Mission
To respect and protect the safety and health of the public, our employees, our contractors and the environment in all countries and communities in which we conduct our business.

Vision
To achieve excellence in our safety, health and environmental performance.

Policy
In achieving our Mission and Vision, our Policy is to:
• Promote a culture that allows for employee involvement in maintaining a safe work environment while recognizing that safety, health and environmental incidents are preventable;
• Strive for zero injuries and incidents;
• Be a recognized leader in environmental stewardship;
• Promote continuous improvement in our processes, reducing risk to safety, health and the environment; and
• Adhere to applicable laws, regulations, Anadarko policies and procedures, and recognized standards.

Everyone has the responsibility, and will be held accountable, to work safely and in an environmentally sound manner.

• Our number one priority is the safety and well-being of the public, our employees, and contractors.
• Our business activities will be conducted to minimize our environmental impact.

R. A. Walker
Chairman, President and Chief Executive Officer
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose and Scope</td>
<td>1</td>
</tr>
<tr>
<td>Acknowledgment</td>
<td>2</td>
</tr>
<tr>
<td>Contractor Expectations and Responsibilities</td>
<td>3</td>
</tr>
<tr>
<td>Contractor Onboarding and Engagement</td>
<td>5</td>
</tr>
<tr>
<td>Drug, Alcohol and Weapons</td>
<td>7</td>
</tr>
<tr>
<td>General HSE</td>
<td>9</td>
</tr>
<tr>
<td>Health</td>
<td>12</td>
</tr>
<tr>
<td>General Safety</td>
<td>14</td>
</tr>
<tr>
<td>Safe Work Practices</td>
<td>20</td>
</tr>
<tr>
<td>Environment</td>
<td>25</td>
</tr>
<tr>
<td>Process Safety Management</td>
<td>31</td>
</tr>
<tr>
<td>Safety and Environmental Management Systems (SEMS)</td>
<td>32</td>
</tr>
<tr>
<td>Drilling, Completions and Servicing Operations and Workovers</td>
<td>33</td>
</tr>
<tr>
<td>Appendix (Codes, Standards and Regulations)</td>
<td>35</td>
</tr>
</tbody>
</table>
Anadarko Petroleum Corporation and its subsidiaries (Anadarko or the “Company”) employ a diverse group of contractors that provide specific labor or service functions necessary for operations. While diverse in nature, all contractors share a common need for effective health, safety and environmental (HSE) programs to protect Anadarko’s employees, contractors and the community from injury, illness or property damage associated with incidents arising from contractors’ work.

Purpose

The purpose of the Anadarko HSE Domestic Contractor Expectations Manual (Manual) is to inform contractors of the Company’s minimum expectations relating to worker safety and environmental protection as they relate to the scope of contractors’ work including compliance with applicable industry standards and federal, state and local laws and regulations. This manual does not serve as a comprehensive guide to all government regulations or does not exempt any contractor from these responsibilities.

Since the functions performed by contractors are diverse, requirements may vary depending on the scope of a particular contractor’s work. It is the responsibility of each contractor to assess the specific job hazards and HSE requirements associated with their operations.

Scope

The guidelines contained in the Manual apply to all domestic onshore and offshore field service contractors including, but not limited to those who perform on-site services related to the drilling, completion and production of oil and natural gas wells, and the construction, operation and maintenance of related tank batteries, processing plants, compressors, and offshore facilities.
Anadarko expects all contractors to:

1. Review this Manual;
2. Communicate key points of the Manual as they apply to your business, employees and subcontractors; and;
3. Acknowledge understanding of the Manual through the request in ISNetWorld (ISN).
   (http://www.isnetworld.com)
CONTRACTOR EXPECTATIONS AND RESPONSIBILITIES

Anadarko requires each of its contractors to execute a contract and provide the Company with evidence of required insurance coverage. Failure to have an executed service agreement and meet all contractual requirements will result in the contractor being removed from the Company’s approved vendor list.

The Company expects contractors to (i) evaluate the specific hazards and safety and environmental requirements associated with their activities; (ii) develop and implement HSE programs, policies and procedures in accordance with applicable industry standards, best practices and federal, state and local laws and regulations.

Each contractor is expected to meet or exceed the practices outlined in this Manual; their own contractor manual and programs; and any applicable federal, state, or local regulation. The contractor is also responsible for ensuring their subcontractors are doing the same.

Anadarko requires contractors to provide training documentation illustrating that employees have the appropriate knowledge and skills to perform their job duties. SafeLand and/or SafeGulf will not be accepted as a form of training for assessments since it is defined as orientation only.

Specific responsibilities that apply to all contractors include, but not limited to:

1. Conduct operations in a manner consistent with an approved HSE program consistent with Anadarko’s HSE programs, policies and bridging documents.
2. Comply with all HSE federal, state, and local laws, rules and regulations applicable at all locations where services are performed.
3. Provide and maintain all required personal protective equipment (PPE) and instrumentation necessary to perform work effectively, efficiently and safely.
4. Report all injuries, incidents and spills immediately to the appropriate Anadarko Person-In-Charge (PIC).
5. Ensure employees and subcontractors are trained and possess the skills, knowledge and experience to conduct their work in a safe and environmentally friendly manner. Subcontractors are subject to the same HSE requirements as the contractor.
6. Coordinate all activities, including the use of subcontractors to complete contracted work or services, with the designated Anadarko PIC.
7. Maintain a minimum of one English-speaking employee on location at all times.
8. Plan safety and pollution prevention into all operations and advise the Anadarko PIC of any unique hazards presented by the contractor’s employees, equipment or procedures prior to beginning work.
9. Establish and enforce policies and procedures and provide training to employees in accordance with the guidelines contained in the Manual, applicable industry standards and federal, state and local laws and regulations.
Onboarding

A third-party database, ISNetWorld (ISN), is used to collect safety statistics and documentation during the onboarding process. Contractors who have the potential to or will send employees to Anadarko field locations are required to subscribe with ISN (http://www.isnetworld.com) and complete the action items listed within their profile.

Action items listed in ISN can include but are not limited to the following:

- Upload a current EMR Letter;
- Upload all required written safety programs;
- Upload OSHA 300 & 300A Logs for the past three years;
- Answer the safety statistical information found in section 10 of the US Questionnaire; and

All contractors must meet the standards as outlined by their own safety programs and be prepared to be assessed on that criteria. Contractors are also required to ensure their employees complete SafeLand USA Orientation (onshore specific) or SafeGulf Orientation or equivalent (offshore specific) prior to arriving on an Anadarko location.

Acceptable SafeLand documentation includes the following:

1. Copy of permanent or temporary SafeLand card (must contain SafeLand logo)
2. Training Roster containing all of the following items:
   a. Title of Course
   b. Contact Information for Instructor
      • First & Last Name (Print & Signature)
      i. Company Name & Address
      ii. Phone Number & Email Address
      iii. SafeLand Accrediting Organization
   c. Attendee Information
      i. First & Last Name (Print & Signature)
      ii. SafeLand ID or Last Four Digits of Social Security Number

For more information on ISNetworld please visit www.isnetworld.com.
For more information on SafeLandUSA please visit www.safelandusa.org.
For more information on SafeGulf please visit www.safegulfweb.com
Engagement

Anadarko strives to employ only those contractors who demonstrate a commitment to conduct their business in a safe and environmentally responsible manner. The Company will review and assess contractors periodically. When requested to participate in periodic contractor assessments Anadarko will evaluate training, as well as Anadarko specific requirements. The items listed below reflect the documentation that will be requested for review during these assessments. APC reserves the right to request additional items of the contractor at any time.

<table>
<thead>
<tr>
<th>Drug and Alcohol Compliance</th>
<th>Training Documentation</th>
<th>Other Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug and Alcohol Summary Reports</td>
<td>Hazard Communication</td>
<td>Permit Forms</td>
</tr>
<tr>
<td>Drug and Alcohol Policy</td>
<td>Fire Protection/Fire Extinguishers</td>
<td>Employee Observations</td>
</tr>
<tr>
<td>DOT and Non-DOT</td>
<td>Personal Protective Equipment</td>
<td>PPE Hazard Assessments</td>
</tr>
<tr>
<td>Testing Panels on NON-DOT</td>
<td>First Aid/CPR</td>
<td>JSA Forms</td>
</tr>
<tr>
<td>Background Screening Policy</td>
<td>Training based on services provided</td>
<td>Fire Extinguisher Inspection Records</td>
</tr>
</tbody>
</table>

Anadarko requires contractors to provide training documentation as shown in the table above. The training must illustrate that employees have the appropriate knowledge and skills to perform their job duties. No course designated as an orientation will be accepted as training documentation.

