
# ENVIRONMENTAL HEALTH & SAFETY MANUAL

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**BEHAVIOR BASED SAFETY OBSERVATIONS**

1. **PURPOSE**
   1.1. Concrete Pump Partners, LLC Behavior Based Safety initiative is an education and observation process used to improve safety and reduce risk in the workplace. This process uses a proactive approach and is intended to communicate to employees the elements and the procedures of Behavior Based Safety that will assist in reducing "at risk" behaviors which in turn reduces injuries in our workplaces.
2. **SCOPE**
   2.1. This procedure applies to all field employees and shop/service mechanics. Employees are permitted to participate in any Behavior Based Safety programs that are in place at customer locations if required.
3. **RESPONSIBILITIES**
   3.1. Managers/Supervisors are responsible for ensuring that all employees are trained in the company's Behavior Based Safety elements.
   3.2. Employees will be trained and encouraged to participate in the Behavior Based Safety process and follow the process guidelines.
4. **REQUIREMENTS**
   4.1. Safety awareness principles are the foundation of the Company's Behavior Based Safety Process. The key concepts teach employees to recognize when they may be in one of the following states:
      - Rushing.
      - Frustration.
      - Fatigue.
      - Complacency (which can cause or contribute to these critical errors).
      - Eyes not on task.
      - Mind not on task.
      - Line of fire.
      - Loss of balance/traction/grip (which in turn increases the risk of injury).

   4.2. Learn how to recognize these states and apply techniques to avoid critical errors. The company will measure and track results so that numerical and statistical information can be made over time.
      4.2.1. Once trend analysis is complete, appropriate action plans shall be developed to address unsafe behaviors.
   4.3. Action planning will include:
      4.3.1. Evaluating unsafe behaviors from trend analysis and prioritize, developing action plans for unsafe behaviors based on comments and feedback from data sheets, designating responsible parties and timeframes within the action plan, defining who is responsible for action planning, and ensuring management support.
   4.4. Pre-task Analysis is a process to evaluate the work environment by performing a Job Safety Analysis (JSA) of each job. The purpose of which is to eliminate or control all hazards that may be encountered to complete the job. This process is included in the Behavior Based

Safety process to establish the correct habits and work procedures in order to reduce at-risk behaviors.

4.5. The observation process is designed to raise safety awareness and provide a feedback mechanism for management to make changes in design, process or procedure in order to reduce at-risk behaviors. The key to this process is raising awareness of behavior through observation and feedback.

4.5.1. The Observation Process.

4.5.1.1. The process starts with the observation of workers; fellow employees, other contractor employees and customer employees) as they perform their tasks. Observers collect information about worker performance and provide feedback via the observation application. The emphasis is NOT on who was observed but rather WHAT was observed. Items to be observed include but are not limited to: PPE, Procedures/Methods, People, Work Environment, and Equipment.

4.5.1.2. This reinforces safe work behaviors and facilitates the collection of data about why at-risk behaviors are performed. Documenting feedback allows workers to assess what should be repeated and what should change to reduce risks in the workplace.

4.5.1.3. Analysis and Action Planning:

4.5.1.3.1. Reviewing the cards collected enables the manager/supervisor to reinforce successes and identify areas for improvement in a timely manner (feedback to employees must be given at least weekly...no longer than a calendar month -per individual and/or group at the monthly safety meeting.

4.5.1.4. Data Management:

4.5.1.4.1. The corporate safety director is responsible for inputting data into the Behavior Based Safety database.

4.5.1.5. Corrective Action Plan Developed by Corporate Safety Director:

4.5.1.5.1. In developing a corrective action plan, observations and comments are analyzed to determine contributing factors. Corrective action item(s) are then implemented to address and/or correct the behavior(s) or unsafe condition(s) identified on observation cards for any observations that have a score of 94% or lower for three consecutive months. Corrective actions completed should be noted (documented) on a corrective action spreadsheet and kept on file.

4.6. The Company's Behavior Based Safety process administration responsibilities.

4.6.1. Oversight

4.6.1.1. The manager/supervisor has these oversight responsibilities:

4.6.1.1.1. Coach observers and develop Corrective Action Plans to ensure continuous improvement.

4.6.1.1.2. Maintain communication with workforce by channeling information in a timely manner (FEEDBACK).

4.6.1.1.3. Collect and review process modification change requests from employees. After reviewing and giving feedback, the BBS/JSA information should be forwarded to the corporate safety director for data entry and corrective action plans.

4.6.1.1.4. The company's Behavior Based Safety is a continuous improvement process.

4.6.2. Management, Shop Craftsmen, and Pump Operator Roles:

4.6.2.1.1. Each employee plays a specific role in the company's Behavioral Based Safety process. These roles include observee, observer, supervisor, manager, and safety director.

4.6.2.1.1.1.1. Observee: (Person being observed) should do the following. Be willing to be observed. Be open and cooperative. Avoid being defensive. Participate in problem-solving meetings. Be familiar with the Behavior Based Safety process.

4.6.2.1.1.1.2. Observer. (Person performing the observation) should do the following. Learn the Behavior Based Safety process and the benefits of reducing at-risk behaviors. Promote the Behavior Based Safety process. Make observing proactive. Be open to coaching. Be courteous and helpful. Assist workers by offering suggestions to safely perform a task or help them with a task if necessary. Communicate with the workers being observed. Give constructive feedback after observations. Stress the safe behaviors before the at-risk behaviors. Offer and work towards solutions of problems found. Record a comment for every recorded "at-risk" to include what and why. Make quality observations, concentrating on quality COMMENTS.

4.6.2.1.1.1.3. Manager - The manager has the following responsibilities. Actively promote and participate in the behavior safety process by supporting the goals and objectives of the Behavior Based Safety process. Ensure that all employees are aware of what is expected of them regarding the Behavior Based Safety process. Encourage employees to participate in observations so that incidents/injuries are reduced in the workplace. Provide necessary resources to keep process productive. Attend safety meetings and offer feedback on areas of improvement.

4.6.2.1.1.1.4. Supervisor -The supervisor supports the goals and objectives of the Behavior Based Safety process by doing the following. Actively promoting and participating in the Behavior Based Safety process by reviewing cards turned in at least weekly and giving feedback, completing corrective actions identified by the corporate safety director, etc. Refraining from using

data from the Behavior Based Safety process in a punitive manner. Assisting in problem solving and completing corrective actions in a timely manner. Understanding the behavior safety process and the benefits of reducing at-risk behaviors.

4.6.2.1.1.1.5. Safety Director - The safety director has the following duties. Support the goals and objectives of the Behavior Based Safety process. Encourage, promote, provide technical support, and assist in acquiring the resources needed for the Behavior Based Safety process. Address the concerns and suggestions of field personnel. Collect all observation data cards. Enter data into CPP database. Prepare and distribute Corrective Action reports as deemed necessary.

4.6.3. Training will include: Program objectives and incident metrics reviewed How to conduct the observation. How to complete the observation form What do the behaviors mean? Feedback training and role play (mentoring and coaching). Employees should be aware they may be observed at any time. Employee training on the use and benefits of observations.

**BLOODBORNE PATHOGENS EXPOSURE CONTROL PROCEDURE**

1. **PURPOSE**
   1.1. The purpose of this procedure is to provide specific instructions to reduce workers' risk by minimizing or eliminating employees' exposure to blood borne pathogens, such as the Hepatitis B Virus (HBV), non-A and non-B hepatitis, and Human Immunodeficiency Virus (HIV).
2. **SCOPE**
   2.1. This procedure is designed for CPP employees who have the potential for being exposed to blood or other potentially infectious material (OPIM).
3. **REFERENCES**
   3.1. 29 CFR 1910.1030 – Bloodborne Pathogens
4. **RESPONSIBILITY**
   4.1. The Branch Manager or Person-in-Charge shall be responsible for the implementation of this program.
   4.2. Employees shall comply with the following procedures:
      4.2.1. Wear the assigned PPE.
      4.2.2. Inform their supervisors of equipment that needs to be replaced.
      4.2.3. Inform their supervisors if they have been exposed.
   4.3. Safety Department shall:
      4.3.1. Develop and maintain the Bloodborne Pathogens Exposure Control Procedure and conduct hazard assessments of the work areas at each CPP location for exposure determination.
      4.3.2. Administer the Hepatitis B vaccination medical exam program as needed.
5. **OBJECTIVE**
   5.1. The objectives of this procedure are to:
      5.1.1. Identify employees with occupational exposure or potential occupational exposure to blood and OPIMs. All employees that can be identified as having "reasonably anticipated exposure" to infectious material must review this written exposure control plan and receive initial training at assignment and annual refresher training.
      5.1.2. All employees shall have access to a copy of this exposure control plan.
      5.1.3. Provide procedures to eliminate or minimize employee exposure.
6. **PROCEDURES**
   6.1. CPP employees will use universal precautions to prevent contact with blood or OPIMs. Exposure determination shall be made without regard to the use of personal protective equipment. "All body fluids shall be considered potentially infectious for bloodborne pathogens and/or OPIMs.
   6.2. Engineering and work practice controls shall be used to eliminate or minimize exposure to CPP employees. If the potential for exposure continues after implementing these controls, then personal protective equipment (PPE) shall be worn.
   6.3. Employees shall wash their hands and skin with soap and water or flush mucous membranes with water immediately after contact with blood or OPIMs and PPE removal.

Hand washing facilities shall be readily available at all work locations or antiseptic solutions/towelettes shall be made available for use.

6.4. Contaminated needles and other contaminated sharps shall not be bent, recapped, removed, sheared, or purposely broken.

6.5. Sharp objects shall be disposed of in proper containers immediately after they are used.

6.6. All equipment or environmental surfaces shall be cleaned & decontaminated after contact with blood or other infectious materials.

6.7. Work area restrictions

6.7.1. Eating, drinking, smoking, applying cosmetics or lip balm, or handling contact lenses shall not be permitted where exposure to blood or OPIMs may occur.

6.7.2. Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets, or on countertops or benches where blood or OPIMs are present.

6.8. Personal protective equipment (PPE)

6.8.1. Employees shall wear PPE when they may be exposed to infectious or potentially infectious materials. PPE will be provided at no cost to employees.

6.8.2. PPE shall be worn to prevent contaminating a work surface or when helping a fellow employee dresses a wound.

6.8.3. Contaminated PPE shall be removed immediately and placed in an approved container. The Safety Department shall be contacted for disposing the container.

6.8.4. Contaminated saturated clothing shall not be laundered.

6.8.5. Contaminated PPE shall not be reused.

6.9. Labels, tags, and bags

6.9.1. Biohazard labels shall be affixed to regulated waste containers; refrigerators and freezers containing blood and OPIMs; and other containers used to store, move, or ship blood or OPIMs. Tags can also be used to label containers or equipment.

6.9.2. NOTE: Red bags or red containers may be substituted for labels.

6.9.3. Place biohazard contaminated materials in the designated biohazard waste containers. Blood-soaked bandages, etc. shall be placed in leak proof bags/containers for handling, storage and transport.

6.10. Housekeeping

6.10.1. Employees shall clean and decontaminate the area immediately when the following exposures occur:

6.10.1.1. First aid procedures are completed.

6.10.1.2. Blood or OPIM spills.

6.10.1.3. The end of each work shift (if surfaces have become contaminated since the last cleaning).

6.10.1.4. Bio-hazard pails, bins, cans, and similar receptacles shall be inspected regularly for visible signs of contamination or deterioration of container integrity. These containers shall be decontaminated immediately or replaced as needed.

6.11. Biohazard waste shall be disposed of in compliance with applicable federal and state regulations.

6.12. Hepatitis B vaccination

6.12.1. CPP shall make available the hepatitis B vaccine to all employees that have occupational exposure at no cost to the employee(s).

6.12.2. Employees declining the Hepatitis B vaccine shall sign a waiver. These forms shall be kept on in the Safety Department so that the vaccination status of each employee exposed to blood or file OPIMs are known.

6.12.3. Employees may change their minds at any time and still receive the vaccination series at no cost.

6.13. Post-exposure evaluation and follow-up

6.13.1. Exposures shall be reported, investigated, and documented.

6.13.2. After a reported exposure, the exposed employee shall immediately receive a confidential medical evaluation and follow-up.

6.13.3. Information shall be provided to the healthcare professional as required.

6.13.4. Healthcare professional's written opinion

6.13.4.1. Within 15 days after the evaluation is completed, the employee shall receive a copy of the CPP consultant's written opinion.

6.14. Training and information requirements

6.14.1. Training shall be given to employees impacted by this procedure. CPP will ensure that all employees with occupational exposure participate in a bloodborne pathogens training program. Employees shall be provided with training at the time of initial assignment & annual training will be provided for all employees within 1 year of their previous training.

6.15. Evaluation and review

6.15.1. This program shall be reviewed annually to evaluate its effectiveness and updated as needed.

7. **RECORDS**

7.1. Medical records shall be maintained for the duration of employment plus 30 years and training records for duration of no less than 3 years.

7.2. CPP shall ensure that all records are made available upon request of employees. The release of medical records must have the written consent of the employee before being released by CPP.

8. **FORMS**

8.1. Hepatitis B Vaccine Declination

8.2. CPP Incident Report

9. **DEFINITIONS**

9.1. Blood - Human blood, human blood components, and products made from human blood.

9.2. Blood borne pathogens - Pathogenic microorganisms present in human blood that can cause disease in humans, including, but not limited to, the Hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

9.3. Contamination - The presence or the reasonably anticipated presence of blood or OPIMs on an item or surface.

9.4. Decontamination - The use of physical or chemical means to remove, inactivate, or destroy blood borne 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 handing, use, or disposal.

9.5. Exposure incident - Denotes a specific eye, mouth, or other mucous membrane, non-intact skin, or potential contact with blood or other potentially infectious materials resulting from the performance of an employee's duties. (An incident in which an employee has been exposed to a blood borne pathogen.)

9.6. Licensed healthcare professional - A person who's legally permitted scope of practice allows him or her to independently perform the required activities under the subsection of Hepatitis B Vaccination and Post- Exposure Evaluation and Follow-up, found in this plan.

9.7. HBV - Hepatitis B virus.

9.8. HIV - Human immunodeficiency virus.

9.9. Occupational exposure - Reasonably anticipated skin, eye, mucous membrane, or potential contact with blood or OPIMs that may result from the performance of an employee's duties (potential exposure).

9.10. Other potentially infectious material (OPIM) - Blood, semen, vaginal secretions, vessel sanitation systems, saliva (if bloody), joint fluids, organs, and other body fluids which may appear to be visibly tainted with blood.

9.11. Parenteral - Piercing mucous membranes or the skin barrier with needle sticks, human bites, cuts, and abrasions.

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

9.13. Regulated waste - Liquid or semi-liquid blood or OPIMs; contaminated items that would release blood or OPIMs in a liquid or semi-liquid state if compressed; items that are caked with dried blood or OPIMs and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or OPIMs. Feminine napkins are not considered a regulated waste as long as they are not squeezed to the point that blood would drip or flake out. They are to be treated as infected but are not a regulated waste; therefore, they do not have to be labeled or containerized.

9.14. Sharps - Articles that can penetrate the skin, such as needles, scalpels, broken glass, and sawblades.

9.15. Source individual - Any individual, living or dead, whose blood or OPIMs may be a source of occupational exposure to the employee.

9.16. Universal precautions - An approach to infection control. According to the concept of universal precautions, human blood, and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

9.17. Work practice controls - Controls that reduce the likelihood of exposure by alerting the manner in which a task is performed (i.e. prohibiting recapping of needles by a two-handed

technique or wearing gloves in the galley to prevent contact with food and work surface areas due to an open cut on a person's hand).

**COMPRESSED GAS CYLINDERS**

1. **PURPOSE**
   1.1. The purpose of this procedure is to provide safe handling and storage controls for compressed gas cylinders.
2. **SCOPE**
   2.1. This procedure applies to CPP employees whose job assignments require them to work with compressed gases.
3. **REFERENCES**
   3.1. 29 CFR 1926.350 - Gas welding & Cutting
   3.2. 29 CFR 1910.101 - Compressed Gases
4. **RESPONSIBILITY**
   4.1. Managers shall be responsible for implementing the compressed gas cylinders' procedure.
   4.2. Supervisors are to ensure employees comply with this procedure.
   4.3. Employees are responsible for adherence to this procedure.
5. **PROCEDURE**
   5.1. Safe Handling
      5.1.1. Compressed gas or Liquid Petroleum Gas (LPG) cylinders must not be charged or filled except by certified gas suppliers.
      5.1.2. Self-contained breathing apparatus cylinders may be filled at field locations by qualified personnel utilizing a proper cascade system, or compressor, if detailed procedures are followed and equipment safeguards are used.
      5.1.3. Cylinders, cylinder valves, couplings, regulators, hose, and apparatus shall be kept free from oily or greasy substances.
      5.1.4. Oxygen cylinders shall not be handled with oily hands or gloves.
      5.1.5. Compression or liquefied gases shall not be transferred without the use of proper procedures or equipment capable of handling the working pressures.
      5.1.6. Changing the gas contents of a compression gas or Liquid Petroleum Gas (LPG) container from the original contents is not allowed.
      5.1.7. Cylinder regulators shall be removed, cylinder valves shall be closed, and valve protection caps screwed down hand-tight before cylinders are moved unless the cylinders are mounted on a piece of equipment specifically designed for movement with regulators assembled to cylinders.
      5.1.8. Cylinders shall not be rolled, dragged, or slid. Rolling cylinders on their bottom edge is acceptable.
      5.1.9. Care must be taken to prevent cylinders from being dropped or striking against each other.
      5.1.10. For transit by motor vehicle, cylinders shall be secured in the vertical position. Cylinders (with caps) shall be secured against toppling, rolling, or sliding during transport. Protective caps shall not be used for lifting cylinders.
      5.1.11. Care must be taken to prevent cylinders from being dropped or striking against each other.

5.1.12. Protective caps shall not be used for lifting cylinders.

5.1.13. Cradles or platforms with appropriate attachments will be used to lift cylinders to an overhead location. The use of magnets, ropes and slings is prohibited for lifting cylinders.

5.1.14. Where removable protective caps are provided, they shall be kept on cylinders until the cylinders are secured and in service.

5.1.15. Cylinders shall not be used as rollers, supports, or for any purpose other than to contain compressed gases.

5.1.16. Cylinder valves will be closed at all times except when in use. "In Use" means gas is flowing from the cylinder into a system or maintaining a pressure supply to equipment.

5.1.17. Compressed gas or Liquid Petroleum Gas (LPG) containers shall not be placed where they may encounter electrical circuits, open flames, or heat more than 130° F.

5.1.18. Where a bank of compressed gas cylinders is connected to a manifold system, the manifold and related equipment must be designed to withstand the maximum pressure.

5.1.19. Pressure relieving devices will be installed into all systems utilizing compressed gas cylinders to prevent over-pressurization.

5.1.20. Open cylinders slowly. Regulators in the system shall be returned to their lowest settings prior to opening the cylinder valve. The regulator then can be increased to the desired pressure.

5.1.21. Before removing a regulator from a cylinder, the cylinder valve must be closed, and pressure be off the regulator.

5.1.22. Regulators and pressure gauges shall be used only with gases for which they are designated and intended. This applies particularly to oxygen equipment.

5.1.23. Oxygen cylinders, valves, regulators, hoses, and other oxygen apparatus shall be kept free from oil, grease, and other hydrocarbons. They shall not be handled with oily hands, oily gloves, or greasy equipment.

5.1.24. Cylinders shall be secured in the vertical position by means of iron strapping, chain, or cable. Fabric strap and rope should not be used since either will burn in a fire and leave the cylinders unsecured.

5.1.25. Connections that do not fit shall not be forced. Threads on the regulator shall match those on the cylinder valve. Cylinder valve threads and sizes are specifically different to ensure that interchange is not readily accomplished. Adapting connections to cross utilize cylinders, regulators, or systems is prohibited.

5.1.26. A cylinder that leaks, is bulged, has defective valves, or safety devices, bears evidence of physical abuse, fire or heat damage, detrimental rusting, or corroding, must not be used unless it is properly repaired and re-qualified.

5.1.27. Cylinders that have been assigned to a vehicle and stored outside shall be inspected for damage as prescribed above, prior to each use.

5.2. Cylinder Storage

5.2.1. Container storage areas shall be posted with the name or type of gas in each grouping. Full and empty containers shall be stored separately; empty containers shall be marked.

5.2.2. Where gases of different types are stored in the same location, the containers shall be grouped by gases.

5.2.3. Oxygen cylinders in storage must be separated from fuel-gas cylinders or combustible materials (especially oil or grease) a minimum distance of 20 feet, or by a non-combustible barrier at least 5 feet high having a fire resistance rating of at least one-half hour.

5.2.4. Gas cylinders shall be stored standing upright (valve up) and secured to prevent tipping.

5.2.5. Indoor storage rooms shall be ventilated and dry.

5.2.6. Gas cylinders may be stored outside but shall be protected from the ground to prevent bottom corrosion.

5.2.7. The cylinder valve or cap shall not be used to pry loose cylinders that have become frozen to the ground or supports. Warm water shall be used to thaw them loose.

5.2.8. Liquid Petroleum Gas (LPG) cylinders shall be stored in cool, well-ventilated areas, with no exposure risk to other flammable liquids or materials.

5.3. Oxyfuel Gas Welding Safety

5.3.1. Fuel gas and oxygen torches shall be provided with back flow check valves to prevent intermixing of gases.

5.3.2. Regulators shall be provided with flashback arrestors.

5.3.3. Pressure regulator shall be used only for the gas and pressures for which they are intended.

5.3.4. Regulators with nuts and connections shall be visibly inspected before each use to detect leaks. Defective or damaged regulators shall be replaced. Damaged connections and nuts shall be replaced.

5.3.5. Hoses used in oxyfuel gas service shall comply with rubber welding hose specifications of the Compressed Gas Association. Hoses showing leaks, burns, worn areas or other defects rendering unfit for service shall be repaired or replaced.

5.3.6. Fuel gas hoses shall be red; oxygen hoses shall be green; and inert gas hoses shall be black. Where multiple parallel hoses are used and taped together, not more than 4 inches in each 12 inches will be taped to allow adequate inspection.

5.3.7. Hose connections shall comply with the Compressed Gas Association hose connection specifications. Hose connections shall be fabricated so they will withstand, without leakage, twice the normal service pressure but never less than 300 psi.

5.3.8. Oxygen shall not be used in pneumatic tools, to dust clothing, or work to create pressure in a container to blow out pipelines or ventilate a space.

5.3.9. Cylinders, valves, hoses, regulators, and other equipment to be used in oxygen systems shall be kept oil or grease free, including handling with oily hands and gloves.

5.4. Inspection

5.4.1. Upon receiving compressed gas cylinders, the labels shall be checked to verify contents.

5.4.2. Labels should be clearly legible and contain the cylinder owner's name, date of manufacture, hazard warnings, hydrostatic test date and a DOT label for interstate transport.

5.4.3. The neck rings and shoulder label should be checked to verify they are the same color. The cylinder shell, base, and valve protection cap should be checked.

5.4.4. Cylinders must be hydrostatic tested every 5 years.

5.4.5. Visually check the hoses, valves, regulators, couplings, and other systems parts for cracks, burns or other structural weakness.

5.4.6. Check to ensure all system parts are free of grease and oil.

5.4.7. Check to ensure that the fusible metal pressure relief device on the base of each cylinder is intact.

5.4.8. Check to ensure there is a spark arrestor coupling in place at the connection between the hoses and torch and a backflow preventer is in place between the regulator and hoses.

5.5. Maintenance

5.5.1. Any compressed gas cylinder maintenance shall be conducted by the CPP gas supplier.

5.5.2. Pressure relief devices on cylinders shall not be changed, modified, obstructed, or repaired by CPP employees.

5.6. CPP employees

5.6.1. Identification marks shall not be altered, defaced, or removed.

5.6.2. Each gas cylinder shall be legibly labeled or marked to identify its contents.

5.6.3. The content markings of gas containers such as labels, color codes, decals, tags, or stencils shall not be altered, removed, or covered.

5.6.4. Any defects found shall result in the removal of the defective cylinder and immediately reported to CPP gas supplier.

**OUTRIGGER PAD GUIDELINES**

1. **PURPOSE**
   1.1. The purpose of this procedure is to provide supplemental guidelines for outrigger pad use with concrete pump trucks and ensure that operators follow guidelines as set forth in the ASME, ACPA, Manufacturers, and Concrete Pumping Holding's EHS Manual.
2. **SCOPE**
   2.1. This procedure is designed for CPP employees whose job assignment requires them to operate concrete pump trucks.
3. **RESPONSIBILITY**
   3.1. The Branch Manager or Person-in-Charge shall be responsible for the implementation of this program.
   3.2. Employees shall comply with the following procedures:
      3.2.1. Know and understand the functions, limitations, and operating characteristics of the specific boom size and outrigger system they are assigned to.
      3.2.2. Know and understand CPP Safety guidelines as set forth in the EHS Manual.
      3.2.3. Know and Understand standards and guidelines contained in the ASMEB 30.27-2019.
      3.2.4. Know and understand ACPA guidelines for safe setup and operation of a concrete pump truck.
      3.2.5. Know and understand the concrete pump's operation manual for safe setup and operating of the outriggers to the specific size concrete pump the operator is working with.
      3.2.6. Inspect the site where the concrete pump is to set up and ensure that the area where the outrigger pads are to be set is flat or can safely be made flat so the outrigger foot rests on a flat surface.
      3.2.7. Review the planned operation and requirements with the person-in-charge at the jobsite and ensure Work Order authorization is signed. The additional best practice of completing a PTP (Pre-Task Plan) is encouraged.
      3.2.8. Ask the job-site person-in-charge where they have planned for the pump to safely set up.
      3.2.9. Use adequate outrigger pads and where needed apply the guidelines found in the Concrete Pump Operations Manual, ASME, ACPA, or CPP. EHS Manual or whichever standard or guideline is greater.
   3.3. Safety Department shall:
      3.3.1. Develop and maintain the Concrete Pump Outrigger Pad Guidelines and amend as needed to comply with stricter guidelines for each region, branch, or individual job site.
4. **OBJECTIVE**
   4.1. The objectives of this procedure are to:
      4.1.1. Provide supplemental guidelines for the use of outrigger pads.
5. **PROCEDURE**
   5.1. Concrete Boom Pump Outrigger Pads Procedures:

5.1.1. Outrigger Pads will be used each time the outriggers are deployed for use.

5.1.2. Operator shall ensure compliance with the one-to-one rule when setting up near excavations and cut edges.

5.1.3. Look around the area where the outriggers are to be set, are there voids, trenches, excavations, slopes, or any other signs like pipes rising from the ground to indicate that there may be a hazard that will prevent you from setting the pump up safely.

5.1.4. Employees are obligated to work safely and in accordance with their training. Whenever there is any doubt as to safety, the operator shall have the authority to stop and refuse to continue the pour until safety has been assured.

5.1.5. After the concrete pump is set up and ready for operation, and before concrete is introduced into the boom, swing the empty boom over each working side outrigger, as applicable, that will be used during the pour. As the boom moves over the outriggers, operator shall watch the outrigger pads and look for settling or movement of the outrigger pad. The operator shall determine if additional support is necessary. Some settlement is to be expected. Note that when concrete is in the pipeline the force on the outrigger pad doubles.

5.1.6. If significant settling or other concerns arise, additional dunnage or cribbage must be used. This could include heavy lumber or even steel plates. In some cases, the pump may need to be moved to another location.

5.2. Training and information requirements

5.2.1. Training shall be given to employees impacted by this procedure.

6. **RECORDS**

6.1. Operator training records shall be maintained by the local branch office.

7. **FORMS**

7.1. Repair Request Form

7.2. Concrete Pump Boom Inspection Report

7.3. Pre-Task Plan (PTP)

**CONCRETE PUMP SAFETY**

1. **PURPOSE**
   1.1. The purpose of this procedure is to identify specific instructions for the safe use of concrete pump trucks and ensure that operators are qualified as required by federal and state agencies.
2. **SCOPE**
   2.1. This procedure is designed for CPP employees whose job assignments require them to operate concrete pump trucks.
3. **RESPONSIBILITY**
   3.1. Managers shall be responsible for implementing the Concrete Pump Safety Procedure.
   3.2. Supervisors shall ensure that employees comply with the Concrete Pump Safety Procedure
   3.3. Concrete Pump operators shall:
      3.3.1. Know and understand the functions, limitations, and operating characteristics of the designated boom size they are assigned to.
      3.3.2. Know and understand the concrete pump's operations manual.
      3.3.3. Know and understand responsibilities per ASME B30.27-2019.
      3.3.4. Inspect and maintain the pump truck regularly as prescribed by D.O.T and management.
      3.3.5. Inform their supervisor of any problems, needed maintenance, or necessary repairs to the pump truck.
      3.3.6. Ensure that the site is adequately prepared for the concrete pump truck operations.
      3.3.7. Review the planned operation and requirements with the person in charge at the jobsite.
      3.3.8. Position and set up the concrete pump truck properly to suit the site, work requirements, and jobsite conditions.
      3.3.9. Maintain communication with the placing crew.
      3.3.10. Keep their pump truck clean and free of debris.
   3.4. The Safety Department shall develop and maintain the Concrete Pump Truck Safety Procedure.
4. **OBJECTIVE**
   4.1. The objective of this procedure is to provide guidelines and procedures for safe concrete pump operation and maintenance.
5. **PROCEDURE**
   5.1. Concrete Pump operators shall be medically qualified as required by D.O.T.
   5.2. Concrete Boom Pump Operating Procedures
      5.2.1. Trucks and booms shall be inspected by the operator prior to each use, using the Daily DOT Pre and Post Inspection Checklist. Any discrepancies shall be recorded and immediately reported to the supervisor.
      5.2.2. Concrete Pump trucks shall be operated only by the following personnel:
         5.2.2.1. Designated operator.
            5.2.2.1.1. Personnel who are learning under the direct supervision of a designated operator.

5.2.2.1.2. Maintenance and test personnel when it is necessary in the performance of their duties.

5.2.2.1.3. Inspectors.

5.2.3. The operator shall respond to signals only from the appointed signalman, but shall obey a stop signal at any time, no matter who gives it.

