

Pablo Energy II, LLC

Safety Manual

INTRODUCTION

As an upstream oil and gas operator Pablo Energy II, LLC (“Company”), strives to conduct business in a safe and efficient manner. Company recognizes the potentially hazardous conditions in the oil and gas industry and has provided this Manual as a tool to communicate those conditions to Company employees and to identify the procedures and precautions that all Company employees must follow. Each employee has a duty to review this Manual and understand its contents. Each employee is required to ask the employee’s supervisor for explanation or training regarding anything contained in this Manual that the employee does not understand. Each supervisor has a duty to explain or obtain training in response to any questions posed by any employee.

HAZARD COMMUNICATION (HAZCOM) PROGRAM

In accordance with OSHA’s Hazard Communication Standard, 29 CFR 1910.1200, Company communicates the hazards of the oil and gas industry in different ways: this Manual, verbal and digital communication, hazard labels, Safety Data Sheets (SDS’s), and training. Company safety documents and additional information is available online at www.verdugoenergy.com.

Verbal and digital communication - Daily hazard assessments or safety meetings are required when working in the field or on location. The general work tasks should be discussed and the hazards should be identified and avoided. Digital communications such as email, text messages, online content, etc. also serves as a frequent means of HAZCOM

Hazard Labels - Company requires hazardous chemicals on location to be labeled as per OSHA req.

Safety Data Sheets (SDS’s) - Company furnishes their employees with SDS’s (Previously known as MSDS) for common chemicals on oil and gas locations such as wellhead natural gas, crude oil or condensate, diesel, hydrogen sulfide, common production chemicals, and other potentially hazardous chemicals. Company will request all contractors to maintain and have SDS’s readily available for any hazardous chemical brought on location.

Training - Company will provide training for employees on an individual basis depending on their roles within the company. Employee are required to request training if an employee does not believe the employee has the training and experience to perform any task required of the employee. Requests for training may be made to the employee’s supervisor or the President of the Company.

Emergency Response Contacts (Cell Phone #'s):

Local Field Personnel:

Coalgate, Oklahoma:	Darrell Yount – 806-662-5293	Ikke Caudell – 405-696-6787
Seymour, Texas:	Kelly Harrington – 940-733-8257	
Pampa, Texas:	Phil Grant – 806-662-0069	

Office Personnel:

Edmond, Oklahoma:	Gary Wurdeman – 405-990-5926	Dwyatt Jackson – 405-513-4531
Amarillo, Texas:	Jerry Steed – 806-662-0101	Shannon Grant – 806-336-1326

SAFETY MANUAL

1.0 GENERAL SAFE WORK PRACTICES

- 1.1 Obey all safe work practice, signs and instructions. Your first responsibility is to perform your job in a safe manner. Ask questions if you are unsure how to perform a job safely.
- 1.2 Intoxicating liquor, alcoholic beverages, controlled substance, illegal drugs, or ammunition and fire arms are not permitted on company property at any time. Use of illegal drugs, alcohol or prescription drugs that impair or interfere with your ability to work safety are strictly prohibited whether consumed before, during, or after working hours.
- 1.3 Do not allow a hazardous condition(s) to continue; correct the hazard if possible and report it to a supervisor immediately.
- 1.4 When working with others, protect yourself, and avoid actions that might cause problems for your fellow employees.
- 1.5 When you are relieved by another employee, inform your relief of all operating conditions, and potential hazards.
- 1.6 When working alone or in a small group in isolated areas, check in periodically by phone, radio or per the area supervisor's directions.
- 1.7 You must inform your supervisor if you are on prescribed medication that may affect to preform your work.
- 1.8 Do not use makeshift devices or make temporary repairs that compromise the integrity of tools, equipment, or safety devices.
- 1.9 Perform an inspection of the work area before you undertake any job. Return the work area to safe, and orderly condition when the job is complete.
- 1.10 Always stop working if hazards are identified or an unsafe act occurs.
- 1.11 When performing a task that is potentially hazardous, the use of electronic devices such as cell phones, tablets, pagers, GPS devices, or other devices is prohibited.

2.0 OFFICE SAFETY

2.1 GENERAL RULES

- 2.1.1 Office equipment and furniture shall only be used for its designated proposes.
- 2.1.2 Walk, do not run in the office building.
- 2.1.3. Get help lifting or moving objects. Always use proper lifting techniques.
- 2.1.4 Always keep one hand free to hold the handrail when ascending or descending stairways.

- 2.1.5 Take only one step at a time on stairways.
- 2.1.6 Do not attempt to carry bulky and heavy packages that interfere with your line of sight.
- 2.1.7 Open doors into offices and hallways carefully.
- 2.1.8 Avoid standing in front of a door that opens toward you.
- 2.1.9 Approach blind corners with caution.
- 2.1.10 Use a ladder or step stool when reaching for items above your head.
- 2.1.11 Never use chairs of any kind in place of a ladder.
- 2.1.12 Employees must be familiar with the emergency response plan for the building.
- 2.1.13 Familiarize yourself with the emergency escape routes for your building or location.
- 2.1.14 Know the location of the nearest fire extinguisher and fire alarms. Never use elevators in the event of a fire.
- 2.1.15 Keep emergency contact information readily available.
- 2.1.16 Know the location of first aid kits and emergency medical facilities.

2.2 FILING AND STORAGE

- 2.2.1 Avoid placing cabinets and files so that open drawers block passageways.
- 2.2.2 Never stack separate two-drawer filing cabinets.
- 2.2.3 Do not stack bookcases or file cabinets on top of tables or desks.
- 2.2.4 Arrange files in a single cabinet so the lower drawers bear the heaviest load to avoid tipping when a higher drawers bear the heaviest load to avoid topping when a higher drawer is opened.
- 2.2.5 Always close a drawer before opening another in the cabinet.
- 2.2.6 Close filing cabinets and desk drawers immediately after removing or replacing materials.

2.3 HAZARDS

- 2.3.1 Smoking is only allowed in the external designated areas.
- 2.3.2 Do not place unprotected unsecured extension cords across and aisle, passageway, or under carpet.
- 2.3.3 Only appliances, electric cords and plugs that bear a UL seal of approval shall be used.
- 2.3.4 Place paper cutter blades in the “down” position with the safety latch hooked when not in use.
- 2.3.5 Do not operate electric fans unless guards are place.
- 2.3.6 Electrical heating devices such as space heaters must be approved by supervisor.