Field evaluations may also be conducted on contractors while they perform services on Anadarko locations. The purpose of these evaluations is to verify implementation of the contractors’ HSE programs and to review whether Anadarko’s requirements and expectations are being met.
Drug and Alcohol Testing Requirements

Contractors shall establish and maintain drug and alcohol testing programs that, at a minimum, provide for pre-employment, random, reasonable suspicion, return-to-duty and post-incident testing. Contractors and subcontractors who perform certain types of DOT work must maintain Anti-Drug and Alcohol Misuse Programs that comply with 49 CFR Part 40. DOT Drug and alcohol programs must be submitted to the National Compliance Management System (NCMS) database.  http://nationalcompliance.com/

This includes, but is not limited to:

- Contractors who perform construction, operations, maintenance or emergency response activities on pipeline facilities regulated by 49 CFR, Part 199, Pipeline and Hazardous Materials Safety Administration (PHMSA); and
- Contractors who operate commercial motor vehicles and are subject to the requirements of 49 CFR Parts 382, Federal Motor Carrier Safety Administration (FMCSA).

Illegal Drugs

Anadarko prohibits the use, possession, transportation, promotion or sale of illegal drugs.

Illegal drugs include any and all forms of:

- Narcotics; Depressants; Stimulants; Cannabis
- Hallucinogens, whose sale, purchase, transfer, use or possession is prohibited or restricted by law; and
- Drugs that are not prohibited or restricted by law but were obtained illegally.

The Company also prohibits the possession or use of alcoholic beverages, firearms, weapons or explosives on Company property unless authorized by an executive officer of the Company.

Contractors will not report for duty under the influence of any drug, alcoholic beverage, intoxicant or other substance.

Legal Drugs

Contractors will not report for duty while being administered legally prescribed drugs or while taking “over the counter” medications that affect the contractor’s ability to safely and effectively perform normal duties or affect the safety of themselves or others.

The misuse of any legal drug is prohibited. Misuse includes the use or possession of any prescription drug for which an employee does not have a valid prescription. Misuse also includes the use or possession of any prescription drug in quantities greater than the amount prescribed. Anyone using prescription medications that cause drowsiness or impaired functioning must disclose any work restrictions (not the medication or underlying medical condition) to their supervisor and seek clearance to operate an Anadarko vehicle, operate equipment, or engage in other activities posing a significant risk to the health or safety of the individual or others.
Where legally permissible, Anadarko reserves the right to conduct unannounced random drug and/or alcohol testing for contractors assigned to a particular location or within a particular area at such location where there exists a need for continued maintenance of safe working conditions.

Where legally permissible, Anadarko reserves the right to conduct searches of all persons, employee or otherwise, as a condition to entering, remaining on or departing from Company work locations. These searches include personal vehicles parked on Company property, lease space or contractor facilities.
Housekeeping

Good housekeeping is essential to providing a safe working environment. Contractors shall maintain work areas in a clean and organized manner. The following should be applied for good housekeeping:

- Contractors shall prevent the accumulation of debris or other tripping hazards;
- Tools and equipment shall be securely stored when not in use;
- Routes of exit and access to emergency equipment will be maintained;
- Work areas and vehicles shall be routinely monitored for unsecure trash to prevent it from leaving work areas or vehicles; and
- Work zones shall be cleared of excess materials, debris and trash after work is completed.

HSE Meetings

HSE meetings are essential to ensure that affected Company and contractor personnel are aware of hazards associated with the work. Contractors shall conduct and attend HSE meetings appropriate to the scope of their work or as required by the Company. At a minimum, HSE meetings shall be conducted under the following circumstances as detailed below.

Project Orientation Meetings

When, as determined by the Company’s designated representative, a project requires contractor personnel to perform a non-routine or high-hazard task, the Company’s designated representative and contractor will conduct a project orientation meeting prior to the beginning of work. This meeting is intended to allow Company and contractor representatives to identify and discuss any known or potential hazards that may be encountered during the project and to familiarize the contractor with any site/job specific requirements. The meeting will be documented.

Examples of when a project orientation meeting will be conducted:

- Construction, operations or maintenance work performed at a Process Safety Management (PSM) facility, offshore platform, natural gas processing plant, compressor station or other manned facility;
- Confined space entry by contractor or Company personnel (see page 20);
- Welding, cutting, hot tapping or other hot work on in-service or previously in-service tanks, vessels, piping or other equipment;
- Any other work involving a non-routine or high hazard task, as determined by the Company’s PIC.

On-The-Job/Tailgate and JSA HSE Meetings

Contractors shall conduct and document on-the-job/tailgate/JSA HSE meetings with their employees and subcontractors daily, or more frequently if necessary. The meetings should include discussion of the hazards involved in the task(s) to be performed and the controls or procedures used to address these hazards.

Examples of topics to be included as applicable include, but not limited to:

- Site-specific emergency response and notification procedures;
- Review of Safety Data Sheets (SDS) for chemicals and products used during the operation;
- Site/job specific PPE requirements;
- Equipment specific lockout/tagout procedures;
- Work permit requirements (permit-to-work, hot work, confined space entry, etc.); and
- Site or equipment specific hazards (equipment pinch points, utility locations, etc.).

Contractors shall retain documentation of on-the-job HSE meetings, including the topics covered and personnel in attendance and shall provide documentation to the Company upon request.

**Incident Reporting**

Incidents, including injuries, illnesses, vehicle incidents, property damage, spills and near misses occurring on Anadarko property or leases shall be reported immediately to the appropriate Company representative or PIC.

For injuries, Anadarko recommends that contractors utilize case management as available and applicable.

It is the responsibility of the contractor’s designated PIC to ensure that all incidents are verbally reported immediately to the Company representative or PIC. Additionally, the contractor must submit a copy of the written incident or spill report to the appropriate Anadarko representative within 24 hours. Anadarko expects contractors to conduct incident investigations, provide documentation that identified corrective actions have been implemented and provide written investigation reports.

When an incident involving a contractor’s employees requires notification of a regulatory agency, such as the Occupational Safety and Health Administration (OSHA), United States Coast Guard (USCG), or Bureau of Safety and Environmental Enforcement (BSEE), the contractor’s designated PIC is responsible for making timely reports to the appropriate agencies, unless deemed Anadarko will be reporting to the regulatory agency. The contractor’s designated PIC shall immediately notify the appropriate Anadarko representative and provide the name and phone number of the agency contact.

**Isolated Work Areas**

Contractor personnel working in isolated areas shall be equipped with appropriate communication devices and periodically check-in with the appropriate contractor or Anadarko representative.

**Short-Service Employees (SSE)**

All contract companies with employees working on Anadarko locations shall have an SSE program. The program length and training will be dependent on work duties and the complexity of job tasks. All programs shall have, at minimum, job task training, a defined mentoring process, a process to identify SSEs and an awareness to applicable Anadarko HSE policies and expectations. The program shall be available to Anadarko through ISNetWorld. (see page 5)

Crews of five and more people shall have no more than 20 percent SSEs and crews of less than five people shall have no more than one SSE without prior Anadarko PIC approval. No SSE shall work alone.

An SSE should not work with active energy or high potential-energy sources or high-risk activities without direct supervision. Examples include energy isolation, confined space entry, work requiring fall protection and crane/rigging operations.

**Signs and Postings**

Contractor personnel shall comply with all signs and postings throughout Anadarko facilities, leases and roadways. Contractors shall post appropriate warning signs of their own when required by their operations.
Smoking

Smoking (including e-cigarettes) is prohibited at all Anadarko facilities except in designated smoking areas. Contractor personnel should contact the Company’s designated representative to determine where smoking is allowed. No pressurized lighters or e-cigarettes are allowed offshore.

