# Accident Control Program 2023



Anderson Columbia Co., Inc. P.O. Box 7692 Corpus Christi, Texas 78467 Phone (361) 853-2535

## TO: All Employees and Subcontractors

No phase of our operations or management is of higher importance than safety and accident prevention. The policy of this company is to provide and maintain safe and healthy working conditions, which are free of recognized hazards. I expect all personnel to comply with the established operating practices and policies which are designed to provide safe working conditions combined with efficient operations.

All personnel have the right to expect a safe and healthy place in which to work and the proper tools and machinery, in safe operating condition, with which to accomplish the job.

This handbook of the company's Safety Policy is meant to help minimize the accident potential and to bring everyone into the safety effort. All personnel must develop a safety awareness attitude and sense of personal responsibility for safety, in order to have a truly effective accident prevention program.

The information contained herein concerns personnel's duties and responsibilities toward accident prevention. This company's Safety Policy, its rules and regulations, are mandatory and must be strictly adhered to by all personnel.

ZERO ACCIDENTS is our goal. We can achieve this goal, but only with the combined efforts of all our employees and subcontract personnel.

No Accident Prevention Manual, however complete, can provide for all situations, contingencies, or emergencies such as constantly arise. Therefore, it is expected that all personnel use common sense and intelligence in selecting safe methods and practices in performing the jobs at hand.

Sincerely
Gary Trayler
HR/Safety Director
Anderson Columbia Co., Inc.

# TABLE OF CONTENTS

# **GENERAL SAFETY REGULATIONS**

Section	1	SAFETY FUNCTIONS AND PEOPLE	

# Section 2 TRAINING AND SAFE PRACTICES

## Section 3 PERSONAL PROTECTION EQUIPMENT

- 3.1 Steel Toe Work Shoes or Boots
- 3.2 Eye Protection
- 3.3 Hard Hats
- 3.4 Safety Vest
- 3.5 Hearing Protection
- 3.6 Respirators
- 3.7 Clothing
- 3.8 Safety Belts, Harnesses & Lines
- 3.9 Gloves
- 3.10 Welding Protection

## **Section 4 BASIC SAFETY REGULATIONS**

- 4.1 Compliance With Rules
- 4.2 Alcohol & Drugs
- 4.3 Accident & Incident Reports
- 4.4 Medical Attention
- 4.5 Special Safety Equipment
- 4.6 Guards
- 4.7 Vehicles and Equipment
- 4.8 Tools
- 4.9 Qualified Operators
- 4.10 Suspended Loads
- **4.11** Work Instructions
- **4.12** Signs
- 4.13 Weapons Fighting
- 4.14 Explosives and Flammables
- 4.15 Ladders
- 4.16 Check Equipment First
- **4.17** Moving Parts
- 4.18 Fencing
- 4.19 Compressors

- **4.20** Nails
- 4.21 Loose Material, Tools etc.
- 4.22 Safe Access
- 4.23 Stairs Landings
- **4.24** Be Aware
- 4.25 Footing
- 4.26 Barricades

#### Section 5 ACCIDENT REPORTING AND INVESTIGATION

#### Section 6 HOUSEKEEPING

- **6.1** Site Inspection
- 6.2 Basic Housekeeping

#### Section 7 VEHICLE OPERATION RULES

- 7.1 Motor Vehicle Records
- 7.2 Current License Information
- 7.3 Family Members and Company Vehicles
- 7.4 Passengers
- 7.5 Alcohol & Drugs
- 7.6 Trailer Hitches
- 7.7 Additional Fuel Tanks
- **7.8** Trust
- 7.9 Reporting Accidents
- 7.10 Accident Report Forms
- 7.11 Vehicle Documents Required
- 7.12 Accident and Driving Records
- 7.13 Negligence
- 7.14 Transportation of Employees

## Section 8 FIRE PREVENTION AND CONTROL

- 8.1 Location of Fire Extinguishers
- 8.2 Discharged Fire Extinguishers
- **8.3** Fire Extinguisher Inspections
- 8.4 No Smoking Areas
- 8.5 No Smoking Signs
- 8.6 Storage of Flammables
- 8.7 Combustible Materials
- 8.8 Smoking Near Fuel Storage Areas
- 8.9 Storage of Oily Rags
- 8.10 Cleaning Flammable Liquids From Drums or Cans
- **8.11** Heating Equipment
- **8.12** Refueling Engines and Generators
- 8.13 Flammable Liquid Storage
- 8.14 Wearing Combustible and Oily Clothes
- 8.15 Engines Inside Buildings
- 8.16 Gasoline Safety
- 8.17 Oxygen Cylinders and Fuel Gas Cylinders

# Section 9 WELDING AND BURNING

9.1 Eye Protection

- 9.2 Regulators
- 9.3 Safety Valves
- 9.4 Vertical Cylinder Trucks
- 9.5 Hot Materials
- 9.6 Welder Protection
- 9.7 Respirators
- 9.8 Ventilation
- 9.9 Fire Extinguishers
- 9.10 Release of Gases
- 9.11 Transporting Cylinders In Vehicles / Mechanics Trucks
- 9.12 Cylinder Placement

## Section 10 STORAGE AND HANDLING OF GASOLINE

- **10.1** Approved Containers
- 10.2 Gasoline Transferring
- **10.3** Fire Prevention
- 10.4 Working On Empty Tanks
- 10.5 Breathing Fumes
- 10.6 Cleaning With Gasoline
- 10.7 Spilled Gasoline

## **Section 11 CABLES AND ROPES**

- 11.1 Inspect Prior to Use
- 11.2 Bends and Knots
- 11.3 Metal Thimble
- 11.4 Protect From Sharp Objects
- 11.5 Inspect For Loose or Damaged Hardware
- 11.6 Stand Clear of Cable Under Tension

# Section 12 EXCAVATION, TRENCHING AND SHORING

- 12.1 Angle of Repose and Shoring
- 12.2 Ladder Availability
- 12.3 Inspection by Supervisor
- 12.4 Be Aware of Hazardous Conditions
- 12.5 Excavated Soil
- 12.6 Tools and Supplies
- 12.7 Vehicles & Equipment Near Excavations
- 12.8 Stav Clear of Machinery
- 12.9 Be Aware of Other Workers
- 12.10 Personal Protective Equipment
- 12.11 Unsafe Breathing Conditions

# **Section 13 BARRICADES AND GUARDS**

- 13.1 Manhole Covers
- 13.2 Public Streets and Highways
- 13.3 Public Sidewalks
- 13.4 Open Holes and Trenches

# **Section 14 EQUIPMENT OPERATION**

- 14.1 Pre-Shift Inspection
- 14.2 Equipment Service

- 14.3 Equipment Fire Extinguishers
- **14.4** Machine Guards
- 14.5 Steps, Ladders, and Hand Rails
- 14.6 Moving Equipment
- 14.7 Unattended Equipment
- 14.8 Operating Equipment Near Shops
- 14.9 Seatbelts
- 14.10 Windshields
- 14.11 Equipment Traveling On Slopes
- 14.12 Backing-Up Equipment
- 14.13 Permission to Operate Equipment
- 14.14 Heavy Equipment on Highways
- 14.15 Equipment Operating Speed
- 14.16 Driving Lane In Pit Areas
- 14.17 Intersections In Pit or Construction Areas
- 14.18 Right Of Way
- 14.19 Dangerous Conditions
- 14.20 Haul Unit Operation
- 14.21 Crane Operation
- 14.22 Front End Loaders

## **Section 15 TOOLS AND EQUIPMENT**

- 15.1 Guards
- 15.2 Maintenance
- 15.3 Portable Compressors
- 15.4 Air Hoses
- 15.5 Authorized Operation
- 15.6 Sharpening of Tools
- 15.7 Broken Tools
- 15.8 Correct Use of Tools
- 15.9 Electric Wires and Cords
- **15.10** Double Insulated Tools
- 15.11 Repair of Tools
- 15.12 Guards on Power Saws and Portable Grinders
- 15.13 Stationary Grinders
- 15.14 Grinding Wheels
- 15.15 Air Tool Repair
- 15.16 Hand Grinders
- 15.17 Tools and Water

## **Section 16 EQUIPMENT AND TRUCK SHOP**

- 16.1 Dollies and Hoists
- 16.2 Using Jacks
- 16.3 Hand and Portable Tools
- 16.4 Compressed Air
- 16.5 Eye Protection
- 16.6 Eye Protection Standing Grinders
- **16.7** Tool Grounding
- 16.8 Electric Grinders
- 16.9 Maintenance Activities
- 16.10 Ventilation
- 16.11 Gas Tanks / Fuel Containers
- **16.12** Electrical Switches Machinery

- 16.13 Machine Guards
- 16.14 Shop Entrances and Exits
- 16.15 Moving Vehicles In/Out of Shop
- 16.16 Speed Limit
- 16.17 Shop Floors
- 16.18 Clothing
- 16.19 Adjusting Power Units
- 16.20 Bench Grinder Operation
- 16.21 Power Saws
- 16.22 Removing Radiators
- 16.23 Repairing Maintenance on Scrapers / Mixers
- 16.24 Suspended Machine or Parts
- 16.25 Vehicles Locked Out
- 16.26 Hazardous Materials
- 16.27 Approved Solvents

## Section 17 TRAFFIC FLAGGING PROCEDURES

- 17.1 Certified Flagger Requirement
- 17.2 Remain Alert
- 17.3 Where to Stand
- 17.4 What to Wear
- 17.5 Stop-Slow Paddle
- 17.6 Flag
- 17.7 Pilot Car
- 17.8 Flagger Sign
- 17.9 Dealing With The Public

#### Section 18 ASPHALT PAVING

- **18.1** Working In Traffic
- 18.2 What to Wear
- 18.3 Footing
- 18.4 Truck Caution
- 18.5 Cleaning Tools
- 18.6 Heat Health Risk
- **18.7** Caution With Tools
- 18.8 Fire Extinguisher

#### Section 19 SAFETY PRECAUTIONS WITH CEMENT AND CONCRETE

- 19.1 Keep Cement off Skin
- 19.2 Eye Protection
- 19.3 Stay Alert
- **19.4** Caution With Tools
- 19.5 Housekeeping
- 19.6 Face Protection
- 19.7 Heat Related Illness

#### Section 20 BRIDGE WORK

- 20.1 Housekeeping
- **20.2** Working Over Others
- **20.3** Personal Protective Equipment
- 20.4 Scaffolds and Ladders
- **20.5** Tools

- **20.6** Working Around Equipment
- 20.7 Hand Signal Person
- 20.8 Materials Lifted Overhead

## **Section 21 ELECTRICAL HAZARDS**

- **21.1** Electrical Equipment
- 21.2 Lock-out / Tag-out Procedure
- 21.3 Protective Equipment
- 21.4 Jewelry
- 21.5 Splicing Wires
- 21.6 Electrical Controls / Panels
- 21.7 Qualified Electrician
- 21.8 Power Switch Labeling
- 21.9 Warning Signs

## Section 22 ALCOHOL AND DRUG POLICY

- 22.1 Alcohol Drug Testing
- 22.2 Suspicion
- 22.3 Testing After An Accident or Injury
- 22.4 Job-Site Specific Requirements
- 22.5 Refusal to Test
- 22.6 Search Policy
- 22.7 Consequences of Violation of Policy

## Section 23 Job-Site Safety Analysis

23.1 "JSA" Requirements

## **Section 1 Safety Functions & People**

#### Safety Manager

The Safety Manager will manage the company safety program, act as a liaison to regulatory agencies and conduct audits to ensure compliance with OSHA Safety Standards. The Safety Manager will formulate policy and provide technical support to Supervisors and Foremen. Safety Training will be conducted by the Safety Manager to ensure employees are properly qualified. Some safety training is available online at our website but testing is always conducted at our office ( <a href="http://www.hacsafety.com">http://www.hacsafety.com</a>).