5.2.4. The operator shall be responsible for those operations under his/her direct control. Whenever there is any doubt as to safety, the operator shall have the authority to stop and refuse to continue the pour until safety has been assured.

5.2.5. The operator shall be responsible for communicating to the ready-mix driver/hopper watch person the location and criteria for activating the alarm horn and/or emergency stop switch.

5.2.6. Before leaving the concrete pump truck unattended, the operator shall ensure that the truck is secured.

5.2.7. Before beginning the prime out, the operator shall see that controls are in the off positions and personnel are in the clear. Personnel should move a prudent and reasonable distance beyond the reach of the tip hose when a concrete pump truck primes out, repositions on the jobsite, and/or re-starts after a delay greater than 10 minutes.

5.2.8. Regarding overhead power lines, the operator shall:

5.2.8.1. Ensure there is always a 20° (foot) clearance from all overhead power lines unless one of the following has been established:

5.2.8.1.1. Option 1) The Power lines have been confirmed as de-energized and visibly grounded, or

5.2.8.1.2. Option 2) The Power line's voltage has been confirmed and minimum clearances can be maintained as permitted by Table A (OSHA)

**TABLE A-MINIMUM CLEARANCE DISTANCES**

| Voltage (nominal, kV, alternating current) | Minimum clearance distance (feet) |
|---|---|
| up to 50 | 10 |
| over 50 to 200 | 15 |
| over 200 to 350 | 20 |
| over 350 to 500 | 25 |
| over 500 to 750 | 35 |
| over 750 to 1,000 | 45 |
| over 1,000 | (as established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution). |

**Note:** The value that follows "to" is up to and includes that value. For example, over 50 to 200 means up to and including 200kV.

5.2.8.2. At no time shall a boom be positioned above an overhead power line unless Option 1 has been confirmed. A boom may be positioned under an overhead power line as long as a 20° clearance can be maintained, or Option 2 is utilized.

5.2.8.3. If voltage has been determined by Option 2 and the boom will be operated closer than 20 to the power line, the following must happen prior to commencing operations:

5.2.8.3.1. The operator must inform dispatch, supervisors or managers that he/she is breaking 20' clearance.

5.2.8.3.2. Managers must also be informed and approve the breaking of 20 feet clearance.

5.2.8.3.3. A full-time dedicated spotter must be identified and utilized until operations have been completed.

5.2.8.4. Identify the minimum clearance by utilizing the safety cones carried on board the truck. (See EHS-035)

5.2.8.5. Utilize Power Line Awareness Sleeve on tip hose. (See EHS-035)

5.2.8.6. "Text-In-Compliance"

5.2.8.6.1. After placing Flagging System on outriggers and on hose, per EHS-035, the operator shall take pictures of the flags in use and text or email the pictures to Dispatch to ensure compliance with EHS-035.

5.2.8.6.2. Dispatch shall save all pictures in an electronic file as related to "Text-In-Compliance", as well as upload to the dispatch system. All files/photos will be made available for audits upon requests.

5.3. Handling the Boom

5.3.1. No concrete boom shall be loaded beyond the rated load, except for test purposes.

5.3.2. The concrete boom truck shall not be used as a crane to transfer equipment or people.

5.3.3. No concrete pump truck shall be driven or repositioned with the boom out of the cradle.

5.4. Signals

5.4.1. Standard signals to the operator shall be in accordance with the standards prescribed by the American Concrete Pumping Association (A.C.P.A.), unless voice communication equipment (i.e., telephone, radio, or equivalent) is utilized. Signals shall be discernible or audible. No response shall be made unless signals are clearly understood. Hand signals shall be posted in/on the cab to be visible to personnel involved in the operations.

5.4.2. For operations not covered or for special conditions that occur from time to time, additions to, or modifications of the standard signals may be required. In such cases these special signals shall be agreed on in advance by the operator and the designated signalman and shall not be in conflict with standard signals.

5.5. Inspections

5.5.1. Boom Truck Inspections

5.5.1.1. A visual and physical pre and post trip inspection shall be performed by the operator prior to each operation (frequent). CPP, boom inspectors or other individuals approved by the President of CPP, shall perform annual inspections (periodic). Inspections must be completed annually for the first five years and semi- annually thereafter. Discrepancies should be noted and reported to the shop manager or supervisor immediately.

5.5.1.2. Pre and Post trip inspections will be documented on the DOT Daily Inspection Checklist. Documentation shall be kept on file in the Branch Shop or Fleet Records Office, as appropriate.

5.6. Boom Certification after Equipment Failure

5.6.1. Keeping an accurate and permanent record of inspection.

5.6.2. In the event of a failure of a structural member, overloading, or contact with energized electrical power lines and before returning to service, Booms shall be recertified for the work intended by:

5.6.2.1. The manufacturer, an agent of the manufacturer, or an approved boom inspector.

5.6.3. Copies of the certification shall be maintained in the cab of that respective vehicle.

5.7. Boom Rigging Inspection (Placing Boom)

5.7.1. Placing boom rigging sets shall be inspected monthly and prior to the start of each new project. A visual inspection shall be made by the assigned operator prior to each lift. Placing boom rigging sets shall be taken out of service immediately if any of the following conditions exist:

5.7.1.1. Reduction of the rope diameter due to loss of core support, internal or external corrosion, or wear of outside wires.

5.7.1.2. A number of broken wires and the degree of distribution of concentration of such broken wires.

5.7.1.3. Worn outside wires.

5.7.1.4. Corroded or broken wires at end connections.

5.7.1.5. Corroded, cracked, bent, worn or improperly applied end-connections.

5.7.1.6. Severe kinking, crushing, cutting or un-stranding.

5.8. Training Requirements

5.8.1. Training meeting requirements for each specific type of concrete pump shall be given to affected employees.

5.9. Hazard Recognition/Awareness Orange Cones and Sleeve

5.9.1. Short-Rigging

5.9.1.1. Any time the concrete pump is set up and the outriggers are not fully extended, orange awareness cones will be used to mark safe operating areas, and the orange awareness sleeve will be placed on the tip hose.

5.9.1.2. When pouring a deck, orange awareness cones will be deployed in such a manner where safe operating areas will be marked, and the operator will not boom past the orange awareness cones.

## 6. RECORDS

6.1. Operator training records shall be maintained by the local branch office.

6.2. Boom inspection records shall be maintained by the branch Shop Manager or the Corporate fleet records office, as appropriate, for the life of the boom.

## 7. FORMS

7.1. DOT Pre-Post Trip Daily Inspection Checklists

7.2. Concrete Pump Boom Inspection Report

**CONTRACTOR SAFETY REQUIREMENTS**

1. **PURPOSE**
   1.1. The purpose of this procedure is to identify the minimum safety requirements that CPP expects from contractors.
2. **SCOPE**
   2.1. This procedure applies to all contractors and their employees who work on job sites for CPP.
3. **RESPONSIBILITY**
   3.1. Each contractor shall be responsible for ensuring all contractor and subcontractor personnel comply with all applicable federal, state, and local regulations.
   3.2. CPP will ensure that each contractor's employees are trained appropriately in the hazards associated with the tasks that are being done.
4. **PROCEDURE**
   4.1. Pre-Job Meeting
      4.1.1. Understanding the safety and health requirements of the job is critical to the overall success of the project. Contractors shall be required to attend a pre-job meeting to discuss Contractor Safety Requirements and job site safety and hazard information
   4.2. Reporting to Work
      4.2.1. Contractor supervisory personnel shall report to the appropriate supervisor upon arrival at the work location. Contractor management shall ensure that Contractor personnel are given a safety and health orientation for familiarization with potential job site hazards and emergency procedures.
   4.3. Accident, Injury, and Illness Reporting
      4.3.1. All work-related accidents, injuries, and illnesses should be reported immediately or as soon as safely possible to the appropriate CPP, representative. It is the responsibility of the Contractor's designated person-in-charge jurisdiction at all accidents on the property of CPP, involving personal injury or illness, fire and/ or explosions, property damage, hazardous material spills and vehicles are reported to CPP,
         4.3.1.1.1. and to all applicable federal, state, and local governments having jurisdiction.
   4.4. Contractor Responsibilities
      4.4.1. Contractors shall ensure all Contractor personnel are qualified and trained to perform the contracted services. This shall include all high-risk activities such as confined space entry, hot work permits, LOTO, etc.
      4.4.2. Contractors shall adhere to all applicable federal, state, and local regulations pertaining to a particular operation for which its services are contracted.
      4.4.3. Contractors shall be responsible for ensuring all operations are conducted in a safe manner, and for promptly correcting and reporting to CPP, and to Contractor's employees and subcontractors all known or suspected hazards or unsafe conditions.
      4.4.4. Contractor personnel violating any CPP, safety policy, practice or procedure, or applicable governmental regulation shall be subject to immediate removal from CPP, job sites.

4.5. Personal Protective Equipment

4.5.1. Head Protection

4.5.1.1. A non-conductive hard hat/safety helmet that meets the requirements of ANSI Z89.1 shall be worn at all times while performing work on CPP, equipment or facilities.

4.5.2. Eye and Face Protection

4.5.2.1. Eye protection shall be worn while performing work on CPP equipment or while at CPP 's facilities. Minimum protective eye wear shall be safety glasses with side shields. All eye and face protection shall meet the requirements of ANSI Z87.1.

4.5.3. Hearing Protection

4.5.3.1. Hearing protection devices that meet the standards of OSHA 1910.95 shall be worn in all posted high noise areas. Hearing protection is required in all known or suspected areas with noise levels of 85 dBA or above.

4.5.4. Protective Clothing

4.5.4.1. Protective Clothing shall be worn when handling hazardous materials or chemicals, when the applicable Safety Data Sheet (SDS) specifies such.

4.5.5. Hand Protection

4.5.5.1. Appropriate protective gloves shall be worn where there is risk of exposure to high temperatures, sharp edges, chemicals or any other conditions or materials that may cause injury to the hands.

4.5.6. Fall Protection

4.5.6.1. All work performed over four (4) feet above ground or where a fall hazard of six (6) feet exists shall be in accordance with the applicable federal or state regulations.

4.5.7. Respiratory Protection Equipment

4.5.7.1. Contractor respiratory protection equipment shall be selected, inspected, maintained, and used in accordance with federal or state requirements.

4.5.8. Other Personal Protective Equipment

4.5.8.1. In addition to the personal protective equipment described above, special situations may require the use of additional personal protective equipment. The contractor shall be solely responsible for recognizing when such equipment is required and shall be responsible for providing such equipment.

4.6. Safe Work Practices - The following items recognize basic safe work practices:

4.6.1. Smoking

4.6.1.1. Smoking is prohibited at all facilities except in designated smoking areas.

4.6.2. Signs

4.6.2.1. All Contractor personnel shall be familiar with and comply with all signs posted throughout CPP job sites.

4.6.3. Lockout/Tagout

4.6.3.1. All Contractors shall comply with federal or state requirements for lockout/tagout while working on powered equipment, when performing

confined space entry operations or when engaged in other work activities where the control of potentially hazardous energy is necessary to ensure personal safety.

4.6.4. Confined Space Entry

4.6.4.1. All Contractors performing work involving confined space entry shall be in accordance with applicable federal and state regulations.

4.6.5. Hot Work

4.6.5.1. All welding, cutting, and brazing shall be done in accordance with federal, state, and local Fire Department regulations.

4.6.6. Hazard Communication

4.6.6.1. CPP, shall provide, upon request, an appropriate Safety Data Sheet (SDS) for hazardous chemicals or materials maintained at each location.

4.6.6.2. Contractor shall maintain an on-site appropriate SDS for any hazardous material or chemical which Contractor brings on-site. Such hazardous materials or chemicals shall be properly stored and labeled in accordance with federal, state, and local Fire Department regulations.

4.6.7. Vehicle Operations

4.6.7.1. Contractors shall operate vehicles in full compliance with all applicable federal, state, and local regulations.

4.6.8. Training

4.6.8.1. Contractor employees shall be appropriately trained to perform the assigned task.

4.6.9. Contractor Waste

4.6.9.1. The contractor shall notify the appropriate CPP, Representative of any issues or concerns.

4.6.9.2. Contractor shall place waste in designated area

4.6.9.3. Contractor shall be responsible for appropriate waste disposal unless otherwise stated by Contract.

4.7. Confidentiality Agreements

4.7.1. Contractors shall abide by all confidentiality agreements from CPP, and their clients. This includes all patents and trade secrets.

**ENVIRONMENTAL PROTECTION PROGAM**

## 1. POLICY STATEMENT

1.1. CPP is committed to environmentally sound practices. CPP, operating philosophy, emphasizes protecting the environment through quality equipment, maintenance, operations, and human resources. CPP shall continue to recognize and exercise its responsibility to minimize environmental risks through the CPP's Environmental Protection Program.

## 2. ENVIRONMENTAL PROTECTION PROGRAM

2.1. Concrete Pump Partner shall work toward a goal of zero pollution. The following operating principles reinforce CPP's commitment to environmental protection and shall be applied in all operations and business planning activities:

- Operate and maintain pump trucks and facilities in a manner that protects the environment, as well as the safety and health of all employees and the public.
- Continue to work toward pollution free operations by providing employees environmental education, oil spill training, and education of environmental sensitivities.
- Reduce the generation of hazardous waste by using fewer toxic products which have a minimal effect on the environment.
- Comply fully with federal, state, and company rules and procedures for managing hazardous materials and waste.
- Hold employees accountable for the safety and protection of the environment.

**SAFETY PROGRAM**

## 1. POLICY STATEMENT

**1.1.** Concrete Pump Partners (CPP) shall conduct its business in a manner which protects people from injury or damage to health, and equipment, property, and facilities from loss of value or function.

## 2. RESPONSIBILITIES

**2.1.** *Safety Department*

**2.1.1.** The Safety Department shall be responsible for developing and maintaining the Environmental Health and Safety Manual which represents CPP's Safety and Environmental Program. Further, the Safety Department shall provide support and resources, as required, to assist in the implementation, verification, and maintenance of this program.

**2.2.** *Managers and Supervisors*

**2.2.1.** Managers and Supervisors shall be responsible and accountable for implementing and maintaining the Environmental Health and Safety Manual to ensure safe operation of the activities of which they have control. Further Managers/Supervisors, with the assistance of the Safety Department, shall ensure immediate corrective actions are developed and implemented to eliminate and/or control identified workplace hazards.

**2.3.** *Employees*

**2.3.1.** All CPP employees are responsible and accountable for the safety of their own actions, the use of approved safety devices and personal protective equipment, and for complying with the safe practices and approved procedures outline in this manual. All work-related accidents, incidents, injuries, illnesses, and near misses shall be reported to Managers/Supervisors as soon as safely practicable.

**CRANE SAFETY**

1. **PURPOSE**
   1.1. The purpose of this procedure is to identify specific instructions for the safe use of cranes and ensure that crane operators are qualified as required by federal and state agencies.
2. **SCOPE**
   2.1. This procedure is designed for CPP, employees whose job assignments require them to operate cranes which are a part of or regularly used to transfer materials or equipment.
3. **RESPONSIBILITY**
   3.1. Managers shall be responsible for implementing the Crane Safety Procedure.
   3.2. Supervisors shall ensure that employees comply with the Crane Safety Procedure.
   3.3. Crane operators shall:
      3.3.1. Know and understand the functions, limitations, and operating characteristics of the cranes they use at their work sites.
      3.3.2. Become familiar with the crane's load chart.
      3.3.3. Find out the load and rigging weight and determine where the load is to be placed.
      3.3.4. Inspect and maintain the crane regularly as prescribed by management.
      3.3.5. Inform the supervisor of any problems, needed maintenance, or necessary repairs to the machine.
      3.3.6. Ensure that the site is adequately prepared for the crane operation.
      3.3.7. Review the planned operation and requirements with the line supervisor.
      3.3.8. Assemble, set up, and rig the crane properly to suit the load, site, and lift conditions.
      3.3.9. Maintain communication with the signalmen.
   3.4. The Safety Department shall develop and maintain the Crane Safety Procedure.
4. **OBJECTIVE**
   4.1. The objective of this procedure is to provide guidelines and procedures for safe crane operation and maintenance.
5. **PROCEDURE**
   5.1. Crane operators shall be evaluated annually by a member of management.
   5.2. Crane operating procedures
      5.2.1. Cranes shall be inspected by the operator prior to each use using the Daily Inspection Checklist. Any discrepancies shall be recorded and immediately reported to the supervisor.
      5.2.2. Cranes shall be operated only by the following personnel:
         5.2.2.1. Designated operator.
         5.2.2.2. Personnel who are learning under the direct supervision of a designated operator.
         5.2.2.3. Maintenance and test personnel when it is necessary in the performance of their duties.
         5.2.2.4. Inspectors.
      5.2.3. The operator shall respond to signals only from the appointed signalman, but shall obey a stop signal at any time, no matter who gives it.

5.2.4. The operator shall be responsible for those operations under his/her direct control. Whenever there is any doubt as to safety, the operator shall have the authority to stop and refuse to handle loads until safety has been assured.

5.2.5. If a warning signal is furnished, it shall be sounded each time before traveling and intermittently during travel.

5.2.6. Before leaving the crane unattended, the operator shall ensure that the crane is secured.

5.2.7. Before closing the switch or starting the engine, the operator shall see that controls are in the off positions and personnel are in the clear.

5.2.8. If power fails during operations, the operator shall:

5.2.8.1. Set brakes and locking devices.

5.2.8.2. Move clutch or other power controls to the off position.

5.2.8.3. Land the suspended load under brake control, if practical.

5.3. Handling the load

5.3.1. Use guide sticks/ropes (tag lines) if needed to avoid hand contact with load.

5.3.2. Use proper body positioning to avoid pinch/crush points.

5.4. Attaching the load

5.4.1. The load shall be attached to the hook by means of a sling or other approved devices.

5.5. Moving the load

5.5.1. The individual directing the lift shall see that:

5.5.1.1. The crane is level and outriggers extended as necessary.

5.5.1.2. The load is well secured and properly balanced.

5.5.2. Before starting to hoist, the following conditions shall be noted:

5.5.2.1. The hoist rope shall not be kinked.

5.5.2.2. Multiple part lines shall not be twisted around each other.

5.5.2.3. The hook shall be brought over the load in such a manner as to prevent swinging.

5.5.2.4. If there is a slack rope condition, it shall be determined that the rope is properly seated on the drum and in the sheaves.

5.5.3. During hoisting, care shall be taken that:

5.5.3.1. There is no sudden acceleration or deceleration of the moving load.

5.5.3.2. The load does not contact any obstructions.

5.5.4. Side loading of booms shall be limited to freely suspended loads. The crane shall not be used for dragging loads sideways.

5.5.5. The operator shall not hoist, lower, swing, or travel while anyone is on the load or hook, unless in an approved man-platform or spreader.

5.5.6. The operator shall avoid carrying loads over people.

5.5.7. The operator shall test the brakes each time a load approaches the rated load. The load shall be handled by raising it a few inches and applying the brakes.

5.5.8. Outriggers shall be used when the load to be handled at that radius exceeds the rated load without outriggers as given by the manufacturer for that crane. Where floats are used, they shall be securely attached to the outriggers.

5.5.9. Neither the load nor the boom shall be lowered below the point where less than two full wraps of rope remain on their respective drums.

5.5.10. When two or more cranes are used to lift one load, one designated person shall be responsible for the operation. He/she shall analyze the operation and instruct personnel involved in the proper positioning, rigging of the load, and movements to be made.

5.5.11. Before traveling a crane with a load, a designated person shall be responsible for determining and controlling safety. Decisions such as position of load, boom location, ground support, travel route, and speed of movement shall be made.

5.5.12. A crane with or without load shall not be traveled with boom so high that it may bounce back over the cab.

5.5.13. When rotating the crane, sudden starts and stops shall be avoided. Rotational speed shall be such that the load does not swing out beyond the radii at which it can be controlled. A tag or restraint line shall be used when rotation of the load is hazardous.

5.6. Holding the load

5.6.1.The operator shall not leave his/her position at the controls while the load is suspended.

5.6.2.No person shall be permitted to stand or pass under a load on the hook

5.7. Signals

5.7.1. Standard signals to the operator shall be in accordance with the standards prescribed in ASMEB30.222016, unless voice communication equipment (telephone, radio, or equivalent) is utilized. Signals shall be discernible or audible. No response shall be made unless signals are clearly understood. Hand signals shall be posted in/on the cab to be visible to personnel involved in the operation.

5.7.2. For operations not covered or for special conditions that occur from time to time, additions to or modifications of the standard signals may be required. In such cases these special signals shall be agreed on in advance by the operator and the signalman and shall not be in conflict with standard signals.

5.8. Inspections

5.8.1. Crane inspections

5.8.1.1. A visual and physical pre-lift inspection shall be performed by the operator prior to each operation (frequent). Shop personnel shall perform quarterly inspections for each mechanized material handling device (periodic). Discrepancies shall be noted and reported to the supervisor immediately.

5.8.1.2. Frequent inspections will be documented on the Daily Inspection Checklist. Periodic inspections will be documented on the Safety Maintenance Checklist. Documentation shall be kept on file in the Branch Shop, as appropriate.

5.8.2. Rope inspections (monthly)

5.8.2.1. Running ropes - A thorough inspection of ropes in use shall be made at least once a month during the monthly crane inspection. Inspections shall be performed by Branch Shop mechanics. Wire rope shall be taken out of service immediately if any of the following rope conditions exist:

5.8.2.1.1. Reduction of rope diameter below nominal diameter due to loss of core support, internal or external corrosion, or wear of outside wires.

5.8.2.1.2. A number of broken wires and the degree of distribution of concentration of such broken wires.

5.8.2.1.3. Worn outside wires.

5.8.2.1.4. Corroded or broken wires at end connections.

5.8.2.1.5. Corroded, cracked, bent, worn or improperly applied end connections.

5.8.2.1.6. Severe kinking, crushing, cutting or un-stranding.

5.8.2.1.7. Other ropes - Heavy wear and/or broken wires may occur in sections in contact with equalizer sheaves or other sheaves where rope travel is limited, or with saddles. Care shall be taken to inspect ropes at these locations.

5.8.2.1.8. Rope which has been idle for a period of a month or more due to shut down or storage for a crane on which it is installed shall be given a thorough inspection as defined in 5.8.2.1 before it is placed in service.

5.8.2.1.9. Care shall be taken in the inspection of non-rotating rope.

5.9. Shop Truck-Mounted Cranes

5.9.1. A visual and pre-lift inspection shall be performed prior to each operation and documented on the pre-lift inspection for truck mounted crane s. Discrepancies shall be noted and reported to the supervisor immediately.

5.9.2. Monthly inspections shall be performed by the shop mechanic and documented on the Monthly Inspection for truck mounted cranes. Documentation shall be kept on file in the branch office.

5.9.3. Truck mounted cranes are designated only for loading and moving the equipment required to facilitate repairs.

5.10. Crane Certification

5.10.1. Particular attention shall be paid to keeping an accurate and permanent record of inspections.

5.10.2. Cranes shall be re-certified for the work intended on an annual basis by an approved OSHA/WISHA certification agency.

5.10.3. Copies of the certification shall be maintained in the cab of that respective crane.

5.10.4. At any time, a crane is re-rated, it must be re-certified for the work intended.

5.11. Training requirements

5.11.1. Training meeting requirements for each type of crane shall be given to affected employees.

## 6. POWER LINES

6.1. Maintain 20-foot clearance from power lines and follow the policy in EHS-035.

## 7. RECORDS

7.1. Designated operator and qualification records shall be maintained by the Safety Department for three years.

7.2. Crane certification and inspection records shall be maintained by the Branch Shop as appropriate, for three years.

**8. FORMS**

8.1. Daily Inspection Checklists

8.2. Safety Maintenance Checklists

**9. DEFINITIONS**

9.1. **Base (mounting)** - The traveling base on which the rotating superstructure of a locomotive or crawler crane is mounted.

9.2. **Boom** - A member hinged to the rotating superstructure and used for supporting the hoisting tackle.

9.3. **Cab or station operated cranes** - Conditions during which a crane is performing functions within the manufacturer's operating recommendations. Under these conditions, the operator is at the operating control devices on the crane, and no other persons except those appointed are to be on the crane.

9.4. **Load** - The external load in pounds applied to the crane, including the weight of load-attaching equipment such as lower load block, shackles, and slings.

9.5. **Oiler** - Oils and greases the crane while in operation. Inspect parts, such as boom pins, hoist gears, brakes, cables, and supports to detect wear. May drive the crane into working position. Works under the supervision of the crane operator.

9.6. **Outriggers** - Extendible or fixed members attached to the mounting base, which rest on supports at the outer ends used to support the crane.

9.7. **Reeving** - A rope system in which the rope travels around drums and sheaves.

9.8. **Repetitive pickup point** - When operating on a short cycle operation, the rope being used on a single layer and being spooled repetitively over a short portion of the drum.

9.9. **Rope** - Refers to wire ropes unless otherwise specified.

9.10. **Running rope** - A load applied to an angle to the vertical load of the boom.

9.11. **Side loading** - A load applied to an angle to the vertical plane of the boom.

9.12. **Structural competence** - The ability of the machine and its components to withstand the stresses imposed by applied loads.

9.13. **Superstructure** - The rotating upper frame structure of the machine and the operating machinery mounted thereon.

9.14. **Tackle** - An assembly of ropes and sheaves arranged for lifting, lowering, or pulling.

# Concrete Pump Partners, LLC

# Vehicle Fleet Safety Manual

Revised: December 2025

# Index



# Forms

# Vehicle Fleet Safety Manual

The purpose of this Vehicle Fleet Safety Manual is to provide our employees and managers with tools and materials to ensure the safety of all employees who drive Company vehicles. Vehicle accidents are costly to the company but more importantly they may result in injury or death to our employees, occupants of other vehicles or pedestrians. It is the driver's responsibility to operate the vehicle in a safe manner and to drive defensively to prevent injuries and property damage.

The company endorses all applicable state motor vehicle regulations relating to driver responsibility. The company expects each driver to drive in a safe and courteous manner.

The attitude our drivers take when behind the wheel is the single most important factor in driving safely.

*Definitions: **"FMCSR"** Federal Motor Carrier Safety Regulations*

_____
Initials and Date

# Driver Safety Rules

1. The use of a company vehicle while under the influence of intoxicants and other drugs (which could impair driving ability) is forbidden and is sufficient cause for discipline, up to and including termination of employment.

2. A cell phone can only be used while driving a Commercial Motor Vehicle (CMV) if it is in a hands-free mode, such as voice activation or a one-touch feature, and is mounted within a safe and easy-to-reach location. You cannot hold a phone to make calls, dial, text, or reach for it while the vehicle is in motion, except to communicate with law enforcement or in a true emergency.

3. Colorado Law prohibits people who are 18 years of age and older from using a wireless telephone to send text messages or other similar forms of manual data entry or transmission while operating a motor vehicle.

3. No driver under the age of 18 shall operate a company vehicle.

4. No driver shall operate a company vehicle when his/her ability to do so safely has been impaired by illness, fatigue, injury, prescription medication or any alcohol consumption whatsoever.

5. All drivers and passengers operating or riding in a company vehicle ***MUST*** wear seat belts as intended, even if air bags are available.

6. No unauthorized personnel are allowed to ride in company vehicles.

7. Drivers are responsible for the security of company vehicles assigned to them.

8. The headlights must be on from 30 minutes after sunset to 30 minutes before sunrise, or anytime visibility is reduced to the point where you cannot clearly see a person or vehicle from 1,000 feet away. This includes periods of rain, snow, fog, or other hazardous weather conditions, especially when windshield wipers are in continuous use.

9. All Federal, State, and Local laws must be obeyed.

_____
Initials and Date

## OWNED AUTO DRIVER ELIGIBILITY

Our auto insurance follows our vehicles. The trigger to coverage is "use with Permission", the vehicle and driver are insured when driving with permission of the company. That said one of the best ways to safely manage our fleet is to restrict use of company vehicles to authorized employees ONLY, except in emergencies, or in case of repair testing by a mechanic. Other employees and family members should not be permitted to drive company vehicles. Also, no unauthorized persons should be allowed to ride in company vehicles. All Concrete Pump Partners, LLC vehicles that are the property of the company, must only be used on company business with the prior authorization of your immediate supervisor. This policy is critical to ensure the proper use and availability of company assets while limiting the company's exposure to liability each day. These vehicles should be returned clean and in proper maintenance each time they return, this is the responsibility of the driver.

Violating this policy could result in disciplinary action(s) being taken, this may include formal written documentation up to and including termination of the employee.

No unauthorized person should be allowed to ride in company vehicles. Unauthorized drivers and passengers may not be covered by our insurance carrier. No one under the age of 18 may drive company vehicles.

## NON-OWNED AUTO DRIVER ELIGIBILITY

On occasion employees of the company may use their personal vehicles in connection with company activities, be it a mechanic to pick up parts, or an office assistant going to the post office to pick up the mail. If an employee is involved in an accident while driving his/her personal vehicle on company business or activities, the company may be liable if the employee does not have insurance or if the loss exceeds his/her policy limits. Employees who use their personal vehicles on company business or activities are required to carry adequate limits of insurance; we suggest a minimum of $100,000 for property damage and $300,000 for bodily injury.

_____
Initials and Date

## DRIVING POLICY

All CPP employees operating a company or personally owned vehicle for company business must always comply with all traffic laws and maintain a current, valid driver's license that is submitted upon initial employment and may be subject to subsequent annual review. Such employees have an affirmative obligation to promptly notify their supervisor of any moving violation, or other violations of motor vehicle law which may affect their driver's license, insurability or restriction or suspension of their driver's license.

Seat belts/shoulder harnesses must be worn at all times by such employees and being under influence of alcohol, drugs or other substances while operating a vehicle for Company business is strictly prohibited. Additionally, employees compelled to use cell phones while driving must use a "hands-free" apparatus or safely pull to the side of the road and stop, to conduct a phone call. The use of mobile devices while driving creates physical, mental, and visual distraction and is strictly prohibited while driving.

