

PROJECT CONTACT INFORMATION

Site Location Address: _____

Site Office Telephone:

Project Manager:

Emergency Phone Numbers

Ambulance: _____

Fire: _____

Police: _____

Poison Control:

ECS Project Manager:

ECS Project Supervisor:

ECS Health and Safety Rep:

State Agency:

Nearby Hospital:

Site Safety:

SITE DESCRIPTION

SITE SAFETY MEETINGS (Toolbox Talks)

Weekly safety meetings are another component of our Program. The Site Superintendent will hold safety-talks with the on-site workers Tuesday of each week. The meetings are intended to review and remind workers of on-going safety issues and mitigation measures to reduce the risk of on-site hazards. The first safety meeting will review this Health and Safety Plan, specifically the Job Hazard Analysis', having each employee sign-off on each one.

MATERIAL SAFETY DATA SHEETS

Material Safety Data Reports (MSDR's) for hazardous substances used during the course of our work will be kept at the site and will be made available to all workers. MSDR's may be used as topics for the weekly safety meetings. A set of the MSDR's for our work is included in this site-specific health and Safety Plan. * Please see attached MSDR's

DRUG TESTING

Any individuals observed acting unusually or out of character in a manner indicating impairment stemming from drug or alcohol use may be tested for illegal drug use and alcohol abuse. Individuals testing positive for illegal drug use or alcohol use at any time shall be removed from employment on the Project and shall be referred his union's employee assistance program (EAP).

FIRE PROTECTION

Precautions will be taken to prevent fire. Permits will be obtained and maintained up to date from the proper officials.

- Flammable materials will be stored in UL listed safety cabinets or containers.

- Secure / restrain compressed gas tanks, prevent falling,
- Provide Fire watch for at least 30 minutes after hot work is stopped – comply with NFPA 51B.
- Maintain / clean all areas within the work limits under East Coast Slurry's control.
- Never use Acetylene gas at a pressure of 15 psig.
- Never use damaged equipment.
- Never use oil or grease on or around Oxygen equipment.
- Never use Oxygen or fuel gas to blow dirt or dust off clothing or equipment.
- Never light a torch with matches or a lighter. Always use a striker.
- When opening an Oxygen or fuel cylinder valve, always crack it open first.
- Always make sure regulators have their adjusting screws released by turning them counter clockwise till free before opening cylinder valves. Stand to the side of a regulator, not in front of it when opening cylinder valves.
- Always wear the proper welding goggles, gloves and clothing when operating Oxy-Acetylene equipment. Pants should not have cuffs.
- Always have a fire extinguisher handy when operating Oxy-Acetylene equipment.
- Always replace cylinder caps when finished using cylinders.
- Do not rely on the color of the cylinder to identify its contents as some suppliers may use different color codes.
- Always use the proper regulators for the gas in the cylinder.
- Always use cylinders in the upright position only.
- Never store cylinders in temperatures over 130 degrees F.
- Always keep the valve wrench on the Acetylene cylinder valve when use. Only open valve a maximum of 1 ½ turns.
- Do not carry lighters, matches or other flammable objects in pockets when welding or cutting.
- Always be aware of others around you when using a torch.
- Be careful not to let welding hoses come into contact with torch flame or sparks from cutting.

HAZARD COMMUNICATION PROGRAM

The OSHA Hazard Communication Standard, 29 CFR 1926.59, requires that all Construction Companies develop a written Hazard Communication Program. The purpose of the Standard and the Program is to establish consistent workplace standards and requirements to protect the health and safety of all employees through the identification, communication, container labeling, dissemination of Material Safety Data Sheet information, and employee training in their safe use regarding toxic or hazardous substances used in construction. This program is designed to make sure that the hazards of all chemicals produced, imported, or used on this project are evaluated, and that this hazard information is transmitted to all affected and exposed employees.

GENERAL COMPANY PROGRAM

East Coast Slurry will comply with the OSHA Hazard Communication Standard, 29 CFR 1926.59, by having a written Hazard Communication Program, by compiling a MSDS Inventory List, by ensuring that hazardous chemical containers are properly labeled, by collecting and using Materials Safety Data Sheets (MSDS's), and by training employees as required by the Standard.

This Program applies to all work operations where an employee may be exposed to hazardous substances under normal working conditions or during a foreseeable emergency and has been incorporated by reference into the Safety Program.

Under this Program, employees will be informed of the Contents of the Hazard Communication Standard, the hazardous properties of chemicals with which they work, safe handling and storage procedures, and measures to take to protect themselves from these chemicals. They will be informed of the hazards associated with non routine tasks, such as confined space entry and the hazards associated with chemicals in unlabeled pipes or containers.

DEFINITIONS

1. **CAS Number:** The identification number assigned by the Chemical Abstracts Service to chemical substances.
2. **Chemical Name:** The scientific designation of a substance in accordance with the nomenclature system developed by the International Union of Applied Chemistry or the system developed by Chemical Abstracts Service.
3. **Material Safety Data Sheet (MSDS):** The written document, which sets forth the specific information about toxic or hazardous substances.
4. **Toxic or Hazardous Substance:** Any gas, liquid, or solid which, through its chemical proportions produces serious or lethal effects upon contact with body cells during normal operations.
5. **Technically Qualified Individual:** A person who, because of education, training, or experience, understands the health risks associated with the toxic or hazardous substance or mixture handled by or under his/her supervision, and is familiar with the personal protective procedures to be followed in the use and handling of such substances.

PROGRAM COMPONENTS

A. RESPONSIBILITIES

- The Project Safety Officer and the Project Superintendent are responsible for the implementation of this Program.
- The Project Safety Officer and the Project manager are Responsible for administering compliance with this Program.

B. CONTAINER LABELING

The Safety Officer or Project Superintendent Shall verify that all in-coming containers received for use are clearly labeled to indicate:

- The identity of the contents. (The identity must match the corresponding MSDS).
- Appropriate hazard warnings. (Including routes of entry and target organs).
- The name and address of the manufacturer, importer, or responsible party.
The area Supervisor will ensure that all secondary containers (those containers other than the original) will be labeled with:
 - The identity of the contents. (The identity must match the corresponding MSDS)
 - Appropriate hazard warnings. (Including routes of entry and target organs.)

The Hazardous Materials Identification System (HMIS) establishes guidelines and responsibilities for the identification and communication of the hazardous properties of chemicals used in the workplace.