#### **Managers / Superintendents**

Managers and Superintendents are directed to have a continuing and aggressive accident prevention program designed to reduce accidents to a minimum. Each division manager, superintendent, supervisor and employee of the Company is then responsible for the effectiveness of the Safety Program.

Managers and Superintendents have the responsibility to enforce all ACCI Safety Programs and OSHA regulations. The superintendent is the jobsite manager and is in full control of the employees and subcontractors. It is the superintendents responsibility to actively work to eliminate accidents by eliminating hazards. The Superintendent is always tasked with protecting the company, its employees and assets.

Managers and Superintendents should set an example for all employees to follow when it comes to safety. They should wear the proper personal protective equipment required of all ACCI employees and follow all safety regulations.

Where there are jobsites without "Foremen" the superintendent will also take on the foreman responsibilities.

It is the superintendent's responsibility to ensure all incidents are reported to the office and safety department immediately.

#### Foremen

All foremen will assume the responsibility of thoroughly instructing their personnel in safety practices to be observed in their daily operations and will enforce these safety standards to the utmost of their ability and authority. Because the foreman is in a position to observe unsafe conditions and operations directly, he/she will act positively to eliminate any potential hazard within the activity under his/her jurisdiction.

Foremen shall insist on adherence to compliance with every safety rule and take necessary action to obtain complete compliance from every employee they supervise.

Foremen must complete a "Job Safety Analysis" form every day before starting work. This form is to be completed using input from all the crew members. The form must be turned in using our IPAD -HCSS software every morning. The "Job Safety Analysis" Inspection is required by OSHA and is designed to eliminate accidents by identifying potential hazards before work begins. We have found this JSA program to be very effective in eliminating accidents.

## **Employees**

Every employee must consider safety as part of their job. Only through safe work practices by every individual employee will our safety program be effective. Every employee should be made to feel that they are a vital part of our safe operation.

Every employee at ACCI has the authority to stop any work or practice that they think is unsafe or dangerous. They should stop the work and immediately report the condition to the supervisor.

It is our goal that every employee returns home at the end of the day, without an accident or injury. Our families depend on our being safe every day.

## **Section 2 Training and Safe Practice**

We will instruct and train you to safely operate our equipment and tools. In turn, it is a requirement that you inform your supervisor when you do not know or understand or do not have the experience to perform any task safely.

When you are issued personal protective equipment, be sure that you know its intended purpose, that you have been instructed properly in its safe use/care and that you wear this protective equipment as required to prevent injury.

The following pages give some of the important accident prevention information you will be expected to know, understand, and apply.

Work will be well planned and supervised to insure safe working conditions at all times. Standard construction safe practices and OSHA regulations will be employed and enforced.

#### Section 3 Personal Protection Equipment (PPE)

OSHA safety regulations require that all employees wear appropriate personal protective equipment. Company policy requires that every employee wear a safety vest, safety steel toe boots or shoes, hard hat and safety eye protection on all job sites. No employee or subcontractor employee will be allowed to work without the proper PPE.

Hot-mix plant employees will not be required to wear safety vests while working directly on the plant. This is because there is a limited amount of vehicle traffic in most areas. If an employee is working on the plant itself doing such items as maintenance or repairs, they will be required to wear the hardhat and eyewear along with other PPE that is appropriate for the duty. The shift manager will ensure all proper PPE is worn during the specific shifts and for specific duties.

OSHA 1910.132 (D) requires the employer to assess the workplace to determine if hazards are present, or are likely to be present, which necessitates the use of personal protective equipment. ACCI supervisors must ensure "Job Safety Analysis Inspections" are carried out and documented daily. A Job Safety Analysis form must be completed by each foreman and should include all of the affected crew members. This tool will help in selecting additional PPE that may be needed.

## 3.1 Steel Toe Work Boots or Shoes

The Company recommends wearing the high-top lace up style of boots, which provide better ankle support. The pull-on boot or leather heavy duty shoe is acceptable. No tennis shoes will be allowed.

Anyone working in wet concrete will be required to wear rubber boots. Rubber boots will protect your feet from lime or cement burns.

#### 3.2 Eve Protection

Eye protection on construction projects is required by OSHA regulations. ACCI employees and Sub-Contractors are required to wear safety eyewear while working in our construction areas. The eyewear should be selected to match the type of work or activity the employee is involved with.

## Different eye protection requirements.

- A. Safety glasses are required where blowing dirt or sand is present.
- B. Full eye protection is required in operations such as grinding.
- C. Mono-goggles or face shields should be worn over safety glasses when grinding.
- D. Cutting goggles are required while working with a cutting torch.
- E. Hoods and proper shaded lenses are required for welding work.
- F. When working near welding work all employees should wear eye protection.
- G. When using Muriatic Acid you must always wear safety goggles.
- H. Safety glasses are required by OSHA when working in a trench or excavation.
- I. Safety glasses are required when working anywhere near traffic.
- J. Face shields and safety glasses are required if you are pumping concrete.
- K. Eyewear is not required inside the closed cab of a piece of equipment.

#### 3.3 Hard-Hats

Safety hard-hats must be worn at all times while in construction areas. This includes anytime you are working in or around traffic. Hard-hats protect the employee from falling objects and items that may be thrown up from a tire, mixer or other equipment.

Hard-hats should be checked regularly for damage. The head-gear support or shell should be replaced anytime it shows damage or wear.

Some hard-hat manufactures require the head-gear to be replaced every year; check the owner's information carefully. Haas-Anderson will supply hard hats to our employees as needed along with replacement parts.

Employees are allowed use a privately owned hard hat on our jobs as long as it meets all OSHA regulations. All outside equipment must be inspected by the superintendent.

## 3.4 Safety Vest

Wearing a safety vest makes an employee much more visible than if he or she is wearing everyday street clothes. The safety vest color is designed to stand out in all light conditions and against all backgrounds. ACCI employees and all Sub-Contractor employees are required to wear a safety vest when on any ACCI job-site. The vests are supplied when needed to all employees.

Safety Vests can be high visibility orange or high visibility green. The vest can be mesh or cloth as long as it has the "Type" listed on the label.

When working during the daytime a Type 2 vest is required. When working after dark all employees must wear a Type 3 vest which has more reflective surface area.

## 3.5 Hearing Protection

All employees who work in high noise areas will be required to wear hearing protection. Ear plugs and ear muffs are available through each project superintendent. If you are unsure if it is too noisy in your work area; use your ear plugs. Job-site sound level testing is available to all employees when requested. Ask your supervisor. Ear plugs are available at the office.

A few examples of high noise jobs include jack-hammer work, working around compressors, and on loud equipment such as mixers.

#### 3.6 Respirators

Respirators must be worn in all areas where dust concentrations are unusually high. This could include painting, sand blasting, cement dust, burning toxic metals and others.

Respirators must fit properly to be protective. Consult your supervisor and/or Safety Manager for the proper fit testing and selection. If the respirator is not properly fitted to your face it is not protecting you from the hazard.

## 3.7 Clothing

Clothing should be appropriate for the type of work you are conducting. Shirts without a sleeve or short pants (shorts) will not be allowed. Long sleeve shirts are encouraged to protect from the harsh sunlight. Non-flammable material should be worn when working around welding or burning.

Always be cautious of loose-fitting clothing that can get caught in equipment or tools. Jewelry such as chains should not be worn while working. Jewelry can get caught in equipment or tools and pull the employee into the danger area.

Hot-mix plant workers should be cautioned against wearing loose fitting clothing while working around the operational machinery. Loose fitting clothes if caught in equipment can cause serious accidents or death.

#### 3.8 Fall Protection

Safety Belts are for securing your position only. <u>Safety belts are not to be used for fall protection</u>. If fall protection is required, you must use a harness.

Safety harnesses are to be used for fall protection along with lifelines and securing systems. If you are six feet above the ground, you are required to have a fall protection system on our construction jobs. If you are working at the Hot-mix plant, you are required to use fall protection when working over 4 foot. If safety harness and lines are used they must be in like new condition without cuts, tears or frays. See the ACCI Fall Protection Program for more information.

No one will be allowed to use fall protection without fall protection training. OSHA tells us that wearing fall protection without training is like not wearing it at all.

## 3.9 Gloves

Gloves should be worn when performing duties that could harm or injure the hand. Rubber gloves should be worn when handling chemicals such as muriatic acid. Be cautious of gloves getting caught in equipment or tools.

Hot-mix plant employees should use gloves when dealing with any item that is hot.

Heavy rubber gloves for distributor drivers and such are available at the office or your supervisor.

#### 3.10 Welding Protection

When welding always wear long sleeve flame retardant clothing. The proper eye protection should be selected for welding or cutting. Heat resistant welding gloves should be used to protect the hand against burns. Along with protection for yourself you should ensure those working in your area are also protected.

Always check with others to make sure they are not subjected to harmful light or toxic gasses. Additional welding shields and ventilation may be needed depending on the area.

## **Section 4** Basic Safety Regulations

## 4.1 Compliance With Rules

Failure to comply with Occupational Safety and Health Administration, State and Local safety regulations or ACCI Safety Policies will result in disciplinary action or termination. Any noncompliance to safety regulations can be grounds for immediate termination. No warning is necessary, we work in hazardous areas.

# 4.2 Alcohol & Drugs

Possession, use or being under the influence of any alcohol, mind altering drug, or any other controlled substance will be cause for immediate dismissal. All employees are subject to random drug and alcohol screening. Refusal to submit to drug and alcohol testing will be cause for immediate dismissal. ACCI practices pre-employment, random, post-accident and suspicion testing. See Drug and Alcohol policy for more information.