- 2.3.7 Open flame devices such as candles and incense burners can be hazardous, use extreme caution.
- 2.3.8 Report defective lighting fixtures, loose outlet plates, defective insulation on electric cords, other potential electrical hazards, and remove from service immediately.
- 2.3.9 Keep corridors, passageways, and fire exits clear at all times.
- 2.3.10 Work areas should be clean and orderly.
- 2.3.11 Damaged furniture and furnishings which present a hazard shall be reported and removed from service.
- 2.3.12 Warped, cracked or broken chair mats create a stumbling hazard and shall be reported and replaced.
- 2.3.13 Secure pictures and wall hangings with proper fasteners.
- 2.3.14 Remove staples with a staple puller and dispose of used staples properly.
- 2.3.15 Pass scissors handle first, blades together, and store them properly. Knives, utility cutters, and box knives shall be used with extreme caution. Always cut away from yourself.
- 2.3.16 Do not place pointed objects upright in a container or a pocket.
- 2.3.17 Use extreme caution with paper shredders. Beware ties dangling jewelry and loose clothing. Stand with the "off" switch accessible. Turn shredder off after each use. Never force paper into shredder. Remove jam from shredder when the power is turned off and unplugged.
- 2.3.18 Keep all flammable materials away from potential ignition sources and in approved containers. The contents must be labeled for identification. Containers must not be left uncapped.
- 2.3.19 Do not use aerosol sprays, cleaners, or insect repellents near ignition sources.
- 2.3.20 Dispose of pressurized containers according to label instructions.
- 2.3.21 Report burned-out light bulbs in exit signs promptly.
- 2.3.22 Avoid touching the heated parts of copying machines, printers or other electronic devices.
- 2.3.23 Never stick a metal object such as a letter opener into an office machine.
- 2.3.24 All chemicals should be handled per the Safety Data Sheet (SDS).

3.0 FIELD AND PLANT SAFETY

3.1 Safe Work Practices.

3.2 Personal Protective Equipment

- Head, foot, Eye, Hand
- Hearing Conservation
- Respiratory Protection
- Fall Prevention and Protection Equipment.

- 3.3 Fire Prevention and Protection
- 3.4 Equipment Guarding
- 3.5 Electrical Safety
- 3.6 Handling and Storage of Compressed Gas Cylinders
- 3.7 Pressure Hazards
- 3.8 Ladders
- 3.9 Scaffolds
- 3.10 Hand Tools
- 3.11 Handheld Power Tools
- 3.12 Mowing and Edging
- 3.13 Powered Shop Tools
- 3.14 Chemical Handling
- 3.15 Miscellaneous

3.1 GENERAL SAFE WORK PRACTICES

- 3.1.1 Know your role as described in Emergency Response Procedures as described in section 7 of this Manual.
- 3.1.2 Perform an inspection of the entire work area before beginning a job. Return the work area to a safe, orderly condition when the job is complete.
- 3.1.3 When working as a group: protect not only yourself, but avoid action that might cause problems for your fellow employee or contractors. Assign/request an employee to coordinate the work if necessary.
- 3.1.4 Horseplay or practical jokes are strictly prohibited on company premises or on company time.
- 3.1.5 Smoke only in designated or approved areas
- 3.1.6 Use the correct tool for the job, and in the proper manner for which they are designed.
- 3.1.7 Wear appropriate clothing for the task.
- 3.1.8 Do not wear loose, dangling or exposed jewelry while working around moving or rotating equipment, performing electrical work or in other hazardous areas.
- 3.1.9 When shift is complete, you must inform your relief of all operating conditions and potential hazards.
- 3.1.10 Protect, by barricading or railing, every opening in floors, holes in the ground, or pits into which a person may accidentally step by barricading or railing. Constantly attend if opening cannot be protected otherwise.

- 3.1.11 Request assistance for heavy loads.
- 3.1.12 Never violate a regulatory rule on a safety device.
- 3.1.13 Report all safety device malfunctions to your supervisor soon as possible and tag the device immediately to warn relief and other personnel of the hazard.
- 3.1.14 Before placing equipment back into service to ensure that all associated guards and safety devices are in place and operational.
- 3.1.15 Do not use makeshift devices or temporary repairs that compromise safety.
- 3.1.16 When on a business trip, become familiar with all emergency procedures and escape routes at work location and the hotel or motel.
- 3.1.17 When walkways and steps are provided, they must be used. Do not take shortcuts.
- 3.1.18 Secure and flag hoses and electrical cords whenever they are laid across walkways. Never lay hoses and cords across stairways that create a trip hazard.
- 3.1.19 Use caution on icy walkways and working surfaces. Keep hands free and out of pockets.
- 3.1.20 When using materials handling equipment, always inspect the area and route of travel and remove tripping hazards. Make sure that clearances are adequate.
- 3.1.21 Beards or long hairstyles that can constitute a hazard when near moving machinery or rotating tools are not permitted.
- 3.1.22 Ensure new employees, contractors and visitors receive EH&S orientation for the facility.
- 3.1.23 Walk, do not run at your workplace.

3.2 PERSONAL PROTECTIVE EQUIPMENT

3.2.1 Head Protection

- 3.2.1.1 All employees, contract personal, and visitors must wear American National Standards Institute (ANSI) standard hard hats at field and plant locations.
- 3.2.1.2 Hard Hats may not be painted in any manner. Stickers should be kept to a minimum.
- 3.2.1.3 Hair styles that make it impossible for a person to properly wear a Hard Hat are not permitted.

3.2.2 Foot Protection

- 3.2.2.1 All employees, contract personnel, and visitors must wear ANSI standard steel toe foot protection as required for the work location.

3.2.3 Eye Protection

- 3.2.3.1 All employees, contract personnel, and visitors must wear ANSI standard eye protection as required for the work location.

