ABRASIVE BLASTING

Scope

These procedures apply to all Hunt Energy Services employees. The procedures must be used where applicable in conjunction with other established safe work procedures such as:

- Hot Work
- Confined Space Permits
- Lockout/Tagout
- Respiratory protection
- Personal protective equipment
- Lead handling and asbestos

POLICY

1. Requirements and Guidelines

1.1. Employees operating abrasive blasting equipment must be trained in the safe operation of that equipment in accordance with manufacturers' user instructions as well as best industry practices and Hunt Energy Services safety procedures.

1.2. Employees will be trained on the appropriate techniques for inspecting equipment, and the procedures to follow if equipment is not functioning properly.

1.3. Designated blasting areas must be established based on the size of the project and composition of materials being used and removed. Note: Designated areas may also include areas downwind of the blasting operation (i.e. harmful atmospheres and damage to property). Access to designated areas should be limited to workers involved in the abrasive blasting operation.

1.4. Shielding may be required for coatings containing lead or asbestos. Unless documented and proven to Icenhower Oil & Gas, all materials must be tested to determine their composition before blasting. Work area preparation includes but is not limited to:

1.5. Marking the area with warning signs
1.6. Covering any sewer drains
1.7. Covering air intakes and protecting instrumentation
1.8. Appropriate work permits in accordance with safe work procedures must be completed.

2. Equipment

2.1. Equipment must be installed, operated, and maintained in a safe and productive manner in accordance with the manufacturer's operating guidelines. Equipment must be inspected daily to ensure that all equipment is in working order, and there is no visible damage. If blasting equipment is ever in need of repair, the equipment must be taken out of service until it is properly repaired or replaced (See Blasting Equipment Inspection on p. 9).

2.2. Breathing air compressors (oil-less air pump) capable of providing Grade D breathing air must be located in a dust-free, contaminant-free area. If an oil-lubricated breathing air compressor is used to supply respirators, it should be equipped with a high-temperature monitor and a carbon monoxide monitor. A breathing air filter for the removal of moisture and particulate matter must be present.

2.3. The blast air compressor must be sized to provide sufficient volume (cfm) for nozzle and other tools, plus a 50% reserve to allow for nozzle wear. Ensure a large compressor outlet and large air hose (4-times the nozzle orifice size). Follow the manufacturer's maintenance instructions.

2.4. The blast hose must have an internal diameter of 3 to 4 times the size of the nozzle orifice. Lines should be run as straight as possible from machine to work area with no sharp bends.

2.5. Abrasive blast material must be properly sized and free of harmful substances, such as free silica. Hunt Energy Services personnel will refer to SDS for chemical hazards.

3. Static Electricity

3.1. Organic abrasives which are combustible shall be used only in automatic systems. Where flammable or explosive dust mixtures may be present, the construction of the equipment, including the exhaust system and all electric wiring, shall conform to the requirements of American National Standard Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying, Z33.1-1961 (NFPA 91-1961), and Subpart S of this part. The blast nozzle shall be bonded and grounded to prevent the build up of static charges. Where flammable or explosive dust mixtures may be present, the abrasive blasting enclosure, the ducts, and the dust collector shall be constructed with loose panels or explosion venting areas, located on sides away from any occupied area, to provide for pressure relief in case of explosion, following the principles set forth in the National Fire Protection Association Explosion venting Guide. NFPA 68-1954.

4. Waste Disposal

4.1. Hunt Energy Services will properly dispose of all waste or byproducts of abrasive blasting. Some surfaces containing lead, asbestos, arsenic, barium, cadmium, chromium, zinc, or nickel may require special disposal. Hunt Energy Services will contact client representative for waste disposal instructions. Hunt Energy Services employees will use engineering means and then personal protective equipment to protect themselves from these byproducts.

5. Workplace Monitoring

5.1. Unless exact concentrations of hazardous substances are known, (in the absence of analysis), any concentrations and/or amount of substance shall be considered IDLH. When this condition does exist, personal protection equipment shall be provided for extreme (high) concentrations (worst case scenario).

5.2. If analysis is conducted, personal protective equipment shall follow all safety data sheet requirements as to the found concentration levels. For example, Lead exposures (at a minimum) must not exceed the OSHA interim final PEL of 50 micrograms per cubic meter of air (50 ug/m(3)) averaged over an 8-hour-period. When feasible engineering controls and work practice controls cannot reduce worker exposure to lead at or below 50 ug/m(3), respirators must be used to supplement the use of engineering and work practice controls.

5.3. At all times, engineering practices, such as: exhaust ventilation, enclosure/encapsulation, isolation, etc., will be utilized initially to remove hazardous substances. If ventilation is used, analysis must still be conducted to determine that levels are within acceptable ranges. In the absence of analysis, even when engineering practices are used, condition remains IDLH.

6. Personal Protective Equipment

6.1. All personnel who are performing abrasive blasting operations and anyone working inside the designated area must wear PPE. Protective clothing should include heavy coveralls or a special blast suit, or equivalent protection to protect them from the impact of abrasives designed to protect the employee from flying debris. Some area may require fire- retardant clothing. NOTE: Leather gloves (or equivalent) and safety shoes must be worn.

7. Personal Hygiene

7.1. All sandblasters MUST wash their hands and faces before eating, drinking, or smoking.

7.2. No eating, drinking, or tobacco products in the blasting area (sign marked area).

7.3. Workers should wash themselves as much as possible before leaving the worksite.

7.4. Workers should change into clean clothes before leaving the worksite.

7.5. Workers should change into disposable or washable work clothes when arriving at the worksite.

7.6. Vehicles should not be parked in contaminated areas.

8. Respirators

8.1. Supplied air helmets or hoods are generally required for those directly involved with abrasive blasting.

8.2. Supplied air respirators used for abrasive blasting must be National Institute for Occupational Safety and Health (NIOSH) approved for this purpose. Employees outside the immediate blast area but within the direct hazard area (dust vicinity) are required to wear air-purifying respirators with the appropriate cartridges. Refer to the Hunt Energy Services Respiratory Protection Policy.

Atmospheric Hazard	Work Activity	Concentration	Respirator	End of Service Life
Metal Dusts	Machining, Grinding	<50 mg/m3	Filtering Face piece: 3M 8710	8 hrs.
Acid Gas	Escape	IDLH	90 AG Scott Escape Mouth Bite with Acid Gas Cartridge	NA
Ammonia	Escape	IDLH	3M 6200 Half Face Mask with 6004 Ammonia – Methylamine Cartridge	NA
Misc.	Escape	IDLH	Scott SCBA	30 inutes

8.3 Only personnel who are trained to ensure that proper respirators are issued shall issue respirators. At Hunt Energy Services the Safety Coordinator is responsible for issuing respirators. They are responsible for verifying that personnel have been Medically Evaluated, Fit Tested, and Trained before the respirator is issued. Respirators shall be used in accordance with the recommendations and requirements of the manufacturer. Copies of the instruction manual for each respirator used at this facility shall be provided to the user and kept by the Supervisor.

9. **TYPES OF RESPIRATORS** Hunt Energy Services employees may use:

9.1. Air-purifying respirator

9.1.1. These respirators remove air contaminants by filtering, absorbing, adsorbing, or chemical reaction with the contaminants as they pass through the respirator canister or cartridge. The respirator is to be used only where adequate oxygen (19.5 to 23.5 percent by volume) is available. Air-purifying respirators can be classified as follows:

9.1.1.1. Particulate-removing respirators filter out dust, fibers, fumes and mists. These respirators may be single-use disposable respirators or respirators with replaceable filters.

9.1.1.2. Gas- and vapor-removing respirators remove specific individual contaminants, or a combination or contaminants by absorption, adsorption or by a chemical reaction. Gas masks and chemical-cartridge respirators are examples of gas- and vapor-removing respirators.

9.1.1.3. Combination particulate/gas-and-vapor-removing respirators, which combine the respirator characteristics of both kinds of air purifying respirators.

9.2. Supplied-Air Respirators

9.2.1. These respirators provide breathing air independent of the environment. Such respirators are to be used when the contaminant has insufficient odor, taste or irritating warning properties, or when the contaminant is of such high concentration or toxicity that an air-purifying respirator is inadequate. Supplied-air respirators, also called airline respirators, are classified as follows:

9.3. Demand

9.3.1. This respirator supplies air to the user on demand (inhalation), which creates a negative pressure within the face piece. Leakage into the face piece may occur if there is a poor seal between the respirator and the user's face.

9.4. Pressure-Demand

9.4.1. This respirator maintains a continuous positive pressure within the face piece, thus preventing leakage into the face piece.

9.5. Continuous Flow

9.5.1. This respirator maintains a continuous flow of air through the face piece and prevents leakage into the face piece.

9.6. Self-Contained Breathing Apparatus (SCBA)

9.6.1. This type of respirator allows the user complete independence from a fixed source of air and offers the greatest degree of protection but is also the most complex. Training and practice in its use and maintenance is essential. The type of device will be used in emergency situations only.

10. Identification of Respirator Cartridges and Gas Mask Canisters

10.1. Respirator cartridges and canisters are designed to protect against individual or a combination of potentially hazardous atmospheric contaminants, and are specifically labeled and color-coded to indicate the type and nature of protection they provide. Hunt Energy Services employees, through the assistance of the Safety Department, will ensure all respiratory protection matches the hazards present.

10.2. All Hunt Energy Services employees will understand the NIOSH-approval and limitations of the particular respirator being used.

11. Selection of N, R, and P-series filters:

11.1. When determining the type of respirator to choose for non-powered particulate respirators, Hunt Energy Services will abide by the following directives:

11.2. If no oil particles are present in the work environment, use a filter of any series (i.e., N-, R-, or P-series)

11.3. If oil particles (e.g., lubricants, cutting fluids, glycerin, etc.) are present, use an R- or P- series filter.

11.4. Note: If oil particles are present and the filter is to be used for more than work shift, use only a P-series filter. N-Series filters cannot be used if oil particles are present.

11.5. Note: To help you remember the filter-series, use the following guide: N for Not resistant to oil, R for resistant to oil and P- for oil Proof.

11.6. Hunt Energy Services will always attempt to purchase and use 99.97% efficiency filters. If these are not available, 99% efficiency will be purchased next, followed by 95% efficiency as a last alternative.

12. Respirator Selection Guide

12.1. Hunt Energy Services will use the following Respiratory Selection Guide. If a process, hazard, or material is not listed, consult the SDS before selecting a respirator.

Task	*Hazard*	*Type of Respirator*
Abrasive Blasting	Abrasive Blasting	Silica Abrasive: Airline With abrasive blasting Helmet/ hood
Spray painting (Organic solvents, Paints)	Vapors/ mists	Half-face piece respirator with organic cartridge Airline Systems Depending on type of paint; Note: If lead Based paints, must Use a combination HEPA and organic vapor cartridge.

Road dusts/ Construction	Dust	Depending on levels from total or toxic dust, disposable Respirator or half-Face piece respirator With dust filter or HEPA cartridge
Herbicides/ Pesticides	Depends on Formulation	Refer to SDS
Carbon Monoxide	Carbon Monoxide	Airline Respirators, Special approved gas masks with ESLI
Confined space entry	Toxic Atmosphere Deficiency Possible IDLH If IDLH environment	Pressure-demand Airline, Full-face piece respirator A minimum of 5-minute escape Cylinder is required to be worn in conjunction with the airline
Emergency Response	Toxic atmosphere	SCBA

NOTE: All employees will refer to the chemical SDS to determine the proper and necessary respiratory protection.

13. Hearing Protection

13.1. Due to the noise generated by abrasive blasting, hearing protection must be worn at all times in blasting areas.

14. Eye Protection

14.1. All employees involved with abrasive blasting must wear eye protection. Blast helmets and hoods will have built-in eye protection.

14.2. Personnel that are not blasting but are within the regulated areas must wear safety goggles. Face shields with built-in safety goggles are available for additional eye protection.

15. Abrasive Blasting of Storage Tanks Containing Volatile Liquids

15.1. The following conditions must be met before tanks containing volatile liquids can be blasted.

15.2. Abrasive blasting must not be conducted during periods of product movement either into or out of the tank. Ensure that the suction and fill lines have been blocked and locked, in accordance with Lockout/Tagout procedures.

15.3. All leaking or weeping seams must be properly caulked to prevent escaping vapors (remember pressure build-up). After caulking, the seams are to be tested for combustible vapors.

15.4. Two 10-pound fire extinguishers must be present and certified. All vents are to be covered with appropriate material to help prevent vapors escaping or air entering.

15.5. Abrasive blasting hose must be wire-wrapped (conductive type) and bonded to the tank being abrasive blasted.

15.6. All open sewers must be covered, vents or drains must be closed, and air must be checked to ensure an acceptable atmosphere.

15.7. Abrasive blasting must not be conducted within 6 feet of vents, gauge hatches, or any other uncovered opening.

15.8. Compressed air shall not be used for cleaning purposes except where reduced to less than 30 p.s.i. and then only with effective chip guarding and personal protective equipment.

16. Abrasive Blasting Inspection

16.1. The items below should be inspected before each work shift during which abrasive blasting will be conducted. The inspection should insure that all employees:

16.2. Wear proper PPE in or adjacent to the blasting area.

16.3. Use properly maintained NIOSH-approved respirators. All respirator components will be present. Helmets will never be used without inner lens in place. Inspect all respirator components for cleanliness and wear.

16.4. Verify that the breathing air hoses have the correct fittings and that they are in proper working order. Also check the condition of the hose for excessive wear or abuse.

16.5. Check breathing air source. Breathing air should be regulated for correct pressure, according to the hood manufacturer's recommendations.

16.6. If using a breathing air compressor, check the first filter for color change. Color change takes place as a part of the normal process of filtering. The filter should be changed according to the filter manufacturer's recommendations.

16.7. Before using a breathing air cylinder, check the cylinder pressure and confirm the proper oxygen content in the breathing range of 19.5 to 23%.

16.8. Ensure potential atmospheric releases are directed away from the work area, and open drains are covered to protect drain systems.

17. Equipment to be sand blasted

17.1. Ensure the necessary permits have been completed, the equipment isolated, and the atmosphere tested.

17.2. Ensure that all Hunt Energy Services client property is protected as well as Hunt Energy Services property to include sight glasses, nameplates, electrical fixtures, etc.

18. Blasting Equipment Inspection

18.1. Blasting equipment must be inspected on a daily basis. The following are a list of components that must be inspected:

18.2. Ensure hose couplings and nozzle holders are fitted snugly to the hose-end and installed using the proper coupling screws.

18.3. Inspect the fittings and components to be sure that they are correctly sized and will not hamper airflow.

18.4. To maintain the proper air pressure, worn coupling gaskets and fittings that are leaking should be replaced before blasting commences.

18.5. Coupling lugs must be snapped firmly into the locking position.

18.6. The blast cleaning nozzles shall be equipped with an operating valve which must be held open manually. A support shall be provided on which the nozzle may be mounted when it is not in use.

18.7. Gaskets must form a positive seal with safety pins inserted through pinholes. Replace gaskets if they show signs of wear, softness, or distortion.

18.8. Safety cables are installed at every connection to prevent disengagement.

18.9. Check nozzle holder for worn threads. Replace nozzle when it is 1/16 inch larger than original size or if liner appears cracked.

18.10. Inspect and test remote controls without turning on abrasive metering valves.

18.11. Check precise start and stop response times.

18.12. Check hood for sanitation.

18.13. Check the windows on the hood to see that they are clear and that the rubber seals around the windows are in good condition.

18.14 Verify that the interior sock fits closely around the neck and the exterior cape seals with

the hood. Verify all parts of the hood assembly are in good condition.

19. **Control of Visible Emissions**

19.1. Abrasive blasting should be conducted in such a manner that does not interfere with the adjacent property. If abrasive blasting causes materials to drift onto adjacent property or roadways, shrouding or other control measures must be taken.

19.2. Dust shall not be permitted to accumulate on the floor or on ledges outside of an abrasive- blasting enclosure, and dust spills shall be cleaned up promptly. Aisles and walkways shall be kept clear of steel shot or similar abrasive which may create a slipping hazard.

20. Employee Training

20.1. No employee is permitted to sandblast until he/she has fulfilled the Respiratory Protection policy requirements, including a respirator fit test, medical evaluation, and respiratory protection training. All sandblasters will be medically evaluated annually.

20.2. All Hunt Energy Services employees that participate in abrasive blasting will receive training in the following areas:

20.2.1. Information about the potential harmful effects of silica exposure

20.2.2. Safety Data Sheets for silica, alternative abrasives, or other hazardous materials

20.2.3. Instruction about obeying signs that mark boundaries of work areas containing crystalline silica

20.2.4. Information about safe handling, labeling and storage of toxic materials

20.2.5. Discussion about the importance of engineering controls, personal hygiene, and work practices in reducing crystalline silica exposure

20.2.6. Instruction about the use and care of appropriate protective equipment (including protective clothing and respiratory protection)

21. Employee Reporting of Illness

21.1. Hunt Energy Services requires all employees to report any signs of illness and this includes any respiratory illness. Failure to follow abrasive blasting policies may cause illness. Hunt Energy Services will properly report all cases of silicosis to the State Health Department and to OSHA.

22. Silicosis: Signs and Symptoms and Adverse Health Effects

22.1. When workers inhale the crystalline silica used in abrasive blasting, the lung tissue reacts by developing fibrotic nodules and scarring around the trapped silica particles. This fibrotic condition of the lung is called silicosis. If the nodules grow too large, breathing becomes difficult and death may occur. Silicosis victims are also at high risk of developing active tuberculosis.

22.2. The silica sand used in abrasive blasting typically fractures into fine particles and becomes airborne. Inhalation of such silica appears to produce a more severe lung reaction than silica that is not freshly fractured. This factor may contribute to the development of acute and accelerated forms of silicosis among sandblasters.

22.3. A worker may develop any of three types of silicosis, depending on the airborne concentration of crystalline silica:

22.4. Chronic silicosis usually occurs after 10 or more years of exposure to crystalline silica at relatively low concentrations.

22.5. Accelerated silicosis results from exposure to high concentrations of crystalline silica and develops 5 to 10 years after the initial exposure.