## 4.3 Accident or Incident Reports

All accidents, injuries, hazardous practices, or conditions must be reported immediately.

Medical attention and /or corrective action must be taken immediately. All supervisors are required to report accidents to the Safety Department at the time of the accident and complete an incident report no later than the next morning.

All accidents involving the public that occur inside our job-site limits must be reported immediately to the Safety Manager. Even if we did not have any damage or injury and were not involved, we still investigate the accident.

All accidents involving sub-contractors on our job-sites must be reported to the office immediately.

All supervisors should protect the scene after an accident. No changes to the area, barricades and signage should be made until an investigation is completed. Only move items that are necessary for the safe movement of traffic or to protect others from injury. Try not to move any signs, barrels, cones or traffic control devices.

## 4.4 Medical Attention

In the event of an on-the-job injury requiring medical attention contact your supervisor immediately. If necessary, contact 911 immediately. Minor injury conditions should be treated at the Company selected clinic. All serious injury conditions will be treated at the emergency room. Call 911 for a serious emergency response. If an employee or subcontractor employee is injured notify the Safety Manager immediately at (361)444-7490 after hours. Any other doctor that the employee wants to use must be part of the medical network as approved by the workers compensation insurance carrier.

## 4.5 Special Safety Equipment

ACCI has special safety equipment for certain circumstances such as air sniffer devices for confined space work, noise level monitors and others. Special care should be taken with the equipment. After all it can save your life. Training is offered for all special equipment and is required. Keep the equipment in good condition and report any losses or damage immediately so replacements can be made.

## 4.6 Guards

Equipment guards were designed and installed for your protection. They must be in place and in good working order at all times. No equipment should be operated without the proper guard. It is an OSHA violation to have a guard missing or damaged; even if the tool is not being used. If you have a damaged guard, the tool must be tagged-out as not for use.

# 4.7 Vehicles and Equipment

No one is to ride in or on equipment except the properly seated operator. No one is to work from the bucket or ride in the bucket of any machine. If you are required to ride in the bed of a pickup truck, you must be seated and arms and legs inside the body of the truck completely.

All equipment operators are required to wear safety belts. If the safety belt is not operable or not in good shape it must be noted on the daily equipment repair inspection form. The belt must be repaired before the machine is operated.

Every piece of equipment needs to be inspected daily before it is used. An equipment inspection sheet should be filled out and turned into your supervisor. Please make sure items noted are repaired and the unit is safe before operation.

All equipment and vehicles, working in traffic or next to traffic are required to have a flashing yellow light. The light must be visible from 360 degrees. Make sure your light is working and turned on.

All equipment is required to have a back-up alarm that is working properly. If you do not have a working back-up alarm, a spotter is required. Inform your supervisor immediately if your alarm does not work so a spotter can be positioned.

Always look behind you before backing any piece of equipment or vehicle. Do not take it for granted that the way is clear. Small vehicles or men kneeling behind a vehicle or piece of equipment can easily be overlooked. Check twice before backing up any vehicle or equipment.

#### 4.8 Tools

Defective tools will not be used. This includes but is not limited to broken handles, worn tools, tools with chips or cracks, electric power tools with damaged guards or cords and any other defect that causes the tool to be a safety risk.

Having a defective tool in your truck (even if you are not using it and everyone knows it is broken) is an OSHA violation. All damaged tools must be marked as out of service with a tag, repaired or discarded immediately.

Electric tape is not an acceptable repair for power cord damage. OSHA requires that all electric cord damage be repaired in such a way that the repair is equal to or better than new. There are some liquid rubber coatings that can be purchased to repair an electric cord. Only these rubber coatings are considered equal to a standard electric cord repair.

Tape is not acceptable for repairs to cracked handles. If the handle on a hammer, shovel or other such tool is cracked or broken it must be thrown away or replaced.

All hot-mix plant electric repairs must be made by a licensed electrician.

In all cases use lock-out / tag-out procedures for working on electric items. If an item is damaged – tag the item "do not use".

# 4.9 Qualified Operators

Only qualified operators will operate equipment, valves, switches or other machinery.

ACCI encourages all employees to learn new skills. If you wish to operate ACCI equipment, see your supervisor. Proper training will be given before anyone is allowed to operate equipment.

Only qualified drivers who have been approved to operate ACCI vehicles can drive a company truck.

## 4.10 Suspended Loads

Never walk, stand or work under a suspended load. If you see someone under a suspended load; immediately correct the condition. Always use safe practices when working with suspended loads. When possible, suspended loads should have a tag-line attached to better control swing and unwanted movement.

**IMPORTANT**: OSHA regulations require anyone giving signals to an operator who is lifting a load, (ANY LOAD), "<u>Must Be A Certified Signal Person</u>". The only way to be certified is to take our training and receive a certification card. It must be with you if you are signaling. This includes any lifting – even a track-hoe lifting a piece of RCP requires a certified signal person. Supervisors can set up training anytime.

**IMPORTANT**: Regulations state only one person at a time can give signals to an operator who is lifting a load. More than one person giving signals can be confusing and is a violation of OSHA regulations.

## 4.11 Instructions

Listen carefully to instructions. Your safety and the safety of those working around you depend on how well you understand instructions. If you do not understand something, be sure to ask for more information.

# **4.12 Signs**

Always check for any signs in your work area. It is important to note any tags or signs that may indicate underground utilities in the areas you are working. In all cases be alert to your surroundings. Sometimes something as simple as an old sign lying on the ground half covered with dirt could be warning of a gas line running in the area. The sign could have broken from its post and been damaged.

Signs on equipment or tools should always be checked. In many cases, they may include instructions for the operator or indicate out of service equipment.

Always look for no-smoking signs and no-cellphone signs. Remember we have assigned smoking areas at the office, the shop, the hot-mix plants and at some construction sites.

## 4.13 Weapons – Fighting

Weapons of any type are not allowed on any ACCI property or job-sites. Having a weapon is reason for immediate termination.

Fighting on ACCI property or on job-sites will not be tolerated. Fighting will result in termination.

## **4.14 Explosives and Flammables**

Gasoline and other flammables should be kept in OSHA approved safety cans or the original containers. Any damaged, leaking, or defective safety-can should be replaced immediately. Any time a safety can is being carried in a pickup truck it should be upright and without anything stacked on top.

When adding fuel to portable generators; always put the generator on the ground and the gasoline can on the ground first. This will discharge any static electricity. Never fuel a generator in the back of a pickup truck. Always fill a generator when it is cool and never when it is running.

Oxygen and Acetylene bottles must be transported in an upright position and secured. Never transport oxygen and acetylene bottles with the regulators connected. Safety caps should be fixed on all bottles when not in use. All bottles in storage should be secured in position. When not in use or stored, Oxygen cylinders will be separated from gas cylinders and from oil – grease products by at least 20 feet.

Torches must be cleaned with proper tip cleaners. All connections should be checked daily before they are used with flammable gasses.

#### 4.15 Ladders

Anytime the elevation of any work area changes by 19 inches you are required to provide a ramp, step, slope or ladder for access.

If you build a temporary ladder the steps must be at least 10 inches and not more than 14 inches apart. The steps or rungs must be level, parallel and evenly spaced.

The steps (rungs) of any ladder must be corrugated, knurled, dimpled, or coated to become non-skid.

All ladders are to be secured in place.

Extension ladders must extend 3 feet above any landing.

Extension ladders must never be taken apart. They must only be used as designed.

Step ladders can only be used when they are opened and placed securely on a level surface. Do not lean a step ladder against something then climb the ladder.

#### 4.16 Check Equipment First

All equipment should be inspected every day before it is used. Equipment inspection forms should be filled out and turned into your supervisor prior to your shift. If you have something on your equipment that is damaged immediately report it. Do not operate the equipment. Tag it out of service "do not use".

Ensure every piece of equipment is safe before using it for the day's work. Check to see if the equipment has a fire extinguisher and if it is properly secured and charged. Every piece of equipment should have a fire extinguisher. We keep extras – if you need one just ask we will bring you one immediately. If you see the field safety inspector, ask for an extinguisher if you need one – he has several on hand at all times.

## **4.17 Moving Parts**

Never check equipment fluid levels while the equipment is running. Never try to repair or adjust equipment that is running. Only trained mechanics should make any repairs or adjustments to running equipment. Machine and motor guards are in place for your protection. If they are removed for repairs or service, ensure they are replaced properly before using the equipment.

Hot-mix plant employees should be trained and approved before they can make any repairs to the equipment. Only after being trained and approved will you be allowed to make any adjustment or repairs. Working on equipment when you have not been approved is grounds for immediate termination.

## 4.18 Fencing

Safety orange construction fencing should be securely placed around all holes, openings, drop-offs or areas where entering could be dangerous. You never know when a young child may try to cut across a construction area after school or play in a construction area after you go home. The safety fence is not just to protect you and your fellow employees, but it helps to protect the public from hazards associated with our work.

#### 4.19 Compressors

Always check air hoses before you use an air tool. The hoses must not be cut or damaged.

Never repair an air hose with a common radiator hose clamp or with wire. The end connectors must always be secured with a proper air hose clamp.

When an air hose is attached to a compressor it must be secured in place with a wire or safety pin.

Never disconnect an air hose from a compressor or tool until the air pressure is bled off. A pressurized air hose can be very dangerous.

Air used for cleaning should never be over 30 psi. Never use air to clean yourself or others. Eye protection is required when working with pressured air.

#### **4.20** Nails

When wrecking forms, or removing braces make sure you pull the old nails or bend them over. Wood thrown on the ground with protruding nails is very dangerous and causes many severe injuries every year.

When building forms, or bracing, remember do not leave nails sticking out of the wood. Someone may catch clothing on the nail or hurt themselves. If someone trips and reaches for a piece of wood, we don't want them to have a puncture wound.

When pulling nails always pick them up and discard them properly.

#### 4.21 Loose Material, Tools etc.

Keep loose material, tools, etc. off stairs, walkways, ramps, platforms or other work areas. Numerous injuries are caused each year by trip hazards.

Tools and loose materials should always be secured in pickup trucks. Tools can be damaged if items are stacked on top of them and loose materials can fly out of vehicles when on the road.

#### 4.22 Safe Access

Everyone needs safe access to our work areas, shop and parking lots. When loading and unloading never block drives, or vehicle access.

When parking on job-sites try never to block private drives or walks.

When loading or unloading materials or picking up crew members, always try to stop in the parking areas and not in the driveway. Many times, it is still dark when we are preparing for the days work. Being in the driveway with traffic when it is dark makes the condition more dangerous.

## 4.23 Stairs – Landings

When building stairs and landings for job-site trailers, always keep these requirements in mind.