***NOTE-1***: CDL drivers **MUST** notify the company in writing within 30 days of any motor vehicle convictions (other than parking violations) even if it is in the driver's personal vehicle, and off of company time (FMCSR *383.31*)

**NOTIFICATION**. The notification to State official and EMPLOYER must be made in writing and contain the following information

1. Driver's full name:
2. Driver's license number:
3. Date of conviction
4. The specific criminal or other offense(s), serious traffic violation(s), and other violation(s) of State or local law relating to motor vehicle traffic control, for which the person was convicted and any suspension, revocation, or cancellation of certain driving privileges which resulted from such conviction(s).
5. Indication whether the violation was in a commercial motor vehicle.
6. Location of offense.
7. Driver Signature.

If an employee is involved in an accident, the police report will be used to determine who was at fault. As an employee you are responsible for obtaining a copy of the police report. If the police report is not obtained you may be considered at fault by an insurance company. Hence you have an affirmative duty to obtain all accident reports by all proper authorities, i.e., highway patrol, sheriff's office, or police department.

In addition to all the responsibilities an employee may be terminated if he/she knowingly operates a company vehicle or privately owned vehicle used for company business while driving with a suspended or revoked license.

Finally, CPP reserves the right to review an employee's motor vehicle record. After that review Concrete Pump Partners, LLC reserves the right to place an employee on probation or non-driving status for one year pending the next annual review. Probation would require an employee to attend specific classes or counseling in order to have full driving privileges reinstated. All the classes must be completed during the employee's off-duty time and at the employee's expense. Failure to comply with the company driving policy regulations may result in immediate termination of employment, even for the first offense.

_____

Initials and Date

## Drivers Licenses

Drivers must have a valid driver's license for the type of vehicle to be operated and keep the license(s) with them at all times while driving. Any employee who has a driver's license revoked or suspended should promptly notify the operation Manager and/or the Field Manager (in writing) and should discontinue operation of Company vehicles.

Vehicles with a gross vehicle weight more than 10,001 pounds or which are designed to transport more than fifteen passengers, including the driver, are classified by the Department of Transportation (DOT) as commercial vehicles. You may also need one if you are crossing state lines for business or if your state has specific intrastate requirements. Drivers for these types of vehicles do require a DOT physical once every two years by an approved medical provider.

Driver qualification and review criteria for CDL drivers is inherently more extensive than for non-CDL drivers due to the heightened degree of risk and heightened degree of responsibility. CDL drivers must comply with all applicable DOT regulations, including successful completion of medical, drug, and alcohol evaluations. Driver Qualification files will be maintained by Concrete Pump Partners, LLC accordance with FMCSR *391.51*

_____

Initials and Date

## ACCIDENT REPORTING

All accidents involving Company vehicles, regardless of severity, must be reported to the police, the Operation Manager and the Field Manager - the driver of our vehicle and the Operation/or Field Manager should jointly complete a Vehicle Accident Report (see page 8). All accidents should be reported by the Operation/or Field Manager to our Safety Director(s) and our Controller Michael Perry.

_____

Initials and Date

# Vehicle Accident Report

Driver's Name Driving Company Vehicle: _____

Driver's Date of Birth: _____

Year, Make, Model and VIN of Company Vehicle: _____

Site of Accident: _____

Description of Accident and Driving Conditions (Snow, Rain, Fog, Day/night, etc.)

_____

_____

_____

_____

Were The Police/Highway Patrol Notified? (Please circle one) YES NO

Was Anyone Cited With a Ticket? _____ If So, Who? _____

Was Anyone Injured? _____ If So, Who? _____

Driver's Name of Other Vehicle(s) _____

Driver's Date of Birth of Other Vehicle(s) _____

Tag Number and State of Other Vehicle(s) _____

Year, Make, Model, and VIN of Other Vehicle(s) _____

_____

Insurance Information of Other Driver(s) _____

_____

Description of Damage to Our Vehicle: _____

_____

_____

Description of Damage to Other Vehicle(s): _____

_____

_____

Witness(s) Name and Number: _____

_____

Signature of Employee _____ Date: _____

Manager Signature: _____ Date: _____ Pictures taken? _____

## MOTOR VEHICLE RECORDS

Motor Vehicle Records (MVRs) should be ordered initially during the onboarding process then they will be monitored on going. (forms on page 11) In recognition of certain privacy protections provided under The Fair Credit Reporting Act, the appropriate authorization must be secured from the concerned individual prior to requesting an MVR for that person (see Inquire Release on page 12). In evaluating MVRs, the following criteria are the standards in disqualifying or placing an individual on probation from use of Company vehicles and driving any vehicle while on Company business:

- One (1) or more type 'A' Violations in the past 3 years (as defined below)
- Three (3) or more accidents (regardless) of fault in the last 3 years.
- Three (3) or more 'B' violations in the past 3 years.
- Any combination of accidents and type 'B' violations which equal Four (4) or more in the last 3 years.

Please consult with your Operations Manager for approval of driving privileges. Refer to Motor Vehicle Record Review Form (page 11).

**Definition of Type "A" and Type "B" Violations**

**Type 'A' Violations**:

- Driving While Intoxicated
- Driving While Under the Influence of Drugs
- Negligent Homicide Arising out of the use of a Motor Vehicle (gross negligence)
- Operating During a period of Suspension or Revocation
- Using a Motor Vehicle for the commission of a Felony
- Aggravated Assault with a Motor Vehicle
- Operating a Motor Vehicle Without the Owners Authority (grand theft)
- Permitting an Unlicensed Person to Drive
- Reckless Driving
- Speed Contest (racing)
- Hit and Run (Bodily Injury or Property Damage)

**Type 'B' Violations:**

- All Moving Violations not listed as type 'A' Violations.

_____
Initials and Date

**MOTOR VEHICLE RECORD REVIEW FORM**

Employee_____ Date_____

INSTRUCTIONS:

This form will be used to evaluate the driving record of prospective employees prior to hiring; and all other full and part-time employees whose jobs involve operating Company vehicles. An employee will be disqualified or placed on probation from driving for 1 year if the review indicates the following and the operation manager or Field Manager does not approve employee:

Type 'A' Violations

- Driving While Intoxicated
- Driving While under the Influence of Drugs
- Negligent Homicide Arising Out of the Use of a Motor Vehicle (gross negligence)
- Operating During a Period of Suspension or Revocation
- Using a Motor Vehicle for the Commission of a Felony
- Operating a Motor Vehicle Without the Owners Authority (grand theft)
- Aggravated Assault With a Motor Vehicle
- Permitting an Unlicensed Person to Drive
- Reckless Driving
- Speed Contest (racing)
- Hit and Run (Bodily Injury or Property Damage)

Type 'B' Violations (3 or more)

• All Moving Violations Not Listed as Type 'A' Violations

Accidents (3 or more)

Motor Vehicle Record Review

• Does the employee have a valid driver's license? Yes ____ No _____
• Total number of Type A Convictions _____
• Total number of Type B Convictions _____
• Total number of Accidents _____

__ I have reviewed the attached motor vehicle record and APPROVE the named employee operating Company vehicles.

__ I have reviewed the attached motor vehicle record and DISAPPROVE the named employee operating Company vehicles.

Authorized Signature:_____ Date:_____

## Exception

Based on convictions or accidents during the past 3 years, can approval be granted to the named employee? Yes ____ No ____

Probation Conditions/restrictions:_____

_____

_____

Authorized Signature:_____ Date:_____

Printed Name:_____Title:_____

Reviewed by: _____ Date: _____

Authorized Signature: _____Date:_____

## Disclosure and Release

In connection with my application for employment with you, I understand that consumer reports which may contain public record information may be requested. These reports may include the following types of information: names and dates of previous employers, reasons for termination of employment, work experience, accidents etc. I further understand that such reports may contain public record information concerning my driving record, workers compensation claims, credit, bankruptcy proceedings, criminal record etc., from federal, state and other agencies.

I hereby authorize procurement of consumer reports. If hired (or contracted), this authorization shall remain on file and shall serve as ongoing authorization for you to procure consumer reports at any time during my employment (or contact) period

Print Name: _____ Social Security Number: _____

Applicant's Signature: _____ Date: _____

Date of Birth: _____ Driver License Number: _____

# Driver Vehicle Inspection Report Policy and Procedures

Concrete Pump Partners, LLC requires all Commercial Drivers to complete a Driver Vehicle Inspection Report in accordance with the ***Federal Motor Carrier Safety Regulations 396.11***. "Pencil Whipping" and not following procedure for the Driver Vehicle Inspection Report will result in disciplinary action up to, and including, immediate discharge.

## Driver Vehicle Inspection Report Procedures

- At the start of the shift the driver will review the previous DVIR for the equipment he/she will be operating that day and sign where it says "Reviewing Drivers Signature" is to acknowledge that the driver has reviewed it and that there is a certification that the required repairs have been performed. (if repairs were needed)

- The driver is required to conduct a pre-trip inspection (before leaving the yard) on the piece of equipment he will be operating for the day, starting a NEW DVIR

- The driver is required to do a "safety walk" around the piece of equipment the driver is running, before leaving the jobsite.

- At the end of the shift the driver is required to do a post trip inspection and complete the DVIR. The driver will sign the DVIR and turn in the DVIR to the mechanics for review and filing.

If the driver at any time finds that the piece of equipment is UN-SAFE to operate properly it is his duty not to operate and document the defect on the DVIR for that piece of equipment and to notify management immediately of the defect so they can correct the problem.

Not following proper procedure can and will put the driver, fellow workers and the public at risk.

Drivers Signature: _____Date:_____

Print Name: _____

# Driver's Vehicle Inspection Report

**Concrete Pump Partners, LLC**

**AS REQUIRED BY THE D.O.T. FEDERAL MOTOR CARRIER SAFETY REGULATIONS**

Driver's Name:_____ Unit#:_____ Date:_____

Mileage:_____ Pump Hrs:_____ Time In:_____ Time Out:_____

| **Check Every 2 hours** | **Enter time each item was checked.** | | | | | |
|---|---|---|---|---|---|---|
| Water Box | | | | | | |
| Grease Agitator Bearing | | | | | | |
| Grease Rock Valve Shaft | | | | | | |

| **Perform Daily** | | **Perform Weekly** | |
|---|---|---|---|
| | Drin Air Tanks | | Grease Boom Completely |
| | Grease Agitator Bearing | | While Greasing Tower, Rotate Boom |
| | Fill or Drain Water Tank | | Grease Hollow Pin |
| | Check Engine Oil & Water Levels | | Check Boom Pipe Swivel & Hub |
| | Clean Water Box | | Drain Water from Oil Tank |
| | Fuel Truck | | Grease Outriggers Completely |
| | Check all Tires | | Fill & Check Auto Greasers |
| | Grease Rock Shaft & Shifting Cylinder | | Check Driveline & PTO Bolts |
| | Oil Kidney Seal (hopper) | | |

**Daily Checklist: Circle everything needing attention. Check-off if OK.**

| **PUMP** | | **BOOM** | | **TRUCK EXTERIOR** | |
|---|---|---|---|---|---|
| | Cycle Problems | | Holding Valve | | Lights, Turn Signals, Reflectors |
| | Agitator Seals | | Electrical Problems | | Suspension |
| | HYD. Levels | | Elbows | | Tires |
| | Piston Heads | | Pipe | | Wheels, Rims, Lugs |
| | Rock Valve Wear | | Gaskets (leaking) | | Batteries |
| | Gauges | | Brackets | | Exhaust |
| | HYD. Cooling Fan | | Outriggers | | Load Secured (pipes, hoses, etc.) |
| | Water Pump | | HYD> Leaks | | Mud Flaps |
| | Agitator Blades | | Grease Problems | | |
| | HUD> Leaks | | Safety Cable | | |
| | Vibrator | | Clamps, Reducers, Hoses | | |
| | Misc. | | Washout Equipment | | |
| | | | Misc. | | |

| **TRUCK - General Condition** | | **TRUCK ENGINE** | | **TRUCK – Interior Cab** | |
|---|---|---|---|---|---|
| | Cab, Doors, Windows | | Oil Level | | Gauges, Warning Indicators |
| | Body, Fenders | | Coolant | | Windshield Wipers/Wiper Fluid |
| | Oil Leaks | | Power Steering Level | | Horns, Mirrors |
| | Grease Leaks | | Other | | Heater / Defroster |
| | Coolant Leaks | | | | Steering |
| | Fuel Leaks, Fuel Tank | | | | Clutch / Transmission |
| | Transmission, PTO, Diff. Leaks | | | | Service / Parking Brake |
| | Air Lines / Air Leaks | | | | Safety Equip (Triangles, Fire Ext) |
| | Sub-Frame / Truck Frame | | | | Spare Fuses |
| | Other | | | | Seat Belt |
| | | | | | Permits, Registration, Ins, Job Tickets |
| | | | | | Other |

**Repairs Needed** **YES** **NO**

____ Vehicle condition OK (this must be checked if no defects) Driver Signature:_____

Above Defects Corrected? **YES** **NO**

Above defects need not be corrected for safe vehicle operation. **YES** **NO**

Mechanic's Signature:_____ Driver's Signature:_____

# DEFENSIVE DRIVING

Defensive Driving

It is assumed that drivers of company vehicles adhere to a posture of defensive driving - driving to avoid accidents in spite of the wrong actions of the other driver and despite adverse driving conditions.

Standard Performance

Concrete Pump Partners, LLC expects all management and employees to practice defensive driving as the standard.

Intersections

It is the responsibility of all drivers to approach, enter and cross intersections prepared to avoid accidents that might occur through the action of other drivers. Complex traffic movement, blind intersections, or failure of the other driver to conform to law or traffic control devices will not automatically discharge an accident as "non-preventable" Intersection accidents are preventable even though the driver has not violated traffic Regulations. His /Her failures to take precautionary measures prior to entering the intersection are factors to be studied in making a decision. When a driver crosses an intersection and the obvious actions of the other driver indicate possible involvement either by reason of excess speed, crossing a lane in turning, or coming from behind a blind spot, such entrapment could be preventable.

Backing

Practically all backing accidents are preventable. A driver is not relieved of the responsibility to back safely when a guide is involved in the maneuver. A guide cannot control the movement of the vehicle; therefore, a driver must check all clearances personally.

Front End Collisions

Regardless of the abrupt or unexpected stop of the vehicle ahead, a driver can prevent accidents by maintaining a safe following at all times. This includes being prepared for possible obstructions on the highway, either in plain view or hidden by the crest of a hill or the curve of a roadway. Overdriving headlights at night is a common cause of front-end collisions. Night speed should not be greater than that which will permit the vehicle to come to a stop within the forward distance illuminated by the vehicle's headlights.

Rear End Collisions

Investigation will often disclose that a driver risked being struck from behind by failing to maintain a margin of safety in his/her own following distances. Rear end collisions preceded by a roll back, an abrupt stop at a grade crossing, when a traffic signal changes, or when the driver fails to signal a turn at an intersection is considered preventable. Accidents caused by failure to signal intentions or to slow down gradually are generally preventable.

Passing

Failure to pass safely indicates faulty judgment and the possible failure to consider one or more of the important factors a driver must observe before attempting the maneuver. Unusual actions of the driver being passed or of oncoming traffic might appear to exonerate a driver involved in a passing accident; however, the entire passing maneuver is voluntary and could potentially be the driver's responsibility.

Being Passed

Sideswipes and cut-offs involving a driver while being passed could be preventable when the driver fails to yield to the passing vehicle by slowing down or moving to the right where possible.

Lane Encroachment

A safe driver is rarely a victim of entrapment by another driver when changing lanes. Similarly, entrapment in merging traffic could be an indication of unwillingness to yield to other vehicles or to wait for a break in traffic. Blind spots are not valid excuses for lane encroachment accidents. Drivers must make extra allowances to protect themselves in areas of limited sight distances. Squeeze plays causing involvement with parked cars, pillars, and other road structures can be prevented by dropping back when it is apparent that the other driver is forcing the issue or contesting a common portion of the road.

Grade Crossings

Collisions with fixed rail vehicles, such as trains, rail maintenance vehicles, etc., occurring at grade crossings, in traffic, in a rail yard, switch area or on private property are the responsibility of the driver to prevent. When a vehicle is parked across a rail siding, the driver must first determine if it is safe and permissible and, furthermore, must stand by in case conditions change by the movement of rail cars during the parking interval.

Opposing Vehicles

When an opposing vehicle enters a driver's traffic lane, it may be possible for a driver to avoid a collision. For example, when an opposing vehicle is in a passing maneuver the driver should slow down, stop or move to the right to allow the vehicle to re-enter its own lane. Signaling the opposing driver by flicking the headlights or sounding the horn might aid in the avoidance of an accident.

Turning

Turning movements, like passing maneuvers, require the most exacting care by a driver. Squeeze plays at left or right turns involving other vehicles, scooters, bicycles or pedestrians are the responsibility of the driver making the turn. The driver should signal, properly position the vehicle for the turn, check the rearview mirrors, check pedestrian lanes and take any other defensive action. Be aware of sudden turns by other drivers. Drivers should take precautionary action from tip-offs from the other vehicles to avoid sudden turns by other drivers. U-turns by the driver that result in a collision are generally preventable

Passenger Accidents

Passenger accidents in any type of vehicle are preventable when they are caused by faulty operation of the vehicle. Even though the incident did not involve a collision of the vehicle, it should be considered preventable when a driver stops, turns or accelerates abruptly.

Pedestrians

Traffic regulations and court decisions generally favor the pedestrian hit by a moving vehicle. Drivers need to watch for unusual routes of pedestrians at mid-block or from between parked vehicles. Whether speed limits are posted or the area is placarded with warning signs, speed too fast for conditions may be involved. School zones, residential streets and other areas with special pedestrian traffic must be traveled at reduced speeds equal to the particular situation. Bicycles, motor scooters and similar equipment are generally operated by young and inexperienced operators. The driver, who fails to reduce speed when this type of equipment is operated within sight distance, has failed to take the necessary precaution to prevent an

accident. Keeping within posted speed limits is not taking the proper precaution when unusual conditions call for voluntary reduction of speed.

Weather

Adverse weather conditions are generally not a valid excuse for being involved in an accident. Rain, snow, fog, sleet or icy pavements have never caused an accident. These conditions merely increase the hazards of driving. Failure to adjust driving to the prevailing weather conditions, or to "call it a day" when necessary, may result in a preventable accident. Safety devices such as skid chains, sanders, etc., need to be used when weather conditions require it.

Alley, Driveways and Plant Entrances

Drivers need to slow down, sound a warning or yield to the other driver when vision is blocked in an alley, driveway or plant entrances in order to avoid a potential accident.

Fixed Objects

Collisions with fixed objects are generally preventable. They usually involve failure to check or properly judge clearances. Use extra caution when entering new routes, strange delivery points, resurfaced pavements, under viaducts, inclined entrances to docks, marquees projecting over a traveled section of road and similar situations. The driver must be constantly on the lookout for such conditions to avoid accidents.

Private Property

When a driver is expected to enter private property, make sure as a driver you have the appropriate permission to enter the area.

Parking

When drivers are in unconventional parking locations, including double parking, they need to use warning devices. Roll-away accidents from a parked position normally are preventable. Generally, roll-aways occur when a driver fails to set the parking brake, properly block wheels, or to turn wheels toward the curb to prevent vehicle movement.

_____

Initials and Date

## VEHICLE USE AGREEMENT-COMPANY VEHICLES

*All employees of Concrete Pump Partners, LLC operating a company owned vehicle, agree to operate the vehicle according to the following guidelines. Failure to adhere to these guidelines may result in revocation of an employee's privilege to operate company vehicles or termination under some circumstances.*

- Employees must maintain a proper and current driver's license for the type of company vehicle that they are operating and notify management immediately if they no longer have a valid license.
- Employees will notify the company of any citations received while operating a company vehicle.
- The employee is responsible for maintaining an MVR within established company guidelines.
- Employees must follow generally accepted safe driving practices and obey traffic regulations.
- Employees will ensure that all occupants of a company owned vehicle are properly wearing safety belts while the vehicle is in motion.
- The employee is responsible for ensuring that the vehicle is properly maintained. This includes having the vehicle serviced at regular service intervals by a qualified mechanic. The company will reimburse the employee for the cost of vehicle maintenance.
- Employee authorizes the company to obtain and review the Motor Vehicle Record of the employee.
- The vehicle may be used for non-business use in accordance with the conditions outlined in this agreement. The employee agrees to operate the vehicle in such a manner that will not expose the company to excessive liability or risk.
- Personal use/non-business is only "To and From Work" may drive the vehicle home every night. Any other Personal use/non-business must be authorized in writing by the owner of the company.
- The personal use privilege is not extended to a spouse, children, parents, in-laws, brothers or sisters, or to any other person.
- Company owned vehicles are not to be used for family vacations.
- Employees are financially responsible for any traffic violations while operating a company owned vehicle.
- Employees must report all accidents within ½ hour of the occurrence to their manager.
- Employees will not make any modification or add equipment (CD players, stereos, cellular phones, etc.) to any company owned vehicles.
- Vehicles are not to be loaned to any employees not allowed to operate company vehicles.
- No non-employees are allowed to operate vehicles.
- No hitchhikers are allowed in vehicles.
- Towing of mobile homes, travel trailers, or any type of recreational or utility trailer is prohibited.
- Employees are responsible for parking cars in safe and legal areas off public ways.
- The use of alcohol and controlled substances prior to and during operation of any vehicle is prohibited.
- Any hazardous substances, chemicals or dangerous goods (as defined by law) are prohibited from being carried in a company car.
- Read and receive a copy of the Vehicle Safety Manual

*This authorization may be terminated by the company at any time.*

**I have read, understand, and agree to comply with the above conditions authorizing me to drive a company vehicle.**

_____ _____

Employee Signature Date

_____

Please Print Name

APPROVED:_____ _____

Date

Authorized for personal use **YES** **NO**

**ELECTRICAL AWARENESS (Flagging System)**

1. **PURPOSE**
   1.1. The purpose of this procedure is to identify safe working zones when operating equipment near or in the vicinity of overhead power lines.
2. **SCOPE**
   2.1. This procedure applies to all drivers and operators of CPP equipment.
3. **RESPONSIBILITY**
   3.1. Each driver and/or operator shall be responsible for establishing safe work zones before set up operations begin.
4. **PROCEDURE**
   4.1. When operating equipment near or in the vicinity of overhead power lines, Hi-visibility orange flags shall be placed adjacent to the lines twenty (20) feet away. To establish the awareness barrier, the operator will stand directly under the power line.
      4.1.1. With his/her back to the power line, pace off a minimum of twenty (20) feet and place a cone. For lines over 50 KV, add 4" of distance for every 10KV.
      4.1.2. Repeating the same guidelines, the operator will move a short way down the power line, in the radius of the boom, and place another cone.
      4.1.3. This will provide a visual reference point for the operator to maintain the necessary twenty (20) feet of clearance.
   4.2. When using a radio remote, operators shall, if possible, stand at the cones to observe boom clearance of the overhead power lines.
   4.3. If a spotter is used, ensure spotting is their only duty and communicate prior to what you are doing and the appropriate hand signals.
   4.4. All pump trucks shall be equipped with at least 2 orange flags.

**EMERGENCY RESPONSE & FIRST AID**

**1. PURPOSE**

1.1. The purpose of this procedure is to ensure all employees are aware of the steps to be taken in emergency situations.

2. **SCOPE**

2.1. This applies to all CPP employees and is always available in the EHS manual for their review. Managers, foreman, and point of contacts with names and contact information will be made available for all employees upon request.

3. **PROCEDURE**

3.1. First Aid

3.1.1. In the event of an on-the-job injury that requires medical attention that goes beyond basic first aid, employees shall utilize the 911 system. Employees will utilize on-site staff for first aid or medical treatment.

3.1.2. For minor injuries which can be treated at the facility or job site, a trained first aid provider shall assist the injured with the proper treatment (i.e., minor cuts, abrasions, and lacerations).

3.1.3. First aid kits are located at each facility and in all company vehicles.

3.1.4. First aid kits shall consist of items determined for each specific jobsite.

3.1.5. First aid kits shall be restocked as soon as possible once an item has been utilized and shall be checked periodically to ensure that all missing items are replaced.

3.1.6. Facilities shall be provided for quick flushing of eyes or body where the eyes or body of any person may be exposed to injurious materials.

3.2. Transportation/Communication with EMS and Medical Facilities

3.2.1. If an injured employee can be transported without EMS, an employee should be transported to the nearest medical facility that can treat the employees' injuries.

3.2.2. If in doubt call 911 and let EMS decide the proper mode of transportation to the medical facility for the injured employee.

3.2.3. In rural locations where EMS cannot be readily contacted numbers and contact information for alternative sources of treatment should be posted in a prominent place for employees.

3.3. Fire and Explosion

3.3.1. Contact 911.

3.3.2. If a fire or explosion occurs within the workplace, all employees shall immediately evacuate the building without hesitation via the emergency routes identified on the building floor plan and gather at a pre-determined muster area. All employees shall then be accounted for.

3.3.3. Bomb Threat

3.3.3.1. All bomb threats shall be treated as real. If possible, try to learn what you can about the bomb before the caller hangs up by asking the following questions as calmly as possible:

- Where is the bomb?

- When will it detonate?
- Why is it being done?

3.3.3.2. Then Call 911.

3.3.4. Severe Weather Threat

3.3.4.1. During a severe weather threat, you are safer inside the building or vehicle than outside. If severe weather is in the area:

- Move into an interior room and stay near an interior wall and avoid falling objects.
- Stay away from windows.
- Once the threat has subsided safely exit the building and report to the muster area for a head count.

3.4. Alerting and Training

3.4.1. In the event of an emergency, all employees that could potentially be involved will be notified via audible alarm or mobile communication. Training for this policy will take place at the time of employment, and annually thereafter.

**EMPLOYEE SAFETY RULES**

1. **PURPOSE**
   1.1. The purpose of this procedure is to identify the minimum safety requirements CPP expects from its employees.
2. **SCOPE**
   2.1. This procedure applies to all employees who work on CPP equipment and at CPP facilities.
3. **RESPONSIBILITY**
   3.1. Each employee shall be responsible for complying with all company safety and health procedures, and applicable federal, state, and local regulations.
4. **PROCEDURE**
   4.1. Drivers and Operators
      4.1.1. Do not operate boom equipment, concrete pumps, tele-belts or mobile cranes so as they are capable of coming within twenty (20') of overhead energized power lines (per EHS-035)
      4.1.2. CPP Equipment must be operated within 3° of level, according to manufacturer's recommendations.
      4.1.3. Do not allow anyone to uncouple any system (hose, pipe, reducers) until pressure has been removed fully from the line by reversing the pump.
      4.1.4. Approved safety glasses, hi-vis clothing or vest, and hard hats/safety helmets will be worn at all times when operating equipment.
      4.1.5. Never loosen any holding valves with any load on boom.
      4.1.6. Never put any part of the body (hands, feet) in valve box (water box and hopper). Do not stand on hopper grates.
      4.1.7. Operate vehicles in full compliance with all applicable federal, state, and local regulations.
   4.2. Accident, Injury, and Illness Reporting
      4.2.1. All work-related accidents, injuries and illnesses shall be reported immediately or as soon as safely possible to the appropriate CPP, dispatcher or manager.
   4.3. Personal Protective Equipment
      4.3.1. Head Protection
         4.3.1.1. A hard hat/safety helmet that meets the requirements of ANSI Z89.1 shall be worn at all times while performing work on CPP, equipment, facilities and on all job sites.
   4.4. Foot Protection
      4.4.1. Safety shoes, full-shelled boots, or work shoes in good condition, with slip resistant and oil-resistant soles that meet ANSI Z41.1 requirements shall be worn.
   4.5. Eye and Face Protection
      4.5.1. Eye protection shall be worn while performing work on CPP equipment or while on CPP facilities.
      4.5.2. Minimum protective eyewear shall be safety glasses with side shields. All eye and face protection shall meet the requirements of ANSI Z87.1.
   4.6. Hearing Protection

4.6.1. Hearing protection devices that meet the regulatory standards shall be worn in all posted high noise areas. Hearing protection is required in all known or suspected areas with noise levels of 85 dBA (Decibels) or higher.

4.7. Protective Clothing

4.7.1. Protective clothing shall be worn when handling hazardous materials or chemicals, when the applicable Safety Data Sheet (SDS) specifies such.

4.7.2. Hi-vis vest or other clothing shall be worn when applicable.

4.7.3. Fall Protection

4.7.3.1. All work performed with a fall hazard of six (6) feet or more (Four (4) feet when state fall protection regulations require) personal fall protection must be used. (EHS-050)

4.8. Safe Work Practices - The following items recognize basic safe work practices.

4.8.1. Smoking

4.8.1.1. Smoking is prohibited at all facilities except in designated smoking areas.

4.8.2. Signs

4.8.2.1.1. All personnel shall be familiar with and comply with all signs posted throughout CPP facilities.

4.8.3. Lockout/Tagout

4.8.3.1. All affected personnel shall comply with federal or state requirements for lockout/tagout while working on powered equipment, when performing confined space entry operations or when engaged in other work activities where the control of potentially hazardous energy is necessary to ensure personal safety.

4.8.4. Hot Work

4.8.4.1. All welding, cutting, and brazing shall be done in accordance with federal, state, and local Fire Department regulations.

4.8.5. Hazard Communication

4.8.5.1. CPP shall provide, upon request, an appropriate Safety Data Sheet (SDS) for hazardous chemicals or materials maintained at each location.

4.8.6. Vehicle Operations

4.8.6.1. Employees shall operate vehicles in full compliance with all applicable federal, state, and local regulations.

4.8.7. Training

4.8.7.1. Employees shall be appropriately trained to perform the assigned task.

4.8.8. Hand and Power Tools

4.8.8.1.1. Employees shall not use unsafe hand tools. Adjustable wrenches shall not be used if jaws are sprung or worn to a point that slippage occurs.