22.6. Acute silicosis, which occurs where exposure concentrations are the highest and can cause symptoms to develop within a few weeks to 4 or 5 years after the initial exposure.

22.7. Silicosis is characterized by shortness of breath, fever, and cyanosis (bluish skin); it may often be misdiagnosed as pulmonary edema (fluid in the lungs), pneumonia, or tuberculosis. Silica dust causes severe fungal infections to develop. This condition could be fatal.

1.0 Overview

1.1. Aerial lifts are commonly used in construction, inspection, and repair services to lift employees to an elevated work position. Proper operation and use of aerial lifts can make completion of tasks at elevation, safer and more efficient. However, unsafe use, operation and aerial lift work practices can result in serious injury. This program has been developed due to the hazards associated with improper use and the concern for the safety of individuals in and around this type of equipment. In addition, this program outlines general, operating, maintenance, inspection and training requirements governing safe aerial lift use at Icenhower Oil and Gas.

2. Policy

2.1. Employees using aerial lifts must ensure that supervisors and operators comply with all aspects of this safety program. All employees must successfully complete a training program, and receive certification prior to the operation of any aerial lift. Contractors operating aerial lifts for Icenhower on Icenhower projects are expected to meet or exceed the requirements found in this program, and comply with all applicable statues and regulations governing the use of powered industrial trucks as listed in Section 3.0 of this document.

3. Requirements

3.1. OSHA Standard 29CFR 1910.68 (Powered Platforms, Manlifts, and Vehicle-Mounted Work Platform)
3.2. OSHA Standard 29CFR 1926.453 (Aerial Lifts)
3.3. ANSI/SIA A92.6 – 2006 (Self-Propelled Elevated Work Platforms)

4. Purpose

4.1. This program has been developed to reduce the risk of physical injury or property damage in areas where aerial lifts are in operation. It also brings Icenhower into compliance with federal, state, and local law.

5. SCOPE

5.1. This program applies to the operation of all aerial lifts operated by Icenhower employees.

5.2. **Pre-Use Inspection**

5.2.1. Prior to the operation of any aerial lift the Pre-use inspection checklist must be completed. This applies at the beginning of every work period, and whenever a new equipment operator takes control of the aerial lift.

5.2.2. Any safety defects (such as hydraulic fluid leaks; defective brakes, steering, lights, or horn; and/or missing fire extinguisher, lights, seat belt, or back-up alarm) must be reported for immediate repair. They must also be locked and tagged, and taken out of service.

5.3. **General Safe Work Practices**

5.3.1. Operators shall not wear any loose clothing or any accessory that can catch in moving parts.

5.3.2. Before machine is started, the operator should walk completely around the machine to ensure everyone and everything is clear of the machine.

5.3.3. Articulating boom and extendable boom platforms, primarily designed as personnel carriers, shall have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower level controls shall not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.

5.3.4. Modifications and additions that may affect the capacity or safe operation of an aerial/scissor lift are strictly prohibited without the manufacturer's written approval. Capacity, operation, and maintenance instruction markings will be changed as necessary if the manufacturer approves a modification.

5.3.5. The insulated portion (if applicable) of an aerial / scissor lift shall not be altered in any manner that might reduce its insulating value.

5.3.6. Any signs, plates, or decals which are missing or illegible must be replaced.

5.3.7. If the aerial / scissor lift becomes disabled, a "out of service" tag or equivalent shall be attached to the controls inside the platform in a conspicuous location.

5.3.8. Aerial/scissor lift devices with noted, reported deficiencies shall not be operated until repairs are made and equipment is authorized for use.

5.3.9. Operators must report all accidents, regardless of fault and severity, to their Supervisor.

5.3.10. Employees shall always stand firmly on the floor of the basket, and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.

5.3.11. For lines rated 50 kV or below, minimum clearance between the lines and any part of the equipment or load shall be at least 10 feet. If the aerial lift is insulated for the voltage involved, and if the work is performed by a qualified person, the clearance distance (between the uninsulated portion of the aerial lift and the power line) may be referenced to the distance provided in 1910.333(c)(3)(ii)(C) Table S-5.

5.4. Safe Work Practices Before Operation

5.4.1. Consideration shall be given to the amount of wind. Follow the manufacturer's instruction regarding operation in windy conditions. As a general rule aerial lifts shall not be operated in winds exceeding 25mph although this can vary depending on the model of equipment

5.4.2. <u>An approved fall restraint system shall be worn when working from an aerial lift.</u>

5.4.3. <u>An approved fall restraint system shall be attached to the boom or basket when working from an aerial lift and is not permitted to be attached to adjacent poles or structures.</u>

5.4.4. At 20mph wind speeds or anticipated gusts, lifts will be lowered to a maximum height of 20 feet.

5.4.5. At 25mph wind speeds or anticipated gusts, lifts will be grounded.

5.4.6. Guardrails must be installed and access gates or openings must be closed before raising the platform.

5.4.7. Boom and platform load limits specified by the manufacturer shall not be exceeded.

5.4.8. Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position (if equipped).

5.4.9. Consideration shall be given to the protection of bystanders via barricading, having another employee keep bystanders at a safe distance or by other means.

5.4.10. Aerial lifts shall not be operated from trucks, scaffolds, or similar equipment.

5.4.11. Check to ensure that the vehicle has a reverse signal alarm audible above the surrounding noise level or the vehicle is backed up only when an observer signals that it is safe to do so.

5.5. **Safe Operation During Operation**

5.5.1 Attention shall be given towards the direction of travel, clearances above, below and on all sides.

5.5.2 Employees shall not sit or climb on the guardrails of the aerial lift.

5.5.3 Planks, ladders or other devices shall not be used on the work platform.

5.5.4 An aerial lift shall not be moved when the boom is elevated in a working position with employees in the basket.

5.5.5 Aerial lift shall not be placed against another object to steady the elevated platform.

5.5.6 Aerial lift shall not be used as a crane or other lifting device.

5.5.7 Aerial lift devices shall not be operated on grades, side slopes or ramps that exceed the manufacturer's recommendations.

5.5.8 The brakes shall be set and outriggers, when used, shall be positioned on pads or a solid surface.

5.5.9 Speed of aerial lift devices shall be limited according to the conditions of the ground surface, congestion, visibility, slope, location of personnel and other factors that may cause hazards to other nearby personnel.

5.5.10 Stunt driving and horseplay shall not be permitted.

5.5.11 Booms and elevated platform devices shall not be positioned in an attempt to jack the wheels off the ground.

5.5.12 The area surrounding the elevated platform shall be cleared of personnel and equipment prior to lowering the elevated platform.

5.5.13 All equipment must be secured on the inside of the aerial lift

5.5.14 Operators are to call for assistance if the platform or any part of the machine becomes entangled.

5.6 Safe Work Practices After Operation

5.6.1 Safe shutdown shall be achieved by utilizing a suitable parking area, placing the platform in the stowed position, placing controls in neutral, idling engine for gradual cooling, turning off electrical power, and taking the necessary steps to prevent unauthorized use.

5.6.2 Aerial lifts shall be shut off prior to fueling. Fueling must be completed in well ventilated areas free of flames, sparks or other hazards which may cause fires or explosions.

5.7 Maintenance

5.7.1 Any aerial lift not in safe operating condition must be removed from service. Authorized personnel must make all repairs.
5.7.2 Repairs to the fuel and ignition systems of aerial lifts that involve fire hazards must be conducted only in locations designated for such repairs.
5.7.3 Aerial lifts in need of repairs to the electrical system must have the battery disconnected before such repairs.
5.7.4 Only use replacement parts that are currently recommended by the manufacturer.

6.0 RESPONSIBILITIES

6.1 Utilizing Powered Industrial Trucks

6.1.1 Must implement and administer the Aerial Lift Safety program.
6.1.2 Review the Aerial Lift Safety program annually for compliance and effectiveness.
6.1.3 Verify that all employees who operate or work near aerial lifts are properly trained.
6.1.4 Maintain written records of operator training on each model of aerial lift and the name of the trainer.
6.1.5 Maintain written records of all inspections performed by the aerial lift owner
6.1.6 Make recommendations for revisions if necessary.

6.2 Supervisors

6.2.1 Coordinate employee training, and certify that all operators receive annual training including, but not limited to, the items listed in Section 8.0 of this document.
6.2.2 Ensure that only trained and qualified individuals use aerial lifts.
6.2.3 Verify employee compliance with the principles and practices outlined in the Aerial Lift Safety Program.
6.2.4 Provide specific operational training for each aerial lift.
6.2.5 Observe the operation of aerial lifts, and correct unsafe practices.

6.3 Operators

6.3.1 Read the Aerial Lift Safety Program.
6.3.2 Complete the daily pre-use inspection checklist before operating any aerial lift.

6.3.3 At least annually review the procedures outlined in Section 6.0 of this document.

6.3.4 Observe the operation of the aerial lift, and report unsafe practices to your supervisor.

7.0 TRAINING

7.1 Employees who are authorized to operate aerial lifts must receive training prior to engaging in their duties, and at least every three (3) years thereafter. The training is to ensure that the Aerial Lift Safety Program is understood. The supervisor will also ensure that authorized aerial lift operators have acquired the necessary practical skills required for safe operation. All operational training must be conducted under close supervision.

7.2 Initial Training

7.2.1 Receive instruction on the intended purpose and function of each control.

7.2.2 Prior to operating any Aerial Lift the trainee will read and understand the manufacturer's operating instruction(s) and aerial lift procedures (Section 6.0), or receive training by a qualified person on the contents of the manufacturer's operating instruction(s) and users safety rules.

7.2.3 Be informed of the Aerial Lift operating limitations and restrictions as defined by the manufacturer.

7.2.4 Understand by reading or having a qualified person explain all decals, warnings, and instructions displayed on the Aerial Lift.

7.2.5 During operational training, trainees may operate a aerial lift only under the direct supervision of authorized trainers, and where such operation does not endanger the trainee or other employees.

7.2.6 All training and evaluation must be completed before an operator is permitted to use an aerial lift without continual and close supervision.

7.3 Annual Training – must include at least the following

7.3.1 Review of the Aerial Lift Inspection

7.3.2 Review of Section 6.0 – Procedures.

7.3.3 Updated information on new equipment.

7.3.4 Review of written program.

7.4 Training Records

7.4.1 Must maintain a record of all individual training, including:

7.4.1.1 Subject of training.

7.4.1.2 Date of training.

7.4.1.3 Name of individual trained.

7.4.1.4 Name of person providing the training.
7.4.1.5 Training records must be maintained or a minimum of 3 years.

8.0 Program Evaluation

8.1 The aerial lift program shall be evaluated on an annual basis utilizing the protocols set forth by Occupational Health and Safety. The deficiencies determined in the report will be documented and corrective action plans will be developed.

Bloodborne Pathogens

Purpose

The purpose of this program is to prevent Hunt Energy Services employees from being exposed to bloodborne pathogens, to minimize the risk of exposure, where there may be a potential for exposure to a bloodborne pathogen through an Exposure Control Program (ECP), and to assure compliance with 29 CFR 1910.1030.

Responsibilities

It is management's responsibility to implement and enforce this program. It is the responsibility of all employees to comply with this program and encourage their peers to do the same. Compliance with this program is mandatory, and employees are obligated to report all violations.

Employee Involvement

Employees are encouraged to offer suggestions for the improvement of this and any safety program; suggestions should be submitted to the Hunt Energy Services corporate office, either by the employee or his/her supervisor.

Hunt Energy Services welcomes all suggestions because it is committed to creating a safe workplace for its employees. A safe and effective bloodborne pathogen exposure prevention and control program is an important component of the overall safety plan.

Covered Employees

If an employee is trained in first aid and designated by Hunt Energy Services as responsible for rendering medical assistance as part of his/her job duties, that employee may have occupational exposure to bloodborne pathogens and is therefore covered by the Bloodborne Pathogen Standard, 29 CFR 1910.1030.

Occupational Exposure means reasonably anticipated skin, eye, mucous membrane, or other contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Hepatitis B Vaccine Exemption

Where first aid providers have completely unrelated job duties and have little actual likelihood of occupational exposure, such as with Hunt Energy Services employees, OSHA has issued an official exemption from the pre-exposure hepatitis B vaccination requirement of the standard. All other requirements, including the written exposure control plan (ECP) of the bloodborne pathogens standard still apply to workers exempted from the HBV vaccination requirements.

First Aid Training

First aid trainers are responsible to make sure that employees are trained in bloodborne pathogen hazards and controls at the time the first aid training is provided. Training should include:

- Symptoms of bloodborne diseases
- Modes of transmission of bloodborne pathogens
- Recognition of tasks that may involve exposure
- Use and limitations of methods to reduce exposure, for example, use of plastic gloves, and other personal protective equipment (PPE)
- Types, use, location, removal, handling, decontamination, and disposal of PPE
- The basis of selection of PPE
- Hepatitis B vaccination efficacy, safety, method of administration, and benefits

Exposure Control Plan (ECP)

This document serves as the written procedures Bloodborne Pathogens Exposure Control Plan (ECP) for Icenhower Oil & Gas. These guidelines provide policy and safe practices to prevent the spread of disease resulting from handling blood or other potentially infectious materials (OPIM) during the course of work.

This ECP has been developed in accordance with the OSHA Bloodborne Pathogens Standard, 29 CFR 1910.1030. This plan is made available to all employees in the Employee Handbook in a reasonable time, place and manner. Each employee is given this handbook at time of hire and again as revisions are made. The purpose of this ECP includes:

- Universal Precautions procedures will be observed at all times: All body fluids will be considered potentially infectious.

- Eliminating or minimizing occupational exposure of employees to blood or certain other body fluids

- Complying with OSHA's Bloodborne Pathogens Standard, 29 CFR 1910.1030

- Assuring adequate protection for those employees who are designated first aid responders

1. Exposure Determination

Designated first aid responders may incur occupational exposure to blood or OPIM. The exposure determination is made without regard to the use of personal protective equipment (i.e., employees are considered to be exposed even if they wear personal protective equipment).

2. Work Practice Controls

Work practice controls shall be used to eliminate or minimize exposure to employees, including:

- The appropriate PPE shall be made available to all employees at no cost to the employees. Hunt Energy Services will insure that the appropriate PPE in the appropriate sizes is distributed. PPE will be cleaned, laundered and properly disposed of as needed. PPE shall be used unless employees temporarily declined to use under rare circumstances. Hunt Energy Services will replace or repair PPE that is damaged to maintain its effectiveness.

- All equipment or environmental surfaces shall be cleaned and decontaminated after contact with blood or other infectious materials

- Removing contaminated PPE as soon as possible

- Cleaning and disinfecting contaminated equipment and work surfaces with a solution of 1/4 cup chlorine bleach per gallon of water

- Thorough hand washing with soap and water immediately after providing care or provision of antiseptic towelettes or hand cleanser where hand washing facilities are not available

- Use of leak-proof, labeled containers for contaminated disposable waste or laundry

- Barricading exposed areas

3. Hand washing Facilities

Hand washing facilities are normally available to employees who have exposure to blood or OPIM.

When circumstances require hand washing and facilities are not available, either an antiseptic cleanser and paper towels or antiseptic towelettes shall be provided. Employees must then wash their hands with soap and water as soon as possible.

4. Handling Regulated Wastes

When handling regulated wastes, the procedures detailed below shall be followed:

- Placed in containers which are closeable, constructed to contain all contents, and prevent fluid leaks during handling, storage, transportation, or shipping

- Labeled or color coded and closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.
  - Identified with the wording, "Potential Bloodborne Pathogen"

Note: Disposal of all regulated waste is in accordance with applicable Unites States, state and local regulations.

5. Handling Contaminated Laundry

Laundry contaminated with blood or OPIM shall be handled as little as possible. Such laundry shall be placed in appropriately marked (biohazard labeled, or color coded red bag) bags at the location where it was used. Such laundry shall not be sorted or rinsed in the area of use.

Hepatitis B Vaccination Program

1. Hepatitis B vaccination

Hunt Eeneergy Services offers: the Hepatitis B vaccine and vaccination series to all employees who have had an occupational exposure to bloodborne pathogens; and post exposure follow- up to employees who have had an exposure incident.

All medical evaluations and procedures including the Hepatitis B vaccine and vaccination series and post exposure follow up, and prophylaxis shall be:

- Made available at no cost to the employee

- Made available to the employee at a reasonable time and place

- Performed by or under the supervision of a licensed physician or by or under the supervision of another licensed healthcare professional

- Provided according to the recommendations of the U.S. Public Health Service

2. Post-Exposure Evaluation and Follow-Up

All exposure incidents shall be reported, investigated, and documented via the Icenhower Oil
& Gas accident investigation process. When the employee is exposed to blood or OPIM, the incident shall be reported to the Hunt Energy Services Safety and Environmental Manager. When an employee is exposed, he or she will receive a confidential medical evaluation and follow-up, including at least the following elements:

- Documentation of the route of exposure, and the circumstances under which the exposure-occurred
- Identification and documentation of the source individual, unless it can be established that identification is infeasible or prohibited by state or local law

- The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity.When the source individual's consent is not required by law, the source individual's blood, if available, will be tested and the results documented
- When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated
- Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual

Collection and testing of blood for HBV and HIV serological status shall comply with the following:

- The exposed employee's blood shall be collected as soon as possible and tested after consent is obtained
- The employee shall be offered the option of having their blood collected for testing of the employee's HIV/HBV serological status. The blood sample shall be preserved for up to 90 days to allow the employee to decide if the blood should be tested for HIV serological status

All employees who incur an exposure incident shall be offered post-exposure evaluation and follow-up according to the OSHA standard.

The healthcare professional responsible for the employee's Hepatitis B vaccination shall be provided with the following:

- A copy of 29 CFR 1910.1030
- A written description of the exposed employee's duties as they relate to the exposure incident
- Written documentation of the route of exposure and circumstances under which exposure occurred
- Results of the source individuals blood testing, if available
- All medical records relevant to the appropriate treatment of the employee including vaccination status

Hunt Energy Services shall obtain and provide to the employee a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation. The healthcare professional's written opinion for HBV vaccination shall be limited to whether HBV vaccination shall be indicated for an employee, and if the employee has received such vaccination.