Release Response and Reporting

A release is any unpermitted quantity of liquid or solid substance that is partially or wholly outside of its primary containment (e.g., tank, drum, truck, pond, pit, pipeline and storage tank), excluding beverages, food items, unused hydraulic fracturing sand (non-coated and natural) and fresh (including potable) water under specified circumstances. All releases on Anadarko property must be reported to the Anadarko PIC immediately. Timely and consistent spill reporting enables Anadarko to minimize and monitor impact on the environment and to comply with all regulatory requirements.

NOTE: Offshore requires any and all sightings of sheens to be reported immediately to the Anadarko PIC.

Contractors may be responsible for the clean-up of any releases they cause, at the contractors’ expense. Clean-up must not occur until the company PIC has been contacted.

NOTE: Ensure release response and clean-up personnel have the appropriate task-specific Hazardous Waste Operations and Emergency Response (HAZWOPER) training.

Stop Work Authority

All Company and contractor employees have an obligation and the authority to Stop Work at any time. Stop Work may be exercised whenever a person identifies an actual or perceived unsafe or potentially dangerous condition, act, error, omission or lack of understanding that could result in an undesirable event. Work will not resume until the stop work issues and concerns have been adequately addressed. Any form of retribution or intimidation directed at any individual or company for exercising their authority and obligation of stop work will not be tolerated.

When a contractor employee exercises Stop Work Authority they will immediately notify the designated Anadarko PIC and the appropriate person(s) within the Contractor’s organization of the work stoppage. The contractor’s designated representative shall then notify the appropriate Anadarko PIC.

Offshore Fatigue Management

Offshore personnel shall not work in excess of 16 hours during a 24-hour period. Exception to this rule will require approval from the PIC and a maximum eight consecutive hours off duty following shift completion. Personnel shall not be expected to work for extended 16 hour days. To manage fatigue, a limit of no more than three consecutive days at the maximum 16 hour limit is to be utilized for routine operations.

Offshore Manual Lifting

The maximum permissible weight that an individual can manually lift is 50 pounds from the floor up to chest level. Manually lifting heavier loads can be accomplished by dividing weight amongst more than one person up to 50 pounds per person. Mechanical lifting devices must be used if the weight will exceed 50 pounds per person.
First Aid

Contractors shall maintain a first-aid program in compliance with 29 CFR 1910, Subpart K. Contractors’ programs must provide a minimum of one trained first-aid person at each job site and a first-aid kit with supplies appropriate for the job exposures and number of workers.

Hazard Communication

Contractors shall maintain a written hazard communication program and shall ensure that their employees understand and comply with the requirements of 29 CFR 1910.1200. Contractors may request information about chemical hazards associated with the Company’s operations from the designated Anadarko PIC and shall provide a Safety Data Sheets (SDS) to the designated Anadarko representative of all hazardous chemicals and materials brought onsite and used by the contractor.

Contractors shall ensure that all chemical containers are properly labeled, handled, stored and disposed of in accordance with SDS or manufacturers’ recommendations. All unused chemicals shall be removed by the contractor upon completion of work or project. Contractors should contact the Anadarko PIC for guidance on any unused chemicals requiring disposal. Contractors shall be prepared to immediately provide copies of the SDS upon request.

Anadarko specific SDSs can be found at:

Heat-Related Illness

Contractors are responsible for identifying and mitigating heat exposures specific to their work. Heat illness comes in several forms, the types and basic symptoms of which are as follows:

- Heat cramps: muscle cramps associated with abdominal pain;
- Heat rash: localized skin redness characterized by a prickly sensation and itching;
- Heat syncope or fainting: a serious heat illness characterized by fainting;
- Heat exhaustion: a serious heat illness characterized by dizziness and nausea with possibly increased core body temperature; and
- Heat stroke: life threatening illness characterized by elevated core body temperature, hot dry skin, unconsciousness or convulsions.

Hydrogen Sulfide (H₂S)

Contractors shall ensure that personnel working at facilities where hydrogen sulfide (H₂S) is present have been properly trained and are certified in the use of supplied-air breathing equipment as required. Contractors are required to ensure their employees are medically fit and qualified to wear supplied-air breathing equipment as needed.

Contractors shall ensure that personnel working in potential H₂S environments are clean shaven and equipped with an adequate number of SCBAs and appropriate monitoring equipment.

Any employees required to wear respiratory protection that are not clean shaven will not be allowed to enter area.
NORM (Naturally Occurring Radioactive Material)

NORM accumulates in some oil and natural gas production and processing equipment and facilities. Contractors are responsible for performing work in compliance with applicable state and federal regulations and industry recommended practices involving NORM. Contractors are required to train their personnel in safe work practices related to NORM and supply proper safety equipment necessary to perform their work.

Silica

Crystalline silica is a common mineral found in materials that we see every day in roads, buildings and sidewalks. It is a common component of sand, stone, rock, concrete, brick, block and mortar. Exposures to silica dust may occur in common workplace operations involving cutting, sawing, drilling, and crushing of concrete, brick, block, rock, and stone products (such as construction or demolition tasks), and operations using sand products (such as in sand blasting and hydraulic fracturing). Contractors conducting activities that may expose workers to silica at or above the OSHA action level (25 micrograms of silica per cubic meter of air) shall meet the requirements of 29 CFR 1910.1053 and/or 29 CFR 1926.1153. Examples of these requirements include:

- Limit worker access to areas where they could be exposed above the OSHA permissible exposure limit (PEL);
- Use dust controls to protect workers from silica exposures above the PEL;
- Provide PPE to workers when dust controls cannot limit exposures to the PEL;
- Restrict housekeeping practices that expose workers to silica where feasible alternatives are available;
- Establish and implement a written exposure control plan that identifies tasks that involve exposure and methods used to protect workers. Designate a specially trained person to implement the written exposure control plan;
- Train workers on work operations that result in silica exposure and ways to limit exposure; and
- Hydraulic fracturing contractors must implement engineering controls to limit exposures to the PEL by June 23, 2021.
Compressed Gas Cylinders

The contractor will properly label, handle, store, transport and inspect cylinders to ensure compliance with regulations and industry standards.

All cylinders must be returned to their storage area after use. Protective caps must be placed over the cylinder valves when not in use or when cylinders are being transported. Cylinders must be stored upright and secured to a stationary object or structure. Cylinders shall not be secured to a handrail at any time. Regulators should be removed for transport.

Cylinders should be kept away from heat including direct sunlight, fire, molten metal and electrical lines. Acetylene or liquid gas cylinders should never be operated in a horizontal position, as the liquid may be forced out through the hose causing a fire or explosion hazard. Flammables, oxygen and inert gases shall be stored separately with proper barriers between as required by OSHA 1910.253.

Department of Transportation (DOT)

Contractors are required to provide any necessary training for personnel performing work on or at a DOT pipeline or facility. Training will be completed and individual regarded as a qualified individual for the designated work scope prior to commencing work. Prior to commencing unsupervised work, additional training will include completion of appropriate portions of Anadarko’s Operator Qualification Program for the assigned task(s).

Any safety-related concern observed while working on the pipeline or pipeline facility will be reported to Anadarko personnel.

DOT Operator Qualification (OQ) Program Requirements

To ensure pipeline safety, Anadarko is committed to complying with the DOT OQ Program requirements. Contractor employees or others may be used to perform certain tasks. Therefore, contractors who may perform covered tasks as defined in 49 CFR 192.801 and 195.501 (e.g., pipeline operators, technicians, welders, electricians, or others) will be qualified via proper documentation provided by the contractor. Contractor’s OQ programs are subject to audit or other verification by the pipeline supervisor, and must, at a minimum, be consistent with Anadarko’s OQ program. Non-qualified personnel will not operate equipment or perform covered tasks unless under the direct supervision of a qualified individual.

A qualified individual must be onsite during the performance of the covered task and in a position to observe the actions of the non-qualified individual performing the covered task. The qualified individual may physically stop the activity if performance of the covered task is not consistent with established Anadarko procedures or if an abnormal operating condition is detected. A qualified individual shall be allowed to supervise a maximum of three non-qualified individuals.
Hand Tools

Most tasks performed by contract personnel involve the use of hand tools. Incidents can result from the misuse of a tool or use of a defective tool. In order to prevent hand injuries, contractors must adhere to the following general guidelines:

- Select the proper tool for the job. For example, never use pliers in place of a wrench or use a wrench in place of a hammer.
- Use tools in a safe and correct manner. This includes not pulling a wrench toward your chin while tightening a nut or bolt, not using a screwdriver on an object held in the hand, and not pulling a knife toward you.
- Tools must be in good condition. A hand tool that is not in good operating condition cannot perform the job in a safe manner. Wrenches with worn jaws, hammers with loose heads, chisels with “mushroomed” heads, and screwdrivers with broken points are all examples of unsafe tools that could lead to an incident.