- 3.2.3.2 Wear approved eye and face protection, including face shields and goggles during inspection, grinding, chipping, buffing, pneumatic tool operation, chemical handling, cutting or any other operations where particles may cause and eye injury.
- 3.2.3.3 Splash proof chemical goggles must be worn when hazardous chemical liquids, powders, or vapors are being handled. For handling chemicals, full face shield and goggles must be worn. Refer to SDS for proper protection.
- 3.2.3.4 Suitable goggles must be worn when inspecting tubing under pressure.
- 3.2.3.5 Welders must wear an approved shaded lens during welding operations.
- 3.2.3.6 Welder's helpers shall wear goggles, safety glasses, and side shields when chipping, and must wear the proper shade lens when there is a possibility of receiving ultraviolet eye burn.
- 3.2.3.7 Face shields shall be worn while inspecting lighting fired equipment.
- 3.2.3.8 Goggles and face shield shall be worn when dust hazard exist.
- 3.2.3.9 Replace worn, scratched, cracked, deeply pitted or broken eye wear.

3.2.4 Hand protection

- 3.2.4.1 Appropriate gloves as well as aprons must be worn when acids, bases or other chemicals are handled. Refer to SDS for proper glove type.
- 3.2.4.2 Leather gloves are recommended to be worn when wire rope is being handled.
- 3.2.4.3 At a minimum, canvas or cloth gloves must be worn when handling pipe.
- 3.2.4.4 Insulated or heat-resistant gloves must be worn when regular work gloves cannot adequately protect against burns.

3.2.5 Hearing Conservation

- 3.2.5.1 Approved hearing protection must be worn in designated high noise areas.
- 3.2.5.2 Hearing protection must also be worn in non-posted areas where there is a potential for temporary excessive noise.

3.2.6 Respiratory Protection

- 3.2.6.1 If the situation poses a respiratory hazard, a respiratory medical assessment must be completed. Fit testing must be completed and passed with approved respiratory equipment that is suitable for the hazard expected.
- 3.2.6.2 Respiratory equipment includes filter mask, cartridge, Self-Contained Breathing Apparatus (SCBA) and supplied air systems.
- 3.2.6.3 Inspect respirator equipment before and after each use. Always check for correct fit and proper seal before use.

- 3.2.6.4 Clean respiratory equipment after use and store to protect against dust, sunlight, heat, extreme cold, excessive moisture or damaging chemicals.
- 3.2.6.5 Facial hair interfering with sealing surfaces is prohibited. Beards and excessive side burns are prohibited.
- 3.2.6.6 Do not attempt to repair respiratory equipment unless authorized to do so.
- 3.2.6.7 SCBA or supplied air system with full face mask must be used in all areas where unknown concentration of toxic gases may be present, where dangerous levels are known to be present, or where oxygen deficient atmospheres may exist.

3.2.7 Fall prevention and Protection

- 3.2.7.1 Approved fall prevention equipment must be worn while working at heights of four feet or more.
- 3.2.7.2 Inspect safety harnesses lanyards and life lines carefully before each use and replace when necessary.
- 3.2.7.3 An approved climbing device must be worn when climbing uncaged ladders more than 20 feet high or when climbing any ladder more than 30 feet high.

3.3 FIRE SAFETY: PREVENTION AND PROTECTION

- 3.3.1 Upon discovering fire, sound the fire alarm immediately and announce the location of the fire.
- 3.3.2 Understand and recognize the fire alarm signal and know what to do when it sounds.
- 3.3.3 Know the location of the fire equipment and be familiar with the fire reporting system procedures.
- 3.3.4 Do not move firefighting equipment from its designated location.
- 3.3.5 Do not block access to the firewalls, around tanks, buildings and wells free form weeds and trash.
- 3.3.6 Keep the area inside and on firewalls, around tanks, buildings and wells free from weeds and trash.
- 3.3.7 Follow instructions when lighting fired vessels.
- 3.3.8 Keep iron sulfide or hydrogen sulfide scale wet until proper disposal can be arranged.
- 3.3.9 When high API gravity, high vapor pressure hydrocarbon liquids, such as condensates, gasoline and crude oils are drawn into a container, a metal container must be used and container must be properly bonded and grounded. High API gravity, High vapor pressure hydrocarbon liquids must not be drawn into plastic or rubber containers.
- 3.3.10 Use only approved containers to store or transport flammable liquids.
- 3.3.12 Never handle gasoline in open containers.

- 3.3.13 Never use an open flame to test for the presence of a flammable or combustible gas. Always use the combustible gas detector/indicator.
- 3.3.14 In areas with potential combustible gas, use a combustible gas detector/indicator to test the presence of gas before you use equipment capable of producing an ignition source.
- 3.3.15 Flame Retardant Clothing (FRC) will be required at field locations. Company supervisors will inform personnel of the requirements prior to initiating work.

3.4 EQUIPMENT GUARDING

- 3.4.1 Equipment with missing broken or improperly installed guards must be properly installed after repair or maintenance.
- 3.4.2 Never attempt to lubricate moving machinery that is not equipped with proper grease and lubrication fittings.
- 3.4.4 Guards shall never be rendered ineffective.

3.5 ELECTRICAL SAFETY

- 3.5.1 Become familiar with industry standard lockout/tagout procedures.
- 3.5.2 When operating electrical equipment, proceed according to instructions. If equipment fails to operate properly, consult an electrician.
- 3.5.3 Only qualified personnel shall make repairs to electrical equipment.
- 3.5.4 Report unsafe appliance, lines, and electrical apparatus immediately to the electrical or supervisor, and remove from service.
- 3.5.5 When working on electrical equipment, the power must be turned off, equipment locked and tagged, and tested for stored energy before you begin work.
- 3.5.6 Use approved insulation tools and protective devices when working on electrical equipment.
- 3.5.7 Periodically inspect and clean insulated tools and equipment. When safe condition is in doubt, test the tools and equipment.
- 3.5.8 Ground all electrical tools and equipment before use. Double insulated tools are not required to be grounded.
- 3.5.9 When operating electrical panels containing open type switches, stand on approved mats. Electrical tools must be rated for the environment in which operations will occur. (Class 1 Division 1 and Division 2)
- 3.5.10 Do not touch or handle energized electrical circuits.
- 3.5.11 Do not operate electrical equipment while wearing wet shoes or damp clothing. Keep hands dry.
- 3.5.12 Rings, watches, bracelets, metal eye glasses frames or other metal items are prohibited when working with electrical equipment.