The HMIS label is diamond shaped and divided into the following four sections:

- **HEALTH (blue): Indicating the hazard to personal health.**
- **FLAMMABILITY (red):** Indicating how easily a material will ignite and burn.
- **REACTIVITY (yellow):** Indicating how easily and how violently the material will react with other chemicals.
- **SPECIAL HAZARDS (white):** Indicating other properties of the material that may cause special problems.

A severity index from 0 to 4 will be used to rate the severity of the material in the respective hazard rating category. The criteria for this index are as follows:

- 0. Minimal hazard
- 1. Slight Hazard
- 2. Moderate Hazard
- 3. Serious Hazard

- 4. Severe Hazard

The Special hazard Index uses symbols, rather than numbers, to indicate what conditions to avoid. The criteria for the symbol index are as follows:

- ACID Acid
- ALK alkali
- COR Corrosive
- W Use no water
- OX Oxidizer
- RAD Radioactive

HAZARDOUS SUBSTANCES - UNLABELED PIPES

To ensure that our employees who work on unlabeled pipes have been informed as to the hazardous substances contained within, the following Program has been established. Prior to starting work on unlabeled pipes, our employees are to contact their supervisor for the following information:

- **The hazardous substance in the pipe.**
- **Potential hazards.**
- **Safety precautions that will be taken.**

INFORMING SUBCONTRACTORS

It is the responsibility of the Safety Officer or the Project Superintendent to provide subcontractors with the following information:

- **Notification of the toxic or hazardous substances they May have been exposed while on the project and how the appropriate MSDS can be obtained.**
- **Precautionary measures to be taken to protect employees during the workplace's normal operating conditions and in foreseeable emergencies.**
- **Explanation of labeling system used.**

The Safety Officer or Project Superintendent will be responsible for contacting each contractor and subcontractor before work is started to gather and disseminate any information concerning chemical hazards that the contractor or subcontractor is bringing onto the project site. All subcontractors are responsible for compliance with the OSHA Hazard Communication Standard, 29 CFR 1926.59, by having their own written Hazard Communication Program, by compiling a MSDS Inventory list, by ensuring that hazardous chemical containers are properly labeled, by collecting and using Material Safety Data Sheets (MSDS's), and by training employees as required by the Standard.

EMPLOYEE HAZCOM TRAINING PROGRAM

Sample Training Program

Today's training program is about chemicals you will be using on this project. We will be using some technical terms that you may not be familiar with. Stop and ask your Supervisor or the Safety Officer to explain any terms you do not understand. If your Supervisor does not know the meaning, he will contact the Safety Manager for clarification.

Chemicals are an essential part of our everyday lives. For example, the chemical caffeine occurs naturally in coffee, tea and many soft drinks. Many of us drink these products every day without fear. But, did you know that a few ounces of caffeine in concentrated form could cause death?

To ensure that you understand the hazards of chemicals on this project and you know how to use the chemicals safely, the Occupational Safety and Health Administration (OSHA) implemented a hazardous communication standard. Under this standard you have certain rights. They are:

- **The right to be informed of the identity and hazards of the chemicals used in your work area.**
- **The right to request and obtain information on hazardous chemicals you may be exposed to.**
- **The right to have access to our written Hazard Communication Program.**
- **The right to file a complaint with OSHA if you believe that you have been discriminated against by exercising your rights under the Standard.**

As mandated by this Standard, chemical manufactures or suppliers must:

- **Determine the hazards of the chemicals that they manufacture.**
- **Label all shipping containers.**
- **Provide Material Safety Data Sheets (MSDS) for all chemicals they ship.**

The Standard requires East Coast Slurry to develop, implement, and maintain a written hazard Communication Program, which must be made available to all employees. The Program describes the way we comply with the standard and how we utilize it on this project. At a minimum, the Program must contain provisions for the following:

- **First: The creation and maintenance of a list of all chemicals found on the work site. A copy must be made available to any employee during the work shift.**
- **Second: Obtain and maintain MSDS's for all chemicals found on the project.**
- **Third: Maintenance of labels on all incoming containers and labeling of all in House containers.**
- **Fourth: Informing employees of the potential hazards of non-routine work tasks.**
- **Fifth: Sharing MSDS's and other information regarding hazards and protective Measures among all contractors on site.**
- **Sixth: Provisions for training employees.**
 1. Toxic materials are those, which are poisonous to the body. How toxic a substance is depends on how much of it a person is exposed to over a period of time. Even a substance as necessary to life as salt can cause problems when too much is taken into the body. Acute toxic materials tend to have a fast acting, short term effect, which is usually reversible once the toxic exposure is removed.
 2. Chronic toxic materials have the property that low levels of exposure to them over long periods of time may present cumulative health hazards, These materials tend to effect a specific body organ or system. Some of these are liver, kidneys, nervous system, blood and lungs. Some materials, called reproductive toxins, affect the reproductive organs or can be toxic to fetuses in the womb.
 3. Another category of health hazards are called mutagens, carcinogens, and teratogens. Mutagens are materials, which cause a change in the genetic makeup of the cell. Mutagens, which cause cancer, are called carcinogens. Those which change the reproductive cells and can cause changes in the offspring are called teratogens.
 4. Corrosives are material which causes damage on contact with the skin, eyes or respiratory system. Weak corrosives whose effects of living tissue are reversible are called irritants. Materials that may be corrosive at full strength are irritants when diluted. Many corrosives are either acids or caustics. In construction, many corrosive materials are found as cleaners. It may be necessary to wear appropriate personal protective equipment when working with corrosives.
 5. Sensitizers are chemicals that react with the body's immune system. On the first exposure, which may be rather high, some mild irritation may be experienced. But on future small exposures, severe and serious allergic reactions, hives, and/or asthma-like symptoms may occur.

Chemicals can enter the body in any of three ways. They can be inhaled, ingested, or absorbed through the skin. Some chemicals can enter the body in more than one way.

1. Inhalation is the most common way that chemicals enter the body. Whenever you are doing a job that uses a toxic material, you need to exercise extra caution not to inhale the material. Ventilation can be used to remove a chemical from your breathing zone. Your supervisor will advise you if

respirators are necessary and, if so, what types. Be sure to consult the Respiratory Program in the Safety Plan.

2. Some chemicals can hurt you if accidentally eaten or swallowed. This route is referred to as ingestion. Good personal hygiene often prevents this route of entry. Washing hands before you eat and avoid any eating and smoking in the workplace are good practices.
3. Skin absorption is a hazard with many chemical. They have the ability to pass through unprotected skin into the bloodstream. Wearing proper gloves and other skin and face protection will reduce the chance of harm from this route of entry.