The healthcare professional's written opinion for post-exposure follow-up shall be limited to the following information:

- A statement that the employee has been informed of the results of the evaluation
- A statement that the employee has been told about any medical conditions resulting from exposure to blood or OPIM which require further evaluation or treatment

Note: All other findings or diagnosis shall remain confidential and shall not be included in the written report.

Recordkeeping

1. Records Maintenance

First aid, and other bloodborne training records shall be maintained for three years from the date of training. The following information shall be documented:

- The dates of the training sessions
- An outline describing the material presented
- The names and qualifications of persons conducting the training
- The names and job titles of all persons attending the training sessions

Medical records shall be maintained in accordance with OSHA Standard 29 CFR 1910.1020. These records shall be kept confidential, and must be maintained for at least the duration of employment plus 30 years. The records shall include the following:

- Employee's name and social security number
- A copy of the employee's HBV vaccination status, including the dates of vaccination
- A copy of all results of examinations, medical testing, and follow-up procedures
- A copy of the information provided to the healthcare professional, including a description of the employee's duties as they relate to the exposure incident, and documentation of the routes of exposure and circumstances of the exposure

2. Availability

All employee records shall be made available to the employee in accordance with 29 CFR 1910.1020 and to the Assistant Secretary of Labor for the Occupational Safety and Health Administration and/or the Director of the National Institute for Occupational Safety and Health upon request.

3. Transfer of Records

Medical records must have written consent of employee before being released. Icenhower Oil
& Gas will comply with the requirements involving transfer of records set forth in 29 CFR 1910.1020(h). If bloodborne pathogen exposure records cannot be maintained for the prescribed period, the Director of the NIOSH shall be contacted for final disposition.

Labels and Signs

All containers of regulated waste used for storage; transport or shipping of potentially infectious materials shall be clearly marked with a warning label. This warning label shall be fluorescent orange or orange-red with lettering or symbols in a contrasting color.

Wherever applicable, red bags or red containers may be used instead of the warning

label. The Safety Director, or his designee is responsible for ensuring that all

containers are properly
labeled at all times.

Individual containers of infectious materials that are placed in labeled containers for storage, transport or shipping need not be individually labeled.

Training will be provided to employees as follows:

- At the time of initial assignment to tasks where occupational exposure may take place.
- Within 90 days after the effective date of the standard; and
- At least annually thereafter.

1. Compressed Gas Cylinders

1.1. Many industrial and construction operations require the use of compressed gases for a variety of different operations. Compressed gases present a unique hazard. Depending on the particular gas, there is a potential for simultaneous exposure to both mechanical and chemical hazards. Gases may be:

1.1.1. Flammable or combustible
1.1.2. Explosive
1.1.3. Corrosive
1.1.4. Poisonous
1.1.5. Inert
1.1.6. A combination of hazards

2. Safety Procedures

2.1. Careful procedures are necessary for handling the various compressed gases, the cylinders containing the compressed gases, regulators, or valves used to control gas flow, and the piping used to confine gases during flow.

2.2. Hunt Energy Services employees must be trained on the proper use, handling and storage of compressed gas cylinders. Hunt Energy Services has established the following safety procedures for compressed gas cylinders:

2.2.1. Handle cylinders gently; rough handling can lead to leaks, which might result in explosions. Do not use ropes or chains to lift a cylinder, and do not lift it by its cap.

2.2.2. Store cylinders in shaded, well-ventilated, dry areas away from flammable substances (oil, gasoline, or waste). Separate the oxygen cylinders from flammable gases. Cylinders shall not be kept in unventilated enclosures such as lockers and cupboards. Storage areas for full and empty cylinders must be designated and labeled. Cylinders should be stored in definitely assigned places away from elevators, stairs, or gangways.

2.2.3. Post “No Smoking” and “Caution–Flammable Gas” signs on all cylinders. Secure them with chains or rope, in an upright position, with caps in place.

2.2.4. Cylinders should be marked as “MT” and dated when empty. Never mix gases in a cylinder and only professionals should refill cylinders. Empty cylinders must be handled as carefully as full cylinders.

2.2.5. Never use cylinders that have been defaced or had suppliers’ identification information (labels, tags, decals) removed. The color of a cylinder cannot be relied upon to indicate a particular gas.

2.2.6. Gas identification should be stenciled or stamped on the cylinder or affixed with a label. No compressed gas cylinder should be accepted for use that does not legibly identify its content by name.

2.2.7. When a cylinder cap cannot be removed by hand, cylinder shall be tagged "Do Not Use" and returned to the designated storage area for return to vendor.

2.2.8. Visual and other inspections shall be conducted to determine that compressed gas cylinders are a safe condition.

2.2.9. Do not attempt to mix two gases in one cylinder, or transfer gas from one cylinder to another.

2.2.10. Use regulators, gauges, hoses, and so on only for the particular gases for which they are specified. Do not combine these appliances with cylinders containing gases that have different properties. Use properly fitted and recommended wrenches with cylinder valve accessories.

2.2.11. Only tools provided by the supplier should be used to open and close cylinder valves.

2.2.12. Cylinders must be equipped with the correct regulators. Regulators and cylinder valves should be inspected for grease, oil, dirt and solvents.

2.2.13. Routinely soap-test manifolds, gauges, hoses, and fittings to disclose leaks. Do not attempt to repair valves or plugs on a leaking gas cylinder; such cylinders shall not be used. Leaking cylinders should be moved to an isolated, well-ventilated area, away from ignition sources. Notify the supplier for assistance.

2.2.14. Keep cylinder valves closed and protector caps in place at all times, except when the cylinder is in use. Release the regulator adjusting screw and pressure gauges before opening the cylinder valve. Open cylinder valves slowly with the hose end of the valve pointing away from personnel. Never force a cylinder valve open. If it does not open in a normal fashion, set it aside and notify the supplier.

2.2.15. Never leave cylinder valves open when they are not being used. When you finish a job or take a break, close the cylinder valves and release the regulator adjusting screw to relieve the pressure on the hose. Coil the hoses near or on top of the cylinders, but do not wrap them around the cylinder.

2.2.16. Hoses and connections should be inspected regularly for damage. Hoses should be stored in cool areas and protected from damage.

2.2.17. Never use cylinders for purposes they were not designed for, such as rollers, supports, dusting off clothing, and so on.

2.2.18. When transporting cylinders in a vehicle, secure the cylinders in a vertical secured position using a basket or cart so they cannot move or fall while the vehicle is moving. Regulators should be removed and cylinders capped for movement. Keep cylinders of different types of gases separated as much as possible to avoid taking the wrong one off the vehicle and to reduce the possibility of an accident or reaction should two cylinders be

leaking slightly. Cylinders should not be dropped or permitted to strike violently and protective caps are not used to lift cylinders.

2.2.19. Cylinders must be secured at all times in such a way as to avoid them being knocked over or damaged, must be stored in a vertical position, not stored in public hallways, and segregated bases upon contents. 20 feet should be maintained between oxidizers and flammables or firewalls erected at least 5 feet high and with a fire rating of 30 minutes. Cylinders should be capped when they are not being used.

3. Oxygen and Acetylene

3.1. Do not store oxygen and acetylene together. Keep them separated by 20 feet or by a five-foot-high firewall.

3.2. Always use and store acetylene cylinders in an upright position (valve end up) to prevent the acetone (a stabilizing agent) from draining into the valves or fittings. Without acetone present to stabilize the acetylene, it can explode.

3.3. Never use acetylene at a hose pressure in excess of 15 pounds per square inch (gauge). Above 15 psig, acetylene is extremely unstable and can explode.

3.4. Do not allow oxygen to come in contact with oil or grease; it can cause an explosion and fire. Never lubricate or allow oil or grease to get on oxygen connections; use only those types of fittings that do not require lubrication.

3.5. Never use oxygen as a substitute for compressed air.

3.6. Be aware that oxygen connections for hoses and regulators have right-handed threads.

3.7. Acetylene and cutting gas connections have left-handed threads.

4. Compressed Air

4.1. Never point an open-air hose at another person. Never use it to blow dirt from clothing. Compressed air can penetrate the blood stream without breaking the skin. The resulting air bubbles are extremely painful, and can cause death.

4.2. Wear goggles if the use of compressed air stirs up dust and flying particles.

4.3. Direct pressure equipment, such as grease guns and spray paint guns, away from the body and other personnel in the area.

5. Natural Gas

5.1. Never use natural gas to power pneumatic tools.

5.2. Use natural gas only as fuel for internal combustion machines or to power pumps, pneumatic controls, or starters. Use only in areas free of other combustion sources. Any other use of natural gas requires prior approval by the team leader.

5.3. Do not vent or exhaust natural gas to confined areas, enclosures, or other areas where gas can be trapped.

5.4. Never use rubber hose for supply or exhaust lines for natural gas-powered equipment.

5.5. Isolate natural gas from air supply systems. Never co-mingle any type of natural gas and air supply system.

5.6. Natural gas used at some locations may be purchased from an oil-producing lease and may not have been odorized for domestic use. Extra precautions should be taken at these locations, as natural gas itself does not have a detectable odor. Delivery lines and equipment lines should be checked periodically for leaks.

6. Safety Relief Valves

6.1. Only qualified Hunt Energy Services personnel shall be allowed to service safety relief devices. Any servicing or repairs that require resetting of safety valves must be done only by or after consultation with the valve manufacturer or after reviewing the service manual provided by the manufacturer.

CRANE SAFETY PROGRAM

INTRODUCTION

Since Hunt Energy Services does not employ crane operators, this section is designed for our employees who work with a contractor which supplies the crane and crane operator. It is each employee's responsibility to work in a safe and efficient manner while providing skilled and professional results.

PURPOSE

The purpose of this program is to:

- Make all affected company workers aware of the potential hazards of crane operations on this project;

- Ensure that all affected company workers are provided with the knowledge they need to protect themselves from the potential hazards associated with crane operations; and

- Establish safe work practices and procedures for all affected company workers.

GENERAL REQUIREMENTS

Fatalities and serious injuries can occur if cranes are not inspected and used properly. Many fatalities can occur when the crane boom, load line or load contacts power lines and shorts electricity to ground. Other incidents happen when workers are struck by the load, are caught inside the swing radius or fail to assemble/ disassemble the crane properly.

- Crane operators qualified by training or experience shall be allowed to operate equipment and machinery by one of the following methods:

    1. Certification by an accredited crane operator testing organization
    2. Qualification by an audited employer program
    3. Qualification by the U.S. military
    4. Licensing by a government entity

- Only qualified and experienced employees should be used as spotters and crane signalers.

- A pre-lift meeting shall take place before any lift begins. This will be documented on the Icenhower Pre-Lift Checklist.

- Cranes are to be operated only by qualified and trained personnel.

- A designated competent person must inspect the crane and all crane controls before use. A

Competent person means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

- Be sure the crane is on a firm/stable surface and level.
- During assembly/disassembly do not unlock or remove pins unless sections are blocked and secure (stable).
- Fully extend outriggers and barricade accessible areas inside the crane's swing radius.
- Watch for overhead electric power lines and maintain at least a 10-foot safe working clearance from the lines.
- Inspect all rigging prior to use; do not wrap hoist lines around the load.
- Be sure to use the correct load chart for the crane's current configuration and setup, the load weight and lift path.
- Do not exceed the Working Load Limit (WLL) or load chart capacity while making lifts.
- Raise load a few inches, hold, verify capacity/balance, and test brake system before delivering load.
- Do not move loads over workers.
- Be sure to follow signals and manufacturer instructions while operating cranes.
- Operation of the equipment shall be readily available in the cab at all times.

GROUND CONDITIONS

The designated competent person will ensure that appropriate ground preparations have been provided before crane operations begin.

ASSEMBLY / DISASSEMBLY

- When assembling or disassembling equipment or attachments, affected workers will comply with all applicable manufacturer's prohibitions.

- All crane assembly and disassembly will be directed by the designated competent person and the designated qualified person. **Qualified person** means a person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training

and experience, successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the project

POWER LINES

- The work zone shall be identified by demarcating boundaries such as flag and range limiting devices, or defining the work zone as 360 degrees around the equipment up to the maximum working radius. The hazard assessment must determine if any part of the equipment could get closer than 20 feet to a power line.

- If any part of the equipment will get closer than 20 feet from a power line pushing up to 1,000 kV during assembly, disassembly, or equipment operations,

- the line will be de-energized and visibly grounded at the worksite OR

- the appropriate table at 29 CFR 1926 Subpart CC will be used to determine the minimum safe distance based on the line's actual voltage).

- When working near power lines pushing over 1,000 kV, the minimum clearance distance will be established by the utility owner/operator or a registered professional engineer who is a qualified person with respect to electrical power transmission and distribution. The designated qualified person will verify and obtain documentation regarding the established safe distance.

- When traveling under or near power lines with no load, the boom, mast, and boom mast support system will be lowered sufficiently to meet the specified safe distance clearance requirements.

INSPECTIONS

- Modified and/or repaired equipment will be inspected by the designated qualified person after the modifications and/or repairs have been completed, but before initial use.

- Upon completion of assembly, the equipment will be inspected by the designated qualified person to assure that it is configured in accordance with manufacturer's equipment criteria.

- Prior to each shift, the designated competent person will perform a visual inspection of the equipment that will be used.

- Once each month, all of the equipment that is in service will be inspected by the designated qualified person in accordance with the crane inspection criteria established at 29 CFR 1926 Subpart CC.

- Once each year, the designated qualified person will conduct a comprehensive inspection of all equipment that is in service in accordance with the crane inspection criteria established at 29 CFR 1926 Subpart CC.

- Safety devices are required to be on all equipment and must be in proper working order before operations begin. If any of the devices are not in proper working order the equipment must be taken out of service and operations must not resume until the device is working properly again. Examples of safety devices may include: crane level indicator, boom stops, jib stops, foot pedal brake locks, horns, etc.

- When the equipment is used frequently enough that there is a reasonable possibility of damage or excessive wear, affected Icenhower workers will stop using the equipment and take it out of service until it passes inspection by the designated qualified person based on the inspection criteria established at 29 CFR 1926 Subpart CC.

- Equipment that has been idle for three (3) months or more must pass inspection by the designated qualified person based on the inspection criteria established at 29 CFR 1926 Subpart CC before it can be used.

QUALIFICATIONS OF MAINTENANCE & REPAIR EMPLOYEES

Maintenance, inspection and repair personnel are allowed to operate the equipment only under the supervision of the designated qualified person. Modifications or additions that may affect the capacity or safe operation of the equipment must not be made without written approval from the manufacturer or approval from a registered professional engineer.

WIRE ROPE INSPECTIONS

- Prior to each shift, the designated competent person will perform a visual inspection of any wire rope that is intended for use during the subsequent shift.

- Once each month, all of the wire rope that is in service will be inspected by the designated qualified person in accordance with the wire rope inspection criteria established at 29 CFR 1926 Subpart CC.

- Once each year, the designated qualified person will conduct comprehensive inspections of all wire rope that is in service in accordance with the wire rope inspection criteria established at 29 CFR 1926 Subpart CC.

WIRE ROPE SELECTION AND INSTALLATIONS

- The designated competent person will ensure that original equipment wire rope is selected and installed in accordance with the requirements established at 29 CFR 1926 Subpart CC.

- The designated competent person will ensure that selection of replacement wire rope is in

accordance with the recommendations of the wire rope manufacturer, the equipment manufacturer, or the designated qualified person.

OPERATIONAL AIDS

All manufacturer procedures applicable to the operational functions of equipment, including its use with attachments, must be complied with. The operator shall have access to procedures applicable to the operation of the equipment. Procedures include rated capacities (load charts), recommended operating speeds, special hazard warnings, instructions and operator's manual. The designated competent person will ensure that the following operational aids, when applicable, are present on all equipment:

- Boom hoist limiting device;
- Luffing jib limiting devices;
- Boom angle or radius indicator;
- Jib angle indicator;
- Boom length indicator;
- Load weighing and similar devices.

All affected Icenhower workers will comply with all manufacturer procedures applicable to the operational functions of equipment, including its use with attachments.

AUTHORITY TO STOP OPERATIONS

Whenever there is a concern about safety, the designated equipment operator has the authority to stop and refuse to handle loads until the designated competent person has determined that the safety concern has been resolved.

ORDINARY LIFT PLANNING

The designated leader shall ensure that the following pre-lift planning issues are addressed, as applicable, prior to the lift (a written plan beyond normal site work planning and control documents is not required, though may be desirable for more complex lifts). A Icenhower Pre-Lift Checklist may be used as documentation that a pre-lift meeting and pre-lift plan is in place. Also, for construction lifts involving multiple mobile cranes or temporarily installed overhead cranes, a written lift plan is required (refer 29 CFR 1926.1432).

- Identify the item to be moved, its intrinsic characteristics (e.g., load integrity, loose materials, liquids), weight, dimensions, its center of gravity, its ability to support imposed lifting forces (both the load and any lift points), and whether it contains any hazardous or toxic materials.

- Validate the loads path and clearances.
- Identify lifting equipment and rigging to be used by type and rated capacity.
- Prepare rigging sketches, as necessary.
- Evaluate the work area for conditions impacting crane setup operations (e.g., weather, soil bearing capacity, underground utilities, clearances to power lines and other structures).
- Identify any special or site-specific operating procedures and special instructions.

CRITICAL LIFTS

Any time a critical lift takes place, all safety concerns must be addressed and controls in place to eliminate identified hazards. Permits, if required, must be completed and approved per customer procedures.

Critical Lift Determination

A designated person shall classify each lift into one of the categories (ordinary, critical, personnel or pre-engineered production) prior to planning the lift. A lift shall be classified critical if any of the following conditions are met:

- If loss of control of the item being lifted would likely result in the declaration of an emergency as defined by the facility's emergency plan or construction site emergency plan.
- The load item is unique and, if damaged, would be irreplaceable or not repairable and is vital to a system, facility or project operation.
- The cost to replace or repair the load item, or the delay in operations of having the load item damaged would have a negative impact on facility, organizational, or budgets to the extent that it would affect program commitments.
- If mishandling or dropping of the load would cause any of the above noted consequences to nearby installations or facilities.
- For steel erection, a lift shall be designated as a critical lift if:

  ☐ 1. The lift exceeds 75 percent of the rated capacity of the crane or derrick

  OR

  ☐ 2. The lift requires the use of more than one crane or derrick. (§1926.751)

➢ Further site-specific criteria may be developed to supplement those cited above and may include criteria imposed by site or project safety basis requirements as well as lifting loads which require exceptional care in handling because of size, weight, close-tolerance installation or high susceptibility to damage as well as lifts using multiple pieces of lifting equipment.

