



## CONTRACTOR SAFETY MANUAL

This document is intended to provide all Contractors, including subcontractors, inspectors, and contract employees with the essential Environmental, Health and Safety (EHS) standards required to successfully complete tasks while working on and/or adjacent to Company job sites. This manual highlights some of the key regulatory requirements, as well as noting where Kinder Morgan has requirements that are above and beyond the regulatory requirements. **It is not intended to replace or limit EHS requirements imposed by federal, state or local regulations or to preempt standard industry practice.**

Kinder Morgan (the Company) constantly strives to maintain a safe and healthy workplace for employees and Contractors. Additionally, the Company is cognizant that our operations may impact the environment and our goal is to minimize any adverse environmental effects. To meet these goals we need assistance from our contractors. The Contractor and contract employees shall report any unsafe work condition or environmental condition which *has* or *could* have an adverse impact. The Contractors' employees shall refuse to work if an unsafe condition is not corrected.

EHS practices and procedures evolve from experience gained over many years. While these guidelines are helpful in preventing accidents, good judgment and common sense also play an important role in accident prevention. It is the Contractor and its employees' responsibility to work safely and to insist that others working with them do the same. Before undertaking a task take a moment to think about safety and the consequences of your actions.

All Contractor employees and inspectors are required to read and sign the applicable Contractor Safety & Environmental Training Document (Attachment 1) or equivalent upon completion of the Pre-Job Briefing and Site Orientation conducted prior to the start of any work activity at Company facilities and/or projects. At a minimum the contractor orientation is required annually.

Thank you for your commitment to our cooperative Contractor Safety Program. Your continued safety is our primary goal!

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### TABLE OF CONTENTS

Section	Page
INTRODUCTION.....	4
1.0 DEFINITIONS.....	5
2.0 PRE-JOB REQUIREMENTS.....	5
3.0 GENERAL INSURANCE REQUIREMENTS.....	7
4.0 ACCIDENT / INJURY REPORTING.....	7
5.0 ASBESTOS.....	8
6.0 CHAINS, SLINGS, AND CABLES.....	8
7.0 CONFINED SPACE ENTRY.....	8
8.0 CONTROL OF ALCOHOL, ILLEGAL DRUGS AND FIREARMS.....	9
9.0 ELECTRICAL SAFETY.....	10
10.0 EMERGENCY EVACUATION PROCEDURES.....	12
11.0 ENVIRONMENTAL REQUIREMENTS.....	12
12.0 EXCAVATIONS/TRENCHING/SHORING.....	13
13.0 FALL PROTECTION.....	14
14.0 FIRE PREVENTION AND PROTECTION.....	14
15.0 FIRST AID & BLOODBORNE PATHOGENS.....	14
16.0 HAZARDOUS ATMOSPHERES.....	15
17.0 HAZARDOUS ENERGY CONTROL (LOCKOUT/TAGOUT).....	16
18.0 HOT WORK PERMITS.....	16
19.0 IDENTIFICATION OF HAZARDOUS MATERIALS.....	17
20.0 JOB HAZARD ANALYSIS.....	17
21.0 LEAD IN CONSTRUCTION.....	17
22.0 NOISE / HEARING CONSERVATION.....	18
23.0 OPERATOR QUALIFICATION (OQ).....	18
24.0 PERMIT TO BEGIN WORK.....	18
25.0 PERSONAL PROTECTIVE EQUIPMENT.....	18
26.0 PROCESS SAFETY MANAGEMENT (PSM).....	19
27.0 RADIATION PRODUCING EQUIPMENT.....	19
28.0 REGULATORY AGENCY INSPECTIONS.....	19
29.0 RESPIRATORY PROTECTION.....	20
30.0 RIGHT-OF-WAY/ROADSIDE WORK.....	20
31.0 SCAFFOLDS AND LADDERS.....	21
32.0 SECURITY REQUIREMENTS (FACILITY & CONTRACTOR).....	21
33.0 SECURITY REQUIREMENTS (MARINE FACILITY).....	22

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34.0	TRAINING REQUIREMENTS .....	23
35.0	VEHICLE/MOBILE EQUIPMENT POLICY .....	23
36.0	WATER/DOCK OPERATIONS .....	24
37.0	WELDING SAFETY .....	24
38.0	WORK CLOTHING .....	25
39.0	WORKSITE SAFETY .....	25
	ATTACHMENT 1 - CONTRACTOR SAFETY & ENVIRONMENTAL TRAINING DOCUMENT .....	26

# INTRODUCTION

Contractors are required to comply with all applicable Federal, State and local safety, health and environmental regulations including all Company site-specific and/or business unit policies and procedures applicable to the scope of work being conducted. All Contractors shall have, and adhere to, their own Environmental, Health and Safety Plan. The guidelines presented in this document are not an exhaustive list of all applicable requirements and regulations for the Contractor to conduct work for the Company. Instead, these guidelines highlight certain Company standards that may be applicable for the Contractor based on the scope of work.

It is essential that these rules and safety responsibilities are understood before starting work on Company property and/or projects. Violating safety requirements could jeopardize the welfare of the Contractor and/or Company employees and could result in expulsion from Company property and/or project, and deny the Contractor the opportunity to be considered for future Company projects.

The Company updates this manual periodically. As part of the Contractors obligation, the Contractor shall request from the Company an updated Contractor Safety Manual every six (6) months throughout the term of the project. The most current copy can be found on the Company website at:

[http://www.kindermorgan.com/work/contractor\\_co/safety\\_req.cfm](http://www.kindermorgan.com/work/contractor_co/safety_req.cfm)

The Company requires that Contractors:

- Comply at all times with federal, state and local EHS laws, regulations and requirements.
- Maintain communication with the Company Representative throughout the duration of the project. The Company Representative is the employee representing the Company with the primary responsibility of overseeing the completion of the work being performed by Contractor personnel.
- Commit to worker health, safety and environmental protection.
- Maintain an effective EHS compliance program
- Employ only trained qualified individuals at the work site.
- Provide employees with appropriate equipment and training to protect workers and eliminate adverse environmental impacts.
- Work in a legal and ethical manner to protect the environment, as well as the health and safety of their work force at the project site.
- Cease operations immediately if a health, safety or environmental hazard exists at the work site.
- Review each project to identify activities that may create safety hazards or adverse impacts to the environment or the public.
- Hold jobsite safety meetings with all affected employees.
- Perform EHS site audits to identify and correct substandard EHS conditions and work practices.

Contractor employees must notify their supervisor of any unsafe conditions observed at the jobsite or work conditions having an adverse impact on the environment or the public. Contractor employees shall refuse to work if an unsafe condition is not eliminated.

Contractors are advised that the Company retains the right to question Contractor employees in regard to the content of this manual and to stop work if Contractor employees are observed operating in disregard to EHS requirements.

If these standards are not clearly understood, or if safety problems arise which are not covered by these standards, contact the Company EHS representative before proceeding. This Company EHS representative and relevant contact information shall be identified at the pre-job meeting.

All Contractors shall provide direct supervision of their employees. Contractors or subcontractors shall not be supervised by Company personnel.

The minimum age requirement for all Contractor and temporary workers is 18.

Additional information specific to Contractor Safety should be accessed through the web site [www.kindermorgan.com](http://www.kindermorgan.com) under "Work with Kinder Morgan." This web site allows access to the various forms available to achieve documentation requirements such as the Contractors Accident / Injury Report.

## **1.0 DEFINITIONS**

### **1.1 COMPANY:**

Kinder Morgan Inc., Kinder Morgan Energy Partners, L.P. or one of their subsidiaries or business units.

### **1.2 COMPETENT PERSON:**

A competent person is one who has been trained and is authorized to identify existing and predictable dangers and hazards in employee working conditions and has the authorization and training to take prompt corrective action.

### **1.3 CONTRACTOR:**

Any person contracted to perform short or long-term work for the Company. With respect to this policy, references to "Contractor" shall also include sub-contractors and third party contractors, third party inspectors, consultants (e.g. customer contract personnel and other contract personnel that may have an effect on facility safety).

