



Revisions to 2023 Contractor Environmental Safety Manual

(Approved new language in yellow highlight)

I. Confined Space/Confined Space Entry Permit – Section 7

7.2.4. On-site contract rescue services personnel are required if an Immediately Dangerous to Life or Health (IDLH) atmosphere exists, or there is reasonable potential for one to exist, or if facility/site specific procedures mandate. On-site rescue services personnel must:

- Be properly equipped and trained.
- Receive the same training as authorized entrants. In addition, on-site rescue services personnel must be trained in using personal protective and rescue equipment, first aid, and CPR.
- Practice simulated rescues that are properly documented at least once every 12 months.
- Be available for any entry into an IDLH environment.
- Calling 911 and relying on local fire department resources is not considered an acceptable option for rescue services.

II. Electrical Safety and Overhead Power Lines – Section 10

10.3.5 Contractor must maintain the following minimum vehicle and equipment clearances from overhead lines:

- Vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines shall be operated so that a clearance of 10 ft. (305 cm) is maintained. If the voltage is higher than 50kV, the clearance shall be increased 4 in (10 cm) for every 10kV over the voltage.
 - The restriction above does not apply if an appropriate insulated barrier rated for the voltage of the line (and not part of an attachment to a vehicle or its raised structure) is installed by a qualified person to prevent contact with the line.
- A vehicle or mechanical equipment in transit with its structure lowered shall maintain a minimum clearance of 4 ft. (122 cm). If the voltage is higher than 50kV, the clearance shall be increased 4 in. (10 cm) for every kV over that voltage.
 - If insulating barriers are installed to prevent contact with the lines, and if the barriers are rated for the voltage of the line being guarded and are not a part of or an attachment to the vehicle or its raised structure, the clearance may be reduced to a distance within the designed working dimensions of the insulating barrier.
 - Mechanical equipment in transit under overhead lines must have a dedicated spotter (defined in 10.3.4 above).
- Vehicles or mechanical equipment without the capability of having its structure elevated, or vehicles or equipment with that capability but that do not have parts elevated must maintain a minimum clearance of 4 feet from all overhead power lines.
- Any other exceptions to the minimum vehicle and equipment clearances must be in compliance with the OSHA regulations including 29 CFR 1910.333 and 1926.1409-1411 and discussed in advance with the Company Representative.

III. Excavations & Trenching – Section 12

12.2.4. The Contractor's Competent Person will conduct and document periodic inspections throughout the day when work is being performed in an excavation.

IV. First Aid/CPR/AED & Blood-Borne Pathogens – Section 16

16.1.3 AED (Automated External Defibrillator) is a medical device designed to analyze the heart rhythm and deliver an electric shock to victims of ventricular fibrillation to restore the heart rhythm to normal. Ventricular fibrillation is the uncoordinated heart rhythm most often responsible for sudden cardiac arrest.

V. Worksite Safety – Section 45

45.2.10 Vehicles left unattended must either be turned off or have the parking brake engaged. Specific facility or site-specific procedures may be more stringent and applicable.

VI. Spotter/Flagger or Qualified Signal Person – Section 58

58.1 Definitions

58.1.1 *Dedicated Spotter* – A trained person, dedicated to a piece of equipment and its operator, to provide an extra set of eyes for guidance when an operator does not have a clear view of the site, operating around energized power lines or equipment, working in congested areas, or on varied terrain.

58.1.2 *Dedicated Flagger* – A trained, or certified person based on the applicable Federal, State, Provincial, and Local County and/or City requirements to maintain traffic flow through a work zone, despite a shutdown of lanes.

58.1.3 *Qualified Signal Person* – Required where the point of operation is not in full view of the crane or derrick operator. Qualification requirements outlined in OSHA 29 CFR 1926.1404-1441.

58.2 Requirements

58.2.1 Kinder Morgan contractors are required to have an approved written safety program for Spotters, Flaggers and/or Qualified Signal Persons.

58.2.2 Contractor shall provide documented, trained spotters/flaggers in sufficient numbers whenever:

- heavy equipment is being utilized near existing property,
- people, machinery, obstacles, etc. create congested areas,
- the point of operation is not in full view of the crane or derrick operator,
- backing machines and/or equipment, and
- any other situation which a spotter or flagger will help prevent an incident as determined as part of a Job Hazard Analysis (JHA or JSA).

58.3 Training

Spotters/Flaggers must be trained:

- to understand the proper signs, symbols, hand signals used in direct communication with a vehicle or equipment operator.

- to identify blind spots for typical construction equipment.
- to maintain traffic flow through a work zone, despite a shutdown of lanes.
- to identify hazards and implement safety controls before and during the operation.

58.4 Responsibilities

58.4.1 Spotters/Flaggers must:

- wear high visible/reflective clothing.
- have an audible warning device (that can be heard above normal equipment noise; i.e. airhorn, whistle, etc.).
- use lighted flashers and/or proper overhead illumination during sunrise/sunset or nighttime, so flaggers, personnel, and equipment can be seen by oncoming traffic.
- be equipped with a visual aid (i.e. flags, hi-vis/reflective vests, etc.) and positioned correctly to assist in identifying the minimum clearance distance.
- not be distracted by any personal items (cell phones, headphones, etc.)
- not be assigned to any other simultaneous duties.
- give timely information to the operator so that the required clearance distance can be maintained.
- avoid walking into the path of a vehicle, moving equipment, swinging load, behind heavy and equipment while spotting.
- be continuously visible to the operator or in constant contact via electronic means.

58.4.2 Spotters and Operators must:

- agree on hand signals before proceeding.
- stop moving immediately if operator loses sight of/contact with the spotter.
- be knowledgeable of all Kinder Morgan damage prevention requirements as it pertains to the contractors scope of work, including, but not limited to, O&M Procedures 204 & 184, Construction Standard C1005, C2205, and the Contractor Environmental Safety Manual.