4.8.8.1.2. Nails shall not be cut with an axe.

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

4.8.8.1.4. Handles of tools shall be kept free of splinters or cracks and shall be kept tight in the tool.

**FALL PROTECTION**

1. **PURPOSE**
   1.1. The purpose of this procedure is to provide specific instructions for the use of fall protection systems, and to ensure affected employees are trained and made aware of the safety provisions that are required by federal and state regulations.
2. **SCOPE**
   2.1. This procedure is designed for CPP employees whose job assignments expose them to fall hazards. Employees shall comply with federal and state fall protection requirements.
3. **REFERENCES**
   3.1. 29 CFR 1926.502 Fall Protection Systems
4. **RESPONSIBILITY**
   4.1. CPP is responsible for providing fall protection equipment.
   4.2. Managers and Supervisors are responsible for ensuring compliance with this procedure.
   4.3. Employees shall:
      4.3.1. Follow this Fall Protection procedure.
      4.3.2. Wear the Personal Protective Equipment (PPE) assigned to them.
      4.3.3. Ensure their fall protection equipment is in safe operating condition.
   4.4. The Safety Department:
      4.4.1. Develop and maintain this Fall Protection procedure.
      4.4.2. Provide training for all affected employees.
5. **OBJECTIVE**
   5.1. The objective of this procedure is to provide guidelines and procedures for the use of fall protection systems.
6. **PROCEDURE**
   6.1. Anchor Points
      6.1.1. Employees traveling or working in an elevated area where a fall exposure exists shall make use of fall protection by securing their safety lanyard to an available substantial anchoring point.
      6.1.2. Anchor points shall be selected based in accordance with OSHA standards. The use of anchor points shall be discussed during the Safety Meeting.
      6.1.3. The selection of the anchorage point shall reduce free fall to the shortest distance possible.
      6.1.4. Guardrails and railings can be used as anchor points, only if they have been designated as such
   6.2. Walking and Working Surfaces
      6.2.1. Each employee on a walking or working surface six (6) feet or more (Four (4) feet when state fall protection regulations are required) above lower levels shall be protected from falling by a guardrail system (a safety net system or personal fall arrest/restraint system may also be used).
   6.3. Boom Maintenance and Inspections
      6.3.1. Employees performing maintenance and periodic boom inspections shall use personal fall arrest systems on elevated skeletal steel structures where a fall hazard of six (6) feet or more exist (Four (4) feet when state fall protection regulations are required).

6.3.2. When traveling to perform maintenance and inspections on elevated open structures, employees shall utilize personal fall arrest systems.

6.4. Access and Egress with Ladders

6.4.1. A body harness and restraint system shall be used when climbing ladders greater than twenty-five (25) feet in height unless the ladder is enclosed with a protective case. Ladders shall be secured at the base and/or top to prevent slipping.

6.5. Fall Protection Equipment

6.5.1. Personal fall protection devices shall meet ANSI Z359 (American National Standards Institute) requirements.

6.5.2. Full body harnesses shall be used for fall arrest purposes and fall restraint.

***Note: Under no circumstances shall a body belt be used as a personal fall arrest device.***

6.5.3. Lanyards or other connecting equipment shall be equipped with a deceleration device to limit the free-fall to 42 inches or less.

6.5.4. Fall protection equipment shall be inspected prior to use. These inspections include visually observing that the load stitches are intact and belts and lanyards are not deteriorated or frayed. Any equipment found defective shall be removed from services.

7. **DEFINITIONS**

7.1. Anchorage **-** A secure point of attachment for lifelines, lanyards, or deceleration devices. The anchorage point strength for fall arrest shall be capable of supporting 5,000 pounds. The anchorage point strength for fall restraint shall be capable of supporting four times the intended load.

7.2. 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 them to other components of a personal fall arrest system.

7.3. Connector - A device which is used to couple (connect) parts of the personal fall arrest system and positioning device systems together. It may be an independent component of the system, such as a carabineer, or it may be an integral component or part of the system (such as a buckle or D-Ring sewn into a body harness, or a snap hook spliced or sewn to a lanyard or self-retraction lanyard).

7.4. Deceleration Device - A mechanism, like a tearing or deforming lanyard, designed to dissipate energy during a fall and limit the stress on a worker.

7.5. Free Fall - The act of falling before a personal fall arrest system begins to apply force to arrest the fall.

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

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

7.8. Personal Fall Arrest System - A system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, body harness and may include a lanyard(s), deceleration device, lifeline, or suitable combination of these.

7.9. Self-Retracting Lifeline/Lanyard (Yo-Yo) - A device containing a drum-wound line that can be slowly extracted from, or retracted onto, the drum under slight tension during normal operation.

**FATIGUE MANAGEMENT PLAN**

1. **PURPOSE**
   1.1. The purpose of this document is to establish guidelines for identifying, assessing and controlling employee fatigue. It is compliant with Federal Motor Carrier Safety Administration (FMCSA), state and federal labor laws, and Occupational Safety and Health Administration (OSHA) standards for fatigue management.
2. **SCOPE**
   2.1. The Fatigue Management Plan (FMP) will focus on reducing inappropriate shift patterns, task design, and substitution and/or rotation of personnel that display symptoms of worker fatigue. This plan applies to all CPP employees and contractors.
3. **REFERENCES**
   3.1. FMCSA 49 CFR B.III.B.395
   3.2. OSHA 29 CFR 654.5(a)1: General Duty Clause
4. **RESPONSIBILITY**
   4.1. COO, Directors, Managers, and Department Heads ensure supervisor(s)
      4.1.1. Fatigue Management Plan within their branch/department.
      4.1.2. Actively support this Plan thin their branch/department.
         4.1.2.1. Ensuring project and/or task specific controls are developed communicated and effectively implemented as appropriate.
         4.1.2.2. Ensuring that all employees (i.e. Managers, Supervisors and Workers) receive the necessary education and training related to this Policy, as well as project/task specific controls.
         4.1.2.3. Maintaining applicable records (drivers' logs, schedules, and Electronic Logging Device [ELD] records) in accordance with BBCP's record retention procedures/practices.
   4.2. The Branch Manager/Supervisor
      4.2.1. Implement and ensure procedures are followed in accordance with this plan.
      4.2.2. Ensure that employees are aware of the control measures, instructed on the details of implementation, and provided with equipment and methods of control when they are required.
      4.2.3. Contact Safety to request technical assistance, and to evaluate health and safety concerns within their department.
      4.2.4. Design the work roster to comply with the FMP.
   4.3. Employees
      4.3.1. Comply with this procedure and any further safety recommendations provided by managers, supervisors, competent person, and/or EHS regarding the Fatigue Management Plan.
      4.3.2. Contact the appropriate manager, supervisor, competent person or EHS to request technical assistance, and to evaluate health and safety concerns within their department schedule.
      4.3.3. Report any use of medication (prescription or over the counter), chronic or intermediate use, that will affect the employee's ability to perform their duty as required without fatigue.
      4.3.4. Report any fatigue prior to starting their work shift.

4.3.5. Obtain adequate sleep prior to starting their work shift.

4.4. Safety Department:

4.4.1. Develop and maintain the Fatigue Management Plan and conduct hazard assessments based on hours of service for each CPP occupation for exposure determination.

4.4.2. Provide initial and recurrent training annually for employees.

4.4.3. Conduct periodic hazard assessments to address and control fatigue in the workplace.

5. **PROCEDURE**

5.1. The objectives of this procedure are to:

5.1.1. Identify employees with occupational exposure or potential occupational exposure to workplace fatigue. All employees that can be identified as having "reasonably anticipated exposure" to fatigue must review this written control plan.

5.1.2. All employees shall have access to a copy of this plan.

5.1.3. Provide procedures to eliminate or minimize employee exposure.

6. **PROCEDURE**

6.1. Work Shifts and Schedules

6.1.1. Work Hours

6.1.1.1. CDL licensed operators are governed by FMCSA/DOT (49CFR395) regulations for hours of service (working hours).

6.1.1.2. Management must provide adequate time for rest between shifts.

6.1.1.3. Where an employee is required to change from day to night shift, and vice versa, they should be given an adequate rest period before starting the new shift.

6.2. Types of Work

6.2.1. The management team should ensure that all tasks are engineered and designed to reduce fatigue in the user. Tasks that are high risk will require special attention regarding employee scheduling and roster assignments.

- High Risk Tasks
- Monotonous tasks
- Physically demanding tasks
- Hot environments
- Mentally demanding tasks
- Long travel periods

6.3. Controls

6.3.1. Engineered ergonomic solutions.

6.3.2. Roster restrictions allowing 10 hours between shifts, for CDL operators.

6.3.3. Comply with FMCSA use of driver logs and ELDs.

6.3.4. Proper nutrition and lifestyle choices.

6.3.5. Increase break frequency if needed.

6.3.6. Eliminate use of over the counter and prescription drugs that affect the employee's ability to work safely.

6.3.7. Proper sleeping patterns to lower stress.

**FORKLIFT (POWERED INDUSTRIAL TRUCK) SAFETY**

1. **PURPOSE**
   1.1. The purpose of this procedure is to provide specific instructions for the safe operation of forklifts.
2. **SCOPE**
   2.1. This procedure is designed for CPP employees who are responsible for operating material handling equipment, forklifts, stackers, and powered pallet jacks.
3. **REFERENCES**
   3.1. 29 CFR 1926.602 – Material Handling Equipment
   3.2. 29 CFR 1910.178 – Powered Industrial Trucks
4. **RESPONSIBILITY**
   4.1. Managers:
      4.1.1. Ensure compliance with this program.
      4.1.2. Maintain a list of authorized forklift operators, including the types of trucks qualified to operate and the date of their last training and safety skills evaluation.
   4.2. Supervisors:
      4.2.1. ensure employees operate material handling equipment in a safe manner.
   4.3. Employees shall comply with this procedure.
   4.4. Safety Department:
      4.4.1. Develop and maintain the Forklifts (Powered Industrial Truck) Safety procedure.
5. **OBJECTIVE**
   5.1. The objective of this program is to provide guidelines and procedures for safe forklift operation and maintenance.
6. **PROCEDURE**
   6.1. Operators
      6.1.1. Only trained and authorized operators shall be allowed to operate forklifts and mobile equipment.
   6.2. Forklift Operation
      6.2.1. Operators shall drive carefully, observe traffic rules, and be in full control of the forklift.
      6.2.2. No one shall be allowed under a load or raised forks, buckets, truck beds, etc., without blocking the equipment.
      6.2.3. Load backrest extensions shall be required for loads higher than the operator's head.
      6.2.4. Combustion engine-powered vehicles shall not run unattended - lower load to floor, set brake, place in neutral, and shut off ignition.
         6.2.4.1. Passengers shall not be carried on forklifts unless a seat is provided. Jumping on or off a moving vehicle shall not be allowed.
      6.2.5. Powered hand trucks without seats shall not be ridden.
      6.2.6. Driving with legs or arms outside the machine shall not be allowed.
      6.2.7. Vehicles shall have an operating horn and a backup alarm or strobe light installed.
      6.2.8. Forks shall be locked to the carriage so they cannot come off.
      6.2.9. Spinner knobs shall not be used.

6.2.10. Leaving a truck in an aisle or doorway or obstructing another work shall not be allowed.

6.2.11. When a forklift is parked, the forks shall be flat on the ground.

6.2.12. If at any time a forklift is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service and appropriately tagged or labeled until it has been restored to safe operating condition.

6.3. Traveling

6.3.1. Upon approaching blind corners or other places where clearance or vision is restricted, the operator shall slow down and sound the horn. The operator shall travel slowly around corners.

6.3.2. The operator shall stop, look, and listen at active railroad tracks; cross them diagonally to reduce jar to machine and load; and park at least eight feet from tracks.

6.3.3. When going up or down ramps, the operator shall always keep the load upgrade. The operator shall not turn the vehicle sideways on an incline.

6.3.4. The operator shall not travel with load raised unless the load impacts the field of vision or there is insufficient maneuvering room. Forks shall be raised just high enough to clear floor and yard obstructions. Driving with forks raised high endangers goods, property, and personnel. The load shall be tilted back while traveling.

6.3.5. The operator shall slow the vehicle on wet and slippery floors.

6.3.6. The operator shall not follow other vehicles too closely.

6.3.7. The operator shall normally face-in the direction in which he/she is traveling. Driving backward shall be done when the load is too high or too wide to see around. Guards shall not obstruct the operator's vision.

6.3.8. Bumps, holes, slick spots, and loose materials that may cause the truck to swerve or tip shall be avoided.

6.3.9. The operator shall avoid sudden starts or stops and operate the vehicle at safe speeds.

6.4. Loading

6.4.1. The rated capacity of the truck shall be posted so it is always readily visible to the operator. The load weight shall not be exceeded.

6.4.2. Before loading, the operator shall check the floors in trucks, freight cars and barges to ensure the combined weight of truck and load can be supported.

6.4.3. The operator shall avoid sudden starts or stops and operate the vehicle at safe speeds.

6.4.4. Unstable loads shall not be lifted.

6.4.5. Pallets used for loading shall be in good condition.

6.4.6. Forks shall be spaced to fit the load. Loads shall never be carried off center.

6.4.7. Pallets or materials shall not be stacked closure than three feet from a sprinkler head.

6.5. Dock Boards

6.5.1. Dock boards shall have positive stops to prevent moving or shifting.

6.5.2. Dock boards shall have at least six inches bearing on the loading dock.

6.5.3. Trucks shall have their wheels blocked and brakes set to prevent them from rolling, while being worked by forklifts.

6.6. Elevated Work Platform

6.6.1. An operator shall be in attendance while workers are on the platform.

6.6.2. The vehicle shall not be moved from point-to-point with workers on the platform.

6.6.3. The platform shall be securely attached to the forklift, and have standard guardrails, mid- rails, and toe boards on all sides.

6.6.4. Areas between the workers on the platform and the forklift shall be guarded to prevent contact with drive chains, sprockets, and shear points.

6.6.5. A safety device shall be installed to prevent the mast from being tilted.

6.7. Changing and Charging Batteries

6.7.1. Smoking shall be prohibited in the charging area.

6.7.2. When charging batteries, the vent caps shall be kept in place to avoid electrolyte spray.

6.7.3. Equipment shall be provided for neutralizing spilled electrolyte.

6.7.4. Emergency eye wash capabilities shall be available in battery changing areas.

6.7.5. Trucks shall be in proper positions and the brake applied before attempting to charge batteries.

6.8. Maintenance

6.8.1. The operator shall make daily maintenance checks at the start of each shift and complete the Forklift Daily Checklist. Brakes, steering gear, lights, horns, warning devices, clutches, etc., shall be tested before operating the vehicle. If the vehicle has any defects that will cause it to be unsafe, it shall be removed from service.

6.8.2. As part of the daily maintenance check, the operator shall inspect the fire extinguisher on the truck

7. **RECORDS**

7.1. Training records shall be maintained by the Safety Department for three (3) years.

7.2. A copy of training records shall be maintained at each branch office for three (3) years.

7.3. Forklift Daily Checklists shall be maintained at each branch for at least ninety (90) days.

8. **FORMS**

8.1. Forklift Daily Checklist (which can be obtained from the Safety Department).

9. **DEFINITIONS**

9.1. Authorized Operator - An employee who has satisfactorily completed both classroom and operation training on material handling equipment.

9.2. Attachments Other factory installed attachments. The attachment shall be marked to identify the attachment and show the approximately weight of the truck and attachment combination at maximum elevation with load laterally centered.

9.3. Attended - The operator is within 25 feet of the vehicle and can see it.

9.4. Modifications - No additions that affect capacity and safe operation shall be performed by the customer or user without manufacturer's prior written approval.

9.5. Rated Capacity - The maximum weight that a forklift is designed to lift as determined by the manufacturer.

9.6. Unattended - The operator is 25 feet or more away from the vehicle, or closer than 25 feet and cannot see the vehicle.

10. **RELATED DOCUMENTATION**

10.1. CPP Forklift Training Program.

**FORWARD**

This Concrete Pump Partners (CPP), Environmental Health and Safety Manual outlines the proper standards, rules, guidelines, and procedures associated with the safe operation of CPP equipment and facilities. The value of applying the safety and health practices outlined in this manual should be realized through the reduction of incidents during the course of routine job assignments and concrete pump truck activities, with the ultimate goal being the elimination of occupational injuries and illnesses.

Each procedure in this manual is assigned a unique number (i.e. EHS-001). Revision numbers and effective dates are noted on each procedure to ensure the most current version is in use.

Continual Evaluation and Improvement is the objective of CPP's safety and environmental programs. Any recommendations to improve this manual through the revision process will be addressed and revised accordingly in order to enhance its quality and efforts in making the workplace safer for all CPP, employees and customers.

Jon Kemp

President

**HANDHELD ELECTRONIC DEVICES POLICY (CELL PHONE/RADIO/GPS)**

1. **PURPOSE**
   1.1. The use of handheld electronic devices while driving or operating a concrete pump/tele belt presents a hazard to the operator, other employees, jobsite personnel, and the general public. This policy is meant to ensure the safe operation of Company equipment while an operator is conducting company business.
2. **SCOPE**
   2.1. This procedure is applicable to all CPP operators that drive a commercial motor vehicle and/or operate a concrete pump or tele belt as part of their job duties.
3. **REFERENCES**
   3.1. 49 CFR 392.82 – Handheld Devices
4. **RESPONSIBILITY**
   4.1. Managers / Supervisors shall:
      4.1.1. Ensure operators are aware of and adhere to all federal, state, local and company rules and regulations regarding the use of handheld electronic devices while driving or operating company equipment.
   4.2. Operators shall:
      4.2.1. Adhere to all federal, state, local and company rules and regulations regarding the use of handheld electronic devices while driving or operating company equipment.
   4.3. Safety Department shall:
      4.3.1. Ensure all managers and supervisors are aware of all federal, state, local and company rules and regulations regarding the use of handheld electronic devices while driving or operating company equipment.
      4.3.2. Maintain this Handheld Electronic Devices policy and procedure.
5. **OBJECTIVE**
   5.1. The objective of this procedure is to ensure that CPP operators only use handheld electronic devices while driving with the use of approved hands-free options and do not use such devices while operating company equipment.
6. **PROCEDURE**
   6.1. Operators shall only use handheld electronic devices while driving if the device is equipped with an approved hands-free option (i.e. Speaker phone, Wired, or Wireless earphone).
   6.2. Operators shall not use handheld electronic devices while operating Company equipment.
   6.3. Texting is prohibited at all times while driving or operating Company equipment.
   6.4. Whenever possible, directions to job sites shall be written down before driving begins, not over the cellular phone/radio, or with the help of a handheld GPS unit while in transit. If dispatch contacts the operator while in-route, he/she shall only respond with the use of a hands-free option. If a hands-free option is not available, the operator shall only respond once they are able to pull off to a safe and legal stopping place.
   6.5. If for any reason an operator needs to make use of a handheld GPS unit while driving, he/she should locate a lawfully designated area to park before using the GPS unit.
   6.6. Operators shall contact dispatch when they arrive on-site to report they have arrived and have checked the site for overhead power lines and other identified hazards. Once dispatch confirms, operators should discontinue the use of any cellular phone/radio.

6.7. Operators shall not use their cellular phones/radios while setting up on the job or while pumping. If a break occurs during operations the operator may then use the cellular phone to inform dispatchers of their status and/or make any necessary, phone calls. If an operator is alerted by dispatch and/or their Supervisor/Branch Manager, he/she shall discontinue operations before responding.

6.8. Once wash out operations are completed and the pump is ready for travel, the operator should call in and be ready to write down the directions to the next jobsite, if applicable. Their handheld electronic devices should then be converted to a hands-free mode before driving. If the device does not have a hands-free option, the device should be stowed.

6.9. Operators of company equipment shall be required to sign an acknowledgment sheet of this policy.

**HAZARD COMMUNICATION**

1. **PURPOSE**
   1.1. The purpose of this procedure is to provide instructions for the safe handling and use of hazardous chemicals and products.
2. **SCOPE**
   2.1. This procedure applies to CPP employees whose job assignments involve working with, or exposure to, hazardous chemicals and substances.
3. **REFERENCES**
   3.1. 29 CFR 1926.59 - Hazard Communication.
4. **RESPONSIBILITY**
   4.1. Managers shall ensure compliance with this procedure.
   4.2. Supervisors:
      4.2.1. Updated Hazard Communication Program notifications are accessible to employees.
      4.2.2. The Safety Data Sheets (SDS) binder (Hazards Communications Manual) is available at the workplace and up to date. A QR Code is available for all company owned vehicles on the inside of each door.
      4.2.3. Hazardous chemicals and products are stored, handled, and used in compliance with company procedures.
      4.2.4. Primary and secondary containers meet labeling requirements.
   4.3. Employees:
      4.3.1. Become informed of the hazardous chemicals in the workplace.
      4.3.2. Learn how to read a container warning label.
      4.3.3. Learn how to read an SDS.
      4.3.4. Understand their responsibilities per the Hazards Communication procedure.
      4.3.5. Comply with the personal protective equipment requirements for using each hazardous chemical or product.
   4.4. The Safety Department:
      4.4.1. Review and maintain the Hazards Communication procedure.
      4.4.2. Maintain and post a list of all hazardous chemicals used in the workplace.
      4.4.3. Provide training on the Hazards Communication Program to all affected employees.
5. **OBJECTIVE**
   5.1. The objective of this procedure is to increase employee awareness of the risks associated with using hazardous chemicals and products while minimizing worker exposure.
6. **PROCEDURE**
   6.1. Safety Data Sheets (SDS)
      6.1.1. SDS's are readily accessible to employees and shall be kept current per the approved list of hazardous chemicals.
      6.1.2. SDS's are available for information on hazardous chemicals regarding physical properties, physical and chemical hazards, personal protective equipment which may be required, as well as first-aid treatment.
      6.1.3. Before any new product, which may be hazardous may be purchased, the Safety Department shall obtain an SDS from the manufacturer or its representative for review of its toxicity to the employee and the environment and costs associated with disposal of its container and residual contents.

6.1.4. If a chemical specific SDS is not available, contact the supervisor and request that an SDS for this product be obtained.

6.2. Labeling and Other Forms of Warning

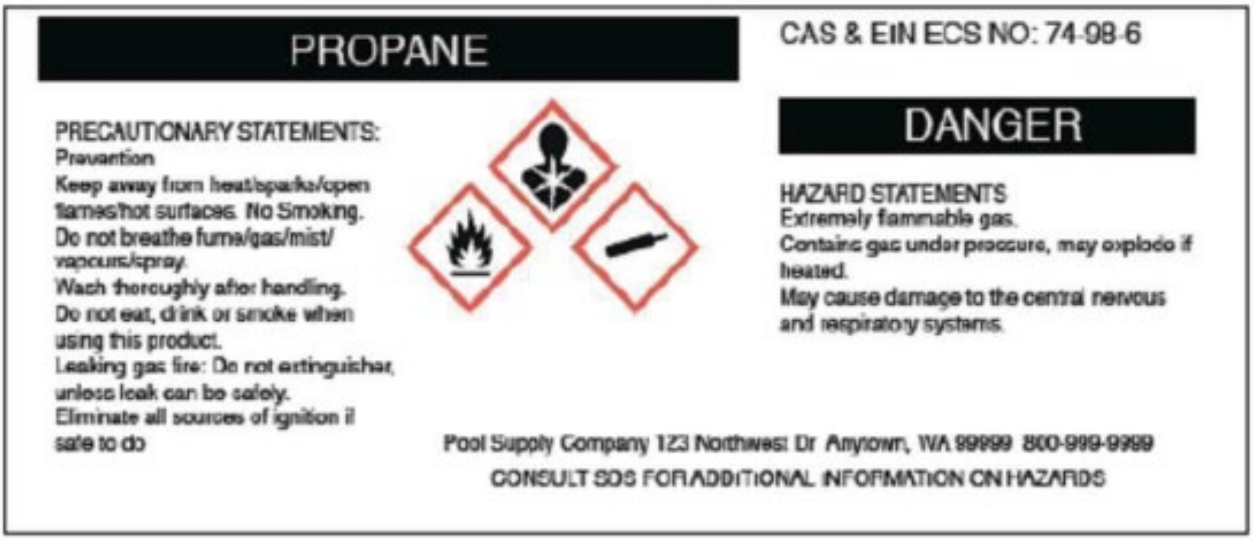
6.2.1. Chemical containers that have not been labeled with the following information shall not be accepted for use:

- Product identifier.
- Signal word.
- Hazard statement(s).
- Pictogram(s).
- Precautionary statement(s); and
- Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.

6.2.2. Unlabeled containers shall be reported to a supervisor, who shall safely attempt to identify the chemical and label the container or appropriately dispose of the product.

6.2.3. Chemicals shall not be handled until properly identified.

6.2.4. Product SDS and Global Harmonized System of Classification and Labeling of Chemicals (GHS) compliant labels on the product's container, shall be used to identify potential hazards prior to using a chemical.




6.3. Secondary Container Labeling

6.3.1. Primary (original) and secondary (containers other than the original container) hazardous chemical containers shall be appropriately labeled with GHS compliant labels/markings.

6.3.2. The following information, from the SDS, shall be completed on a label for a secondary container:

- Product identifier.
- Signal word.
- Hazard statement(s).
- Pictogram(s).

6.4. Containers with hazardous chemicals intended for immediate use shall not be labeled.

6.5. For one-time-use products, the supervisor shall ensure that each employee who will be exposed to the product is provided with the following information.

6.5.1. Physical properties.
6.5.2. Physical and chemical hazards.
6.5.3. Personal protective equipment which may be required.
6.5.4. First-aid treatment.
6.5.5. Proper procedures for using the product.
6.5.6. Control measures to be taken to reduce the hazard such as ventilation or assigning other employees as safety watches.

6.6. Special/Non-Routine Tasks

6.6.1. Before beginning special or non-routine tasks, the supervisor shall provide each affected employee with the following information:

- Hazards of the product.
- Proper procedures for using the product.
- Control measures to be taken to reduce the hazard such as ventilation, respirators, or assigning other employees as safety watches.

## 7. TRAINING

7.1. All employees who work with or have the potential to be exposed to hazardous chemicals in the workplace shall receive training on the federal or state Hazard Communication Regulations and company specific Hazard Communications Program.

## 8. DEFINITIONS

8.1. ***Chemical*** means any substance, or mixture of substances.

8.2. ***Chemical manufacturers*** mean an employer with a workplace where chemical(s) are produced for use or distribution

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

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

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

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

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

8.8. ***Globally Harmonized System*** Classification and Labelling of Chemicals. GHS defines and classifies the hazards of chemical products and communicates health and safety information on labels and safety data sheets.

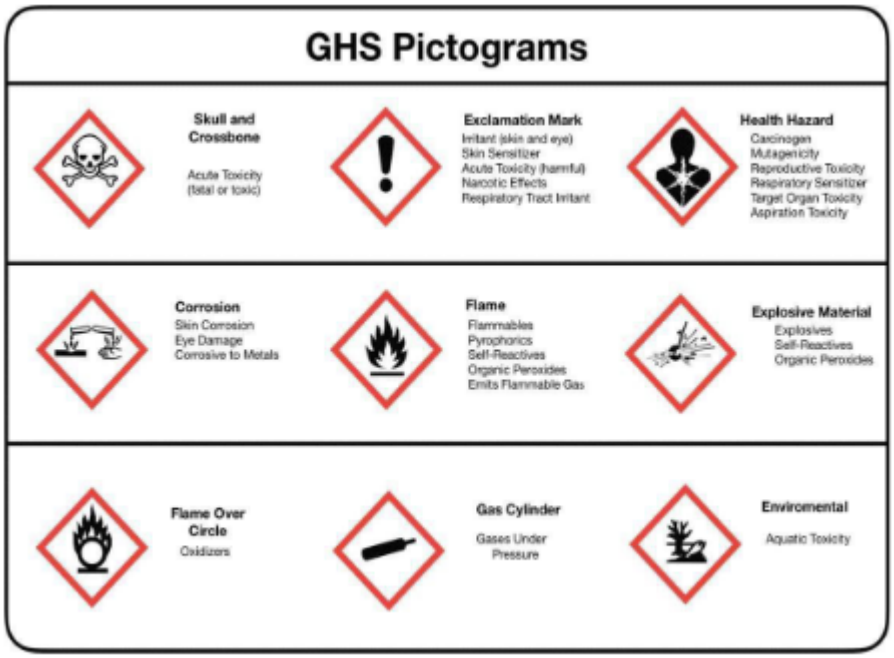
8.9. ***Hazard statement*** means a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical including, where appropriate, the degree of hazard.

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

8.11. ***Label elements*** mean the specified pictogram, hazard statement, signal word and precautionary statement for each hazard class and category.

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

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




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

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

8.16. ***Safety data sheet (SDS)*** means written or printed material concerning a hazardous chemical that is prepared in accordance with WAC 296-901-14014.

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

**HAZARDOUS WASTE AND NON-HAZARDOUS MATERIALS STORAGE**

1. **PURPOSE**
   1.1. To define procedures, which meet federal, state, and local requirements for the accumulation and storage of hazardous waste and non-hazardous materials generated by CPP.
2. **SCOPE**
   2.1. This procedure is applicable to CPP facilities that generate, accumulate, or store hazardous waste and non-hazardous materials, except where such facilities or operations are required to comply with alternative equally stringent procedures.
3. **RESPONSIBILITY**
   3.1. Personnel involved in hazardous waste and non-hazardous materials accumulation and storage shall comply with procedure requirements to his/her level of authority and responsibility.
4. **PROCEDURE**
   4.1. Company facilities that generate hazardous waste materials shall follow the accumulation requirements stipulated for a large quantity generator of hazardous wastes in federal regulations.
   4.2. Company facilities shall store non-hazardous waste prior to disposal in a manner not to attract, or be accessible, to animals.
   4.3. Wastes streams which are not hazardous wastes but could post a hazard if not properly managed shall be handled in a more controlled manner than other non-hazardous wastes (e.g., asbestos-containing materials, PCB's (polychlorinated biphenyl), glycol, regulated garbage, and non-hazardous oily spill debris and gravels (petroleum contaminants other than crude, including but not limited to turbine fuel, diesel fuel, hydraulic fluid, etc.).
   4.4. Facilities that are classified as conditionally exempt small quantity generators (CESQG's) do not have an accumulation time limit as long as the 220 pound per month limit is not exceeded, and no more than 2,200 pounds are accumulated at one time.
   4.5. Facilities that are classified as small quantity generators (SGQ's) can accumulate hazardous waste for up to 90 days, with the following exceptions:
      4.5.1. If the nearest treatment, storage, or disposal facility (TSDF) is more than 200 miles from the facility, hazardous waste may be accumulated on site for a maximum of 270 days.
      4.5.2. If the nearest TSDF is less than 200 miles from the facility, hazardous waste maybe accumulated on site for a maximum of 180 days.
   4.6. Facilities that are classified as large quantity generators (LQG's) can accumulate hazardous waste for a maximum of 90 days on site.
   4.7. The Safety Department shall:
      4.7.1. Determine the hazardous waste generator category of each company facility. This determination shall be performed annually.
      4.7.2. Perform site inspections to ensure the hazardous and non-hazardous material storage areas are in compliance with applicable regulations and waste disposal documentation is being adequately performed.

