

# Health, Safety & Environmental Program Policies



**ORION MARINE GROUP**



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## Orion Marine Group (OMG)

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# Orion Marine Group (OMG)

## Sec. 1.1 - Health, Safety and Environmental Policy Statement

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### **Purpose**

The purpose of this document is to set forth the Company's policy with regard to the Health, Safety & Environmental (HSE) core values, fundamental to the way we conduct business, by establishing the requirements for providing a safe, healthy and injury free workplace for all employees.

### **Responsibility**

The implementation of this policy is the responsibility of Company senior management including Managing Directors and other Directors/Executives. All employees are responsible for complying with this policy. Supervisory personnel are responsible for holding their employees accountable for meeting Company standards regarding this policy and for the application of, and compliance with, this policy at work locations where they have operational responsibilities. The Director of Corporate HSE is responsible for the administration of this policy in partnership with the Executive Management Team.

### **Policy**

Orion Marine Group (OMG) goal is to provide a safe, healthy, injury and incident free workplace for all its employees. To accomplish this, we are committed to:

- Promotion of good health
- Prevention of injuries and ill health
- Efficient use of energy and resources
- Providing reliable waste management and pollution prevention practices
- Effective employee engagement in our HSE programs
- Compliance with legal and other requirements, including applicable HSE laws, regulations and Orion HSE Standards
- Providing clients, upon request toward contract fulfillment or project requirements, with designs that are safe, cost-effective and environmentally sound
- Continual improvement of our HSE management, performance and culture

To achieve these commitments, we have developed and implemented a comprehensive HSE management system. We hold company leaders responsible and accountable for providing the financial, human, and organizational resources necessary to ensure its effective implementation and maintenance. Furthermore, our commitment to HSE excellence is demonstrated by integrating HSE into our business systems and processes, defining roles and responsibilities for personnel throughout the organization, promoting a proactive culture and healthy lifestyle, identifying risks arising from all phases of our activities and reducing those risks to the lowest practical levels and establishing ambitious goals, monitoring our performance, adopting best practices and taking action to continually improve.

This policy and the entire HS&E policy manual are communicated to all employees at the start of employment and reviewed annually to ensure it remains relevant and appropriate to Orion Marine Group.

 (Original signature on file)

Mark Stauffer  
President & CEO – Orion Group Holdings, Inc.


## Orion Marine Group (OMG)

### Sec. 1.2 - The Director of HS&E

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The person with the overall authority and ultimate responsibility for our company's Health, Safety & Environmental program is the Director of HSE - Ryan Gammons. Whenever and wherever appropriate, the Director of HSE may delegate Health, Safety & Environmental-related duties to Regional VP's, Area Managers, Project Management, Field Supervision, and/or craft employees.

We have committed our company resources toward building and maintaining an effective HSE Process though our goal of Target Zero. This commitment is backed by strong organizational policies and procedures. It is the responsibility of all corporate leadership, vice presidents, directors, managers, supervisors and employees to understand and follow all aspects of this HSE Manual.

 (Original signature on file)

Scott Cromack  
Executive Vice President – Orion Marine Group

# Orion Marine Group (OMG)

## Sec. 1.3 – HS&E Responsibilities

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Everyone's acceptance and participation in our company's HSE program is the first step toward reducing work-related injuries. However, this task can only be meaningful and effective when we succeed in getting all our employees to do their work under the common goal of Target Zero. It is Orion's goal that Target Zero will be the HSE standard our company and employee's will strive for. Only by following our focus for Target Zero can we all be assured that the company's HSE program will succeed. All company and contractor employees have the authority to stop any task or operations where concerns or questions regarding the control of HSE risk exist.

The HSE programs will succeed only when all managers, superintendents and foremen are convinced that it is their responsibility to ensure every employee at Orion strives to achieve Zero Damage, Zero Harm and Zero Incidents.

### **Focus For Target Zero**

1. Plan our work and identify the risks
2. Follow the plan and address changes as they occur
3. Set our expectations with the teams
4. Hold everyone responsible for safety
5. Have a team mentality; stay involved with our operations
6. Actively communicate safety and environmental information
7. Report all safety incidents immediately

### **Regional Vice Presidents**

The Regional VP's are responsible for the health and safety of all employees in his/her area. They will endorse the Project Managers, General Superintendents, Project Engineers and office staff.

These rolls will designate the responsibility to ensure all training is accomplished for their area and that the training is documented and retained by the HSE Management. This roll will also ensure that all managers and supervisory employees are familiar with the most recent revision of the HSE Policies and Program.