The information needed to use, handle, and store chemicals safely can be found on the MSDS's. These data sheets are made available to employees and are used by supervisors and employers to assure that proper protective measures are taken. Each data sheet, they all contain the same basic information. Let's now discuss by section what you can learn from reading a MSDS.

The identity section contains information about the chemical name and manufacturer of a material. An emergency telephone number is provided. Synonyms and trade names are also given.

The **Hazardous Ingredients** section lists all the hazardous ingredients and to what degree they are present in the material, along with the **Permissible Exposure Limits (PEL's)** and the **Threshold Limit Values (TLV's)**. Both measure the toxicity of the material. These measures set limits to the amounts to which a person may be exposed during the work shift.

The **Physical and Chemical Characteristics** section provides detailed information on the material, which will help you identify it by observing its appearance and odor. Information such as vapor pressure and whether the material is heavier or lighter than air will help you use the materials more safely.

The **Fire and Explosion** section gives special fire protection information. The flash point, or temperature at which the material gives off enough vapor to burn, is important. This section also tells you how to extinguish fires and any special fire fighting procedures.

The **reactivity** section gives conditions to avoid, such as a material reacting with water or decomposition due to heat or fire. The section may also indicate the shelf life of a product.

The **health hazard** section details the health hazards related to the chemical. Routes of entry into the body are noted along with a short discussion of the effects of overexposure and first aid procedures for use in an emergency. This section will also tell you if the material is a carcinogen.

The **Precautions for Handling** section tells about the precaution to take when using the material, how to store it safely, and methods for cleaning up spills. Special instructions on waste disposal are also given.

The **Control Measures** section provides very important information, which tells you how to protect yourself from the physical and health effects of the material. Usually, if adequate ventilation is available, respiratory protection is not needed. Using the correct type of gloves, clothing, eye protection, respirator or other special protective equipment should prevent overexposure. In addition, this section covers engineering controls.

When an emergency such as a chemical spill occurs, the response must be quick and effective, using the MSDS as a guide. If you do not know what to do, contact your supervisor immediately. Of course, the first place to look for **hazard information** is on the label that must be on the chemical container. It will list the name of the chemical, the name and address of the manufacturer, appropriate hazard warnings and safe handling procedures. Sometimes materials have to be transferred from the incoming container to an in-house container. In doing so, we are required to label our in-house containers. The label will list the physical effects, health effects, and target organs. On occasion, you may be required to perform a task that falls outside of your normal routine. Procedures for non-routine work tasks are found in this written Program. You should make sure you understand what precautions, if any, you need to use before undertaking non-routine work tasks.

We know that our program will only succeed if we work together in this process. If you are in any doubt about proper work procedures, ask your Supervisor or Safety Officer. Remember, it is up to you to learn about safe work practices and following the rules. Working together we can get the job done safely and without accidents. The Hazard Communications Program has been developed and implemented by East

Coast Slurry to comply with the provisions of OSHA's Hazard Communication Standards, 29 CFR 1910-1200, dated 24 August 1987 and the general spirit of safety. Please see your Project Safety Officer or Superintendent for any questions or to receive a copy of any MSDS.

East Coast Slurry has made a good faith effort to comply with the Hazard Communication requirements. This written Program documents the actions we have taken regarding our hazardous chemical information list, our MSDS, our labeling of chemical containers and our employee information and training program.

MEASURES TO ADDRESS HEALTH & SAFETY ISSUES
(JOB HAZARD ANALYSES)

The following sections address measures and engineering controls to mitigate risks associated with each of the health and safety concerns (including potential chemical, physical, and/or biological hazards) described in this site-specific health & safety plan. Specific hazards and associated protective measures for each of pages.

**JOB HAZARD ANALYSIS FOR
MACHINERY AND MECHANIZED EQUIPMENT**

Hazard Evaluation/Control Measures/Task Specific/Personal Protective Equipment

Safety for employees in contact with equipment:

- Seats or equal protection must be provided for each person required to ride on equipment.
- Do not get off machinery while in motion.
- All machinery or equipment shall be shut down while being worked on.
- Machinery being suspended while being worked on shall be blocked up.
- Mechanized equipment will be shut down during fueling operation.

Guarding and Safety devices:

- All self propelled construction equipment will be equipped with reverse signal alarms/distinguishable from the surrounding noise level. 1926.601
- All belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, etc., shall be provided with a guard.
- A warning device or signal person shall be provided where there is danger to persons from moving equipment.
- All machinery or equipment and material hoists shall have positive stops.
- Stationary machinery and equipment shall be placed on a firm foundation.
- Riding on loads, hooks, hammers, buckets, material hoist and other hoisting equipment is prohibited.
- Hoisting ropes shall be installed in accordance with the wire rope manufacturer's recommendations.

JOB HAZARD ANALYSIS FOR MIXING BENTONITE FOR SLURRY

Prior to mixing; the Bentonite bags are placed at the mixer, where they are opened and water is introduced for mixing and storage.

Hazard Evaluation / Control Measures / Task Specific Personnel Protective Equipment

- Introducing water into the mixer may cause slippery surfaces. Wearing proper footwear and exercising caution may greatly reduce any existing hazards. Grated decking should be used when available.
- While opening bags of Bentonite, use adequate ventilation to keep exposure below the recommended exposure limits. Wear a NIOSH approved respirator or equivalent.
- When disposing of Bentonite bags use good housekeeping in storage and work areas to prevent accumulation of dust.
- When sending Bentonite to storage, open and close valves slowly to avoid pulsing at the fitting joints and rupturing lines.
- When shutting down mixing operation, assure proper wash-down and housekeeping in order to avoid slippery surfaces.

Exposure to Contaminates in Bentonite

- Review Bentonite Materials Safety Data Sheets with workers.

Worker Safety around Mixer

- Maintain eye contact with operators.
- Use proper lifting techniques—lift with knees and don't turn at base of back.
- Utilize ear protection while operating the pump.
- Use of proper PPE – gloves, proper footwear, eye protection, NIOSH approved respirator or equivalent.
- Employees should take caution while using Bentonite may cause slight eye irritation – direct eye contact should be avoided to prevent physical abrasions. Flush with tepid water for 15 minutes. If irritation persists, seek medical attention.
- Wash any skin exposure with soap and water.

JOB HAZARD ANALYSIS FOR DESANDING OPERATION AND TREMIE PIPE PLACEMENT

Upon completion of excavation, the slurry in the trench must be cleaned of all sediment prior to concrete placement. This requires the building of vertical pipe to sweep the trench bottom.