➢ Though lifting personnel may meet the above criteria, personnel lifts shall not be considered critical lifts and shall be conducted in accordance with 29 CFR 1926.1431 and ASME B30.23.

Critical Lift Requirements

Ensure that the requirements are met for ordinary lifts specified in each section of this standard for each particular equipment category. The operating organization shall appoint a Lift Supervisor for critical lifts. The Lift Supervisor shall be present at the lift site during the entire lifting operation. The Lift Supervisor shall:

➢ Have the necessary knowledge and experience of the specific type of equipment and assigned lifting operations.

➢ Understand the site rules and procedures addressing:

- ☐ Administrative requirements for lifting operations.
- ☐ Personnel assignments and responsibilities commensurate with job requirements.
- ☐ Selection of proper slings, rigging hardware, and lifting equipment.
- ☐ Recognition and control of hazardous or unsafe conditions.
- ☐ Job efficiency and safety.
- ☐ Critical-lift determination and documentation.

➢ The Lift Supervisor shall ensure that a documented pre-job plan or procedure is prepared by qualified person(s) that defines the operation and includes the following:

- Identify the item to be moved, its intrinsic characteristics (e.g., load integrity, loose materials, liquids), weight, dimensions, its center of gravity, its ability to support imposed lifting forces (both the load and any lift points), and whether it contains any hazardous or toxic materials.

- Identification of operating equipment to be used by type and rated capacity (e.g., mobile crane, overhead crane, forklift).
- Rigging sketches and/or descriptions
- Operating procedures and special instructions to operators including rigging precautions and safety measures to be followed as applicable.

- All rigging equipment used in critical lifts (i.e., slings, below-the-hook lifting devices, and rigging hardware) shall be proof load tested in accordance with applicable ASME standards.

- Experienced operators who have been trained and qualified to operate the specific equipment to be used shall be assigned to make the lift.

- Only designated, qualified signalers shall give signals to the operator. However, the operator shall obey a STOP signal at all times, no matter who gives the signal.

- The procedure and rigging sketches shall be reviewed and approved by a qualified person, the responsible manager (or designee) and the responsible oversight organization (such as the safety or engineering departments) before the lift is made. Subsequent revisions shall be approved per site specific procedures.

- A pre-lift meeting involving participating personnel shall be conducted prior to making a critical lift. The critical lift plan/procedure shall be reviewed and questions shall be resolved.
- Prior to executing a critical lift, a qualified person shall verify that the as-installed rigging matches the configuration in the approved lifting plan.

- If required by the critical lift procedure, a practice lift shall be done before the critical lift. Conditions for a practice lift should closely simulate actual conditions involving: weight, rigging selection and configuration, load movement path, and other relevant factors. Practice lifts should be done by the same crew using the same lifting equipment that will be used in the lift.

- Although individual plans are generally prepared for critical lifts, multi-use plans may be employed to accomplish recurrent critical lifts. For example, a multi-use plan may be used to lift an item or series of similar items that are handled repeatedly in the same manner. However, if the lifting equipment or rigging must change to accomplish the lift, the critical lift plan must be revised and approved accordingly.

SIGNAL PERSON QUALIFICATIONS

- The designated competent person will obtain documentation from a third-party qualified evaluator showing that the signal person meets the qualification requirements before that signal person gives any signals to operators.

- The designated competent person will ensure that the signaler qualification documentation is always available at the jobsite. The documentation will specify each type of signaling the signal person is qualified to perform.

- Workers who do not meet the qualification requirements are not permitted to work as signal persons. This includes those who have signal person qualification credentials, but whose actions indicate that they are not performing signaling as required.

SIGNALING

- A qualified signal person will be used in each of the following situations:

  ☐ When the point of operation is not in full view of the operator;
  ☐ When the view in the direction of travel is obstructed when the equipment is traveling; and/or
  ☐ When site-specific safety concerns are an issue because either the operator or the person handling the load determines that it is necessary.

- Signals to the operator will be given by standard hand signals, unless, the signals cannot be seen by the operator.

- All directions given to the operator by the signal person will be given from the operator's direction perspective.

- When standard hand signals can't be used safely, radios will be used for communication.

- When radios are used, the operator and the signal person chosen for the project will be able to effectively communicate in the same language.

- The devices used to transmit signals will be tested on site before beginning operations to ensure that the signal transmission is effective, clear and reliable.

- Signal transmission will be performed through a dedicated channel, except where the crane is being operated on or adjacent to railroad tracks, and the actions of the equipment operator need to be coordinated with the movement of other equipment or trains on the same or adjacent tracks.

- All operators will use a hands-free system to receive signals and communicate with the signal person.

- Before beginning operations, the operator and signal person will contact one other and agree on the voice signals to will be used. Once the voice signals are agreed upon, further meetings are not needed unless: a worker is added or substituted, there is confusion about the voice signals, or a voice signal is to be changed.

- Each voice signal will contain the following three elements, given in the following order.
  1. Function (such as hoist, boom, etc.) direction;
  2. Distance and/or speed; and
  3. Function stop command.

- If the ability to transmit signals is interrupted during operations, the designated equipment operator will safely stop all operations until the ability to transmit is re-established and proper signals can be given and understood.

➢ If the designated equipment operator becomes aware of a safety problem and needs to communicate with the designated signal person, the designated equipment operator will safely stop all operations. Operations will not resume until both parties agree that the problem has been resolved.

➢ Only the designated signal person may give signals to the operator, except in the case of an emergency.

➢ Any worker may give the emergency stop signal if an emergency occurs. The designated equipment operator will safely stop all operations any time the emergency stop signal is given.

➢ Before lift operations begin, the designated competent person will post a hand signal chart on the equipment or in a conspicuous place close to hoisting operations.

THE SIGNALER MUST ALWAYS:

- Be in clear view of the crane operator.
- Have a clear view of the load at all times.
- Keep people outside the load travel path.
- Ensure the load does not pass above people.
- Keep the crane away from power lines.
- Watch for other potential hazards during the lift.
- There should be only one designated signaler at a time. More than one will only confuse the operator.
- Wear a bright vest, or different colored hard hat that will help the operator identify who is currently in charge of signaling.
- Communication between the crane operator and the signal person shall be maintained continuously during all crane movements.
- If at any time communication is disrupted, the operator shall stop all crane movements until communication is restored.
- If there are any concerns regarding the signal or needs to communicate with the signal person, the operator shall stop all crane movement.
- Crane movement shall not resume until the operator and the signal person agree the issue has been resolved.

- If it is desired to give instructions other than those provided by the established signal system, the crane movements shall be stopped.

BASICS WHEN USING RADIO COMMANDS:

- Discuss the lift plan with the operator and agree on signals to be used.
- All directions shall be given from the operator's direction perspective.
- Use a secure frequency, free of distracting chatter.
- Use specific names not just titles. (i.e. "Jim" or "Tom Smith" as opposed to just "operator").
- Command names should be same as the hand signal names, (i.e. "Use whip line", "Boom down", "Boom Up", etc.).
- Each series of voice signals shall contain three elements stated in the following order:
  - ☐ Function and direction
  - ☐ Distance and/or speed
  - ☐ Function stop

(i.e. "swing right 15 feet, 10 feet, 5 feet, 2 feet, swing stop)

- Once lift has begun, the signaler should never break communication with the operator. This is referred to as "constant communication".

- Never un-key the mic while the load is moving. The signaler should repeat the command to let the operator know everything is alright: (i.e. "slowly down, slow, slow….).

- If the signaler breaks communications (un-keys mic), the operator should stop immediately.

RIGGER QUALIFICATIONS

- The designated competent person will ensure that any worker being considered for designation as a qualified rigger has the knowledge, experience and expertise to serve in that capacity.
- The designated competent person will ensure that the documentation used to help determine that a worker is a designated qualified rigger is always available at the jobsite. The documentation will specify the types of rigging that the rigger is qualified to perform.
- Workers who do not meet the qualification requirements are not permitted to work as qualified riggers, including those who have qualified rigger credentials, but whose actions indicate that they are not performing rigging operations as required.

FALL PROTECTION

- The designated competent person will ensure that adequate fall prevention and/or protection is provided any time a worker is exposed to a fall of 6 feet or more to a lower level or to an object below.

WORK AREA CONTROL

- The designated competent person will take measures to protect Icenhower workers from reasonably foreseeable risks of being struck by and/or pinched or crushed by the equipment's rotating superstructure.

- All affected Icenhower workers will be trained to recognize struck-by and pinch/crush hazard areas posed by the rotating superstructure.
- The designated competent person will ensure that control lines, warning lines, railings or similar barriers are erected to mark the boundaries of the hazardous areas, unless it is infeasible to do so. Where it is infeasible to erect barricades, the hazard area will be marked by a combination of warning signs (such as "Danger-Swing/Crush Zone") and high visibility markings on the equipment. The designated competent person will ensure that all affected Icenhower workers are trained with regard to what these markings signify.
- Before any worker goes to a location in the hazard area that is out of the view of the operator, the worker will ensure that the operator is informed that he is going to that location.

KEEPING CLEAR OF THE LOAD

- Where available, affected workers will use hoisting routes that minimize their exposure to hoisted loads.
- While a suspended load is not moving, only the following Icenhower workers will be allowed in the fall zone.
  - ☐ Workers engaged in hooking, unhooking or guiding a load; and
  - ☐ Workers engaged in the initial attachment of the load to a component or structure.
- When affected Icenhower workers must be in the fall zone the following will apply:
  - ☐ The materials being hoisted will be rigged to prevent unintentional displacement;
  - ☐ Hooks with self-closing latches or their equivalent will be used; and
  - ☐ The rigging will be done only by the designated qualified rigger.
- Only workers receiving the load are allowed in the fall zone when the load is being landed.
- During tilt up or tilt down operations, the following will apply:
  - ☐ No worker may be directly under the load; and
  - ☐ Only workers who are essential to the operation can be in the fall zone, but may never be directly under the load. A worker is considered to be an "essential worker" only when it is infeasible for that worker to perform the operation from outside the fall zone and he is physically guiding the load, closely monitoring and giving instructions regarding the

loads movement, or must detach the load or initially attach the load to another component or structure.

FREE-FALL AND CONTROLLED LOAD LOWERING

- Use of equipment in which the boom is designed to free fall is prohibited when:
  - ☐ A worker is in the fall zone of the boom or load;
  - ☐ The load or boom is directly over a power line or other hazardous area;
  - ☐ The load is over a shaft in which workers are present;
  - ☐ The load is over a cofferdam in which workers are present; or
  - ☐ Lifting operations are taking place in a refinery or a tank farm.
- Where the use of equipment with a boom that is designed to free fall is prohibited, the boom hoist will have a secondary mechanism or device designed to prevent the boom from falling in the event the primary system fails.
- Hydraulic telescoping booms will have an integrally mounted holding device to prevent the boom from retracting in the event of hydraulic failure.
- When a worker is directly under the load being hoisted, or when the load is directly over a power line or any other hazardous areas, controlled load lowering is required and free fall of the load line is prohibited.

HOISTING PERSONNEL - PERSONNEL PLATFORMS

- Lifting equipment will not be used to hoist workers.
- Personnel platforms will be used only as a last resort. All other avenues of elevated work should be explored and eliminated before working from a personnel platform.
- The number of employees occupying the personnel platform shall not exceed the manufacturer's load rating specification.
- Personnel platforms shall be used only for employees and their tools necessary to do their work, and shall not be used to hoist materials and/or equipment.
- Materials and tools for use during a personnel lift shall be secured to prevent displacement.
- Materials and tools for use during a personnel lift shall be evenly distributed within the confines of the platform while the platform is suspended.
- Employees shall keep all parts of the body inside the platform during raising, lowering, and

positioning. This provision does not apply to an occupant of the platform performing the duties of a signal person.

- Before employees exit or enter a hoisted personnel platform that is not landed, the platform shall be secured to the structure where the work is to be performed, unless securing to the structure creates an unsafe situation.
- Hoisting of employees shall be promptly discontinued upon indication of any dangerous weather conditions or other impending danger.

OVERHEAD JIB AND GANTRY CRANES

- Overhead jib and gantry cranes will be installed per manufacturer's directions.
- Daily visual inspections before use will include:
  - ☐ All functional operating mechanisms
  - ☐ Operation of limit switch and associated components
  - ☐ Host braking system for proper operation
  - ☐ Deterioration or leakage in lines, tanks, valves, drain pumps, and other parts of air or hydraulic systems
  - ☐ Hooks with deformation or cracks
  - ☐ Hoist chains
  - ☐ Cracks in welds or base structure
- Overhead cranes will be inspected monthly and documented by a competent person.
- Complete annual inspections will be performed by a qualified crane company.
- Any overhead jib or gantry crane/hoist that does not pass inspection will be immediately tagged out of service and reported to the appropriate supervisor.
- Repairs will be made by a qualified person.
- Before performing any maintenance or electrical maintenance on the equipment, de-energize the main switch supplying power to the equipment. Follow all pertaining lockout tagout

procedures.

- Hoist operators shall read the operation manuals and head all instruction and warning labels. They will be required to be familiar with the hoist and hoist controls before being authorized to operate the hoist or lifting system.

TRAINING

The employer must train each operator and crew member assigned to work with the equipment on all of the following:

- The procedures to be followed in the event of electrical contact with a power line. Such training must include:
  - ☐ Information regarding the danger of electrocution from the operator simultaneously touching the equipment and the ground.
  - ☐ The importance to the operator's safety of remaining inside the cab except where there is an imminent danger of fire, explosion, or other emergency that necessitates leaving the cab.
  - ☐ The safest means of evacuating from equipment that may be energized.
  - ☐ The danger of the potentially energized zone around the equipment (step potential).
  - ☐ The need for crew in the area to avoid approaching or touching the equipment and the load.
  - ☐ Safe clearance distance from power lines.
  - ☐ Power lines are presumed to be energized unless the utility owner/operator confirms that the power line has been and continues to be de-energized and visibly grounded at the worksite.
  - ☐ (Power lines are presumed to be un-insulated unless the utility owner/operator or a registered engineer who is a qualified person with respect to electrical power transmission and distribution confirms that a line is insulated.
  - ☐ The limitations of an insulating link/device, proximity alarm, and range control (and similar) device, if used.
  - ☐ The procedures to be followed to properly ground equipment and the limitations of

grounding.

- Employees working as dedicated spotters must be trained to enable them to effectively perform their task.
- Employees who may be exposed to fall hazards while on, or hoisted by equipment under this section.
- Signal persons. The employer must train each employee who will be assigned to work as a signal persons who does not meet the requirements of Sec. 1926.1428(c) in the areas addressed in that paragraph
- Competent persons and qualified persons. The employer must train each competent person and each qualified person regarding the requirements of this subpart applicable to their respective roles.
- Crush/pinch points. The employer must train each employee who works with the equipment to keep clear of holes, and crush/pinch points and the hazards pertaining to those tasks.
- Tag-out. The employer must train each operator and each additional employee authorized to start/energize equipment or operate equipment controls (such as maintenance and repair employees), in the tag-out and start-up procedures.

Training administration:

- The employer must evaluate each employee required to be trained under this subpart to confirm that the employee understands the information provided in the training.
- The employer must provide refresher training in relevant topics for each employee when, based on the conduct of the employee or an evaluation of the employee's knowledge, there is an indication that retraining is necessary.
- Whenever training is required under subpart CC, the employer must provide the training at no cost to the employee

OBJECTIVE

This Excavation Safety Program has been developed to protect employees from safety hazards that may be encountered during work in trenches and excavations. This program is intended to assure that:

A. Employees who perform work in excavations are aware of their responsibilities and know how to perform the work safely.

B. **Icenhower** has appointed one or more individuals within the company to assure compliance with the requirements of this program.

C. All persons involved in excavation and trenching work have received appropriate training in the safe work practices that must be followed when performing this type of work.

II. ASSIGNMENT OF RESPONSIBILITY

A. Employer

In administering the Excavation Safety Program, Hunt Energy Services will:

1. Monitor the overall effectiveness of the program.
2. Provide atmospheric testing and equipment selection as needed.
3. Provide personal protective equipment as needed.
4. Provide protective systems as needed.
5. Provide training to affected employees and supervisors.
6. Provide technical assistance as needed.
7. Preview and update the program on at least an annual basis, or as needed.

B. Program Manager

The Safety Director acts as the competent person for Hunt Energy Services in reference to this program, and must assure that:

1. The procedures described in this program are followed.

2. Employees entering excavations or trenches are properly trained and equipped to perform their duties safely.

3. All required inspections, tests, and recordkeeping functions have been performed.

C. Employees

All employees, including contractor personnel, who work in or around excavations, must comply with the requirements of this program. Employees are responsible for reporting hazardous practices or situations to Hunt Energy Services management, as well as reporting incidents that cause injury to themselves or other employees to the Safety Director.

III. TRAINING

A. Training Schedule

1. All personnel involved in trenching or excavation work shall be trained in the requirements of this program by a competent person with assistance from the appropriate supervisors.

2. Training shall be performed before employees are assigned duties in excavations.

3. Retraining will be performed when work site inspections indicate that an employee does not have the necessary knowledge or skills to safely work in or around excavations, or when changes to this program are made.

4. Training records will be maintained by HR/safety, and shall include:

   a. date of the training program;
   b. name(s) of the instructor(s) who conducted the training;
   c. a copy of the written material presented; and
   d. name(s) of the employee(s) who received the training.

B. Training Components

The training provided to all personnel who perform work in excavations shall include:

1. The work practices that must be followed during excavating or working in excavations.

2. The use of personal protective equipment that will typically be required during work in excavations, including but not limited to safety shoes, hardhats, and fall protection devices.

3. Procedures to be followed if a hazardous atmosphere exists or could reasonably be expected to develop during work in an excavation.