### **1.4 COMPANY REPRESENTATIVE / INSPECTOR:**

Any person contracted or assigned to perform short or long-term workplace inspections for the Company. References to "representative or inspector" in these guidelines shall also include Company and third party contract inspectors.

### **1.5 COMPANY PROPERTY, JOBSITE, JOB, WORKSITE OR CONSTRUCTION SITE:**

Any real property on which Contractor will be working under the Contract Documents, whether owned by Company or not, including: terminals, facilities, stations, roads, parking lots, pipeline right-of-ways, common areas, compressor/pump station or offices.

### **1.6 WORK:**

Shall mean, any and all services, acts, obligations, duties and responsibilities necessary to the successful completion of the project assigned to or undertaken by Contractor under the Contract Documents, including the furnishing of all labor, services, materials, equipment and other incidentals.

## **2.0 PRE-JOB REQUIREMENTS**

**2.1** All Contractors are required to participate in the Company's **Contractor Safety Evaluation Program**. Each Contractor shall be required to subscribe to ISN Software Corporation (ISNetworld) or have a Contractor Exemption / Safety Evaluation form completed and signed by the Company hiring manager and/or Company V.P. Each Contractor that is required to subscribe to ISNetworld will be required to complete a Standardized Contractor Questionnaire-Verified (SCQ-V) provided by ISNetworld. The Contractor's information shall be entered in ISNetworld's online compliance database and reviewed by the Company hiring manager to ensure compliance with:

- The Company Contractor Safety Program
- DOT Operator Qualification Program if applicable
- DOT Drug and Alcohol Program if applicable

It is the Company's expectation that the Contractor's status within the ISNetworld database remain satisfactory throughout the duration of the project. If the Contractor fails to meet any applicable requirements outlined above during the duration of the contract the Contractor shall be required to submit an Action Plan outlining the Contractor's plan for correcting any deficiencies and timelines for completion. This Action Plan shall be submitted to the Company Hiring Manager and the Company Contractor Safety Group for review and approval. If the Contractor fails to meet the approved Action Plan and timelines the Company shall have the right to remove the Contractor from the project.

Contact information for ISNetworld:

ISN Software Corporation

(214) 303-1303

[www.isnetworld.com](http://www.isnetworld.com)

**2.2** The General/Prime Contractor shall evaluate all subcontractors prior to being hired to ensure they meet Company requirements. The General/Prime Contractor may utilize the CSM-005 Sub-Contractor Prequalification form or equivalent to document this evaluation.

**2.3** The Company has the right to review each Contractors' safety data and supporting documentation submitted on the Standardized Contractor Questionnaire–Verified (SCQ-V).

**2.4** The Company shall evaluate the safety performance of the Contractors as the job progresses. At a minimum this shall include periodic job site reviews.

**2.5** The Company reserves the right to request copies of all applicable procedures, plans and documentation specific to training, inspections, permitting and accident/injury reporting.

**2.6** On all major projects, multi-contractor projects and other projects that are unique or carry significant health and safety risk or as determined by the Company the Contractor shall be required to develop a project specific Health and Safety Plan (HASP). The HASP shall establish the health and safety expectations for the project, describe the key processes to be utilized during the project by the Contractor their subcontractors and assign areas of responsibility.

- Based on the project scope of work the Contractor shall develop a detailed work plan describing the project objective, timelines, required manpower, and the resources required to complete the project.
- Based on the detailed work plan the Contractor shall conduct a Hazard Evaluation to identify hazards anticipated during the project and measures that will be implemented to eliminate or control the hazard. In conjunction with the Hazard Evaluation the Contractor shall develop a project specific Health and Safety Plan (HASP). At a minimum, the HASP will address each of the subjects identified in the table of contents of this manual if applicable based on the scope of work. In addition, the HASP will describe the methods, programs, processes, and specific equipment or materials to be used in controlling the hazards.
- The Contractor HASP must also contain their plans for utilizing sub-contractors and ensure the subcontractor meets Company requirements. The general/prime contractor may utilize CSM-005, Sub-Contractor Prequalification Form or equivalent to document this evaluation. The CSM-005 form or equivalent must be completed and contained in the contractors HASP.
- Changing conditions, work scope, or new information may warrant modifications to the Project Specific – Health and Safety Plan. Modifications or changes shall be written and submitted to the Company Manager of Contractor Safety for approval.

**2.7** After the project is awarded, the Contractors' employees shall participate in the Contractor Employee Orientation Program consisting of the following elements:

**Safety Orientation**

- Prior to beginning any work with the Company, hiring manager and Company representative(s) along with the General/Prime Contractor's representative(s) and any applicable Company Operations personnel and EHS staff shall conduct a pre-job meeting covering this Contractor

Safety Manual and any site specific procedure requirements and/or Abnormal Operating Conditions (AOCs) if applicable.

- The Contractor shall ensure that all of their employees and sub-contractors receive the appropriate safety orientation. This can be accomplished by viewing the Companies “Contractor Safety DVD” and reviewing all applicable requirements outlined in the Contractor Safety Manual based on the scope of work, along with a review of any site specific procedures and requirements, emergency action plans and special circumstances associated with the project.
- The site-specific orientation shall include a review of emergency procedures, restricted areas, security, hazards that contract personnel may encounter, evacuation routes, assembly areas, emergency systems (such as eye washes, safety showers) and Contractor access and parking requirements.
- All Contractor employee orientations shall be documented with the content of the orientation on the **Contractor Pre-Job Orientation Report CSM-003** (or equivalent form). Each Contractor employee shall sign the **Contractor Safety & Environmental Training Document** (or equivalent form) to verify full understanding of the covered topics.
- A copy of the completed form shall be provided to the Company project representative and placed in the job file.
- Where applicable Contractor employees shall be issued the Company’s current “Contractor Safety Orientation” sticker for their hard hats.

**2.8** All Contractor employees and visitors to Company facilities or job sites shall sign in each time they enter/leave Company property. If necessary complete CSM-006 Contractors/Visitors Log.

**2.9** Visitors shall not be granted entry without an escort and prior permission from Company site personnel.

### **3.0 GENERAL INSURANCE REQUIREMENTS**

**3.1** All Contractors shall have insurance that complies with the Company Contract Administration and Procurement Department requirements. All changes in coverage of the Contractor’s insurance policies shall be approved by the Company Corporate Contract Administrator.

### **4.0 ACCIDENT / INJURY REPORTING (29 CFR 1904)**

**4.1** Reportable Incident is defined as any act, accident, injury, occurrence, unwanted release of energy, unwanted release of product or near miss (defined below) situation that is not considered a normal operating procedure; an occurrence that results in employee injury or monetary loss.

**4.2** A *Near Miss* is an undesired event or a condition that, under slightly different circumstances, could have resulted in injury, damage or other loss.

**4.3** The Contractor shall immediately report all Reportable Incidents to the Company representative and the local EHS representative.

**4.4** The Contractor supervisor shall submit a copy of the written report and investigation (use form CSM-001 Contractor Incident Report form for proper documentation) to the Company Representative within with in 48 hours of occurrence.

- The Contractor shall investigate all incidents that result in, or have the potential to result in, injury or illness, property damage, process/product loss or harm to the environment.
- The investigative process includes identifying root causes or causal factors that contributed to the occurrence, determining the necessary corrective actions and timely follow-up to ensure that corrective actions have been completed.
- After the Company Representative has completed the investigation section in form CSM-001 the report shall be forwarded to the Company EHS representative for review.
- In addition to the Contractor’s analysis/investigation, the Company retains the right to investigate any illnesses, injuries, fatalities, accidents or near misses occurring at its jobsite.

**4.5** Contractors shall maintain an OSHA 300 Log for their respective employees. As required by the Company EHS representative, Contractors may be required to supply a safety and environmental performance report on a bi-weekly basis, summarizing injuries and illnesses with total work hours and the total number of employees and the total number of spills and/or releases to the environment that have occurred on the project. In addition, all significant near misses shall be reported.