Stairways must be installed at least 30 degrees and no more than 50 degrees from horizontal.

Variations in riser height or stair tread depth must not exceed ¼ inch in any stair system. That includes the last step before the ground or the top step before the landing.

If a door opens onto the stair landing you must provide 20 inches beyond the swing of the door for safety.

The steps and landing must not be slippery when wet or dirty.

Stairways with 4 or more risers or 30 inches or more in height whichever is less must be equipped with at least one handrail and stair rail along each unprotected side.

Stair handrails shall not be more than 37 inches or less than 30 inches from the upper surface of the handrail to the top surface of the stair tread.

Landing Guard Rails at 42" must be in place on all open sides of landings. The guard rails must have mid-rails halfway between the landing surface and the top of the top-rail.

#### 4.24 Be Aware

When entering a work area look around and get a feel for what is going on. Ask yourself; will I be in the way, can operators of equipment see me, am I in an operator's blind spot, should I be that close to the edge of an excavation. Try to get a feel for the area so you don't endanger yourself or others.

Always be aware of suspended loads. If you are in an area where materials are being lifted; always keep an eye out and make sure you are safe. Never get under a load being lifted.

#### 4.25 Footing

Be sure of your footing. Watch out for trip hazards that may cause you to stumble or fall.

Trips and falls account for most accidents on job-sites like ours. Watch where you are walking. Be aware you are on a construction site and surfaces are not as smooth as areas open to the public.

## 4.26 Barricades

Barricades come in many shapes and sizes. Barricades are also used for many purposes from traffic control to protecting excavations.

Road work barricades range from Type 3 barricades to cones and barrels. No matter which type is used, it is important that it be in place – positioned correctly and clean. The barricade must be clearly visible in order for the traveling public to understand its use.

If you see a barricade, barrel or cone turned over or out of place; please correct it. Your life or the lives of others may depend on it being correctly positioned.

Job-site barricades may be as simple as plastic warning tape, orange construction fence or as complex as a chain link fence. In all cases it is in place to protect our employees and the public from hazards on our sites. Please help keep our sites safe by making sure all holes are covered or barricaded and unsafe work areas are protected.

OSHA 1910.23 – Manholes. While the cover is not in place, a manhole opening shall be constantly attended by someone or shall be protected by removable standard railings. Try to keep manholes covered anytime they are open and you are not working on them.

## Section 5 Accident Reporting and Investigation

Every accident involving employees or material and equipment will be investigated to determine the cause and resultant losses. Measures to prevent the recurrence of accidents must be taken.

Superintendents / Foremen / employees are responsible for investigating and reporting all types of accidents. Accidents that are of a serious or potentially serious nature must be reported to the Safety Director immediately. The superintendent should do an initial investigation to obtain facts and should protect the site as much as possible until an investigation is completed.

All superintendents should fill out a accident reports on our HCSS Ipads that will be kept in the file along with the Safety Departments incident investigation report.

Blank vehicle accident forms should be in all company vehicles. In the case of a vehicle accident the Safety Director is to be notified immediately. The driver should complete the Vehicle Accident Form at the time of the accident.

It is everyone's responsibility to report accidents or near accidents. Failure to do so can result in disciplinary action up to termination.

## Section 6 Housekeeping

## **6.1 Site Inspection**

All site supervisors – foremen and employees should keep an eye out for housekeeping. Materials should be cleaned up on a continuous basis. Supervisors should inspect each work area during the day and make clean-up suggestions to crew foremen. Crew foremen should inspect the work areas periodically during the day to eliminate hazards.

Trash should be removed from the job-site often enough to keep materials from becoming a nuisance. Trash materials can become an eyesore or a dangerous hazard if not removed. During high winds material blowing around from a job-site can be in violation of local and state laws.

# **6.2 Basic Housekeeping**

- a. Good housekeeping is essential in accident prevention and should be a part of the daily routine with clean-up being a continuous procedure.
- b. All protruding nails in lumber must be pulled out or bent over.
- c. The working area and all stairways, ladders, and passageways shall be kept free from loose materials and debris.
- d. All excess materials shall be stacked with due regard to safety and allowance made for easy access.
- e. Spills of oil, grease, or bulk cement shall be removed immediately.
- f. Areas around saws or other wood working equipment shall be kept clean and free of excess scrap, chips and sawdust.
- g. Paper drinking cups and trash shall be placed in trash barrels for removal.
- h. Remember a clean job is a safe job and that is a responsibility of every employee.

i. One of the most common accidents in the workplace is trips and falls. They account for more injury accidents than any other. Good housekeeping could eliminate over half of these very costly accidents.

# **Section 7 Vehicle Operating Rules**

#### 7.1 Motor Vehicle Records

All employees must be approved before they can drive a company vehicle. A Motor Vehicle Report will be obtained, and the supervisor will be notified when an employee is eligible to drive. An employee is not allowed to operate any company vehicle without prior approval.

Commercial Drivers will have a Motor Vehicle Report reviewed and will also have a full criminal background check made. This is to conform to Federal security and safety requirements.

Commercial Driver Qualification files are kept separate from all personnel files. The Qualification file is made available to the Department of Public Safety and to Department of Transportation representatives upon request.

Some information in the Commercial Driver Qualification File is shared with future employers as required by Federal Law.

All drivers are required to notify the Safety Department when they receive moving vehicle violations, whether in a company vehicle or not.

#### 7.2 Current License Information

Commercial drivers will need to keep a current Commercial Drivers License along with a current DOT Physical. Copies of both are required to be in the driver's qualification file before he/she is allowed to drive. When the license or DOT medical is renewed, it is the driver's responsibility to immediately inform the office and see that a copy of the new certificate is on file.

All employees noted as eligible to drive a company vehicle must inform the company of any change in license status. Failure to notify the company can result in termination.

## 7.3 Family Members and Company Vehicles

ACCI vehicles are not to be used to transport family members who are not employed by the company. The vehicle is to be used for work transportation only.

#### 7.4 Passengers

Only company employees and job related individuals will be allowed as passengers in a company vehicle. Job related individuals are those such as sub-contractor personnel and inspectors.

#### 7.5 Alcohol & Drugs

No employee will be allowed to drive a company vehicle while under the influence of alcohol, mind altering drugs or controlled substances.

No employee will be allowed to have in his or her possession any form of alcohol, mind altering drugs or controlled substances.

An employee taking prescription drugs that could alter his/her driving ability must not drive.

FMCSA drug / alcohol testing will be done per federal requirements.

## 7.6 Trailer Hitches

Trailer hitches have been installed on company vehicles to pull company equipment. Company vehicles must not be used to pull privately owned equipment or trailers.

#### 7.7 Additional Fuel Tanks

Diesel tanks are installed on company vehicles so foremen have fuel on the site when needed. Company fuel is to be used for company equipment only.

Gasoline cans carried in company vehicles must be OSHA approved safety cans. These cans must be clearly marked "Gasoline". The safety cans must be set upright and without anything stacked on top. Plastic containers will not be allowed (OSHA regulation).

## **7.8** Trust

The use of a company vehicle is a trust between the company and the employee. Company vehicles should be operated in a safe manner at all times. Every employee must adhere to all traffic laws while driving a company vehicle.

Company gasoline credit cards must only be used for company vehicle fuel.

## 7.9 Reporting Accidents

Every accident involving a company vehicle must be reported immediately. You must report all accidents to the Safety Department and your supervisor. Gary Trayler can be reached at (361) 444-7490 after hours.

#### 7.10 Accident Forms

All vehicles should have an accident report form in the glove box. Additional blank forms can be obtained from the office. Accident forms are to be filled out at the time of the accident.

Accident forms ask for specific information that should be obtained from all parties at the time of the accident. Please attempt to fill out all blanks on the form.

#### 7.11 Vehicle Documents Required

Prior to driving a company vehicle on Texas public highways, the driver will assure the following documents are in the vehicle (glove box)

- a. Vehicle Registration
- b. Evidence of Liability Insurance
- c. Vehicle Accident Report Form

## 7.12 Accident and Driving Records

Records of employee accidents will be kept along with periodic driving record checks. Employees with poor driving records will be prohibited from driving company vehicles. Vehicle driving privileges may be reinstated if the employee satisfactorily completes a driver training and improvement program at their expense.

Employees who were hired to drive company vehicles such as commercial licensed drivers will be terminated if the employee becomes ineligible to drive a company vehicle. In short he/she is no longer qualified for the position of driver.

## 7.13 Negligence

Drivers of company vehicles will be subject to disciplinary action, up to and including dismissal, for accidents involving negligence or failure to comply with company policy and or safe driving rules. Remember to follow all laws. Always take your time.

## 7.14 Transportation of employees

Special precautions should be taken to ensure employee safety.

- a. Vehicles should be maintained in excellent condition and used by a qualified driver.
- b. Seat Belts must be worn at all times.
- c. If employees are riding in the back of a vehicle they must be seated at all times.
- d. Employees should never ride on stacked materials in the back of a pickup truck.
- e. Drivers should stay alert and remember the responsibility they have when driving.

#### **Section 8** Fire Prevention and Control

## 8.1 Location of fire extinguishers

Before welding, grinding, burning, etc., make certain proper fire extinguishers are in the immediate area. They must be readily available and not setting in your truck. We have extra fire extinguishers in the office.

## 8.2 Discharged Extinguishers

Fire extinguishers shall be recharged or replaced with fully charged extinguishers promptly after any discharge. Notify your supervisor upon noticing any discharged unit. It is an OSHA violation to have a fire extinguisher that is not fully charged.

## **8.3** Fire Extinguisher Inspections

OSHA requires that all fire extinguishers be checked every month. OSHA also requires that all fire extinguishers be inspected annually by a company qualified to do fire extinguisher inspections and service. Supervisors should note in the daily log when fire extinguishers are checked. We as a company have all fire extinguishers serviced at least once a year and that is normally done in February.

## 8.4 No Smoking Areas

Smoking and open flames are forbidden when fueling equipment, within certain designated areas, and where flammables or combustible liquids, gasses, or greases are used, stored or transported. A good rule is to stay 50 feet away from any flammable liquid or gas storage. Hot-mix plant areas for smoking are directly behind the control room or in the stockpile areas. No smoking signs will be posted and you are required to respect them.

## 8.5 No Smoking Signs

Check for no smoking signs on fuel trucks, tanks and certain high-risk areas. Any fuel storage area must have a no smoking sign. If you see that a sign is damaged notify the office immediately – we have extras. No Smoking Signs must be obeyed at all times.

# 8.6 Storage of Flammables

Only small quantities of flammable fuels are to be stored and only when they are in OSHA approved safety cans. Oils and other flammables must be stored in factory shipping containers.