4.7.3. Assist Operations in establishment of correct documentation, HAZARDOUS WASTE materials control procedures, and regulation interpretation.

4.8. Managers shall:

4.8.1. Understand the hazardous waste and non-hazardous materials accumulation and storage procedure to be implemented within his/her area of responsibility and ensure personnel comply with this procedure.

4.8.2. Contact the Safety Department with respect to questions that may arise from the accumulation and storage of waste materials or the interpretation of local, state, or federal regulations.

4.8.3. Designate one person who shall be trained as the hazardous materials coordinator (HMC).

4.8.3.1. Designate an area of the facility to be the hazardous waste storage area (HMSA) for the accumulation and storage of hazardous waste materials scheduled for disposal. The hazardous waste storage area shall only be used to: storage hazardous waste materials and accumulate enough materials for economic disposal.

4.8.4. The hazardous materials shall be segregated according to waste/chemical type and shall be clearly labeled.

4.8.5. The hazardous waste storage area shall be able to contain liquid waste (secondary containment) in a bermed area with a liner compatible with the waste or inside a building with a cement floor (no cracks) and a lip on the doorway, etc. The containment shall have a sufficient volume to hold at least 110 percent of the volume of the single largest container. Outdoor secondary containment shall have a sufficient volume to hold at least 110 percent of the volume of the single largest container, plus an allowance for precipitation or be covered.

4.8.6. The HMSA shall be clearly posted with the appropriate signs, which at a minimum include: "HAZARDOUS WASTE MATERIALS STORAGE AREA" and "NO SMOKING" signs.

4.8.7. Designate with the assistance of the Safety Department, satellite accumulation areas where hazardous materials may be accumulated before being removed to the main hazardous waste storage area. Satellite accumulation within a facilities boundary shall adhere to the following criteria:

4.8.8. One type of hazardous waste material may be accumulated in a satellite area.

4.8.9. The hazardous waste material shall be accumulated in a container, the total capacity of which shall not exceed 55 gallons for a single satellite accumulation area.

4.8.10. The container used shall be in good condition.

4.8.11. The container or its liner material must be compatible with the hazardous waste material it is storing.

4.8.12. The container shall be covered and tightly sealed during storage.

4.8.13. The container shall not be opened, handled, or stored in a manner which may cause it to rupture or leak.

4.8.14. The container shall be marked with the words "hazardous waste" (when appropriate) and the contents clearly identified.

4.8.15. The container shall be managed in compliance with hazardous waste container requirements once the container is full. The full container will be moved to HMSA within 3 days.

4.8.16. The designated satellite accumulation area shall be posted with a sign stating, "HAZARDOUS WASTE SATELLITE ACCUMULATION AREA".

4.8.17. Note: Multiple satellite accumulation areas can be designated for separate waste streams if the separate areas are clearly posted, and the floors marked (using paint or tape) to separate the areas.

4.8.18. Designate at least one area of the facility to be a Non-Hazardous Waste Storage Area for the accumulation and storage of non-hazardous waste scheduled for disposal.

4.8.19. This area shall only be used to store non-hazardous waste and accumulate enough materials for economic disposal.

4.8.20. The non-hazardous materials shall be segregated according to company procedures and shall be clearly labeled.

4.8.21. This area shall be clearly posted with appropriate signs, which at a minimum include: "NON-HAZARDOUS WASTE ONLY".

4.8.22. Waste containers are correctly labeled, and other forms of warning are legible, written in English, and prominently displayed on the storage container.

4.9. Hazardous Materials Coordinator

4.9.1. Coordinate implementation of the hazardous waste materials accumulation and storage procedure at his/her facility, including appropriate documentation.

4.9.2. Inspect workplace, satellite accumulation areas, and HMSA regularly to ensure:

4.9.2.1. No unauthorized accumulation of hazardous waste materials which require disposal or transfer to the HMSA.

4.9.2.2. Ensure hazardous materials are stored in appropriate containers.

4.9.2.3. Ensure empty containers are removed from HMSA, and all annotations are removed from the containers.

4.9.2.4. Empty containers are not regulated as hazardous waste, unless the containers contained an acute hazardous waste.

**Note**: Regardless of the criteria listed below, a container is not considered to be empty until all possible material is removed from it by common practice such as pumping, pouring, scraping, or aspirating.

4.9.3. Containers of 100 gallons or less must contain no more than 1 inch of residue on the bottom, or no more than 3 percent by weight of the container's total capacity.

4.9.4. Containers larger than 110 gallons must contain no more than 0.3 percent residue by weight of the container's total capacity.

4.9.5. Waste pressurized gas containers and pressurized cylinders are considered empty when their pressure approaches atmospheric pressure.

4.9.6. Waste containers are correctly labeled, and other forms of warning are legible, written in English, and prominently displayed on the storage container.

4.9.7. Waste containers holding hazardous waste must be:

4.9.8. In good condition. If the container begins to leak, contents must be transferred to a new container or over packed in a larger container.

4.9.9. Compatible with the waste they hold.

4.9.10. Handled in a manner to avoid leaks or spills.

4.9.11. Marked with the words "hazardous waste" and the date accumulation of the waste began

4.9.12. Assure that hazardous waste manifest record keeping and reporting requirements are in compliance.

4.10. Facility Personnel

4.10.1. Understand the hazardous and non-hazardous waste and accumulation storage procedure to be implemented within his/her area of responsibility.

4.10.2. Ensure waste to be removed from a facility is appropriately containerized and labeled.

4.10.3. Ensure waste is placed in the appropriate accumulation area. Waste shall not be left outside designated accumulation areas.

5. **DEFINITIONS**

5.1. Disposal - The discharge, deposit, injection, dumping, spilling, leaking, or placing of any waste into or on any land or water so that such waste or any constituent thereof may enter the environment or be emitted into the air or be discharged into any waters including groundwater.

5.2. Documentation - the paperwork, including but not limited to, manifests, bills of lading, waste profiles, land ban restriction declarations, dangerous cargo manifests associated with accumulation and storage, and transportation of hazardous waste materials. Documentation as defined for this procedure also includes the marks, labels, and placards required by the Department of Transportation for the shipment of hazardous materials and defined in 49 CFR Section 172.

5.3. Hazardous Material - A substance or material, including a hazardous substance, hazardous waste, marine pollutant, or elevated temperature material (as defined by 49 CFR Section 172.101) which has been determined to be capable of posing an unreasonable risk to health, safety, and property when transported. Note: Throughout this document the term "hazardous materials" will be used to include all regulated wastes, including hazardous wastes.

5.4. Hazardous Coordinator - A company representative appointed by the department or facility manager to be responsible for compliance with hazardous materials regulations and procedures. This individual shall provide a single point of contact for the Safety Department with respect to hazardous waste and non- hazardous materials management.

5.5. Hazardous Substance Any substance as designated by 40 CFR Section 302.4. Note: Hazardous substances, which include hazardous wastes, are a subgroup of hazardous materials.

5.6. Hazardous Waste - A waste may be deemed to be a hazardous waste if. 1) it is, or contains a hazardous waste listed in 40 CFR Section 261 Subpart D, or 2) exhibits any of the following characteristics: i) flash-point <140 F; ii) pH>12 or <2; iii) reacts violently with water; or iv) exhibits a toxic characteristic as noted in 40 CFR Section 261 Subpart C. Note: This term is frequently used incorrectly for any waste derived from hazardous materials. In this

document the term will only be used in reference to waste which has been determined to be hazardous by this definition

5.7. Non-Hazardous Waste - A waste that is defined as solid waste but does not meet the definition of hazardous under the Resource Conservation and Recovery Act (RCRA), and which is to be discarded. Examples of non-hazardous wastes include materials such as kitchen refuse (garbage), glass, paper, cardboard, wood, Styrofoam, and punctured empty aerosol cans.

5.8. Non-RCRA Hazardous Waste - A waste, which is defined as hazardous waste by state regulations, although not by federal definition (i.e., any soil containing more than 1,000 parts per millions of lead is a California Hazardous Waste).

5.9. Resource Conservation and Recovery Act (RCRA) - The federal act which forms the basis for all federal and state hazardous waste regulations. State hazardous waste regulations may be more stringent than federal regulations (see non-RCRA hazardous waste definition).

5.10. Satellite Accumulation Area - An area at the point where the hazardous waste material was generated used to accumulate the waste. This area is distinct from a central storage area where hazardous waste materials are consolidated for off-site shipment. Interpretation of the definition of what constitutes a satellite area differs by state.

5.11. Waste - Any discarded material which includes any material that is abandoned, recycled, or considered inherently waste-like, e.g., scrap metal.

**HAZARDOUS WASTE GENERATION**

1. **PURPOSE**
   1.1. To define procedures which meet federal, state, and local requirements for company and contractor operations which generate hazardous waste.
2. **SCOPE**
   2.1. This procedure is applicable to CPP facilities and operations which generate hazardous waste and contractors who generate waste at company facilities, except where such facilities or operations are required to comply with alternative, equally stringent procedures.
3. **RESPONSIBILITY**
   3.1. Personnel involved in hazardous waste generator or contractor-generated waste shall comply with procedure requirements to his/her level of authority and responsibility.
4. **PROCEDURE**
   4.1. CPP facilities that generate hazardous wastes shall follow the hazardous waste management standards of a large quantity generator as defined by the appropriate state or federal regulations.
   4.2. The Safety Department shall:
      4.2.1. Determine which facilities generate hazardous wastes, and what quantity of hazardous wastes are generated annually by each facility, by calendar month.
      4.2.2. Obtain and maintain a United States Environmental Protection Agency (EPA) Identification Number(s) (ID no.) for company facilities that generate more than 220 pounds of hazardous waste per calendar month.
      4.2.3. The following wastes shall not be included in generator status determination:
      4.2.4. Wastes specifically exempted from regulation as hazardous wastes (for example, spent lead-acid batteries accumulated and set off-site for recycling).
      4.2.5. Residues in empty containers that did not contain acute hazardous waste.
      4.2.6. Used oil accumulated to be sent for recycling.
      4.2.7. The following wastes shall be included in generator status determination: hazardous wastes generated during the calendar month; hazardous wastes packaged and shipped off-site for treatment, storage, or disposal; hazardous wastes treated on-site; residues in empty containers that contained acute hazardous wastes; unknown wastes; and wastes awaiting test results to determine RCRA characterization.
      4.2.8. Perform annual facility/operation inspections to ensure the facility or operation is in compliance with applicable regulations.
   4.3. Branch Manager shall:
      4.3.1. Coordinate compliance with appropriate hazardous waste accumulation and storage, and documentation procedures to provide the information required for compliance with this procedure.
      4.3.2. Ensure the documentation of quantities of hazardous waste generated by the facility in a calendar month and forward this information to the Safety Department
   4.4. Contractors shall:
      4.4.1. Ensure contractor-generated waste is discharged in compliance with appropriate company procedures.

4.4.2. Supply the appropriate Safety Data Sheets for materials that are not company standards to the responsible company representative before bringing the material onto a company facility.

4.4.3. Ensure that waste is containerized at the end of each work shift, when possible, and removed from the company facility at the end of the job.

4.4.4. Ensure waste containers are adequately labeled during the performance of the contract.

4.4.5. Perform an adequate profile of each waste stream that is generated as part of the work to ensure appropriate waste disposal.

4.4.6. Complete required labeling of waste containers and documentation of wastes awaiting transport prior to the waste being accepted for storage in the waste hazardous materials storage area by the hazardous materials coordinator.

5. **DEFINITIONS**

5.1. Disposal - For the scope of this procedure, disposal means the permitted technique to permanently remove waste generated by the company, contractors, or operations.

5.2. Documentation - the paperwork, including but not limited to, manifests, bills of lading, waste profiles, land ban restriction declarations, dangerous cargo manifests associated with accumulation and storage, and transportation of waste hazardous materials. Documentation as defined for this procedure also includes the marks, labels, and placards required by the Department of Transportation for the shipment of hazardous materials and defined in 49 CFR Section 172. EPA ID Number - Any facility that generates more than 220 pounds per month or any company that transports hazardous waste must have an EPA ID Number. EPA ID Numbers are used in two ways:

5.2.1. to identify generators of hazardous waste, and

5.2.2. to identify transporters of hazardous waste. A Generator EPA ID Number is facility specific - one for each address where hazardous waste is generated Transporter EPA ID Number is company specific.

5.3. Hazardous Material - A substance or material, including a hazardous substance, hazardous waste, marine pollutant, or elevated temperature material (as defined by 49 CFR Section 172.101) which has been determined to be capable of posing an unreasonable risk to health, safety, and property when transported. Note: Throughout this document the term "hazardous materials" will be used to include all regulated wastes, including hazardous waste.

5.4. Hazardous Substance Any substance as designated by 40 CFR Section 302.4. Note: Hazardous substances, which include hazardous wastes, are a subgroup of hazardous materials.

5.5. Hazardous Waste - A waste may be deemed to be a hazardous waste if: 1) it is, or contains a hazardous waste listed in 40 CFR Section 261 Subpart D, or 2) exhibits any of the following characteristics: i) flash-point <140 F; ii) pH > 12 or <2; iii) reacts violently with water; or iv) exhibits a toxic characteristic as noted in 40 CFR 261 Subpart C. Note: This term is frequently used incorrectly for any waste derived from hazardous materials. In this document the term will only be used in reference to waste which has been determined to be hazardous by this definition.

5.6. Recycling - In general, the use of discarded materials in original or changed form rather than sending the materials for disposal. Precisely used, the term refers to using the material in

the process from which it was first formed, e.g., paper being reused to make paper. Note: Burning waste for energy recovery is not recycling.

5.7. Waste - Any discarded material which includes any material that is abandoned. recycled, or considered inherently waste-like, e.g., scrap metal.

**HAZARDOUS WASTE MANAGEMENT**

1. **PURPOSE**
   1.1. To define procedures for the management of hazardous waste materials generated by CPP.
2. **SCOPE**
   2.1. This procedure is applicable to company facilities that generate, accumulate, or store waste hazardous materials except where such facilities or operations are required to comply with alternative equally stringent procedures.
3. **REFERENCES**
   3.1. Code of Federal Regulations
      3.1.1. Title 49: Subtitle B Other Regulations Relating to Transportation, Chapter I - Research and Special Programs Administration, Department of Transportation, Subchapter C Hazardous Materials Regulations, Section 171 to Section 177.
      3.1.2. Title 40: Chapter I - Environmental Protection Agency
      3.1.3. Subchapter D - Water Programs, Section 100 to Section 149
      3.1.4. Subchapter I - Solid Wastes, Section 260 to Section 399
      3.1.5. Subchapter R - Toxic Substances Control Action, Section 700 to Section 789.
4. **RESPONSIBILITY**
   4.1. Personnel involved in waste hazardous materials documentation, characterization, and transportation shall comply with procedure requirements to his/her level of authority and responsibility.
5. **PROCEDURE**
   5.1. Characterization of Waste Hazardous Materials
      5.1.1. The company appointed Hazardous Materials Coordinator (HMC) shall make the primary waste characterization of waste streams generated at the facility based on the documentation provided by facility personnel generating the waste.
   5.2. The Safety Department shall determine whether or not waste streams at the company's facilities are hazardous waste.
      5.2.1. Review the regulations that control waste.
      5.2.2. Review documentation associated with the products used in the generation of waste.
      5.2.3. Review the process that generated the waste.
      5.2.4. Perform an analysis on a sample of the waste stream.
      5.2.5. Unknown wastes shall be managed as hazardous waste until proven otherwise.
      5.2.6. Documentation of Waste Hazardous Materials.
   5.3. Managers shall ensure the documentation associated with the accumulation, storage, and transportation of company generated waste hazardous materials complies with local, state, and federal regulations, as well as company policy.
      5.3.1. The branch managers shall ensure the documentation associated with the transportation of third-party waste hazardous material complies with local, state, and federal regulations. Specifically, Title 49: Subtitle B - Other Regulations Relating to Transportation, Chapter I - Research and Special Programs Administration, Department of Transportation, Subchapter C - Hazardous Materials Regulations Section 171 to Section 177, as well as company policy.

5.3.2. The manager shall contact the Safety Department if interpretation of documentation regulations or procedures is required.
5.3.3. Documentation shall be in English and legible.
5.3.4. The manager shall contact the Safety Department if interpretation of documentation regulations or procedures is required.
5.3.5. Documentation shall be in English and legible.
5.3.6. Abbreviations and jargon terms shall not be used.
5.3.7. Documentation that may be exposed to adverse weather conditions shall be protected from such weather.
5.3.8. Labeling kits shall be used to document facility and vessel waste.
5.3.9. The manager shall ensure that a record is kept of hazardous wastes shipments sent off site for disposal. At minimum this shall include:
5.3.10. A spreadsheet of each hazardous waste shipment which will include:
5.3.11. Date of shipment.
5.3.12. Hazardous Waste Transporter Company and EPA ID Number.
5.3.13. Type of Waste (as described on the manifest).
5.3.14. Quantity of Waste.
5.3.15. Transfer, Storage, or Disposal Facility and EPA ID Number.
5.3.16. Date of Completed Manifest Return.
5.3.17. Original completed (signed by authorized disposal facility) Uniform Hazardous Waste Manifest for each shipment.
5.3.18. Original applicable waste profile documentation.
5.3.19. Original "Land Ban Restriction" documentation, if applicable.
5.3.20. The manager, in coordination with the Safety Department, shall ensure any state-required annual report relating to hazardous waste generation or transportation is completed. Note: This reporting is mandatory for California and Washington facilities, or facilities which send waste to Missouri for disposal.
5.3.21. Transportation of Company Generated Waste Hazardous Materials.

5.4. The Safety Department shall approve the disposal site of company generated waste hazardous materials before the waste is removed from the facility.
5.4.1. Waste hazardous materials shall only be transported by contractors who have been approved by the Safety Department

5.5. Contractors
5.5.1. Contractors shall be registered with the United States Environmental Protection Agency for the transportation of hazardous wastes.
5.5.2. Contractors shall have a valid Department of Transportation Hazardous Materials Certificate of Registration, as well as appropriate local and state permits and licenses.
5.5.3. Only waste, which has been determined to be non-hazardous wastes, shall be transported on a Uniform Hazardous Waste Manifest.
5.5.4. Wastes, which have been determined to be non-hazardous, shall be transported on a bill of lading or non-hazardous waste manifest.
5.5.5. Waste hazardous materials shall be removed from a company facility only after the Hazardous Materials Coordinator has given approval.

5.5.6. No unscheduled pickup of waste hazardous materials shall be permitted.

5.6. Managers shall:

5.6.1. Understand the waste hazardous materials transportation procedure to be implemented within his/her area of responsibility and ensure personnel comply with this procedure.

5.6.2. Ensure that contractors comply with company procedures for the transportation of hazardous waste material.

5.6.3. Contact the Safety Department with respect to questions that may arise from the contractor's handling or storage of waste or the interpretation of local, state, or federal regulations.

5.7. The Safety Department shall:

5.7.1. Perform due diligence audits of proposed contractors for the transportation of hazardous waste.

5.7.2. Approve waste disposal and transportation subcontractors.

5.7.3. Review of the Waste Hazardous Materials Transportation procedure annually.

5.8. Hazardous Materials Coordinator

5.8.1. Coordinate compliance with the Waste Hazardous Materials Transportation procedure at his/her facility.

5.8.2. Coordinate approval of hazardous material disposal subcontractors, and ultimate disposal method selection, with the Safety Department. Contractors shall not be utilized until the approval of the Safety Department has been given.

5.8.3. Ensure correct packaging, containers, labels, and placards are used for the transportation of hazardous materials.

5.8.4. Ensure that appropriate documentation is completed before any shipment of hazardous materials leaves the facility.

5.9. **DEFINITIONS**

5.9.1. Disposal - For the scope of this procedure, disposal means the permitted technique to permanently remove waste generated by the company, contractors, or operations.

5.9.2. Documentation - the paperwork, including but not limited to, manifests, bills of lading, waste profiles, land ban restriction declarations, dangerous cargo manifests associated with accumulation and storage, and transportation of waste hazardous materials. Documentation as defined for this procedure also includes the marks, labels, and placards required by the Department of Transportation for the shipment of hazardous materials and defined in 49 CFR Section 172. EPA ID Number - Any facility that generates more than 220 pounds per month or any company that transports hazardous waste must have an EPA ID Number. EPA ID Numbers are used in two ways:

5.9.2.1. To identify generators of hazardous waste, and

5.9.2.2. To identify transporters of hazardous waste. A Generator EPA ID Number is facility specific -one for each address where hazardous waste is generated. A Transporter EPA ID Number is company specific.

5.9.3. Hazardous Material - A substance or material, including a hazardous substance, hazardous waste, marine pollutant, or elevated temperature material (as defined by 49 CFR Section 172.101) which has been determined to be capable of posing an

unreasonable risk to health, safety, and property when transported. Note: Throughout this document the term "hazardous materials" will be used to include all regulated waste, including hazardous waste.

5.9.4. Hazardous Material Coordinator - A company representative appointed by the department or facility manager to be responsible for compliance with hazardous materials regulations and procedures. This individual shall provide a single point of contact for the Safety Department with respect to waste hazardous and non-hazardous materials management.

5.9.5. Hazardous Waste - A waste may be deemed to be a hazardous waste if: 1) it is, or contains a hazardous waste listed in 40 CFR Section 261 Subpart D, or 2) exhibits any of the following characteristics: i) flashpoint <140 F; ii) pH > 12 or <2; iii) reacts violently with water, or iv) exhibits a toxic characteristic as noted in 40 CFR Section 261 Subpart C. Note: This term is frequently used incorrectly for any waste derived from hazardous materials. In this document the term will only be used in reference to waste which has been determined to be hazardous by this definition.

5.9.6. Uniform Hazardous Waste Manifest - The documentation as specified in 40 CFR Section 262 Appendix to be used as shipping papers for the transportation of hazardous waste. Waste - Any discarded material which includes any material that is abandoned, recycled, or considered inherently waste-like, e.g., scrap metal.

**HEARING CONSERVATION PROGRAM**

1. **PURPOSE**
   1.1. The purpose of this procedure is to identify controls and their implementation to provide adequate protection for employees exposed to noise levels which may exceed 85 dBA average over an eight- hour time weighted average (TWA).
2. **SCOPE**
   2.1. This procedure is applicable to CPP personnel exposed to noise levels in excess of 85 dBA.
3. **REFERENCES**
   3.1. 29 CFR 1926.52 Occupational Noise Exposure
4. **RESPONSIBILITY**
   4.1. Managers shall ensure personnel with an exposure greater than 85 dBA TWA receive annual audiometric tests and hearing conservation training.
   4.2. Supervisors shall ensure that employees comply with the following procedures:
      4.2.1. Ensure employees are aware of the hearing conservation program and comply with its procedures.
      4.2.2. Ensure adequate hearing protection is available and in use and forward any concerns to the Safety Department.
   4.3. Employees shall comply with the following procedures:
      4.3.1. Wear hearing protectors when required.
      4.3.2. Inform their supervisor or the Safety Department of any perceived noise increases in their work areas.
   4.4. Safety Department:
      4.4.1. Develop and maintain the Hearing Conservation Procedure, which shall include requirements for monitoring, audiometric testing, hearing protectors, training, and records retention.
      4.4.2. Perform training, dosimetry and second level monitoring, and maintain records.
      4.4.3. Standardize hearing protection equipment.
      4.4.4. Identify personnel for placement in the hearing conservation program.
      4.4.5. Maintain medical audiometric test records and track the status of exams.
      4.4.6. Administer exams.
      4.4.7. Notify the appropriate supervisor of employees due and/or overdue for medical exams.
      4.4.8. Monitor employees with standard threshold shifts (STS).
      4.4.9. Standardize hearing protection equipment.
      4.4.10. Identify personnel for placement in the hearing conservation program.
      4.4.11. Maintain medical audiometric test records and track the status of exams.
      4.4.12. Administer exams.
      4.4.13. Notify the appropriate supervisor of employees due and/or overdue for medical exams.
      4.4.14. Monitor employees with standard threshold shifts (STS).

5. **OBJECTIVE**

5.1. The objective of this program is to define actions and controls to prevent personnel from being adversely affected by occupational noise.

5.2. Permissible Noise Exposure per 29 CFR 1926.52.

| Duration per day, hours | Sound level dBA slow response |
|---|---|
| 8 | 90 |
| 6 | 92 |
| 4 | 95 |
| 3 | 97 |
| 2 | 100 |
| 1½ | 102 |
| 1 | 105 |
| ½ | 110 |
| ¼ or less | 115 |

6. **PROCEDURE**

6.1. Warning signs

6.1.1. Warning signs shall be posted at entrances to or at the periphery of work areas where employees may be exposed to excessive noise and where hearing protection is required.

6.2. Monitoring

6.2.1. Monitoring shall be performed by the Safety Department in areas where information indicates that any employee's exposure may exceed an eight-hour time weighted average (TWA) of 85 dB, impact sound levels exceeding 140 dB, or intermittent noise may exceed the acceptable levels.

6.2.2. Monitoring shall be repeated, as appropriate, whenever a change in production, process, equipment, or controls increases noise exposure to the extent that additional employees may be exposed at or above the action level (50% dose) or the attenuation provided by hearing protectors being used by the employees in question may not be adequate.

6.2.3. Sound level and noise dosimeters shall be calibrated according to manufacturer's instructions.

6.2.4. Employees and their managers exposed at or above 85 dBA TWA shall be notified by the Safety Department of the monitoring results.

6.3. Audiometric testing program

6.3.1. Personnel exposed at or above the action level shall receive a baseline audiogram in which subsequent audiograms can be compared.

6.3.2. Annual audiograms shall be compared with baselines to determine validity. This comparison shall take place immediately following the annual audiogram, if possible.

6.3.3. If a Standard Threshold Shift (STS) has occurred:

6.3.3.1. A test shall be conducted again as soon as possible (immediately following the exams that revealed the possible STS, if possible).

6.3.3.2. The employee shall be informed in writing within 21 days of determination

6.3.4. Further evaluation shall be determined by the attending physician (if a technician has performed the initial test and the STS was attained; a physician shall perform the second test).

6.4. Hearing protection

6.4.1. Hearing protection is available to employees exposed to noise at or above 85 dBA TWA.

6.4.2. Both self-molded earplugs and earmuffs shall be made available. Annual training meeting requirements shall be given to affected employees.

**7. RECORDS**

7.1. An accurate record of employee exposure measurements shall be required by these standards.

7.2. Noise exposure records shall be retained by the Safety Department for at least two years.

7.3. Audiometric tests records shall be retained by the Safety Department for the duration of the employee's employment.

7.4. Records of the engineering feasibility studies shall be maintained in the Safety Department office for three years.

7.5. Training records shall be maintained for three years.

8. **DEFINITIONS**

8.1. Action level - An eight-hour time weighted average of 85 decibels measured on the A -scale, slow response, or equivalently, a dose of 50%.

8.2. Audiogram - A chart, graph, or table resulting from an audiometric test showing an individual's hearing threshold levels as a function of frequency.

8.3. Baseline audiogram - The audiogram against which future audiograms are compared.

8.4. Decibel (dB) - A unit of measurement of sound level.

8.5. Hearing protectors - Devices, such as ear plugs and earmuffs, which have attenuation reduction capabilities and reduce noise levels inside the ear.

8.6. Time Weighted Average (TWA) - That sound level, which if constant over an eight-hour exposure, would result in the same noise dose as is measured.

8.7. Standard threshold shift (STS) - A change in hearing threshold relative to the base line audiogram of an average of 10 dB or more at 2,000, 3,000, and 4,000 Hz in either ear.

**INCIDENT REPORTING AND INVESTIGATION**

1. **PURPOSE**
   1.1. The purpose of this procedure is to define the requirements and responsibilities for reporting incidents and gathering information for incident investigations.
2. **SCOPE**
   2.1. This procedure is applicable to all Employees, Supervisors, Branch Managers, Regional Directors, and Company-designated incident investigators.
3. **RESPONSIBILITY**
   3.1. Regional Directors, Branch Managers, Supervisors, and Dispatchers shall:
      3.1.1. Notify the Safety Department immediately of all incidents. Then notify others.
      3.1.2. Initiate and conduct an incident investigation or participate in the Investigation Team in accordance with this procedure.
      3.1.3. Ensure a CPP Incident Report is completed accurately for all incidents and forwarded to the Safety Department within 24 hours of the incident.
      3.1.4. Ensure corrective actions/incident guidance are identified and implemented.
   3.2. Employees shall:
      3.2.1. Immediately report all incidents to their Branch Manager, Supervisor, or Dispatcher.
      3.2.2. Complete an Incident Report and submit it to their Branch Manager or Supervisor within 24 hours of the incident.
      3.2.3. Cooperate fully with Company approved investigators during incident investigations.
   3.3. Safety Department shall:
      3.3.1. Contact the COO, VP Operations, and President/, if necessary, to ensure they have been notified of severe accidents.
      3.3.2. Track and report all incidents as required by State and Federal regulations.
      3.3.3. Investigate incidents or assign a lead investigator, as necessary, to head an Investigation Team. For major incidents, the team may consist of:

         3.3.3.1. Safety Department Representative
         3.3.3.2. Branch Manager or Local Supervisor
         3.3.3.3. Insurance Company Representative
         3.3.3.4. Legal Counsel

      3.3.4. Determine or assist in the determination of incident causes with Branch Manager and/or Supervisors.
      3.3.5. Provide staff support to co-develop with Branch Managers and/or Supervisor at CPP Incident Investigation Report.
      3.3.6. Distribute the draft Investigation Report for review, revision, and comments to the affected management personnel.
      3.3.7. Ensure that employees at all locations are informed of incident investigation findings, causal factors, and lessons learned through the development and distribution of Hazard Alert Announcements and/or Monthly Safety Meetings.
      3.3.8. Maintain the Incident Reporting and Investigation procedure.
4. **OBJECTIVE**

4.1. The objective of this procedure is to ensure that all incidents are reported and that incident investigations are performed in a consistent manner so as to determine the cause(s) of all incidents and near-miss incidents, and to ensure that corrective actions which minimize the likelihood of re-occurrence are developed and distributed to CPP employees at all locations.