## **5.0 ASBESTOS (29 CFR 1926.1101 and 1910.1001)**

**5.1** The potential of encountering Asbestos-Containing Material (ACM) while performing work in Company facilities exists. It is the responsibility of the Company to identify those areas where ACM may be present and to inform Contractors of the presence and location of the ACM. All historical information pertaining to ACM located at a facility shall be available to Contractors. If a sample is required, the sampling and analysis shall be performed in accordance with all federal and state regulations, and the analytical laboratory lab shall be accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) or the American Conference of Government Industrial Hygienists (ACGIH), and the analytical results will be provided to the Company.

**5.2** The Contractor shall contact the Company representative prior to removal of ACM as the Contractor might be required to notify the applicable state agencies 10 business days prior to the removal.

**5.3** All Contractors who perform work where a potential for exposure to asbestos exists shall have a written ACM Compliance Program that meets the minimum content requirements specified in OSHA 29 CFR 1926.1101 and 1910.1001 as it relates to their specific scope of work.

**5.4** Work requiring asbestos removal shall be supervised by an individual that has received comprehensive abatement training that meets the EPA Model Accreditation Plan criteria. All asbestos abatement workers shall be trained to understand the associated health hazard, as well as the personal protective equipment and monitoring requirements associated with asbestos abatement. Training records and certificates shall be documented and maintained by the Contractor. All training records and certificates shall be readily available for review by the Company upon request.

**5.5** An enclosure shall be constructed around the area from which friable asbestos is to be removed to restrict emissions to adjacent areas.

**5.6** The Contractor shall maintain a written work plan delineating the scope of work, responsible parties and site-specific work procedures. This work plan shall be available at the jobsite.

**5.7** Daily exposure monitoring shall be conducted to ensure worker exposure is less than the Permissible Exposure Limit. Appropriate respiratory protection shall be worn as determined by the monitoring results. The Company may request documentation of monitoring results.

## **6.0 CHAINS, SLINGS, AND CABLES (29CFR 1910.179 – 1910.184)**

**6.1** The Contractor shall ensure all chains, slings and cables are applicable for the job and are maintained according to the manufacturers requirements.

- All chains, slings and cables shall have an identification tag attached that shows its load rating and limitations. Never exceed the assigned load rating for chains/slings/cables.
- Chains shall not be used for vertical lifting of materials weighing over 1000 lbs.

**6.2** Daily inspections before use shall be conducted by the Contractor to look for wear, abrasions, collapse and any other visible damage.

- A person trained to recognize defects shall perform the required inspections. Defective or damaged chains, slings, cables or components shall be removed from service immediately. Hooks, rings, links or any coupling device shall have the same or higher rating as the chain to which it is affixed. Never use makeshift links or coupling devices. Make sure attachments meet the same load standards as the cable.

## **6 CONFINED SPACE ENTRY (29 CFR 1910.146)**

**7.1** Where confined space hazards exist, the Contractor is required to have a written Confined Space Entry Program. The Contractor's written program shall meet the minimum requirements of 29 CFR 1910.146(c)(4) and any applicable state and local Confined Space Entry regulations and requirements.

**7.2** Various recognized confined space areas on Company property fall under the OSHA definition of "Permit Required Confined Space." The Company may choose to treat all confined space areas as "Permit Required Confined Spaces," depending upon the type of work to be performed within the space.

**7.3** *Confined space* means a space that:

- Is large enough and so configured that an employee can bodily enter and perform assigned work; and
- Has limited or restricted means for entry or exit; and
- Is not designed for continuous employee occupancy.

**7.4** Confined spaces may include, but are not limited to pits, tanks, vessels, vaults and manholes.

**7.5** *Permit Required Confined Space* (permit space) means a confined space, as defined above, that has one or more of the following characteristics:

- Contains or has the potential to contain a hazardous atmosphere;
- Contains a material that has the potential for engulfing an entrant;
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
- Contains any other recognized serious safety or health hazard.

**7.6** The Contractor employees shall not enter a Permit Required Confined Space until they have:

- Been trained in Permit Required Confined Space Entry;
- Completed and posted a written confined space permit issued by the Contractor at the entry location;
- Ensured that all potential sources of toxic fumes and flammable vapors have been identified and isolated;
- Assigned a trained attendant dedicated exclusively to those duties detailed in the Permit Required Confined Space procedure and capable of initiating an emergency rescue.

**7.7** Training records and certificates shall be documented and maintained by the Contractor and made available upon Company request.

## **7 CONTROL OF ALCOHOL, ILLEGAL DRUGS AND FIREARMS**

**8.1** The possession of firearms or other perceived dangerous weapons while on Company property is strictly prohibited.

**8.2** The use, sale, purchase, transfer or possession of alcohol or any illegal drugs while on Company property is strictly prohibited.

**8.3** Based on the Company business unit or DOT requirements the Contractor and its subcontractors shall establish and maintain acceptable Anti-drug and Alcohol Misuse Programs. Acceptable means the Contractor has demonstrated to the Company's satisfaction that the programs are conducted in accordance with the requirements of 49 CFR Parts 40 and 199. Such programs shall be reviewed and approved by National Compliance Management Systems (NCMS) before the Contractor or subcontractor is allowed to perform work that the Company deems "Safety Sensitive." Positions that the Company classifies as Safety Sensitive under 49 CFR Parts 40 and 199 shall be included in an approved Anti-drug Plan and an Alcohol Misuse Plan.

**8.4** If applicable, the National Compliance Management Systems (NCMS) shall evaluate the Contractor's drug/alcohol programs. The plan shall be submitted to NCMS for evaluation and approval by the Company.

Contact information of the NCMS:

National Compliance Management Systems

1-800-294-8758

[www.nationalcompliance.com](http://www.nationalcompliance.com)

**8.5** Examples of possible Contractor Post-Accident Testing Criteria:

- An event that involves the release of product;
- Death or personal injury requiring inpatient hospitalization;
- Explosion or fire;
- Release of >5 gallons of hazardous substance or carbon dioxide;
- An event that results in a facility shutdown.

**8.6** Testing shall occur following any accident/incident deemed significant by the Company that falls outside the DOT accident definitions. Contractor employees shall be tested as soon as possible following any qualifying accident as follows:

- For alcohol, within 2 hours, but no later than 8 hours after the incident
- For drugs, within 32 hours of the incident

If testing is conducted based upon suspicion the employee shall be removed from service pending test results.

## **8 ELECTRICAL SAFETY (29 CFR 1910 Subpart S and 1926 Subpart K)**

**9.1** The Contractor shall be responsible for implementing all electrical safety requirements in accordance with 29 CFR 1910 Subpart S and 1926 Subpart K.

**9.2** The Contractor shall identify all overhead power lines with signage. When it is determined that electrical lines may be affected, the Contractor shall take steps to elevate, cover or otherwise protect such cables from incidental contact. The Contractor shall advise their employees of the location of any power lines, the hazards involved and the protective measures to be taken.

**9.3** The Contractor shall contact the local utility company and be aware of any special requirements. Contractor shall maintain the clearance to the power line facilities in accordance with 29 CFR 1926.550(a)(15). This standard requires the following minimum clearances for equipment or machinery:

<b><u>Powerline Voltage</u></b>	<b><u>Minimum Clearance</u></b>
230 kV	16 feet
138 kV	14 feet
69 kV	12 feet
13 kV	10 feet
Neutral Conductor	10 feet
Communication	10 feet

**9.4** Contractor shall clearly mark all lifting or boom type equipment to show the maximum height or extension possible as measured from the ground level. If the work cannot be performed while maintaining the proper working clearances, a detailed work planning meeting shall be held with the Company representatives, Contractor and utility company.

**9.5** In addition to federal, state and local EHS laws, regulations and requirements, where applicable the Contractor shall meet the following general guidelines:

- National Electric Safety Code - NESC
- National Association of Corrosion Engineers - NACE - Standard RP-01-77
- National Fire Protection Association - NFPA - 70E (Latest edition)

**9.6** In work areas where the exact locations of the underground electrical power lines are unknown, the Contractor shall locate and clearly identify all such lines prior to beginning excavation. Power cable systems within the work area shall be de-energized during excavation whenever there is doubt about cable location.