- 3.5.13 Verify switches or circuit breakers have no current or are properly grounded with a volt/ohm meter before working on electrical equipment.
- 3.5.14 Operate electrical motors with the off/on switch. Never use the main disconnect switch for stopping a motor except in an emergency.
- 3.5.15 All portable hand lights used in hazardous locations must be rated for hazardous services.
- 3.5.16 Never wrap an extension cord around the body.
- 3.5.17 Do not remove ground prongs from extension cords with electrical tape.
- 3.5.18 Never patch extension cords with electrical tape.
- 3.5.19 Extension cords shall be protected against contact with hot oil, hot surfaces and chemicals.
- 3.5.20 Bridging or circumventing normal operations of fuses and circuit breakers is prohibited.
- 3.5.21 Replace blown fuse with fuses having the appropriate amperage rating.
- 3.5.22 Use a fuse puller and insulated gloves to remove or replace fuses.
- 3.5.23 Never use water or steam to wash any area near electric motors or other electrical equipment.

3.6 HANDLING AND STORAGE OF COMPRESSED GAS CYLINDERS

- 3.6.1 Physically damaged or deteriorated compressed gas cylinders shall not be accepted or used.
- 3.6.2 Only those cylinders that have been hydrostatically tested within the prescribed time period shall be used.
- 3.6.3 Handle all cylinders as if they are full.
- 3.6.4 Store all cylinders in designated areas. Segregate empty cylinders as soon as possible.
- 3.6.5 Keep cylinders secured in a standing position.
- 3.6.6 Dispense the gas only through a pressure regulator.
- 3.6.7 Do not use cylinders as a work bench or hammer upon them.
- 3.6.8 Never use your hand to locate a suspected leak.
- 3.6.9 Ensure cylinders are secured with caps or valve guards in place during storage, handling or transporting.
- 3.6.10 Close all valves on cylinders before moving. Replace protective valve caps before shipping.

3.7 Pressure Hazards

- 3.7.1 Become familiar with industry standard lockout/tagout procedures. Assume there is always pressure and use caution when opening or closing any valve.
- 3.7.2 Test all Pressure Safety Valves (PSV) per regulatory rules or to 80% of maximum working pressure.

- 3.7.3 Secure pressure relief lines. Install lines in a straight line where possible so that rotating force will not be generated when a relief valve opens.
- 3.7.4 Remove bungs from barrels or drums carefully to avoid injury from pressure build-up inside the barrel.
- 3.7.5 Report all leaks or damage immediately.
- 3.7.6 Report abnormal replacement frequency of valves, fittings, or other equipment.
- 3.7.7 Report corrosion to lines and equipment to supervisor or company representative.

3.8 LADDERS

- 3.8.1 Check the condition of the ladder before use.
- 3.8.2 Do not use broken or damaged ladders.
- 3.8.3 Remove damaged ladders from service and tag "Do not Use."
- 3.8.4 Use only approved portable ladders. Do not use metal ladders in close proximity to electrical hazards.
- 3.8.6 Secure a straight ladder mechanically or have another person hold the ladders on that it cannot slip or fall. Secure straight ladders at the top.
- 3.8.7 When ascending or descending a ladder face the ladder and have free use of both hands.
- 3.8.8 Hold the side rails rather than the rungs of a ladder when climbing up or down.
- 3.8.9 Only one person shall be on a portable ladder at anytime.
- 3.8.10 Use a tool belt or pouch for holding small tools when working on a ladder.
- 3.8.11 Always use a hand line to raise or lower objects.
- 3.8.12 Never lean from a ladder to reach work. Move the ladder.
- 3.8.13 Set straight ladders with the base approximately one fourth ($\frac{1}{4}$) of the working length of the ladder from vertical.
- 3.8.14 Do not splice short ladders together to make a longer ladder.
- 3.8.15 Never place ladders in front of doors.

3.9 SCAFFOLDS

- 3.9.1 Use only approved scaffolds. Do not use barrels, boxes, or other makeshift substitutes for scaffolding.
- 3.9.2 Assure the weight that is placed on the scaffolding does not exceed the designed capacity.
- 3.9.3 Assure that scaffolds are secured to supports at appropriate intervals.

- 3.9.4 Guard rails, mid rails, and toe boards are required on all sides and ends of scaffolds and platforms 4 feet or more in height.
- 3.9.5 Inspect scaffold planks before use. Remove and replace damaged scaffold planks immediately.
- 3.9.6 Scaffold walkway planks must be at least scaffold grade 2'x10', full thickness lumber or equivalent.
- 3.9.7 Scaffold planks must be cleaned and must extend over the end supports at least 6", but not more than 12".
- 3.9.8 Scaffolds shall be at least two planks wide.
- 3.9.9 Scaffolds and scaffold ladders shall be securely attached at the top and bottom.

3.9.10 HAND TOOLS

- 3.10.1 Keep tools in orderly fashion on the tool bench or in the tool chest so that they may be easily found when needed.
- 3.10.2 Inspect all hand tools before use. Do not use damaged or broken tools.
- 3.10.3 Before starting equipment be sure all tools are picked up. Never leave tools lying on moving machinery.
- 3.10.4 Replace dull cutting tools as soon as possible.
- 3.10.5 Place crowbars, chain tongs, pipe cutters and similar tools in proper racks.
- 3.10.6 When using wrenches, maintain proper position.
- 3.10.7 When applying force to a wrench, pull do not push wrench.
- 3.10.8 Never use a wrench with another tool to increase leverage.
- 3.10.9 Adjustable wrenches shall be set to take a full snug grip on the pipe or nut. The pull shall be made toward the hook jaw of the wrench to tighten the grip and avoid undue strain on the tool.
- 3.10.10 Never step or jump on wrenches or tongs to create additional force.
- 3.10.11 When two employees are using hammer tools, the employee holding the tool being struck shall use a tool holder or rope to maintain tension on the wrench.
- 3.10.12 Remove jack handles when jacks are not in use.
- 3.10.13 Check the handles of hammers, mauls, axes, picks, and similar tools to ensure handles are securely wedged into the heads and are in good condition.
- 3.10.14 Do not use files without handles.
- 3.10.15 Do not paint or tape wooden handles.
- 3.10.16 Keep chisels, sledge hammers and other impact tools free of "mushrooming" by dressing the head surface with a file or grinder.