5. **PROCEDURE**

5.1. General

5.1.1. The Safety Department shall be notified of all incidents and near misses.

5.1.2. A CPP Incident Report shall be completed and approved by the Branch Manager or Supervisor **within 24 hours after notification** and forwarded immediately to the Safety Department. Forward all information to safety@pumppartners.com.

5.1.3. The investigation process shall begin immediately, if possible, and in no case later than 24 hours after notification of the incident.

5.2. Major incidents (as defined in 6.4)

5.2.1. All major incidents shall be immediately reported to the Director of Risk Management if he cannot be reached then the next contact will be the Director of EHS.

5.2.2. An Incident Report shall be completed and approved by the appropriate Branch Manager or Supervisor **within 12 hours after notification** and forwarded immediately to the Safety Department.

5.2.3. The Safety Department shall advise if outside legal counsel or an outside investigator is necessary to assist in the investigation.

5.2.4. An incident investigation shall be conducted for all major incidents. The level of investigation and report detail will depend on the specific incident. Generally, the more serious an incident or near-miss, the more time necessary for the investigation process. Overhead power line contacts, lost time injuries, and oil spills over 25 gallons are examples of major incidents that may require an investigation and report. Minor injuries without lost time can usually be investigated and corrective/preventive actions developed and implemented immediately.

**5.2.5.** The investigation process shall begin as soon as possible while the facts are still fresh in the minds of individuals involved with the incident. **In no case should the investigation be delayed more than 24 hours after notification.**

5.2.6. Branch Managers and/or Supervisors are to conduct investigations for major incidents in their area of responsibility. This involves gathering all of the applicable facts and documents associated with the incident, including interviewing employees or other witnesses to determine the cause(s) and preventive measures. Examples of required documents to support the investigation are:

5.2.6.1. Incident Report.

5.2.6.2. Diagram(s) of incident location.

5.2.6.3. Interviews/Statements.

5.2.6.4. Photographs.

5.2.6.5. Sketches.

5.2.6.6. Preservation of evidence.

5.2.7. Branch Managers and/or Supervisors shall identify causal factors which could have mitigated or prevented the unwanted act from occurring. This would include actions of the injured party that may have prevented their own injury or damages.

5.2.8. The Safety Department is available as a resource for investigation support and coaching during the investigation process.

5.2.9. The Safety Department shall be contacted to assist in the identification of causes and corrective/preventive actions. The establishment of causes and corrective/preventive actions is a joint process between Operations and the Safety Department and can be accomplished by telephone or in person, depending on the severity of the incident.

5.2.10. Branch Managers and/or Supervisors shall immediately implement corrective/preventive actions within their scope of authority.

5.2.11. When legal counsel is assigned to lead an incident investigation, the Safety Department shall provide technical support during the investigation process. Investigation reports shall be prepared under the guidance of legal counsel and labeled "privileged and confidential" and "do not duplicate". Distribution of these investigation reports shall be on a need-to-know basis under the guidance of legal counsel.

5.3. All other incidents (as defined in 6.3)

5.3.1. An Incident Report shall be completed **within 24 hours of the incident**, approved by the appropriate Branch Manager/Supervisor, and forwarded to the Safety Department

5.3.2. The Safety Department shall obtain legal support if necessary.

5.4. Near-Miss Incidents

5.4.1. Employees operating company equipment or at company facilities who observe incidents or near misses where action of a non-routine nature is taken to identify and avoid a collision, personal injury, or oil spill shall ensure that the event is correctly reported on an Incident Report Form and forwarded to the Safety Department. This form should be completed with the date, location of the event, a brief description of the near miss, and recommended corrective actions.

5.4.2. The Safety Department shall make employees at all locations aware of near- misses through Hazard Alert Announcements and/or Monthly Safety Meetings.

## 6. DEFINITIONS

6.1. Incident - An undesired event that results in injury to people, damage to property, or loss of service.

6.2. Near-miss - An event which occurred (or could occur) but did not result in injury, damage to property or service loss as defined in the "Major Incidents" (see 8.4).

6.3. All other incidents - Any damage or first aid case not classified as a major incident.

6.4. Major incidents - Incidents or near misses involving employees, the public, and/or contractors on CPP property performing activities requested by CPP or activities performed by CPP on a jobsite at the request of a contractor resulting in, or having the potential to result in:

6.4.1. OSHA Recordable Incidents - Refers to incidents which are considered severe enough to be used for governmental statistics. "Recordable occupational injuries or illnesses" are any occupational injuries or illnesses recorded on the OSHA 300 Form resulting in:

6.4.1.1. Fatalities, regardless of the time between the injury and death, or the length of the illness.

6.4.1.2. Lost workday cases, other than fatalities, which result in lost workdays. Non-fatal cases without lost workdays that result in transfer to another job or termination of employment, require medical treatment (other than first aid), or involve loss of consciousness or restricted work motion. This category would also include any diagnosed occupational illnesses that are reported but are not reported as fatalities or lost workday cases.

6.4.2. Fires or explosions.

6.4.3. Equipment Damages over $10,000.

6.4.4. Property damages over $10,000.

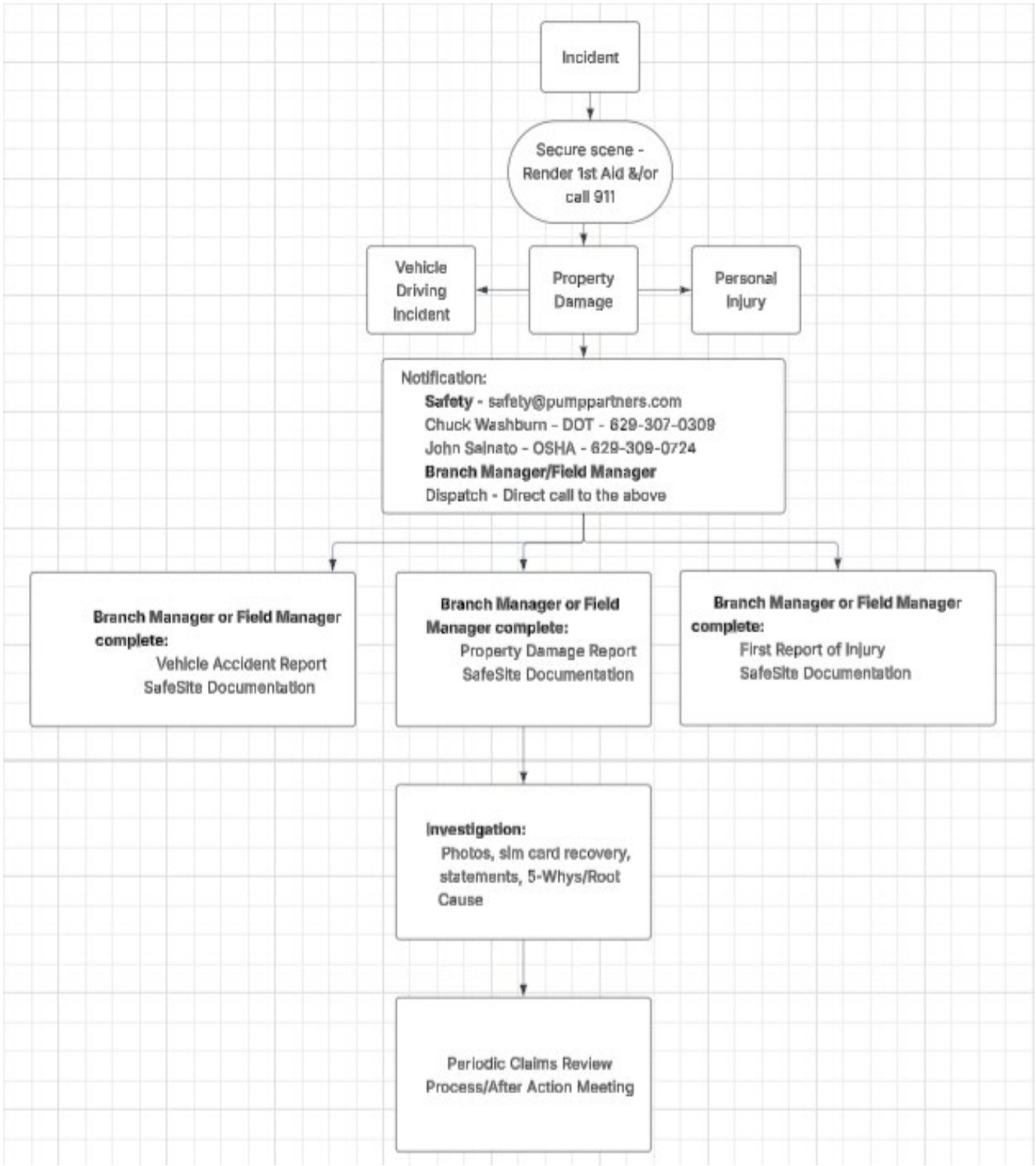
6.4.5. Any discharge of oil to the water, oil spills greater than 25 gallons on land, or any oil spill requiring more than in-house assistance to control.

6.5. Medical Treatment - Includes treatment administered by a physician or registered professional under the standing orders of a physician. Medical treatment does not include first aid treatment, even when provided by a physician or registered professional.

6.6. Lost Workdays - The number of days (consecutive or not) after but not including the day of the injury or illness during which the employee would have worked but could not do so.

7. **FORMS**

7.1. CPP Incident Report


Incident
Secure scene - Render 1st Aid &/or call 911
Vehicle Driving Incident
Property Damage
Personal Injury
Notification:
Safety - safety@pumppartners.com
Chuck Washburn - DOT - 629-307-0309
John Salnato - OSHA - 629-309-0724
Branch Manager/Field Manager
Dispatch - Direct call to the above
Branch Manager or Field Manager complete:
Vehicle Accident Report
SafeSite Documentation
Branch Manager or Field Manager complete:
Property Damage Report
SafeSite Documentation
Branch Manager or Field Manager complete:
First Report of Injury
SafeSite Documentation
Investigation:
Photos, sim card recovery, statements, 5-Whys/Root Cause
Periodic Claims Review Process/After Action Meeting

**INSURANCE CLAIMS REPORTING, PROCESSING & MANAGEMENT**

1. **PURPOSE**
   1.1. The purpose of this procedure is to define the requirements and responsibilities for reporting and managing Auto, Worker's Compensation, and General Liability incident claims.
2. **SCOPE**
   2.1. This procedure is applicable to Regional Managers/Branch Managers/Local Supervisors, the Safety Department, and the Insurance Claims Analyst.
3. **OBJECTIVE**
   3.1. The objective of this procedure is to ensure that all incidents are promptly reported, and insurance claims are properly filed and closely monitored until closure.
4. **RESPONSIBILITY**
   4.1. Regional Managers, Branch Managers, Supervisors, Corporate Departments shall:
      4.1.1. Notify the Safety Department **immediately** of all incidents and accidents.
      4.1.2. Ensure a CPP Incident Report form is completed accurately and faxed or emailed to the Safety Department **within 24 hours of the incident.**
      4.1.3. Assist the Safety Department/Insurance Claims Analyst and their affected employee(s) as necessary to promptly expedite the claim process.
   4.2. Safety Department:
      4.2.1. Ensure the CPP Incident Report Form is completed accurately.
      4.2.2. Work closely with the Insurance Claims Analyst to ensure all incident information is accurate and complete.
      4.2.3. Work closely with the Insurance Claims Analyst to ensure the proper reporting and management of all claims.
      4.2.4. Contact the President/CEO, if necessary, to ensure they have been notified of substantial claim development.
      4.2.5. In the event of a work-related loss time injury/illness, the Insurance Claims Analyst shall team up with the Branch Manager in developing and providing limited/light duty (where/when available) for employees on extended light duty to ensure quick return to work.
      4.2.6. Provide assistance to CPP/Insurance carrier counsel in the event of litigation.
      4.2.7. Assist Insurance Claims Analyst in Maintaining the Insurance Claims Reporting & Management procedure.
5. **PROCEDURE**
   5.1. Employees shall report all incidents immediately to their Branch Manager, Supervisor, or Dispatcher.
   5.2. Dispatchers shall immediately notify their Branch Manager of all incidents.
   5.3. Branch personnel notify the VP of Operations immediately after Safety Department.
   5.4. The Safety Director will ensure the VP of Operations is notified.
   5.5. Branch Managers shall ensure all proper information has been gathered at the incident scene and shall report the incident to the Safety Department.
   5.6. The VP of Operations and/or Safety will notify the President/CEO of any major incidents.

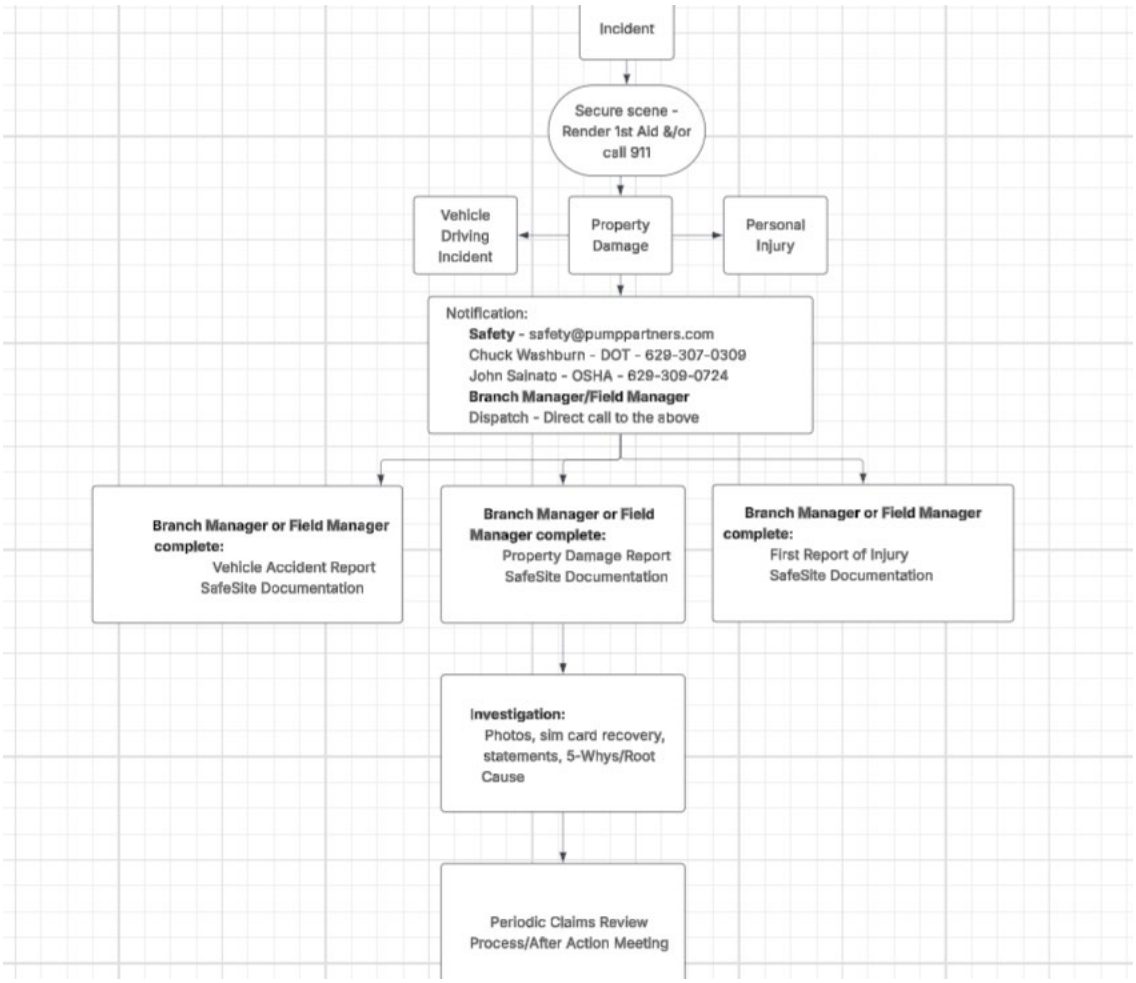
5.7. Branch Managers ensure the Incident Report and the First Report of Injury (for CPP employee injuries) are completed and forwarded to the Safety Department within 24 hours of the incident.

5.8. The Safety Department will ensure information (including if required by your state agency, the First Report of Injury) received is accurate and contact the appropriate insurance carrier for processing the claim.

5.9. The Safety Department will maintain an open line of communication with the claims representative to ensure proper claims management and to ensure the employee is returned to work as soon as possible. This may require working with the Branch Manager to provide a restricted or light duty position.

5.10. The Safety Department will manage property damage claims to a quick conclusion by performing the following:

- 5.10.1. Make immediate contact with other parties involved in CPP at-fault accidents to obtain damage estimates for review.
- 5.10.2. Upon receipt of estimate of repair cost and related items, negotiate settlement with other party. Settlements will include a full and final release executed by the party involved, prior to receipt of payment.
- 5.10.3. Settlements up to $10K will be approved by the CFO. Check request form, estimates, and all associated costs need to accompany request for approval.
- 5.10.4. Settlements over $10K but under $20K will be approved by GM. Necessary documents to accompany approval request.
- 5.10.5. Electronic confirmation is permitted via email.
- 5.10.6. Safety will to forward approved Check Request Form, all related documents, and confirmation to CFO for final processing and payment.


Incident
Secure scene - Render 1st Aid &/or call 911
Vehicle Driving Incident
Property Damage
Personal Injury
Notification:
Safety - safety@pumppartners.com
Chuck Washburn - DOT - 629-307-0309
John Salnato - OSHA - 629-309-0724
Branch Manager/Field Manager
Dispatch - Direct call to the above
Branch Manager or Field Manager complete:
Vehicle Accident Report
SafeSite Documentation
Branch Manager or Field Manager complete:
Property Damage Report
SafeSite Documentation
Branch Manager or Field Manager complete:
First Report of Injury
SafeSite Documentation
Investigation:
Photos, sim card recovery, statements, 5-Whys/Root Cause
Periodic Claims Review Process/After Action Meeting

**LADDER SAFETY**

**1. PURPOSE**

1.1. The purpose of this procedure is to provide specific instructions for the safe use and care of ladders.

**2. SCOPE**

2.1. This procedure is designed for CPP employees whose job assignments require the use of a ladder.

**3. REFERENCES**

**3.1.** 29 CFR 1926.1053 - Stairways & Ladders

**4. RESPONSIBILITY**

4.1. Managers shall be responsible for implementing the Ladder Safety Procedure.

4.2. Supervisors shall ensure that ladders are used in a safe manner.

4.3. Employees shall comply with the Ladder Safety Procedure.

4.4. The Safety Department will develop and maintain the Ladder Safety Procedure.

**5. PROCEDURE**

5.1. Approved ladders

5.1.1. Fiberglass portable step and extension ladders are authorized with a load rating of 300 lbs. or greater:

| ANSI Ladder Type | Duty Rating | Maximum Weight Capacity | Typical Use |
|---|---|---|---|
| 1A | Extra Heavy Duty | 300 lbs. | Professional, industrial use |
| 1AA | Super Duty | 375 lbs. | Maximum durability use |

5.2. Proper use of ladders

5.2.1. Ladders shall be inspected before each use. If a ladder is labels are missing or illegible, broken, cracked, or defective in any way, it shall be tagged for disposal immediately and removed from the work area.

5.2.2. Ladders shall be secured at the top or bottom to prevent slippage. Safety shoes shall be placed on ladders.

5.2.3. Portable ladders shall never be used horizontally as substitutes for scaffold planks, runways, or any other service for which they have not been designed.

5.2.4. When a task can only be done while standing on a portable ladder, the length of the ladder shall be such that the worker stands on a rung no higher than the fourth from the top. The ladder shall also be secured.

5.2.5. Unless suitable barricades have been erected, ladders shall not be set up in passageways, doorways, driveways, or other locations where they can be struck or displaced by persons or vehicles using the access route.

5.2.6. Only one person at a time shall be allowed on a single-width ladder.

5.2.7. Ladders shall not be placed against flexible or movable surfaces.

5.2.8. Three-point contact shall be maintained when climbing up or down a ladder. That means two hands and one foot, or two feet and one hand shall be on the ladder at all times. This is especially important when getting on or off a ladder at heights.

5.2.9. Hands shall be used only for climbing ladders. Tools, equipment, and materials shall be placed in a container and raised or lowered by rope, if necessary.

5.2.10. Workers shall not straddle the space between a ladder and another object.

5.2.11. Ladders shall be placed on secure footings.

5.2.12. Ladder shall not be rested on any of its rungs. Ladders shall rest on their side rails.

5.2.13. Personnel shall watch for overhead power lines before attempting to erect any ladder.

5.3. Straight Ladders

5.3.1. When a straight ladder is used for access from one work level to another, the side rails shall extend a minimum of three feet above the landing.

5.3.2. The base of straight ladders should be placed at a one-to-four ratio from the vertical surface.

5.3.3. Before setting up straight ladders, the area shall be checked for overhead power lines. Straight ladders shall be used only for their intended purpose.

5.4. Step Ladders

5.4.1. The top step of ordinary types of step ladders shall not be used as a step.

5.4.2. When working from a step ladder over five feet high, workers shall not stand on a step higher than the third step from the top of the stepladder.

5.4.3. Step ladders shall not be used as straight ladders.

5.5. Inspection and Maintenance

5.5.1. Ladders shall have all manufacturers' labels, to include weight ratings, present and legible on the ladder frame. If the ladder labels are not present or unreadable the ladder shall be removed from use.

5.5.2. Ladders found to be defective shall be removed, tagged, and scrapped.

5.6. Storage and transportation

5.6.1. Storage areas shall permit easy access.

5.6.2. Ladders shall be stored on their sides or in a secured upright position.

**6. DEFINITIONS**

6.1. Ladder - An appliance, usually consisting of two side rails joined at regular intervals by crosspieces called steps, rungs, or cleats, on which a person may step in ascending or descending.

6.2. Step ladder - A self-supporting portable ladder, non-adjustable in length, having flat steps and a hinged back.

6.3. Single ladder - A non-self-supporting portable ladder adjustable in length, consisting of but one section. Its size is designated by the overall length of the siderail.

6.4. Extension ladder - A non-self-supporting portable ladder adjustable in length. It consists of two or more sections traveling in guides or brackets arranged to permit length adjustment.

6.5. Fixed ladder - A ladder permanently attached to a structure, building, or equipment.

**LOCKOUT/TAGOUT (ENERGY CONTROL)**

1. **PURPOSE**
   1.1. The purpose of this procedure is to establish the requirements for the Lockout or Tagout of energy isolating devices. It shall be used to ensure all machines or equipment are isolated before employees perform any servicing or maintenance.
2. **SCOPE**
   2.1. This procedure applies to all CPP employees who are authorized to perform maintenance service activities on equipment or processes that represent energy hazards and to any employees who are affected by these activities.
3. **REFERENCES**
   3.1. 29 CFR 1926.417 - Control of Hazardous Energy
   3.2. 29 CFR 1910.147 - Control of Hazardous Energy (Lockout/Tagout - LOTO)
4. **RESPONSIBILITY**
   4.1. Managers:
      4.1.1. Be responsible for ensuring employees comply with this procedure.
      4.1.2. Ensure employees who are authorized to service equipment have received general lockout/tagout training as well as specific training on any individual piece of equipment or machine that is to be locked or tagged.
      4.1.3. Coordinate activities of contractors that may affect lockout/tagout and energy control procedures within a facility or when performing repairs on pump trucks in the field.
      4.1.4. Ensure only authorized employees service equipment or machinery requiring lockout/tagout.
      4.1.5. Assign locks, if applicable, or tags to authorized employees.
   4.2. Employees:
      4.2.1. Comply with this procedure.
      4.2.2. Follow safe shut down procedures.
      4.2.3. Ensure the security of their lock and key.
      4.2.4. Communicate activities to affected employees or authorized contractors.
   4.3. Safety Department:
      4.3.1. Develop and maintain the Lockout/Tagout (Energy Control) procedure.
      4.3.2. Provide training for each manager and assist with training employees as needed.
5. **OBJECTIVE**
   5.1. Lockout is the preferred method of isolating machines or equipment from energy sources and shall be used whenever possible.
   5.2. The objective of this procedure is to identify the hazards of energy and establish procedures for safe lockout/tagout operations.
6. **PROCEDURE**
   6.1. Methods of Lock and Tag Identification
      6.1.1. Lockout/Tagout devices should be standardized for each pump truck and at each facility in at least color, shape, or size, and shall be durable for withstanding the environment to which they are exposed for the maximum period of time exposure expected.

6.1.2. Locks and Tags used for Hazardous Energy Control (LOTO) shall not be used for any other function(s). LOTO equipment shall be only used during the repair and servicing of equipment.

6.1.3. When it is necessary to take equipment out of service permanently or for an extended period of time, a shop lock and tag indicating “Out of Service” will be used.

6.1.4. Identifiable lockout/tagout devices shall indicate the identity of the:

6.1.4.1. Locks, which are numbered sequentially (1, 2, 3, etc.), will be used if available. If locks are used, one key shall be issued to the employee and the second key maintained by his/her supervisor.

6.1.4.2. Tags-For tagout devices, a standardized print and format shall be used. The printing shall be legible and understandable for employees (bilingual if necessary). A nylon self-locking tie that requires cutting the nylon self-locking tie to secure tags.

6.2. Periodic Inspections

6.2.1. Periodic inspections shall be conducted at least annually performed by Safety or an authorized employee other than those utilizing the energy control procedure under inspection. The purpose of each inspection is to:

6.2.1.1. Identify and correct any deviations or inadequacies observed.

6.2.1.2. Review each employee's responsibility under the Lockout/Tagout (Energy Control) procedure.

6.2.1.3. Review the limitations and proper placement of tagout devices.

6.3. Acquiring Locks and Tags

6.3.1. The manager or the designee shall provide the necessary equipment to perform lockout and tagout procedures.

6.4. Lockout/Tagout Procedures - Shutdown

6.4.1. The authorized employee shall survey to locate and identify isolating devices to be certain which switch(es), valve(s), or other energy isolating devices apply to the equipment to be locked or tagged out.

6.4.2. Affected employees or contractors shall be notified if a lockout/tagout system will be utilized and the reason.

6.4.3. If the machine or equipment is operating, it shall be shut down by the normal stopping procedure. The employee/operator shutting down the machine shall ensure stored energy is dissipated or properly restrained.

6.4.4. The switch, valve or other energy isolating device(s) shall be operated to verify the equipment is isolated from its energy source(s).

6.5. Lockout/Tagout Device Application

6.5.1. Only an authorized employee shall fix locks and/or tags to each energy-isolating device.

6.5.2. Locks shall be singularly identified.

6.5.3. Locks shall be fixed in a manner that will hold isolating devices in a safe or off position.

6.5.4. Tags that cannot be affixed directly to the energy isolating devices shall be located as safely as possible to the device in a position that will be immediately obvious to anyone attempting to operate the device.

6.6. Lockout/Tagout Start-up

6.6.1. After servicing and/or maintenance is complete and the equipment is ready for normal operations, the area around the machines or equipment shall be checked to ensure no one is exposed to an uncontrolled energy source.

6.6.2. After tools have been removed from the machine or equipment, guards have been reinstalled, and all personnel are in the clear, lockout or tagout devices shall be removed and the affected employees notified of the removal.

6.6.3. Lockout/Tagout shall be removed from each energy isolating device by the employee/operator who applied it, except: Lockout/Tagout devices may be removed by a supervisor when the authorized employee who applied it is unavailable, or it is verified that the authorized employee who applied it is not at the facility.

6.7. Testing or Positioning of Machines, Equipment, or Components

6.7.1. In situations where lockout or tagout devices are temporarily removed and the energy cannot be isolated from the machine, equipment, or component. The following sequence of actions shall be followed:

6.7.1.1. The machine or equipment shall be cleared of all tools and materials.

6.7.1.2. Employees shall be removed from the machine or equipment area.

6.7.1.3. Lockout or tagout devices removed.

6.7.1.4. Energizing shall be completed, and testing or positioning shall be conducted.

6.7.1.5. Systems de-energized and energy control measures shall be reapplied in accordance with the shutdown procedures described in this section.

6.8. Informing Outside Contractors

6.8.1. The supervisor/manager shall inform outside contractors of the elements of this program and obtain their lockout/tagout program.

**7. DEFINITIONS**

7.1. Affected Employee - An employee whose job requires him or her to operate or use a machine or piece of equipment on which service or maintenance is being performed under lockout/tagout, or who's job requires him or who to work in an area in which service or maintenance is being performed. Affected employees must be informed when lockout/tagout is being performed.

7.2. Authorized Employee - An employee who performs service or maintenance on machines and equipment. Lockout or tagout is used by these employees for their self-protection.

7.3. Energized - Machines and equipment are energized when they are connected to an energy source, or they contain residual or stored energy-

7.4. Energy - The movement or possibility of movement in equipment or machinery. Whether the power switch is on or off, energy always is present in any powered equipment.

7.5. Energy Isolating Device - Any mechanical device that physically prevents the transmission or release of energy. These include but are not limited to, manually operated circuit breakers, disconnect switches, line valves, and blocks.

***Note**: Push buttons, selector switches, and other control circuit type devices are not energy isolating devices.*

7.6. Energy Source - Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal or other energy.

7.7. Energy Control Procedure - A written document that contains those items of information an authorized employee needs to know in order to safely control hazardous energy during service or maintenance of machines or equipment.