**9.7** The Contractor shall protect employees from electric shock while using power tools, appliances and related equipment. The Contractor shall install a Ground Fault Interrupter (GFI) on all power outlets/sources that will be used during construction and maintenance or receive a variance from the KM contractor safety group prior to the project starting.

**9.8** For Company equipment operating on 440 volts or higher Contractors shall use caution around all electrical equipment, especially in wet weather. In addition to the following safety precautions, applicable laws, regulations and operating procedures shall be followed when work is performed with or around electrical equipment:

- Always follow Lockout/Tagout procedures.
- Only qualified and authorized employees shall work on electrical equipment.
- All electrical equipment shall be properly grounded and/or bonded. Reconnect all grounding/bonding cables that were removed before energizing the equipment
- All electrical equipment will be treated as if it were energized.
- The Contractor shall not leave cover plates off of electrical connection boxes, pressure switches or similar small electrical equipment. Replace all cover plate bolts or screws when work is completed and equipment energized. Do not leave the door or front panel open on any motor controller or other electrical enclosure.
- The Contractor employees working with live electrical components shall be provided with applicable rubber insulating gloves, blankets, hoods, sleeves and line hoses.
- Guards and barriers shall be used to prevent accidental contact with exposed circuits.

## **9 EMERGENCY EVACUATION PROCEDURES (29 CFR 1910.38, 1926.35)**

**10.1** The Contractor and contract personnel shall be familiar with the Company site specific Emergency Evacuation Plan, including the location of assembly areas and routes of evacuation. In the event of a fire or hazardous materials release the Contractor and their personnel are to follow the direction of Company personnel unless otherwise directed by emergency personnel (e.g., fire department, police or other regulatory personnel).

**10.2** The following is a brief summary of Contractor requirements in the event of an emergency:

- Shut-off all equipment if doing so does not present a risk of bodily injury;
- Evacuate the area. In the event of a fire or other emergency incident, contract employees are to immediately evacuate the area by the safest available route. Normally, evacuation routes shall be as specified by Company personnel;
- Confirm all Contractor employees are accounted for;
- All Contractor employees shall remain at the assembly areas until directed otherwise by Company or emergency personnel.

**10.3** If any Contractor employee suspects that an emergency condition exists, they shall immediately contact Company personnel or local authorities (e.g., call 911 or the particular emergency phone number in the area).

## **10 ENVIRONMENTAL REQUIREMENTS**

**11.1** The Contractor shall review and comply with all applicable environmental permits and conditions prior to commencing work.

**11.2** The Contractor shall comply with all applicable federal, state and local environmental laws, regulations and requirements.

**11.3** The Contractor shall handle, treat, characterize and dispose of all waste in accordance with the Resource Conservation and Recovery Act (RCRA) and any specific contract requirements, such as Company approval of the disposal site. The Contractor shall maintain a clean and safe worksite by properly disposing of trash and debris. Trash and debris shall not be burned without proper permitting. Waste and hazardous materials shall be secured while on the worksite.

**11.4** The Contractor shall not make any un-permitted discharges to water. In the event that the Contractor obtains a discharge permit under the Clean Water Act (CWA) or an applicable state law, it shall comply with all permit requirements.

**11.5** The Contractor shall perform work in a manner that prevents offsite effects of soil erosion and sedimentation in compliance with the Clean Water Act (CWA). The Contractor shall stay on approved access roads, working and parking areas. Clear and grade only areas necessary for construction by separating and replacing topsoil in accordance with project requirements. Sediment barriers shall be installed, inspected and maintained to contain spoil on the construction site and away from wetlands and water bodies. Disturbed areas shall be stabilized as soon as possible following construction in compliance with permit conditions or in accordance with landowner requirements.

**11.6** The Contractor shall not collect or disturb cultural artifacts or human remains in compliance with the National Historic Preservation Act (NHPA). If artifacts or remains are discovered, work shall stop immediately in the areas of the discovery and a Company representative shall be notified. Work in the area may resume only after the Company provides approval.

**11.7** The Contractor shall not agitate, take, feed or otherwise harm wildlife or migratory birds or their nests in compliance with the Endangered Species Act (ESA) and the Migratory Bird Treaty Act (MBTA). If wildlife or migratory birds and/or nests is affected by the construction activity, Contractor shall stop activity in the area and notify a Company representative. Work in area may resume only after the Company provides approval.

**11.8** All Contractors who meet the requirements for needing a Spill Prevention Control and Countermeasure plan (SPCC) shall comply with all applicable local, state and federal requirements. The SPCC, if needed, shall be submitted to the Company.

**11.9** Spills resulting from Contractor activity shall be reported to a Company representative immediately, and reported to regulatory agencies and cleaned-up in accordance with state and federal regulations. Contractors and inspectors are required to immediately investigate and document all Contractor incidents within 24 hours. Utilize CSM-001 for proper documentation. These types of spills include, but are not limited to: small quantities of hydraulic fluid, motor oil and fuel spilled during equipment refueling operations. For spills of petroleum product, chemicals or other hazardous materials release, also see Identification of Hazardous Materials Section 19.0.

## **11 EXCAVATIONS/TRENCHING/SHORING (29 CFR 1926.650-652, Subpart P)**

**12.1** All excavation (trenching/shoring) projects shall comply with the requirements outlined in 29 CFR 1926 Subpart P.

**12.2** Adequate protective systems such as benching, sloping or shoring are required when the sides of a trench are more than five feet deep. The use of protective systems are also required if an excavation is less than five feet in depth and the soil is unstable.

**12.3** Excavations over 20 ft deep or that do not meet OSHA requirements shall be designed by a Professional Engineer. This design shall outline the Contractor's plan for excavation requirements, such as trenching, sloping and or shielding for the particular project. The Professional Engineer design documentation shall be on site.

**12.4** All excavations shall be inspected daily by a trained "competent person". The Contractor's Competent Person shall conduct daily excavation inspections prior to anyone entering an excavation and this documentation shall be present at each excavation. Use form CSM-002 or equivalent to document these inspections. If the inspection shows the area to be unsafe, the unsafe condition shall be mitigated prior to resuming work.

**12.5** A secured ladder, ramp or other means of egress shall be provided within 25 feet of all workers in a trench that exceeds four feet in depth.

**12.6** Each job specification will determine what atmospheric monitoring (e.g., O<sub>2</sub>, LEL, H<sub>2</sub>S, CO), will be conducted prior to an employee entering an excavation that exceeds 4 feet in depth and has the potential to contain a hazardous atmosphere.

**12.7** Excavated material shall be placed at least two feet away from the edge of the excavation. (i.e. tools, spoil pile, rocks, broken concrete or other debris).

**12.8** If walkways are provided over excavations, they shall be capable of supporting the weight of the traffic, guardrails and toe boards if employees will be working below the walkway.

**12.9** After dark, excavations shall be secured to keep vehicles and unauthorized personnel out. It is required that all excavations in high profile/traffic areas warn of the danger by utilizing high visibility fencing material placed 6 feet from the edge of the excavation when possible.

**12.10** A Company representative shall review each excavation inspection report for accuracy and completion and retain in the job file.

**12.11** See the Company facility or business unit's site specific excavation procedures for any additional requirements.

## **12 FALL PROTECTION (29 CFR 1910.66 & 1926.500-503)**

**13.1** Fall protection devices shall be used whenever fall hazards exist. Contractors are required to have a written Fall Protection Compliance Program that meets the minimum content requirements of the applicable OSHA regulation, 29 CFR 1910.66 App C or 1926.500-503, and to follow that program at all times.

**13.2** Training records and certificates shall be documented and maintained by the Contractor and made available to the Company upon request.