### **Project Managers**

The Project Manager in conjunction with the Regional HSE Managers are responsible for the implementation of the HSE Program contained herein. The Project Manager, in conjunction with the Site Superintendent will be responsible for ensuring that a pre-startup checklist and Site Specific Safety Plan is completed reviewed by the Regional team prior to commencing with any work.

When planning a project, the manager will consider any safety related items and discuss these items with the General and site superintendents. During this preplanning stage the Project Manager is responsible for authoring (along with HSE) the Job Hazard Analyses with assistance from the Site Superintendent and Crew. The Project Manager will copy the contract documents and drawings for the project and give to General Superintendent and field Superintendents.

The Project Manager with the field Superintendent(s) shall be responsible for all crane operations on their project and shall ensure any critical lift plans that may be required are completed and forward to the Regional HSE Manager for review.



The Project Manager will organize pre-mobilization meeting involving all necessary management but at a minimum the General Superintendent, field Superintendent(s), the Regional HSE Manager and any HSE Supervisor that may be involved, the Estimator(s), and Equipment Manager. The meeting will review scope of project, contractual agreements, site access, manpower requirements, equipment requirements, job specific safety plans, pick plans and known existing or potential hazards.

It is the Project Managers responsibility to confirm that all provisions of the above paragraphs are properly executed prior to any work commencing on the site.

Project Management or HSE Department Personnel will complete site safety audits as needed and records will be sent to the Area Manager and Regional HSE Manager. Any deficiencies noted shall include the corrective action, who the corrective action is assigned too; the date by which the corrective action is to be corrected, and any disciplinary action notices.

### **General Superintendents / Dredge Superintendents**

The General / Dredge Superintendent is responsible for assigning the Site Superintendent, operators, and general labor for each project. The General/Dredge Superintendent will confirm that each Site or Project Superintendent has the correct & updated training required by Orion to run work.

The General/Dredge Superintendent will coordinate with the Regional HSE Manager to hold safety meetings as required, with their respective superintendents and project teams to discuss the safety responsibilities, the HSE Programs and incidents that may have happened at their respective projects.

When the General / Dredge Superintendent completes a safety inspection the inspection will be copied to the Project Manager, Area Manager and Regional HSE Manager.

The General / Dredge Superintendent will attend the on-site pre-mobilization meeting involving Superintendent(s), Project Manager, and if necessary, the Regional HSE Manager (or HSE Supervisor), Estimator, and Equipment Manager. Meeting should be scheduled so all the participants can attend. Review scope of project, contractual agreements, site access, manpower requirements, equipment requirements; pick plans and known existing or potential hazards. In addition, an onsite meeting with the Owner / General Contractor, and a representative of the local community or utility companies (i.e. city or county) may be held to insure quality utility location prior to commencement of work activity for all projects where utility location is a concern. This is especially important where the locating service does not locate sewers and drains.

The General / Dredge Superintendent or designee (Site/Field Superintendent), along with the HSE Department will be responsible to authorize operators to operate a specific piece of equipment in writing with copies to the Regional HSE office.

When necessary, the General / Dredge Superintendent will aid the Field Superintendent(s) or HSE Department to conduct incident investigations. The General / Dredge Superintendent will also at times complete an independent, documented incident or near miss investigation to corroborate the Superintendent's determination and/or offer a supplementary alternative 'root cause'.

### **Site/Field Superintendents / Dredge & Vessel Captains**

For most Orion projects, the Site Superintendent / Captain is designated as the Site HSE Representative. Superintendents, Captains and foremen safety responsibilities include, but are not limited to the following:

- Conduct "Tailgate" Safety meetings with employees on weekly basis. Document the continuing effort utilizing company safety meeting forms and encourage all workers to participate by assigning them to "chair" the meeting.

