

## CONTRACTOR (ENVIRONMENTAL/SAFETY) MANUAL

\*The latest update of this manual is available from the Kinder Morgan Intranet and the Kinder Morgan web site.

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## SECTION 1: INTRODUCTION / GENERAL REQUIREMENTS / DEFINITIONS

Kinder Morgan (the Company) strives to maintain a safe and healthy workplace for Employees and Contractors. Contractors must report any unsafe work or environmental conditions which *has* or *could* have an adverse impact to human health or the environment. Contractors are to ensure the health and safety of their workers and any person likely to be affected by the workers actions. Contractors have the right to know about hazards and the means used to control or eliminate the hazards. Contractors have the right to participate in workplace safety activities and to refuse to work in an unsafe or environmentally detrimental condition.

This document provides all Contractors with the minimum Environmental, Health and Safety (EHS) standards required while working on and/or adjacent to Company premises. Non-compliance with safety and/or environmental requirements is treated the same as non-compliance with any contract provision, and may result in work stoppage or Contractor removal from the premises. Willful or repeated non-compliance may result in Contractor dismissal and contract termination.

The Company requires that Contractors:

- Meet all guidelines outlined in Section 2.1, Pre-Job Requirements, of this manual prior to commencing any work on Company premises.
- Ensure all workers are at least 18 years of age.
- Contact a Company Representative before proceeding, if the standards in this manual are not clearly understood, or if situations arise which are not covered by this manual.

No Conduit: The Contractor has signed a contract containing an obligation to not disclose to any third party any confidential information regarding Company which Contractor has obtained or creates as a result of performing the contract. Contractor shall review its contractual confidentiality obligation with its designated company representative and periodically inform workers and subcontractors of the requirements.

Within this manual all standard measurements are applicable in the US and the metric numbers are applicable in Canada.

Bound, printed copies of the *Contractor Environmental / Safety Manual* can be obtained from the Company. Electronic copies can be found at [www.kindermorgan.com](http://www.kindermorgan.com) – Contractor Safety.

**NOTE: Consultants, Engineering Support, Temporary Labor, Visitors used in an office setting and/or escorted on project premises for general observation tasks are required to receive a general site safety orientation. The general site orientation includes elements such as; emergency procedures, PPE requirements and muster point locations. The Contractor Environmental / Safety Manual, DVD or ISN requirements do not apply.**

**NOTE: Unless otherwise specified by contract, contractors must supply all tools and equipment. Including but not limited to: portable monitoring equipment, safety equipment, communication tools, etc.**

## US / CANADA REGULATORY REQUIREMENTS CONTRACTORS RESPONSIBILITIES

Contractor is responsible for complying with applicable US and Canadian Federal, State and/or Provincial and local EHS regulations. Contractor must also comply with the requirements listed in the Contractor Environmental / Safety Manual and Company site-specific and/or business unit policies and procedures that are applicable to the project SOW.

The standards presented in this document are not an exhaustive list of all applicable requirements and regulations. As a general rule, if there is uncertainty over which legislation applies (i.e., Federal, Provincial) comply with the most stringent requirement.

For US Contractors, Occupational Health and Safety Administration (OSHA) General Industry Standards (1910), Construction Standards (1926) and/or the Mine Safety and Health Act (MSHA) may apply depending on the nature of the work.

For Canadian Contractors, federally regulated premises must comply with the Canada Labour Code. Provincially regulated sites must follow the Alberta Occupational Health and Safety Act, Regulations and Code, the British Columbia Occupational Health and Safety Act and Regulation, the Saskatchewan Occupational Health and Safety Regulations for work done in those provinces.

Regulatory references applicable to each section are located in the Appendix at the end of this document. The Contractor, however, is ultimately responsible for determining regulatory applicability and assuring compliance.

#### General Definitions / Acronyms

**ASSEMBLY AREA:** A pre-determined location in which to assemble and conduct a roll call in case of an emergency evacuation.

**CDL:** Commercial Drivers License. Defined within the Federal Motor Carrier Safety Regulations

**CMV:** Commercial Motor Vehicle. Defined within the Federal Motor Carrier Safety Regulations

**COMPANY:** Kinder Morgan Inc., Kinder Morgan Energy Partners, L.P. or one of their subsidiaries, affiliates and/or business units.

**COMPANY REPRESENTATIVE:** Any person contracted or assigned to perform short or long-term workplace inspections for the Company.

**COMPETENT PERSON:** A competent person is one who has been trained and is authorized to identify and implement prompt correct actions to mitigate work site hazards.

**CONTRACTOR:** Any company or person contracted to perform short or long-term work for the Company. References to contractor includes; contractor's workers, sub-contractors and third party inspectors and consultants.

**CRIBBING / SKIDDING:** Is a process of stacking wooden skids (made of hardwood) to form a sturdy platform in which to secure pipeline joints.

**CSA:** Canadian Standards Association

**CSM Forms:** Company forms are referenced within this document and are applicable to both US and Canada. Forms are identified as CSM-001 through CSM-013. ALL APPLICABLE US and Canada Contractor Safety Forms can be found on the [Contractor Safety](#) - webpage on kindermorgan.com.

**DOT:** U.S. Department of Transportation

**HIRING MANAGER:** Includes Project Manager (PM), Supervisor, Lead and / or Manager that is accountable for applying knowledge, skills, tools, resources, and techniques to all project activities, ensuring that project results meet stakeholder needs and expectations. With input from the Project Sponsor, the Project Team, and other stakeholders, the Hiring Manager maintains and controls all logistics/mechanics related to project completion.

**NEAR MISS:** An undesired event or a condition that, under slightly different circumstances, could have resulted in injury, damage or other loss.

**NEB:** The National Energy Board (NEB or Board) Regulates pipelines, energy development and trade in the Canadian public interest.

**NFPA:** National Fire Protection Association

PHMSA: Pipeline and Hazardous Materials Safety Administration Pipeline Regulations.

PREMISES: References to Premises includes; company property, job site, job and worksite. Any real property on which Contractor will be working, whether owned by Company or not, including: facilities, terminals, roads, parking lots, pipeline right-of-ways, common areas, compressor/pump station or offices.

REPORTABLE INCIDENT: Any act, incident, injury, occurrence, unwanted release of energy, unwanted release of product or near miss that is not considered a normal operating procedure and/or an occurrence that results in worker injury or monetary loss.

SOW: Scope of work: Includes the purpose of a Project and Project Definition to reduce and ultimately eliminate ambiguity. Scope planning will demonstrate clear, detailed communication among the project stakeholders that results in a clearly defined project with little misinterpretation. Specific project tasks, critical dates, and quality control measures are identified during scope development and project definition.

WORK: 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.

## **SECTION 2: CONTRACTOR SAFETY PROGRAM ADMINISTRATION**

Contractors are expected to read this manual and to comply with Company requirements. The Company retains the right to question Contractors regarding the content of this manual and to stop work if Contractors are observed operating in disregard to EHS requirements.

The Company updates this document and forms periodically. Contractors are advised to check the Company website for the most current Contractor Environmental / Safety Manual and forms. The Company website can be located at: [http://www.kindermorgan.com/work/contractor\\_co/safety\\_req.cfm](http://www.kindermorgan.com/work/contractor_co/safety_req.cfm)

### **2.1 PRE-JOB REQUIREMENTS**

All Contractors are required to participate in the Company's Contractor Safety Evaluation Program by subscribing to ISNetworld (ISN) or have a Contractor Exemption / Variance Safety Evaluation completed and signed by the Company Hiring Manager.

Each Contractor subscribing to ISN is required to enter safety statistics applicable to their country into ISN. This information includes, but is not limited to the following:

- US OSHA Statistics
- Canadian WCB statistics
- US EMR Rates
- Canadian WCB Rates
- Safety Programs

The Company requires the Contractor to have satisfactory statistical scores in the above categories prior to the contract award and must be maintained quarterly thereafter.

It is the Company's expectation that the Contractor's status within the ISN database remain satisfactory throughout the duration of the project. If at any time the Contractor's status becomes unsatisfactory, the Contractor must work with the Company Hiring Manager to develop a plan for correcting deficiencies and timelines for completion.

Contact information for ISN: [WWW.ISNETWORLD.COM](http://WWW.ISNETWORLD.COM)

The Company may audit the performance of the Contractor as the job progresses and/or upon completion conduct a Post-Job Evaluation. All joint or self assessments that are conducted must be documented with all action items addressed by the contractor. This may include periodic premises reviews. ISN may be used to store assessment results conducted by or for the Company. Upon request by the Company, the Contractor

will provide copies of their applicable procedures, plans and documentation, including but not limited to specific to training, inspections, assessments, permitting and incident reporting.

## **2.2 SAFETY ORIENTATION**

After the project is awarded and prior to the start of work, the Contractor and applicable Company representatives must participate in a Safety Orientation which includes:

- A review of the Company EHS requirements, site specific hazards, abnormal operating conditions, emergency response, restricted areas, security, potential hazards that may be encountered, evacuation procedures, assembly areas, safety systems and contractor access and parking requirements at the worksite. The Contractor is encouraged to ask questions during the orientation process.
- The orientation must be documented on form CSM-003 or equivalent. The Contractor must ensure that everyone that works on Company premises receives this orientation. The orientation is required annually or when changes to Project Scope of Work (SOW) and/or to the Contractor Environmental / Safety Manual occur. A copy of the completed orientation form will be kept by a Company representative and filed in the project job book.
- Contractor must be issued the Company's current "Contractor Safety Orientation" sticker for their hardhats. The Contractor Environmental / Safety Manual may be issued to each participant. At a minimum, the location of the Contractor Environmental / Safety Manual will be identified in the orientation.

The Contractor must maintain a daily list of all on-site workers. All visitors to Company premises must sign in each time they enter/leave. Visitors must not be granted entry without prior permission of Contractor or Company Representatives.

The form CSM-006 Contractors/Visitors Log may be utilized to document the sign in / out requirement

## **2.3 CONTRACTOR DUTIES AND RESPONSIBILITIES**

Contractors must provide direct supervision of their subcontractors. The Contractor must have a Subcontractor Management Plan in place which has been approved through the ISN process. The Contractor may utilize form CSM-005 or equivalent to document evaluations of their subcontractors. The Contractor must submit the required subcontractor evaluation documentation to the Company Representative upon request.

## **2.4 DISCIPLINARY ACTION**

If any Contractor requires, requests or allows workers to work in or around unsafe conditions or violates environmental permits or regulations, the Company may remove the Contractor or any of its individual workers from Company premises. For example, immediate and permanent removal may occur if any of the following activities are observed:

- A. Openly exhibits disregard, defiance, or disrespect for the safety program
- B. Falsifying documents or information
- C. Participates in fighting, violence, threats of violence, theft, or destruction of property
- D. Violates established safety or environmental rules, regulations, procedures or codes
- E. Possesses weapons including but not limited to firearms or knives not typically used in conjunction with normal work tasks

## **2.5 SITE/PROJECT HEALTH AND SAFETY PLANS (HASP)**

As determined by the Company, the Contractor may be required to develop a project specific Health and Safety Plan (HASP). If required, the HASP must establish the EHS expectations for the project, describe the key processes to be utilized during the project by the Contractor and assign areas of responsibility. Based on

the detailed work plan, the Contractor must conduct a Hazard Evaluation to identify hazards anticipated during the project and measures that will be implemented to eliminate or control the hazards.

The Contractor must include plans for changing conditions, revised SOW, or new information that will warrant modifications to the HASP. The original HASP and any modifications or changes must be submitted to the Company Representative for review prior to the start of work. Any revisions to the HASP will be returned to the Contractor for discussion or implementation.