4. The OSHA Excavation Standard, 29 CFR 1926, Subpart P.

5. Emergency and non-entry rescue methods, and the procedure for calling rescue services.

6. Hunt Energy Services policy on reporting incidents that cause injury to employees.

C. Training and Duties of Program Manager

The Program Manager, Duncan Smith, shall receive the training detailed in this program as well as training on the requirements detailed in the OSHA Excavation Standard. The Program Manager shall:

1. Coordinate, actively participate in, and document the training of all employees affected by this program.

2. Ensure on a daily basis, or more often as detailed in this program, that worksite conditions are safe for employees to work in excavations.

3. Determine the means of protection that will be used for each excavation project.

4. Ensure, if required, that the design of a protective system has been completed and approved by a registered professional engineer before work begins in an excavation.

5. Make available a copy of this program and the OSHA Excavation Standard to any employee who requests it.

IV. EXCAVATION REQUIREMENTS

A. Utilities and Pre-Work Site Inspection

Prior to excavation, the site shall be thoroughly inspected by a competent person to determine if special safety measures must be taken.

B. Surface Encumbrances

All equipment, materials, supplies, permanent installations (i.e., buildings or roadways), trees, brush, boulders, and other objects at the surface that could present a hazard to employees working in the excavation shall be removed or supported as necessary to protect employees.

C. Underground Installations

1. The location of sewer, telephone, fuel, electric, water, or any other underground installations or wires that may be encountered during excavation work shall be determined and marked prior to opening an excavation. Arrangements shall be made as necessary by a competent person with the appropriate utility entity for the protection, removal, shutdown, or relocation of underground installations.

2. If it is not possible to establish the exact location of these installations, the work may proceed with caution if detection equipment or other safe and acceptable means are used to locate the utility.

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3. Excavation shall be done in a manner that does not endanger the underground installations or the employees engaged in the work. Utilities left in place shall be protected by barricades, shoring, suspension, or other means as necessary to protect employees.

D. Protection of the Public

Barricades, walkways, lighting, and posting shall be provided as necessary for the protection of the public prior to the start of excavation operations.

1. Guardrails, fences, or barricades shall be provided on excavations adjacent to walkways, driveways, and other pedestrian or vehicle thoroughfares. Warning lights or other illumination shall be maintained as necessary for the safety of the public and employees from sunset to sunrise.

2. Wells, holes, pits, shafts, and all similar hazardous excavations shall be effectively barricaded or covered and posted as necessary to prevent unauthorized access. All temporary excavations of this type shall be backfilled as soon as possible.

3. Walkways or bridges protected by standard guardrails shall be provided where employees and the general public are permitted to cross over excavations. Where workers in the excavation may pass under these walkways or bridges, a standard guardrail and toeboard shall be used to prevent the hazard of falling objects. Information on the requirements for guardrails and toeboards may be obtained by contacting competent person.

E. Protection of Employees

Stairs, ladders, or ramps shall be provided at excavation sites where employees are required to enter trench excavations over four (4) feet deep. The maximum distance of lateral travel (along the length of the trench) necessary to reach the means of egress shall not exceed 25 feet.

1. Structural Ramps

a. Structural ramps used solely by employees as a means of access or egress from excavations shall be designed by a competent person. Structural ramps used for access or egress of equipment shall be designed by a person qualified in structural design, and shall be constructed in accordance with the design.

b. Ramps and runways constructed of two or more structural members shall have the structural members connected together to prevent movement or displacement.

c. Structural members used for ramps and runways shall be of uniform thickness.

d. Cleats or other appropriate means used to connect runway structural members shall be attached to the bottom of the runway or shall be attached in a manner to prevent tripping.

e. Structural ramps used in place of steps shall be provided with cleats or other surface treatments on the top surface to prevent slipping.

2. Ladders

a. When portable ladders are used, the ladder side rails shall extend a minimum of three (3) feet above the upper surface of the excavation.

b. Ladders shall have nonconductive side rails if work will be performed near exposed energized equipment or systems.

c. Two or more ladders, or a double-cleated ladder, will be provided where 25 or more employees will be conducting work in an excavation where ladders serve as the primary means of egress, or where ladders serve two-way traffic.

d. Ladders will be inspected prior to use for signs of damage or defects. Damaged ladders will be removed from service and marked with “Do Not Use” until repaired.

e. Ladders shall be used only on stable and level surfaces unless secured. Ladders placed in any location where they can be displaced by workplace activities or traffic shall be secured, or barricades shall be used to keep these activities away from the ladders.

f. Non self-supporting ladders shall be positioned so that the foot of the ladder is one-quarter of the working length away from the support.

g. Employees are not permitted to carry any object or load while on a ladder that could cause them to lose their balance and fall.

F. Exposure to Vehicular Traffic

Employees exposed to vehicular traffic shall be provided with, and shall wear warning vests or other suitable garments marked with or made of reflectorized or high-visibility material. Warning vests worn by flagmen shall be red or orange, and shall be

reflectorized material if worn during night work. Emergency lighting, such as spotlights or portable lights, shall be provided as needed to perform work safely.

G. Exposure to Falling Loads

No employee is permitted underneath loads being handled by lifting or digging equipment. Employees are required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials. Operators may remain in the cabs of vehicles being loaded or unloaded when the vehicles provide adequate protection for the operator during loading and unloading operations.

H. Warning System for Mobile Equipment

A warning system shall be used when mobile equipment is operated adjacent to the edge of an excavation if the operator does not have a clear and direct view of the edge of the excavation. The warning system shall consist of barricades, hand or mechanical signals, or stop logs. If possible, the grade should be away from the excavation.

I. Hazardous Atmospheres

A competent person will test the atmosphere in excavations over four (4) feet deep if a hazardous atmosphere exists or could reasonably be expected to exist. A hazardous atmosphere could be expected, for example, in excavations in landfill areas, areas where hazardous substances are stored nearby, or near areas containing gas pipelines.

1. Adequate precautions shall be taken to prevent employee exposure to atmospheres containing less than 19.5 percent oxygen and other hazardous atmospheres. These precautions include providing proper respiratory protection or forced ventilation of the workspace.

2. Forced ventilation or other effective means shall be used to prevent employee exposure to an atmosphere containing a flammable gas in excess of ten (10) percent of the lower flammability limit of the gas.

3. When controls are used that are intended to reduce the level of atmospheric contaminants to acceptable levels, continuous air monitoring will be performed by a competent person. The device used for atmospheric monitoring shall be equipped with an audible and visual alarm.

4. Atmospheric testing will be performed using a properly calibrated direct reading gas monitor. Direct reading gas detector tubes or other acceptable means may also be used to test potentially toxic atmospheres.

5. Each atmospheric testing instrument shall be calibrated by a competent person on a schedule and in the manner recommended by the manufacturer. In addition:

   a. Any atmospheric testing instrument that has not been used within 30 days shall be recalibrated prior to use.
   b. Each atmospheric testing instrument shall be calibrated at least every three (3) months.

6. Each atmospheric testing instrument will be field checked immediately prior to use to ensure that it is operating properly.

J. Personal Protective Equipment

1. All employees working in trenches or excavations shall wear approved hardhats and steel-toed shoes or boots.

2. Employees exposed to flying fragments, dust or other materials produced by drilling, sawing, sanding, grinding, and similar operations shall wear approved safety glasses with side shields.

3. Employees performing welding, cutting, or brazing operations, or are exposed to the hazards produced by these tasks, shall wear approved spectacles or a welding faceshield or helmet, as determined by a competent person.

4. Employees entering bell-bottom pier holes or other similar deep and confined footing excavations shall wear a harness with a lifeline securely attached to it. The lifeline shall be separate from any line used to handle materials and shall be individually attended at all times while the employee wearing the lifeline is in the excavation.

5. Employees shall wear, as determined by a competent person, approved gloves or other suitable hand protection.

6. Employees using or working in the immediate vicinity of hammer drills, masonry saws, jackhammers, or similar high-noise producing equipment shall wear suitable hearing protection, as determined by a competent person.

7. Each employee working at the edge of an excavation six (6) feet or more deep shall be protected from falling. Fall protection shall include guardrail systems, fences, barricades, covers, or a tie-back system meeting OSHA requirements, as determined by a competent person.

8. Emergency rescue equipment, such as breathing apparatus, a safety harness and line, and a basket stretcher, shall be readily available where hazardous atmospheric conditions exist or may develop during work in an excavation. This equipment shall be attended when in use. Only personnel who have received approved training and have appropriate equipment shall attempt retrieval that would require entry into a hazardous atmosphere. If entry into a known hazardous atmosphere must be performed, then a competent person shall be given advance notice so that the hazards can be evaluated and rescue personnel placed on standby if necessary.

K. Walkways and Guardrails

Walkways shall be provided where employees or equipment are permitted to cross over excavations. Guardrails shall be provided where walkways, accessible only to on-site project personnel, are six (6) feet or more above lower levels.

L. Protection from Water Accumulation Hazards

1. Employees are not permitted to work in excavations that contain or are accumulating water unless precautions have been taken to protect them from the hazards posed by water accumulation. Precautions may include special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water, or use of safety harnesses and lifelines.

2. If water is controlled or prevented from accumulating by the use of water removal equipment, the water removal equipment and operation shall be monitored by a person trained in the use of that equipment.

3. If excavation work interrupts the natural drainage of surface water (such as streams), diversion ditches, dikes, or other suitable means shall be used to prevent surface water from entering the excavation. Precautions shall also be taken to provide adequate drainage of the area adjacent to the excavation. Excavations subject to runoff from heavy rains shall be re-inspected by a competent person after each rain incident to determine if additional precautions, such as special support or shield systems to protect from cave-ins, water removal to control the

level of accumulating water, or use of safety harnesses and lifelines, should be used.

4. ***Responsible Person*** shall inform affected workers of the precautions or procedures that are to be followed if water accumulates or is accumulating in an excavation.

M. Stability of Adjacent Structures

Responsible Person will determine if the excavation work could affect the stability of adjoining buildings, walls, sidewalks, or other structures.

1. Support systems (such as shoring, bracing, or underpinning) shall be used to assure the stability of structures and the protection of employees where excavation operations could affect the stability of adjoining buildings, walls, or other structures.

2. Excavation below the level of the base or footing of any foundation or retaining wall that could be reasonably expected to pose a hazard to employees shall not be permitted, except when:

   a. a support system, such as underpinning, is provided to ensure the safety of employees and the stability of the structure;
   b. the excavation is in stable rock;
   c. a registered professional engineer has approved the determination that the structure is sufficiently removed from the excavation so as to be unaffected by the excavation activity; or
   d. a registered professional engineer has approved the determination that such excavation work will not pose a hazard to employees.

3. Sidewalks, pavements, and appurtenant structures shall not be undermined unless a support system or other method of protection is provided to protect employees from the possible collapse of such structures.

4. Where review or approval of a support system by a registered professional engineer is required, a competent person shall secure this review and approval in writing before the work begins.

N. Protection from Falling Objects and Loose Rocks or Soil

1. Adequate protection shall be provided to protect employees from loose rock or soil that could pose a hazard by falling or rolling from an excavation face. Such protection shall consist of:

    a. scaling to remove loose material;
    b. installation of protective barricades, such as wire mesh or timber, at appropriate intervals on the face of the slope to stop and contain falling material; or
    c. benching sufficient to contain falling material.

2. Excavation personnel shall not be permitted to work above one another where the danger of falling rock or earth exists.

3. Employees shall be protected from excavated materials, equipment, or other materials that could pose a hazard by falling or rolling into excavations.

4. Protection shall be provided by keeping such materials or equipment at least two (2) feet from the edge of excavations, by use of restraining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.

5. Materials and equipment may, as determined by a competent person, need to be stored further than two (2) feet from the edge of the excavation if a hazardous loading condition is created on the face of the excavation.

6. Materials piled, grouped, or stacked near the edge of an excavation must be stable and self-supporting.

O. Inspection by Competent Person

1. The Competent Person, shall conduct daily inspections of excavations, adjacent areas, and protective systems for evidence of a situation that could result in possible cave-ins, failure of protective systems, hazardous atmospheres, or other hazardous conditions. An inspection shall be conducted by a competent person prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rainstorm or other hazard-increasing occurrence. These inspections are only required when the trench will be or is occupied by employees.

2. Where the competent person finds evidence of a situation that could result in a possible cave-in, failure of protective systems, hazardous atmosphere, or other

hazardous conditions, exposed employees shall be removed from the hazardous area until precautions have been taken to assure their safety.

3. A competent person shall maintain a written log of all inspections conducted. This log shall include the date, work site location, results of the inspection, and a summary of any action taken to correct existing hazards.

V. PROTECTIVE SYSTEM REQUIREMENTS

A. Protection of Employees

1. Employees in an excavation shall be protected from cave-ins by using either an adequate sloping and benching system or an adequate support or protective system. The only exceptions are:

a. excavations made entirely in stable rock; or
b. excavations less than five (5) feet in depth where examination of the ground by a competent person provides no indication of a potential cave-in.

2. Protective systems shall be capable of resisting all loads that could reasonably be expected to be applied to the system.

B. Design of Sloping and Benching Systems

The slope and configuration of sloping and benching systems shall be selected and constructed by a competent person in accordance with the following options:

1. Allowable configurations and slopes

a. Excavations shall be sloped at an angle no steeper than one and one-half (1 ½) horizontal to one (1) vertical (34 degrees measured from the horizontal), unless one of the options listed below is used.
b. Slopes shall be properly excavated depending on soil type as shown in 29 CFR 1926, Subpart P, Appendix B.

2. Determination of slopes and configurations using 29 CFR 1926, Subpart P, Appendices A and B

The maximum allowable slopes and allowable configurations for sloping and benching systems shall meet the requirements set forth in these appendices.

3. Designs using other tabulated data

The design of sloping or benching systems may be selected from, and shall be constructed in accordance with, other tabulated data, such as tables and charts. The tabulated data used must be in written form and include the following:

a. Identification of the factors that affect the selection of a sloping or benching system.

b. Identification of the limits of the use of the data, including the maximum height and angle of the slopes determined to be safe.

c. Other information needed by the user to make correct selection of a protective system.

d. At least one copy of the tabulated data that identifies the registered professional engineer who approved the data shall be maintained at the jobsite during construction of the protective system. After that time, the data may be stored off the jobsite, and shall be maintained by a competent person.

4. Design by a registered professional engineer

a. Sloping or benching systems designed in a manner other than those described in the preceding three options shall be approved by a registered professional engineer.

b. Designs shall be in written form and shall include at least the following information:

i. the maximum height and angle of the slopes that were determined to be safe for a particular project; and
ii. the identity of the registered professional engineers who approved the design.

c. At least one copy of the design shall be maintained at the jobsite while the slope is being constructed. After that time, the design may be stored off the jobsite, and shall be maintained by a competent person.

C. Design of Support, Shield, and Other Protective Systems

The design of support systems, shield systems, and other protective systems shall be selected and constructed by a competent person in accordance with the following requirements:

1. Designs using 29 CFR 1926, Subpart P, Appendices A, C and D

    a. Timber shoring in trenches shall be designed in accordance with the requirements of the OSHA guidelines.

    b. Aluminum hydraulic shoring shall be designed in accordance with the manufacturer's tabulated data or the requirements of the OSHA guidelines.

2. Designs using manufacturer's tabulated data

    a. Support systems, shield systems, and other protective systems designed from manufacturer's tabulated data shall be constructed and used in accordance with all specifications, recommendations, and limitations issued or made by the manufacturer.

    b. Deviation from the specifications, recommendations, and limitations issued or made by the manufacturer shall be allowed only after the manufacturer issues specific written approval.

    c. Manufacturer's specifications, recommendations, and limitations, as well as the manufacturer's written approval to deviate from the specifications, recommendations, and limitations, shall be kept in written form at the jobsite during construction of the protective system(s). After that time, the information may be stored off the jobsite, and shall be maintained by a competent person.

3. Designs using other tabulated data

Designs of support systems, shield systems, and other protective systems shall be selected from and constructed in accordance with tabulated data, such as tables and charts.

    a. The tabulated data shall be in written form and shall include all of the following:

i. identification of the factors that affect the selection of a protective system drawn from such data;
ii. identification of the limits of the use of such data;
iii. information needed by the user to make a correct selection of a protective system from the data.

b. At least one written copy of the tabulated data, which identifies the registered professional engineer who approved the data, shall be maintained at the jobsite during construction of the protective system. After that time, the data may be stored off the jobsite, and shall be maintained by a competent person.

4. Design by a registered professional engineer

Support systems, shield systems, and other protective systems designed in a manner other than the preceding three options shall be approved by a registered professional engineer.

a. Designs shall be in written form and shall include:

i. a plan indicating the sizes, types, and configurations of the materials to be used in the protective system; and
ii. the identity of the registered professional engineer who approved the design.

b. At least one copy of the design shall be maintained at the jobsite during construction of the protective system. After that time, the design may be stored off the jobsite, and shall be maintained by a competent person.

D. Materials and Equipment

1. Materials and equipment used for protective systems shall be free from damage or defects that might affect their proper function.

2. Manufactured materials and equipment used for protective systems shall be used and maintained in accordance with the recommendations of the manufacturer, and in a manner that will prevent employee exposure to hazards.

3. When materials or equipment used for protective systems are damaged, a competent person shall ensure that these systems are examined by a competent

person to evaluate suitability for continued use. If the competent person cannot assure that the material or equipment is able to support the intended loads or is otherwise suitable for safe use, then such material or equipment shall be removed from service. The material or equipment shall then be evaluated and approved by a registered professional engineer before being returned to service.

E. Installation and Removal of Supports

1. General

a. Members of support systems shall be securely connected together to prevent sliding, falling, kickouts, or other potential hazards.

b. Support systems shall be installed and removed in a manner that protects employees from cave-ins, structural collapses, or from being struck by members of the support systems.

c. Individual members of the support systems shall not be subjected to loads exceeding those that they were designed to support.

d. Before temporary removal of individual support members begins, additional precautions shall be taken as directed by a competent person to ensure the safety of employees (i.e., the installation of other structural members to carry the loads imposed on the support system).

e. Removal of support systems shall begin at, and progress from, the bottom of the excavation. Members shall be released slowly. If there is any indication of possible failure of the remaining members of the structure or possible cave-in of the sides of the excavation, the work shall be halted until it can be examined by a competent person.

f. Backfilling shall progress in conjunction with the removal of support systems from excavations.