Job Safety Analysis (JSA)

Contractors are required to have an established JSA process or program to utilize when they are working on Anadarko locations. Contractors may use the local Anadarko JSA form if approved by the area/location supervisor or the local HSE Representative.

A JSA shall be completed prior to commencement of certain jobs, including but not limited to:

- Mechanical lifting – using cranes or other lifting devices to lift equipment or material over process equipment or to work around overhead hazards
- Working on pressurized equipment
- Working at heights
- Isolating and/or opening piping or equipment (lockout-tagout)
- Working in a possibly hazardous atmosphere
- Working in unguarded, unprotected areas more than four feet above grade
- Work involving trenching or excavations
- Performing an exemption from an authorized procedure (i.e. non-routine tasks)
- Hot work
- Confined space entry (see page 20)
- Work that disables critical safety components
- Electrical work
- Radioactive materials or explosives
- Working around heavy machinery (i.e. traffic control plan)

Work control programs such as Permit to Work may be required for these activities.

Personal Protective Equipment (PPE)

Contractors are required to provide their employees with a level of PPE that meets or exceeds OSHA standards and shall ensure that their personnel have been issued the required PPE prior to arrival at the jobsite. Contractors are solely responsible for ensuring that their PPE programs adequately addresses the scope of their employees’ work and complies with applicable federal, state and local regulations, including 29 CFR 1910, Subpart I.
Minimum PPE Requirements

Work attire at Company field locations shall include:
Head protection or hard hat • Foot Protection • Eye/Face Protection • 100 percent cotton clothing that covers the torso and the entirety of the arms (long-sleeve) and legs (pants) • Locations that have had hydrocarbons (i.e. crude oil, natural gas liquids, etc.) present require Fire Resistant Clothes (FRC).

NOTE: Offshore platforms require FRC, 100% cotton clothing is not applicable. Hardhat lanyards are also required offshore.

Contact the local Anadarko PIC for clothing requirements and any other PPE questions prior to work.

NOTE: The above PPE list is not intended to be all-inclusive and your particular work area or job assignment may require the use of additional PPE. It is the responsibility of the contractor to identify the special equipment requirements and furnish all necessary PPE and other safety equipment to all employees.

Head Protection

Head protection that meet the requirements of ANSI Z89.1 Type 1 (impact protection) and Z89.1 Class E (electrical protection) shall be worn by all personnel in accordance with manufacturer’s specifications in the work area. Hard hats of molded plastic shall be worn in accordance with manufacturer’s recommendations. Cowboy-style hard hats shall not be worn at Company facilities. Metal hard hats shall not be worn at Company facilities without Company HSE approval and will only be allowed for emergency well control contractors adhering to their applicable PPE program and hazard assessment.

Foot Protection

Foot protection that meets the requirements of ASTM F2413 or equivalent international standards shall be worn in all work areas. Foot protection shall be constructed of either substantial leather, flame resistant material or chemical/water resistant material (e.g. rubber). Have composite or steel toes and provide over-the-ankle coverage. Foot protection must be maintained in good condition and have a non-skid, oil and chemical resistant sole. Footwear made of cloth, canvas or mesh is not approved. Tennis shoe-type safety shoes are not allowed.

Eye/Face Protection

- Eye protection that meets the requirements of ANSI Z87.1 shall be worn in all work areas.
- Prescription glasses worn in the work area must also meet the requirements of ANSI Z87.1;
- Splash-proof chemical goggles should be worn while handling hazardous chemical liquids, powders, vapors or during operations where eyes are potentially exposed to hazardous chemicals in liquid or solid form;
- Number 5 or 6 shade lenses should be worn when cutting material with acetylene gas;
- Electric arc welding requires the use of a welding helmet fitted with shaded lenses and
- Face shields are required when grinding or other tasks are being performed that cause flying debris. When using a face shield, safety glasses must also be worn.

Hearing Protection

Hearing protection that conforms to regulatory requirements and industry standards shall be worn by all personnel in high-noise areas. High-noise areas are generally identified as areas where noise levels exceed 85 A-weighted decibels (dBA). Examples of high-noise areas are compressor buildings, internal combustion engine areas and areas where grinding tools, air compressors, power tools, or power mowers are being operated.
Clothing and Personal Effects
Contract personnel shall dress appropriately for the work and weather conditions. Some locations may require FRC and contractors are expected to utilize as required. Baggy or loose fitting clothing, rings, watches, neck chains or loose jewelry shall not be worn when such items could pose a hazard to the employee or a potential for damage to equipment. Jewelry (necklaces, ear rings, bracelets, anklets, finger rings, wrist watches or metallic adornments) shall not be worn outside living quarters when working offshore. Long hair must be restrained (nets, braids, etc.) and confined within the employee’s hard hat.

Flame Resistant Clothing (FRC)
FRC is required in areas classified by the National Electric Code (NEC) as Class 1, Division 1, and in any other area where flammable gases or vapors are likely to be present such as NEC Class 1, Division 2. FRC may be required in other areas not listed previously by policy and contractors are expected to comply with requirements.

FRC shall be worn as the outermost garment and must cover the torso, arms and legs (i.e., sleeves rolled down, body fully zipped or buttoned up and shirt tails tucked in).

Electrical Arc Flash Protection - NFPA 70E
Prior to performing any high voltage work, work permits shall be completed and proper PPE identified. Garments shall be rated as ‘HRC2’ or higher and the entire PPE ensemble must be adequate for the level of arc flash risk.

Hand Protection
Hand protection that meets the requirements of 29 CFR 1910.138 shall be worn where there is exposure to high temperatures, sharp edges, chemicals or any other materials that may cause injury to the hands. When working around machinery or other equipment where there is a danger of entanglement, hand protection should be selected accordingly.

Examples of gloves types include:
* Cotton or leather gloves – general work activities
* Leather gloves – grinding
* Impact resistant gloves - maintenance, rigging activities
* Chemical resistant gloves – should be appropriate based on SDS requirement

Personal Fall Arrest Systems
Contractors shall provide, and require their employees and subcontractors to utilize a personal fall arrest system whenever a fall hazard of six feet or more is unprotected by standard guardrail. Contractors shall ensure that personal fall arrest system components including, harnesses, lanyards, anchorage points, etc. comply with applicable standards and regulations, including 29 CFR 1926, Subpart E and ANSI Standard A-10.14 1991.

Contractors are required to have a rescue plan when using personal fall arrest systems in a confined space. (see page 20)

NOTE: When operating aerial man lifts or any other personnel lifting device, fall protection shall be used at all times.
Respiratory Protection
Contractors working in areas where respiratory hazards are present shall have a written respiratory protection program that conforms to industry standards and the requirements of 29 CFR 1910.134. Contractors shall ensure that their employees are familiar with the contractor’s respiratory protection program requirements and are trained in the use and maintenance of the respiratory protection equipment. Contractors shall perform and document required training, medical clearance and fit tests and shall provide such documentation to the Company upon request.

Gas Monitors
Contractors are expected to evaluate work being performed as well as location to determine need of gas monitoring. Contractors are required to provide monitors as needed and train employees on proper use of monitors.

Transportation Safety

Vehicle Operations
• Applicable motor vehicle laws and regulations must be observed, as well as in-field vehicle requirements such as speed limits.
• Operator of vehicle must have a valid and appropriate driver’s license;
• Automotive equipment must be maintained in a safe condition and meet applicable local/state safety inspection requirements;
• Speed must be consistent with road and weather conditions and posted limits;
• A vehicle should be parked to minimize backing. Whenever possible, the first move should be forward;
• Prior to moving a vehicle, the area should be cleared by walking around the vehicle;
• Seat belts are required to be worn by all persons riding in a motorized vehicle while on Company property including wearing belts, where provided, on forklifts, cranes, backhoes and other heavy duty equipment;
• Personnel are not allowed to ride in the back of pickups or as passengers on any equipment not specifically designed for passengers;
• Personnel are not permitted to enter a plant/facility with vehicles unless authorization is obtained from the facility operations personnel and atmospheric monitoring is conducted of the intended vehicle path of entry;
• Use of cell phones, laptops or other similar equipment while driving is prohibited unless they are “hands free” and do not distract from the driver’s operation of the vehicle; and
• Defensive driving should be practiced at all times, making sure the driver is constantly alert for incident producing situations and be prepared to take action as needed.