7.8. Lockout - The placement of a lockout device on an energy isolating device, in accordance with established procedure, ensuring the energy isolating device and equipment being controlled cannot be operated until the lock out device is removed.

7.9. Normal Production Operations - The utilization of machine or piece of equipment to perform its intended production operation.

7.10. Servicing and/or Maintenance - Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing equipment. These activities include lubrication, cleaning or unjaming machines or equipment, making adjustments or tool changes, where the employee may be exposed to unexpected energizing or start-up of the equipment or release of hazardous energy.

7.11. Setting Up - Any work performed to prepare a machine or piece of equipment to perform its normal production operation.

7.12. Tagout-The placement of a tagout device on an energy isolating device, in accordance with established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

7.13. Tagout Device - Any prominent warning device, such as a tag and means of attachment that can be securely fastened to an energy-isolating device in accordance with established procedure. The tag indicates that the machine or equipment to which it is attached is not to be operated until the tagout device is removed in accordance with the energy control procedure.

**LOCKOUT/TAGOUT (ENERGY CONTROL)**
**CONCRETE PUMP TRUCKS, TRAILER-MOUNTED, & PLACING BOOM**

1. **PURPOSE**
   1.1. The purpose of this procedure is to establish requirements for the Lockout or Tagout of the concrete pump or placing boom when performing servicing or maintenance tasks. It shall be used to ensure all machines or equipment are isolated before employees perform any service or maintenance.
2. **SCOPE**
   2.1. This procedure applies to all CPP employees who are authorized to perform maintenance service activities on equipment or processes in which energy hazards are present and to any employees who are affected by these activities.
3. **REFERENCES**
   3.1. 29 CFR 1926.417 - Control of Hazardous Energy
   3.2. 29 CFR 1910.147 - Control of Hazardous Energy (Lockout/Tagout - LOTO)
4. **OBJECTIVE**
   4.1. The objective of this procedure is to identify the hazards of hazardous energy and establish procedures for safe hazardous energy control/lockout/tagout operations.
5. **PROCEDURE**
   5.1. Methods of Lock and Tag Identification
      5.1.1. Lockout/Tagout devices should be standardized for each pump truck and at each facility in at least color, shape, or size, and shall be durable for withstanding the environment to which they are exposed for the maximum period of time exposure expected.
      5.1.2. Locks and Tags used for Hazardous Energy Control (LOTO) shall not be used for any other function(s). LOTO equipment shall be only used during the repair and servicing of equipment.
      5.1.3. When it is necessary to take equipment out of service permanently or for an extended period of time, a shop lock and tag indicating “Out of Service” will be used.
      5.1.4. Identifiable lockout/tagout devices shall indicate the identity of the:
         5.1.4.1. Locks, which are numbered sequentially (1, 2, 3, etc.), will be used if available. If locks are used, one key shall be issued to the employee and the second key maintained by his/her supervisor.
         5.1.4.2. Tags-For tagout devices, a standardized print and format shall be used. The printing shall be legible and understandable for employees (bilingual if necessary). A nylon self-locking tie that requires cutting the nylon self-locking tie to secure tags.
   5.2. If you will be working in a hazardous location of a unit (such as in the water box or the rock valve) or you will be hidden from view to outsiders (inside the unit, on the driveline), operators shall perform the below tasks on the specified unit.
      5.2.1.Truck Mounted Units
         5.2.1.1. Shut down truck engine.
         5.2.1.2. Remove the key and place it in your pocket.
         5.2.1.3. Place the sign "**DO NOT OPERATE**" placard on the inside of the windshield of the truck

5.2.1.4. After exiting the truck cab, securely close the door, and place the magnetic warning placard "**DO NOT OPERATE"** over the door handle. This will prevent any unauthorized personnel from opening the door without being made aware of the work you are performing on the machine.

5.2.1.5. Perform the needed service on the machine.

5.2.1.6. Remove the placards and reinstall the key.

5.2.1.7. Store the signs / tags in the glove box for future use.

5.2.2. Trailer Mounted Units

5.2.2.1. Diesel/Gas Engine Towing and Trailer Units

5.2.2.1.1. Shut down the truck and the trailer unit engines.

5.2.2.1.2. Remove the key and place it in your pocket.

5.2.2.1.3. Attach and secure a wire or plastic tie into the hole on the "**DO NOT OPERATE”** tag.

5.2.2.1.4. Hang and secure the bilingual tag in a position that will have to be moved in order to insert a key into the ignition switch. Ensure the language that is most likely to be spoken is facing outward. Perform the needed service on the unit.

5.2.2.1.5. Remove all tools, rags, or equipment used from repaired/serviced operation.

5.2.2.1.6. Remove the tag and replace the key.

5.2.2.1.7. Store the tag in the unit box for future use.

5.2.2.2. Electric Motors

5.2.2.2.1. Shut down the truck/towing unit engine.

5.2.2.2.2. Remove the key and place it in your pocket.

5.2.2.2.3. Disconnect the mains and install a lock according to the Lockout/Tagout procedure EHS-110.

5.2.2.2.4. Attach and secure a wire or plastic tie into the hole on the **"DO NOT OPERATE”** tag.

5.2.2.2.5. Hang and secure the bilingual tag in a position that it will have to be moved in order to insert a key into the ignition switch. Ensure the language that is most likely to be spoken is facing outward.

5.2.2.2.6. Perform the needed service on the unit.

5.2.2.2.7. Remove all tools, rags, or equipment used from repaired/serviced operation.

5.2.2.2.8. Remove the tag and replace the key.

5.2.2.2.9. Store the tag in the unit toolbox for future use.

5.2.2.2.10. Hang and secure the bilingual tag in a position that it will have to be moved in order to insert a key into the ignition switch. Ensure the language that is most likely to be spoken is facing outward. Perform the needed service on the unit.

5.2.2.2.11. Remove the tag and replace the key.

5.2.2.2.12. Store the tag in the unit box for future. Use.

5.2.3. Placing Boom Power Packs

5.2.3.1. Connecting Power

5.2.3.1.1. Ensure that energy source is isolated and Lockout/Tagout device has been installed.

5.2.3.1.2. Note name and contact info of personnel who installed Lockout/Tagout device.

5.2.3.1.3. Connect the power cable to the placing boom power pack and ensure the plug is fully inserted and secure.

5.2.3.1.4. Contact personnel responsible for Lockout/Tagout device and inform them that the power has been connected and the device may be removed.

5.2.3.1.5. Turn on placing boom power pack and ensure the placing boom is operating properly.

5.2.3.2. Disconnecting Power

5.2.3.2.1. Contact personnel responsible for installing Lockout/Tagout device and ensure Lockout/Tagout device has been installed and energy source is isolated prior to disconnecting power cable.

5.2.3.2.2. Note name and contact info of personnel who installed Lockout/Tagout device.

5.2.3.2.3. Disconnect power cable from placing boom powerpack.

**NEW EMPLOYEE ORIENTATION – SHORT SERVICE EMPLOYEE**

1. **PURPOSE**
   1.1. The purpose of this procedure is to identify employees that are new to CPP. and ensure that they are provided with the optimal training to provide a safe working environment.
2. **SCOPE**
   2.1. This procedure applies to all employees who operate or CPP equipment on job sites and at CPP facilities.
3. **RESPONSIBILITIES**
   3.1. Managers shall assign a trainer to each new employee. The trainer will be required to provide training in safe operation of equipment. Trainers will also provide training in CPP' policy and procedure.
   3.2. New employees will be required to follow all procedures and safety policies. These policies and procedures are outlined in this safety manual, employees' handbook, and all other documented resources for the duties the employee is expected to perform.
   3.3. All subcontractors must adhere to this policy for short-service employees when working for CPP.
4. **PROCEDURE**
   4.1. New Employees
      4.1.1. Will be identified by a unique trainee sticker on their hard hat/safety helmet.
         4.1.1.1. Trainee designation will remain in place until OSHA 10, and ACPA certification is complete.
      4.1.2. Will be required to follow all safety policies and procedures.
   4.2. Managers
      4.2.1. Assign a trained, competent employee as a trainer to any new employee to provide guidance on CPP safety policies.
      4.2.2. Notify any clients or customers prior to sending any new employee, known as a short service employee, to their facility to complete any work.
      4.2.3. Ensure that the new employee is following all safety guidelines and procedures.
      4.2.4. Ensure that training file is complete prior to the new employee working alone and removing that employee from the short service employee program.
   4.3. Trainer
      4.3.1. Must train new employees to ensure compliance with safety policies to ensure safe operation of CPP Equipment. The trainer will work with the new employee until he/she demonstrates proper and safe operation of the equipment.
5. **DEFINITION**
   5.1. Short Service Employee - A newly hired employee that does not have experience working with CPP. The length of time that a new employee may remain a short service employee can vary based on prior knowledge, experience, and training. This status may also be based on active compliance with policy and procedure.
   5.2. Trainer - A designated trained employee of CPP that has knowledge and experience with CPP' safety policy, the safe operation of the equipment being used and a positive attitude for training new employees.

**CONCRETE PUMP OUTRIGGER PAD GUIDELINES**

1. **PURPOSE**
   1.1. The purpose of this procedure is to provide supplemental guidelines for outrigger pad use with concrete pump trucks and ensure that operators follow guidelines as set forth in the ASME, ACPA, Manufacturers, and Concrete Pumping Holding's EHS Manual.
2. **SCOPE**
   2.1. This procedure is designed for CPP employees whose job assignment requires them to operate concrete pump trucks.
3. **RESPONSIBILITY**
   3.1. The Branch Manager or Person-in-Charge shall be responsible for the implementation of this program.
   3.2. Employees shall comply with the following procedures:
      3.2.1. Know and understand the functions, limitations, and operating characteristics of the specific boom size and outrigger system they are assigned to.
      3.2.2. Know and understand CPP Safety guidelines as set forth in the EHS Manual.
      3.2.3. Know and Understand standards and guidelines contained in the ASMEB 30.27-2019.
      3.2.4. Know and understand ACPA guidelines for safe setup and operation of a concrete pump truck.
      3.2.5. Know and understand the concrete pump's operation manual for safe setup and operating of the outriggers to the specific size concrete pump the operator is working with.
      3.2.6. Inspect the site where the concrete pump is to set up and ensure that the area where the outrigger pads are to be set is flat or can safely be made flat so the outrigger foot rests on a flat surface.
      3.2.7. Review the planned operation and requirements with the person-in-charge at the jobsite and ensure Work Order authorization is signed. The additional best practice of completing a PTP (Pre-Task Plan) is encouraged.
      3.2.8. Ask the job-site person-in-charge where they have planned for the pump to safely set up.
      3.2.9. Use adequate outrigger pads and where needed apply the guidelines found in the Concrete Pump Operations Manual, ASME, ACPA, or CPP. EHS Manual or whichever standard or guideline is greater.
   3.3. Safety Department shall:
      3.3.1. Develop and maintain the Concrete Pump Outrigger Pad Guidelines and amend as needed to comply with stricter guidelines for each region, branch, or individual job site.
4. **OBJECTIVE**
   4.1. The objectives of this procedure are to:
      4.1.1. Provide supplemental guidelines for the use of outrigger pads.
5. **PROCEDURE**
   5.1. Concrete Boom Pump Outrigger Pads Procedures:
      5.1.1. Outrigger Pads will be used each time the outriggers are deployed for use.

5.1.2. Operator shall ensure compliance with the one-to-one rule when setting up near excavations and cut edges.

5.1.3. Look around the area where the outriggers are to be set, are there voids, trenches, excavations, slopes, or any other signs like pipes rising from the ground to indicate that there may be a hazard that will prevent you from setting the pump up safely.

5.1.4. Employees are obligated to work safely and in accordance with their training. Whenever there is any doubt as to safety, the operator shall have the authority to stop and refuse to continue the pour until safety has been assured.

5.1.5. After the concrete pump is set up and ready for operation, and before concrete is introduced into the boom, swing the empty boom over each working side outrigger, as applicable, that will be used during the pour. As the boom moves over the outriggers, operator shall watch the outrigger pads and look for settling or movement of the outrigger pad. The operator shall determine if additional support is necessary. Some settlement is to be expected. Note that when concrete is in the pipeline the force on the outrigger pad doubles.

5.1.6. If significant settling or other concerns arise, additional dunnage or cribbage must be used. This could include heavy lumber or even steel plates. In some cases, the pump may need to be moved to another location.

5.2. Training and information requirements

5.2.1. Training shall be given to employees impacted by this procedure.

6. **RECORDS**

6.1. Operator training records shall be maintained by the local branch office.

7. **FORMS**

7.1. Repair Request Form

7.2. Concrete Pump Boom Inspection Report

7.3. Pre-Task Plan (PTP)

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

1. **PURPOSE**
   1.1. The purpose of this procedure is to provide CPP employees with the requirements for adequate and effective personal protective equipment (PPE).
2. **SCOPE**
   2.1. This procedure is designed for CPP employees whose job assignments require the use of PPE.
3. **REFERENCES**
   3.1. 29 CFR 1926.28 Personal Protective Equipment
   3.2. 29 CFR 1910.132 Personal Protective Equipment
4. **RESPONSIBILITIES**
   4.1. Managers shall be responsible for implementing the Personal Protective Equipment procedure.
   4.2. Supervisors will ensure personnel wear the required PPE.
   4.3. Employees shall comply with the Personal Protective Equipment procedure.
   4.4. The Safety Department:
      4.4.1. Develop and maintain the Personal Protective Equipment procedure, to include requirements for monitoring.
      4.4.2. Conduct a hazard assessment of typical jobs and duties for PPE selection.
      4.4.3. Monitor the purchase of acceptable PPE.
5. **OBJECTIVE**
   5.1. The objective of this program is to provide guidelines and procedures adhering to the ANSI (American National Standards Institute) standards for appropriate PPE selection, use, and maintenance.
6. **PROCEDURE**
   6.1. PPE meeting the requirements shall be selected for use based on the results of the hazard assessment and proper fit for each affected employee.
   6.2. A safety gear locker shall be readily available to employees, which contains required PPE necessary to perform assigned job tasks.
   6.3. Supervisors shall contact the Safety Department for special PPE not available.
   6.4. PPE shall be properly fitted and well maintained in a sanitary and reliable condition.
   6.5. Equipment shall not be used if found to be defective or damaged either during the inspection, prior to use, or while donning.
   6.6. The employee shall immediately notify his/her supervisor of the need for new equipment.
7. **RECORDS**
   7.1. PPE Hazard Analysis
   7.2. PPE Safety Meeting Form/Training Records are maintained by the Safety Department.

**POWER LINES POLICY ACKNOWLEDGMENT**

1. **PURPOSE**

1.1. The purpose of this Acknowledgment is to ensure CPP Equipment Operators are aware of the established company policies used to identify safe working zones when operating equipment near or in the vicinity of overhead power lines.

2. **RESPONSIBILITY**

2.1. Each operator shall be responsible for identifying overhead power lines and establishing safe work zones before set-up operations begin.

**3. PROCEDURE**

3.1. THE FOLLOWING IS TAKEN DIRECTLY FROM CPP'S SAFETY & ENVIRONMENTAL PROCEDURES MANUAL. THESE SECTIONS APPLIES TO WORKING AROUND OUR NEAR POWER LINES:

*3.1.1. Per SE-020 - Concrete Pump Safety:*

3.1.2. *Section 5.2.8* - Regarding overhead power lines the operator shall:

*3.1.2.1.1.* Ensure there is always a 20' clearance from all overhead power lines unless one of the following two options have been established:

1) The Power lines have been confirmed as de-energized and visibly grounded or

2) The Power line's voltage has been confirmed and minimum clearances can be maintained as permitted by Table A (OSHA)

TABLE A—MINIMUM CLEARANCE DISTANCES

| Voltage (nominal, kV, alternating current) | Minimum clearance distance (feet) |
|---|---|
| up to 50 | 10 |
| over 50 to 200 | 15 |
| over 200 to 350 | 20 |
| over 350 to 500 | 25 |
| over 500 to 750 | 35 |
| over 750 to 1,000 | 45 |
| over 1,000 | (as established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution). |

**Note:** The value that follows "to" is up to and includes that value. For example, over 50 to 200 means up to and including 200kV.

3.1.2.1.2. At no time shall a boom be positioned above an overhead power line unless Option 1 has been confirmed. A boom may be positioned under an overhead power line as long as a 20' clearance can be maintained, or Option 2 is utilized.

3.1.2.1.3. If voltage has been determined per Option 2 and the boom will be operated closer than 20' to the power line, the following must happen prior to commencing operations:

3.1.2.1.3.1. The operator must inform dispatch that he/she is breaking 20' clearance, and;

3.1.2.1.3.2. A full-time COMPETENT spotter must be identified and utilized until operations have been completed.

3.1.2.1.4. Identify the minimum clearance by utilizing the Hi-Visible Green Safety Awareness safety cones carried on board the truck. (See EHS-035)

3.1.2.1.5. Utilize Power Line Awareness Sleeve on tip hose. (See EHS-035)

3.1.2.1.6. "Text-In-Compliance"

3.1.2.1.6.1. After placing Hi-Visible Orange Flags and Power Line Awareness Sleeve, per EHS-035, the operator shall take pictures of the safety cones and sleeve in use and text or email mail pictures to Dispatch to ensure compliance with EHS-035.

3.1.2.1.6.2. Reference EHS-020 (5.2.8.6.2***) Per SE-035 Electrical Awareness Overhead Power Lines***) *Section 4.1*-Flagging System)

3.1.3. When operating equipment near or in the vicinity of overhead power lines, Hi-Visibility Orange Flags shall be placed adjacent to the lines to identify the minimum safe clearance that is required.

3.1.4. To establish the awareness barrier, the operator shall stand directly under the power line.

3.1.4.1. With his/her back to the power line, the operator should take enough long paces to establish the required clearance per EHS-020 and place a orange flag.

| |
|---|
| *One (1) long pace equals approx. three (3) feet*<br>*20 feet equals approx. 7 paces.*<br>*10 feet equals approx. 4 paces.* |

3.1.4.1.1. Repeating the same guidelines, the operator will move a short way down the power line, in the radius of the boom, and place another flag.

3.1.4.1.2. This will provide a visual reference point for the operator to maintain the necessary clearance as established by EHS-0205.8.2.

3.1.5. 4.1.3 When using a radio remote, operators shall, if possible, stand at the cones to observe boom clearance of the overhead power lines.

3.1.6. All pump trucks shall be equipped with at least 2 orange awareness flags

*3.1.7. Section 4.2-Power Line Awareness Sleeve*

*3.2.* A power line awareness flag shall be placed on the tip hose above the hose person's head whenever operating equipment is near or in the vicinity of overhead power lines. Eco-Pan will use a Power Line Awareness Device.

*3.3. Section 4.3* - If a spotter is used, ensure spotting is their only duty and communicate prior to moving what you are making and the appropriate hand signals.

**REQUIRED PUMP TRUCK DOCUMENTATION AND EQUIPMENT**

1. **PURPOSE**
   1.1. The purpose of this procedure is to ensure all regulatory and CPP required documentation, and equipment is carried in each pump truck or with the operator (whichever is always applicable).
2. **SCOPE**
   2.1. This procedure applies to all operators of CPP pump trucks.
3. **RESPONSIBILITY**
   3.1. Managers and supervisors shall be responsible for ensuring all drivers/operators in their area of operations comply with this procedure.
   3.2. Each driver/operator is responsible for compliance with this procedure.
4. **OBJECTIVE**
   4.1. In the Pump:
   - Hard Hat/Safety Helmet
   - Safety Glasses
   - Reflective Hi-Vis Vest or Clothing
   - Safety Gloves
   - Power Line Awareness Flags
   - Hazard Awareness Orange Cones
   - Hazard Awareness Orange Sleeve
   - DOT Regulations Book
   - Current Registration
   - Insurance Card
   - Overweight Permit
   - Hazardous Materials Book (OSHA)
   - First Aid Kit
   - Reflective Triangle Kit
   - Fire Extinguisher
   - Pump Manufacturer's Safety Manual
   - Pump Manufacturer's Co-Workers Safety Rules
   - Pump Manufacturer's Safety Manual Quick Index

   4.2. On Driver/Operator's Person:
   - Valid Commercial Driver's License
   - Valid DOT Medical Card

**SAFE WORK PERMIT**

1. **PURPOSE**
   1.1. The purpose of this procedure is to identify the high-risk activities that require a permit to be issued.
2. **SCOPE**
   2.1. This procedure applies to all CPP employees and contractors that work for or under CPP.
3. **RESPONSIBILITY**
   3.1. Employees will be responsible for complying with this procedure when working around power lines and when required to on customer's property.
   3.2. Managers shall be responsible for enforcing the safe work permit procedure.
4. **PROCEDURE**
   4.1. Pre-Task Hazard Identification
      4.1.1. CPP employees will be trained to identify hazards associated with tasks prior to starting work. When operating equipment near power lines (unless not energized), a safe work permit is completed as required under EHS-035 (Power line Awareness), prior to beginning the task. If the scope changes, a new permit process will be required.
   4.2. Managers
      4.2.1. Managers will be required to review the safe work permit and identify any additional hazards in the work area. The manager will also be responsible for ensuring that the employee is aware of the additional safety requirements for these tasks (i.e. flagging system, etc.). The manager can then approve the safe work plan.
   4.3. End of Shift
      4.3.1. At the end of each shift or when changing operators, the safe work plan process should be renewed.

**SAFETY COMMITTEE/SAFETY MEETINGS**

1. **PURPOSE**
   1.1. The purpose of this procedure is to allow a consistent approach in the operations safety committees and ensure safety management controls are incorporated into business practices.
2. **SCOPE**
   2.1. This procedure applies to all CPP employees.
3. **RESPONSIBILITY**
   3.1. The Safety Department will Co-Chair safety committee meetings and evaluate safety and health issues and performance (charter is included).
   3.2. Managers shall be responsible for ensuring compliance with the following procedures:
      3.2.1. Endorse and post the company's safety and health policies.
      3.2.2. Assign supervisory personnel as company local safety and health committee members to meet monthly.
      3.2.3. Require, at a minimum, monthly safety meeting attendance by employees at each work site or branch facility.
   3.3. Supervisors and employees shall ensure that employees comply with this procedure.
   3.4. The Safety Department shall:
      3.4.1. Develop and maintain the Safety Committee's procedure.
      3.4.2. Assist management in meeting the intent of the program including management inspections, safety committees, and safety committee meetings.
      3.4.3. Provide hazard alert notifications and bulletins for use in safety meetings and for general information.
4. **OBJECTIVE**
   4.1. The objective of this procedure is to review incidents and provide guidelines and procedures for establishing administrative requirements to reduce risks.
5. **AGENDA**
   5.1. Requested agenda items should be submitted to the secretary at least one week in advance of the committee meeting.
   5.2. The secretary develops the agenda based upon requests and committee requirements (see Attachment 1 for sample agenda).
   5.3. Upon approval of the agenda by the chairman, the secretary will distribute.
   5.4. Upon completion of the meeting, the secretary shall:
      5.4.1. Write the meeting minutes.
      5.4.2. Obtain approval from the chairman.
      5.4.3. Distribute copies to committee members, Safety Department, and other applicable supervisors and managers.
   5.5. Items that are outside of the chairman's or other committee members' authority to pursue or take corrective action upon shall be noted in the meeting minutes by requesting the item to be reviewed at the appropriate level of CPP management.
6. **LOCAL SAFETY COMMITTEE CHARTER**
   6.1. Mission

6.1.1. The mission of this charter shall be to study matters within the facility/operations pertaining to safe working conditions and practices.

6.2. The services of appropriate departments and/or individuals shall be requested as required by the subject under investigation.

6.2.1. Recommend Actions may include:

| | |
|---|---|
| Safety concerns/Customer concerns | Employee Safety Incentive Program Status |
| Regulatory agency citations | Hazards assessments |
| Accidents | Reviewing audit action items |
| Accident analysis/trending | Near misses |
| Environmental concerns | Discussing Good Catches |

6.3. The Committee shall be composed of equal representation of management, shop, and operator employees.

***Note**: Managers shall appoint backups to ensure representation at meetings.*

**7. TERM OF OFFICE**

7.1. Employee representatives of the shop mechanics, operators and office personnel shall serve a one-year term.

8. **CHAIRMAN**

8.1. The chairman shall be a member of upper management from the facility selected by regional or corporate management (e.g.: Branch Manager).

9. **SECRETARY**

9.1. The chairman selects the Secretary.

9.2. Minutes shall be developed by the secretary and approved by the chairman. Copies distributed to members, the Safety Department, and senior management.

**10. MANAGEMENT CONTROL SYSTEMS**

10.1. The following management control systems shall be implemented:

- Work required to achieve risk reduction objectives identified.
- Standards for the desired work performance established.
- Compliance with performance standards shall be commended and deficiencies corrected.

**11. EMPLOYEE SAFETY MEETINGS**

11.1. Employee safety meetings shall be held monthly to discuss job site safety concerns, Hazard Alert notifications and employee concerns. A safety meeting log will be filled out with each attending employee's name and signature. A list of topics discussed will also be included.

11.2. Each Branch Office shall keep a record of their safety meetings on file for three (3) years, post a copy on their break room bulletin boards, and submit a copy to safety@pumppartners.com.

**12. ATTACHMENTS**

Attachment 1 - Sample Agenda for Local Safety Committee

Attachment 2 - Safety Meeting Log

**Attachment 1 - Sample Agenda for Local Safety Committee**

- Chairman's Notes.
- Review and approve previous meeting's minutes.
- Old business.
- Power Line.
- Issues/Near Misses.
- Items deferred.
- Driving Incidents/Near Misses.
- Total Personnel Accident Rate: Worker's Comp.
- Total Pump Truck, Cargo and Vehicle Damages.
- Modification Rate/Experience Factor and Lost Workday Incident.
- Status of Action Item(s).
- Review selected safety, health and environmental reports to assist in correction of identified sub-standard conditions or practices (examples).
- Issues identified from reports by the safety representatives.
- Corrective Action/Incident Guidance status.
- Inspection Reports/Hazards.
- Surveys Alternative Hazards.
- Assessments Near misses.
- Review recent Incident Investigation Reports. Scenarios provided by the Investigative Supervisor/Manager.
- Safety, health, and environmental concerns from the Committee (concerns should be transmitted to the secretary prior to the meeting). Include a list of concerns proposed but were not scheduled on the current agenda.
- Perform group hazards assessments according to Hazards Assessment Guide (optional).
- Perform Committee Inspection (optional).
- Recommend changes to Safety and Environmental Procedures Manual (optional).

**SILICA EXPOSURE CONTROL PROCEDURE**

1. **PURPOSE**
   1.1. The purpose of this document is to establish and implement a written exposure control plan that identifies tasks involving silica exposure and methods used to protect employees. All branches/departments are required to implement the components of this Plan to ensure compliance with the following applicable state and federal regulations. The following Occupational Safety and Health Administration (OSHA) standards are applicable for respirable crystalline silica.
2. **SCOPE**
   2.1. The Respirable Crystalline Silica Exposure Control Plan applies to all CPP employees who are expected to be exposed to respirable crystalline silica as outlined in section 5; or through other means, which are determined by Safety, competent person, or their manager/supervisor.
3. **REFERENCES**
   3.1. General Standard 29 CFR 1910.1053 - Respirable crystalline silica.
   3.2. Construction Standard 29 CFR 1926.1153 - Respirable crystalline silica.
4. **RESPONSIBILITY**
   4.1. COO, Directors, Managers, and Department Heads
      4.1.1. Ensure supervisor(s) understand their responsibilities for the preparation and implementation of the Silica Exposure Control Plan within their branch/department.
      4.1.2. Actively support this Plan within their branch/department.
      4.1.3. Ensuring project and/or task specific Exposure Control Plans (ECPs) are developed, communicated and effectively implemented as appropriate.
      4.1.4. Ensuring that all potentially exposed employees (i.e., Managers, Supervisors, Operators, etc.) receive the necessary education and training related to this Policy, as well as project/task specific ECPs.
      4.1.5. Maintaining applicable records (i.e., inspections, respirator fit tests, training records, etc.) in accordance with BBCP's record retention procedures/practices.
   4.2. Branch Manager/Supervisor
      4.2.1. Implement and ensure procedures are followed in accordance with this ECP
      4.2.2. Ensure that employees are aware of this ECP, instructed in the details of implementation, and provided with equipment and methods of control (e.g. engineering controls, work practice controls and respirators) when they are required.
      4.2.3. Contact EHS to request technical assistance, and to evaluate health and safety concerns within their department.
   4.3. Employees
      4.3.1. Comply with this ECP and any further safety recommendations provided by managers, supervisors, competent person(s), and/or EHS regarding the Silica Exposure Control Plan.
      4.3.2. Contact the appropriate manager, supervisor, competent person, or EHS to request technical assistance, and to evaluate health and safety concerns within their department/ scope of work.
      4.3.3. Working in accordance with the project/task specific ECP.

4.4. Safety Department:

4.4.1. Develop and maintain the Silica Exposure Control Plan and conduct hazard assessments of the work areas for each CPP occupation for exposure determination.

4.4.2. Assess the Silica exposure plan at least annually.

5. **OBJECTIVE**

5.1. The objectives of this procedure are to:

5.1.1. Identify employees with occupational exposure or potential occupational exposure to crystalline silica.

5.1.2. All employees shall have access to a copy of this exposure control plan.

5.1.3. Provide procedures to eliminate or minimize employee exposure.

5.1.4. Identify job tasks to which occupational exposure could occur. (Example: employee trained in concrete removal, janitors, housekeeping, etc.)

6. **PROCEDURE**

6.1. The primary means of protecting employees will be through safe work practices to include: the use of enclosed systems, local exhaust ventilation, and wet methods.

6.1.1. Reducing exposure to crystalline silica in the workplace.

6.1.2. Wet down the dust at the point of generation.

6.1.3. Install local exhaust ventilation to prevent dust from being released into the air where silica limits are exceeded.