2. Additional Requirements

a. Excavation of material to a level no greater than two (2) feet below the bottom of the members of a support system is allowed, but only if the system is designed to resist the forces calculated for the full depth of the trench. There shall be no indications of a possible loss of soil from behind or below the bottom of the support system while the trench is open.

b. Installation of a support system shall be closely coordinated with the excavation of trenches.

F. Sloping and Benching Systems

Employees are not permitted to work above other employees in the faces of sloped or benched systems, except when employees at lower levels are protected from the hazards of falling, rolling, or sliding material or equipment.

G. Shield Systems

1. General

a. Shield systems shall not be subjected to loads that are greater than those they are designed to withstand.

b. Shields shall be installed in a manner that will restrict lateral or other hazardous movement of the shield and could occur during cave-in or unexpected soil movement.

c. Employees shall be protected from the hazard of cave-ins when entering or exiting the areas protected by shields.

d. Employees are not permitted in trenches when shields are being installed, removed, or moved vertically.

2. Additional Requirements

a. Excavation of material to a level no greater than two (2) feet below the bottom of the shield system is allowed, but only if the system is designed to resist the forces calculated for the full depth of the trench.

b. There shall be no indications of a possible loss of soil from behind or below the bottom of the shield system while the trench is open.

VI. ACCIDENT INVESTIGATIONS

All incidents that result in injury to workers, as well as near misses, regardless of their nature, shall be reported and investigated. Investigations shall be conducted by a competent person as

soon after an incident as possible to identify the cause and means of prevention to eliminate the risk of reoccurrence.

In the event of such an incident, the Excavation Safety Program shall be reevaluated by a competent person to determine if additional practices, procedures, or training are necessary to prevent similar future incidents.

VII. CHANGES TO PROGRAM

Any changes to the Excavation Safety Program shall be approved by a competent person, and shall be reviewed by a qualified person as the job progresses to determine additional practices, procedures, or training needs necessary to prevent injuries. Affected employees shall be notified of procedure changes, and trained if necessary. A copy of this program shall be maintained at the jobsite by a competent person.

VIII. GLOSSARY

Accepted engineering practices: the standards of practice required by a registered professional engineer.

Aluminum hydraulic shoring: a manufactured shoring system consisting of aluminum hydraulic cylinders (crossbraces) used with vertical rails (uprights) or horizontal rails (wales). This system is designed to support the sidewalls of an excavation and prevent cave-ins.

Bell-bottom pier hole: a type of shaft or footing excavation, the bottom of which is made larger than the cross section above to form a bell shape.

Benching system: a method of protecting employees from cave-ins by excavating the sides of an excavation to form one or more horizontal steps, usually with vertical or near-vertical surfaces between levels.

Cave-in: the movement of soil or rock into an excavation, or the loss of soil from under a trench shield or support system, in amounts large enough to trap, bury, or injure and immobilize a person.

Competent person: a person who has been trained to identify hazards in the workplace, or working conditions that are unsafe for employees, and who has the authority to have these hazards corrected.

Cross braces: the horizontal members of a shoring system installed from side to side of the excavation. The cross braces bear against either uprights or wales.

Excavation: any man-made cut, cavity, trench, or depression in an earth surface formed by earth removal.

Faces or sides: the vertical or inclined earth surfaces formed as a result of excavation work.

Failure: the movement or damage of a structural member or connection that makes it unable to support loads.

Hazardous atmosphere: an atmosphere that is explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, that may cause death, illness, or injury.

Kickout: the accidental movement or failure of a cross brace.

Program Manager: the individual within the company who oversees excavation work and is responsible for assuring compliance with this program.

Protective system: a method of protecting employees from cave-ins, from material that could fall or roll from an excavation face into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.

Ramp: an inclined walking or working surface that is used to gain access to one point from another. A ramp may be constructed from earth or from structural materials such as steel or wood.

Sheeting: the members of a shoring system that retain the earth in position and in turn are supported by other members of the shoring system.

Shield system: a structure used in an excavation to withstand cave-ins and which will protect employees working within the shield system. Shields can be permanent structures or portable units moved along as work progresses. Shields used in trenches are usually referred to as **trench boxes** or **trench shields**.

Shoring system: a structure that is built or put in place to support the sides of an excavation to prevent cave-ins.

Sides: see **faces**.

Sloping system: sloping the sides of an excavation away from the excavation to protect employees from cave-ins. The required slope will vary with soil type, weather, and surface or near surface loads that may affect the soil in the area of the trench (such as adjacent buildings, vehicles near the edge of the trench, etc.).

Stable rock: natural solid mineral material that can be excavated with vertical sides that will remain intact while exposed.

Structural ramp: a ramp built of steel or wood, usually used for vehicle access. Ramps made of soil or rock are not considered structural ramps.

Support system: a structure used as underpinning, bracing or shoring, which provides support to an adjacent structure, underground installation, or the sides of an excavation.

Tabulated data: tables and charts approved by a registered professional engineer and used to design and construct a protective system.

Trench: a narrow excavation (in relation to its height) made below the surface of the ground.

Trench box or trench shield: see **shield**.

Uprights: the vertical members of a trench shoring system placed in contact with the earth and usually positioned so the individual members do not contact each other. Uprights placed so that individual members are closely spaced, in contact with or interconnected to each other, are often called **sheeting**.

Wales: horizontal members of a shoring system placed in the direction of the excavation face whose sides bear against the vertical members of the shoring system or earth (the uprights or sheeting).

HUNT ENERGY SERVICES	Operations	Number: HES
	Administration Procedure / Guideline	Revision: 0 Effective Date: 1/29/2020
	Fall Protection Protocol	Approved By: General Manager HR/Safety Director

OVERVIEW

Purpose
This protocol establishes minimum safe work practices for personnel working at heights.

Scope
This protocol defines the requirements for analyzing hazards associated with working at heights, along with the selection and use of fall protection equipment to protect workers from fall hazards. The document will apply to all work performed at heights of 4 feet or greater. Contractors will meet or exceed Icenhower's Fall Protection Protocol when performing work on Icenhower locations.

1.0 RESPONSIBILITIES

Leadership

- Reinforce adherence to this protocol and provide resources for application of the protocol
- Ensure employees responsible for working at elevated heights receive required training

Line Supervisor

- Know how this protocol applies to personnel in their area of responsibility.
- Ensure employees have training, skills, knowledge and understanding to comply with this protocol
- Check periodically to ensure the requirements of this protocol are being met.

Icenhower Employees

- Adhere to the requirements of this protocol
- Identify and report gaps in this protocol
- Complete required training

Contract Company Representative

- Comply with regulatory requirements and follow the Icenhower safety protocols

2.0 TERMS AND DEFINITIONS

2.1 Fall Protection Terms and Definitions

Anchor Point – a secure point of attachment for lifelines, lanyards or deceleration devices.

Climb Assist Device – a devise consisting of a length of wire rope reeved over a sheave, with one end attached to a counterweight and the other end attached to a harness.

Competent Person – one who is able to identify existing and potential hazards and has authorization to take prompt corrective measures to eliminate them.

Control Access Zone – an area used to control access from the leading edge of an elevated position.
Deceleration Device – a mechanism which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy imposed on a worker during a fall. Examples include rope grab or rip-stitch lanyards, specially woven lanyards, tearing or deforming lanyards, or automatic self-retracting device/lanyards.
Elevated Position – a position where person is exposed to a fall of 4 feet or more to a lower level.
Fall Arrest System – full body harness with lanyard that is attached directly to an approved anchor point, that arrests the fall of an individual at a safe rate and prior to landing on a lower level.
Fall Restraint System – Lanyard and harness system that restricts movement on platforms which prevent a worker from falling.
Full Body Harness – an apparatus with straps which may be secured about the worker in a manner that will distribute the fall arrest forces over least the thigs, pelvis, waist, chest and shoulders with means for attaching it to other components of a fall arrest system.
4-to-1 Rules – for every 4 feet a ladder extends upward, the ladder should be 1 foot from the base of the structure the ladder is leaned against.
Guardrail System – a barrier erected to prevent workers form falling.
Ladder Safety Devise – a device, other than a cage or well, designed to help prevent accidental falls from ladders, or to limit the length of such falls.
Lanyard – a flexible line of rope, wire rope or strap that has a connector at each end for connecting the body harness to a deceleration device, lifeline or anchorage.
Lifeline – a line provided for direct or indirect attachment to a worker's body harness, lanyard or deceleration device. Such lifelines may be horizontal or vertical in application.
Opening, Wall – a gap or void 30 or more inches high or 8 or more inches wide in a wall or railing, through which workers can fall to a lower level.
Positioning Device System – a body harness system rigged to allow a worker to be supported on an elevated vertical surface, such as a wall, and work with both hands free while leaning backwards.
Rope Grap – a device that attaches to a lifeline as an anchoring point that provides a means of arresting a fall.
Self-Retracting Device – a deceleration device that can be used for fall arrest protection.
Snap-Hook – a self-closing device with a keeper, latch or other similar arrangement that will remain closed until manually opened.
Three Point of Contact – a climbing technique used while 2 hands and 1 foot or 2 feet and 1 hand on the ladder or stairwell at all times.

Toe-Board – a low, protective barrier that will prevent the fall of materials and equipment to lower levels and provide protection from falls for personnel.
Total fall Distance – a maximum vertical distance between the wearer's body harness attachment points before and after the fall is arrested including lanyard extension and / or deceleration distance.

2.2 General Terms and Definitions

Area – individual operating fields or components that collectively comprise a Region; Areas normally include an area office.
Area Office – field office with assigned employees that support an area.
Contract Company Representative – a contractor who is assigned responsibilities and oversight for a specific task that requires adherence to Icenhower ESH protocols.
Facility – the collection of tangible structures, piping, valves, vessels, tanks, compression and processing equipment located in close geographic proximity, that are involved directly in the development, production, processing or delivery of oil and gas to market (e.g. a tank battery, drill site, well-site, compressor stations, pipeline and gas plant)
Line Supervisor – titled position that has assigned authority and responsibility for financials, production, maintenance, projects and personnel for a defined area. In Icenhower, this could be any supervisor, superintendent, foreman or assistant foreman.
Person in Charge (PIC) – a person that has been authorized by Icenhower to perform specific tasks to comply with this Icenhower protocol and / or regulatory requirements related to EHS. The PIC is defined in all protocols in the second column of the protocol section.

3.0 PROTOCOL

3.1 Engineering Controls

3.1.1 Where feasible eliminate fall exposures during initial design and construction.

3.2 Pre-Task Tailgate

3.2.1 Conduct a pre-task tailgate prior to working in an elevated position. Examples include:

- Fixed / portable ladders
- Scaffolding
- Platforms
- Manlifts

Note: Complete a visual fall protection assessment (including emergency rescue measures, which must be communicated to affected employees if fall hazard cannot be eliminated).

3.2.2 Only walk on tanks that are designed for this activity and only with proper fall protection

3.3 Fall Protection Equipment

3.3.1 Use fall restraint or fall arrest systems when working at heights 4 feet or greater and fall protection barriers are not reasonable, practical or effective

3.3.2 Maintain 100% tie-off when a personal fall-arrest device is required.

3.3.2.1 **NOTE:** This can be achieved by using a "Y" lanyard or twin leg retractable lifeline

3.3.3 Inspect fall arrest and fall restraint system components prior to each use for wear, damage and other deterioration.

3.3.3.1 **NOTE:** In the event defects cannot be immediately resolved, notify your supervisor and remove the equipment from service by placing a tag which states "OUT OF SERVICE" on the equipment or destroying the equipment.

3.3.4 Only use fall arrest and fall restraint system components that have a documented inspection within the past 12 months.

3.3.5 Use appropriate fall restraint equipment to ensure the individual will remain in the basket of a manlift, crane-suspended platform or basket (e.g. bucket truck, extendible boom platform, manlift, articulating boom platform or vertical tower).

3.3.6 Calculate the maximum fall distance when using a fall arrest system to ensure the proper fall arrest system is used.

Lanyards

3.3.7 Connect fall arrest lanyards to appropriate anchor points directly above the user's head when possible

3.3.8 Do not tie knots in lanyards for any reason and do not tie off a lanyard to itself unless the lanyard is specifically designed to such use and application

3.3.9 Follow manufacture's recommendation when connecting the lanyard directly to the D-ring on the full body harness.

Harnesses

3.3.10 Ensure all harness straps are snug to ensure there is no body shifting in case of a fall

3.3.11 Never use a body belt in place of a harness

Components for Harnesses, Lanyards and Lifeline

3.3.12 Use only dual action latching snaphooks on fall protection equipment

3.3.13 Use snaphooks that are sized to be compatible with the equipment to which they are connected to prevent unintentional disengagement of the snaphook by depression of the snaphook keeper by the connected member

3.3.14 Ensure fall protection equipment involved in a fall is tagged with a "Do Not Use" tag on the equipment and immediately removed from service or destroyed.

3.4 Fall Protection and Prevention of Falling Objects

3.4.1 Ensure workers engaged in activities on elevated platforms 4 feet or more above lower levels are protected from falling by:

- Guardrail / toe-board systems
- Personal fall arrest systems, or
- A combination of a control line
    - Guardrail / toe-board system
    - Personal fall arrest system, or
    - Safety monitoring device

Guardrail Systems

3.4.2 Ensure guardrails / toe-boards or barricades are erected to protect workers from wall openings on elevated surfaces

3.4.3 Ensure guardrail systems and toe-boards are installed to prevent falling objects by:

- Ensuring openings are small enough to prevent passage of potential fall objects
- Not storing materials and equipment within 6 feet of an edge unless guardrails and toe boards are erected
- Ensuring excess materials and debris are removed from the working area at regular intervals.

3.4.4 Controlled access zones may be used without guardrails, toe-boards and personal fall arrest systems under certain situations:

- Capable of suspending 5,000 lbs. per persona or certified by a professional engineer to withstand two times the maximum arresting force
- Independent of any anchorage used to support or suspend a platform

3.4.5 Tie-off to only manufacturer-approved anchor points designed to restrain workers from falling out of the basket in a manlift

3.5 Scaffolding

3.5.1 Ensure personnel responsible for the assembly of scaffolding are under the supervision of a competent person

3.5.2 Ensure scaffold are inspected and tagged by a competent person prior to each work shift they will be used or when modifications to the scaffolding have been made:

3.6 Fixed Ladders

3.6.1 Ensure fixed ladders are maintained in a safe condition. All ladders must be visually inspected prior to use

3.6.2 Ensure that fixed ladders are constructed with the following:

- Ladders taller than 20 feet will be equipped with a ladder cage or ladder safety device
- Ladders taller than 30 feet will be equipped with a ladder safety device or be horizontally offset with landings every 30 feet.

3.7 Portable Ladders

3.7.1 Ensure portable ladders are:

- Inspected prior to use and free from defects
- Positioned so that feet are secure and level
- Used only for their intended use

  NOTE: Damaged ladders will be tagged with "Do Not Use" tag on ladder and immediately removed form service

3.7.2 Ensure extension and straight ladders used to access an elevated surface:

- Extend at least 3 feet above the elevated surface
- Are positioned so they have the proper slope (4-to-1 Rule in fall protection terms and definitions)

3.7.3 Do not use metal ladders around electrical equipment

3.7.4 Only on person shall climb or work from a portable ladder at the same time

3.7.5 Maintain three points of contact when climbing / descending a ladder

3.7.6 When not in use portable ladders must be properly stored

4.0 RECORDKEEPING

Record	Retention Time
Harness Inspection Sheet	Current + 3 Years
Lanyard Inspection Sheet	Current + 3 Years
SRD Inspection Sheet	Current + 3 Years

5.0 TRAINING REQUIREMENTS

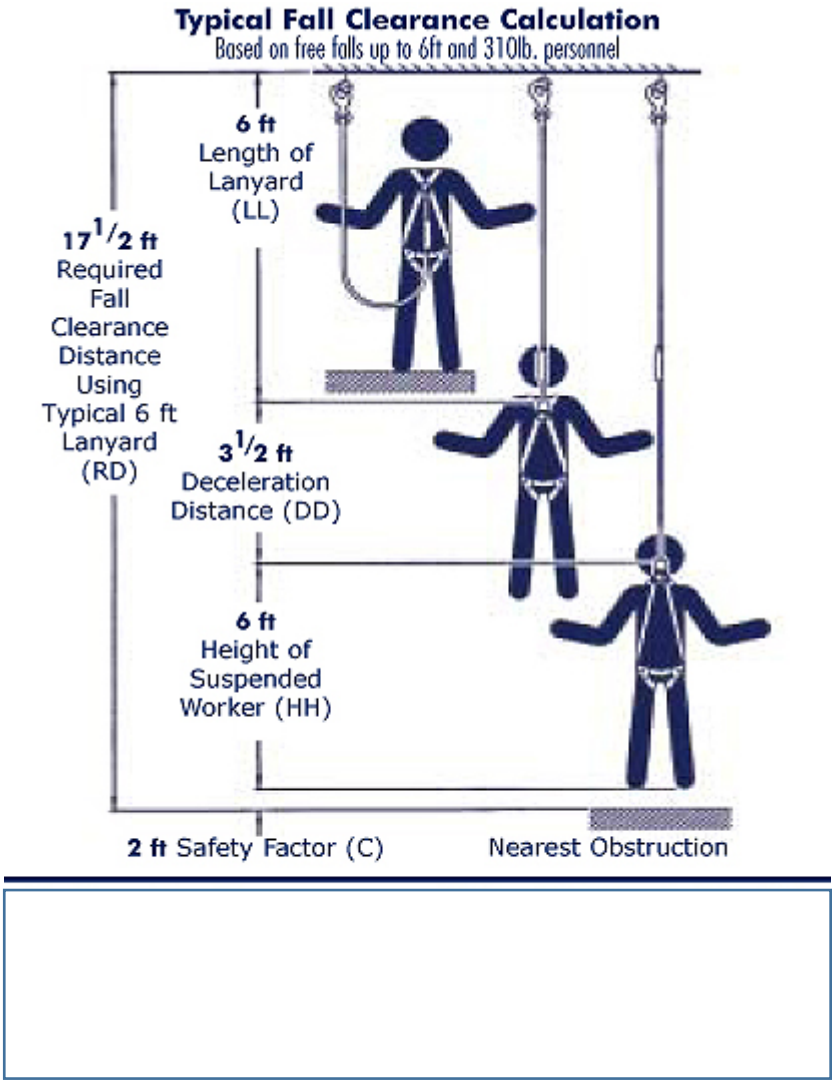
5.1 Supervisor will ensure Icenhower employees who will perform elevated work have been trained on this protocol before assigning them applicable activities

Training Level	Participants	Content
General Awareness	All employees around elevated positions	Hazard Identification
Authorized	Employees accessing elevated positions	Hazard identification. Selection of anchorage points. Equipment selection PPE inspection / Storage.
Competent	Employees who oversee the installation of fall protection systems and approve key fall protection elements	Installation of fall protection systems (e.g., horizontal lifelines, etc.). Design of controlled access zones. Approving anchorage points. Selection of anchorage points. Hazard Identification. Equipment selection. PPE inspection / storage.
Scaffold Competent Person Training	Employees who will erect, disassemble, move, operate, repair, maintain or inspect scaffolding	Hazard identification for specific scaffold type being used. Correct procedures for erecting, disassembling, moving, operating, repairing, inspecting and maintaining the scaffold being used. Design criteria, maximum intended use of scaffold being used. Proper equipment selection when the scaffold is being used with restrictions.
Scaffold User Training	Employees who use Scaffolds	Hazard identification for specific scaffold type being used. Proper equipment selection when the scaffold is being used with restrictions. Proper use of scaffold. Proper handling of materials on the scaffold. Maximum intended load. Load-carrying capacities of the scaffold used.