### **SECTION 3: ACCIDENT / INCIDENT REPORTING AND INVESTIGATION**

#### **3.1 KEY REQUIREMENTS**

3.1.1 The Contractor must immediately report all accidents/incidents and near misses to the Company Representative. If required, the Contractor must notify the applicable regulatory agency within the required reporting requirements.

3.1.2 The Contractor must investigate all accidents/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 must include the identification of root causes or causal factors that contributed to the occurrence. The Contractor must determine the necessary corrective actions and ensure closure/completion in timely manner. In addition to the Contractor's analysis/investigation, the Company retains the right to conduct their own investigation for any illnesses, injuries, fatalities, incidents or near misses occurring on its premises.

3.1.3 The Contractor must submit a copy of the written report and investigation, using form CSM-001 to the Company Representative, unless otherwise specified, within 48 hours of occurrence.

3.1.4 Contractor must maintain injury logs for their respective workers. (Example: US OSHA Logs).

3.1.5 As determined by the Company, Contractor will be required to supply an EHS performance report on a monthly basis. The Contractor must utilize the Contractor Incident Reporting Log form **CSM-007** to communicate this data to the Company by the 5<sup>th</sup> of each month.

### **SECTION 4: ALCOHOL, ILLEGAL DRUGS AND FIREARMS**

#### **4.1 GENERAL INFORMATION**

4.1.1. Contractor must develop and enforce a policy that prohibits the possession, distribution, promotion, manufacture, sale, use, and abuse of illegal drugs, drug paraphernalia, controlled substances, alcoholic beverages and weapons by workers while on Company premises. Unless state or local law provides otherwise, contractors and guests, regardless of whether or not licensed to do so, may not carry or transport any firearm or weapon, whether or not concealed, at the workplace, on any Companies' owned or leased premises, Companies'-owned vehicle, or in any other vehicle while engaged in Companies' business.

#### **4.2 KEY REQUIREMENTS**

4.2.1. Based on the Company business unit or regulatory requirements the Contractor must establish and maintain acceptable Anti-Drug and Alcohol Misuse Programs.

4.2.2. Where required in the US, the National Compliance Management Systems (NCMS) must evaluate the Contractor's drug/alcohol programs. The plan must be submitted to NCMS for evaluation and approval by the Company. Contact information for the NCMS: [www.nationalcompliance.com](http://www.nationalcompliance.com)

4.2.3. Contractor programs must include post-incident testing criteria. Examples of these criteria include but are not limited to:

- An event that involves the release of product
- Death or personal injury requiring inpatient hospitalization
- Explosion or fire
- Release of >5 gallons ( 19 liters) of hazardous substance or carbon dioxide
- Accidents/Incidents involving vehicles and/or heavy equipment
- An event that results in a premises shutdown

4.2.4. Contractor workers must be tested within the following timelines:

- FOR ALCOHOL: Within 2 hours, but no later than 8 hours after the accident/incident
- FOR DRUGS: Within 32 hours of the accident/incident

4.2.5. If testing is conducted based upon suspicion, the Contractor under suspicion, must be removed from service pending test results.

4.2.6. Contractor is subject to searches which includes personal effects and automobile if it is located on the job site. Such searches may be conducted when there is a reasonable basis to suspect that the work performance or on-the-job behavior may have been affected by alcohol/drug use or that the Contractor has sold, purchased, used, or possessed illegal drugs or alcohol on the job site.

## **SECTION 5: ASBESTOS**

### **5.1 GENERAL INFORMATION**

5.1.1 The potential of encountering Asbestos-Containing Material (ACM) while performing work in Company premises exists. The Company will identify those areas where ACM may be or is present, if known. All historical information pertaining to ACM for a premise is available for Contractor to review upon request.

### **5.2 KEY REQUIREMENTS**

5.2.1 The Contractor must contact the Company Representative prior to removal of ACM. If required, the Contractor or Company must make any notifications to the applicable regulatory agencies a minimum of 10 business days prior to the removal.

5.2.2 Any Contractor who performs work where a potential for exposure to ACM exists must have a written ACM Compliance Program. The work plan must be available at the jobsite.

5.2.3 Work requiring ACM removal must be supervised by an individual that has received comprehensive abatement training. In the U.S., training must meet the EPA Model Accreditation Plan criteria. In Canada, training must meet the regulatory requirements of the Province in which work is taking place. Training records and certificates must be documented and maintained by the Contractor. All training records and certificates must be readily available for review by the Company upon request.

5.2.4 To restrict emissions to adjacent areas, an enclosure must be constructed around an area from which friable ACM is to be removed.

## **SECTION 6: CHAINS, SLINGS AND CABLES**

### **6.1 GENERAL INFORMATION**

6.1.1 Defective or damaged chains, slings, cables or components must be tagged and removed from service immediately. Hooks, rings, links or any coupling device must have a rating equivalent or greater than the chain, sling or cable to which it is affixed. Never use makeshift links or coupling devices.

### **6.2 KEY REQUIREMENTS**

6.2.1 The Contractor must ensure all chains, slings and cables are applicable for the job and are maintained according to the manufacturers' requirements.

6.2.2 Chains must not be used for vertical lifting of materials weighing over 1000 lbs / 454 kilograms. The Contractor can request a variance by submitting the applicable engineering data to validate the request. All variances must be approved by a Company Representative in writing.

6.2.3 Daily inspections before use must be conducted and documented by the Contractor to look for wear, abrasions, collapse and any other visible damage. Contractor conducting the inspections must be trained to recognize defects.

6.2.4 All chains, slings and cables must have an identification tag attached that shows its load rating and limitations.

## **SECTION 7: CONFINED SPACE / CONFINED SPACE ENTRY**

### **7.1 GENERAL INFORMATION**

7.1.1 A confined space is an enclosed area that has a limited means of egress and may be subject to the accumulation of toxic or flammable substances or could have an oxygen-deficient atmosphere. Confined Space means:

- A space that is large enough and so configured that a worker can bodily enter and perform assigned work
- Has limited or restricted means for entry or exit
- Is not designed for continuous worker occupancy

7.1.2 In the U.S. *Permit Required Confined Space* (permit space) means a confined space which 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

### **7.2 KEY REQUIREMENTS**

7.2.1. The Contractor is required to have a written Confined Space Entry Program that at a minimum, defines the roles and responsibilities for entry supervisor, attendant, entrant, fire watch, communications and emergency response. This program must be made available to the Company upon request

7.2.2. 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.

7.2.3. Any Contractor entering a Confined Space or Permit Required Confined Space must have the following:

- Training in Confined Space or Permit Required Confined Space Entry;
- If required, a completed and posted written confined space permit at the entry location;
- Ensure that all potential sources of toxic fumes and flammable vapors have been identified and isolated;
- A trained attendant dedicated exclusively to those duties detailed in the Permit Required Confined Space procedure and is capable of initiating an emergency rescue.

7.2.4 Training must be completed by the Contractor and records and certificates must be documented and maintained by the Contractor and made available upon Company request.

## **SECTION 8: CRANES AND RIGGING AND CRIBBING**

### **8.1 GENERAL INFORMATION**

8.1.1 Proper set up and operation of cranes and rigging is required.

8.1.2. This section applies to crawler cranes, locomotive cranes, wheel mounted cranes of both truck and self-propelled wheel type and any variations that have the same fundamental characteristics.

8.1.3 Contractor must prepare a lift plan for all anticipated lifts requiring the use of specialized equipment for the duration of the project. Specialized equipment may include but is not limited to: Lulls, Cranes, Boom Trucks, and Fork Lifts. Equipment and/or rigging gear must follow the Original Equipment Manufacturers (OEM) recommended lift specifications and capacities.

## 8.2 KEY REQUIREMENTS

8.2.1 A competent person must conduct and document a daily inspection of cranes. If a crane is moved or the lifting process changes during operations it must be re-inspected prior to performing the lift in order to reflect the changes. If the crane or its associated rigging exhibits any damage or excessive wear during daily inspection, the crane cannot be used.

8.2.2 Crane inspection records must be kept on site with the crane or in the Contractor's temporary office and readily available for inspection.

8.2.3 Rigging devices must have permanently affixed identification stating size, grade, rated capacity, and manufacturer.

8.2.4 If it is determined that any portion of equipment being operated under a power line can be within 20' 7m of a power line, a plan must be developed following guidelines set forth in the regulatory requirements.

8.2.5 Contractor must 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 must be held with the Company Representatives, Contractor and utility company.

8.2.6 Tag lines must be used on all lifts.

8.2.7 Contractor must develop a Lift Plan.

8.2.8 For Pipeline Construction Projects in the U.S - Safety Latches should be used when they make the task safer. The determination of whether or not a hook should be used with or without a latch is dependent on the circumstances and whether the addition of the latch will result in a safer operation or instead of creating an additional hazard.

8.2.9 The determination must be based upon the applicable requirements and the manufacturer's recommendations for the type of hook. The Contractor may consider without limitation, the following:

- All applicable regulatory standards and interpretation letters.
- Pre-arranged means of communication and placing the load;
- Pre-planned routes for suspended loads designed to minimize workers from being below or near a moving or suspended load;
- Any required training for workers hooking and unhooking loads;

8.2.9 Contractor shall develop a Cribbing/Skidding plan when working with large diameter pipe (30" and larger) or utilizing mechanized welding. At a minimum the procedure must address the following requirements:

- When Cribbing is initially set up, workers shall inspect the skids for defects (cracks, splintering, other deformations). Defective skids shall be discarded from use and removed from the site for disposal. Inspect and monitor all piping on cribbing before work begins.
- Where welded sections of pipe joints are strung, crutching shall be installed on the 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> cribbing from any loose end and then every 5<sup>th</sup> set of cribbing thereafter.
- When working in an area where soil conditions or terrain may potentially allow Cribbing to sink or lean to one side, increase the area of the base by adding more timbers, utilize a mat, or plywood (of adequate thickness) under the Cribbing to help distribute the weight more evenly.
  - If none of the above is appropriate to safely support the weight of the pipe section then a wide base configuration shall be utilized every 5<sup>th</sup> joint. A Wide Base Configuration usually encompasses a double sized crotch that is set up transverse to the pipe section which intern will provide a larger base.

- Pipe shall not be solely supported vertically by a side-boom, crane, or loader during the welding process. Cribbing shall be utilized under the pipe. At no time shall anyone be allowed to work under or around a load until it is safely supported.

## **SECTION 9: ELECTRICAL SAFETY AND OVERHEAD POWER LINES**

### **9.1 GENERAL ELECTRICAL SAFETY INFORMATION**

9.1.1. This section applies to the use of electrical power to operate equipment and electrical power tools and all work near electrical systems including, but not limited to overhead or underground power lines.

### **9.2 KEY REQUIREMENTS**

9.2.1 Power cable systems within the work area must be de-energized during excavation whenever there is doubt about cable location.

9.2.2 The Contractor must protect workers from electric shock while using power tools, appliances and related equipment by use of Ground Fault Interrupter (GFI) systems on all power outlets/sources that will be used during construction and maintenance.

9.2.3 Only qualified and authorized Contractors are permitted work on electrical equipment.

9.2.4 All electrical equipment must be properly grounded and/or bonded.

9.2.5 All electrical equipment must be treated as if it were energized.

9.2.6 The Contractor must place guards and/or barriers to prevent incidental contact with exposed electrical equipment. Cover plates must be correctly placed on equipment during times that they are not monitored.

9.2.7. Contractor must provide and use applicable PPE such as rubber insulating gloves, blankets, hoods, sleeves and line hoses as applicable to regulatory requirements.

### **9.3 Overhead Power Lines**

9.3.1. The Contractor must advise their workers of the location of any power lines, the hazards involved and the protective measures to be taken to ensure lines are not hit.