3.10.17 Never use a screwdriver as a pry tool, drift punch or chisel.

3.10.18 Never hit a hammer with another hammer.

3.10.19 Approved handle extension must not be longer than 1-1/2 times the length of the wrench handle.

3.11 HAND POWER TOOLS

3.11.1 Inspect all power tools before use. All power tools must have proper guards in place at all times.

3.11.2 Do not use powered tools or equipment that are worn, deteriorated or have damaged insulation. Tag and removed the tools from service.

3.11.3 Ensure the sources of air supply pressure cannot exceed the working pressure of the tool per manufacture's rating.

3.11.4 Do not use power tools if locking devices must be removed or disconnected.

3.11.5 Electrical tools must be double insulated or properly grounded.

3.11.6 Use proper washers on all grinders, sanders, and polishers.

3.11.7 Never install grinding wheels on equipment having maximum speed greater than that wheel's rating.

3.12 MOWING AND EDGING

3.12.1 Before mowing or edging, carefully inspect the area and remove all wire, rocks, glass, or other objects that could become airborne if struck by the blade.

3.12.2 Disconnect the spark plug wire before inspecting or repairing the mower blade.

3.12.3 Inspect equipment for loose parts and defective or loose guards before starting the mower.

3.12.4 Steel-toed footwear, eye and ear protection shall be worn when operating a rotary power mower or edger.

3.12.5 Do not allow personnel to remain in the immediate vicinity of mowing or edging operations.

3.12.6 Do not fuel the engine while running. Allow engine to cool before refueling.

3.13 POWER SHOP TOOLS

3.13.1 All powered shop tools must be properly secured to a work surface or stand.

3.13.2 Ensure power switch is in the off position prior to connecting with power source.

3.13.3 Bench grinders shall have protective shields, guards, and tool rests installed. Shields, guards, and tool rests shall be adjusted in accordance to OSHA regulations.

3.13.4 A bench grinder tool rest shall be adjusted to a clearance of no more than 1/8 inch.

3.13.5 When starting a bench grinder, stand to one side until full operating speed is achieved.

- 3.13.6 Remove chuck key before operating drill press.
- 3.13.7 Secure all work pieces and keep hands clear when using drill press.

3.14 CHEMICAL HANDLING

- 3.14.1 Review the location of the area or facility SDS.
- 3.14.3 Review location of eyewash stations and safety showers before handling chemicals.
- 3.14.4 Wash hands with approved cleaners.
- 3.14.5 When working with chemicals always wear approved personal protective equipment as required by the SDS.

3.15 MISCELLANEOUS

- 3.15.1 Do not use an air hose to blow particles off clothing, hair, or skin. If air pressure is being used to clean an area, the user must wear protective goggles and the air hose must be equipped with a pressure regulator to reduce the air pressure to less than 30 psi.
- 3.15.2 Mops or other potentially flammable items must not be placed near engine exhausts or other hot surfaces for drying.

4.0 TRANSPORTATION

4.1 Motor VEHICLES

- 4.1.1 Operators of company vehicles must have a current, valid driver's license and comply with designated restrictions.
- 4.1.2 All drivers must practice the concept of defensive driving. A defensive driver is one who drives with caution to prevent accidents in spite of incorrect actions of others or adverse conditions.
- 4.1.3 Drivers of company motor vehicles shall be familiar with and abide by state federal, and local traffic regulations.
- 4.1.4 Seat belts and shoulder restraints must be worn by all occupants of company vehicles and personal cars used on company business.
- 4.1.5 Seat belts, shoulder restraint straps, buzzers and interlock system shall not be disconnected or bypassed.
- 4.1.6 Drivers shall reduce speed accordingly when confronted with unfavorable road or weather conditions.
- 4.1.7 Drivers shall not pick up hitchhikers.
- 4.1.8 Personnel shall not get on, off, in or out of a vehicle while it is in motion or ride on the running board, fenders, pick-up bed or other areas of the vehicle not designated for passengers.

- 4.1.9 All Drivers must look around the vehicle for potential hazards before entering and placing it in motion. If the driver does not have clear visibility, a spotter should be obtained to ensure an unobstructed view.
- 4.1.10 Never crawl under a vehicle raised by a bumper jack or any other support that could fail and allow vehicle to fall.
- 4.1.11 Before driving a vehicle, clear all windows of frost, ice or dew.
- 4.1.12 Aerosol containers, including engine starting fluids and drivers must not be exposed to heat. Aerosol containers should not be carried in the same compartment as two-way radio transmitters. In addition, engine starting fluid must not be carried inside the passenger compartment.

5.0 MATERIAL HANDLING EQUIPMENT

5.1 Heavy Duty Cranes

5.1.1 General Rules

5.1.2 Personal Nets

5.1.3 Rigging of the Load

5.2 Small Mobile Cranes

5.3 Forklift and Pallet Storage

5.3.1 General

5.3.2 Loading

5.3.3 Unloading

5.3.4 Operation

5.1 HEAVY DUTY CRANES

5.1.1 General Safe Work Practices

- 5.1.1.1 Crane operator must conduct pre-use and daily visual inspections before crane is used and report defects immediately.
- 5.1.1.2 Crane operator shall not operate crane unless emergency shutdown devices are operable.
- 5.1.1.3 If a crane operator considers a load unsafe to lift, he shall refuse to make such a lift and report this immediately to his supervisor.
- 5.1.1.4 The crane operator will not operate the crane until all personnel have been instructed of the work to be performed.
- 5.1.1.5 The crane operator shall designate a qualified signal person.