**13.3** Workers shall be protected from fall hazards of six feet or more by guardrails or personal fall arrest systems. Personal fall arrest systems shall be rigged so that the worker cannot fall more than six feet or contact any hazard at a lower level.

**13.4** Full body harnesses, shock absorbing lanyards and a proper attachment point are the minimum requirements for a personal fall arrest system. All fall protection devices shall be properly stored, maintained and inspected for defects before each use. Harnesses, lifelines, retractable lifelines and lanyards shall be constructed of a durable material and marked with a tag stating maximum load and name of the manufacturer. Lanyards and vertical lifelines shall have a minimum breaking strength of 5,000 pounds. The Contractor is responsible to supply all fall protection equipment required for their employees. Positioning devices shall be rigged to prevent free falls more than two feet.

**13.5** The Contractor shall provide a competent person to oversee fall protection and compliance.

**13.6** The Contractor shall provide a "rescue plan" wherever personal fall arrest equipment is employed.

## **14 FIRE PREVENTION AND PROTECTION (29 CFR 1910 Subpart L and 1926 Subpart F)**

**14.1** The Contractor shall be required to provide fire prevention protection in accordance with the requirements outlined in 29 CFR 1910 Subpart L and 1926 Subpart F and/or any environmental regulatory requirements. Fire extinguishers shall be used only for the control of incipient stage fires.

**14.2** A *Fire Watch* is an individual who has been designated for monitoring the hot work site where open flames are present, where work on in-service equipment is being performed or where sparks have the potential for landing on adjacent in-service equipment. This individual is capable of evaluating unsafe conditions and initiating emergency action in the event of a fire. The fire watch can have no other assigned duties while conducting this task.

**14.3** The Contractor shall supply fire fighting equipment and ensure a fire watch is present while performing any hot work within 35 feet of combustible material or as requested by the Company.

**14.4** Fire fighting equipment and a fire watch supplied by the Contractor shall be present while performing any hot work. Access to fire fighting equipment shall be maintained at all times.

**14.5** Fire response equipment shall be inspected on a periodic basis and maintained in good working condition.

**14.6** Smoking is allowed only in designated areas. Designated smoking areas will be identified during the project pre-job construction meeting.

**14.7** "Strike Anywhere" matches or uncovered and trigger-type lighters are not allowed where potentially hazardous atmospheres may exist.

## **15 FIRST AID & BLOODBORNE PATHOGENS (29 CFR 1910.151 and 1910.1030)**

**15.1** The following are the minimum first aid requirements for Contractors working at Company facilities:

- **First Aid Trained Personnel:** The Contractor shall have personnel trained and immediately available to provide first aid treatment at the job site. All trained personnel shall possess a current (First Aid) certificate.

- First Aid Kit: Each Contractor shall supply each job site with a first aid kit supplied for potential exposures and number of employees at the job site.
- Emergency Procedures: Each Contractor shall post a copy of the Company's and/or Contractor's emergency medical procedures at the job site or have a copy immediately available, at all times, to all employees. The procedure shall include:
  - The name of the hospital or emergency care center where employees are to be transported for treatment of non life-threatening injuries;
  - Travel route to the hospital or emergency care center and emergency telephone numbers;
  - The statement "IN CASE OF SERIOUS INJURY CALL 911" (or a specified emergency number).

**15.2** The following are the minimum bloodborne pathogens requirements for Contractor's working at Company facilities:

- The Contractor's employees shall be properly trained in basic bloodborne pathogen exposure, control and post accident sanitation procedures.
- The Contractor shall provide bloodborne pathogen supplies in a location accessible to all Contractor employees.

## **16 HAZARDOUS ATMOSPHERES**

**16.1** Contractors are not to enter ANY area containing hazardous concentrations of toxic gases unless they are properly trained and utilize calibrated equipment, follow proper monitoring procedures and provide the proper personnel protective equipment (PPE).

**16.2** All personnel working in a potential H<sub>2</sub>S environment shall have certificates to verify they have been properly trained and are proficient in the use of emergency air packs. All personnel working in an H<sub>2</sub>S environment shall be required to be clean-shaven in a manner consistent with accepted practices governing SCBA use with H<sub>2</sub>S gas.

### **16.3 H<sub>2</sub>S Characteristics**

- The definition of H<sub>2</sub>S is a heavier-than-air toxic gas. At lower concentrations it has the odor of rotten eggs; at higher concentrations it may deaden the sense of smell. H<sub>2</sub>S is extremely toxic and can cause death.
- It can be detected by monitoring with properly calibrated direct-read instrumentation; if monitor alarms, immediately exit the area.
- A self-contained breathing apparatus (SCBA) is required for H<sub>2</sub>S levels exceeding the permissible exposure limit:

THE PERMISSIBLE EXPOSURE LIMIT FOR H<sub>2</sub>S IS 10 PPM.

### **16.4 Benzene Characteristics**

- A carcinogenic volatile aromatic organic chemical found in hydrocarbons. It also has a characteristic hydrocarbon odor at higher concentrations.
- Benzene can cause immediate toxicity at high concentrations but is also a long-term carcinogen at low concentrations.
- Benzene concentrations are monitored using Draeger tube air monitoring equipment. Immediately exit the area if monitoring results are above the permissible exposure limit. Personnel may wear an air-purifying respirator with organic vapor cartridges if concentration exceeds permissible exposure limit.

THE PERMISSIBLE EXPOSURE LIMIT FOR BENZENE IS 1.0 PPM.

### **16.5 Nitrogen and Other Inert Gases Characteristics**

- Gases are not toxic in themselves, but may cause asphyxiation due to lack of oxygen,

particularly in low areas and trenches. Inert gases have no color or odor and cannot be detected by sight or smell.

- Monitor for sufficient oxygen level with properly calibrated direct-reading instrumentation when inert gases are in use.
- If oxygen is low, personnel shall exit and ventilate the area.

THE OXYGEN LEVEL SHALL BE BETWEEN 19.5% AND 23.5%.

## **17 HAZARDOUS ENERGY CONTROL (LOCKOUT/TAGOUT) (29 CFR 1910.147 & 1926.417, & 1926.702)**

**17.1** The Contractor's hazardous energy control procedures shall follow applicable guidelines as outlined in 29 CFR 1910.147. The Contractor's key individual responsible for Lockout/Tagout shall be identified to a Company operations personnel and/or Company Representative.

**17.2** All Lockout/Tagout will be coordinated with Company operations personnel prior to the Contractor working in an area of hazardous or stored energy.

**17.3** The Contractor may not perform work until written approval, in the form of a Company Work Permit, has been received and understood.

**17.4** The Contractor will ensure that they understand the Company's lockout/tagout requirements and adhere to all lockout and tagout warnings including:

- Unauthorized removal of lockout/tagout devices is prohibited;
- Unauthorized operation or servicing of equipment is prohibited.

## **18 HOT WORK PERMITS (29 CFR 1910.252)**

**18.1** *Hot Work* shall be defined as any work that involves the use of open flames or other sources of ignition with the potential to generate a spark, heat or static electricity that could cause a fire or explosion.

**18.2** The Contractor shall establish written hot work procedures that meet the minimum requirements outlined in 29 CFR 1910.252 and applicable state and local regulations.

**18.3** A Hot Work Permit is required PRIOR to the start of any hot work and/or work that creates a source of ignition. Hot work permits will be coordinated with Company operations personnel or designee prior to commencing any hot work. Contractors performing hot work shall be responsible for the safe execution of assigned tasks. If an unsafe condition (or potentially unsafe condition) arises, work shall be stopped and the condition reported to Company management or designee.

**18.4** Work involving open flames or other sources of ignition on the exterior of tanks, pipelines and other structures that contain flammable or combustible liquids or any other hazardous atmosphere, presents a wide variety of potential hazards.

**18.5** Adequate knowledge of the work to be performed is essential. Proper safeguards shall be established to guard against unsuspected changes in the situation that may alter the working conditions. Hot work intended for "in-service" equipment shall follow procedures set forth for all hot work activities. Special precautions shall be identified in the hot work permit.