9.3.2 Mandatory controls to prevent utility strikes must include three of the following five layers of safety controls:

- Signage – “Beware of Overhead Lines” signs must be placed at equipment operator’s eye level and must be a minimum of 2 feet by 2 feet (60cm by 60 cm).
- Physical barriers – A non-conductive barrier, i.e. goal posts with rope and ribbons/flagging, must be set outside the limits of the approach on both upstream and downstream sides at a minimum of 10 feet
- Dedicated spotter – A dedicated Contractor to monitor and direct traffic around and under lines and must use an appropriate audible alarm such as an air horn to warn operators of the hazard
- Proximity alarms – Alarms that are attached to the equipment that are set off when equipment approaches too close to an energized source
- Utility controls – site specific controls; i.e. line insulators, line raising or outage(s)

9.3.3 The Contractor must contact the local utility company and be aware of any special requirements. The Contractor must also maintain the clearance to the power line following minimum clearance requirements.

## **SECTION 10: EMERGENCY EVACUATION**

### **10.1 GENERAL INFORMATION**

10.1.1. When required by the Company, the Contractor must develop a project 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 their Emergency Evacuation Plan and/or emergency personnel (e.g., fire department, police or other regulatory personnel).

## **10.2 KEY REQUIREMENTS**

10.2.1. If any Contractor suspects that an emergency condition exists, they must immediately contact the local authorities, as applicable (e.g., 911 or the particular emergency phone number in the area) and then the Company Representative.

10.2.2. Contractor must shut-off all equipment IF DOING SO DOES NOT POSE RISK OF INJURY.

10.2.3. Contractor must evacuate to the pre-determined assembly area by the safest available route.

10.2.4. The Contractor must account for all workers.

10.2.5. The Contractor must remain in the assembly areas until otherwise directed.

## **SECTION 11: EXCAVATIONS / TRENCHING AND SHORING**

### **11.1 GENERAL INFORMATION**

11.1.1. In work areas where the exact location of underground utilities are known or unknown, the appropriate Dig Safe or One Call system must be notified so the owner / operators can locate and clearly identify their utilities prior to beginning excavation work. This notification must be conducted at a minimum of 2 days (US) and 3 days (Canada), prior to work being started.

### **11.2 KEY REQUIREMENTS**

11.2.1. The Contractor must provide adequate protective systems such as benching, sloping or shoring when the sides of a trench are more than 5' / 1.2m deep and intended for worker entry.

11.2.2. Excavations over 20' / 3m deep or that do not meet regulatory requirements must have protective systems designed by a Professional Engineer (PE/PEng) within the same state/province. The PE/PEng design documentation must be on site and available for inspection.

11.2.3. The Contractor's Competent Person must conduct daily excavation inspections prior to anyone entering an excavation and this documentation must 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 must be mitigated prior to resuming work.

11.2.4. A secured ladder, ramp or other means of egress must be provided within 25' (8m) of all workers in a trench that exceeds 4' / 1.2m in depth and/or when using a trench box.

11.2.5. The Job Hazard Assessment will determine what atmospheric monitoring (e.g. O<sub>2</sub>, LEL, H<sub>2</sub>S, CO), will be conducted prior to a worker entering an excavation that exceeds 4' / 1.2m in depth and has the potential to contain a hazardous atmosphere.

11.2.6. Excavated material must be placed at least 2' / 1m away from the edge of the excavation. (i.e. spoil pile, rocks, broken concrete or other debris).

11.2.7. If walkways are provided over excavations, they must be capable of supporting the weight of the traffic, guardrails and toe boards. Every crossover must have engineering design documentation and meet regulatory design standards. Toe boards will be used if Contractor will be working below the walkway.

11.2.8. Excavations must be secured to keep vehicles and unauthorized personnel out. High visibility fencing material placed 4' / 1.2m from the edge of the excavation when possible must be used to warn of the danger in high profile/vehicular traffic areas. Traffic impact plans may be required in high vehicular traffic areas.

## **SECTION 12: FALL PROTECTION**

### **12.1 GENERAL INFORMATION**

12.1.1 Contractors are required to review the job hazards associated with Fall Protection and develop a specific plan to address the hazards including a rescue plan

### **12.2 KEY REQUIREMENTS**

12.2.1 Contractor must be protected from fall hazards of 4' / 2.4m or more by guardrails or personal fall arrest systems. Personal fall arrest systems must be rigged so that the Contractor cannot free-fall more than 6' / 2.4m or contact any hazard at a lower level. Positioning or fall prevention devices must be rigged to prevent free falls more than 2' / 60cm.

12.2.2 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 must be properly stored, maintained and inspected for defects before each use. Harnesses, lifelines, retractable lifelines and lanyards must be marked with a tag stating maximum load and name of the manufacturer. Lanyards and vertical lifelines must have a minimum breaking strength of 5,000 lbs/ 2270 kg. All anchor points for fall arrest or restraint must meet minimum regulatory requirements and engineering design criteria for the weight. The Contractor is responsible for supplying all fall protection equipment required for their workers.

12.2.3 The Contractor must provide a Competent Person to oversee fall protection compliance.

12.2.4 The Contractor must develop a "Rescue Plan" wherever personal fall arrest equipment is used.

## **SECTION 13: FIRE PREVENTION AND PROTECTION**

### **13.1 GENERAL INFORMATION**

13.1.1 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 must be capable of evaluating unsafe conditions and taking necessary actions to mitigate and communicate the conditions. The Fire Watch can have no other assigned duties while conducting this task.

### **13.2 KEY REQUIREMENTS**

13.2.1 Firefighting equipment and a Fire Watch must be supplied by the Contractor and must be present while performing any hot work. Access to firefighting equipment must be maintained at all times and must be inspected as required, to ensure proper working condition.

13.2.2 Smoking is allowed in designated areas only. Designated smoking areas will be identified during the project pre-job construction meeting or work permitting process.

13.2.3 Matches or uncovered and trigger-type lighters are not allowed.

13.2.4 All non-intrinsically safe devices are only permitted in Company approved areas. Devices include, but are not limited to: cell phones, pagers and cameras.

13.2.5 Unless otherwise specified by the Authority Having Jurisdiction, (AHJ), all flammable and combustible liquids must be stored in metal enclosures and must be placed at least (3') feet; (1m) away from other flammable storage cabinets.

13.2.6 Unless otherwise specified by the AHJ, the volume of Class I, Class II, and Class IIIA liquids stored within a single approved storage cabinet must not exceed 120 gallons / (454 L).

13.2.7 Unless otherwise specified by the AHJ, approved storage cabinets must be UL Listed or FM Approved for indoor storage of flammable or combustible liquids.

## **SECTION 14: FIRST AID & BLOODBORNE PATHOGENS**

### **14.1 GENERAL INFORMATION**

14.1.1. First aid is used for temporary treatment of on-the-job injuries and minimizes occupational exposure to hepatitis B virus (HBV), human immunodeficiency virus (HIV) and other bloodborne pathogens.

### **14.2 KEY REQUIREMENTS**

14.2.1 The following are the minimum first aid requirements for Contractors working at Company premises:

The Contractor must have personnel trained and immediately available to provide first aid treatment at the premises. Contractor must be able to provide a current first aid certificate.

The Contractor must have applicable first aid supplies at the premises.

When required, the Contractor must develop an Emergency Plan for the premises and have the plan available at all times. The Emergency Plan must include at a minimum:

- Location of the premises
- Name of Hospital or Emergency Care Center where Contractor is to be transported to.
- Travel route
- A statement saying: "In Case of Serious Injury Call 911" or a specific number
- For remote premises, the plan will include applicable transportation which may include helicopter services.

14.2.2 The following are the minimum requirements for Contractor working at Company premises who might be exposed to bloodborne pathogens:

- The Contractor must be properly trained in basic bloodborne pathogen exposure, control and post incident sanitation procedures
- The Contractor must provide accessible bloodborne pathogen cleanup supplies

## **SECTION 15: FLOORS, ROOFS AND WALL OPENINGS**

### **15.1 GENERAL INFORMATION**

15.1.1 The Contractor must prevent falls from roofs, wall and floor openings by ensuring proper safeguards are in place.

15.1.2 Guarding and covers should be removed only after other means of protection are in place. Contractor installing or removing guarding and covers must be protected by alternative means throughout the process.

15.1.3 Installation of a standard railing is required for floor perimeter and wall opening protection.

### **15.2 KEY REQUIREMENTS**

15.2.1 Wire rope used as top rail or/mid-rail must be ½" / 1.27cm in diameter with at least three J-type fist grip wire rope clamps at each connection and turn buckles every 100' / 30m. Thimbles must be used where the wire rope is connected.

15.2.2 For construction work performed on low sloped roofs (less than 4:12 pitch), or work areas with an unprotected edge, a warning line system may be used as an alternative protection where workers may be within 25' / 7.6m of an unprotected side or edge.

15.2.3 Stair railings must be constructed similar to a standard railing, but the vertical height must be 34-36" / 92-107cm from the top rail to the surface tread in line with the face of the riser, at the forward edge of the riser.

15.2.4 Floor opening covers must be used for openings greater than 2" / 5cm and capable of supporting the maximum intended load and installed to prevent accidental displacement.

15.2.5 During construction, Contractor must provide temporary stairs on structures that are two or more floors or more than 20' / 6m high until permanent stairways are in place.

15.2.6 Runways must be guarded by use of standard railing, or the equivalent, on open sides above the ground level. When tools, machine parts, or materials are likely to be used on the runway, provide a toe-board on each exposed side.

## **SECTION 16: HAZARD COMMUNICATIONS (HAZCOM – US / WHMIS - CANADA)**

### **16.1 GENERAL INFORMATION**

16.1.1 Contractor must establish and maintain a written, comprehensive hazard communication program (HAZCOM/WHMIS). Hazard communication programs may differ between sites, areas, and business units at Company premises. Contact the KM representative or the site safety representative for specific hazard communication concerns relevant to the location.

### **16.2 KEY REQUIREMENTS**

16.2.1 Contractor must prepare a hazardous materials list before the materials arrive on site.

16.2.2 The use of hazardous materials on Company premises requires consultation with the Company.

16.2.3 Contractor must maintain the most current MSDS sheets provided by manufacturers and distributors of the material.

16.2.4 Contractor must properly label all hazardous materials entering the premises. All labels must be intact and legible.

16.2.5 Contractor must have a means of informing workers of the hazardous materials associated with the work they perform, and communicating information on hazards where work is being conducted.

16.2.6 Storage cabinets must be marked in conspicuous lettering: **FLAMMABLE — KEEP FIRE AWAY**

16.2.7 Unless otherwise specified by AHJ, regulations require that flammable and combustible liquids be stored as follows:

In a quantity insufficient to produce an explosive atmosphere if inadvertently released

More than 100' / 30m away from an underground shaft

Away from the air intake of ventilation system, an internal combustion engine, or the fire box of a fired heater or furnace

Only in containers approved to NFPA standards, CSA Standard B376-M1980 (R1998), "Portable Containers for Gasoline and other Petroleum Fuels" or ULC Standard C30-1995, "Containers, Safety"

## **SECTION 17: HAZARDOUS ATMOSPHERES**

### **17.1 GENERAL INFORMATION**

17.1.1 A hazardous atmosphere is an atmospheric condition that may expose workers to a risk of death, incapacitation, and impairment of ability to escape unaided, injury or acute illness. Testing of hazardous areas is required prior to entry into an area of concern. Contractor is not to enter ANY area containing hazardous concentrations of toxic gases unless they are properly trained, protected and utilize calibrated air monitoring equipment.

### **17.2 KEY REQUIREMENTS**

17.2.1 All personnel working in a potential H<sub>2</sub>S environment must have certificates to verify they have been properly trained. Additionally, all personnel working in an H<sub>2</sub>S environment must be clean-shaven in a manner consistent with accepted practices governing SCBA (Self-Contained Breathing Apparatus) use.