- 5.1.1.6 Cranes shall not be operated beyond their rated capacity.
- 5.1.1.7 Visually inspect hooks on hoisting equipment for cracks before using.
- 5.1.1.8 All hooks shall have an operable safety closing or latching device in good condition before use.
- 5.1.1.9 Only certified wire rope slings with manufactured swedges shall be used. The rated maximum load capacity shall be stamped on the swedges by the manufacture.
- 5.1.1.10 Inspect slings, fittings, and shackles prior to each use. Those not fit for service shall be set aside for repair or replacement. Soft line shall not be used in place of wire rope slings.
- 5.1.1.11 Never work under suspended loads and keep clear of them at all times.
- 5.1.1.12 There shall be at a minimum three wraps of cable left on the cable drum during material or personnel transfer operations.
- 5.1.1.13 All signals shall be given by the signal person. The operator shall obey any emergency stop signals given.
- 5.1.1.14 Personnel shall not ride on loads or hooks suspended from a crane.
- 5.1.1.15 "Tag-lines" shall be used and shall be free of knots.
- 5.1.1.16 The crane operator shall determine if weather conditions allow a safe lift to be completed.
- 5.1.1.17 Horseplay in or with the crane will not be tolerated.

5.1.2 Personnel Lifts

- 5.1.2.1 Only qualified crane operators shall make or use personnel lifts

5.1.3 Rigging of the Load

- 5.1.3.1 Qualified heavy duty crane operators and helpers are expected to rig the load in a safe manner as specified by the crane operator.

5.2 SMALL MOBILE CRANES

- 2.2.1 Qualified small crane operators and helpers are expected to operate their equipment in a safe manner as specified by the crane operator.

5.3 FORKLIFTS AND PALLET STORAGE

5.3.1 General

- 5.3.1.1 Operator must be qualified and familiar with the forklift prior to use.
- 5.3.1.2 Forklifts shall be visually inspected daily for conditions adversely affecting the safety of the vehicle. If the forklift is used by multiple shifts, it should be inspected after each shift.

- 5.3.1.3 Each forklift shall carry a name plate showing its weight and rated capacity.
- 5.3.1.4 Each forklift shall have a horn or other warning devices loud enough to be heard above the local noise. The horn will be sounded when entering or exiting a building or when approaching blind corners.

5.3.2 Loading

- 5.3.2.1 Never overload the forklift.
- 5.3.2.2 Material must be placed securely on the forklift at all times.
- 5.3.2.3 Red flagging must be placed on material that projects over the side of the pallet.
- 5.3.2.4 Before lifting, be sure that the load is stable and properly balanced.

5.3.3 Unloading

- 5.3.3.1 Always lower the load slowly; a sudden stop may cause the forklift to tilt forward.
- 5.3.3.2 Be sure stacked materials are not top heavy. When placing or picking up pallets, do not unbalance the stack.
- 5.3.3.3 Never stack material in roadways or aisles.
- 5.3.3.4 Employees other than the operator must stand clear of the forklift while it is being used to stack or remove materials.
- 5.3.3.5 Do not unload materials too high for safe lifting and handling.

5.3.4 Operation

- 5.3.4.1 The operator must not permit personnel to ride on any part of the forklift.
- 5.3.4.2 Do not use gasoline or diesel powered forklift in small buildings without proper ventilation.
- 5.3.4.3 Park with forks under a flat pallet or bench to prevent tripping.
- 5.3.4.4 When forklift is left unattended, the forks should be fully lowered, controls in neutral, power shut off, and brakes set.
- 5.3.4.5 Never drive over objects lying on floors. Such material may cause damage to the forklift and may shift or topple the load.
- 5.3.4.6 When driving with or without a load, keep the forks four to six inches above the ground.
- 5.3.4.7 When following another forklift, keep at least ten feet clearance. Do not travel abreast of another forklift.
- 5.3.4.8 Avoid sudden stops and starts which may cause skidding or toppling of the load.
- 5.3.4.9 If the load obstructs forward view, the operator must travel with the load trailing.
- 5.3.4.10 Avoid carrying loose materials on forks. Use a pallet whenever possible.

- 5.3.4.11 Never stand under elevated loads.
- 5.3.4.12 Gasoline or diesel powered forklifts must be refueled outside buildings with the engine off and the brakes set.

6.0 NATURAL ENVIRONMENTAL HAZARDS/EMERGENCY ACTION PLAN

6.1 Severe weather

6.1.1 Thunderstorms

6.1.2 Tornados

6.1.3 Hurricanes

6.2 Temperature Extremes

6.3 Insects, Plants, Reptiles

6.4 Emergency Action Plans

6.1 SEVERE WEATHER

6.1.1 Thunderstorms

6.1.1.1 Seek shelter in a building or vehicle when a thunderstorm approaches and remain in shelter throughout the duration of the storm.

6.1.1.2 If shelter is not available, avoid isolated, high or conductive objects.

6.1.1.3 Avoid using corded telephones, electrical appliances and equipment during the storm.

6.1.1.4 Do not drive into standing or running water.

6.1.1.5 Avoid shelter under tall objects such as trees.

6.1.2 Tornadoes

6.1.2.1 During a tornado warning, take immediate cover.

6.1.2.3 If in the city:

- Seek and inside shelter, preferably in a strongly reinforced building.
- Stay away from windows,
- Avoid auditoriums or gymnasiums with large poorly supported roof structures.

6.1.2.4 When in open country, with a tornado approaching, lie down in a low place such as a bar ditch. Do not remain in a vehicle.

6.1.3 Hurricanes

Know the local hurricane preparedness plans and emergency procedures that are specific to your location.

6.2 TEMPERATURE EXTREMES

- 6.2.1 Know the symptoms of heat exhaustion. These include pale, cold, clammy skin, rapid weak pulse, weakness, headache, or nausea, or cramps inn abdomen or limbs, and excessive perspiration. Notify your supervisor if such severe symptoms exist.
- 6.2.2 Know the symptoms of heat stroke. These include flushed, dry, hot skin, rapid strong pulse, and temperature well above normal, skin that feels hot to the touch, headache, dizziness and nausea. Notify your supervisor if such severe symptoms exist.
- 6.2.3 Know the symptoms of frostbite. These include a white to grayish-yellow appearance on the affected area, pain that quickly subsides, and numbness in the frostbitten area. Notify your supervisor if such severe symptoms exist.