Mobile Equipment Operation
Contractor drivers and equipment operators shall be properly trained, qualified and licensed in accordance with industry standards and applicable federal, state and local laws and regulations. The contractor is responsible for the safe operation and condition of motorized equipment brought onto Company property. Contractors shall, upon request, provide written verification, including the name and status of each operator and any restrictions.

The following requirements must be met:
1. Motorized equipment is not permitted in the facility without authorization from facility operations personnel.
2. Only trained and qualified personnel are permitted to operate motorized equipment such as forklifts, backhoes, cherry pickers, mobile lifts, cranes, etc.
3. Daily pre-checks should be made prior to operating mobile equipment.

4. Any equipment found to be defective or otherwise unsafe must be shut down immediately and not operated until repairs are made.

5. Equipment should always be operated in a safe manner. Cranes, forklifts and other lifting equipment must not be loaded beyond the rated capacity of the unit. Legible rating charts shall be fixed to the vehicle where the operator can refer to them easily.

6. Always use a spotter(s) whenever backing in the process area and any other congested area.

7. Contractors shall ensure that all vehicles and mobile equipment including, but not limited to: forklifts, tractors, bulldozers, backhoes and portable mast rigs are operated, maintained and inspected in a manner consistent with the manufacturer’s specifications and applicable federal, state and local laws and regulations.

8. Wheel-type agricultural, industrial tractors, bulldozers, backhoes, etc., over 20 horsepower, will be equipped with a Rollover Protection System (ROPS). This includes a roll bar and seatbelt. While operating equipment with ROPS, the seat belt must be worn.

9. Personnel authorized to operate equipment shall be familiar with the operating manual and will have successfully completed a safety course for the equipment to be operated.

10. Never permit anyone to ride in or work from a backhoe or loader bucket. No passengers are allowed on the equipment.

11. The equipment shall not be driven at an unsafe speed.

12. Turn off equipment and lower all attachments before stepping off for any reason.

NOTE: Personnel must wear fall protection at all times when operating mobile lifts.
Confined Space Entry

Contractors entering confined spaces shall ensure that their personnel understand and comply with recognized industry standards and federal, state and local regulations. Contractors shall have a written program for confined space entry in accordance with 29 CFR 1910.146 and shall ensure that all personnel have received appropriate training prior to performing confined space operations.

All contract employees have the responsibility to understand hazards of the space being entered and participate in any activities associated with assuring the space is safe for entry. This includes identifying and implementing specific entry requirements, equipment isolation (LOTO) requirements, atmospheric testing, etc.

Prior to entering a confined space, the contractor shall consult the appropriate Anadarko PIC. No contractor is allowed to enter any confined space without obtaining authorization from the Company PIC and completing the required non-permit space reclassification or confined space permit.

Electrical Hazards and Tools

Electrical voltages on facility equipment typically ranges from 24 VDC to 480 VAC or more. Contract employees must not perform any electrical work without specific authorization from Company personnel. All contractor employees performing electrical work must be properly trained before performing work on these systems.

Before utilizing power tools, contractor must read, understand and follow the manufacturer’s operating manual and inspect the tool to ensure it is in good condition. Power cords as well as extension cords should be kept in good condition. Check for bad insulation and continuity of ground conductor regularly to ensure proper function. A ground fault circuit interrupter (GFCI) device is required on all electrical circuits when using extension cords or power tools.

Material Handling

Contractors shall ensure that safe lifting and rigging practices are performed during material-handling activities including, but not limited to:

- Crane;
- Forklift and pole truck operations;
- Sandblasting;
- Painting; and
- General construction.

Contractors shall ensure that personnel are trained and material-handling equipment and hardware are operated and maintained in accordance with industry standards and applicable federal, state and local regulations.

When using mechanical equipment to move material, contractors shall stay clear of loads including when the load is picked up, moved and set down. Contractors shall not stand or pass under loads at any time.
**Cranes**

Crane operators must receive permission from an Anadarko representative before operating a crane on Anadarko property.

Crane booms, cables, rigging, foundation mountings, control cables and safety devices shall be visually inspected and determined to be functioning properly by the crane operator each day before starting operations. The inspection will consist of a visual inspection for cracked welds, cable defects, bent braces, sheave condition, deformed or broken hooks, and any other defects.

Appropriate inspections shall be made on cranes, cables and hooks. Records of inspections shall be made available upon request. Inspection types and frequencies will be dictated by manufacturer’s recommendations or regulatory requirements.

The load limit chart and the boom angle indicator for cranes shall be in clear view of the operator. Boom angle indicators shall be permanently attached to the boom to show the operating radius. The rated load capacity of the crane shall not be exceeded. The crane operator shall check load chart, confirm boom length with the chart, and establish the load weight and maximum operating radius or corresponding minimum boom angle.

Standard hand signals for controlling crane operations shall be used. All hand signals shall be given by a designated signalman, but the operator shall obey any emergency stop signal given by anyone.

Taglines shall be used to assist in controlling loads. These lines shall be at least ½-inch thick and an appropriate length to keep ground personnel away from load.

The operator shall properly secure the crane and boom before going off duty or when shutting down operations.

Cranes operated near, under or over power lines energized at 50 kV or less shall maintain a minimum clearance distance of 10 feet. If the voltage is greater than 50 kV, the distance is 10 feet plus 4 inches for each 10 kV above 50 kV (except where the power lines have been de-energized and visibly grounded at a point of work or where insulating barriers, not a part of or an attachment to the crane, have been erected to prevent physical contact with the power lines). When working in areas with power lines, high voltage proximity alarms shall be mounted on the crane boom. Lifting equipment (auto-crane, aerial lift trucks), while working near overhead power lines or energized equipment, shall be grounded and barricaded.

**Rigging/Slings**

- Riggers will be trained and competent.
- Prior to use, slings, fittings, fasteners and shackles shall be visually inspected for evidence of overloading, excessive wear, kinks, twists or damage. Slings or shackles found to be defective shall be removed from service and destroyed.
- Wire rope, slings and shackles shall be maintained as per manufacturer’s recommendations or applicable regulatory requirements.
- Manufacturer or pull test date and sling number shall be attached to slings.
- Rigging shall be such that the angle of the sling to the load shall never be less than 30 degrees.

**Forklifts**

Use of forklifts is restricted to qualified operators. Personnel operating forklifts will be trained and qualified on the type of forklift they will be operating. Safe operation of a forklift includes but not limited to:

- Inspect forklifts prior to use;
• Operate forklifts within the rated capacity;
• Do not use forklifts as a man-lift; and
• Set the parking brake, lower the forks and neutralize the controls when dismounting or stowing a forklift.

**Personnel Lifts**

Personnel lifts are any telescoping or articulating device that is used to position personnel at a height such as in a bucket or on a working platform. Personnel operating lifts will be trained and qualified on the type of lift they will be operating.

• Personnel operating lifts will be trained and qualified on the type of lift they will be operating;
• Lift controls shall be tested prior to use to determine that such controls are in safe working condition;
• A full-body harness shall be worn and a lanyard attached to the boom or basket when working from a personnel lift;
• Boom and basket load limits specified by the manufacturer shall not be exceeded;
• The brakes shall be set and outriggers, when used, shall be positioned on pads or a solid surface. Wheel chocks shall be installed before using a personnel lift on an incline;
• A personnel lift may not be moved when the boom is elevated in a working position with personnel in the basket, except for equipment which is specifically designed for this type of operation;
• Controls shall be plainly marked as to their function. Lower controls shall provide for overriding the upper controls. Lower controls shall not be operated unless permission has been obtained from the personnel in the lift, except in case of emergency;
• Before moving a personnel lift for travel, the boom shall be inspected to see that it is properly cradled and outriggers are in stowed position; and
• Lifts shall be maintained and inspected per manufacturer’s recommendations or applicable regulatory requirements.