Hazard Evaluation/Control Measures/Task Specific Personnel Protective Equipment

- Assure that the proper crane inspections have been conducted prior to any work in accordance to 1926.550.
- Do not work beneath area while installing frame for tremie (airlift pipe).
- When connecting tremie from the rack / inserting spaghettis – beware of pinch points and rough surfaces by utilizing gloves and grease.
- Minimize the distance of travel when swinging the tremie into place.
- When guiding tremie through the rack / doors, communication among the labor foreman and operator is crucial. This operation should not be rushed.
- For placement of the desanding machine, utilize the crane for any hose lifts, to avoid back injury, pinch points and leaking lines.
- Hearing protection should be used while operating the de-sander.

- Prior to operating the compressor, inspect all whips, safety clips and hoses.
- Proper housekeeping and wash down on wall while moving desanding pipe to avoid slip / trip / falls.
- **Use PFD's / Life rings while working around top of open panel to avoid drowning hazard in accordance with 1926.106. Properly fitted and worn at all times.**

Exposure to Contaminates in (Grease) used in tremie connection

- Review Material Safety Data Sheets for white lithium grease.

Worker Safety

- Keep workers out of swing radius of equipment/controlled access zones.
- Maintain eye contact with machine operator when passing through the controlled access zone
- Delegate single person to communicate with operator, with pre-determined hand signals.
- Utilize hearing protection.
- **Utilize PFD's while working atop of open panel. Proper fit and fastened at all times.**
- **A controlled access zone around each of our rigs, using a combination of (1) garlock (2) weighted safety barrels, connected with a brightly colored 2X4 and (3) signage stating "No Admittance".**
- A floor hole cover - of standard strength and construction to with stand twice its potential intended load. The floor cover should be clearly marked "**DANGER – FLOOR HOLE**".

JOB HAZARD ANALYSIS FOR POURING CONCRETE

Concrete will be poured into the drilled shaft excavation for the structural support of the columns. 1926.700

Hazard Evaluation / Control Measures / Task Specific Personnel Protective Equipment

- Assure that the proper crane inspections have been conducted prior to any work.
- Do not work beneath area while installing frame for tremie (airlift pipe).
- When connecting tremie from the rack / inserting spaghetitis –be aware of pinch points and rough surfaces by utilizing gloves and grease.
- Make sure that there are functioning back-up alarms on the concrete trucks.
- Work cautiously around chutes by minimizing the swing and avoiding placing hands at pinch points.
- Use proper PPE with concrete placement eye protection, gloves, rain gear.
- Minimize the distance of travel when swinging the tremie.
- Proper PPE should be used when cleaning the tremie pipe—avoids contact with skin.
- When pumping excess bentonite, use proper hearing protection.
- Utilize the crane to move / lift hose that are too heavy during clean up.
- Inspect all rigging pieces during removal of tremie doors.
- Cover / backfill the 2' gap from top of guide walls when the pour is complete.

Exposure to Contaminates in Concrete (Alkaline) solution

- Review Material Safety Data Sheets for concrete (Alkaline) solution.
- Avoid contact with skin by using proper personal protective equipment.

Worker Safety

- Employee should wear tight fitting goggles.
- The use of impervious gloves, boots and clothing to protect the skin from contact is recommended.
- No employee shall be permitted to work under concrete buckets while buckets are being elevated or lowered into position.

- No employee shall be permitted to apply cement, sand and water mixture through a pneumatic hose unless the employee is wearing protective head and face equipment.
- Keep workers out of swing radius of equipment.
- Maintain eye contact with machine operator.
- Delegate a single person to communicate with operator, with pre-determined signals.
- Designate a worker to act as a spotter for trucks and large vehicles as they back and navigate through tight spaces.
- Spotter / flagman shall know and use standard hand signals when directing the traffic.
- The spotter / flagman must maintain visual contact with the driver.
- The area shall be cleared to the rear of the truck before backing up.
- If any person, vehicle or object enters the hazard area, immediately give the stop signal to the driver and warn persons away or move objects. Clear the area before resuming the maneuver.
- Spotters should avoid walking backward, and remain clear of the line of movement of the vehicle.
- Beware of and avoid hazards, such as other vehicles, that may approach from the spotter's back.
- If the spotter must change position during the maneuver, signal to the driver to stop and move to the new position before the maneuver is to continue.
- Trucks will be equipped with back-up alarms.

Exposure Warnings

- ***Acute Exposure:*** Exposure can dry skin, cause alkali burns and affect the mucous membranes. Dust can irritate the eyes and upper respiratory system.
- ***Chronic Exposure:*** Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Repairable crystalline silica can cause silicosis.

Emergency First Aid Procedures:

- ***Eyes:*** Flush eyes thoroughly with water for 15 minutes. Call physician immediately.
- ***Skin:*** Wash skin with cool water and a mild detergent. Seek medical treatment if irritation or inflammation develops. Seek medical attention if a burn occurs.
- ***Inhalation:*** Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing does not subside. If large amounts are inhaled, seek medical attention immediately.
- ***Ingestion:*** Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

JOB HAZARD ANALYSIS FOR SETTING BEAMS / CAGES

Once the slurry in the trench / shaft has been cleaned to an acceptable level, reinforcing cages and / or steel columns will be set prior to concrete placement.

Hazard Evaluation / Control Measures / Task Specific Personal Protective Equipment

- Assure that the proper crane inspections have been conducted prior to any work.
- Prior to rigging the beams / cage, review load limits and ratings of proper rigging equipment.
- Check the rigging alignment—ensure all safety clips are properly placed.
- When lifting the beam / cage, employees should remain outside of load area and crane swing.
- A tag line should be utilized while crane swings beam / cage into place.
- Designate one person to direct crane—using standard hand signals.
- During swing / placement of beam / cage only necessary workers should be allowed in immediate area—keep work area clean to avoid slips, trips and falls.

- When working around panel top / steel frame—cover all openings with plywood that is rated to support twice the weight of an employee, equipment or materials that may be imposed at any one time.
- Proper training is required for bolting members. Do not remove rigging until 50% of bolts are in place (for spliced columns).

Worker Safety

- Keep workers out of swing radius of equipment/controlled access zones.
- Employees should maintain eye contact with machine operator at all times while passing through the controlled access zone.
- Good housekeeping is crucial to avoiding slips, trips and falls.
- 100% eye protection during entire operation in order to avoid eye damage from falling pieces during bolting members.
- 100% hard hat—during entire operation in order to avoid head injury from falling pieces during bolting members.
- Employees should have proper training prior to use of any pneumatic tools.
- Employees should avoid placing hands / fingers at the pinch points between steel pieces.
- “Garlock” bases and rails should be placed around any open trenches more than 5 feet deep to avoid falls—maintain handrails as close as possible to panel opening.
- A floor hole cover of standard strength and construction to with stand twice its potential intended load. The floor cover should be clearly marked “**DANGER – FLOOR HOLE**”.