NOTE: A SCBA is required for H<sub>2</sub>S levels exceeding the permissible exposure limit: THE PERMISSIBLE EXPOSURE LIMITS (PEL) VARY IN US AND CANADA. CHECK REGULATIONS FOR PEL LIMITS.

17.2.2 In areas where potential concentrations of Benzene and H<sub>2</sub>S may be present, applicable monitoring with appropriate air monitoring equipment must be conducted. Immediately exit the area if monitoring results are above the permissible exposure limit. Personnel must wear appropriate respiratory protection if concentration exceeds permissible exposure limit. THE PEL VARY IN US AND CANADA. CHECK REGULATIONS FOR PEL LIMITS.

17.2.3 Oxygen levels must be between 19.5% and 23.5% (US) and 19.5% and 23% (Canada).

## **SECTION 18: HOUSEKEEPING**

### **18.1 GENERAL INFORMATION**

18.1.1. Good housekeeping is mandatory. Work areas must be kept neat, clean, and orderly. If a Contractor's work area is not kept clean, the Company may have the area cleaned and charge the cost to the Contractor. The Company may also stop work until the area has been cleaned.

### **18.2 KEY REQUIREMENTS**

18.2.1. Keep work areas, passageways, fire exits, fire lanes, and stairs in and around the buildings and structures clear of debris at all times.

18.2.2. Properly store all tools and equipment after use. Keep walkways free of dangerous depressions, obstructions, and debris.

18.2.3. Clean the work area daily and dispose of debris in dumpsters, or off site in accordance with the environmental requirements.

18.2.4 Contractor must remove all unused material and equipment upon the completion of the project.

## **SECTION 19: JOB HAZARD ANALYSIS /ASSESSMENT**

### **19.1 GENERAL INFORMATION**

19.1.1 Contractor must conduct a daily Job Hazard Analysis and/or Safe Work Permit to identify Personal Protective Equipment (PPE) requirements, special equipment or operators and to develop controls for any potential hazards. This analysis must be based on the daily job scope and work area.

### **19.2 KEY REQUIREMENTS**

19.2.1 The Job Hazard Analysis and/or Safe Work Permit must be documented and utilized on a daily basis and communicated at each daily tailgate meeting.

19.2.2 If the scope of work changes during the day the Contractor must update the Job Hazard Analysis and/or Safe Work Permit and communicate these changes by conducting a tailgate meeting. If requested, Site Operations must be notified of all changes and updates.

19.2.3 Job Hazard Analysis and/or Safe Work Permits must be available for review and retained in the job file.

## **SECTION 20: LADDERS**

### **20.1 GENERAL INFORMATION**

20.1.1 Ladders used on Company premises must meet appropriate guidelines. In the US, manufactured ladders must comply with ANSI specifications. In Canada, ladders must comply with CSA Standard Can 3-Z11-M81 (R2001) portable ladders, and ANSI Standard A14.5-2000 portable reinforced plastic ladders.

### **20.2 KEY REQUIREMENTS**

20.2.1 Metal ladders are prohibited for electrical work.

20.2.2 Stepladders must be fully opened when in use. Safety latches on extension ladders must be fully engaged.

20.2.3 Always face the ladder when climbing or descending. When working, face the ladder with both feet securely on the rungs. Never stand, step or sit on the top of the ladder, straddle the ladder, work on leaned stepladders, or work with two people on the same ladder.

20.2.4 The Contractor must ensure ladders are:

- Inspected before each use. Do not use ladders with broken or missing rungs, broken or split side-rails, or damaged components. Defective ladders must be tagged out of service and removed from job site.
- Extend 3' / 1m above the upper landing surface.
- Secured to prevent slippage and workers must use the three point contact rule while working or climbing on a ladder
- The Contractor must use barricades or guards for areas impacted by ladder use. Areas include, but are not limited to passageways and doorways.
- Ladders must meet minimum load ratings.

## **SECTION 21: LEAD IN CONSTRUCTION**

### **21.1 GENERAL INFORMATION**

21.1.1 Company will identify those areas where lead may be present and communicate this information to the Contractor. If Contractor unexpectedly encounters lead, the Contractor must stop work and consult with the Company Representative on how to proceed.

### **21.2 KEY REQUIREMENTS**

21.2.1. All Contractors who perform work where there is exposure to regulated levels of lead must have a written lead abatement program.

21.2.2. All Contractor lead abatement workers must be adequately trained to understand the hazards associated with lead exposure. This includes the nature of operations that could expose them to lead, the purpose of medical surveillance, use of engineering work practices and appropriate PPE to minimize exposure.

21.2.3. Training records and certificates must be documented and maintained by the Contractor and made available to the Company upon request.

## **SECTION 22: LOCKOUT / TAGOUT (CONTROL OF HAZARDOUS ENERGY)**

### **22.1 GENERAL INFORMATION**

22.1.1 Guidelines and safeguards must be in place to protect Company and Contractor from unexpected startup or energy release.

22.1.2 Contractor must Lockout and/or Tagout any energy isolating device when performing maintenance or service/repair of equipment. If an energy isolating device is not capable of being locked out and a tag provides equal protection, tagout is acceptable.

22.1.3 Contractor must supply all required materials, equipment and training for their workers to comply with this requirement. The Contractor must discuss the proposed lock and tag locations with the Company Representative before they are allowed to proceed with their planned work.

### **22.2 KEY REQUIREMENTS**

22.2.1 All Lockout/Tagout must be coordinated with Company before working in an area of hazardous or stored energy.

22.2.2 The Contractor must follow applicable JHA and/or Work Permit requirements before performing work.

22.2.3 The Contractor must review and understand the Company's Lockout/Tagout procedures and adhere to all warnings including:

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

22.2.4 Only authorized workers may perform Lockout/ Tagout.

22.2.5 Contractor shall develop Lockout/Tagout procedures if they do not exist, prior to working on equipment.

## **SECTION 23: NOISE / HEARING CONSERVATION**

### **23.1 GENERAL INFORMATION**

23.1.1 Hearing protection must be worn in all areas where ear protection requirements are posted by the Company and/or the Contractor. Hearing protection is required at all times when operating or using any equipment that emits noise at a level greater than 85 decibels.

## **SECTION 24: PERSONAL PROTECTIVE EQUIPMENT (PPE)**

### **24.1 GENERAL INFORMATION**

24.1.1 Contractor is required to maintain a written PPE program and provide training in the proper use, maintenance and inspection of PPE PRIOR to beginning work. The daily JHA and/or Safe Work Permit must identify and specify any special or additional PPE requirements based on the scope of work to be conducted.

### **24.2 KEY REQUIREMENTS**

24.2.1 The Contractor must supply all required PPE to their workers.

24.2.2 Unless otherwise specified in a WHA (Workplace Hazard Assessment), the minimum PPE includes: hard hats, safety glasses (with side shields), safety toed shoes (steel toed, approved covers, etc).

- Eye and Face Protection must comply with ANSI Z87.1 (US); CAN/CSA-Z94.3-92, or Z94.3-99, or Z94.3-02 (Canada)
- Head Protection must comply with ANSI Z89.1 (US); CAN/CSA-Z94.1-92 (Canada)
- Foot Protection must comply with: US – ASTM F2413-05; CAN/CSA-Z195-M92 (R2000) or CSA Z195-02 (Canada)

24.2.3 PPE must be upgraded when changes in conditions are noted during monitoring of the site. PPE requirements for handling hazardous substances are available in the specific MSDS sheets.

## **SECTION 25: PROCESS SAFETY MANAGEMENT (PSM)**

### **25.1 GENERAL INFORMATION**

25.1.1 Contractors who perform work on a premise that is under the jurisdiction of PSM (Process Safety Management) must comply with all PSM requirements. Contractors working on or around the covered process in a PSM facility are required to:

Provide their workers information on the hazards of the process and the applicable provisions of the emergency action plan

Train their workers to safely perform assigned tasks

Assure their workers follow facility safety rules

Advise the Company of any special or unique hazards associated with their work on the covered process

In addition, site requirements will be addressed by the Company in the Pre-Job Meeting which includes a review of the scope of work.

## **SECTION 26: PROTECTING THE PUBLIC**

### **26.1 GENERAL INFORMATION**

26.1.1 Contractor must protect the public with appropriate and visible protective systems when the public could be exposed to hazards.

### **26.2 KEY REQUIREMENTS**

#### 26.2.1 Exterior Protection Procedures

- Keep sidewalks, entrances, lobbies, corridors, aisles, doors, and exits clear of obstructions to permit safe entrance and exit at all times. Post appropriate warning and instructional safety signs. Barricades must be provided where sidewalks, sheds, bridge fences, or guardrails are not required between work areas and pedestrian walkways, roadways and occupied buildings. Barricades must be secure, except where temporary removal is necessary to perform work.

#### 26.2.2 Interior Protection Procedures

- Before starting work in occupied buildings, contractors must coordinate with a Company Representative and develop a work plan. The SOW must include risks such as: electricity or gas outages, excessive noise generation, chemical fumes, asbestos, and fire exit blockages. The work plan must address provisions for proper communication and related control measures. Control measures may include providing PPE, scheduling work during non-business hours, or area evacuation. Contractor must notify the Company of revisions to this plan.

## **SECTION 27: RADIATION PRODUCING EQUIPMENT**

### **27.1 GENERAL INFORMATION**

27.1.1 Only properly trained, qualified personnel are allowed to use radiation-producing equipment or materials on Company premises. The Contractor must maintain records of all training and qualifications.

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

### **27.2 KEY REQUIREMENTS**

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

27.2.2 All dark rooms must have a carbon monoxide monitor/alarm installed.

27.2.3 Contractor working with equipment that contain radioactive sources must:

- Not transport, commission or decommission gravimeters without written permission from the Company and properly secure equipment when work is not occurring
- Coordinate work activities with the Company representative. If the Contractor must work in proximity to a gravimeter, work time around the radioactive source must be minimized by task planning;
- If the Contractor damages a gravimeter or observes one that may be damaged, they must contact the Company representative immediately.

## **SECTION 28: REGULATORY AGENCY INSPECTIONS**

### **28.1 General Information**

28.1.1 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 KEY REQUIREMENTS**

28.2.1 For any agency audit or inspection, the Contractor represents itself and not the Company during the inspection. Upon notification of a regulatory agency audit or inspection, the Contractor must inform the Company Representative. If possible, this should be done prior to beginning the inspection. The Company will decide whether or not it will attend the inspection. In general, the Company will attend DOT/NEB inspections but not other agency inspections.

28.2.2 The Contractor should ask the regulatory inspector for applicable credentials and have them sign the visitor's register/log.

28.2.3 The Contractor should ensure the regulatory inspector follows all safety requirements, procedures and PPE requirements.

28.2.4 The Contractor should verify any equipment readings by performing parallel sampling and/or monitoring.

28.2.5 When the inspection and exit interview are completed:

- The Contractor must coordinate with the Company Representative to discuss any findings, actions for compliance, responsible parties and estimated completion date for actions. The Contractor must take immediate action to correct all identified citations or violations and document actions taken.
- The Contractor must supply documentation of the corrective actions to the Company Representative.

## **SECTION 29: RESPIRATORY PROTECTION**

### **29.1 GENERAL INFORMATION**

29.1.1 The Contractor must develop a written respiratory protection program relating to respirator use during work activities.

29.1.2 Any Contractor potentially exposed to hazardous atmospheres or substances in excess of permissible exposure limits is required to have applicable respiratory protection.

### **29.2 KEY REQUIREMENTS**

29.2.1 Contractor's respiratory protection program must include, training records, medical clearance and fit test records. Air purifying cartridges must be tagged. The records must be documented and maintained by the Contractor. Contractors that are subject to a respiratory protection program must be clean shaven at all times. Moustaches are permitted, provided that a proper seal can be maintained.