**Lockout/Tagout**

Contractors whose employees perform work on powered equipment, piping systems or confined space entry operations shall develop and maintain a lockout/tagout program that complies with the requirements of 29 CFR 1910.147. The contractor’s designated PIC shall be responsible for ensuring that tags, locks and other necessary energy isolating equipment is provided as necessary. Contact the Anadarko PIC to identify applicable procedures and energy control devices (lockout points).

**Scaffolding**

All scaffolding must be designed, built, secured and inspected in compliance with OSHA standards. No contractor may utilize scaffolding at any Company facility unless the contractor utilizes employees who are properly trained in scaffold safety and have a properly trained representative on-site overseeing scaffold work. The scaffolding must be inspected prior to initial use each day by a properly trained representative, and the inspections shall be documented. A scaffold tag system must be utilized indicating the status of all scaffolding. Safe work practices when working with scaffolding, include but not limited to:

• Guardrails shall be installed on all open sides and ends of scaffolds and platforms. Toe boards are required where personnel can walk or work under the scaffold;
• Planks shall be secured on platforms so they cannot move. Extend and secure scaffold planks at least six inches over end supports, but not more than 12 inches;
• When scaffolds are erected above a work or walk area, the area shall be posted to warn of overhead hazards; and
• Handrails are not to be used as weight bearing support for any work platform.
**Trenching and Excavation**

Contractors performing trenching and excavation work shall ensure that their personnel are trained and that operations are conducted in accordance with industry standards and applicable federal, state and local regulations, including 29 CFR 1926 Subpart P and 1926.650 through 653. The contractor shall provide a “Competent Person”, as defined in 29 CFR 1926 Subpart P, to provide necessary supervision and inspection of the excavation activity and shall be responsible for supplying signs, barriers, etc. necessary to protect workers and the public from hazards associated with the excavation. Workers shall be protected from cave-in or entrapment as prescribed in 29 CFR 1926 Subpart P.

Prior to beginning any excavation work, it is the responsibility of the contractor to ensure that underground utilities have been located and marked in accordance with federal, state and local regulations, and that their personnel are trained in the location and marking procedures used in their area. Excavations within two feet of an existing underground installation shall be hand dug unless a more stringent requirement is specified. The contractor’s designated PIC shall notify the appropriate Anadarko representative of any third-party utility crossings prior to proceeding with the excavation. Anadarko requires that a Company representative be present at foreign line crossings or whenever excavation will come within two feet of the pipeline.

When performing excavation activities in response to a hydrocarbon spill or release, necessary precautions to protect workers must be employed.

These protective measures will include but not be limited to:
- Protective clothing such as Tyvek or Saranex coveralls and rubber steel toe boots;
- Organic vapor monitoring in the breathing zone, lower explosive limit monitoring in the work zone; and
- Action levels will be established for air monitoring for donning respiratory protection and/or stopping work temporarily.

**Welding and Hot Work**

Contractors performing welding, cutting and other hot-work activities shall ensure their personnel understand and comply with recognized industry standards and federal, state and local regulations, including the requirements of 29 CFR 1910.252 and 29 CFR 1926, Subpart J. Contractors shall ensure that welding and cutting equipment is used and maintained in accordance with applicable industry standards and shall establish a preventative maintenance program for such equipment.

An Anadarko PIC must authorize hot work before the contractor starts such work. Contractors are responsible for preparing their hot-work permit and assuring that a qualified person issues their hot-work permit. Employees of the contractor shall be trained by their employer in hot-work procedures. The contractor will ensure that a fire watch who is trained in the functions to be performed is assigned. The contractor shall assure that all affected personnel are aware of the hot work to be performed. The requirements of the contractor’s permit shall be met prior to commencement of hot-work activity. Upon completion of the hot-work activity, a copy of the contractor’s hot-work permit will be kept on file at the facility office or the nearest field office.

Contractors performing hot-work activities in conjunction with Anadarko employees (mixed crews) or within a Process Safety Management (PSM) facility shall work under the Anadarko Hot-Work Program.

Welding rigs shall be equipped with appropriate fire protective equipment including a minimum of one 30-pound type BC dry chemical fire extinguisher. The contractor shall ensure that their personnel have been instructed in the use of fire extinguishers and that fire extinguishers are maintained in accordance with 29 CFR 1910.157.
Pollution Prevention and Waste Management

Contractors shall conduct their operations in a manner that is protective of the environment and shall take the necessary precautions to prevent and minimize impacts of spills and releases and to manage wastes in accordance with applicable federal, state and local regulations. Contractors shall ensure that all personnel are aware of each individual’s obligation to prevent pollution in accordance with Anadarko policy and shall coordinate disposal of wastes from Company facilities with the appropriate Anadarko representative.

Anadarko’s operations and facilities may require the use of products that are classified as hazardous materials. Improper handling can result in:
- Exposure to your employees or the public;
- Harmful pollution of the environment;
- Harm to company reputation;
- Regulatory fines; and
- Costly clean-up.

Expired, abandoned or spilled hazardous materials can become hazardous waste. All chemicals and containers brought onto an Anadarko location by a contractor must be removed at the completion of the job. If not removed, Anadarko will dispose of the materials and all costs associated with disposal will be charged back to the contractor unless contractually Anadarko is responsible for disposal, specifically offshore.

Waste produced by contractor as a result of operations at Anadarko facilities must be managed in accordance with instructions from the Anadarko PIC and applicable laws. Transport and storage of wastes must follow applicable regulatory requirements.

When waste materials are produced on site by contractors, they must be segregated in a way that minimizes the need and costs for disposal. Recyclable waste or materials should be separated from non-recyclable materials. Mixing (e.g., mixing of waste oil with a non-recyclable liquid) may reduce disposal options and increase the disposal costs.

Waste generated solely by the contractor (e.g., waste oil from contractor equipment) are the responsibility of the contractor to recover and dispose of properly off site.

Waste disposal is always subject to Anadarko approval. Hazardous waste disposal must be coordinated by a certified individual, transported by licensed transporters to an approved facility, and accompanied by appropriate documentation including the Uniform Hazardous Waste Manifest.

The transport and disposal of NORM-contaminated equipment, piping, or other material must follow regulatory requirements. Only contractors licensed and equipped to perform approved disposal methods will be contracted to transport and dispose of NORM-contaminated waste.

NOTE: If you have any question as to the proper handling or disposal of waste, please refer to the SDS or contact the Anadarko PIC.
Eyes On - Spill Prevention

1. Any company transporting produced fluids are required to participate in the “Eyes On Spill Prevention” program.

2. Transportation contractors shall acknowledge that their driver(s) have received training before entering Anadarko locations. Acknowledgment forms (i.e. copies of training sign-in sheets) shall be sent to the Anadarko PIC and/or local HSE representative.

3. All fluid transfers on Anadarko locations involving drilling, completion, well servicing, production and flowback operations will be monitored by an Anadarko employee or designated/approved contractor.
   - Eyes On offloading, loading, transferring, etc.
   - Includes tank to tank, truck to tank, truck to truck, pit to pit, pit to truck, pit to tank, etc.
   NOTE: The only exception is when loading from permitted fresh water source or offloading fresh water from a transport trailer.

4. For drilling and completion on-location transfers, no fluid-transfers at night or during crew change unless fully supervised and in the presence of sufficient light to ensure adequate visibility at all potential spill points. No fluid transfers during severe rain or snow events that would impair the ability to detect a leak. Fluid handling protocols and procedures regarding fluid monitoring should be posted as described below:
   - Obtain site supervisor approval prior to any fluid transfer operation.
   - Prior to any fluid transfer, inspect proper working conditions, alignment and operation of all valves, piping, manifolds, floats, discharge outlets, seals, etc.
   - Prior to any fluid transfer, inspect and verify all spill prevention equipment, berms, liners, mats, shut-down devices, etc. are in good working order and properly installed.

5. Companies contracted to load/unload hydrocarbon-based materials shall have:
   - A written safety and spill prevention plan;
   - Loading and unloading procedures;
   - Plans available to Anadarko upon request;
   - Trained employees on plans and procedures.