JOB HAZARD ANALYSIS FOR DRILLED SHAFT EXCAVATION

Hazard Evaluation/Control Measures/Task specific Protective Equipment

- Assure proper training for all employees using any site equipment.
- Designate (1) person to work with the operator of the Drill Rig, with pre-determined hand signals.
- Prior to work, the rig should be inspected for rated load capacities/special hazards & instructions.
- Complete daily/monthly inspections of: house, tracks, Kelly bar, rigging, drilling equipment.
- Only designated employees allowed in the controlled access zone.

Excavation of shaft –

- Employees should remain outside of the controlled access zone to avoid the potential swing of the buckets/augers.
- Employees must remain outside of area that spoils are being spun from – buckets/augers.
- During pre-Rig inspection and removal, maintain 10 foot safety zone.
- Practice good housekeeping and wash down areas, on bentonite covered areas.
- To avoid slips – use proper footwear to protect from water and bentonite and to provide proper traction.
- Do not lean over drilled shaft to avoid falls.
- Minimize free fall by keeping slurry within 2’ of top of casing.
- Do not leave drilled shaft open – cover with an enforceable plywood able to with stand twice its intended weight.
- Minimize drowning – use a personal floatation device.
- Assure the use of “Garlock” around the drilled shaft.
- When placing guardrail system, use proper lifting techniques. Employee should lift the object with his/her legs, not back and should avoid turning from the base of the back.
- “Garlock” bases and rails should be placed around any open trenches more than 5 feet deep to avoid falls—maintain handrails as close as possible to panel opening.

- A floor hole cover of standard strength and construction to with stand twice its potential intended load. The floor cover should be clearly marked “**DANGER – FLOOR HOLE**”.

Check verticality –

- Stop all excavation operations – position the Kelly bar inside casing, then place 4’ level on Kelly bar to check the verticality.
- The operator should pay particular attention to the specialists directions

Slurry Sampling –

- Employee should remain outside of the controlled access zone to acquire samples

Worker Safety –

- **A controlled access zone around each of our rigs, using a combination of (1) garlock (2) weighted safety barrels, connected with a brightly colored 2X4 and (3) signage stating “No Admittance”.**
- Keep employees out of the controlled access zone while the rig is in operation.
- Always wear the proper personal protective equipment; safety glasses, to protection flying debris, hard hats, to avoid falling objects, proper foot gear to give good traction, and gloves when necessary.
- One specialist should be assigned to work with the operator of the rig with pre-determined had signals.

JOB HAZARD ANALYSIS FOR SLURRY WALL EXCAVATION

Once guide walls have been constructed, trench excavation along the slurry wall perimeter can commence. All excavation work shall be done in accordance with 29 CFR 1926.650-652.

Hazard Evaluation / Control Measures / Task Specific Personnel Protective Equipment

1.) Excavate to Pre-Poured Guide wall

- No employee is allowed to work under overhead loads or any other overhead work being performed without proper overhead protection. Any overhead work must be coordinated with all other contractors on the site.
- All motorized vehicles shall be equipped with audible warning devices (back up alarms). In accordance of 1926.601
- Construction equipment/vehicles shall be inspected. Regularly scheduled maintenance and repair performed to keep the units in safe operating condition.
- While excavating to the pre-poured guide wall—employees must wear a high-visibility vest.
- One designated employee to communicate with the operator, with pre-determined hand signals.

2.) Loading Trucks

- Drivers of the equipment being loaded shall remain in the cab of their vehicles, if the driver does exit the vehicle, they must wear a hard hat.

3.) Pre-Slurry Wall Excavations Site Work

- To avoid encumbrances—the operator of the loader should remove site obstacles, fill holes / trenches and keep work area level—install road plates if necessary; lay down stone / gravel.

4.) Installation of Guardrail System

- When placing guardrail system, use proper lifting techniques. Employee should lift the object with his/her legs, not back and should avoid turning from the base of the back.

- **A controlled access zone around each of our rigs, using a combination of (1) garlock (2) weighted safety barrels, connected with a brightly colored 2X4 and (3) signage stating “No Admittance”.**
- A floor hole cover of standard strength and construction to with stand twice its potential intended load. The floor cover should be clearly marked **“DANGER – FLOOR HOLE”**.
- Maintain good housekeeping around guide wall. Clean excess bentonite / water to avoid slippery conditions.

5.) **Excavation of Panel**

- The digging/rigging/hoisting equipment must be inspected for rate capacities prior to panel excavation.
- Complete daily / monthly inspections of crane.
- During the excavation of the panel—the operator must be alerted to the possibility of the swing potential of the bucket, rigging failure and the chance of hitting the guide wall during the operation.
- No employee is allowed to cross over guide wall.
- In addition, the operator should conduct a pre-excavation inspection for any overhead lines—in the event that there is overhead danger, maintain a 10 foot safety zone.
- Keep the guide wall clean of Bentonite spillages; this will give you a rough surface providing traction.
- Minimize free fall distance by keeping slurry within 2 feet of top of guide wall.
- Any employee working within the “garlock” vicinity of the guide wall must wear a personal flotation device. (PFD). In accordance to 1926.106
- Employees must remain outside of the controlled access zone.

6.) **Check Verticality**

- Stop all excavation operations to position the bucket well inside the panel to prevent contact with mini bridge.
- The operator should pay particular attention to the specialist’s directions.
- During placement of the mini-bridge, employees must use proper lifting techniques.
- To avoid slips, trips and falls—cover any open area behind the platform with plywood.

7.) **Chiseling**

- Remain outside of controlled access zone during chiseling contact
 - (a) **To Mark Cable**
 - To avoid slips, trips and falls—it is imperative that the operator and specialist have good conversation.
 - Practice good housekeeping and wash down guide wall—remove all splashed Bentonite.
 - Employees should avoid short cuts—do not cross over guide wall.

8.) **Slurry Sampling**

- Remain outside of the control access zone to acquire samples.

9.) **Exposure to Contaminates in Bentonite**

- Review Material Safety Data Sheets for Bentonite.