29.2.2 Contractor must designate an individual to perform air monitoring at the premises to ensure Contractor is not over exposed. This designated individual will inform Contractor when respiratory protection is required and must continue to monitor to determine if premises conditions change.

#### **29.2.3 Supplied Breathing Air Use**

Contractor must ensure supplied breathing air sources meet the applicable requirements. In the US, Grade D breathing air is required and described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989. In Canada air must meet the requirements of CSA Z180.1 (Compressed Breathing Air and Systems). If compressors are used to supply breathing air, they must have suitable in-line air purifying devices to ensure air quality.

For oil-lubricated compressors, Contractor must use a high-temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply must be

monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 5 PPM. Locate compressors in an area to prevent taking in contaminated air.

For compressors that are not oil-lubricated, the Contractor must also ensure that carbon monoxide levels in the breathing air do not exceed 5 PPM.

Air-purifying devices must be tagged with the most recent date of change-out.

## **SECTION 30: RIGHT-OF-WAY / ROADSIDE WORK**

### **30.1 GENERAL INFORMATION**

30.1.1 Work on or adjacent to existing public roadways must be performed in accordance with the requirements of applicable Traffic Control Programs. In the US this includes MUTCD (Manual of Uniform Traffic Control Devices) requirements.

30.1.2 Contractor must obtain applicable permits.

### **30.2 KEY REQUIREMENTS**

30.2.1 Contractor must develop an approved written plan relating to vehicular traffic control during roadside work activities. The plan must include the proper placement of barricades, cones, signs, flashers and warning signs. The approved plan must be available at all times.

30.2.2 Contractors exposed to vehicular traffic must be provided with and instructed to wear, warning vests that meets regulatory requirements.

30.2.3 All Flaggers must be trained or certified based on the applicable Federal, State, Provincial, and Local County and/or City requirements.

30.2.4 When flaggers are working during sunrise/sunset or night time, lighted flashers and proper overhead illumination must be utilized to ensure flaggers/personnel and equipment can be seen by oncoming traffic.

## **SECTION 31: SAFETY PERMITS FOR SAFE WORK, HOT WORK OR CONFINED SPACE**

### **31.1 GENERAL INFORMATION**

31.1.1 Company premises have site specific procedures and permit requirements. Examples include, but are not limited to the following: permit to work, hazardous energy control, hot work permit, excavation permit, and confined space permit. These site specific requirements and the requirements in this manual must be met, with the most stringent requirements taking precedence. These requirements must be defined during pre-job meetings.

31.1.2 Where applicable, the Company may require Contractor to obtain a safe work permit on a daily basis from a Company Representative prior to the start of work. The permits must identify work to be completed, additional permits that may be required, potential hazards and safety measures to be followed.

31.1.3 Unless agreed to otherwise in the contract, Contractor is responsible for obtaining all applicable permits and for making all required notifications prior to the start of work, including One Call or excavation notices.

31.1.4 The Contractor must not operate any Company valves, equipment, fire suppression systems or alarm systems unless specifically outlined in the work permit or at the direct approval and/or presence of a Company Representative.

### **31.2 KEY REQUIREMENTS**

31.2.1 *Hot Work* is 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.

31.2.2 *Hot work* permits will be coordinated with Company representative prior to commencing any hot work. Contractor performing hot work are responsible for the safe execution of assigned tasks. If an unsafe

condition or potentially unsafe condition arises, work must be stopped and the condition reported to a Company representative.

31.2.3 Proper safeguards must be implemented to guard against changes in the working conditions. Hot work on "in-service" equipment must follow special precautions and must be identified in the hot work permit.

31.2.4 Unless permitted by premise specific policies or rated for the hazardous area non-intrinsically safe devices such as, cell phones, computers, radios, lighting or pagers must not be allowed in the area.

## **SECTION 32: SCAFFOLDS**

### **32.1 GENERAL INFORMATION**

32.1.1 Scaffolds must be designed, built, inspected and tagged by a competent person. All uses must conform to the applicable requirements. Daily inspections must be conducted before use and documented.

32.1.2 Lean-to scaffolds and make-shift platforms are prohibited.

32.1.3 Scaffolds must not be used for storing material except if material is being used while on the scaffold. Place material over cross members.

### **32.2 KEY REQUIREMENTS**

32.2.1 Contractor must provide a competent person to oversee scaffold erection, inspection and permitting.

32.2.2 Contractor must ensure that scaffolding design and construction provides:

- A fall arrest system in place for each worker placed more than 4' / 2.4m (Canada) 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:
  - Wire or fiber rope used for scaffold suspension must be capable of supporting at least six times the intended load
  - All platforms must overlap at least 12" / 30cm and be secured from movement
  - Overhead protection must be provided to Contractors working on or near scaffolding
  - Pole scaffolds must be tied to the building or structure at intervals of no more than 25' / 7.5m

## **SECTION 33: SECURITY REQUIREMENTS**

### **33.1 GENERAL INFORMATION**

33.1.1 Company premises are not to be accessed by Contractor, vendors, or suppliers without prior authorization.

33.1.2 Only designated roads, gates, and doors should be used for entry or exit and park in designated areas.

33.1.3 Where permitted by law, US Contractor may be required to undergo successful background screening prior to being granted access to Company premises. The term premises is used in its broadest sense and includes, but is not limited to, all jobsites, projects, network or cyber access, and property owned, leased, operated or otherwise under the control of the Company .

### **33.2 KEY REQUIREMENTS – SECURITY FOR NON MARINE PREMISES**

33.2.1 When entering and exiting Company premises, vehicles and belongings are subject to screening. Contractor is required to present valid government photo identification (e.g.; State/Province Issued Drivers

License, Passport and Government Agency ID) to security or premises personnel and sign in and out of the premises.

33.2.2 Contractor may be required to review security requirements, undergo training sessions as appropriate, understand information protection requirements which in the US may include Security Sensitive Information (SSI), Chemical Vulnerability Information (CVI), and obtaining a CVI User Certificate as appropriate, and complete certain security paperwork (e.g. a Non-Disclosure Agreement) before being allowed to enter Company premises. Contractor must cooperate with all security requirements.

33.2.3 A Facility Specific Security Plan has been implemented at each premise that prescribes the security measures based on national and/or local threat levels. The Company has adopted the three-tier National Terrorism Advisory System (NTAS). The NTAS system provides uniform guidance to citizens, the private sector and public agencies on the perceived threat posed to the country by terrorists. Depending on the nature of the threat, you may see a heightened law enforcement or military presence at the premises

33.2.4 Anyone entering the premises should be aware at all times and report to a Company representative anything that is suspicious which include at a minimum:

- Recognition of characteristics and behavioural patterns of persons who are likely to threaten security;
- Observation of any suspicious activity, theft, vandalism, and suspicious or dangerous substances or devices.
- Any unauthorized filming or photography.

Security Awareness for Information Protection must include;

- Contractors should exercise discretion in discussing proprietary information in public places where conversations can be easily overheard.
- Proprietary information, in any form, should be handled and stored in a manner which ensures its security.
- Care should be taken to protect documents, conversations, and information posted in public view from visitors to company offices.

### 33.3 KEY REQUIREMENTS – SECURITY FOR MARINE PREMISES

33.3.1 In Contractor entering a marine premises are subject to the measures required under the Maritime Transportation Security Act of 2002 (MTSA), the U.S. Coast Guard, international port security regulations and Transport Canada’s Marine Transportation Security Requirements. Failure to abide by security procedures may result in denial or revocation of authorization to access the premises.

33.3.2 Transportation *Workers Identification Credential* (“TWIC”): Any person needing unescorted access to Company premises regulated by MTSA must possess a valid Transportation Workers Identification Credential (“TWIC”). A TWIC is a valid, non-revoked transportation worker identification credential. In addition, any person needing unescorted access must also have familiarity with all relevant aspects of the requirements of a TWIC holder.

33.3.3 Maritime premises 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 National Terrorism Advisory System (NTAS).

| Department of Homeland Security’s National Terrorism Advisory System (NTAS) | Equivalent maritime security (MARSEC) level |
|-----------------------------------------------------------------------------|---------------------------------------------|
| Baseline/ Normal                                                            | MARSEC Level 1.                             |
| Elevated                                                                    | MARSEC Level 2.                             |
| Imminent                                                                    | MARSEC Level 3.                             |

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

#### 33.4 Department of Homeland Security's Chemical Facility Anti-Terrorism Standards (CFATS)

33.4.1 Contractor must notify Company thirty (30) days in advance of any plans to bring any chemical of interest (COI) onto the Premises, and must obtain the written approval of the Company Representative for that facility prior to bringing any COI onto the facility.

### **SECTION 34: SMALL TOOLS (POWER, AIR AND HAND TOOLS)**

#### **34.1 GENERAL INFORMATION**

34.1.1 Contractor must follow the manufacturers' guidelines and guidelines from this section, for using small tools.

#### **34.2 KEY REQUIREMENTS**

34.2.1 Power, air, and hand tools must be in good condition. Replace worn tools immediately.

34.2.2 Remove damaged or frayed cords from service. Do not hoist or lower tools by the cord or hose

34.2.3 Do not use power tools if safety equipment such as shields, tool rests, hoods, and guards have been removed or rendered inoperative.

34.2.4 Contractor must wear identified PPE when using tools.

34.2.5 Ground electrically powered tools by ground-fault-circuit interruption devices.

34.2.6 Reduce the operating pressure of compressed air used for cleaning purposes to 30 psi or less. NOTE: Compressed air cannot be used to clean substances from workers clothing or bodies.

### **SECTION 35: STOP WORK AUTHORITY**

#### **35.1 GENERAL INFORMATION**

35.1.1 All Contractor and / or Company representatives have the authority to suspend a work task or group operation when the control of safety or environmental risk is not clearly established or understood.

35.1.2 Stop Work Authority is in place to ensure the right thing is done the right way. This program manages risk and protects personnel, the environment and assets. Any intervention will be supported by the Company and there will be no repercussions for using the Stop Work Authority

#### **35.2 KEY REQUIREMENTS**

35.2.1 Work must be stopped when:

- Any Contractor brings attention to an unsafe act or condition.
- An unsafe condition could result in an undesirable event

35.2.2 The steps to take:

- Stop work activities, remove workers from area and stabilize the situation. Make the area safe as possible.
- Notify all affected personnel and Company representative of the stop work issue.

35.2.3 Most issues can be adequately resolved in a timely fashion at the job site.

## **SECTION 36: TRAINING**

### **36.1 GENERAL INFORMATION**

36.1.1 Contractor is obligated to perform applicable safety training relative to the scope of work. Training and documentation for the proper application, use, care and maintenance of safety equipment must be conducted for all affected workers.

36.1.2 Contractor must conduct safety meetings to instruct on the recognition and avoidance of hazards in the work place. Safety meetings must focus on topics related to the scope of work to be conducted to ensure all contract workers understand potential hazards and mitigation steps.

### **36.2 KEY REQUIREMENTS**

36.2.1 Daily tailgate safety meetings are required prior to work commencing. These tailgate meetings are intended to review applicable safety permits and/or the JHA.

36.2.2 Detailed safety meetings must be conducted at least once per week.

36.2.3 Safety meetings/training and tailgates must be documented by the Contractor. The documentation must include each topic discussed, content, attendees, dates and the name(s) of instructors or persons presiding.

36.2.4 Company Representatives/Inspectors may attend these meetings to evaluate their value and improve communications.

36.2.5 Contractor must implement a Short Service Worker (SSW) Program for all Contractor workers that have less than 6 months of actual job task experience. It is the Contractor's responsibility to have a means of identifying short service workers (SSW). This can be accomplished with a unique colored hard hat or distinctive and easily visible marker or identifier.