**18.6** Unless rated for the hazardous location, cell phones, computers, radios, lighting or pagers shall not be allowed in an area where a hazardous atmosphere may exist, unless the atmosphere has been determined to be non-hazardous and a hot work permit has been completed - **no exceptions**.

## **19 IDENTIFICATION OF HAZARDOUS MATERIALS (29 CFR 1910.1200 & 1926.59)**

**19.1** All Contractor and/or or sub-contractor employees shall be trained by their company in Hazard Communication (HazCom). The Contractor shall maintain a written program in accordance with 29 CFR 1910.1200 and applicable state and local regulations that instructs employees to comprehend Material Safety Data Sheets (MSDS), labels and safe hazardous material handling.

- Contractors shall maintain a list of hazardous chemicals, their use and storage location on the job and associated MSDS. Training shall be performed that identifies the hazards associated with the specific chemicals and their proper handling procedures.
- All chemicals used on site shall be clearly labeled, and safety precautions/warnings shall be clearly visible.
- Contractor employees shall be informed by the Contractor of all hazards associated with performing tasks and the physical hazards that may be present at the jobsite.

**19.2** Company shall inform the Contractor of known hazardous material(s) that may be present, how and where to locate material safety data sheets (MSDS) and any PPE requirements.

**19.3** Contractors are required to maintain copies of MSDS for any and all Contractor -supplied materials requiring special handling on the job site.

**19.4** Each Contractor and sub-contractor is required to provide the Company a copy of the MSDS for all chemicals brought on site.

## **20 JOB HAZARD ANALYSIS (29 CFR 1910.132)**

**20.1** Contractor shall conduct a daily Job Hazard Analysis and/or Safe Work Permit to identify Critical Tasks, any additional Personal Protective Equipment (PPE) requirements, special equipment or operators and to develop controls for any potential hazards. This assessment shall be based on the daily job scope and work area to confirm the existence of safe working conditions for their employees.

**20.2** The Job Hazard Analysis and/or Safe Work Permit shall be documented and utilized on a daily basis for each Contractor crew. Contractor shall communicate any controls required to the Company representatives.

**20.3** Company representative shall review each Job Hazard Analysis and/or Safe Work Permits for accuracy and completion, and retained in the job files.

**20.4** Contractor shall ensure pre-placement qualifications are conducted on all job tasks to ensure employees are qualified to perform the task based on the scope of work to be performed.

## **21 LEAD IN CONSTRUCTION (29 CFR 1926.62 and 1910.1025)**

**21.1** The likelihood of encountering Lead while conducting construction and maintenance activities on equipment in Company facilities exists. It is the responsibility of the Company to identify those areas where Lead may be present and to inform Contractors of the presence and location of Lead prior to conducting work. If Lead is identified in excess of threshold limits, abatement of lead-bearing materials shall be completed prior to the demolition or repair work.

**21.2** All Contractors who perform any type of work where there is exposure to regulated levels of Lead as well as maintenance or repair operations where there is exposure to Lead shall comply with 29 CFR 1926.62 and 1910.1025 and have a written compliance program.

**21.3** All Lead abatement workers shall be adequately trained to understand the hazards associated with lead exposure, the nature of operations that could expose them to lead, the purpose of medical surveillance, use of engineering work practices and respiratory protection to minimize exposure.

**21.4** Training records and certificates shall be documented and maintained by the Contractor and made available to the Company upon request.

## **22 NOISE / HEARING CONSERVATION (29 CFR 1910.95)**

**22.1** Hearing protection shall be worn in all areas where ear protection requirements are posted by the Company or the Contractor.

**22.2** Contractors are required to wear hearing protection when operating or using any equipment that emits noise at a level greater than 85 decibels.

**22.3** As a general rule of thumb, if monitoring devices are not readily available, Contractors shall wear hearing protection if it is necessary to speak above normal conversational tones in order to be heard.

## **23 OPERATOR QUALIFICATION (OQ)**

**23.1** Contractors who perform Company defined OQ-covered tasks shall be qualified to perform such tasks or be directed and observed performing such covered tasks by a qualified individual.

**23.2** The Contractor shall provide OQ documentation from the ISNetworld database for each qualified individual performing covered tasks.

**23.3** Contractor OQ action plans shall be reviewed and approved by the Company's Operator Qualification Administrator prior to performing contracted covered tasks.

**23.4** The Contractor shall supply a daily roster of qualified covered task workers to a Company representative unless the roster of covered task workers does not change from day to day during the project.

## **24 PERMIT TO BEGIN WORK**

**24.1** The Contractor is responsible for obtaining all applicable agency required permits and making all required notifications PRIOR to the start of work, unless permits are obtained and notifications are made by the Company. This includes "One Call" or excavation notices within required timelines.

**24.2** Where applicable, the Company may require the Contractor to obtain a safe work permit on a daily basis from Company operations personnel or a Company representative PRIOR to the start of work. The permits shall identify work to be completed, additional permits that may be required, potential hazards and safety measures to be followed. Additional permits that may be required are discussed in applicable sections of this manual.

**24.3** Work Permit means a daily written authorization that describes the scope of the work to be completed, describes where and when the work is to be completed, special precautions, personal protective equipment required, and emergency information. To be valid, the permit shall be signed by the designated permit issuer and it shall indicate the date and time of expiration.

## **25 PERSONAL PROTECTIVE EQUIPMENT (29 CFR 1910 Subpart I)**

**25.1** The Contractors is required to maintain a written Personal Protective Equipment (PPE) program in accordance with 29 CFR Subpart I, along with any applicable state and local regulations. Contractors shall provide training in the proper use, maintenance and inspection of PPE to their employees PRIOR to beginning work.

**25.2** The daily Job Hazard Analysis and/or Safe Work Permit shall identify and document any special or additional Personal Protective Equipment (PPE) requirements based on the scope of work to be conducted. (See the Job Hazard Analysis section 20.)

**25.3** All personal protective equipment shall comply with the applicable standards specified for that equipment.

**25.4** The Company shall not supply PPE to Contractor's employees

**25.5** The minimum PPE includes: hard hats, safety glasses, leather boots and shall include, if needed, any Business Unit or Site-Specific PPE:

- Eye and Face Protection (29 CFR 1910.133 & 1926.102) Eye protection equipment shall comply with the latest revision of ANSI Z87.1.
- Head Protection (29 CFR 1910.135 & 1926.100) – (Hardhats) Head protection shall comply with the latest revision of ANSI Z89.1
- Foot Protection (29 CFR 1910.136 & 1926.96) Leather boots are required as a minimum. Where foot hazards exist boots with safety toes shall be required and shall meet industry safety standards. Open-toe footwear and tennis shoes are prohibited.
- Hearing Protection (29 CFR 1910.95 & 1926.52) Hearing protection shall be worn in areas that have been identified or where there is a potential for exposure to high sound levels (in excess of 85 dB).
- Hand Protection (29 CFR 1910.138) Protective gloves shall be worn where hand hazards exist.

**25.6** PPE shall be upgraded when performing tasks that require additional protection or when changes in conditions are noted during monitoring of the site. Specific PPE requirements for handling hazardous substances are available in the MSDS.

## **26 PROCESS SAFETY MANAGEMENT (PSM) (29 CFR 1910.119 & 1926.450-454)**

**26.1** Contractors who perform work in a facility that is under the jurisdiction of OSHA 29 CFR 1910.119, Process Safety Management, shall comply with all applicable requirements of 1910.119 in addition to the general requirements that may be specified by the scope of work.

## **27 RADIATION PRODUCING EQUIPMENT (29 CFR 1910.1096)**

**27.1** The Contractor shall be in compliance with all Local, State and Federal safety regulations dealing with radioactive materials.

**27.2** Only properly trained, qualified personnel shall be allowed to use radiation-producing equipment or materials at Company facilities. The Contractor shall maintain records of all training and qualifications.

**27.3** Radiation warning devices and signs containing the internationally recognized symbol for radiation shall be placed around the perimeter of any area which may be affected by radiation.