10.) **Worker Safety**

- **A controlled access zone around each of our rigs, using a combination of (1) garlock (2) weighted safety barrels, connected with a brightly colored 2X4 and (3) signage stating “No Admittance”.**
- Keep workers out of controlled access zones.
- Maintain eye contact with machine operator.

- Delegate single person to communicate with the operator, with pre-determined hand signals.
- Always utilize PFD's while working atop of open panel.
- Use proper footwear to protect from Bentonite / water and to provide proper traction.
- Use rough, clean guide wall top to prevent slips.
- Maintain a well-lit work area.
- Maintain handrails as close to panel as allowable.
- Cover any open areas—with plywood that is rated to support twice the weight of an employee, equipment or materials that may be imposed at any one time.
- Employees must wear a high-visibility vest while in the work zone.
- Employee should always practice proper lifting techniques—lift with your legs and not with the back.

GENERAL EMERGENCY EVACUATION FROM SITE

In the event of an emergency that requires evacuation from the site, East Coast Slurry utilizes a “pyramid approach” to alert and communicate with our workers at the site. In summary, our site superintendent will communicate with each E.C.S. foreman working with each crew by cell phone or two-way radio to evacuate the site and report to the designated muster point. Each foreman is responsible to account for each worker on his individual crew (i.e., ensure that each worker leaves the work area and is present at the muster point). The foreman will notify our superintendent that all his/her workers have or have not been safely evacuated from the site. The superintendent will double-check that all workers are accounted for by checking the Daily Superintendent Report (this report lists all workers on-site).

For our initial site work activities, the muster point will be at the Main Gate. The muster point may change throughout the progress of the project, as the construction progresses and access paths change. Any changes in the muster point will be communicated to our workers during our weekly on-site safety meetings (toolbox talks).

Alternatively, the site superintendent may choose to sound a “Warning Horn” (three long blasts of a portable air horn) to notify our employees to immediately evacuate the site and report to the muster point.

PERSONAL PROTECTION EQUIPMENT:

Based on the available information for this project, Level D is recommended for our general work at the site. As described in the East Coast Slurry Health and Safety Plan Level D consists of the following:

- Full-length work pants and shirts
- Work Gloves (during work activities that might abrade or contaminate worker's hands)
- Hard hat 100%
- Safety glasses 100%
- Hearing Protection (during work activities that produce elevated noise levels)
- Fluorescent vest 100%
- Nit rile gloves for water sampling handling
- PR-coated Tyvek ® suit, MBR outer and nit rile inner gloves if skin contact with contaminants is possible.

Higher personal protection levels (i.e., Level A, B or C) are not anticipated on this Project, and are excluded from our scope of work. If higher protection levels are detected by the engineer, work will be stopped and the conditions reviewed with the General Contractor. If engineering controls cannot be implemented such the work may continue in the Level D (described above), the work will be renegotiated and a revised Site Specific Health and Safety Plan prepared to address the planned work.

Additional task specific personal protective equipment may be required depending on the task. Individual tasks are reviewed on the following pages and include specific additional recommendations for personal protective equipment.

EMERGENCY FIRST AID

1. Survey the situation. Do not endanger your own life. DO NOT ENTER A CONFINED SPACE TO RESCUE SOMEONE WHICH HAS BEEN OVERCOME UNLESS PROPERLY EQUIPPED AND STANDBY PERSON IS PRESENT.
2. Call 911 or the Fire Department IMMEDIATELY. Explain the physical injury, chemical exposure, fire, or release.
3. Decontaminate the victim without delaying life-saving procedures.
4. If the victim's condition appears to be non-critical, but seems to be more severe than minor cuts, he/she should be transported to the nearest hospital by trained Emergency Medical Services (EMS) personnel: Let the doctor assume the responsibility for determining the severity of the injury. If the condition is obviously serious, EMS must transport the victim.
5. Notify the Project Manager and the Safety Manager. Complete the Accident/Incident (Near Miss) Form within 24 hours.

ACCIDENT PREVENTION

Recognized site hazards and an evaluation of potential dangers are presented. Both general guidelines and specific actions within this plan are designed to provide a safe workplace, as well as to safeguard the surrounding environment.

It is the policy of East Coast Slurry, and all subcontractors involved, that every employee at the site is entitled to a safe and healthful place in which to work. It is this basic concept that guided the development of this Health and Safety Plan, and which will be carried into its implementation, maintenance, and enforcement throughout the project.

Initiating action to eliminate site hazards is a direct job responsibility of every employee. The responsibility for observing safety procedures and regulations; and for Realizing the objectives of the Health and Safety Plan require that the following actions be taken:

1. Site Safety Meetings will be held weekly. Observations of compliance with standard operating procedures, the result of area monitoring, and progress in the implementation of the Health and Safety Plan will be discussed. Additional meetings will be held as needed in response to emergency or near/ miss occurrences, changes in procedures or site conditions, or anomalous air monitoring or fugitive dust control results.
2. Fire prevention and protection training will be included in the safety training.
3. A First Aid Station will be maintained onsite, and arrangements made with a Hospital to provide emergency medical response services in case of an emergency.
4. Personal Protective Equipment will be maintained in a state of instant readiness according to the procedures and schedules outlined in the PERSONAL PROTECTIVE EQUIPMENT (PPE) Section.
5. Maintaining good housekeeping and sanitation is an integral part of accident prevention and health preservation.
6. Safety training and standard operating procedures will be continually reviewed and updated to ensure a high level of safety for every phase of the operation.
7. Constant promotion of safety will be an important aspect of all site work.
8. All employees will be required to report even minor accidents to the site Superintendent, who will document each incident as referred to in the SITE SAFETY PROCEDURES.

East Coast Slurry shall comply with all applicable provisions of the Federal, State, and Local Health and Safety Statues and Codes.

Fall Protection ~ Slurry Wall Operations

These procedures identify the fall protection system to be used in slurry wall construction activities and the measures that all that is to follow in order to prevent falls from a height of 6 feet or more to a lower level. Our slurry wall excavation operations involve four separate conditions for fall exposures:

1. Those experienced while rigging up, maintaining, and repairing equipment.

2. Those experienced while working around a panel under construction.
3. Those remaining after the panel has been excavated and is being desanded & steel set or concrete poured.
4. Those remaining after a shaft has been excavated and is not being worked.

Fall exposures experienced while rigging up, maintaining, and repairing equipment will require the use of fall protection systems in the form of guardrails or personal fall arrest systems. These activities are not considered to be “leading edge” activities as defined by OSHA and the use of a written fall protection plan to avoid use of a conventional fall protection system is not applicable.