Large quantities of fuel, oil, or other such items will be managed by the area supervisor. All TCEQ, EPA and OSHA regulations will be followed. Large containers must be kept inside dirt / lined or concrete containment areas.

#### **8.7** Combustible Material

Keep all areas clear of combustible materials. Keep all vehicles away from storage areas when they are parked for the evening.

## 8.8 Smoking near Fuel Storage Areas

Smoking is not allowed within 50 feet of the fuel storage or fuel tank area.

## 8.9 Storage of Oily Rags

Store oily rags in metal containers that stay covered at all times. Oily rags are highly flammable and caution should always be used when they are stored.

## 8.10 Cleaning Flammable Liquids from drums or cans

Never use air pressure to empty or clean drums or cans that have held flammables. Compressed air and flammable liquids can quickly become explosive.

## **8.11 Heating Equipment**

Keep salamanders or other heating equipment away from combustible materials.

## **8.12 Refueling Engines and Generators**

Do not refuel an engine or generator that is running. Do not refuel an engine or generator that is hot. Always have a fire extinguisher at hand.

Only refuel a generator if it is out of the truck and setting on the ground. Never refuel a generator until you set the gasoline can on the ground first. This helps to discharge any static electricity and helps keep sparks from igniting the fuel.

## 8.13 Flammable Liquid Storage

Flammable liquid containers should be clearly labeled and stored in a separate isolated area. Check OSHA regulations when planning storage. Several regulations cover quantities and type of storage lockers. Call the safety department if you are unsure.

## **8.14** Wearing Combustible or Oily Clothes

Never wear oily combustible clothes on the job. A mechanic may come in contact with oxygen which can start a fire when exposed to oily materials.

## 8.15 Engines inside buildings

When running motors or vehicles inside buildings such as in the shop, it is important to have the exhaust fumes ventilated.

## **8.16** Gasoline Safety

Gasoline should never be used to clean parts. Gasoline is a motor fuel and that should be its only use. Always use an OSHA approved gasoline safety can for gas and always keep a fire extinguisher at hand.

#### 8.17 Oxygen Cylinders and Fuel Gas Cylinders

When transporting or storing cylinders, the safety cap must be in place.

Cylinders shall be moved by tilting and rolling them on their bottom edges.

When transporting cylinders in a vehicle they must be in a vertical position and secured.

Unless cylinders are secured on a special carrier intended for this purpose, regulators shall be removed and valve protection caps put in place before cylinders are moved.

Compressed gas cylinders shall be secured in an upright position at all times. The only exception is while cylinders are actually being hoisted or carried.

Oxygen cylinders in storage shall be separated from fuel gas cylinders or combustible materials by a minimum distance of 20 feet.

# Section 9 Welding and Burning

## 9.1 Eye Protection

Cutting goggles are required when doing burning or torch work. When welding always wear a hood with the proper shaded lenses.

#### 9.2 Regulators

Regulators are to be kept clean and undamaged. Always check for leaks around fittings. Regulators should never be lubricated with oil or grease.

# 9.3 Safety Valves

Flash-back safety valves will be used on all hoses and lines. Flash-back valves may be attached at the gauge or at the manifold.

## 9.4 Vertical Cylinder Trucks

Acetylene and oxygen bottles shall be secured with a chain in an upright vertical position while in use and at all times when mounted on a cylinder truck.

#### 9.5 Hot Materials

Employees should always protect cylinders, equipment and other combustibles from sparks and hot slag materials. Always plan your work to protect yourself and objects around you.

#### 9.10 Welder Protection

Welders can suffer burns to the skin produced by the arc of welding rods. The burns are similar to sunburn. Welders should wear long sleeve shirts for protection. Welders should wear welding gloves, eye protection, shields and helmets.

## 9.11 Respirators

Respirators should be used when working with toxic fumes. Respirators come in many sizes and types. They should be fitted to the individual and training should be given in the care and use. If your work requires a respirator or if it is suggested in an MSDS sheet, see your supervisor.

#### 9.12 Ventilation

When welding, the materials used for flux, rods, and base materials can cause toxic fumes. Good ventilation is necessary and should be established before work begins.

## **9.13** Fire Extinguishers

Fire protection equipment is required when you are welding. Make sure fire extinguishers are handy when welding or cutting.

## 9.14 Release of Gases

To help prevent the release of gases always turn off the cylinder valve when the torch is not in use.

## 9.15 Transporting Cylinders in Vehicles

OSHA requires all cylinders to be transported in a vertical position, secured and the valve protection caps in place. Caps are to be removed only during welding or cutting operations and then replaced when the work is completed. Never transport cylinders with the regulators in place.

## 9.16 Cylinder Placement

Cylinders shall be kept far enough away from actual welding or cutting operations so that sparks, hot slag, or flames will not reach them.

#### **Section 10 Storage and Handling of Gasoline**

Gasoline is manufactured for one purpose – to cause an explosion. Ordinarily this explosion is confined to the cylinders of a gasoline engine; but if gasoline is misused, explosions can occur that result in serious injuries or burns and are often fatal. Take care when using gasoline.

## **10.1 Approved Containers**

Gasoline should always be kept in an approved safety container. All containers must be properly labeled "Gasoline". The container is required to be metal and must have an automatic close top to prevent vapors from escaping. Only use approved containers. This is an OSHA regulation.

## 10.2 Gasoline Transferring

Gasoline should always be transferred with caution. Pouring gasoline from one can to another, or from a can to the gasoline tank of a vehicle can cause static electricity to discharge. Whenever you fill a gasoline tank make sure that the can from which it is being poured is in contact with the tank. It is always best to place the can on the ground first to help discharge any static electricity.

## 10.3 Fire Prevention

Gasoline should only be transferred in areas free of open fires and flames. All gasoline spills should be cleaned up immediately. Always keep a fire extinguisher close at hand when filling up equipment.

## 10.4 Working on empty tanks

You should never attempt to perform a welding or soldering job on an empty gasoline tank, gasoline drum or the like without first properly cleaning it. You should always clean the tank of any residue or vapors before making repairs. Steam cleaning is the best option.

# **10.5 Breathing Fumes**

Try to avoid breathing gasoline fumes when possible. Always stand on the windward side when you are pouring gasoline.

## 10.6 Cleaning With Gasoline

Gasoline is not a cleaning fluid and should never be used for that purpose. Gasoline can cause serious irritations and skin damage.

## 10.7 Spilled Gasoline

Spilled gasoline is a hazard to clean up. Gasoline saturated soil can be highly flammable. Gasoline spills should be cleaned up quickly and all materials used for the clean up discarded properly. In case of a spill make sure no sparks or flames are in the area or downwind.

#### **Section 11 Cables and Ropes**

#### 11.1 Inspect Prior to Use

All cables should be carefully inspected before installing to make sure there has been no damage in transit. Regular inspections should be made while in service. If any signs of wear or damage are noticed the parts should be removed and put out of service.

If a cable, chain, or rope is taken out of service; it must be marked with a tag or thrown away immediately. Just having a damaged item in your truck (even if you know it will not be used) is an OSHA violation. It must be tagged as out of service.

## 11.2 Bends and Knots

Sharp bends or knots should not be permitted in wire rope. Bends and knots reduce the manufactures certified strength and causes these wire rope pieces to be unstable.

#### 11.3 Metal Thimble

Always use a metal thimble in an eye splice.

#### 11.4 Protect From Sharp Objects

Make sure your wire rope is protected from sharp objects or metal edges. When the rope is under pressure it can be easily damaged or cut.

## 11.5 Inspect for Loose or Damaged Hardware

Clamps, hooks, shackles, rings and slings should be inspected at regular intervals. Discard those showing strain or small fatigue cracks.

## 11.6 Stand Clear of Cables Under Tension

No one should be permitted to stand in the vicinity of a cable under tension. Never stand under a suspended load.

## **Section 12 Excavation – Trenching – Shoring**

Never excavate soil deeper than 6 inches without first calling for line locates. Plan ahead and make sure you allow for the required 48 hour line locate waiting period. Use the <u>811</u> system.

Line locates must be re-established every two weeks. An old line locate is as good as not having one at all.

If you hit a line or pipe and it is damaged, we must report the damage to the line locate service immediately and a report may be required to be filed with the Rail Road Commission. This must be done even if we have a good locate number and it was not our fault.

A competent person must be assigned to every excavation. Excavations require a daily excavation report be made. A new report must be made if conditions change during the day. Excavation inspection forms are on the HCSS I-pad under forms section.

## 12.1 Angle of Repose and Shoring

All trenches or excavations 5 feet deep or more shall be sloped to the angle of repose or shored in accordance with OSHA standards.

The soil type dictates what the proper angle of slope should be. If in doubt always consider the soil as a class C. For class C soil use a 1½ to 1 slope. (For every foot of depth slope back 1½ foot. Measure your slope from the edge of trench not the center.

## 12.2 Ladder Availability

OSHA requires a ladder to be available to every employee working in a trench within 25 feet. The ladder must be relocated as the employees change locations.

If a trench is 51 feet long or more, two ladders will be required. Even if the employee walks outside the 25 foot range just for a moment it is a violation of OSHA regulations. Ladders must stick up 3 feet or more above the landing.

#### 12.3 Inspection By Supervisor

You must not enter any excavation or trench until it has been inspected by the competent person or the supervisor. Only after it has been noted as safe can any employee enter.

#### 12.4 Be Aware Of Hazardous Conditions

Many conditions can change the safety of an excavation. You should always be aware of changing conditions such as weather (rain), ground water, changes in soil types and vehicle traffic. When in doubt leave the trench immediately and ask for it to be re-inspected. It is always better to be safe than sorry.

## 12.5 Excavated Soil

All excavated soil material is to be placed no less than 2 feet from the edge of an excavation. This set back helps prevent materials from falling back into the trench.

## 12.6 Tools and Supplies

Tools and supplies should never be placed next to the excavation. They should be kept at least 2 feet back from the edge. Vibration can cause items to roll down into the excavation causing injuries.

## 12.7 Vehicles and Equipment Operating Near Excavations

Vehicles and heavy equipment can cause cave-in hazards. Just the vibration from traffic or heavy vehicles in the area can cause loose soil to slump. These dangerous cave-in conditions can change very quickly. Always be aware of changing conditions.

# 12.8 Stay Clear of Machinery

Never work too close to machinery in or around a trench. Machines move quickly and it is easy to get trapped between the machine bucket and the trench wall. Generally, trenches are narrow and only as wide as necessary, so give yourself plenty of room for safety.

#### 12.9 Be Aware of Other Workers

When using tools look to see where your fellow employees are working. Tight conditions can lead to injury accidents.