6.3 INSECTS, PLANTS, REPTILES

- 6.3.1 Be able to identify poisonous plants. Avoid them at all times.
- 6.3.2 To prevent insect stings, the work area should be inspected and sprayed frequently with an approved insecticide.
- 6.3.3 Be able to identify poisonous snakes and reptiles. Avoid them at all times.
- 6.3.4 Be able to identify poisonous spiders and insects. Avoid them at all times.
- 6.3.5 Proper protection from mosquitoes should be taken by using insect repellent containing DEET.

6.4 EMERGENCY ACTION PLANS

- 6.4.1 All well locations have contact phone numbers for Company representatives. In the event of an emergency, call the posted number, describe the incident and proper action will be taken.
- 6.4.2 All office locations have evacuation routes posted. Familiarize yourself with each individual building evacuation route in the case of an emergency.
- 6.4.3 In the event of a medical emergency, perform initial inspection and administer first aid as applicable. If medical authorities are needed, call 911.
- 6.4.4 Ensure first aid supplies applicable to a potential injury or illness are available on location or in the office.

7.0 SPECIAL OPERATIONS

- 7.1 General

- 7.2 Isolation of Energy Sources
- 7.3 Hot Work
- 7.4 Sandblasting, Chipping, and Spay Painting
- 7.5 Confined Space Entry
- 7.6 Hydrogen Sulfide (H₂S)
- 7.7 Radiographic Inspections
- 7.8 Acidizing
- 7.9 Hydraulic Fracturing
- 7.10 Perforating
- 7.11 Hydrostatic Testing of Tubing, Casing and Line Pipe
- 7.12 Well Servicing and Workovers
- 7.13 Drilling
- 7.14 NORM (Naturally Occurring Radioactive Material)
- 7.15 Hazzard Communication (HAZCOM)
- 7.1 General**
 - 7.1.1 Never undertake special operations unless qualified and approved to perform special operations involving:
 - Isolation of energy sources
 - Electrical, pressurized or mechanical equipment
 - Hot Work
 - Sandblasting, chipping and spray paining
 - Confined space entry
 - Hydrogen sulfide (H₂S)
 - Radiographic inspections
 - Acidizing
 - Hydraulic fracturing
 - Perforating
 - Hydrostatic testing
 - Well servicing and workovers
 - Drilling
 - NORM (Naturally Occurring Radioactive Material)

7.2 ISOLATION OF ENERGY SOURCES

7.2.1 Any installation, construction, repair or maintenance activity involving energy sources must follow approved lockout/tagout training. If you've not been trained, do not perform work that requires lockout/tagout.

7.2.2 Only approved, authorized personnel may lockout/tag out an energized system or return the system to service.

7.2.3 Never remove, modify, or tamper with tags or locking devices.

7.3 HOT WORK

7.3.1 Each employee involved in operations must know that HOT WORK is defined as an operation which involves one or more of the following:

- Welding
- Torching
- Flaming
- Soldering
- Grinding
- Sandblasting
- Chipping

7.3.2 A HOT WORK hazard assessment is required by company supervision. Permission to perform work is also necessary.

7.3.3 Only personnel involved in the HOT WORK activity are permitted in the designated HOT Work area.

7.3.4 A trained fire watch must be designated for any HOT WORK activity outside designated HOT WORK areas.

7.4 SANDBLASTING, CHIPPING

7.4.1 Each employee involved in operations must know that sandblasting and chipping are special operations that may require an approved HOT WORK permit for work outside of designated HOT WORK areas.

7.4.2 Used sandblasting waste must be properly disposed.

7.5 CONFINED SPACE ENTRY

7.5.1 Confined space work and confined space permitting will comply with applicable OSHA regulations.

7.5.2 Company employees are NOT to enter a confined space as defined as any operation involving the following.

- Entry into any manholes, bell holes, sumps, or hazardous excavations that are:
 - Large enough for a person to physically enter.
 - Contains a limited means of entry or exit.

- Not intended for continuous human occupancy.

- 7.5.3 A CONFINED SPACE hazard assessment is required by company supervision. Permission to perform work is also necessary.
- 7.5.4 Only qualified, trained personnel are permitted to enter and perform work in confined spaces or act as a confined space attendant (CSA)
- 7.5.5 The confined space attendant (CSA) must have approved personal protection equipment ready for immediate use during the operation.
- 7.5.6 A full body harness with lifeline is required to work in confined space.
- 7.5.7 The confined space attendant (CSA) must maintain contact with the entrant.
- 7.5.8 THE CSA must not enter the confined space until relieved of duty. The CSA will enter the confined space for rescue work only when adequate assistance is present.
- 7.5.9 If there is an emergency the CSA shall:
- Summon aid immediately
 - Attempt to remove the victim by use of the life line
 - Perform all other necessary rescue functions from outside.

7.6 HYDROGEN SULFIDE (H₂S)

- 7.6.1 Be aware of general H₂S safe handling procedures. If H₂S contamination is suspected, the amount of contamination must be determined with an approved H₂S detector before personnel are allowed to enter the area.
- 7.6.2 All portable and permanent sensors shall be properly calibrated, working properly, and if worn, worn within 2 feet of the wearers' face.
- 7.6.3 Adequate ventilation must be maintained in a contaminated work area.
- 7.6.4 In H₂S operating areas, approach ditches, ravines, inside firewalls and other low areas with caution and from an upwind position.
- 7.6.5 H₂S concentrates in the vapor space of storage tanks, separators, sumps, etc. may be elevated.
- 7.6.6 Only sample or gauging when necessary! When sampling or gauging a storage tank, or working around open hatches, personnel must use approved respiratory protection equipment. Stand-by personnel are required for 100 ppm H₂S (IDLH) or greater.
- 7.6.7 H₂S is combustible; therefore, pure oxygen respirators must not be used.
- 7.6.8 Canister masks must not be able to be used in H₂S service.
- 7.6.9 Vented vapors from chemical cleaning must be treated as toxic unless testing and proved otherwise.

7.6.10 Pilot lights for venting/flaring of gas streams containing hydrogen sulfide must be kept lit.

7.7 RADIOGRAPHIC INSPECTIONS

7.7.1 Stay clear of areas marked off as affected by radioactivity during a radiographic or X-ray inspection of equipment or welds.