All activities that require an employee – to be 3 or more feet off the ground will require the use of a harness & lanyard.

Fall exposures experienced while working around a panel under construction will require employees to adhere to the procedures as outlined in this program. A site specific fall protection plan form shall be completed and the use of a controlled access zone with a safety monitoring system. Due to greater hazards being created or infeasible, the use of conventional fall protection systems is not recommended for these conditions.

Fall protection remaining after the panel has been excavated and is being worked will require the use of a guardrail on all sides or a cover. In this condition, the edges of the panel are considered to be “unprotected” and the use of a conventional fall protection system, such as guardrails, or a cover must be used.

Regardless of the type of fall exposure condition that may exist; the following specific responsibilities will be carried out:

The competent person (field engineer or above) is responsible for inspecting the work areas, prior to the start of work, to identify potential fall hazards for each work task and for determining the type of fall protection equipment needed to accomplish the tasks safely. This information will be recorded on the site specific fall protection plan, as required.

The competent person is responsible for insuring compliance with these procedures through continual safety checks of work operations for planning & arranging for prompt & safe rescue and/or medical treatment, if needed. They are also responsible for correcting any unsafe acts or conditions immediately & they have the authority to shut down the project if deemed necessary.

All affected employees have the responsibility to understand & adhere to these procedures and to follow the instructions given to them by the competent person.

Each worker is responsible for bringing to the attention of the competent person any unsafe or hazardous conditions or acts that may cause injury to either themselves or other employees.

Each affected employee will be trained in the requirement set forth in these procedures and will strictly adhere to them except when doing so would expose themselves or fellow workers to a greater hazard.

If a worker has a concern for their safety with respect to a potential fall hazard, then they must immediately notify the site safety coordinator of their concerns and implement control measures before proceeding.

In operations involving the excavation of panels, the following activities have been identified as, but are not limited to, activities in which a fall of 6 feet or more to a lower level could exist during the rig up & tear down of equipment:

- ~ Assembly and disassembly of equipment, and
- ~ Performance of routine maintenance and/or repair of equipment, Components (i.e., buckets, boom tip head sheaves, cable replacement, Boom moist sheaves, servicing any crane attachments).

Other activities performed in the panel excavation operation that could expose a worker to a fall of 6’ or more to a lower level include, but not limited to the following:

- ~ Reconnecting the cable to equipment when the tool is in the hole.
- ~ Checking for plumb, vertically, location, depth obstruction, marking cables.
- ~ Placing dewatering pumps, reinforcing steel, or concrete in the excavated shaft.

- ~ Installing or removing rigging from reinforcing steel
- ~ Directing ready-mix (concrete) truck or other equipment
- ~ Installing temporary panel covers or barricades

The selection of conventional fall protection equipment or other protective measures for each of these exposures will be the responsibility of the competent person, and will depend on the type and design of the equipment being used, job site layout restrictions, and terrain. East Coast Slurry's position on the use of conventional fall protection systems is that they do not lend themselves to practical application in the excavation of panels. The use of personal fall arrest systems around an excavated panel creates a greater hazard due to restricted movement, entanglements with moving objects & equipment, accidental activation of equipment controls the inability of the equipment to function properly on short less than 6 foot falls. The ability to avoid falling objects & tripping; the use of safety nets around an excavated panel is considered infeasible since their use would prevent the performance of the required work.

Fall Protection Systems

The fall protection systems that are recommended for exposures to falls 6 feet or more to a lower level include controlled access zones, safety-monitoring systems, cover for shafts, guardrails systems, and personal fall arrest systems. The following procedures provided for each system must be strictly followed.

Controlled Access Zones

A controlled access zone is an area, which has access restricted only to authorized personnel and is designated and clearly marked with appropriate warning signs, barricades, and/or lines, in which shaft excavation operations are being performed and no conventional fall protection systems are being used. The use of controlled access zones must comply with the following provisions:

1. The controlled access zone must be clearly defined by the competent person or by an individual designated by the competent person.
2. Access to the controlled access zone will be restricted to authorized entrants only and monitored by the safety monitor.
3. The controlled access zone shall be defined in a recognized manner with use of signs, wires, tapes, or ropes on stanchions, or other appropriate measures. The controlled access zone shall be established not less than 6 feet or more than 25 feet from the edge of the shaft being worked.
4. The controlled access zone must be defined and identified around the entire area where the leading edges exist.
5. When wires, tapes, or ropes on stanchion are used to define the controlled access zone, they shall be flagged or otherwise clearly marked at not more than 6-foot intervals with high-visibility material. They shall be rigged and supported in such a way that the lowest point, including sag, is not less than 39 inches from the walking/working surface. [OSHA requires ropes and tapes used for this purpose have a minimum tensile strength of 200 pounds].

Safety Monitoring Systems

A safety monitoring system is a fall protection system in which a competent person is responsible for recognizing and warning employees of fall hazards. A safety monitoring system must be used with a controlled access zone around an open shaft. It shall not be used by itself without a controlled access zone.

The safety monitor must be designed by the competent person and trained in the duties of the safety monitor. Safety monitors are responsible for continually observing work activities within the controlled access zone and for restricting entry into the controlled access zone to only authorized workers. The maximum number of workers to be monitored by one safety monitor is five (5). Only individuals with the appropriate experience, skills and training will be authorized to enter the controlled access zone by the safety monitor(s).

The duties of the safety monitor(s) are the following:

1. Be competent in recognizing fall hazards.

2. Warn workers by voice when they are approaching the open shaft in an unsafe manner, when they appear to be unaware of a fall hazard, and when a dangerous situation is developing.
3. Be on the same walking/working surface as the monitored employees and within visual sighting distance of the monitored employees.
4. Be close enough to communicate orally with monitored employees.
5. Not allow other responsibilities to encumber monitoring; the monitor shall immediately notify the competent person to designate another safety monitor.

Signs

Danger signs shall not be used without the use of other fall protection systems. Signs shall be securely mounted on guardrails around open holes and/or strategically placed around the perimeter of the controlled access zone. These signs are required to identify that a potential hazard exists. Danger sign must indicate “DANGER” and have red as the predominant color in the upper panel, black outline on the borders, and white lower panel for sign working such as “CONTROLLED ACCESS ZONE – AUTHORIZED PERSONNEL ONLY.”