6.0 REFERENCES

6.1 ANSI Standard A10.8 – 2011 Scaffolding Safety Requirements
6.2 ANSI A10.32 Construction Fall Protection
6.3 ANSI Z359 Fall Protection
6.4 OSHA 29 CFR 1910.23, Walking Working Surfaces
6.5 OSHA 29 CFR 1962.1053 Fixed Ladders
6.6 OSHA 29 CFR 1910.28, Scaffolding
6.7 OSHA 29 CFR 1910.461, Scaffolding
6.8 OSHA 29 CFR 1926.453 Aerial Lifts
6.9 OSHA 29 CFR 1925.454 Scaffolding Training Requirements
6.10 OSHA 29 CFR 1926.501, Construction Fall Protection
6.11 OSHA 29 CFR 1926.502, Construction Fall Protection
6.12 OSHA 29 CFR 1926.1053, Stairways and Ladders
6.13 OSHA 29 1910.27, Fixed Ladders

APPENDIX A



A worker is six (6) feet tall using a (6 ft.) lanyard. The combined weight of the worker, clothing and tool belt is 310 lbs.

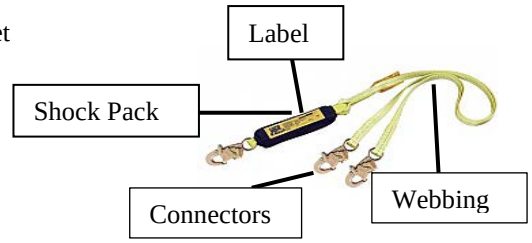
A. Length of Lanyard – 6ft.
B. Shock absorbent pulling apart – 3.6 ft. ANSI compliant shock absorber
C. Harness stretch plus D-ring sliding – 1ft. for normal harness and 2.5 ft. for stretch webbing harness
D. Height of worker – 6ft.
E. Safety Factor – clearance below feet of 2 – 3ft.
F. A+B+C+D+E Minimum clearance distance varies between 18.6ft. and 21.1ft. depending on the components used in the system

APPENDIX B

Non-Engineered Anchorage Point Examples

Acceptable Tie-Off Points	Unacceptable Tie-Off Points
• I-beams • Horizontal support beams (structural supports) • Equipment lifting eyes • Scaffolding under specific situations • Other substantial anchors that are capable of supporting more than 5,000 pounds per individual attached	• Electrical conduit • Fire sprinkler piping • Heating / Cooling (HVAC) duct • Handrails / guardrails • Electrical cable trays • Rebar • Light fixtures • Ladder • Lifting eyes on mobile equipment (e.g., back hoe, forklift, etc.)

Lanyard Inspection Sheet



Location: _____ Date: _____

Auditor: _____ Date Manufactured: _____

Manufacturer: _____ Serial No.: _____

____ Pass _____ Fail

All fall protection equipment shall be inspected before each use in accordance with the manufacturer's instructions.

The following is general guidance for the inspection of this equipment.

Lanyard Inspection

Shock Pack PASS FAIL

Shock-absorbing lanyards should be examined as web lanyard. However, also look for signs of deployment. If the lanyard shows signs of having been put under load (e.g., torn out stitching), remove it from service and destroy.

Webbing PASS FAIL

Inspect the entire surface of webbing for damage. Beginning at one end, bend the webbing in an inverted "U." Holding the boy side of the belt toward you, grasp the belt with your hands six to eight inches apart. This surface tension makes the damaged fibers or cuts easier to see. Watch for frayed edges, broken fibers, pulled stitches, cuts, burns and chemical damage.

"D" Rings/Back Pads PASS FAIL

Check "D" rings for distortion, cracks, breaks and rough or sharp edges. The "D" ring should pivot freely. "D" ring back pads should also be inspected for damage.

Labels and Markings PASS FAIL

Ensure that the labels are present and legible and have the date of first used.

_____ _____

Signature Date

Harness Inspection Sheet

Location: _____ Date: _____

Auditor: _____ Date Manufactured: _____

Manufacturer: _____ Serial No.: _____

____ Pass _____ Fail

All fall protection equipment shall be inspected before each use in accordance with the manufacturer's instructions.

The following is general guidance for the inspection of this equipment.

Harness Inspection:

Webbing PASS FAIL

Inspect the entire surface of webbing for damage. Beginning at one end, bend the webbing in an inverted "U." Holding the boy side of the belt toward you, grasp the belt with your hands six to eight inches apart. This surface tension makes the damaged fibers or cuts easier to see. Watch for frayed edges, broken fibers, pulled stitches, cuts, burns and chemical damage.

"D" Rings/Back Pads PASS FAIL

Check "D" rings for distortion, cracks, breaks and rough or sharp edges. The "D" ring should pivot freely. "D" ring back pads should also be inspected for damage.

Attachment of Buckles PASS FAIL

Note any unusual wear, frayed or cut fiber, or distortion of the buckles.

Tongue / Grommet PASS FAIL

The tongue receives heavy wear form repeated buckling and unbuckling. Inspect for loose, distorted or broken grommets. The webbing should not have any additional punched holes.

Tongue Buckle PASS FAIL

Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. The roller should turn freely on the frame. Check for distortion or sharp edges.

Friction and Mating Buckles PASS FAIL

Inspect the buckle for distortion. The outer bars and center bars must be straight. Pay special attention to corners and attachment points of the center bar.

_____ _____

Signature Date

FATIGUE MANAGEMENT PROGRAM POLICY

PURPOSE
The intent of this document is to address limiting work hours and controlling job rotation schedules, also known as staff/work balance, shall be implemented to help control worker fatigue.

SCOPE
This document is limited to the Fatigue Management Program Policy

POLICY

1. All employees with Hunt Energy Services will review this program with employees at the new employee orientation and annual training with updates on fatigue and controlling fatigue while at work.

2. Where possible we shall use ergonomic friendly equipment to reduce/release and control worker fatigue.

3. All work tasks shall be reviewed by employees/supervisors to reduce fatigue. All managers should address an analysis of work tasks to control possible fatigue.

4. HUNT ENERGY SERVICES employees shall take rest breaks to control fatigue and increase mental fitness.

5. HUNT ENERGY SERVICES through this program requires any employee with their roles and responsibilities to report tiredness/fatigue to his/her supervisor. Supervisors must take appropriate action to assist the worker to limit work hours, controlling job rotation schedules to help reduce fatigue.

6. HUNT ENERGY SERVICES employees must not chronically use over the counter, prescription drugs, or any other product which may affect an employee's ability to perform their work safely.

First Aid /Cardiopulmonary Resuscitation (CPR) Procedures

Definition of First Aid: Immediate care given to a victim of an accident or sudden illness until a higher level of medical skill and care can be provided.

Special Note: If you are in a situation that requires medical services of any kind, you are required to notify the Emergency Medical System (EMS) by calling 911. Each jobsite will have at least one employee who has a current certification in First Aid and CPR such as American Red Cross or equivalent. It is the responsibility of crew pushers and supervisors to render first aid, and it is the policy of Hunt Energy Services to provide all employees with training in First Aid on a three- year rotation and CPR annually. A valid certificate in first-aid training must be obtained from the U.S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence.

Prior to commencement of a project, determine the availability of the Emergency Medical System (911). In areas where the 911 system is not available, an emergency contact document will be given to each person on the job site. This document will include the numbers of the physicians, hospitals or ambulances in the area. In the event that an ambulance is not warranted or available, a supervisor that is fluent in the language of the injured employee is responsible for transporting the injured employee to an emergency facility.

Always remember to ensure the scene is safe for you to enter before you attempt to administer any type of rescue. If you are going to enter a hazardous atmosphere, ensure you are wearing appropriate breathing equipment for the environment. If there are electrical hazards of any kind, ensure that the electric current is turned off before you attempt a rescue.

Specimens of blood or other potentially infectious materials must be double-bagged in the leak- proof, red biohazard bags and disposed of properly. These bags are found in the first aid kit provided by the company.

The following are guidelines to use in the field for common situations.

Victim has Stopped Breathing—Situation: Critical

Two types of breathing emergency scenarios include:

1. Not breathing with a pulse: Requires rescue breathing

2. Not breathing without a pulse: Requires Cardiopulmonary Resuscitation (CPR)

Not breathing with a pulse. It is essential to check for a pulse when you assess any victim. You can check for a pulse at the carotid artery on the victim's neck. This can be located by placing your first two fingers on the Adam's apple region of the neck and sliding your fingers towards yourself until you reach about midway or just shy of ¼ around the neck. Be sure to use your fingers and not your thumb.

If the victim has a pulse then the rescuer must sustain life by providing rescue breaths.

- Ensure the victim is out of harm's way.
- Perform a head tilt-chin lift to open the victim's airway.
- Administer 1 rescue breath every 5 seconds (about 12 per minute).
- Ensure your breaths enter the victim's lungs by watching the chest rise and by feeling your own lungs exhaling.
- Continue for 1 minute before rechecking for the pulse.
- You will continue until another first responder relieves you, if EMS arrives, or you become too physically exhausted to continue.
- Trained personnel will accomplish the administration of Grade D breathing air.

Common situations that can cause the victim to stop breathing but continue to have a pulse might include but are limited to; inhalation of gas vapors, oxygen deficient environment, smoke inhalation, drowning or electric shock.

Always check for a pulse; never make an assumption!

Not breathing without a pulse. This is an indication that the victim is not only not breathing (taking in oxygen), but the victim's heart is not pumping the already oxygen depleted blood throughout the body. This is a critical time. You, as the first responder, must sustain life by introducing oxygen through artificial resuscitation, while helping distribute the oxygen manually (chest compressions). This is Cardiopulmonary Resuscitation.

Cardiopulmonary Resuscitation (CPR)

CPR is to be administered by First Aid/CPR certified individuals. If you are not trained and certified in First Aid/CPR and are confronted with this situation, always assist to the best of your ability: summon help, confront the victim, and attempt CPR, etc.

If the victim needs CPR, then remember the following:

- Ensure the victim is out of harm's way
- Perform a head tilt/chin lift to open the victim's airway
- Give two steady breaths that last approximately 1-3 seconds
- You will need to check for a pulse at this time on the victim's carotid artery. If no pulse found then proceed to next step. If you do find a pulse, continue with rescue breathing as is covered in above section.
- Give 15 chest compressions approximately 1"-1 ½" deep

  NOTE: You can find proper hand placement by tracing the victim's rib cage up until you find the sternum. Place your fingers on the sternum, then place your opposite palm just above your fingers that are on the sternum. Then place the hand you used to find the sternum on top of the hand resting on the victim's chest. This will give you the proper hand placement to begin chest compressions
- Administer two breaths into the victim. This is the 15:2 ratio of CPR.
- This ratio will be completed 4 complete times before you recheck for a pulse.

When to stop CPR:

1. When another person trained in CPR relieves you,
2. When paramedics or EMT personnel arrive,
3. When the situation endangers your safety and health, or
4. When you become too exhausted to proceed.

Things to remember:

- Always use Universal Precautions: assume every other person's blood or body fluids are contaminated and protect yourself accordingly.
- Always wash your hands before and after giving first aid. If there are no hand washing facilities available, hand sanitizer found in the first aid kit must be used.
- Use latex or similar type gloves when treating someone
- Wear goggles if possible, to protect against splash hazard
- Be prepared to break ribs during CPR
- And breathing barriers are an excellent way to prevent contamination during CPR

Heart Attack

- Immediate notification of the EMS system is essential. Call 911.
- Treat for shock (see below)
- Try to keep the victim calm and make them as comfortable as possible.
- Monitor the ABC's— Airway B r e a t h i n g Circulation: If the victim is talking to you, you know that he/she is breathing. If they become unconscious, do a head tilt/chin lift to maintain an open airway. Check for breathing and monitor the pulse. If the victim needs CPR you will be prepared.

Severe Bleeding

- Apply direct pressure to the wound with a dry, clean, sterile pad or gauze.
- If possible, have the victim apply the bandage. This helps control shock by giving the victim something to focus on, and it helps to keep the rescuer away from the victim's blood
- Keep the wound elevated above the heart if possible
- If bleeding will not stop, then apply pressure at the applicable pressure points. For injuries of the arm, find the brachial artery located along the upper arm bone on the inside if the bicep. For injuries of the leg, find the femoral artery located next to the pubic region where the leg and pelvis come together.

Have victim seek medical attention after first aid attempts were successful. If you cannot get blood to stop, then you may need to call 911.

Fractures or Breaks

Common signs and symptoms include severe pain, muscle spasms, weakness or numbness below the suspected area, and the victim guarding the suspected area.

- If you cannot get victim out safely, call 911
- Splint the injured limb above and below the nearest joint. This prevents the parts from moving
- Never move a suspected broken limb. Splint in place.
- Monitor the ABC's and treat for shock if the victim begins to show signs

Chemical Exposure

Treatment for chemical exposure will be based on SDS recommendations. SDS books will be readily available at each jobsite for reference. Eye wash equipment

should be capable of providing a 15-minute supply of cleansing solution, to be used for flushing chemicals from the eyes or off of the body. A safety shower shall be available in the work area for flushing of skin in the event of an exposure to a chemical Drinking water may also be used. The person taking the employee to emergency services will bring along a copy of the SDS sheet.

Shock

Shock happens when a victim's entire system begins to shut down.
Symptoms of shock include cold and clammy skin, pale complexion, shallow breathing, and rapid pulse. Many things can cause shock such as a severe injury, witnessing a trauma, infection, pain, heart attack, stroke and or heat exhaustion.

- Notify EMS (Call 911)
- Have victim lie down
- Elevate feet 8 – 12 inches if no spinal trauma suspected
- If possible, have the victim's head slightly lower than the his/her heart
- Keep the victim comfortable
- Monitor ABC's until help arrives

Heat Exhaustion

Following heat cramps, heat exhaustion is the warning sign of a potential heat-related emergency. You must take care of yourself and your co-workers at this critical time.
The signs and symptoms of heat exhaustion include, pale complexion, clammy skin, headache, nausea, weakness, high body temperature and excessive sweating.

- Treat for shock.
- Get victim out of heat and into a shaded cool place.
- Have victim lie down with head below heart level.
- If conscious, give victim something to drink.
- Monitor the ABC's and seek medical attention.

Heat Stroke

Heat stroke is a medical emergency that is life threatening. If medical attention is not administered, the victim can face coma and/or death. Signs of heat stroke include but are not limited to; flushed and /or hot skin, sweating stops or slows noticeably, Strong

rapid heart rate (pulse), body temperature significantly above normal (normal is 98.6^{O}F), headache, nausea, dizziness and finally unconsciousness.

The victim needs immediate attention.

- Call EMS (911)
- Get victim out of heat, into shade, a building, or whatever provides a cover from the heat
- Rapidly cool the victim by applying cool water to the victim's entire body. If only dirty puddle water is available, then use it.
- Monitor the ABC's and assist the victim with whatever he/she needs until help arrives.

Burns

First and foremost, you must remove the victim from the source of the burn (example: If electrical, turn off power).

- Treat for shock
- Protect the burned area with sterile dressings or gauze
- Control the pain
    a. Place burned appendage in cool running water such as a sink and faucet
    b. Give Ibuprofen (an anti-inflammatory)
    c. Give acetaminophen (a pain reliever)
    d. Ask victim if they are allergic before assisting in administering any medicine.
    e. Neither will counteract with each other.

Things to remember:

If it is a chemical burn you are dealing with, remember to read the SDS before flushing the eyes. If you do not read the SDS you can make matters worse by mixing water with a chemical that reacts to water.

If you are going to flush your eyes and skin, brush powered chemicals away first, and remove unnecessary clothing. Flush for 15 minutes at a minimum.

Use only clean, clear water for flushing. Contact a physician for any chemical burn.

Insect/Animal Bites

Any sting or bite from an insect with venom, i.e., wasps, bees, spiders, fire ant, etc, should be reported to your supervisor immediately. Some people can react quite

severely to insect stings and bites. This is called anaphylaxis. Insect or medications, certain foods, or even pollen can cause this type of reaction. Anaphylaxis will usually occur within minutes of the exposure and can peak around 15 to 30 minutes, usually ending after a few hours. Signs and symptoms of anaphylaxis include sneezing, coughing, wheezing, difficulty breathing, swelling in the throat, tightness in the chest, rapid heart rate, swelling of the tongue, nose and mouth, blueness around lips and mouth, dizziness, nausea and vomiting.

What do you do?