## **SECTION 37: UNDERGROUND UTILITY LOCATING (ONE CALL)**

### **37.1 GENERAL INFORMATION**

37.1.1 Line hits have the potential to impact the general public, additional pipeline owner-operators and Company operations. This is a reminder to all Contractors of their legal and contractual requirement to complete the One - Call process.

### **37.2 KEY REQUIREMENTS**

37.2.1 THE EXCAVATOR IS RESPONSIBLE FOR HAVING ALL UTILITIES LOCATED AT THE SITE.

37.2.2 One - Calls are a mandatory notification requirement. This mechanism allows the owners of underground facilities to identify their facilities before excavation occurs. This potentially avoids the damage, injury or service disruption that can occur by an excavator digging into underground facilities. These facilities include, but are not limited to electrical lines and pipelines carrying natural gas, liquid petroleum products, water and sewage.

37.2.3 Excavators are required by law to notify applicable One - Call Centers at least two working days (US) or three working days (Canada) in advance before starting an excavation project or otherwise applicable state requirement.

37.2.4 All utility lines on or near the job site must be identified and marked at this time using flags, spray paint, or both. Additionally, survey the area for identifiers such as pipeline line markers, depressions or other indicators of underground utilities.

37.2.5 Once utilities are marked, respect the demarcations and dig carefully in their proximity. Always expose underground installations by a safe and acceptable method. It may be necessary to excavate by hand in congested areas such as pump stations or when underground utility locations are unknown. Review available detailed underground facilities drawings before beginning an excavation. While the excavation is open, protect, support or remove such installations to safeguard employees.

37.2.6 Always call One-Call before beginning an excavation project. Every digging project, no matter how large or small, no matter what the location, warrants a One - Call. Example digging projects include tasks as simple as installing a mailbox, building a deck, planting a tree or more complex tasks such as major road or building construction.

37.2.7 Depending on the location of the in relation to the excavation, a Company representative may be required at the job site to monitor excavation activity and can help determine the most appropriate digging method. Alert Company if work crews will be crossing the right-of-way with motorized equipment or vehicles.

**37.2.8 If you accidentally damage or hit the Company pipeline or damage a pipeline marker, contact the Company immediately. All dents, scrapes or other damage need to be assessed and repaired to prevent a future leak or serious accident.**

## **SECTION 38: VEHICLES – HEAVY EQUIPMENT (MOBILE POWERED)**

### **38.1 GENERAL INFORMATION**

38.1.1 Vehicles and heavy equipment brought on site must be inspected, tested, and certified to be in safe operating condition. The certification documentation must be available for review

38.1.2 Contractor equipment operators must be licensed or certified to operate equipment. Certification is required for crane operations, power industrial trucks, and others as applicable. Training documentation must be current.

### **38.2 KEY REQUIREMENTS**

38.2.1 All Contractor personnel must have the proper commercial driver's licenses to operate equipment on public roadways.

38.2.2 Special permission by Company is needed for vehicles to enter restricted areas such as dike areas.

38.2.3 Contractor must be transported to and from the job site in a safe manner. Each passenger must 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 prohibited. Seat belts must be worn by driver and all passengers while on public roadways.

38.2.4 All posted speed limits and traffic regulating signs must be observed. Only drive on designated roads or right of ways.

38.2.5 Reckless driving and horseplay is prohibited.

38.2.6 Mobile Equipment Operation

- Only properly trained, qualified personnel are permitted to operate equipment or machinery.
- Contractor is prohibited from operating Company owned equipment or machinery
  - This does not include Contractor workers considered to be temporary workers with Company approval.
- Company workers are prohibited from operating Contractor owned equipment or machinery.
  - This does not apply to equipment the Company rents.

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

38.2.8 Audible back-up alarms must be correctly installed and maintained on Contractor equipment

38.2.9 Contractor is required to secure and/or remove keys from all vehicles and mobile equipment that remain on the right of way without supervision or security.

### **38.3 ALL TERRAIN VEHICLES (ATV) AND UTILITY VEHICLES**

38.3.1 ATV's and utility vehicles include any motorized off highway vehicles having a bench or seat to be straddled by the Contractor and a handlebar or wheel for steering control).

- Under no circumstances may a Contractor use three-wheeled ATVs.

- All ATVs and utility vehicles must have the proper warning placards affixed to them. These placards include the general safety requirements, weight capacities, and tire pressures assigned by the manufacturer.
- Seat belt use is required on utility vehicles if the vehicle is equipped with them.
- ATVs and utility vehicles are not to be operated on public roads or public drives unless allowed by local traffic laws.
- (PPE must be worn when operating an ATV including:
  - A DOT, Snell, CSA or ANSI approved helmet with face shield and/or impact resistant goggles.
  - Long sleeved shirt and long pants.
  - Leather, heavy cotton, or company issued work gloves.
  - Other PPE that may be required for the working conditions

38.3.2 All Contractors operating ATVs and/or utility vehicles must complete a Safe Operations training course.

## **38.4 CONTRACTOR TRANSPORTATION DRIVERS**

38.4.1 Contractor transportation drivers associated with any construction project entering a Company premises must receive a Driver Safety Orientation. Utilize CSM-009 (US/Canada) or site/project specific form for documentation.

38.4.2 A "Driver" is defined as follows: Any Contractor who will be operating a vehicle including loading or unloading of a vehicle/trailer at the job site without performing additional work. (This does not include delivery services such as UPS or FEDEX).

38.4.3 In the US, drivers are required to obtain and hold a CDL for the proper vehicle class being operated

38.4.4 Any violations of Company Policy, posted signs or the law while operating a motor vehicle that may result in immediate dismissal of the Driver or the Contractor from a Company project. Examples of issues that may result in immediate dismissal from a Company project include without limitation:

- Being under the influence of alcohol or controlled substance
- Leaving the scene of an accident Speeding Driving recklessly
- In the US, driving a CMV without a CDL in the driver's possession.
- Not completing required inspections as outlined
- Not maintaining equipment to recognized standards. (NOTE: At anytime a Company representative can question the quality of the equipment being used the project. If the equipment is deemed unsafe, it may be tagged out of service and will not be allowed to operate on the project).

## **SECTION 39: WATER / DOCK SAFETY**

### **39.1 GENERAL INFORMATION**

39.1.1 Contractors who perform work on marine docks or who are at risk of falling into water must be protected from the fall utilizing the proper fall protection equipment and/or must use approved personal floatation devices.

## **SECTION 40: WELDING SAFETY**

### **40.1 GENERAL INFORMATION**

40.1.1 Contractor must follow approved, site-specific procedures for welding, cutting, and heating. If no site specific procedures exist, Contractor must develop procedures using guidelines in this section.

40.1.2 Contractor must meet all requirements related to welding safety and compressed gas cylinders.

## 40.2 KEY REQUIREMENTS

**40.2.1** Contractor personnel performing welding and cutting must be qualified and trained in accordance with applicable standards and must be thoroughly familiar with potential hazards and precautions necessary to ensure safety.

- Grinder guards are required on all abrasive grinding wheels.
- Safety glasses must be utilized when hoods or pancake hoods are not in use

**40.2.2** Mechanical Plugs, air bags, aqua-gel mud packs, dry ice, spheres or other approved sealants must be used to prevent flammable atmospheres/air mixtures from contacting possible sources of ignition (i.e. grinding, brushing, beveling). **Warning:** Mechanical plugs or air bags are not pressure holding devices and must not be used as pressure plugs. Air bags may not be approved for use in all business units.

**40.2.3** Mechanical plug requirements:

- Extend the vent to an adequate location away from the work area to prevent possible ignition
- Do not install anything that restricts or narrows the inner diameter of the hose or piping
- Use a reinforced vent hose to prevent hose crimping, which would restrict venting
- Be sure that the pressure gauge and related openings are free from obstructions. Verify ounce / millibar gauge accuracy before each use. If there is any pressure buildup, immediately declare the area unsafe and eliminate the pressure before resuming work.

## SECTION 41: WORK CLOTHING

### 41.1 GENERAL INFORMATION

41.1.1 Normal work attire includes sleeved shirts and long pants are required at all times. Where hazards exist due to moving parts on machinery or equipment, clothing and hair must be maintained to avoid entanglement.

### 41.2 KEY REQUIREMENTS

41.2.1 Special work clothing must 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 premises or business unit's site specific requirements for any additional needs, such as Fire Retardant Clothing (FRC). The Contractor is required to supply special work clothing, ensure it is in good condition and properly worn, when required.

## SECTION 42: WORKSITE SAFETY

### 42.1 GENERAL INFORMATION

42.1.1 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 are maintained.

42.1.2 Contractor must provide illumination bright enough for work to proceed safely.

### 42.2 KEY REQUIREMENTS

42.2.1 Contractor must ensure protection from severe weather conditions including but not limited to: hurricanes, extreme winds, tornadoes, lightning storms, extreme heat or cold and flooding.

42.2.2 If lightning is seen or if thunderclouds are building overhead, Contractor must implement a lightning safety action plan without delay.

42.2.3 The Contractor needs to evaluate the environmental extremes of the project, such as the ability of their workers to work in areas of excessive cold or heat. Based on that evaluation the Contractor must implement the appropriate procedures to provide a safe a work environment.

42.2.4 Contractor must provide an adequate supply of fresh drinking water on a daily basis for its workers. Unless otherwise specified, portable rest rooms must be provided and maintained by the Contractor.

42.2.5 **All animals, except for service animals,** are not allowed on Company premises.

## **SECTION 43: ENVIRONMENTAL REQUIREMENTS - GENERAL**

### **43.1 KEY REQUIREMENTS**

43.1.1 Contractor must review and comply with all applicable environmental permits and conditions, laws, regulations and Company requirements prior to the start and during work. If the Company obtained environmental permits, the Contractor will be provided copies. If the Contractor obtained environmental permits, the Contractor will provide the Company with copies.

43.1.2 Contractor must participate in and comply with all applicable project-specific environmental training prior to commencing work.

43.1.3 For projects on which the Company has designated an Environmental Inspector, the Contractor shall recognize that the Environmental Inspector has the authority to stop activities that violate environmental conditions, state/provincial or federal environmental permit requirements, or landowner requirements; and to order appropriate corrective action.

43.1.4 Contractor shall use only approved access roads and stay within approved and designated working, staging, temporary use, and parking area boundaries. The Contractor will stay out of exclusion zones. All motorized vehicles must be cleaned to prevent the spread of weeds.

43.1.5 Contractor must handle, treat, characterize and dispose of all waste in accordance with all applicable federal and state/provincial regulations and any specific contract requirements, such as Company approval of the disposal site. Trash, debris, and other wastes shall not be burned or otherwise disposed on site without proper permitting. Waste materials must be secured while on the worksite. All containers will be properly labeled for content.

43.1.6 Contractor shall maintain a clean and safe worksite. Trash and debris will be collected at the end of each day. Cigarette butts must be disposed of in the receptacles provided and not in garbage bins or bags.

43.1.7 Contractor shall maintain equipment to prevent leaks. The Contractor shall take appropriate measures to contain potential leaks and repair leaks promptly.

43.1.8 Contractor shall perform refueling and equipment maintenance activities only in approved areas. Routine or planned vehicle maintenance is not allowed onsite. Before performing refueling and maintenance, install appropriate containment to collect potential spills; this includes absorbent pads, plastic sheeting, and/or mats beneath the equipment.

43.1.9 Contractor must not make any discharges to water that are not permitted or otherwise approved by law. In the event that the Contractor performs a discharge under an applicable state/provincial permit or regulation, they must comply with all applicable requirements.