## **12.10 Personal Protective Equipment**

OSHA has specific requirements for employees working in excavations and trenches. You must always wear a hard-hat, safety glasses, safety vest, and safety steel toe shoes. These are our general safety PPE requirements for any job site.

# 12.11 Unsafe Breathing Conditions

Your competent person or supervisor should check the air quality in an excavation or trench before you start work. Dangerous conditions can be present when working around sanitary sewer lines, gas lines unknown content lines and similar areas. Always be cautious of exhaust fumes from generators and vehicles. Many gasses are heavier than air and will seek the lowest elevation. Traffic traveling close to an excavation can fill a trench with deadly fumes that cannot be smelled and are heavier than air. ACCI has air quality testing equipment, and it is available for all job-sites. When in doubt test the air or consider forced ventilation. If it is 4 foot deep it needs to be tested.

#### Section 13 Barricades and Guards

## 13.1 Manhole Covers

When a manhole is uncovered it must be protected. OSHA requires an open manhole to be protected with a cover, barricaded or have someone standing guard to protect against anyone falling inside.

#### 13.2 Public Streets and Highways

All Barricades and guards used on public streets and highways must meet standards as established in the Texas Manual on Uniform Traffic Control Devices.

Never alter or make repairs to barricades unless they are done to original specification. Changing a barricade design or adding bracing material can cause a barricade to not meet crash standards.

It is important to keep barricades and traffic control devices clean. They must be clearly visible and reflective to be efficient.

Never make changes to traffic control layout or design without written instruction from the traffic control engineer.

In case of an accident in your work-zone, protect the traffic control layout until an investigation can be made. Never change any traffic control until an investigation has been completed unless it is causing a hazard to the public. If you must change traffic control after an accident, take many photos of the traffic control from all directions. You cannot have too many photos.

We must never stack materials or place objects (even signs) in such a way that the public's view at an intersection or roadway is blocked. We must ensure drivers can see oncoming vehicles at all intersections and drives.

## 13.3 Public Sidewalks

If you remove a section of the sidewalk or change its condition it may need to be closed. Remember the "Americans with Disabilities Act" (ADA) must be adhered to. If you make any changes to a sidewalk (such as demo a section) it may not meet ADA and will require closure. If you do not have Sidewalk Closed signs, then put orange construction fence across the walk.

#### 13.4 Open Holes and Trenches

All open holes and excavations must be barricaded after working hours. Orange fencing material or several runs of caution tape need to indicate the hazard exists. Small children or adults may cross the job-site after hours and not notice an open excavation. These excavations must be protected even while working on private property.

## **Section 14 Equipment Operation**

## 14.1 Pre-shift Inspection

A pre-shift inspection is required on all equipment before it is operated. The company provides equipment inspection forms and they should be used to make sure everything is in good working condition.

Any deficiencies should be noted and reported to your supervisor. Any defects affecting the safety of the equipment should be corrected before the equipment is used.

#### **14.2** Equipment Service

Fueling and service of equipment should be done with the motor turned off. All service work should be done in a safe location for the equipment and employees.

Service truck drivers should ask the equipment operators to move or reposition equipment if needed for service.

## 14,3 Equipment Fire Extinguishers

Any fire extinguisher installed on equipment should be checked daily. If your unit has been discharged tell your supervisor. All fire extinguishers must be checked monthly and a log entry must be made as to the condition.

#### **14.4 Machine Guards**

All moving parts on equipment should be fitted with guards. The operator should check these guards daily prior to operation of the equipment. Guards should never be removed while the equipment is in operation.

#### 14.5 Steps, Ladders, and Handrails

When steps – ladders and handrails are provided on equipment they must be used. An example of an unsafe operation (and a serious violation with OSHA) is when a motor grader operator rides the blade to the ground.

## 14.6 Moving Equipment

No one other than the operator is allowed to ride on moving equipment. Equipment should not be started if anyone other than the operator is on the equipment. Ensure a 20-foot safety zone before moving equipment.

## 14.7 Unattended Equipment

Operators should not leave equipment running unattended. Even if you are within 20 feet you are required to lower the bucket to the ground, set the parking brake and have the transmission out of gear. The best practice is to turn off the machine when you get off.

# 14.8 Operating Equipment Near Shops

When entering or exiting a shop area you should sound your horn as a notice to other employees. If the area is congested use a spotter before moving equipment.

#### 14.9 Seatbelts

Seatbelts are installed on all equipment. It is a requirement that seatbelts be worn while operating any equipment. Wearing seatbelts is not only a good idea but an OSHA regulation requires them to be worn.

#### 14.10 Windshields

Windshields should be kept clean and undamaged. If a windshield becomes damaged, please notify your supervisor so repairs can be made.

## 14.11 Equipment Traveling on Slopes

Heavy equipment should not be operated in a sideways manner across a slope. Travel on slopes should always be up or down to avoid the danger of overturning.

## 14.12 Backing Up Equipment

Operators should never start backing equipment without checking behind the unit first. If necessary, the operator should get off his equipment and walk behind the unit before moving. When working in close quarters with employees or other equipment you should use a spotter.

Backup alarms are required on all equipment. If the alarm is not working, you must have a spotter with you.

Operators and drivers not looking before they back up is a real problem. We need everyone to pay special attention when backing vehicles or equipment.

Keep workers out of the 20 foot safety zone.

## 14.13 Permission to Operate Equipment

All operator trainees will be thoroughly tested before operating equipment alone. Unauthorized use of Haas-Anderson Construction equipment is cause for dismissal.

# 14.14 Heavy Equipment on Highways

Heavy equipment operated on highways will conform to all laws and regulations governing motor vehicles. When construction equipment proves hazardous to highway users, traffic will be controlled or warned by flagmen, signs, temporary barricades, or other acceptable means.

All equipment working in or near traffic is required to have a flashing yellow light that is visible 360 degrees around the vehicle.

When the condition requires flagging of traffic, all flaggers must be certified, including sub-contractor flaggers. The flagger certification is a State law and an OSHA regulation.

## 14.15 Equipment Operating Speed

All operators should use equipment at safe speeds. When a speed is not posted you should consider 20 mph a maximum speed. In all cases traffic speed limits should not be exceeded. Speed limits in the yard area should be 5 mph.

## 14.15 Driving Lane in Pit Areas

All equipment operators and truck drivers should use the right-hand side of any access road.

#### 14.17 Intersections In Pit or Construction Areas

All operators should exercise extreme caution at any construction area. Blind intersections should be approached slowly, and each operator should be prepared to stop quickly.

## 14.18 Right of Way

All mobile equipment, company vehicles and employees should yield right of way to any loaded equipment. When in doubt, yield the right of way.

## 14.19 Dangerous Conditions

Because all job sites are dangerous everyone should watch out for equipment. Because equipment is noisy and sometime the visibility is low; operators should constantly stay alert to avoid hitting obstructions or employees.

#### **14.20** Haul Unit Operation

While waiting to be loaded, haul vehicles will be positioned so that the bucket of the loading equipment does not pass over the cab.

Haul unit operators should stay in the vehicle at all times to avoid being struck by falling debris.

If a driver is out of his truck, he is required to wear a hard-hat, safety glasses, vest, and steel toe boots.

Before raising your bed make sure you are on level ground.

Always check the tail-gate. Make sure it is open for dumping and locked for travel.

Always clean the bed and outside of your truck before going on to a roadway. Ensure no loose rock or debris is dropped on the roadway.

Always lower your truck bed before pulling away from a dump site. Watch for power lines before raising the bed or moving the truck.

#### **14.21 Crane Operation**

Cranes will only be operated by qualified crane operators.

Crane booms or other parts of the load should never be closer than 20 feet to a power line. Spotters should be used to ensure a safe distance is kept.

When possible, tag lines are to be used on all hoisted loads.

Counter-weights must be barricaded so no one enters the swing radius.

Only certified signal persons will be allowed to give hand signals to a crane operator.

Remember the crane operator is watching the signal person, he is not watching you. Always watch out for hazards when working around a lift operation.

Walk around and check the area before moving a crane = remember 20-foot safety zone.

#### 14.22 Front End Loaders

Perform a pre-shift inspection and report any defective parts, hoses or leaks to the foreman. The tires should be inspected for damage and proper inflation. All guards should be in place and secure.

When a loader bucket is full of material the operator has very limited vision to the front. Make sure no one is in front of your bucket and out of sight before you move the machine.

Because the motor is located to the rear of the operator cab, your visibility is limited to the back. Always double check before backing up.

## **Section 15 Tools and Equipment**

#### 15.1 Guards

Keep machines and tools fully guarded at all times. Never expose workers to moving parts.

Power saws and grinders should have properly operating guards as sent from the factory. These guards should never be tied back or altered in any way. If the saw guard no longer works properly, let your supervisor know and have it repaired or replaced.

## 15.2 Maintenance

Machinery should never be oiled, greased, cleaned or adjusted while in motion. All guards must be kept in place when machinery is in motion. Machinery should be locked-out / tagged-out for maintenance. See the HAC lockout procedures for more information.

#### **15.3 Portable Compressors**

Anytime portable compressors are moved they should be secured with safety chains.

Hose connections to compressors must be secured with wires or pins.

Compressor tanks should be drained daily to remove condensation. This extends the life of the compressor and the air tools.

If air tools are stored in an air compressor while it is being pulled, the tools should be secured so that they do not damage the compressor, the tool, or fall out and cause an accident.

#### 15.4 Air Hoses

Air hose connections should be secured in position with pins, wire or safety chains.

Shut off air supply and bleed lines before disconnecting any tool from the hose.

Only factory type air hose clamps are allowed. Radiator hose type clamps can not be used for air hose clamps. If hoses are damaged or the clamps need repairs, the hose must be tagged as out of service. Do not leave a damaged hose in an air compressor. A damaged air hose in a compressor is considered a serious OSHA violation.

#### **15.5** Authorized Operation

The operation of any machine except by an authorized employee is prohibited.

## **15.6 Sharpening of Tools**

All bull points, chisels, drill bits and spades should be dressed and sharpened when they are dull or damaged. A dull or damaged tool is a dangerous tool.

#### 15.7 Broken Tools

Any broken tool is dangerous. Any type of tool, no matter what it is must be in good working condition. If a handle is cracked or broken such as on a shovel, it must be repaired.

A broken tool in your truck, even if it is not going to be used, is still a violation of regulations. A broken tool must be tagged as not to be used or thrown out.

#### 15.8 Correct Use of Tools

Always use the correct tool for the job. Take the time to plan your work so you have the proper tools that are needed. For example, prying something with a shovel when a pry-bar is available in the truck is not a good idea. Breaking a tool or getting someone hurt is not worth it.

#### 15.9 Electric Wires and Cords

If your tools are electric, check the cords before using them. Cords can be easily damaged while working around concrete and forms. Make sure your cords have a ground plug. If the ground plug is broken, we need to replace it.