- Inspect physical conditions throughout each project constantly, and correct obvious deficiencies immediately.
- Assure that all other safety related inspections are done and documented per the requirements. These inspections may be done by designated persons.
- Ensure that all cranes have daily; annual and quadrennial documented inspections.
- Investigate incidents (including near misses) immediately after the injuries and working conditions are stabilized. Utilize the company Initial Incident Notification Report to document the incident and send the completed form to the Project Manager , VP of Risk Management and the Regional HSE Manager by the end of the shift of the incident.
- Escort injured workers to a medical facility when needed (or designee).
- Complete a disciplinary action form(s) whenever necessary to document safety and other policy procedures.
- Attend required Safety Meetings and participate freely. Upon the rare instance when you cannot attend, appoint a temporary replacement.
- Insist on employees observing and obeying every rule, regulation and order as is necessary for the safe and efficient conduct of work.
- Complete new hire safety orientation and place new hires with more experienced workers to learn the job by on-the-job training.
- Confirm that operators have the necessary training and experience to operator our equipment, this includes NCCCO Crane operator requirements (or equivalent).
- Aid the Project manager in authoring the Job Hazard Analysis for each project and whenever a new process is introduced to the project. Ensure all site personnel are trained in the contents of the JHA.
- Provide personal protective equipment as required by the SSSP/JHA, train and ensure employees are using the PPE correctly.
- Aid the Project Manager in authoring Lift and Critical Pick plans for each item elevated with a crane.
- Author Near Miss reports and/or aid employees in writing near misses.
- Ensure crews perform an effective stretch and flex prior to starting each shift.
- Oversee the works of subcontractors to ensure they are complying with the project safety documents.

The Superintendent(s) / Captains, along with the General / Dredge Superintendent and Project Manager are responsible to enforce the Site Specific Safety Plan (SSSP), Job Hazard Analysis documents, complete required safety training, ensure safety is held at the highest standard on the project, verify all cranes, rigging and other mechanical equipment have been inspected prior to use; perform new hire safety orientation; maintain emergency response and communication equipment; provide PPE per the SSSP and maintaining records of the above. The Site Superintendent / Captains will ensure that the Regional HSE Manager, VP of Risk Management and Project Manager is up-to-date of any near misses, incidents or injuries. The Site Superintendent will hold a valid First Aid/CPR Certification and an OSHA 10-hour training card (at a minimum).

The Superintendent(s) / Captain will most likely also be a “Competent Person” as defined by OSHA – an individual who, by way of training and experience, is knowledgeable of applicable standards, capable of identifying workplace hazards relating to the specific operation – including but not limited to general construction safety, fall protection, rigging and confined spaces, as designated by the employer, having the authority to take appropriate actions.

In addition to the above and in order to be a “Competent Person” for excavation, one must have specific training in, and be knowledgeable of, soils analysis, the use of protective systems, and the requirements of the excavation standards.

The Superintendent / Captain will attend an on-site pre-job meeting involving General / Dredge Superintendent, Project Manager, the Regional HSE Manager and if necessary, the Estimator and Equipment Manager. The

meeting will involve a review scope of project, contractual agreements, site access, manpower requirements, and equipment requirements; pick plans and known existing or potential hazards.

### **Equipment & Yard Managers / Superintendents**

The Equipment & Yard Managers / Superintendent, or designated representative, is responsible for the following:

- Inspect the yard for hazardous conditions and correct those conditions.
- Inspect and keep fire extinguishers current by initialing the F/X tag and arranging for the annual inspection.
- Ensure equipment is sent to projects in a safe working order.
- Ensure that all personnel, including mechanics, are wearing the appropriate PPE.
- Inspect and replace, when necessary, all outside lighting.
- Maintain gates in good working condition.
- Follow correct JHA's for loading/unloading materials and equipment.
- Each driver of delivery vehicles will be: 1) licensed to drive that vehicle; 2) authorized/approved by the Fleet Manager to drive company vehicles.

This individual(s) will maintain a safe workplace by following the yard site specific safety plan and sharing the responsibility for completing the weekly tailgate meeting and daily safety talk.

### **Employees**

Employees are responsible for following the directions of the Site Superintendent, the SSSP and this program.

- Each employee is also responsible for his/her own work area, tools and equipment. Employees are required to know their job before starting work. Employees are required to ask questions if they are 'not sure' or 'don't know' how to work their job safely. Therefore, each employee shall:
  - Coordinate and cooperate with all other employees to eliminate incidents.
  - Observe all safety standards governing their work.
  - Apply the principles of incident prevention in their daily work and use proper safety devices and protective equipment as required by ORION .
  - Report each incident, injury, or near miss regardless of severity to their supervisor and HSE Manager immediately.
  - Cooperate with incident investigations.
  - Follow safe work practices.
  - Attend and participate in the weekly "Tailgate Safety Meetings", daily "Safety Huddle" and the company "Stretch and Flex" program.

### **Crane Operators**

Crane Operators will be NCCCO Certified (or equivalent) for the appropriate category and follow the directions of this HSE Program. Operators will be authorized by the Regional Equipment Manager, HSE Manager and/or project General Superintendent after review of the individual's certification.