43.1.10 Contractor must perform work in a manner that prevents effects of soil erosion and sedimentation in compliance with applicable laws, regulations, permits, and Company requirements. Clear and grade only areas necessary for construction and within the approved construction boundaries. Separate and replace topsoil in accordance with project requirements. Erosion and sediment control must be installed, inspected and maintained to contain soil on the construction site and away from wetlands and water bodies. Disturbed

areas must be stabilized and re-vegetated where applicable, as soon as possible following construction in compliance with permit conditions and Company requirements or in accordance with landowner requirements.

43.1.11 Contractor must not collect or disturb indigenous plants, wildflowers, cultural artifacts, fossils or human remains in compliance with historic preservation laws, regulations, permits or Company requirements.. If artifacts, fossils or remains are discovered, work must stop immediately in the areas of the discovery and a Company Representative must be notified. The site must be protected from incursion. Work in the area may resume only after the Company provides approval.

43.1.12 Contractor must not agitate, take, feed or otherwise harm wildlife (mammals, birds, snakes, etc.) , or livestock. If wildlife or livestock are affected by the construction activity, Contractor must notify a Company Representative.

43.1.13 Contractor must not agitate, take, feed or otherwise harm species protected by federal, state/provincial, local statutes or permits or their habitat, or migratory birds or their nests. If protected species and/or their habitat or migratory birds and/or nests are affected by the construction activity, Contractor must stop activity in the area and notify a Company Representative. Work in area may resume only after the Company provides approval.

43.1.14 All Contractors who meet the requirements for needing a Spill Prevention Control and Countermeasure plan (SPCC) must comply with all plan requirements. The SPCC, if needed, must be submitted to the Company.

43.1.15 Spills resulting from Contractor activity must be reported to a Company Representative immediately. Immediate actions will be taken to safely stop the discharge, contain it, and clean it up in accordance with applicable statutory and Company requirements. Spills include, but are not limited to: small quantities of hydraulic fluid, motor oil and fuel spilled during equipment refueling operations.

43.1.16 Company facility/premise may be required to follow applicable Air Permit requirements. Contractors must review the permit with Company Representative to ensure all Air Permit requirements are followed.

43.1.17 Contractor must properly train their workers on their responsibilities regarding spill notification requirements and have all notification numbers available at all times.

## **SECTION 44: ENVIRONMENTAL – HAZARDOUS WASTE MANAGEMENT**

### **44.1 GENERAL INFORMATION**

44.1.1 Contractor is responsible for the safe use and disposal of chemicals and hazardous materials brought onto Company property in compliance with applicable laws and regulations, and for complying with the applicable requirements for generation of hazardous waste.

44.1.2 Contractors that generate hazardous waste must comply with all regulations. No hazardous waste may be disposed in Company waste containers. If there are questions, consult Company Representative.

### **44.2 KEY REQUIREMENTS**

44.2.1 In the US, do not store more than 55 gallons / 208 liters of hazardous waste or one quart of acutely hazardous waste without written approval from Company. Waste containers must be clearly be labeled as to their contents.

44.2.2 The disposal of waste materials such as asbestos, lead paint, hazardous construction debris, or contaminated soil resulting from demolition or excavation must be approved by the Company.

## **SECTION 45: ENVIRONMENTAL – SPILL PREVENTION AND CONTROL**

### **45.1 GENERAL INFORMATION**

45.1.1 Contractors must minimize the risk of spills or releases to the environment by implementing appropriate protective procedures such as secondary containment, double containment, employee training,

overflow protection, and other measures as part of activities involving the use, storage, or handling of petroleum products or hazardous materials on Company property.

## **45.2 KEY REQUIREMENTS**

45.2.1 Containers of hazardous materials and petroleum products should be stored in a manner that prevents releases to the environment. This requires selecting locations and methods to minimize exposure to rainfall, surface water, and the ground. Enclosures, shelters, and secondary containment should be used where appropriate. Containment pans should be placed under equipment where there is the potential for a leak or discharge.

45.2.2 Prior to discharge from a containment system, inspect the primary container for signs of leakage, and inspect the containment system by visual observation for color, foam, outfall staining, visible sheens, and dry weather flow. The discharge from a containment system that has evidence of contamination is prohibited.

45.2.3 The Contractor must maintain a log indicating the individual making the observations, description of accumulated stormwater, and the date and time of release. These logs must be maintained daily, monthly and yearly as outlined in the regulation. Submit a copy of the log to the Company.

## **SECTION 46: ENVIRONMENTAL – DISCHARGES TO STORMWATER CONVEYANCE SYSTEMS**

### **46.1 GENERAL INFORMATION**

46.2.1 All discharges to a permitted stormwater conveyance system must be performed in compliance with the applicable permit and Storm Water Pollution Prevention Plan (SWPPP).

46.2.2 Non-stormwater discharges are NOT permitted unless approved by Company. Examples of prohibited activities include:

- Discharging of rinse water from vehicle or equipment washing
- Discharging of treated water systems such as water fountains, cooling tower water
- Discharging groundwater from excavations

46.2.3 An unauthorized or unpermitted non-stormwater discharge is considered a release and must be reported and documented in accordance with the accident/incident and spill notification procedures.

## **SECTION 47: ENVIRONMENTAL – EROSION CONTROL**

### **47.1 GENERAL INFORMATION**

47.1.1 Appropriate erosion and sediment control measures must be in place prior to ground breaking or any condition that could cause silt to enter a sewer, wetland, or water body.

47.1.2. If a construction activity involves ground disturbance, the work may be subject to an applicable permit. In the US, this is a construction storm water permit; if a permit is required, the project must have a SWPPP developed and implemented before starting the work and the construction must be performed in compliance with the SWPPP.

## **SECTION 48: ENVIRONMENTAL – EXCAVATION ACTIVITIES IN ENVIRONMENTALLY RESTRICTED AREAS**

### **48.1 GENERAL INFORMATION**

48.1.1 In areas outlined in the general site drawings as environmentally restricted or areas identified as environmentally sensitive (i.e. – parks, water bodies, areas containing migratory birds, etc.), excavations are prohibited unless approved in writing by Company. If an area is marked on the drawings or delineated on site as an exclusion zone, the Contractor will not enter the area without express authorization.

**SECTION 49: ENVIRONMENTAL – OPEN BURNING****49.1 GENERAL INFORMATION**

49.1.1 Unless otherwise specified, open burning of debris on Company property is prohibited.

**SECTION 50: ENVIRONMENTAL – WORKING NEAR WATERBODIES AND WETLANDS****50.1 GENERAL INFORMATION**

50.1.1 Contractor must minimize disturbance to water bodies and wetlands by ensuring that all proper permits have been obtained and reviewed prior to commencement of work activities and ensuring that proper precautions are taken to minimize vegetation loss and impact to water quality and compliance with the permit.

**50.2 KEY REQUIREMENTS**

50.2.1 Do not drive through open water bodies or wetlands.

50.2.2 Do not take water from or discharge to water bodies or wetlands without prior approval and required permits. Carry out proper water quality monitoring and discharge water handling procedures as required by permits.

50.2.3 Take all measures required to mitigate disturbance to water bodies by utilizing proper soil handling, erosion and sediment control techniques. (i.e. – install berms, cross ditches, and or silt fences at the base of approach to slopes of wetlands between the wetlands and work area).

50.2.4 If the project requires working within or across a water body or wetland, verify that the project design complies with all applicable permits before initiating work in the resource, and perform the crossing in compliance with the design.

**SECTION 51: UNITED STATES - DOT – OPERATOR QUALIFICATION (OQ)****51.1 GENERAL INFORMATION**

51.1.1 Hiring Managers and Contractors can access a full list of OQ covered tasks on the Company OQ Website. [http://www.kindermorgan.com/work/contractor\\_co/dot\\_operator\\_qual.cfm](http://www.kindermorgan.com/work/contractor_co/dot_operator_qual.cfm).

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

51.1.3 The Hiring Manager may use non-mandatory Exhibit A: Operator Qualification (OQ) Contractor Compliance Checklist to assist with Company OQ documentation requirements.

51.1.4 Exhibit A applies to any contract that involves performance of tasks identified in Company's OQ Program as OQ covered tasks. Exhibit A applies ONLY to the OQ component.

**51.2 KEY REQUIREMENTS**

51.2.1 New construction is not covered by the OQ regulation. However, almost every new construction project will tie into an existing pipeline system, at which point OQ covered tasks will be involved for the tie-in and any subsequent work on the new segment after it is tied in.

51.2.2 Contractor must submit an OQ Action plan for review to the ISN Contractor database. The OQ Action Plan Template is located at: [http://www.kindermorgan.com/work/contractor\\_co/oq\\_action\\_plan\\_elements\\_for\\_contractors.pdf](http://www.kindermorgan.com/work/contractor_co/oq_action_plan_elements_for_contractors.pdf).

51.2.3 Contractor OQ action plans must be reviewed and approved by the Company's OQ Administrator prior to performing OQ covered tasks.

51.2.4 Contractor must submit employee ISN OQ reports to the appropriate Company ISN jobsite indicated on the OQ Action Plan Template. The Contractor must also provide a hard copy of the workers ISN OQ

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report at the jobsite as required by Appendix E of the Company's Corporate OQ Plan. Appendix E is located at:

[http://www.kindermorgan.com/work/contractor\\_co/oq\\_procedure\\_for\\_Contractor\\_Compliance.pdf](http://www.kindermorgan.com/work/contractor_co/oq_procedure_for_Contractor_Compliance.pdf).

51.2.5 Contractor must supply a daily roster of OQ covered task workers to a Company Representative unless the roster of OQ covered task workers does not change from day to day during the project.