Covers

Any shaft left unattended or not under construction shall be guarded by a guardrail system or completely covered by an appropriate cover. Covers will not be removed without the approval of the competent person. Covers for shafts must meet the following requirements:

1. All covers shall be capable of supporting, without failure, at least twice the weight of the employees, equipment, and materials that may be imposed on the cover at any one time.
2. All covers shall be secured when installed so as to prevent accidental displacement by the wind, equipment, etc...
3. All covers shall be color-coded or they shall be marked with the word “HOLE” or “COVER” to provide warning of the hazard.

Guardrail Systems

When used for fall protection, guardrails systems must comply with the following provisions:

1. Top edge height of top rails, or equivalent guardrails system members, shall be 42 inches plus or minus 3 inches above the walking/working level. When conditions warrant, the height of the top edge may exceed the 42-inch height, provided the guardrail system meets all other criteria listed below.
2. Mid-rails, screens, mesh, intermediate vertical members, or equivalent intermediate structural member shall be installed between the top edge of the guardrail system and the walking/working surface. There must not be openings in the guardrail system that are more than 19 inches wide.
3. Guardrail systems shall be capable of withstanding, without failure, a force of at least 200 pounds applied within 2 inches of the top edge, in any outward or downward direction, at any point along the top edge. Under a load of 200 pounds, the top edge of the guardrail must not deflect to a height less than 39 inches above the walking/working level.
4. Mid-rails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members shall be capable of withstanding, without failure, a force of at least 150 pounds applied in any downward or outward direction at any point along the mid-rail or other member.
5. Guard rail systems shall be so surfaced to minimize injury to an employee from punctures or lacerations, and to prevent snagging of clothing.
6. The ends of all-top rails and mid-rails shall not overhang the terminal posts, except where such overhang does not constitute a projection hazard.
7. Steel banding and plastic banding shall not be used as top rails or mid rails.
8. Top rails and mid-rails shall be at least one-quarter inch nominal diameter or thickness. If wire rope is used for top rails, it shall be flagged at not more than 6 feet intervals with high-visibility material.

9. When guardrail systems are used around shafts that are not under construction, all sides of the shaft must be completely enclosed by the guardrail system.

Personal Fall Arrest System

Personal fall arrest systems and their use shall comply with the provisions set forth below. **Effective January 1, 1998, body belts are not acceptable as part of a personal fall arrest system.**

1. Connectors shall be drop forged, pressed or formed steel or made of equivalent materials.
2. Connectors shall have a corrosion-resistant finish, and all surfaces and edges shall be smooth to prevent damage to interfacing parts of the system.
3. Dee-rings and snap hooks shall have a minimum tensile strength of 3,600 pounds without cracking, breaking or taking permanent deformation.
4. Dee-rings and snap hooks shall have a minimum tensile of 5,000 pounds.
5. Snap hooks shall be sized to compatible with the member to which they are connected to prevent unintentional disengagement of the snap hook by depression of the snap hook keeper by the connected member, or shall be a locking type snap hook designed and used to prevent disengagement of the snap hook by the contact of the snap hook keeper by the connected member. **Effective January 1, 1998, only locking type snap hooks shall be used.**
6. Unless the snap hook is a locking type and designed for the following connections, snap hooks shall not be engaged directly to webbing, rope or wire rope, to each other, to a dee-ring to which another snap hook or other connector is attached, to a horizontal lifeline, or to any object which is incompatibility shaped or dimensioned in relation to the snap hook such that unintentional disengagement could occur by the connected objects being able to depress the snap hook keeper and release itself.
7. Lanyards and vertical lifelines shall have a minimum tensile strength of 5,000 pounds.
8. When vertical lifelines are used, each employee shall be attached to a separate lifeline.
9. Self-retracting lifelines and lanyards that automatically limit free fall distance to 2 feet or less shall have a minimum tensile strength of 3,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.
10. Self-retracting lifelines and lanyards which do not limit free fall distance to 2 feet or less, rip stitch lanyards, and tearing and deforming lanyards shall have a minimum tensile strength of 5,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.
11. Ropes and straps used in lanyards, lifelines, and strength components of body belts and body harnesses shall be made from synthetic fibers.
12. Anchorage's used for attachment of personal fall arrest equipment shall be capable of supporting at least 5,000 pounds per employee attached.
13. Personal fall arrest systems, when stopping a fall, shall:
 - Limit maximum arresting force on an employee to 900 pounds when used with a body belt harness.
 - Limit maximum arresting force on an employee to 1,800 pounds when used with a body harness.
 - Be rigged such that an employee can neither free fall more than 6 feet nor contact any lower level.
 - Bring employee to a complete stop and limit maximum deceleration distance and employee travels to 3.5 feet.
 - Have sufficient strength to withstand twice the potential impact energy of an employee free falling a distance of 6 feet or the free fall distance permitted by the system, which ever is less.

These design controls are based on the use of the equipment by an employee having a combined person and tool weight of less than 310 pounds. If the system is used by an employee having a combined tool and body weight of 310 pounds or more, then alternative equipment must be provided for such heavier weights.

14. The attachment point of the body belt shall be located in the center of the wearer's back. The attachment point of the body harness shall be located in the center of the wearer's back near shoulder level, or above the wearer's head.
15. Body belts, harnesses, and components shall be used only for employee protection as of a personal fall arrest system.
16. Personal fall arrest system shall be inspected prior to each use for wear, damage and other deterioration. Defective components shall be removed from service. Personal fall arrest systems and components subjected to impact loading shall be immediately removed from service and shall not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.
17. The employer shall provide for prompt rescue of employees in the event of a fall assure that employees are able to rescue themselves.
18. Body belts shall be at least one and five-eighths (1 5/8) inches wide.

ACCIDENT REPORTING & INVESTIGATION PROCEDURES

The proper reporting and investigation of incidents involving falls are a necessary portion of these Procedures that an investigation takes place as soon as possible so that the cause and means of prevention can be identified to prevent a recurrence. The following guidelines will be followed in reporting, and investigating accidents, and maintaining records for injuries involving falls:

Accident Reporting

1. Employees must report all incidents resulting in personal injury to the competent person immediately.
2. The competent person must complete a written report of the incident on the same day that the incident occurred.
3. An incident involving an employee fatality or a catastrophe involving hospitalization of three or more workers will be reported by Management to the nearest OSHA office within 8 hours of the incident. This requirement applies to any fatality or multiple hospitalizations that occurs within 30 days of a work-related incident. The report must include the name of the establishment, location and time of the incident, number of fatalities or hospitalized employees, the contact person, phone number and a brief description of the incident.

COMPETENT PERSON:

In accordance of 1926.32(f), the competent person (Supervisor or Foreman) is one who is capable or identifying existing and predictable hazards in the surrounds or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate one.