Products are available to repair electric cords when they are cut. Do not use electric tape. OSHA considers it a violation to repair a cord with anything that is not equal to the original factory protection.

All electric cords should be checked every 3 months to ensure all needed repairs are made. This inspection is required by OSHA and should be logged in the supervisor's daily logbook. The field safety inspector will also conduct 3-month electrical inspections.

#### **15.10 Double Insulated Tools**

Double insulated tools are designed to operate without a ground wire. They will have a plug with only two prongs. These are preferred on our sites because they add an extra layer of protection against shock hazards.

## 15.11 Repair of Tools

Never repair a tool unless you are qualified to do so. We have loaner tools that can be used while your power tools are being repaired. Several tool repair facilities are available that can repair your tool properly.

#### 15.12 Guards on Power Saws and Portable Grinders

Power saws and grinders shall be equipped with guards which will protect against contact with the blade or wheel. Guards should never be wedged in place or made to stay open.

#### **15.13 Stationary Grinders**

Stationary grinders are to be secured properly so as not to turn over when pressure is applied. All stationary grinders are required to have guards and tool rests.

# 15.14 Grinding Wheels

Check your grinding wheels and cutting blades to make sure they do not have cracks or breaks. When a grinding wheel comes apart pieces can fly in all directions. Face shields are required to protect against injury.

## 15.15 Air Tool Repair

Air tools, like all other tools, must be kept in good working condition. Any defective tool should be immediately repaired or replaced. Always tag a tool that is defective or damaged.

#### **15.16 Hand Grinders**

Never use a hand grinder to sharpen points, chisels, or blades. A small slip can cause the tool to be thrown away from the grinder and can cause serious injury.

#### 15.17 Tools and Water

Electricity and water do not mix. Tools and electric cords should be kept out of the water or mud. Support cords or tie them up when possible.

# **Section 16 Equipment and Truck Shop**

#### 16.1 Dollies and Hoists

Shop employees use mechanical devices such as dollies and hoists to move large heavy items. These lifting devices must be marked with the weight capacity they were made to carry.

## 16.2 Using Jacks

The rated load will be clearly and permanently marked on all jack casings. Shop managers and employees will make sure the jacks have sufficient rating to lift and sustain loads when used. Employees should never place any part of their bodies directly under a vehicle when it is jacked up. Always use blocks or stands to secure a vehicle or piece of equipment.

#### 16.3 Hand and Portable Tools

All hand and portable tools will be maintained in safe working condition. Any sign of wear or damage which might affect the safety of the user is cause to take the tool out of service.

## 16.4 Compressed Air

All employees will exercise extreme caution when using compressed air. A maximum pressure of 30 psi will be used for cleaning with compressed air.

#### **16.5** Eye Protection

Appropriate eye protection will be worn anytime work is being performed on batteries. This includes servicing, changing or charging batteries of all kinds.

#### 16.6 Eve Protection for Standing Grinders

Face shields, goggles, or both will be worn during standing / grinding operations.

# 16.7 Tool Grounding

Tools with metal cases should be grounded. Make sure the cord has 3 prong connectors and the electric system is grounded properly.

## 16.8 Electric Grinders Wheels

The RPM of all grinding discs will be closely matched with the rated RPM of an electric grinder before the disc is installed. In the event the two can't be identically matched, a disc with a higher RPM rating than the grinder's RPM will be used.

## 16.9 Maintenance Activities

The shop area is a very busy place with vehicles and equipment being moved around and lots of other activities going on at one time. One person may be welding while another is painting. Always use caution in the shop and check to make sure you will not cause a problem for someone else in the same area.

#### 16.10 Ventilation

Sufficient ventilation will be provided for all operations that produce dangerous concentrations of dust, vapors, fumes, mists or gases.

#### 16.11 Gas Tanks / Fuel Containers

Gas tanks and other fuel containers will be removed from vehicles, drained, purged and if possible filled with water before welding or cutting is performed on the tank.

## 16.12 Electrical Switches-Machinery

Electric switches should be within easy reach of the operator, but not placed where they can be accidentally turned on or off. Switches should not be positioned so that clothing may be caught in a machine while it is being turned on or off.

#### 16.13 Machine Guards

Machine guards will not be removed except for maintenance purposes. When guards are removed during repair; power control switches will be locked in the off position and properly tagged. The machine will remain tagged until guards are replaced.

## 16.14 Shop Entrance and Exits

Caution should be taken when walking in the area of exits and entrances. It is generally much brighter outside than inside a shop. A person's eyes may not adjust to the light conditions quickly enough to give adequate vision.

# 16.15 Moving Vehicles In/Out of Shops

Signals or vehicle horns will be used anytime a vehicle is moving into or out of a shop. A spotter will be used anytime a vehicle is being moved in a congested area.

#### 16.16 Speed Limit

A maximum speed limit of 5 mph will be enforced in the shop area.

#### 16.17 Shop Floors

Shop floors will be kept clean and free of oil, grease, gasoline, water and other hazardous and slippery materials. All trash should be picked up regularly.

## 16.18 Clothing

Clothing should not be loose fitting where it could get caught in moving parts.

## **16.19 Adjusting Power Units**

Never adjust or remount power units with the motor running.

# 16.20 Bench Grinder Operation

Ensure all guards and rests are in place before using a bench grinder. Never use the grinder without proper eye protection.

#### 16.21 Power Saws

Always stop a power saw and raise the blade before reaching in to retrieve materials.

#### 16.22 Removing Radiators

Large radiators should be blocked or tied to a hoist before the bolts are removed.

## 16.23 Repairing – Maintenance on Scrapers / Mixers

Never work on a scraper/mixer without the apron blocked or pinned so it won't fall. The scraper arms can be pinned to keep the cover from lowering. Make sure the wheels are blocked to prevent movement.

Never get under a mixer / scraper without the unit ignition being tagged "DO NOT START".

## 16.24 Suspended Machine or Parts

Anytime you are working under a suspended machine or part, you must be protected from an unexpected fall or slip. Make sure the lifted parts are properly blocked or supported.

## 16.25 Vehicles Locked Out

Always make sure the ignition is properly tagged, noting the unit is OUT OF SERVICE. Take the key out of the master or ignition when possible. Always warn others if you are under a vehicle.

#### 16.26 Hazardous Materials

SDS sheets should be checked to identify required personal protective equipment. Anytime solvents or hazardous materials are used the proper eyewear and other required protection should be used.

## 16.27 Approved Solvents

Only approved solvents are to be used for cleaning. The use of gasoline for cleaning is prohibited.

## **Section 17 Traffic Flagging Procedures**

## 17.1 Certified Flagger Requirements

No one should stop, direct, or flag traffic without being certified as a flagger. Using non-certified flaggers is a violation of State law.

## 17.2 Remain Alert

The flagger is a very important part of our operation. He is not only protecting our employees from traffic hazards; he is also helping to protect the public. Many times, drivers are distracted and not paying attention to the road. They may not realize traffic has stopped for a flagger until it is too late. Always remain alert to changing conditions.

## 17.3 Where To Stand

Stand on the shoulder of the road when possible. The best guide is to stand where a stop sign would normally be found. Only after you have stopped a vehicle in the traffic lane can you move into the lane for better visibility. Even though this is allowed it should be avoided when possible. If someone hits the stopped vehicle it could be pushed into you. When stopping traffic stand behind 3 orange cones for better visibility.

#### 17.4 What to Wear

A flagger must be the most visible person on the crew. Wear a clean vest and have it zipped up for best visibility. You are also required to wear a hard-hat, safety glasses and steel toe boots. In the daytime the vest must be at least a type 2 and after dark the vest must be at least a type 3.

## 17.5 Stop – Slow Paddle

The stop – slow paddle is the only approved device for flagging. The paddle must be 24 inches x 24 inches and it must be mounted at least 6 feet off the ground. Any other size paddle or height is in violation of state law.

#### 17.6 Flag

The red 24x24 flag can be used in an emergency and it can be used for short durations when a paddle is not available. It can only be used while a paddle is being obtained. The flag should be mounted on a staff about 3 feet long.

#### 17.7 Pilot Car

The pilot car method of traffic control is often used. The pilot car must have a sign on the back that states "Pilot Car Follow Me". Without this sign the pilot car is illegal.

## 17.8 Flagger Sign

The flagger sign (portable sign) is required when you are using a flagging operation. The flagger sign must be the last sign the public sees before reaching the flaggers position.

When you are not flagging traffic (even for a short period) the flagger sign must be removed or made so the public cannot see it.

#### 17.9 Dealing With the Public

When dealing with the public always be polite and understanding. It is ok to give information to the public as to what work is ahead. Keep the conversation simple and quick. You must keep your eyes on traffic at all times.

## **Section 18 Asphalt Paving**

#### 18.1 Working in Traffic

When working in traffic you must always be aware of where you are and where the traffic is passing. Remember they don't watch out for you. Think about trucks with wide mirrors. Drivers forget the mirror can stick into the other lane.

Try never to turn your back on traffic. Someone texting or distracted may cross over into your closed lane just enough to hit you. Keep an eye out and be ready to get out of the way.

#### 18.2 What to Wear

You are always required to wear a hard-hat, eye protection, steel toe shoes/boots and traffic safety vest. During the daytime hours a type 2 vest is required but a type 3 vest is required after dark. Even if you are not working in traffic, the type 3 vest is required after dark. Clean vests that are visible are necessary – never wear a dirty vest that is hard to see.

## 18.3 Footing

When working on the distributor truck, on the lay-down machine, rock spreader or around traffic in general you should always be cautious of your footing. If you trip, you could fall into the hot-mix asphalt or into traffic.

#### **18.4 Truck Caution**

During a hot-mix operation trucks are always pulling into position or pulling out into traffic. You should always be cautious and watch closely what the trucks are doing. Drivers may be watching traffic or the person signaling to them and not see where you are standing.

Trucks have blind spots and drivers may not see you. You must be alert and protect yourself from being hit by a backing truck. Let the drivers know where you are; wave your hands so you are noticed.

If you position yourself where you can see the driver in his mirror or through a window, he will have a better chance of seeing you.

More workers are killed by being backed over on roadwork jobs than for any other reason.

#### **18.5** Cleaning Tools

Tools are cleaned often while working with hot-mix to keep them from getting heavy. The build up of hot-mix can make them hard to work with. Tools should never be cleaned with diesel or gasoline. Always use an approved solvent.

Solvent must be kept in a container that is properly labeled. The container cannot be a coke bottle or other such container that can be confused by anyone. If you do not have a proper dispenser, please call the Safety Department. We can get them for you quickly.