51.2.6 The OQ orientation must be documented on CSM-003 or equivalent.

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| APPENDIX 1 – Regulatory Applications to Sections |                                          |                                       |                     |            |               |                                |                     |                  |                        |                                |                                                      |
|--------------------------------------------------|------------------------------------------|---------------------------------------|---------------------|------------|---------------|--------------------------------|---------------------|------------------|------------------------|--------------------------------|------------------------------------------------------|
| Section Number                                   | Section Heading                          | OSHA                                  | MSHA 30 CFR         | DOT Parts  | EPA 40 CFR    | Canada Federal SOR (Parts)     | Alberta WCB (Parts) | BC – WCB (Parts) | Manitoba – WCB (Parts) | Ontario (Regulation / Section) | Saskatchewan (Chapter / Regulation / Part / Section) |
| 4                                                | Accident / Incident Reporting            | 1904                                  |                     |            |               | 94-165 ; XVI 16.3; 86-304 ; XV | 544 (1)             | 3.4              | 2.6 – 2.9              | 213/91; 8-12                   | 0.1; 1; 2; 7-11                                      |
| 5                                                | Alcohol, Illegal Drugs and Firearms      |                                       | Parts 66            | 40 and 199 |               |                                | 4.20                |                  |                        |                                |                                                      |
| 6                                                | Asbestos                                 | 1910.1001; 1926.1101                  | 56.5001             |            | 61.140-61.157 | 304; 10.1                      | 29-40               | 6                | 37                     | 490/09; 5                      | 0.1.1; 1; 23; 330.345                                |
| 7                                                | Chains, Slings and Cables                | 1910.179-184 1926.251                 |                     |            |               | XVI 14.2                       | 292.-309            | 15.1-15.60       | 26.30-26.32            | 213/91; 168-180                | 0-1.1; 1; 14; 227-239                                |
| 8                                                | Confined Space / Confined Space Entry    | 1910.146                              | Parts 49            |            |               | XI                             | 5                   | 9.1-9.51         | 15.1-15.14             | 213/91; 222-242                | 0-1.1; 1; 18; 266.275                                |
| 9                                                | Cranes and Rigging                       | 1910.179 1926.550; 1926.1408          | 56.16014            |            |               | XIV                            | 6; 292-309          | 14.1-14.132      | 23.1-23.38.4           | 213/91; 15-167                 | 0-1.1; 1; 13; 199-226                                |
| 10                                               | Electrical Safety                        | Subpart s Subpart K                   | 56.12004; 57.12004  |            |               | XIV 14.39                      | 17                  | 19.1-19.43       | 39.1-39.12             | 213/91; 181-195.5              | 0-1.1; 1; 30; 450-467                                |
| 11                                               | Emergency Evacuation                     | 1910.38 1926.35                       | 77.1101             |            |               | XVII                           | 7                   | 32.1-32.9        | 13.5                   | 213/91; 70-72                  | 0-1.1; 1; 16; 248                                    |
| 12                                               | Excavations / Trenching and Shoring      | 1926.650-652                          | 77.1900             |            |               | 3.12                           | 36                  | 20.78-20.95      | 26.1-26.47             | 213/91; 222-242                | 0-1.1; 1; 17; 257-275                                |
| 13                                               | Fall Protection                          | 1910.66 1926.500-503                  | 77.1710             |            |               | 2.12-2.13                      | 9                   | 11.1-11.10       | 14.1-14.29             | 213/91; 26.1-26.11             | 0-1.1; 1; 9; 115-122 & 0-1.1; 1; 7; 101-107          |
| 14                                               | Fire Prevention and Protection           | Subpart L 1926.24; Sub F              | Parts 75; Subpart L |            |               | 17.3                           | 10                  | 31.1-31.39       | 19.1-19.11             | 213/91; 52-58                  | 0-1.1; 1; 25; 359-374                                |
| 15                                               | First Aid & Bloodborne Pathogens         | 1910.151; 1910.1030 1926.50           | 56.18010; 57.18010  |            |               | 18.6                           | 11                  | 3.14-3.21        | 5.1-5.19               | 213/91; 261-263                | 0-1.1; 1; 5; 50-63                                   |
| 16                                               | Floors, Roofs and Wall Openings          | 1910.23 1926.105; 1926.1050           | 56.15005            |            |               | 2.5                            | 22; 314             | 20.8             | 30.5                   | 213/91; 212-221                | 0-1.1; 1; 9; 124                                     |
| 17                                               | Hazard Communications (Hazcom)           | 1910.1200 1926.59                     | Parts 47            |            |               | 10.31                          | 29                  | 5.3-5.19         | 35.1-35.25             | 397/93;                        | 0-1.1; 1; 22; 315-329                                |
| 18                                               | Hazardous Atmosphere                     | 1910.146; 1910.1000; 1926.55; 1926.64 | Parts 57; Subpart T |            |               | 10.19                          | 18                  | 5.48-5.59        | 6.16 (1) (2)           | 833                            | 0-1.1; 1; 7; 90                                      |
| 19                                               | Housekeeping                             | 1910.22; 1926.25                      | 56.20003; 57.20003  |            |               | 10.36                          | 12-185              | 4.32-4.45        | 2.14                   | 213/91; 35-48                  | 0-1.1; 1; 6; 64                                      |
| 20                                               | Job Hazard Analysis                      | Subpart I ; App B                     | Parts 62            |            |               | 19.5                           | 2                   | 4.13             | 19.2                   | 213/91; 13-19                  | 0-1.1; 1; 3; 12                                      |
| 21                                               | Ladders                                  | 1910.25-27; 1926.1053                 | 57.19111            |            |               | 2,7-2; 3.11                    | 8; 124-137 (3)      | 13.4-13.6        | 13.7-13.21             | 213/91; 78-85                  | 0-1.1; 1; 16; 252-256                                |
| 22                                               | Lead in Construction                     | 1910.1025; 1926.62                    | Parts 50            |            |               | 10.27                          | 4; 41-43            | 6.59-6.69        | 36.5                   | 490/09; 10                     | 0-1.1; 1; 7; 98                                      |
| 23                                               | Lockout / Tagout (Control of Haz Energy) | 1910.147; 1926.417; 702               | 57.14105            |            |               | 8.12 - 8.18                    | 15                  | 10.1 – 10.12     | 16.14 (1)              | 213/91; 181-190                | 0-1.1; 1; 10; 139                                    |
| 24                                               | Noise / Hearing Conservation             | 1910.95; 1926.52                      | Parts 62            |            |               | 7.1 – 7.8                      | 16                  | 7.1 – 7.9        | 12.1 – 12.12           | 851                            | 0-1.1; 1; 8; 109-114                                 |
| 25                                               | Personal Protective Equipment            | 1910.132-138; 1926,28; Sub E          | Parts 75            |            |               | 12.1 – 12.17                   | 18                  | 8.1 – 8.31       | 6.1 – 6.18             | 213/91; 21-27                  | 0-1.1; 1; 7; 86-99                                   |
| 26                                               | Process Safety                           | 1910.119; 1926.450-                   |                     |            |               |                                |                     |                  |                        | 490/09; 19-26                  | 0-1.1; 1; 2; 7                                       |



| Section Number | Section Heading                             | OSHA                                   | MSHA 30 CFR        | DOT Parts | EPA 40 CFR | Canada Federal SOR (Parts) | Alberta WCB (Parts) | BC – WCB (Parts) | Manitoba – WCB (Parts) | Ontario (Regulation / Section) | Saskatchewan (Chapter / Regulation / Part / Section) |
|----------------|---------------------------------------------|----------------------------------------|--------------------|-----------|------------|----------------------------|---------------------|------------------|------------------------|--------------------------------|------------------------------------------------------|
| 27             | Protecting the Public                       | 1910.145; 1926.200                     | 56.9300; 77.1605   |           |            | 17                         | 12                  | 4.1              | 20.1-20.8              | 213/91; 64-66                  | 0-1.1; 1; 9; 133                                     |
| 28             | Radiation Producing Equipment               | 1910.97; 1096; 1926.53-54              | 57.5047            |           |            | 10.26                      | 20                  | 7.17-7.25        | 18.1-18.4              | 855                            | 0-1.1; 1; 6; 84-85                                   |
| 29             | Regulatory Agency Inspections               | 1903; 1926.3                           | Parts 43           |           |            | 17.9                       |                     | 3.5-3.8          | 2.4 (1)-2.4 (2)        | 611                            | 0-1.1; 1; 29; 414                                    |
| 30             | Respiratory Protection                      | 1910.134; 1926.103                     | Parts 72           |           |            | 12.7-12.8                  | 18                  | 8.32-8.45        | 6.15-6.16              | 213/91;                        | 0-1.1; 1; 7; 88-90                                   |
| 31             | Right-Of-Way / Roadside Work                | 1910.202; 1926.201; MTUCD              | 56.9100            |           |            | 13.15                      | 12.194              | 18.1-18.17       | 6.7; 15.9; 20.1-20.8   | 611; 10                        | 0-1.1; 1; 9; 132-133                                 |
| 32             | Safety Permits (Safe, Hot, Confined Space)  | 1910.146; 1910.252                     | 75.103             |           |            |                            |                     | 9.13             | 15.4-15.5              | 213/91; 224-225                | 0-1.1; 1; 18; 272                                    |
| 33             | Scaffolds                                   | 1910 Subpart D; 1926 Subpart L         | 56.11027; 57.11027 |           |            | 4.10                       | 23                  | 13.7-13.33       | 28.1-28.47             | 213/91; 125/136                | 0-1.1; 1; 12; 168-198                                |
| 34             | Security Requirements                       | 40 CFR 1572; 33 CFR 101.105            |                    |           |            |                            | 27                  | 4.27-4.31        | 11.1-11.2              | 20/32                          | 0-1.1; 1; 3; 36-37                                   |
| 35             | Small Tools (Power, Air and Hand)           | 1910.242; 1926.301                     | 56.14205; 77.402   |           |            | 14                         | 25                  | 12.1-12.83       | 16.4-16.13             | 278/05                         | 0-1.1; 1; 10; 134-152                                |
| 36             | Stop Work Authority                         |                                        |                    |           |            | 9.6                        |                     | 3.12             | 24(2)                  | 20 / 43-49                     | 0-1.1; 1; 3; 13                                      |
| 37             | Training                                    | 1910.120; 1926 Subpart R App E         | 48.25              |           |            | 11.19                      |                     | 3.22-3.25        | 14.26                  | 20; 25                         | 0-1.1; 1; 3; 19                                      |
| 38             | Underground Utility Locating (One Call)     |                                        | 43.7               | 192; 195  |            |                            |                     | 4.18             |                        | 210/01                         | 0-1.1; 1; 17; 260                                    |
| 39             | Vehicles – Heavy Equipment (Mobile Powered) | 1910.66-68; 179-181; 1917.43; 1926.600 | 56.6202            |           |            | 15                         | 19                  | 16.1-16.35       | 22.1-22.30             | 213/91; 93-106                 | 0-1.1; 1; 11; 153-167                                |
| 40             | Water / Dock Safety                         | 1917; 1918; 1926.106                   | 56.15020           |           |            | 13.12                      | 18.7                | 8.26-8.30        | 6.17 (3)(5)            | 213/91; 27                     | 0-1.1; 1; 7; 108                                     |
| 41             | Welding Safety                              | 1910.253; Subpart Q; 1926.350,354      | 56.4600-4604       |           |            |                            | 10; 171-174         | 12.112-12.126    | 17.1-17.9              | 213/91; 122-124                | 0-1.1; 1; 15; 370-373                                |
| 42             | Work Clothing                               | 1910 Subpart I; 1926 Subpart E         | 57.150             |           |            | 10.37-38; 13.13            | 7 / 118             | 8.31             | 6.1 / 6.13(1)          | 213/91; 21-27                  | 0-1.1; 1; 7; 86-97                                   |
| 43             | Worksite Safety                             | 1910.22; 1926.20                       | 56.11001           |           |            | 18.1-18.18                 | 12                  | 2.2              | 2.1                    | 213/91; 31-34                  | 0-1.1; 1; 3; 12                                      |
| 44             | Environmental Requirements – General        |                                        |                    |           |            |                            |                     |                  |                        |                                |                                                      |
| 45             | Environmental – Hazardous Waste             |                                        |                    |           | 261        |                            |                     |                  |                        |                                |                                                      |
| 46             | Environmental – Spill Prevention / Control  |                                        |                    |           | 112        |                            |                     |                  |                        |                                |                                                      |
| 47             | Environmental – Discharges to Stormwater    |                                        |                    |           |            |                            |                     |                  |                        |                                |                                                      |
| 48             | Environmental – Erosion Control             |                                        |                    |           |            |                            |                     |                  |                        |                                |                                                      |
| 49             | Environmental –                             |                                        |                    |           |            |                            |                     |                  |                        |                                |                                                      |



|                                                         | Excavation in Restricted Area |      |             |             |            |                            |                     |                  |                        |                                |                                                      |
|---------------------------------------------------------|-------------------------------|------|-------------|-------------|------------|----------------------------|---------------------|------------------|------------------------|--------------------------------|------------------------------------------------------|
| <b>APPENDIX 1 – Regulatory Applications to Sections</b> |                               |      |             |             |            |                            |                     |                  |                        |                                |                                                      |
| Section Number                                          | Section Heading               | OSHA | MSHA 30 CFR | DOT Parts   | EPA 40 CFR | Canada Federal SOR (Parts) | Alberta WCB (Parts) | BC – WCB (Parts) | Manitoba – WCB (Parts) | Ontario (Regulation / Section) | Saskatchewan (Chapter / Regulation / Part / Section) |
| 50                                                      | Environmental – Open Burning  |      |             |             |            |                            |                     |                  |                        |                                |                                                      |
| 51                                                      | DOT – Operator Qualification  |      |             | 192:<br>195 |            |                            |                     |                  |                        |                                |                                                      |



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(Please Print Name Clearly)

I hereby certify that I have read and understand Kinder Morgan's basic safety and environmental rules and policies and will apply them in my job duties.

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(Signature)

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(Name of Contractor)

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(Date)