**27.4** When radiographic equipment is used, the Contractor shall ensure that the area is clear and that all personnel are at a safe distance from the radiation source.

**27.5** Only properly trained and qualified persons shall be allowed entrance to these restricted areas. All dark rooms shall have a carbon monoxide monitor/alarm installed.

**26.6** Nuclear Density Gravimeters and Sulfur Analyzers contain radioactive sources that Contractors shall be aware of:

- The Contractor may not transport, commission or decommission gravimeters without written permission from the Company;
- If the Contractor must work in proximity to a gravimeter, work activities shall be coordinated with the Company Representative. Work time around the radioactive source should be minimized by pre-project planning;
- If the Contractor damages a gravimeter or observes one that may be damaged, they shall contact the Company representative immediately.

## **28 REGULATORY AGENCY INSPECTIONS**

**28.1** Company policy is to cooperate with authorized regulatory agency inspections. The Contractor is required to ensure that regulatory inspections are treated with high priority and with the utmost professionalism.

**28.2** Upon notification of a regulatory agency audit, or when it is apparent an inspection is about to take place, the Contractor shall immediately notify the Company representative and ask the agency inspector to wait to begin the inspection until the Contractor speaks with the Company representative.

**28.3** Where applicable, the Contractor shall ask the regulatory inspector to sign the visitor's register/log.

**28.4** The Contractor shall ensure the regulatory inspector follows all company safety requirements, procedures and PPE requirements.

**28.5** At a minimum, a Company representative shall accompany any regulatory inspector.

**28.6** The Contractor shall take immediate action to correct violations as requested.

**28.7** The Contractor shall verify any readings by having qualified employees perform parallel sampling and/or monitoring.

**28.8** After the agency inspection exit interview:

- The Contractor shall coordinate with the Company representative to determine potential violation items, actions for compliance, responsible parties and estimated completion date for actions.
- The Contractor shall type his/her walk-around notes and supply them to the Company representative.
- The Contractor shall correct all conditions that are in violation of regulations or standards.
- The Contractor shall document corrections taken.
- If the Contractor receives a citation, the Contractor shall notify the Company representative immediately.

## **29 RESPIRATORY PROTECTION (29 CFR 1910.134 & 1926.103)**

**29.1** Where applicable, all Contractors shall follow an approved written program relating to respirator use during work activities as required in 29 CFR 1910.134 and any applicable regulations.

**29.2** Contractor employees potentially exposed to hazardous materials above permissible exposure limits are required to have applicable respiratory protection available.

**29.3** All applicable Contractor employees shall be certified as medically fit for duty by a medical professional prior to issuance of respiratory protective equipment.

**29.4** The Contractor's written respiratory protection program, training records and certificates, medical clearance to use respiratory protective equipment and fit test records shall be documented and maintained by the Contractor and made available to the Company upon request. Contractor employees subject to Contractor's respiratory protection program shall be clean shaven at all times.

**29.5** The Contractor shall appoint a designated individual to perform air monitoring at the jobsite as needed to ensure compliance with any applicable regulations. This designated individual will inform Contractor employees when respiratory protection is required and will continue to monitor to determine if site conditions change.

## **30 RIGHT-OF-WAY/ROADSIDE WORK (29 CFR 1926.201(a) & 1926.202)**

**30.1** The Contractor shall follow an approved written plan relating to vehicular traffic control during roadside work activities. This plan shall be in compliance with 29 CFR 1926.201(a) and 29 CFR 1926.202, state and local regulations/requirements. This plan shall be available on site for review by a Company Representative.

**30.2** Contractor employees working in a public road right-of-way or otherwise exposed to vehicular traffic shall be provided, and instructed to wear, warning vests marked with or made of reflective or highly visible material.

**30.3** Barricades, cones, flashers and warning signs shall be placed at strategic locations when working on or near roads and other areas where vehicular traffic may be a hazard. Signs and flashers shall meet the requirements of applicable state and local traffic authorities.

### **31 SCAFFOLDS AND LADDERS (29 CFR Part 1926 subpart L and 1910 Subpart D)**

**31.1** Scaffolds and ladders shall be installed and used in accordance with the requirements outlined in OSHA 29 CFR Part 1926 subpart L and 1910 Subpart D.

**31.2** The Contractor shall provide a competent person to oversee scaffold erection and use.

**31.3** The Contractor shall ensure that Scaffolding design and construction provides:

- A fall arrest system in place for each employee placed more than 6 feet above a lower level;
- Level footing capable of supporting the loaded scaffold without settling;
- Components that can support at least 4 times the maximum intended load.
- In addition:
  - Scaffolds shall not be altered from their original design
  - Wire or fiber rope used for scaffold suspension shall be capable of supporting at least six times the intended load
  - An access ladder or equivalent form of safe access shall be provided
  - All scaffolding is required to have guardrails and toe boards. The rails shall be 2" x 4" or the equivalent
  - All platforms shall overlap at least 12 inches and be secured from movement
  - Overhead protection shall be provided to all employees working on or near scaffolding
  - Pole scaffolds shall be tied to the building or structure at intervals of no more than 25 feet
  - Scaffolds shall be inspected by a competent person before each work shift and after any occurrence that could affect the structural integrity. This inspection documentation shall be attached to each scaffold.

**31.4** The Company onsite representative shall review each scaffolding inspection form for accuracy and completion daily.

**31.5** The Contractor shall ensure ladders are:

- Inspected before each use.
- Extend 3 feet above the upper landing surface.
- Secured at the top and bottom to prevent slippage and workers use the three point contact rule while working or climbing on a ladder
- The Contractor shall not allow ladders to project into passageways or doorways where they could be struck by personnel, moving equipment, or materials being handled without protection by barricades or guards.

### **32 SECURITY REQUIREMENTS (FACILITY & CONTRACTOR)**

**32.1** When entering Company facilities, the Contractor employee's vehicles and belongings are subject to screening. To enter the facility, all Contractor employees shall present valid government photo identification (e.g.; State Issued Drivers License, Passport and Government Agency ID) to security or

facility personnel, sign in and out of the facility, identify the Contractor's contact person and have a clear explanation of their duties at the facility.

**32.2** Contractor employees may be required to review security requirements and complete certain security paperwork before being allowed to enter Company facilities. Furthermore, Contractor employees shall fully cooperate with all security requirements.

**32.3** A Facility Security Plan has been implemented at each facility that prescribes the security measures based on national and/or local threat levels. Depending on the nature of the threat, you may see a heightened law enforcement or military presence at the facility.

**32.4** Restricted Areas shall be designated by signs at the facility or the entire facility may be designated as a Restricted Area. These Restricted Areas require a higher level of protection and only authorized personnel may be allowed access.

**32.5** Security Awareness is paramount to security. Anyone entering the facility should be aware at all times and report anything that is suspicious. Your awareness should include at a minimum:

- Report any suspicious activity
- Be observant while on the facility and report any suspicious or dangerous substances or devices.
- Do not film or photograph the facility unless authorized. Report any unauthorized filming or photography immediately.
- Be aware of any individuals who appear agitated or nervous
- Report anyone who is wearing unusual layers of clothing or appears to be concealing something.
- Do not allow someone to use you to gain access to a facility or restricted area
- Do not lend your facility ID to anyone

**33 SECURITY REQUIREMENTS (MARINE FACILITY)**

**33.1** In addition to the security measures above: all visitors, vendors, or Contractors entering a marine facility are subject to the measures required under the Maritime Transportation Security Act of 2002 and U.S. Coast Guard and international port security regulations.

**33.2** Maritime ports and facilities have a similar system to the Department of Homeland Security's threat advisory system. The Maritime Security Levels are referred to as MARSEC levels and are set at three levels (MARSEC Level 1, Level 2 or Level 3) similar to the color coded (Homeland Security Advisory System (HSAS)) threat advisory system.