6.1.4. Operating rock drill, jack hammer, chipping gun use water flow to suppress silica hazard.

6.1.5. Install dust collection systems onto machines or equipment that generate dust that exceeds silica limits.

6.1.6. Silica sand or other substances containing more than 1%crystalline silica will not be used for abrasive blasting.

6.1.7. Good personal hygiene will be practiced avoiding unnecessary exposure. Eating, drinking, and use of tobacco products will not be done in areas where there is dust containing crystalline silica.

6.1.8. If possible, employees will shower and change into clean clothes before leaving the worksite to prevent contamination of cars, homes, and other work areas.

6.2. Specific Exposure Control Methods

6.2.1. For each employee working with materials containing crystalline silica and engaged in a task using the equipment and machines listed below, the employer shall fully and properly implement the engineering controls, work practices, and respiratory protection as specified.

6.2.2. Engineering Control: Water continuously fed to the point of impact, or commercial shroud or cowling with dust collection system.

6.2.3. Respiratory Protection (less than 4 hours per shift):

6.2.3.1. Enclosed Area: N95 Dust Mask

6.2.3.2. Outside Area: None Required

6.2.4. Respiratory Protection (more than 4 hours per shift):

6.2.5. Enclosed Area: N95 Dust Mask

6.2.6. Outside Area: N95 Dust Mask

6.2.7. Handheld Grinders for Concrete/Mortar Removal

6.2.7.1. Engineering Control: Commercial shroud or cowling with dust collection system.

6.2.8. Respiratory Protection (less than 4 hours per shift):

6.2.8.1. Enclosed Area: N95 Dust Mask

6.2.8.2. Outside Area: N95 Dust Mask

6.2.9. Respiratory Protection (more than 4 hours per shift):

6.2.9.1. Enclosed Area: Full Face Air Purifying Respirator

6.2.9.2. Outside Area: Full-Face Air Purifying Respirator

6.2.10. Housekeeping

6.2.10.1. The employer shall not allow dry sweeping or dry brushing where such activity could contribute to employee exposure to respirable crystalline silica.

6.2.10.2. Use wet sweeping methods.

6.2.10.3. Use wax-based floor sweep.

6.2.10.4. Use HEPA-Filtering vacuuming.

6.2.10.5. The employer shall not allow compressed air to be used to clean clothing or surfaces where activities could contribute to employee exposure to respirable crystalline silica.

6.2.11. Mixing of materials containing silica (concrete, grout)

6.2.11.1. Enclosed Area: N95 Dust Mask

6.2.11.2. Outside Area: N95 Dust Mask

6.2.12. Additional Exposure Assessment

6.2.12.1. If you are exposed to respirable crystalline silica and engaged in a task using equipment and machines not identified in the list above, contact EHS for an exposure assessment to determine the engineering controls, work practices, and respiratory protection requirements to safely do your job.

6.2.12.2. Wear the proper respirator when changing HEPA filters.

6.3. Training

6.3.1. Silica Hazard Communication training is required by all CPP employees and should be conducted initially upon hiring.

6.3.2. Workers who may be exposed to silica will receive safety training to include the following:

6.3.2.1. Information about the potential health effects of exposure to respirable crystalline silica.

6.3.2.2. Material safety data sheets/Safety data sheets for silica, masonry products, alternative abrasives, and other hazardous materials.

6.3.2.3. Discussion about the importance of substitution, engineering controls, work practices, and personal hygiene in reducing crystalline silica exposure.

6.3.2.4. Instruction about the use and care of appropriate personal protective equipment (including protective clothing and respiratory protection).

6.3.2.5. Training will be conducted by competent employees trained by the Safety Department.

6.3.2.6. Training records will be kept in the EHS Dept. office for 3-years.

6.4. Medical surveillance process

6.4.1. Respiratory protection training, medical clearance, and quantitative fit testing is required under the Respiratory Protection Program. Contact EHS for additional information regarding this program. As of this revision, CPP has no occupation with measurable silica exposure.

6.4.2. The Supervisor is required to maintain all training, medical surveillance, and exposure monitoring results. Contact one of the EHS Directors for additional information.

## 7. HOUSEKEEPING PROGRAM

7.1. Exposed surfaces must be maintained free of accumulation of silica dust. To minimize the hazard of accumulated dust containing silica dust, the area must be cleaned properly.

7.2. Cleaning areas contaminated with dust containing crystalline silica.

7.2.1. Clean contaminated floors with a wet mop, wet pickup vacuum, wax-based floor sweep. or a HEPA filtered vacuum cleaner. The most effective method is with a HEPA vacuum cleaner.

7.2.2. Never sweep, dry mop, use compressed air, or use a regular vacuum cleaner. Regular vacuum cleaners are not suitable because they filter out heavy particles, allowing the finer more hazardous particles to pass into the air.

7.2.3. Clean shelves with a damp sponge or a HEPA vacuum cleaner.

7.2.4. Used filters should be carefully placed in a double plastic bag and disposed of in the regular trash.

7.2.5. Wear the proper respirator when changing HEPA filters.

7.3. Procedures Used to Restrict Access to Work Areas:

7.3.1. Schedule the work so that only employees who are engaged in the task (the jackhammer operator and employees helping the operator) are in the area.

7.3.2. Place barricades or restrictive devices to restrict access in and around work areas.

## 8. Written Site-Specific Exposure Control Plan

8.1. Competent Person Requirements

8.1.1. The employer must designate a competent person to frequently and regularly inspect job sites, materials, and equipment to implement the written exposure control plan. A competent person is someone who:

8.1.1.1. Can identify existing and foreseeable respirable crystalline silica hazards.

8.1.1.2. Authorized to promptly eliminate or minimize silica hazards.

8.1.1.3. Has the knowledge and ability to implement the written exposure control plan.

8.1.2. Any employee can be designated as a competent person if the employee is qualified, including the employee who does the work on a job site. For example, an employee who goes to a job site alone can be designated a competent person if the person knows how to properly implement controls on the tools they use, can recognize if the controls are not working, and can correct the non-working control.

8.1.2.1. The standard does not require specific training for a competent person. CPP is responsible for determining what training is necessary to provide the

knowledge and ability for its competent person to implement the written exposure control plan.

8.1.2.2. The training will depend on the type of work done, and the surrounding area.

9. **RECORDS**

9.1. Medical records shall be maintained for the duration of employment plus 30 years and training records for duration of no less than 3 years.

9.2. CPP shall ensure that all records be made available upon request of employees. The release of medical records must have the written consent of the employee before being released by CPP.

9.3. FORMS

9.3.1. Written Silica Exposure Control Plan (ECP)

9.3.2. CPP Incident Report

**10. COMMUNICATION OF HAZARDS**

10.1. CPP will train and inform employees covered by the silica standard about respirable crystalline silica hazards and the methods the company uses to limit their exposures to those hazards. CPP will cover the cost of training and will pay employees for the time spent on training.

10.2. Training Topics

10.2.1. CPP will ensure that employees trained under the silica standard can demonstrate knowledge and understanding of at least:

10.2.1.1. Health hazards associated with respirable crystalline silica exposure. For respirable crystalline silica, the health hazards include cancer, lung effects, immune system effects, and kidney effects.

10.2.1.2. Specific workplace tasks that could expose employees to respirable crystalline silica. Examples include those listed in Table 1, such as using a handheld grinder for removing crystalline silica-containing materials.

10.2.1.3. Specific measures CPP is implementing to protect employees from respirable crystalline silica exposure, including engineering controls, work practices, and respirators to be used.

10.2.1.4. This training will be specific to the task that each employee performs. For example, employees who operate tools with built-in controls, such as saws with integrated water delivery systems, would need to demonstrate knowledge and understanding of:

10.2.1.4.1. The full and proper use of the controls on those tools.

10.2.1.4.2. Signs that controls may not be functioning properly.

10.2.1.4.3. Employees that are engaged in a task by helping the tool operator would only need to demonstrate knowledge and understanding of:

10.2.1.4.3.1. The general types of controls used in the workplace, such as water or vacuum controls and how to recognize if those controls are not working properly.

10.2.1.4.3.2. Work practices they perform as part of helping the tool operator, such as appropriate clean-up of respirable crystalline silica dust accumulations.

10.2.1.4.3.3. The contents of the respirable crystalline silica standard. This would involve a description of the standard's requirements.

10.2.1.4.3.4. The identity of the competent person or persons designated by CPP. This could be as simple as announcing who the competent person is at the beginning of a work shift.

10.3. Employee Training

10.3.1. Employees will be trained at the time they are assigned to a position involving exposure to respirable crystalline silica.

10.3.2. Additional training will be provided as often as necessary to ensure that employees know and understand respirable crystalline silica hazards and the protections available in their workplace. Examples of when additional training would be required include:

10.3.2.1. When CPP asks an employee to perform a task that is new to that employee;

10.3.2.2. When CPP introduces new protections (for example, an employer who was having employees use a handheld grinder with wet method controls decides to have employees use a handheld grinder with a dust collection system).

10.3.2.3. When an employee is working in a manner that suggests he or she has forgotten what was learned in training.

10.3.3. Training Methods

10.3.3.1. The silica standard does not require CPP to use any particular method for training employees. CPP will use hands-on training, videotapes, slide presentations, classroom instruction, informal discussions during safety meetings, written materials, or any combination of these methods to train employees.

10.3.3.2. In order for employees to demonstrate knowledge and understanding of the training subjects, training will be done in a manner and language that employees understand. This may mean, for example, providing materials, instruction, or assistance in Spanish rather than English for Spanish-speaking employees who do not understand English, and using methods other than printed reading materials if the employee is not able to read.

10.3.3.3. To ensure that employees understand the material presented during training, CPP will ensure that trainees have the opportunity to ask questions and receive answers if they do not fully understand the material that is presented to them. If video tape presentations or computer-based programs are used, this requirement will be met by having a qualified trainer available to address questions after the presentation.

10.3.3.4. CPP will determine if employees know and understand the training topics through written tests or oral quizzes if the employee is not able to read and/or write.

10.4. Making a Copy of the Standard Available

10.4.1. CPP will make a copy of the respirable crystalline silica standard available at no cost to each employee covered by the standard. This program will be included in the CPP Safety Manual which is required to be kept on each job site at all times. In addition, a

digital copy will be uploaded to the company's website ensuring availability to every employee at all times.

## 11. DEFINITIONS

11.1. **Action level** means an airborne concentration of 25 mg/m3 calculated as an 8-hour total weighted average (TWA). Exposures at or above the action level trigger requirements for exposure assessment.

11.2. **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. The competent person must have the knowledge and ability necessary to implement the written exposure control plan required under the standard.

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

11.4. **High-efficiency particulate air (HEPA) filter** means a filter that is at least 99.97 percent efficient in removing mono-dispersed particles of 0.3 micrometers in diameter. HEPA-filtered vacuuming is an example of a housekeeping method that minimizes employee exposure to respirable crystalline silica, and some Table 1 tasks require HEPA-filtered vacuuming.

11.5. **Objective data** means information, such as air monitoring data from industry-wide surveys or calculations based on the composition of a substance, demonstrating employee exposure to respirable crystalline silica associated with a particular product or material or a specific process, task, or activity. The data must reflect workplace conditions closely resembling or with a higher exposure potential than the processes, types of material, control methods, work practices, and environmental conditions in the employer's current operations.

11.6. **Physician or other licensed health care professional [PLHCP]** is an individual who's legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide or be delegated the responsibility to provide some or all of the particular healthcare services required by this standard.

11.7. **Specialist** means an American Board-Certified Specialist in Pulmonary Disease or an American Board-Certified Specialist in Occupational Medicine.

11.8. **TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA**

11.8.1. Table 1 lists 18 common construction tasks with effective dust control methods identified by OSHA, such as using water to keep dust from getting into the air or using a vacuum dust collection system to capture dust. In some operations, respirators may also be needed. **Employers who follow Table 1 correctly are not required to measure workers' exposure to silica from those tasks and are not subject to the PEL.**

Table 1—Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica

| 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 | Use saw equipped with integrated water delivery system that continuously feeds water to the blade<br>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions | None | None |
| (ii) Handheld power saws (any blade diameter) | Use saw equipped with integrated water delivery system that continuously feeds water to the blade<br>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 |
| (iii) Handheld power saws for cutting fiber-cement board (with blade diameter of 8 inches or less) | For tasks performed outdoors only:<br>Use saw equipped with commercially available dust collection system<br>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions<br>Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency | None | None |

Table 1—Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica

| Equipment/task | Engineering and work practice control methods | Required respiratory protection and minimum assigned protection factor (APF) | |
|---|---|---|---|
| | | ≤ 4 hours/shift | >4 hours/shift |
| (iv) Walk-behind saws | ıped with integrated water delivery system that<br>eeds water to the blade<br>ıaintain tool in accordance with manufacturer's<br>minimize dust emissions: | | |
| | -When used outdoors | None | None |
| | -When used indoors or in an enclosed area | APF 10 | APF 10 |
| (v) Drivable saws | For tasks performed outdoors only: | | |
| | Use saw equipped with integrated water delivery system that continuously feeds water to the blade<br>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions | None | None |
| (vi) Rig-mounted core saws or drills | Use tool equipped with integrated water delivery system that supplies water to cutting surface<br>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions | None | None |
| (vii) Handheld and stand-mounted drills (including impact and rotary hammer drills) | Use drill equipped with commercially available shroud or cowling with dust collection system<br>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions<br>Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism<br>Use a HEPA-filtered vacuum when cleaning holes | None | None |
| | For tasks performed outdoors only: | | |

Table 1—Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica

| Equipment/task | Engineering and work practice control methods | Required respiratory protection and minimum assigned protection factor (APF) | |
|---|---|---|---|
| | | ≤ 4 hours/shift | >4 hours/shift |
| (viii) Dowel drilling rigs for concrete | Use shroud around drill bit with a dust collection system. Dust collector must have a filter with 99% or greater efficiency and a filter-cleaning mechanism | APF 10 | APF 10 |
| | Use a HEPA-filtered vacuum when cleaning holes | | |
| (ix) Vehicle-mounted drilling rigs for rock and concrete | Use dust collection system with close capture hood or shroud around drill bit with a low-flow water spray to wet the dust at the discharge point from the dust collector | None | None |
| | OR | | |
| | Operate from within an enclosed cab and use water for dust suppression on drill bit | None | None |
| (x) Jackhammers and handheld powered chipping tools | Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact: | | |
| | -When used outdoors | None | APF 10 |
| | -When used indoors or in an enclosed area | APF 10 | APF 10 |
| | OR | | |
| | Use tool equipped with commercially available shroud and dust collection system | | |
| | Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions | | |

Table 1—Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica

| Equipment/task | Engineering and work practice control methods | Required respiratory protection and minimum assigned protection factor (APF) | |
|---|---|---|---|
| | | ≤ 4 hours/shift | >4 hours/shift |
| | Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism: | | |
| | -When used outdoors | None | APF 10 |
| | -When used indoors or in an enclosed area | APF 10 | APF 10 |
| (xi) Handheld grinders for mortar removal (*i.e.*, tuckpointing) | Use grinder equipped with commercially available shroud and dust collection system | APF 10 | APF 25 |
| | Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions | | |
| | Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism | | |
| (xii) Handheld grinders for uses other than mortar removal | For tasks performed outdoors only:<br>Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface | None | None |
| | Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions | | |
| | OR | | |
| | Use grinder equipped with commercially available shroud and dust collection system | | |

Table 1—Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica

| Equipment/task | Engineering and work practice control methods | Required respiratory protection and minimum assigned protection factor (APF) | |
|---|---|---|---|
| | | ≤ 4 hours/shift | >4 hours/shift |
| | Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions | | |
| | Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism: | | |
| | -When used outdoors | None | None |
| | -When used indoors or in an enclosed area | None | APF 10 |
| (xiii) Walk-behind milling machines and floor grinders | Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface | None | None |
| | Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions | | |
| | OR | | |
| | Use machine equipped with dust collection system recommended by the manufacturer | None | None |
| | Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions | | |
| | Dust collector must provide the air flow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism | | |

Table 1—Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica

| Equipment/task | Engineering and work practice control methods | Required respiratory protection and minimum assigned protection factor (APF) | |
|---|---|---|---|
| | | ≤ 4 hours/shift | >4 hours/shift |
| | When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes | | |
| (xiv) Small drivable milling machines (less than half-lane) | Use a machine equipped with supplemental water sprays designed to suppress dust. Water must be combined with a surfactant | None | None |
| | Operate and maintain machine to minimize dust emissions | | |
| (xv) Large drivable milling machines (half-lane and larger) | For cuts of any depth on asphalt only:<br>Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust | None | None |
| | Operate and maintain machine to minimize dust emissions | | |
| | For cuts of four inches in depth or less on any substrate: | | |
| | Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust | None | None |
| | Operate and maintain machine to minimize dust emissions | | |
| | OR | | |

Table 1—Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica

| Equipment/task | Engineering and work practice control methods | Required respiratory protection and minimum assigned protection factor (APF) | |
|---|---|---|---|
| | | ≤ 4 hours/shift | >4 hours/shift |
| | Use a machine equipped with supplemental water spray designed to suppress dust. Water must be combined with a surfactant | None | None |
| | Operate and maintain machine to minimize dust emissions | | |
| (xvi) Crushing machines | Use equipment designed to deliver water spray or mist for dust suppression at crusher and other points where dust is generated (e.g., hoppers, conveyers, sieves/sizing or vibrating components, and discharge points) | None | None |
| | Operate and maintain machine in accordance with manufacturer's instructions to minimize dust emissions | | |
| | Use a ventilated booth that provides fresh, climate-controlled air to the operator, or a remote control station | | |
| (xvii) Heavy equipment and utility vehicles used to abrade or fracture silica-containing materials (*e.g.*, hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials | Operate equipment from within an enclosed cab | None | None |
| | When employees outside of the cab are engaged in the task, apply water and/or dust suppressants as necessary to minimize dust emissions | None | None |

Table 1—Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica

| Equipment/task | Engineering and work practice control methods | Required respiratory protection and minimum assigned protection factor (APF) | |
|---|---|---|---|
| | | ≤ 4 hours/shift | >4 hours/shift |
| (xviii) Heavy equipment and utility vehicles for tasks such as grading and excavating but not including: Demolishing, abrading, or fracturing silica-containing materials | Apply water and/or dust suppressants as necessary to minimize dust emissions | None | None |
| | OR | | |
| | When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab | None | None |

When implementing the control measures specified in Table 1, CPP shall:

- For tasks performed indoors or in enclosed areas, provide a means of exhaust as needed to minimize the accumulation of visible airborne dust;
- For tasks performed using wet methods, apply water at flowrates sufficient to minimize release of visible dust.

**SITE SPECIFIC SAFETY/HAZARD ANALYSIS**

1. **PURPOSE**
   1.1. The purpose of this procedure is to identify the hazards associated with conducting concrete pumping operations on or near construction sites.
2. **SCOPE**
   2.1. This procedure applies to all CPP pump operations.
3. **RESPONSIBILITY**
   3.1. Managers and Supervisors shall be responsible and accountable for implementing and maintaining the Safety and Environmental Procedures Manual to ensure safe operation of the activities of which they have control. Further Managers/Supervisors, with the assistance of the Safety Department, shall ensure immediate corrective actions are developed and implemented to eliminate and/or control identified workplace hazards.
   3.2. Employees are responsible for their own actions, the use of safety devices and personal protective equipment, and for complying with safe practices and approved procedures. Work-related accidents, incidents, injuries, illnesses, and near misses shall be reported to dispatch/supervisors as soon as practicable.

**Table 1**

| PRINCIPLE STEPS | POTENTIAL HAZARDS | RECOMMENDED CONTROLS |
|---|---|---|
| Driving Commercial Vehicle | Striking or being stuck by other vehicles, equipment, and/or property | -Operator shall adhere to all posted jobsite speed limits and other applicable postings. Operator shall only drive vehicle on designated jobsite routes, unless directed by Contractor. |
| Pumping Concrete | Ground Conditions | -Contractor to provide adequate ground conditions. |
| Pumping Concrete | Set-up Clearance | -Operator is to ensure outrigger placement prior to unfolding boom. Outrigger pads to be used. |
| Pumping Concrete | Tip Hose Whipping (due to air and/or blockage in pipeline) | -Slurry or Slick-Pak will be utilized to coat pump lines prior to pour. Keep personnel back a prudent and reasonable distance beyond the reach of the tip- hose during prime out, relocation, and long delays. |
| Pumping Concrete | Striking or being stuck by other vehicles, equipment, and/or property | -10 ft. minimum clearance will be maintained. Utilize Damage Waiver if Contractor requires less than 10 ft. clearance. |
| Pumping Concrete | Overhead Power Lines | -20 ft. minimum clearance will be maintained. |
| Pumping Concrete | Clean-up of Truck and System | -Utilize clean-up area(s) designated by Contractor. |
| Pumping Concrete | Personal Injury | -Wear PPE such as boots, safety glasses, gloves, hard-hat, orange vest, rain gear, etc. Adhere to all jobsite safety regulations. |
| Pumping Concrete | Fuel / Hydraulic Fluid Spill | -All trucks are equipped with Spill Kits. |

**Table 1 (Continued)**

| EQUIPMENT TO BE USED | EQUIPMENT INSPECTION REQUIREMENTS | PERSONNEL TRAINING REQUIREMENTS |
|---|---|---|
| Concrete Pumping Truck | 1) Annual Inspection<br>2) Daily DOT Inspection (hydraulics, controls, tires, steering, operational functions, etc.)<br>3) Periodic Maintenance Inspection | Only experienced operators will be used. Personnel to review the following plans if available:<br>• Project Safety Plan<br>• Project Environmental Plan<br>• Subcontractor Safety Plan<br>• Subcontractor Site Specific Safety Analysis |

**TOOLS - HAND AND POWER**

1. **PURPOSE**
   1.1. The purpose of this procedure is to provide specific instructions for the use of hand and power tools, and to ensure that affected employees are trained and made aware of the safety provisions which are required by federal and state agencies.
2. **SCOPE**
   2.1. This procedure is designed for CPP employees whose job assignments require the use of hand and power tools.
3. **REFERENCES**
   3.1. 29 CFR 1926.300 - .303 – Tools Hand & Power
   3.2. 29 CFR 1910.215 – Abrasive Wheels & Tools
4. **RESPONSIBILITY**
   4.1. CPP shall be responsible for providing all hand and power tools.
   4.2. Managers shall be responsible for ensuring compliance with this procedure.
   4.3. Supervisors shall ensure that employees comply with this procedure.
   4.4. Employees shall:
      4.4.1. Follow the Hand and Power Tool Procedure.
      4.4.2. Wear the Personal Protective Equipment (PPE) assigned to them
      4.4.3. Ensure that their hand and power tools are in safe operating condition and used properly for the job they were designed for.
   4.5. The Safety Department shall develop and maintain the Hand and Power Tools Procedure.
5. **OBJECTIVE**
   5.1. The objective of this procedure is to identify guidelines and procedures for safe operations of hand and power tools used by CPP employees.
6. **PROCEDURE**
   6.1. General requirements
      6.1.1. All hand and power tools shall be maintained in a safe condition and used only for the purpose for which they were designed. Tape shall not be used to repair cracks; the tool shall be taken out of service and the handle replaced. All tools found defective shall either be identified as unsafe by tagging or locking the controls to render them inoperable or shall be physically removed from operation.
      6.1.2. Power operated tools designed to accommodate guards shall only be used when such guards are in place.
      6.1.3. Employees shall be provided with and use the particular personal protective equipment necessary to protect them from hazards.
      6.1.4. Switches:
         6.1.4.1. Hand-held powered platen sanders, grinders with 2 inches or less diameter wheels, routes, planers, laminate trimmers, nibblers, shears, scroll saws and jigsaws with blade shanks 0.25-inch-wide or less may be equipped with only a positive on/off control.
         6.1.4.2. Hand-held powered drills, tappers, fastener drivers, horizontal, vertical and angle grinders with wheels exceeding 2 inches in diameter, disk sanders, belt sanders, reciprocating saws and similar tools shall be equipped with a momentary contact

on/off control. They may have a lock-on control provided the power can be shut off by a single motion of the same finger(s) that turns it on.

6.1.4.3. All other hand-held power tools, such as chain saws, circular saws, and precision tools, shall be equipped with a constant pressure switch that will shut off the power when pressure is released.

6.1.4.4. Electric power operated tools shall either be of approved double-insulated type or effectively grounded.

6.2. Pneumatic Tools

6.2.1. Pneumatic power tools and hose sections shall be secured by threaded couplings, quick disconnect couplings or by 100-pound tensile strength safety chain or equivalent across each connection to prevent the tool or hose connections from being accidentally disconnected.

6.2.2. Safety clips or retainers shall be securely installed and maintained to prevent tools from being accidentally discharged.

6.2.3. Compressed air shall not be used at the nozzle for cleaning purposes except when reduced to less than 30 psi and the operator is protected by personal protective equipment. The 30 psi requirement does not apply to sandblasting, green cutting, removal of mill scale, cleaning concrete forms and similar cleaning operations.

6.2.4. The manufacturer's safe operating pressure for hoses, pipes, valves, and fittings shall not be exceeded. Defective hoses, valves and fittings shall be removed from service.

6.2.5. Air hoses shall not be used for hoisting or lowering tools. Hoses shall not be laid on ladders, steps, scaffolds, or walkways in a manner creating a tripping hazard.

6.3. Grinding Tools

6.3.1. The installation, guarding, use, and care of grinding tools shall comply with the standards set forth in the current ANSI B7.1-1978, Safety Code for the Use, Care and Protection of Abrasive Wheels. Grinding tools shall not be used without the safety guards, protective flanges, and tool rests installed and maintained in proper adjustment.

6.3.2. Safety guards used on machines known as right angle head vertical portable grinders shall have a maximum exposure angle of 180 degrees and the guard shall be located between the operator and wheel when in use.

6.3.3. The maximum angular exposure of the grinding wheel periphery and sides for safety guards used on other portable grinding machines shall not exceed 180 degrees and the top half of the wheel shall be enclosed at all times.

6.3.4. Abrasive wheels and scratch brush wheels shall not be operated in excess of their rated safe speed.

**7. Bench Grinder**

7.1. The bench grinder (sometimes called a pedestal grinder) is one of the most common pieces of equipment found in a shop setting. It has a multitude of uses but can also cause serious injuries if not operated correctly.

7.1.1. The OSHA regulation for grinders (29 CFR 1910.215) is one of the most frequently cited violations during an OSHA inspection which is primarily due to improperly adjusted work rests and tongue guards on bench grinders.

7.1.2. Check that wheels are rated for a higher speed than the machine RPM.

7.2. Guarding (see Figure 1)

7.2.1. Tongue guards are metal plates located at the upper part of the wheel opening and should be adjusted so they have a ¼ inch clearance between them and the grinding wheel.

7.2.2. Work rests must be kept adjusted closely to the wheel with a maximum opening of 1/8".

7.2.3. Grinders may also have spark shields installed. These are usually clear plastic shields used to divert sparks away from the operator.

7.2.4. Replace the wheel when you cannot adjust the tool rest gap to the proper opening size.

7.3. PPE

7.3.1. Eye protection - clean ANSI rated safety glasses and face shield.

7.3.2. Hearing protection - used for noisy machines and operations.

7.3.3. Hand protection - leather or canvas work gloves.

7.4. Inspection

7.4.1. Ensure that the bench or floor-mounted tool is securely mounted to surface.

7.4.2. Ensure electrical cords are grounded, switch is not damaged, & there are no exposed wires.

7.4.3. Assure machine has anti-restart device in case electric service is interrupted during use.

7.4.4. Make sure all guards are in place and properly adjusted.

7.5. Conduct a “ring" test for all new stones. This will ensure no cracks, breaks or chips are present.

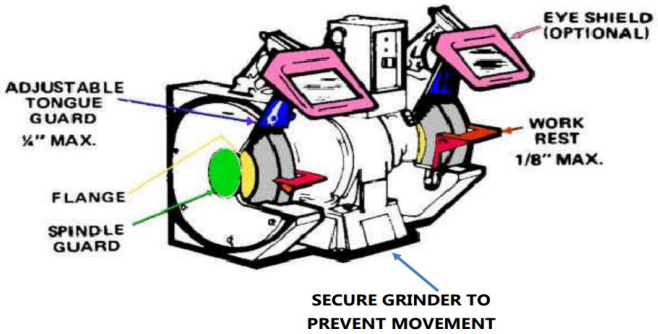
7.5.1. To perform the ring test, wheels should be tapped gently with a light non-metallic implement, such as the handle of a screwdriver for light wheels, or a wooden mallet for heavier wheels.

7.5.2. Tap wheels 45 degrees each side of the vertical line and about 1" or 2" from the periphery. Rotate the wheel 45 degrees and repeat the test.

7.5.3. A sound and undamaged wheel will give a clear tone. If cracked, there will be a dead sound and not a clear ring and the wheel must not be used.

**Figure 1**

**BENCH / PEDESTAL GRINDER SAFETY**




7.6. Power Saw

7.6.1. Portable hand-held circular saws shall be equipped with guards above and below the base plate or shoe. The upper guard shall cover the saw to the depth of the teeth, except for the minimum arc required to permit the base to be tilted for level cuts. The lower guard shall cover the saw to the depth of the teeth, except for the minimum arc required to allow proper retraction and contact with the work. As the blade automatically and instantly return to the covering position

7.6.2. The operating speed shall be permanently marked om all circular saws over 20 inches in diameter or operating speeds over 10,000 peripheral feet per minute. Only blades designed for use at the marked operating speed shall be used. When the saw is re-tensioned for a different speed, the marking shall be changed to indicate the new speed.

7.7. Hydraulic-powered Tools

7.7.1. The manufacturer's safe operating pressure hoses, valves, pipes, filters, and fittings shall not be exceeded. Fluid in hydraulic powered tools shall be fire resistant type approved by a recognized authority, such as Underwriters Laboratories.

7.8. Hand-powered Winches and Hoists

7.8.1. Hand powered winches and hoists shall be used within the manufacturer's rated capacity, and the capacity shall be legibly marked on the winch or hoist.

7.8.2. The use of hand cranks is prohibited unless the winch or hoist is equipped with positive self-locking dogs or of the worm gear type. Hand wheels shall not have projecting spokes or knobs.