### **Craft/Trade Workers**

- Never walk by an unsafe act or condition without stopping to correct it.
- Follow direction given by Superintendent or Lead man.
- When welding or cutting/burning wear correct tinted safety glasses/goggles AND face shields
- When cutting/burning galvanized materials wear appropriate respiratory protection.
- Wear respiratory protection as directed by the Superintendent.
- Inspect all burning/welding leads and hoses before, during and after use, replace/repair as necessary.
- When lifting heavy or awkward loads get help from mechanical means or extra persons.

# Orion Marine Group (OMG)

## Sec. 3.22 - Underground Utility Policy

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All existing utilities will be located, marked, and visually verified prior to starting any underground operation. This includes all newly constructed utilities both permanent and temporary which have been installed by either the General Contractor or other subcontractors as part of contract work.

### Utility Location Services

Prior to the start of any excavation a Utility Locate Service must be contacted. Jobs may utilize the 811 Service which will automatically route your call to the local One Call Center. Call USA at 1-800-642-2444 or 811, each state has a different locate service with specific rules outlining their services. It is very important to understand the state or local guidelines in advance of your excavation. Typically locate companies require 7 days advanced notice before performing their service. Before calling for a locate the excavation area must be pre-marked with white paint stakes or flags. Once all utility companies have confirmed that their utilities have been marked, the Dig Safe Ticket will be considered valid. Until then, it is unlawful to perform ground disturbing activities.

OMG must obtain as-built plans and any other site information from the client in order to locate any underground pipes or utilities which would interfere with the excavation. Beware that these records may not be accurate. Therefore, these obstructions should be physically located and either removed, or protected from damage.








Traffic signal wires and illumination for intersections ARE NOT covered by locate services. The superintendent is expected to exercise all due diligence in locating the traffic signal wires.

It is the responsibility of the job to understand and implement additional safety measures which may be required by the owner of the utility. These safety measures may include an owner representative to be present when working near their utility, emergency contact protocol should the safety of their utility be compromised, etc. The superintendent will verify those additional measures on their JHA and site specific safety plan (SSSP).

In addition, newly constructed work is usually not covered (i.e. drainage, new electrical installations, etc.) and should be located by other means. The engineer or superintendent responsible for this work will be contacted to verify what has been constructed and an appropriate as-built requested. The superintendent is ultimately responsible for insuring we are in compliance with our policy.

### Utility Color Markings

The following colors have been adopted by all utilities for marking underground utilities:

BLUE		Water
ORANGE		Telephone, Railroad, Cable TV
GREEN		Sewer, Storm Drain
RED		Street Lighting, Electric, Traffic Signals (may be orange)
YELLOW		Gas
PINK		Survey
WHITE		Proposed Excavation

## **Potholing**

Before excavating operations begin, potholing for the utilities will take place. Potholing is performed usually by an outside service though OMG may choose to pothole for our own work. To verify the location and depth of the utility lines, potholing will be done using hand labor or a VAC truck.

**NOTE:** Utilities typically identified by locate services have a three-foot safe zone. In other words, the utility should be within a three-foot zone of either side of the markings.

### **Procedure**

Potholing will be performed to locate the utility. The utility must be found prior to the start of excavation operations.

Use the as-built utility drawings and visual indicators such as pull boxes, manholes, luminaires, etc. to verify that all utilities in the area have been marked out by one-call. For utilities that are not marked, such as illumination and traffic signal, our own personnel will need to lay these out.

Use a Ground Penetrating Radar (GPR) and/or Electromagnetic Locator (EM) service to locate the utility prior to beginning pothole. The locate devices will also be used to track/trace the utility between pothole locations along the same utility line.

Double-check all utility locates performed by the Utility Locate Company by performing a “blind sweep” of the work area. These blind sweeps in conjunction with the use of visual indicators (i.e. pull boxes, manholes, etc.) are our only way to identify unmarked utilities or those not shown on the as-built drawings.

Once utilities are located, then the utilities must be exposed by hand. The proper tools that can be used for handwork are shovels, pry bars or vacuum truck. At no time should a pickaxe or other similar tools be used.

Once identified, all utilities will be marked with stakes and ribbon. When offset markings are necessary, the information will be clearly noted on the stake. Make sure all personnel are aware of the location of the utilities in the area. The location, depth, and other properties shall be recorded for future reference if other work will be performed in the area or there is a risk that the stakes will be wiped out.

**NEVER ASSUME THAT THE UTILITY WILL CONTINUE ON THE SAME LINE AND GRADE.**

If any damage occurs to any line during potholing, contact the utility company, the Project Manager, the HS&E Manager and the Superintendent immediately.