Homeland security advisory system (HSAS) threat condition	Equivalent maritime security (MARSEC) level
Low: Green	MARSEC Level 1.
Elevated: Blue	MARSEC Level 1.
Guarded: Yellow	MARSEC Level 1.
High: Orange	MARSEC Level 2.
Severe: Red	MARSEC Level 3.

- MARSEC Level 1 is equivalent to the HSAS Alert Levels Green Blue and Yellow. It is the baseline for marine security.
- MARSEC Level 2 is equivalent to HSAS threat condition Orange. At MARSEC Level 2, additional security measures above what is provided at MARSEC Level 1 shall be instituted.

- MARSEC Level 3 is the highest threat level and equivalent to HSAS threat condition Red, which signifies a probable or imminent threat. Facility operations may be suspended in whole or in part at MARSEC Level 3

**33.3** The current MARSEC Level shall be posted on signs at access points or other common locations within the facility. Elevations in the MARSEC Levels shall be taken seriously. The Facility Security Officer (FSO) shall make sure that threat level information is communicated throughout the facility. In addition, at heightened MARSEC levels, the FSO shall inform facility personnel about the threats, stress reporting procedures and the need for increased awareness.

#### **34 TRAINING REQUIREMENTS (29 CFR 1910.132)**

**34.1** The Contractor is obligated to perform the requisite safety training of its personnel relative to the scope of the subject work activities. Training and documentation for the proper use and care of applicable safety equipment shall be provided by the Contractor.

**34.2** The Contractor shall conduct safety meetings to instruct their personnel in the recognition and avoidance of hazards in the work place.

**34.3** Training shall be documented by the Contractor or each employee involved in the subject work activities. The documentation shall include each training topic discussed, content, attendees, dates and the name(s) of instructors or persons presiding.

**34.4** Safety meetings shall be conducted at an appropriate frequency, in light of the safety characteristics of the assignment, but no less than once per week.

**34.5** Safety meetings shall focus on topics related to the scope of work to be conducted to ensure all contract employees understand the safety requirements.

**34.6** Company Representatives/Inspectors shall attend these meetings to evaluate their value and improve communications.

#### **35 VEHICLE/MOBILE EQUIPMENT POLICY (29 CFR 1926.600, 1926.601, 1926.20 & 1910.179 - 1910.181)**

##### **VEHICLE SAFETY**

**35.1** All Contractor personnel shall have the proper commercial driver's licenses to operate equipment on public roadways.

**35.2** Permission is required for vehicular entry into all Company facilities. Special permission above and beyond the previous requirement is needed for vehicles to enter restricted areas such as dike areas.

**35.3** The Contractor shall comply with all applicable state laws. All persons shall be transported to and from the job site in a safe manner. Each passenger shall have adequate seating. Standing up in a moving vehicle is strictly prohibited. While on Company right of ways riding in the back of a pick-up or similar truck that has not been equipped with adequate seating is discouraged. Seat belts must be worn by driver and all passengers while on public roadways.

**35.4** All posted speed limits and traffic regulating signs shall be observed. Persons shall only drive on designated roads or right of ways.

**35.5** Reckless driving and horseplay is prohibited.

##### **MOBILE EQUIPMENT OPERATION**

**35.6** Only properly trained, qualified personnel shall be permitted to operate equipment or machinery. The Contractor shall keep records of training and qualifications on file and made available to the Company upon request.

**35.7** Contractors are prohibited from operating Company owned equipment or machinery, except under specific written authorization by Company management.

**35.8** When operating vehicles and equipment, whether on or off-road, proper PPE and safety equipment shall be used (such as helmets for off-road vehicles). The Contractor shall be responsible for providing such PPE and safety equipment.

**35.9** All cranes, mobile hydraulic and boom cranes shall meet applicable Federal, State and local requirements and have the proper inspection documentation.

**35.10** Forklifts and Forklift operators shall follow all applicable OSHA 29 CFR 1917.43 and 1910.178 requirements for the safe operations of the forklift.

**35.11** Contractor shall ensure all warning signs, rated load capacity charts, recommended operating speeds and other information is available for all mobile heavy equipment.

**35.12** Equipment operators shall not:

- Operate equipment outside of the manufacturer's recommended limits.
- Modify equipment in such a way as to render the equipment unsafe or exceed the equipment's rated load or working capacity.
- Allow anyone within the operating radius of a crane or backhoe.
- Allow passengers on industrial equipment designed for one person.
- Allow anyone to ride on equipment or in a bucket on a backhoe.

**35.13** Prior to using a crane or hoist, ensure that it has been certified and is in safe operating condition. The controls, lines, slings and other accessories shall be inspected per an established inspection program and show no sign of disrepair.

- Comply with the manufacturer's specifications and limitations applicable to the operation of the equipment.
- Establish and follow safe operating procedures for lifting and moving loads.
- Develop a written critical lift procedure for lifts that the Company deems critical due to the scope of work, hazards or costs associated with the lift.

## **35 WATER/DOCK OPERATIONS (29 CFR 1917 & 1918)**

**36.1** Contractors who perform work on marine docks or who are at risk of falling into water shall be protected from the fall utilizing the proper fall protection equipment and/or shall use United States Coast Guard (USCG)-approved personal floatation devices.

## **36 WELDING SAFETY (29 CFR 1926.350 - .354 & 1910.253)**

**37.1** The Contractor shall meet all OSHA requirements as it relates to welding safety and compressed gas cylinders.

**37.2** Persons welding and cutting shall be qualified and trained in accordance with applicable codes and shall be thoroughly familiar with potential hazards of the operation and precautions necessary to ensure safety.

- Grinder guards shall be required on all abrasive grinding wheels per the OSHA standard or the Contractor must obtain a written variance from OSHA. This variance shall be maintained on the job site.

## **37 WORK CLOTHING**

**38.1 Normal Work Attire:** Sleeved shirts and long pants are required at all times. Sleeveless shirts, tank top-type shirts, or shirtless attire are not allowed. Where hazards exist due to moving parts on machinery or equipment, clothing shall be maintained to avoid entanglement.

**38.2 Special Work Clothing:** Appropriate work clothing shall be worn where exposure to fire, extreme heat or cold, corrosive chemicals, electrical hazards, body impacts, cuts from handled materials or other specialized hazards are possible. See the facility or business unit's site specific procedures for any additional requirements such as Fire Retardant Clothing (FRC). When FRC is required, the Contractor shall supply it to their employees and ensure it is in good condition.

## **38 WORKSITE SAFETY (29 CFR 1910.22)**

**39.1** It is the responsibility of each Contractor to inspect each work area at the beginning of each shift, and periodically thereafter, to ensure safe working conditions exist.

**39.2** The Contractor shall inform each of its affected employees of any concealed dangers or changes in work conditions. The Contractor shall comply with all applicable regulations.

**39.3** The Contractor shall provide illumination bright enough for work to proceed without risking personal injury or affecting the quality of work.

**39.4** All tools shall be used, maintained and inspected in accordance with the requirements as outlined in OSHA 29 CFR 1926 Subpart I.

**39.5** The Contractor shall clean their work areas following the end of each work shift. Debris shall be placed in appropriate containers and properly disposed. All tools and equipment remaining at the job site shall be properly stored.

**39.6** The Contractor shall provide an adequate supply of fresh drinking water on a daily basis for its employees. Portable rest room facilities shall be required and provided and maintained by the Contractor.

**39.7** Pets are not allowed on Company property without written permission from the Company representative.

For further information, visit the [Contractor Companies – Safety Compliance](#) webpage on [www.kindermorgan.com](http://www.kindermorgan.com).

### **Contractor Safety Forms**

[CSM-001 Contractor Accident / Injury Report](#)  
[CSM-002 Excavation Inspection Report](#)  
[CSM-003 Contractor Pre-Job Safety Orientation Report](#)  
[CSM-005 Sub-Contractor Prequalification](#)  
[CSM-004 Job Hazard Analysis](#)  
[CSM-006 Kinder Morgan Contractors / Visitors Log](#)  
[CSM-007 Contractor Incident Reporting Log](#)  
[CSM-008 Visitor Safety Orientation](#)