6. Since facilities may consist of different equipment, general loading/unloading procedures for all facilities may not be available. Drivers are required to follow any site-specific procedures.

7. Operation of trucks shall meet or exceed the recommended practices established in the American Petroleum Institute’s (API) Recommended Practices (RP) 2219, 51R, Manual of Petroleum Measurement Standards (MPMS), and any other applicable API RP.
   - These publications identify a number of hazardous truck operations and suggests procedures that may help prevent accidents.
   - Check oil quality as determined by API, Reference Chapter 3 (MPMS).

8. All incidents (injury, spill, property damage, etc.) shall be reported to Anadarko immediately. Written report shall be submitted to Anadarko within 24 hours.

9. Upon Arriving on location, the driver should visually assess the site:
   - Does everything appear normal and secure?
   - Are there any signs of previous damage, vandalism, spill or leaking?
   - If something is NOT right, STOP, and call Dispatch. Dispatch will then notify Anadarko.
• If the driver’s assessment of the location is safe and secure, then they may proceed to the loading/unloading area to begin the procedure.
  » Use of a spotter is required if and when backing is necessary to perform job task.
• Check weather conditions (wind direction, storms, etc.) prior to loading/unloading. Do not load if unsafe weather conditions (lightning, etc.) are present.
• Minimum requirements for PPE can be found on page 15 of this manual. Wear personal multi-gas (LEL, H₂S, etc.) monitoring as directed by location signage or Anadarko PIC.

10. Upon exiting truck:
• Ensure brakes are set.
• Chock tires.
• Attach grounding cable to electrically ground truck prior to loading.
  » Driving of grounding rods shall not be permitted without first contacting 811 “one call,” and line locating services have been completed and clearly marked, where applicable.
• Connect truck tank to vapor balance line before introducing liquids to truck.
• Upon arrival at location, check equipment integrity connections, fittings, valve positions, hose, belly-line—prior to commencing loading/unloading procedures.

11. No smoking or open flames. Personal electronic devices (cell phones, laptops, pagers, etc.) shall be turned off and/or left within the cab during loading/unloading activities.

12. Conduct a visual inspection of all valves to make sure they are in the appropriate position and sealed.

13. Drivers shall not be in the truck cab during loading/unloading activities. Drivers shall maintain Eyes On during loading/unloading of the area to prevent spills. Loading shall be immediately stopped when the following occurs:
• Hoses and/or connections begin to or are leaking. Do not load/unload with leaking connections or fittings.
• Valves begin to or are leaking.
• Truck tank reaches 95 percent capacity/full.
• Produced water tanks shall not be drained to a level below four feet inside the tank.

14. If using a cam-lock type fitting, a Safety Lock™, a safety strap or similar device must be used.

15. Double check all connections, fittings and valve positions prior to activating pump unit.

16. No service checks or maintenance of any kind are to be performed on trucks, tractors or trailers while loading/unloading. All trucks, tractors and trailers shall be maintained per manufacturer’s specifications.

17. Trucks and tractors should be equipped with engine over-speed protection.

18. Loading or unloading shall not be performed if any equipment related to the loading or unloading process malfunctions or is not operating properly.

19. Check truck tank gauge prior to loading. Ensure gauge is operating correctly. Ensure tank is receiving product.

20. No oil is allowed to be pumped back into any tanks without Anadarko PIC approval.

21. In the event that a spill occurs during loading/unloading, the driver shall immediately turn off the truck engine. Driver will, as soon as safely possible, notify applicable supervisory personnel of the release. Until the product has been removed, remediated, or determined safe to do so, the truck engine must not be restarted.

22. Maintain a high standard of housekeeping around the loading/unloading point.

23. Do not allow hoses to drain onto the ground.
24. Loosen cam-lock closest to product tank and drain hose, sucking product out of load hose.
25. Ensure that all open-ended valves and or fittings are secured/closed and plugged prior to leaving location.
26. Place containment under the vent tube to catch any potential liquids.
27. Conduct a walk-around of the location and tank truck prior to leaving. Ensure that all valves are left in the proper position, no valve is leaking, plugs are in place, area is being left safe and no spills have occurred.
28. Any contractor responsible for a spill shall be required to remediate the contaminated area to Anadarko expectations. Remediation activities shall be coordinated with the Anadarko PIC and/or local HSE representative.

**SPILL PREVENTION**

The Anadarko Spill Prevention Program establishes expectations, conditions and procedures applicable to preventing and containing spills; responsibilities for personnel, and training requirements. The program is applicable to all domestic and international Anadarko operations where the potential for spills of harmful substances exists.

**Spill Prevention Measures**

Spill prevention measures on offshore facilities should meet the following requirements of this program:

- Install and maintain spill prevention measures, as necessary
- Prepare and implement procedures to control and contain spills
- Facilities and tanks, containers, vessels and equipment are to be designed, installed and operated to prevent spills
- Install curbs, gutters, drip pans, and drains in deck areas of offshore platforms and facilities
- Pipe drainage to a sump system that is properly designed, operated, and maintained
- Store oils, fuels, chemicals, and waste material in leak-proof containers compatible with the material stored within
- Ensure lids, caps, bungs, valves, and plugs are properly installed

**Pollution Prevention – Deck Drainage**

“Deck Drainage” means any waste resulting from deck washings, minor spillage, rainwater, and runoff from gutters and drains including drip pans and work areas within facilities

- Do NOT pour samples or drain container contents or container wash-water into deck drain system
- Install drain plugs on the deck drains if conducting activity where spill/release may occur and collect spilled material for disposal
- Ensure sump strainers, curbs, and gutters remain clean
- Practice good housekeeping to prevent debris/solids from entering deck drains
- Ensure blasting and painting material is contained to the maximum extent practicable

**How can you help to prevent spills?**

Conduct daily walk around inspections in your work area. Examples of items inspected may include the following:

- Valves
- Hoses
Wildlife Awareness

General Wildlife

While working for Anadarko, contractors may encounter various species of wildlife. Do not approach, feed, intimidate or otherwise harass wildlife. Report any encounters immediately to your Anadarko PIC. Many species are protected, and harming or killing wildlife could result in state or federal prosecution.

Marine Mammals/Sea Turtles

Vessel crews should do the following in order to avoid causing injury or death to marine mammals and sea turtles:

- Vessel operators and crews should maintain a vigilant watch for marine mammals and sea turtles and slow down or stop their vessel to avoid striking protected species.
- When whales are sighted, maintain a distance of 100 yards (91 meters) or greater from the whale. If the whale is believed to be a North Atlantic Right Whale, the vessel crew should maintain a minimum distance of 500 yards (457 meters) from the animal.
- When sea turtles or small cetaceans are sighted, attempt to maintain a distance of 50 yards (45 meters) or greater whenever possible.
- When cetaceans are sighted while a vessel is underway, attempt to remain parallel to the animal’s course. Avoid excessive speed or abrupt changes in direction until the cetacean has left the area.
- Reduce vessel speed to 10 knots or less when mother/calf pairs, pods, or large assemblages of cetaceans are observed near an underway vessel when safety permits. A single cetacean at the surface may indicate the presence of submerged animals in the vicinity of the vessel; therefore, precautionary measures should always be exercised.
- Whales may surface in unpredictable locations or approach slowly moving vessels. When the vessel crew sights animals in the vessel’s path or in close proximity to a moving vessel, reduce speed and shift the engine to neutral. Do not engage the engines until the animals are clear of the area.

Offshore Platform Fishing

While onboard Anadarko Gulf of Mexico facilities, fishing may be conducted from any main deck which has a handrail, however all personnel are expected to follow all state and federal fishing regulations. In addition, Anadarko will not allow the transportation to shore of any fish which is filleted. Refer to the Gulf of Mexico Fishery Management Council for questions.

Avian Protection

Anadarko has implemented protective practices to minimize harm to migratory birds. These practices include monitoring pits and ponds during drilling and completions operations offshore. For the life of the site (production operations), Anadarko will have in place protective measures (e.g., fire tube covers, cellar covers, and secondary containment netting) to mitigate harm to migratory birds.

If contractor notices a missing protective measure or observes migratory birds or evidence of migratory birds on location, immediately notify the area Anadarko HSE representative.
All contract personnel shall sign in and out of PSM facilities. All contractor personnel entering a PSM facility to conduct work shall complete a facility orientation.