### **Risk Classification**

Utilities will be classified as High, Moderate, or Low Risk. The risk classification will prescribe the requirements for vacuum and/or hand excavation when digging near said utility type.

#### ***High Risk Utilities***

High risk utilities include the following:

- Direct Buried Electrical
- Gas & Fuel
- Any utility that puts OMG employees, subcontractors, or the public at significant risk
- Any utility that has significant financial risk

### ***Moderate Risk Utilities***

Moderate risk utilities include the following:

- Water lines
- Concrete jacketed electrical duct banks
- Street lighting (illumination)
- Traffic Signal
- All communication including fiber optic cabling
- Sewer Force Mains

### ***Low Risk Utilities***

Low risk utilities include but are not limited to the following:

- Sewer
- Drainage
- Irrigation

### **Excavations Near Underground Utilities**

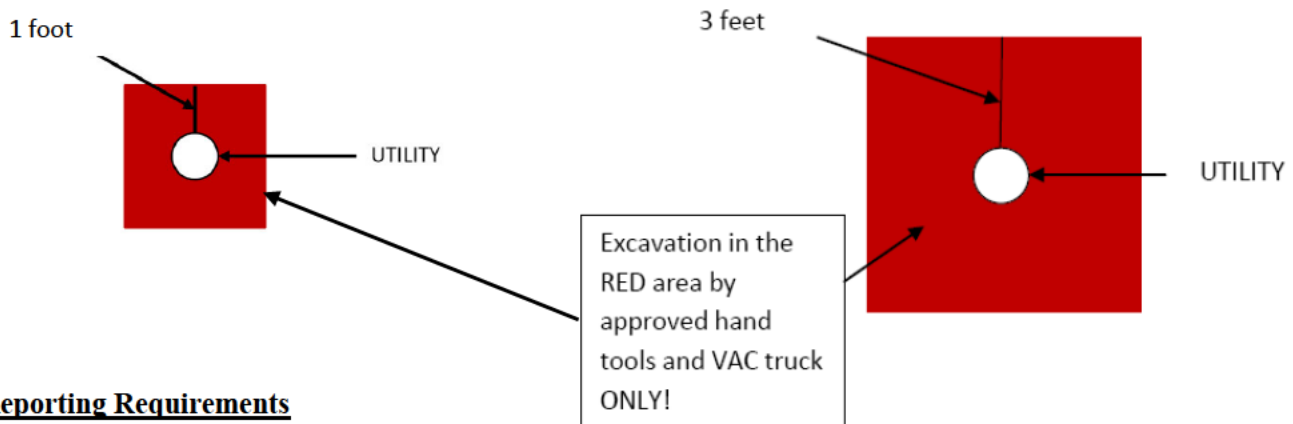
When Excavating within 3 feet of a HIGH RISK utility, in any direction, the operation will be completed using approved hand tools or a VAC truck.

Excavation within 1 foot in any direction of LOW and MODERATE RISK utilities shall only be done using vacuum and/or hand excavation methods.

\*\*If contract, local law, permits or any other governing body has a more stringent requirement the more stringent requirement will be adopted.

### **LOW and MODERATE RISK UTILITIES**

### **HIGH RISK UTILITIES**



### **Reporting Requirements**

If a utility hit does occur, several reporting steps are required:

- First, and foremost, clear and secure the area if there is potential for further exposure to hazardous environments.
- Contact the appropriate utility owner to inform them of the damage so they can inspect and repair, if necessary.
- Notify the Project Manager and HS&E Manager.

The site supervisor will complete the Initial Incident Notification and transmit it to the Regional HS&E Manager within 24 hours.

# Orion Marine Group (OMG)

## Sec. 4.1 - Job Hazard Analysis Policy

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Safe and efficient operations all start with a complete and accurate safety plan. Job Hazard Analysis (JHA) demonstrate our knowledge and understanding of the work and allow us to complete activities without sacrificing safety. As in all of our processes, safety is the first element to be planned and assessed in the pre-activity plans.

### **Job Hazard Analysis**

A job hazard analysis (JHA) is one of the most important elements in any safety program. It is our policy to have a written JHA for all scopes of work in a project. We will not begin any operation without a thorough hazard analysis that has been reviewed and signed by the crew.