#### 18.6 Heat – Health Risk

During the summer months, everything about hot-mix is hot. The road surface, air temperature, the equipment and the mix itself are all hot. This causes a special risk for heat related illnesses. Always drink lots of water, even when you are not thirsty. Drinking lots of water is very important. Keep an eye on those working around you. If you see someone is not drinking water or having heat related symptoms, call it to your supervisor's attention.

#### 18.7 Caution With Tools

Rakes have long handles and can easily reach into traffic lanes while you are working. Be aware of your tools and the traveling public.

#### 18.8 Fire Extinguisher

Fire extinguishers are required on every piece of equipment, and they should be checked at the start of every shift.

OSHA requires that we check every fire extinguisher once a month. It is a requirement that the supervisor complete a monthly fire extinguisher inspection form. The form is on your IPAD under forms. It is our company policy that all extinguishers will be checked at the first of every month.

All fire extinguishers should be ABC type which can be used for all type fires.

#### **Section 19 Safety Precautions With Cement and Concrete**

Extra precautions are needed around cement and fresh concrete. Any cement product when mixed with water including ready mix concrete is highly alkaline. This caustic product can cause skin irritation and even burns.

## 19.1 Keep Cement Off Skin

Experienced concrete workers protect their skin with rubber boots, gloves, and long sleeve shirts. Skin injury may result from clothing that has been wet with cement mix.

When cement dust is left on the skin, any type moisture such as sweat can set off the alkaline reaction. This can result in serious burns and irritation.

If you get fresh concrete or cement dust on the skin make sure you wash it off with large amounts of water. As soon as possible use soap and water to complete the cleaning process.

## 19.2 Eye Protection

Always wear eye protection (safety glasses) when on the job. If any cement or concrete gets in your eyes, flush with water immediately. Flushing with water for 10 minutes is suggested by our doctor. Notify your supervisor immediately. If needed, prompt medical attention will be given. Do not wait until the next day to inform your supervisor.

#### 19.3 Stav Alert

Be alert around a concrete pour. Concrete trucks are backing up with very limited visibility. Remember, it is hard to move out of the way quickly when you are standing in wet concrete.

## 19.4 Caution With Tools

Most concrete tools are metal and can be a hazard if they come into contact with electric lines. When using a bull float type tool with long metal handles be cautious of high-power lines.

Because many times we are working in wet concrete with electric vibrators, the cords should be kept out of the wet material. Ask for help with the cord or have it tied up out of the concrete.

## 19.5 Housekeeping

When working in concrete you must keep the area clear of obstructions and sharp objects. Rebar caps should be used when needed. Nails should be removed from discarded wood and sharp rebar ends should be protected.

Remember, employees are wearing rubber boots and they could step on a nail. Any housekeeping should be taken care of before the pour begins.

#### 19.6 Face Protection

OSHA required a face shield be worn while pumping concrete. The shield is to be worn over your safety glasses. Only the man controlling the hose is required to wear the shield.

#### 19.7 Heat Related Illness

Again, we are bringing up drinking water – it is very important. You can get busy doing a task and forget about getting water. Try to help everyone remember to drink lots of liquid. Even during the winter months, you must stay hydrated.

#### Section 20 Bridge Work

# 20.1 Housekeeping

Bridge work generates a large amount of used materials and material that is stocked for future use, such as forms and rebar. Caution should always be taken in keeping the material stacked neatly and in a manner that is stable. Locations should be designated for materials to keep them out of the way of men and equipment. When loading and lifting you want the material staged so it is not passed over men working below.

## 20.2 Working Over Others

When working on bridges much of the work is done above other workers and traffic. Tools and materials should be secured at all times when working at the edges or at openings.

The nature of bridge work means everything must be lifted into place. Warnings should be sounded and everyone made aware when items will be lifted overhead. If at all possible materials should not be lifted over workers.

## **20.3 Personal Protective Equipment**

Hard-hats, safety eyewear, clean safety vests and steel toe boots are required at all times.

When working in areas that require fall protection, only full harnesses will be used with the proper life lines and lanyards. The systems used must be inspected by a competent person before every work shift. See the ACCI, Fall Protection Program for more details.

## 20.4 Scaffolds and Ladders

Only properly assembled scaffolds will be used. A qualified person in setting up scaffolding must inspect the scaffold assembly every day before the shift starts. This inspection should not only include the proper assembly of the component parts but also the stability of the scaffold, the ground and footing it is set up on and whether it is properly tied off and secured.

Always keep in mind fall protection is needed above 6 feet unless you are at the hot-mix plant and then it is 4 foot. Remember handrails, toe-boards and access to the scaffold must be in place.

Ladders should be commercially built ladders meeting OSHA weight and class requirements. Ladders should always be secured before use.

If job-built ladders are going to be used they should be designed and inspected by a competent person trained in the OSHA requirements of job-built ladders.

## **20.5 Tools**

Tools should be secured when working above other employees or traffic. Every tool should have a tag line if protection is not provided between the work area and the people below.

## 20.6 Working Around Equipment

While in the process of building bridges, heavy equipment is used both on the ground and up on the structure. Special care should always be taken around equipment, but it is particularly important with bridges. When crane operators are on the ground they are looking up where the signal person is located, and they may not see you working on the ground.

When working on top of the structure the equipment has a very limited work zone. Many times, men and equipment share a very small area. Always watch out for spots where you may get pinches or trapped by the equipment.

Always remember to keep a 20 foot safety zone.

## 20.7 Hand Signal Person

The hand signal person must be trained and certified.

Only one person is allowed to give hand signals at a time. If you are not the designated signal person; do not give signals.

If you are giving signals, you must have a certification card with you.

The only time two people can give signals at the same time, is if the operator can not see the primary signal person. In this case one person is the primary signal person and the second person relays the signals from a position the operator can see. Both men are required to have a certification card with them.

#### 20.8 Materials Lifted Overhead

With bridge building, all the materials will need to be lifted to the bridge. This means many lifts will be made above the work area. All employees should pay attention to lift warnings and stay out from under any lifted load.

## **Section 21 Electrical Hazards**

## 21.1 Electrical Equipment

When working on any electric equipment the power will be shut off. The power switch will be locked-out and tagged. All hot-mix plant electrical will be done by licensed electrical contractors.

## 21.2 Lock-out / Tag-out Procedure

Haas-Anderson Construction has a Lock-out/Tag-out Policy and Program. This program should be followed any time electrical equipment is being repaired.

At the very least the main disconnect will be pulled and all blades must be inspected to make sure they are open. All switch handles must be locked and tagged out of service.

## 21.3 Protective Equipment

All personal protective equipment must be worn along with any special equipment needed for your job.

## 21.4 Jewelry

If you are working with electrical equipment, you must remove your rings and other metallic objects that could act as a conductor.

#### 21.5 Splicing Wires

When splicing electrical wires, the disconnect must be pulled, fuses removed, and the switch locked and tagged.

Keep in mind, OSHA requires any electric cord insulation to be repaired with at least an equal protection. Electric tape is not an acceptable repair.

#### 21.6 Electrical Control Panels

Electrical control boards, switches, transformers, and other hazardous electrical devices will be located so the possibility of accidental contact is minimized. Access routes to electrical controls or panels will be kept free of obstacles.

Any electrical panel exposed to the public must be locked unless it is required to be unlocked by code or other such regulation.

## 21.7 Qualified Electrician

State Law requires that any high voltage work or work on live circuits be done by a licensed electrician.

Electric work on manufacturing equipment can be done by an employee qualified in electrical work, if the power is shut off and the system is locked out. Power must be completely shut off to the entire work area.

# 21.8 Power Switch Labeling

All power switches will be labeled to conform to electrical codes and OSHA regulations.

#### 21.9 Warning Signs

Warning signs will be placed in plain sight in all areas where hazardous electrical facilities exist.

## Section 22 Alcohol and Drug Policy

We all work together to maintain a safe workplace for our employees and sub-contractors. The abuse of drugs and alcohol poses a serious threat to both our employees and the company. For the safety of our employees, ACCI has implemented a Drug and Alcohol policy. Please see the ACCI Drug and Alcohol policy for complete details.

- 1. The possession, use or sale of alcohol, illegal drugs, inhalants or the misuse of any legal prescription drug on any job-site or on company time is strictly forbidden. Any violation is subject to discipline including termination.
- 2. Any employee found to be under the influence of alcohol, illegal drugs, inhalants or misused prescription drugs on any job-site or on company time will be subject to discipline including termination.
- 3. Each employee must promptly report to his superintendent any use of prescription drugs which may affect his judgment, performance, or behavior. Failure to give warning is grounds for discipline including termination.

# 22.1 Alcohol – Drug Testing

All employees are subject to random testing for drugs and alcohol. Any employee testing positive for alcohol or drugs will be subject to discipline including termination.

## 22.2 Suspicion

Whenever a superintendent suspects that any employee's work performance may be affected in any way by alcohol or drugs, the company may require the employee to give a urine and or blood sample. Any employee who tests positive for alcohol or drugs will be subject to discipline including termination.

## 22.3 Testing After an Accident or Injury

Whenever an employee is hurt on the job or has any type of accident on company time or in a company vehicle, the company may require the employee to give a urine and or blood sample. Any employee who tests positive for alcohol or drugs will be subject to discipline including termination.

## 22.4 Job-Site Specific Requirements

Whenever a particular job-site policy requires drug or alcohol testing, all affected employees will be expected to submit to such testing as required.

#### 22.5 Refusal to Test.

Any refusal to submit to a drug or alcohol test will result in immediate termination.

#### **22.6 Search Policy**

Whenever a superintendent or other management suspects an employee's work performance may be affected in any way by alcohol or drugs, a company representative may search the employee, any vehicle belonging to ACCI as well as the employee's personal effects. Any vehicle on ACCI property or on an ACCI job-site is subject to search.

Failure to submit to the search policy can result in immediate termination.

## **22.7** Consequences for Violation of Policy

Violation of this policy may result in termination, even for the first offense. No other warning should be expected or will be given.

## Section 23 Job-Site Safety Analysis

Every day on every job-site the Superintendent will ensure the crew foreman completes a "JSA" Job Site Analysis form.

The JSA must be filled out before work starts and it must include all employees on the foreman's crew. Every employee on a job-site should be included in the JSA.

The JSA must be completed on the HCSS Ipad.

\*

# **ACKNOWLEDGMENT & CONSENT**

I have read the **ALCOHOL AND DRUG ABUSE POLICY** or have had it read to me. I understand this policy and agree to follow it without reservation.

# ACKNOWLEDGEMENT

This is to acknowledge that I have received my cope Control Program – Safety Manual. I have read a Manual. I will abide by these rules and regulations regulations pertaining to my job.	and fully understand the contents of this Safety
Employee sign	Date