Prior to performing work at the PSM facility, the contract employer should be familiar with the following:

- The known potential fire, explosion or toxic-release hazards related to the contractor’s work and the process;
- The safe work practices in effect at the facility; and
- The applicable provisions of the PSM facility emergency plan.

Prior to performing any welding, entry into a confined space or other activity designated by the Company, contractors shall obtain the appropriate work permit. Contractors shall obtain a new permit each workday and must fill the permit out completely. Copies of permits must be sent to the Anadarko PIC upon completion of the work.

The contract employer shall assure that each contract employee:

- Is trained in the work practices necessary to safely perform their job;
- Is instructed in the known potential fire, explosion, or toxic-release hazards related to their job and the process; and
- Knows his/her role within the emergency plan.

The contract employer shall document that each contract employee has received and understood the required training. This documentation shall include the identity of the contract employee, the date of training and the means used to verify that the training was understood.

The contract employer shall assure that each contract employee follows the safety rules of the PSM facility or the contract employer’s safety rules, whichever is more stringent.

The contract employer shall advise the PSM Facility Supervisor of any unique hazards presented by the contract employer’s work or of any hazards found by the contract employer’s work.
Contractors must develop, implement, and maintain a safety and environmental management system (SEMS) program. Your SEMS program must address the elements described in §250.1902, American Petroleum Institute’s Recommended Practice for Development of a Safety and Environmental Management Program for Offshore Operations and Facilities (API RP 75) (as incorporated by reference in §250.198), and other requirements as identified in this subpart.

**JSA**
- All jobs steps listed with associated hazards and mitigations
- Environmental impacts must be assessed and mitigated
- 3 levels of signatures are required (workers, supervisor, Designated APC in charge)
- All personnel are trained in hazard recognition
- Must include Stop the job provisions
- Must be maintained for 30 days at location

**Contractor selection and training**
- APC field leads should verify contractor’s qualifications and skills prior to conducting critical work
- All personnel must be trained in accordance with their duties and responsibilities

**UWA (Ultimate work authority) - Typically offshore**
- Entire crew must be informed of who the UWA is at any time. The UWA is the only one that can start (resume) a job after stop work has been initiated

**SWA (Stop work authority)**
- Anyone has the authority to stop the job
- Must be discussed during safety meetings
- Must be included on J SAs
Contractors performing well drilling, completion and servicing operations shall conduct their operations in accordance with recognized industry standards, including but not limited to, those promulgated by the American Petroleum Institute (API), Association of Energy Service Companies (AESC) and International Association of Drilling Contractors (IADC), and applicable federal, state and local regulations.

The practices outlined in the latest edition of API RP 54, Occupational Safety for Oil & Gas Well Drilling and Servicing Operations, and additional recommended practices in which it references, shall be met.

Specific guidelines that each contractor must comply with include, but are not limited to the following:

- Personnel should be familiar with their company procedures and programs and industry recommended practices as they relate to their function in the job at hand and should abide by the applicable recommendations.

- **Well Control** – Well control shall be maintained at all times. Consideration shall be made to ensure appropriate equipment and materials are on location and operational before work commences. The rig floor shall be attended by a person qualified in well-control procedures at all times during operations. Personnel should be trained in basic well control, as needed, in relation to their job duties. When there is any indication that a well will flow, whether through prior records, present well conditions, or the planned well work, blowout prevention equipment shall be installed, tested, inspected and maintained in accordance with API RP 53. Crews should conduct well-control drills. When drilling or well-servicing operations are in progress on a well where there is any indication the well will flow, the rig shall have on the rig floor a safety valve (stabbing valve) with connections suitable for use with each size and type tool joint or tubing connection being used on the job.

- **Guywires and Anchors for Portable Derricks** – Guywires and anchors used for portable derricks shall be constructed installed and tested in accordance with the derrick manufacturer’s specifications or API Recommended Practice 4G. Temporary anchors shall be tested no more than 30 days prior to rig up and shall be retested whenever changes in site conditions, such as significant precipitation, may affect holding capacity. Prior to installation of rig anchors, underground utilities shall be located and marked in accordance with federal, state and local regulations.

- **Supplemental Footing for Portable Derricks** – Contractors shall ensure that supplemental footing used for portable derricks is suitable for the mast guying pattern and anticipated loading, and that timbers or other footing materials are installed in such a manner that the safe load-bearing capacity of the soil is not exceeded. Supplemental footing shall be designed, installed and maintained in accordance with the derrick manufacturer’s specifications or API Recommended Practice 4G.

- **Auxiliary Escape** – Every drilling or well-servicing derrick shall have an auxiliary means of escape installed and employees shall be trained in its use prior to personnel working in the derrick. The auxiliary escape shall be securely anchored and attached to the derrick so as to provide a ready means of escape from the working platform. The escape device shall be maintained free from obstructions and shall have a safety buggy or equivalent device equipped with an adequate braking or a controlled descent device.

- **Hoisting Equipment** – Contractor personnel shall not ride the catline, hoist or traveling blocks at any time, except in an emergency, as provided by industry standards.

Vehicles not involved in the immediate rig operations should be located a minimum distance of 100 feet from the wellbore or a distance equal to the height of the derrick or mast (including attachments), whichever is greater.
Codes, Standards and Regulations

The codes, standards and regulations listed below are commonly applicable to the onshore oil and natural gas industry. The list is intended to serve as a reference guide for contractors. It is not all inclusive and contractors should refer to regulations and industry standards pertaining to their operations for compliance requirements.

Title 29, Code of The Federal Register, Labor, Parts 1900-1926 (OSHA)

Title 40, Code of The Federal Register, Environmental Protection Agency, Parts 1 to 149

Title 49, Code of The Federal Register, Transportation, Parts 1 to 1200

American National Standards Institute (ANSI), 11 West 42nd St., New York, NY 10036:

- ANSI A14.2-56 and A14.2a-77 Safety Code for Portable Metal Ladders
- ANSI B30.2-43 (R 52) Safety Code for Cranes, Derricks, and Hoists
- ANSI B30.6-69 Safety Code for Derricks
- ANSI Z41-91, Personal Protection-Protective Footwear
- ANSI Z49.1-67 Safety in Welding and Cutting
- ANSI Z53.1-67 Safety Color Code for Marking Physical Hazards
- ANSI Z54.1-63 Safety Standard for Non-Medical X-Ray and Sealed Gamma Ray Sources
- ANSI Z87.1-89, Practice for Occupational and Educational Eye and Face Protection
- ANSI Z88.2-69 Practices for Respiratory Protection
- ANSI Z89.1-86, Protective Headwear for Industrial Workers Requirements

American Petroleum Institute (API), 1220 L Street NW, Washington DC 20005:

- API RP 4G, Recommended Practice for Maintenance and Use of Drilling and Well Servicing Structures
- API RP49, Drilling and Well Servicing Operations Involving Hydrogen Sulfide
- API RP53, Blowout Prevention Equipment Systems for Drilling Wells
- API RP54, Occupational Safety for Oil & Gas Well Drilling and Servicing Operations
- API RP 74, Occupational Safety for Onshore Oil and Gas Production Operations
- API RP 1107, Pipeline Maintenance Welding Practices
- API 1104 (1968) Standard for Welding Pipelines and Related Facilities,
- API 2201 (1963) Welding or Hot Tapping on Equipment Containing Flammables,

American Welding Society (AWS), 550 NW, LeJeune Road, P.O. Box 351040, Miami FL 33135:

• AWS B3.0-41 Standard Qualification Procedure
• AWS D10.9-69 Standard Qualification of Welding Procedures and Welders for Piping and Tubing

National Fire Protection Association (NFPA), 11 Tracy Drive, Avon, MA 02322:
• NFPA 51B-1962 Standard for Fire Protection in Use of Cutting and Welding Processes
• NFPA 385-1966 Recommended Regulatory Standard for Tank Vehicles for Flammable and Combustible Liquids
• NFPA 70E – Standard for Electrical Safety in the Workplace

National Institute for Occupational Safety and Health (NIOSH):
• Registry of Toxic Effects of Chemical Substances, 1978
• NIOSH Recommendations for Occupational Safety and Health Standards (Sept. 1987)