### **OMG Focus for Target Zero**

- Plan our work and identify the risks
- Follow the plan and address changes as they occur
- Set your expectations with the team
- Hold everyone responsible for safety
- Have a team mentality; stay involved with our operations
- Actively communicate safety and environmental information
- Report all safety incidents immediately

### **Operation Specific Hazard Analysis**

A hazard analysis is best prepared when planning for each work activity. Superintendents/foreman with his or her crew will be involved in the preparation, review and revision of each hazard analysis. Superintendents/foreman are responsible to ensure that a proper and useable hazard analysis is completed for each work activity. The hazard analysis is a good tool to train the crew whenever the work operation starts or is changed, and to aid in instruction with new crew members.

OMG has a standard JHA form and it will be used to address hazards within the project. Crews can elect to use the standard form or utilize the JHA capabilities of HCSS. Some of the factors that are to be addressed as applicable on the JHA form are:

Access/Egress  
Ergonomic Risks  
Hazardous Materials  
Work Conditions  
Housekeeping  
Protection of Public  
Nighttime Operations

Specific Crush Points  
Operational Big Risks  
Specific PPE Needed or Required  
Overhead / Underground Utilities  
Adjacent Operations  
Fall Hazards/Preventative Measures  
Specific Equipment Hazards

A JHA must include the use of high risk or uncommon tools. Many tools or small pieces of equipment that are not common to that particular crew or project should be included in this regard. To assist in overcoming language barriers, photos of specific hazards, such as pinch points, should be considered and included within in the body of the hazard analysis for the highest probability hazards. The standard JHA form to be used on our projects is included in the appendices. Subcontractors to OMG may use their own company form if approved through the HS&E Department.

Hazard Analyses are dynamic tools and should be reviewed and modified on a regular basis. As a minimum, hazard analyses will be:

- Reviewed with crew participation prior to the start of any operation.
- Reviewed anytime a new crew member is added.
- Reviewed when a new hazard is identified.
- Reviewed and revised if necessary, following an incident or near miss.
- Revised whenever an operation is changed.
- Reviewed bi-weekly with repetitive operations.
- Reviewed each time an intermittent operation resumes.

### **Minor Operation (Daily) Hazard Analysis Books**

The Minor Operations Hazard Analysis should be used as a mechanism for the crew to identify and discuss the hazards associated with a short term task or a change in the operation. Minor Operation HA's can also be used to start the work each shift by identifying hazards specific to the crew that day. The use of the Minor Operation Hazard Analysis form will be strictly applied to the following:

- Daily hazards identified by the Superintendent in charge of the work activities.
- Operations that result from a change and are not covered on the JHA.
- Short-term, non-repetitive operations (i.e., unloading an unexpected truck, repairing an equipment, starting a new task unexpectedly).

### **Attach Relevant Documents**

Most operations have policies or Safety Data Sheets (SDS's) that are particularly relevant. Attach those relevant documents to the SSSP or JHA for the project. Other examples of relevant documents (but not limited to):

- Fall protection work plans.
- Hot work permits.
- Confined space vs. enclosed space determination.
- Crane pick plans.
- Scaffold or temporary structure inspection criteria.

### **Assessments and Inspections**

Workplace hazards can be identified in many ways. Inspections provide a system of recognizing hazardous conditions so that those conditions can be corrected. The data collected, while performing inspections, will be used to identify hazards and barriers to working safely and in an environmentally protective manner so that they can be addressed – such as procedure changes or purchasing different personal protective equipment (PPE). The data will also be tracked as a proactive measure of acceptable health, safety, and environmental (HSE) behavior on the site.

The hierarchy of controls should be used to mitigate hazards. When a hazard is identified, first attempt to eliminate the hazard. If elimination is not practicable, use engineering controls. If engineering controls are not practicable, implement administrative controls. If the hazard cannot be adequately controlled using engineering and/or administrative controls, employees must use Personal Protective Equipment. A combination of engineering controls, administrative controls, and Personal Protective Equipment is usually best.

It is required that each job site schedules and performs at least one safety focused inspection every week. This inspection will be performed by jobsite supervision and documented in HCSS. Reports and safe work observation information will be shared with employees at toolbox safety meetings. Once the hazards have been identified, it is necessary to assess what risk they pose to employees in the workplace. In this way, a measure of the risk can



be established and the priority they should have assigned for corrective action can be determined. The risk assessment step is that part of the process that assesses the probability (likelihood) and consequences (severity) of hazards that have been identified. Once the probability and consequences have been estimated for each hazard, a priority for corrective action can be allocated. JHA should be updated accordingly if or when new hazards are discovered during these inspections. All employees should be trained on the hazard identification and risk assessment process.