7.7.2 Follow the instructions of the radiographer. The radiographer is responsible for the protection and monitoring of every person working with or near X-rays or radio scopes.

7.8 Acidizing

7.8.1 When acid is being pumped, all persons not needed to perform the operation must be restricted from location.

7.8.2 All actual handling of the acid including repair of acid leaks in injection lines, must be performed by qualified personnel.

7.8.3 Acidizing operations, especially acid displacement and at the truck manifold.

7.9 Hydraulic fracturing

7.9.1 Inform your supervisor if you are aware that contractors involved in the fracturing process do not adhere to their procedural and safety guidelines..

7.9.2 Smoking and smoking materials, including matches, lighters, and cigarettes, are prohibited within 150 feet of the well and related equipment before, during, and after the operation

7.9.3 All personnel not needed to perform the operation shall leave the site, and all vehicles and equipment not necessary to the operation should be moved to a point at least 150 feet from the well.

7.9.4 Keep access roads clear.

7.9.5 Do not park trucks or other vehicles over frac lines.

7.9.6 Do not stand on or near frac lines that are under pressure.

7.9.7 Ensure that an approved monitoring device is installed on the casing-tubing annulus to ensure that maximum pressure rating for the casing are not exceeded.

7.9.8 Avoid frac sand inhalation. If nearby airborne frac sand, respiratory PPE may be required.

7.10 PERFORATING

7.10.1 Only authorized personnel may handle perforating equipment.

- 7.10.2 When a perforating gun comes out of the hole, a representative of the service company must be present at the well site.
- 7.10.3 Radio and radar transmitters must be turned off within 500 feet of perforating operations or electrically fired back-off operations.
- 7.10.4 Ensure that temporary signs prohibiting the operation of radio transmitters are posted.
- 7.10.5 The rotary shall be locked during perforating operations.
- 7.10.6 Only personnel required to rig up or rig down the lubricator and perforating gun are allowed in the vicinity of the wellbore.
- 7.10.8 All personnel must stand clear of the lubricator when pressure testing.
- 7.10.9 All welding machines must be shut down during perforating operations.
- 7.10.10 An appropriate wireline blowout preventer, lubricator, stuffing box, or control head must be used in all perforating operations.

7.11 HYDROSTATIC TESTING OF TUBING, CASING AND LINE PIPE

- 7.11.1 When tubing is tested hydrostatically, workers should stand five feet from the string if the work platform is large enough. Safety glasses shall be worn if a close visual inspection is available.
- 7.11.2 When hydrostatically testing pipe on the rack, stand behind the protective wall or physical barrier. Never stand at either end of the joint being tested.
- 7.11.3 Seamed pipe must be rack tested with the seam up, never down.

7.12 WELL SERVICEING AND WORKOVERS

- 7.12.1 Ensure that the well servicing unit has been inspected and is authorized to perform the work begins.
- 7.12.2 Vehicle engines used within 50 feet of a well shall be equipped with spark-proof ignition and spark-arrested exhausts.
- 7.12.3 Personnel must not ride the safety line (Geronimo) from the derrick except in emergencies.
- 7.12.4 Ensure that two independent hanging devices are used to secure the guide sheave when an electrical submersible pump is run or pulled.
- 7.12.5 At least two lines from the traveling block shall be used when tubing is pulled.
- 7.12.6 Do not stand under rods hanging in the derrick.
- 7.12.7 When a well is being serviced, ensure that beam hangers and bridles are tied back or removed.

- 7.12.8 When rising, lowering, or telescoping a single-pole unit, no personnel should remain in the truck cab.
- 7.12.9 Ensure adequate clearance to avoid contact with overhead electric power lines before raising a mast or gin pole.
- 7.12.10 No personnel are allowed on the mast while being raised or lowered.
- 7.12.11 Ensure all guide lines are flagged to allow proper visibility for both ground and air traffic.
- 7.12.12 Hands shall not be used to clean a wireline, sucker rods, or tubing coming out of a hole.
- 7.12.13 Personnel other than the operator must stay away from the well, wireline, and rear of the pulling unit, except when needed for the operation.
- 7.12.14 Do not jump to the ground from a platform, Christmas tree, lubricator, or BOP stack.
- 7.12.15 All contractors involved in the well servicing process must adhere to their procedural and safety guidelines.

7.13 DRILLING

- 7.13.1 A safety harness with a safety line must be worn when climbing or working in the derrick. Riding the pipe elevator is prohibited.
- 7.13.2 No open fires are allowed within 150 feet of the derrick floor.
- 7.13.3 All pressure must be removed from a line before attempting to tighten a connection or repair a leak. All open-ended lines used to bleed pressure must be securely anchored.
- 7.13.4 A chain or net shall be secured across the V-door of the rig floor during all operations, except when transferring materials to and from the rig floor.
- 7.13.6 Ensure that metal rig houses are grounded.
- 7.13.7 Ensure tongs are used to break tool joints. The rotary must not be used for power when breaking out tool joints or drill bits.
- 7.13.8 Do not stand on tongs while working about the rig floor.
- 7.13.9 Ensure tong dies, slip segments, and snub lines are checked before each trip.
- 7.13.10 Inform your supervisor if you are aware that contractors involved in the drilling process do not adhere to their procedural and safety guidelines."

7.14 NORM- Naturally Occurring Radioactive Material

- 7.14.1 NORM is found in produced water, scale, and basic sediment and water.
- 7.14.2 Material should be kept wet at all times.
- 7.14.3 Special disposal is required for materials containing NORM.

7.14.6 Store active or surplus materials that are contaminated with NORM in a special designated area with signage.

7.15 Emergency Response Procedures

7.15.1 The purpose of Emergency Response is to notify correct personnel and take appropriate action to mitigate the severity of the incident.

7.15.2 If you discover an actual or potential emergency release of a hazardous substance, timely and accurate notice of proper personnel is essential.

7.15.3 Evaluate the situation as well as can be accomplished safely, without compromising your own safety.

7.15.4 Notify supervisor and/or emergency responders (911, fire department, etc.) if needed.

7.15.5 Take action to assist any injured persons if necessary.

7.15.6 Monitor emergency until situation is resolved.