- Monitor the ABC's
- Get medical attention immediately
- Help administer medication (epinephrine, Dr. prescribed) if they have it.

Bees and Wasps:

- If bee sting, remove the bee stinger that is carrying the venom by scraping the stinger with an ID card (Driver's License) to allow the barbed end to "pop" free of your skin.
- Wash the sting site with soap and water to stay off infection
- Apply ice pack to site to slow absorption and relieve. A paste of water and baking soda will help draw out the venom.
- Ibuprofen will help reduce swelling and acetaminophen will help relieve pain, and hydrocortisone will help with itching.
- Monitor victim for at least 30 minutes for any signs of reaction. If you notice reaction, then seek medical attention.

All Spiders:

Most all spiders carry some form of venom, however, only a few are highly poisonous. The Brown Recluse and the Black Widow are the biggest spider concerns that we will have in our region. However we must take care for all spider bites.

What to do if bitten?

- Try and capture the spider if at all possible, even if has been crushed by the victim, so that it can be taken to the hospital
- Clean the bite site with soap and water or rubbing alcohol
- Apply ice to slow venom and relieve swelling

- Give ibuprofen and acetaminophen for swelling and pain
- Monitor the ABC's
- Seek medical attention immediately.

NOTE: Anti-venom exists for Black Widows; however, it is usually reserved for children under six and adults over 60, pregnant women and those victims having a severe reaction to the venom.

Snakes

There are four types of poisonous snakes in our area of operation with which we must concern ourselves: Water Moccasin (Cottonmouth), Rattlesnake, Copperhead, and Coral Snake.

Signs and symptoms of snakebite:

- Severe burning at the bite site
- Two small puncture wounds that about ½" apart
- Swelling at the site (usually within 5 minutes)
- Discoloration and blisters filled with blood developing 6+ hours later
- In some cases, nausea, vomiting, weakness

Pit Viper Bites:

- Get victim away from snake. They can strike repeatedly, and they can strike up to half the distance of their bodies. Even a decapitated snake can have movement and release venom for up to 20 minutes after decapitation.
- Calm the victim and either carry them or have them walk with you slowly to help.
- Wash the bite site gently with soap and water.
- If you have a venom extractor and you are more than one hour away from medical facilities, you should use it now. A venom extractor is a device used to pull the venom out of a victim. Do not cut and suck the bite site.
- Anti-venom (if available) is the same used for all three pit vipers in North America. So get to the hospital as soon as possible.

Coral Snake Bites:

- Calm the victim
- Wash the bite site gently with soap and water.
- Apply mild pressure by wrapping the bite site and entire appendage (arm or

leg) that was bitten in several elastic bandages. This is only done for coral snake bite, not pit viper bites.

- Seek medical attention immediately for anti-venom (if available)

NOTE: It is important to remember that coral snakes are not aggressive and do not strike their victims; they have to "chew" to release their venom.

Mammal Bites

Dog, raccoons, bat, fox, and skunk bites are the most common. If a skunk, raccoon, bat or fox bites you in North America, you must consider beginning rabies treatment immediately.

- If bitten in the U.S. by a healthy and domestic dog or cat, the animal must be observed for at least 10 days for any sign of illness
- If the animal is a stray, it should be reported to animal control immediately for capture and testing.
- Clean the wound with soap and water and rinse it with mild pressure
- Stop any bleeding and care for the wound
- Get medical attention for better cleaning and possibly a tetanus shot. The Doctor will assess the need for stitches and/or rabies treatment.

Personal Protective Equipment Recommendations

If there comes a time when you may be required to render first aid to another person, the following PPE recommendations should be adhered to:

Act	Gloves	Mask	Eye Protection	Mouth Barrier
Rescue Breathing	Yes	Not Needed	Ye	Not Needed
CPR	Yes	Not Needed	Ye	Yes
Excessive Bleeding	Yes	Yes	Ye	Not Needed
Slight Bleeding	Yes	Not Needed	Ye	Not Needed
Cleaning Potentially Contaminated Equipment and Surfaces	Yes	Not Needed	Ye s	Not Needed
Taking Temperature	Yes	Not Needed	Not Needed	Not Needed

PPE will be provided by Hunt Energy Services.

Employers should ensure the availability of adequate first-aid supplies, and periodically reassess the demand for supplies and adjust their inventories. These items will be kept in a weather-proof container and all items will be sealed individually.

Purpose

The purpose of this program is to:

- Make all affected company workers aware of the potential hazards of lifting 10” flanges and above;
- Ensure that all affected company workers are provided with the knowledge they need to protect themselves from the potential hazards associated; and
- Establish safe work practices and procedures for all affected company workers.

Lifting Requirement – 10” Flanges and Above

1. The flange should be placed at a 45 degree angle by using pry bar and a fulcrum (skid)
2. Install bolt in 12 o’clock position and tighten down
3. Put sling around each end of the bolt
4. Tie off sling on top of bolt to ensure the sling does not release from the bolt
5. Install tag line to sling
6. Notify personnel of lift
7. Hook sling to tractor to release the slack
8. Ensure the tie and sling are still properly connected prior to lifting
9. Proceed with lift and install flange

GAS HAZARD AWARENESS PROGRAM

PURPOSE

The intent of this program is to provide employees with hazardous gas awareness training

SCOPE

This program applies to all employees with potential exposure to hazardous gas.

REGULATORY REFERENCE

This Hazardous Gas Awareness Program is primarily intended to satisfy the following regulatory requirements:

- 29 CFR 1910.119

1.0 POLICY

1.1 Portable gas detectors must be used in all high gas areas

1.2 Gas monitors must be calibrated per manufacturer recommendations and have a current calibration sticker

1.3 Daily bump tests must be performed to ensure the monitor and alarms are working correctly

1.4 All employees will be aware of the provisions of site specific contingency/emergency plans and participate in drills

2.0 RESPONSIBILITIES

2.1 **Management** – Icenhower management is responsible for the following:

2.1.1 Ensure that the HSE Management System includes a Hazardous Gas Awareness policy and that the policy is reviewed and revised as necessary

2.1.2 Provide Hazardous Gas Awareness Training for all employees

2.1.3 Provide leadership and support for employees in communicating their responsibility to stop the work when hazardous gases are discovered or suspected

2.1.4 Provide resources to address and correct any Hazardous Gas related events/concerns that arise

2.2 **Supervision** – Icenhower Supervision is responsible for the following:

2.2.1 Understand and enforce the Hazardous Gas Policy

2.2.2 Implement site controls isolating employees from hazards when hazardous gas is discovered or suspected on a jobsite
2.2.3 Immediately inform management of any Hazardous Gas exposures on a jobsite
2.2.4 Provide immediate on-the-spot training for all employees on the jobsite regarding Icenhower Hazardous Gas Policy and guidelines enabling employees to protect themselves and others from unnecessary exposure
2.2.5 Contact a competent individual when Hazardous Gas is discovered or suspected on a jobsite

2.3 **Employees** – Icenhower Employees are responsible for the following:
2.3.1 Upon discovery or suspicion of Hazardous Gas being present on a jobsite, employees are to stop the work immediately, evacuate the area and inform their supervisor.
2.3.2 Protect themselves and others from unnecessary exposure
2.3.3 Conduct operations in accordance with Icenhower provided Hazardous Gas Awareness Training
2.3.4 Immediately report to a supervisor any changes, deficiency or breaches in site controls established to isolate employees from hazardous gases on a jobsite.
2.3.5 Participate in JSA and hazard recognition activities. Make every effort to identify potential gas hazards during daily JSA's
2.3.6 Follow all written Hazardous Gas Safe Work, Confined Space Entry and Permit to Work procedures.
2.3.7 Respect all controlled access areas and hazard signs and postings

3.0 TRAINING

3.1 Icenhower will provide Hazardous Gas Awareness training for all employees assigned to at-risk locations before initial assignment and annually thereafter
3.2 **Training Content** – Training will cover the following topics:
3.2.1 Hazardous gas characteristics
3.2.2 Health effects of hazardous gas
3.2.3 PPE required to prevent exposure to hazardous gas

4.0 REPORTING AND RECORDKEEPING

4.1 **Training** – All training shall be documented and recorded in the Icenhower Employee training log
4.2 **Reports** – All hazardous gas related events shall be reported
4.3 **Incident Report** – All hazardous gas exposure shall be recorded as incidents on an HUNT ENERGY SERVICES Incident Report Form.

4.4 **Near Miss Reports** – Failures in containment, control methods, isolations, etc., not resulting in employee exposure, but would have resulted in employee exposure in an employee had been in the immediate area shall be recorded as near miss events on an HUNT ENERGY SERVICES Incident Report Form.

4.5 **Control & Retention** – Records associated with this program shall be handled in the following manner. Hazardous gas incidents shall be handled per the HUNT ENERGY SERVICES Incident Report Form. Records shall be retained for a minimum of the employee's duration of employment plus 30 years.

General Safety & Health Provision Rules

Note: Many of the topics addressed briefly in this section are discussed in more depth within the manual. These rules apply to all Hunt Energy Services employees, including managers, supervisors, visitors, subcontractors, and client personnel.

1. Each employee is required to adhere to the safety rules listed in this manual in order to fulfill their responsibility to the safety program. This means that no one is to work in an unsafe situation or condition, and if an unsafe situation or condition exists, then this must be reported and corrected immediately. If this includes shutting the job down, then shutting the job down is permissible.

2. All work-related injuries or illnesses must be reported immediately. This includes first aid (minor injury) incidents. "Immediately" is defined as within 15 minutes of the incident.

3. Any vehicle - and/or equipment - related incident must be reported immediately.

4. Any injury that occurred off the job and could result in lost work time must be reported to a supervisor as soon as possible, and no later than two hours prior to the next work shift.

5. All near-misses must be reported to the supervisor immediately; near-misses will be documented on a Near Miss report. Near-misses will be discussed with all employees during the next safety meeting.

6. Attempts shall always be made to eliminate possibilities of environmental damage. Releases and spills shall be reported immediately and remediate according to the MSDS recommendations. All wastes shall be disposed of properly in approved waste disposal sites/reclamation centers.

7. Hunt Energy Services employees will follow all client rules and policy recommendations. When there is an absence of these rules, Hunt Energy Services will set the high safety standard and inform management of this lack of safety initiatives.

8. Horseplay or fighting is not permitted at any location.

9. All persons operating vehicles for Hunt Energy Services in any capacity will wear seat belts.

10. Never run on the job unless there is an emergency.

11. Equipment, materials, and work areas shall be maintained in such a fashion as to minimize hazards. In other words, maintain clean work areas and equipment.

12. Avoid skin contact with all chemicals, beware of other means of bodily entry, and take the proper precautions as recommended in the MSDS for each chemical.

13. The proper personal protective equipment shall be worn at all times. Hunt Energy Services requires the use of PPE.

14. The illegal use, possession, transportation, or sale of drugs, alcoholic beverages, firearms, deadly weapons, or explosives while on company or client property is prohibited. The use of prescribed drugs or any over-the-counter drug that might impair your ability to work safely must be reported to your supervisor before work.

15. Only qualified employees are allowed to operate equipment. The employer shall permit only qualified personnel by training or experience to operate company equipment and machinery.

16. Riding in the bed of trucks or in other non-approved areas is prohibited. “Non-approved areas” include areas that are not protected by a seatbelt.

17. Use the three-point contact procedure when getting on or off of any equipment. Do not jump off equipment unless following emergency evacuation procedures involved with power line strikes.

18. Do not walk on pipe or any other non-approved walking/working surface.

19. Smoking is allowed only in designated areas. Smokers are not allowed to take smoking materials into non-designated areas.

20. Whenever a safety device is removed from service and/or defeated, the appropriate supervisor shall be notified, the device tagged, and the action properly documented. If equipment is still operating, restrict entry and monitor continuously. Document all actions.

21. No work may be started in any area or on any equipment without the knowledge and consent of the appropriate supervisor/client representative. Never operate equipment that you are not trained, certified and authorized to operate.

22. Job Safety Analyses are to be conducted before each day's tasks begin or as major work scope changes. All persons affected by the work will attend the JSA meetings. If workers show up after the meeting has been conducted, then he must be briefed as to the JSA findings and the Supervisor is responsible for this safety briefing.

23. Frequent inspections or analysis' of the work environment involves a variety of work site examinations by competent persons in order to identify existing hazards and conditions and operations in which changes might occur to create new hazards.

24. Operation of equipment having a, "DANGER! DO NOT OPERATE." tag is prohibited.

25. All energy will be controlled through appropriate Lockout/Tagout procedures.

26. Do not attempt to do a job alone that takes at least two people to do correctly. The Supervisor will periodically check on persons working alone. All persons working in remote areas must have a form of communication to summon emergency services if needed.

27. Finger rings, loose clothing, unsecured long hair, wristwatches, and other loose accessories should not be worn when within arm's reach of any unguarded operating machinery or electrical equipment

28. Use only proper tools and equipment maintained in good working condition.

29. Gasoline must not be used for any purpose other than motor fuel. No employee will siphon gas by mouth, pour into the fuel tank of an engine that is running, or use as a cleaning solvent. Gasoline will be transported in approved, metal containers.

30. Use proper lifting techniques when lifting or carrying objects. Use legs to lift, keep load close to body, keep feet shoulder-width apart, and ask for assistance to lift heavy objects are a few reminders in proper lifting.

31. Erect barricades around hazardous work areas such as holes in decking, trenches, overhead hazardous work, open unattended vessels, or hazardous storage.

32. Fall protection shall be worn when working at heights greater than 4 feet.

33. Pay close attention to slip, trip and fall hazards and eliminate those hazards immediately.

34. If a normal procedure must be changed to accommodate the work situation, contact client and Hunt Energy Services management before this change is made.

35. All work areas will be equipped with properly working fire extinguishers.

36. Visitors must follow all applicable safety rules as well as be authorized to be in any area.

37. Do not introduce any flame, spark, or sufficient heat (to include non-intrinsically safe equipment) into areas that have a potential for flammable materials/atmospheres. Follow Hot Work Procedures.

38. Follow Defensive Driving techniques when operating motor vehicles. Follow all applicable local, state and federal transportation laws.

39. Do not enter confined spaces unless proper procedures have been followed and proper confined space training has been provided and documented.

40. All jobsites will have first aid and eye wash equipment readily available and these supplies shall be in good condition.

41. Communication in all aspects is highly important. If you do not understand any directive or procedure, say so. Relay all occurrences that have an effect on safety to supervisors whether you think the occurrence is important or not. Always adhere to the highest safety standards.

Purpose

The purpose of this program is to:

- Make all affected company workers aware of the potential hazards of ground disturbance / one call procedures;
- Ensure that all affected company workers are provided with the knowledge they need to protect themselves from the potential hazards associated ground disturbance; and
- Establish safe work practices and procedures for all affected company workers.

Ground Disturbance/One Call Procedures

1. Make the call, requesting the locate
   * Texas one call 811 or the state that the work is being performed in.
   * Consider other utilities that may be present.

2. Develop a work Plan.
   * Identify proposed work area (Take pictures if possible, Coordinates of site).
   * Identify any equipment, personnel, permits, or approvals required for the work.

3. Perform a hazard or risk assessment.
   * Look for signage and other signs of ground disturbance.
   * Identify hazards associated with specific underground utilities.
   * Determine level of risk associated with the hazard.
   * Determine controls and barriers to eliminate or reduce risk.
   * Develop emergency response plan.

4. Confirm locates.
   * Make available record of locate and make sure it matches the work.
   * Understand the agreements or approvals.
   * Check expiration dates of locates.
   * Make sure locates are marked with paint on the ground or stakes.

5. Perform pre-job safety meetings (tailgate).
   * Review work plan with workers
   * Complete JSA/JRA.
   * Adjust JSA/JRA, if the scope of work has changed.

6. Start Work
   * If there is any change to the work plan, call again.
   * Expose any existing utilities as required.
   * Make arrangements for any required site supervision.
   * Install steel flat bar on excavator/backhoe bucket teeth to ensure no damage to existing utilities.
   * Use line locator prior to excavation

7. Completion-site left as required.
   * Ensure all documentation has been completed
   * Clean area, remove stakes, etc.

PURPOSE

To establish methods, guidelines and responsibilities to protect Hunt Energy Services employees from electrical exposure while on construction site.

SCOPE

This program applies to all employees and subcontractors working within Company controlled job sites. This assured equipment grounding conductor program covers all cord sets, receptacles which are not a part of the building or structure, and equipment connected by cord and plug which are available for use or used by employees on work sites.

1. INTRODUCTION

1.1. All 120-volt, single-phase 15- and 20-ampere receptacle outlets on construction sites, which are not a part of the permanent wiring of the building or structure and which are in use by employees, shall have approved ground-fault circuit interrupters for personnel protection. Receptacles on a two-wire, single-phase portable or vehicle-mounted generator rated not more than 5kV, where the circuit conductors of the generator are insulated from the generator frame and all other grounded surfaces, need not be protected with ground-fault circuit interrupters.

2. GENERAL REQUIREMENTS

2.1. Employees who are exposed to electrical hazards at a work location shall use either ground fault circuit interrupters or assured equipment grounding conductor program to protect them from these hazards. These requirements are in addition to any other specific requirements for equipment grounding conductors.

2.2. The company has established and implemented an assured grounding conductor program at all work locations covering all cord sets, receptacles that are not part of the building or structure and equipment connected by cord and plug that are available for use, or are in use by employees.

2.3. A written description of the program including the specific procedures adopted by the company shall be available at each work location for inspection.

2.4. The company shall designate one or more competent persons to implement the program at each Icenhower job site. "Competent person" means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees,

and who has authorization to take prompt corrective measures to eliminate them. At most work locations the competent person will be the Site Supervisor.

2.5. Each cord set, attachment cap, plug and receptacle of cord sets, and any equipment connected by cord and plug, except cord sets and receptacles which are fixed and not exposed to damage, shall be visually inspected before each day's use for external defects, such as deformed or missing pins or insulation damage, and for indications of possible internal damage. Equipment found damaged or defective shall not be used until repaired.

2.6. Damaged items shall be tagged "DO NOT USE", removed from service until repaired and tested.

2.7. The following tests shall be performed on all cord sets, receptacles which are not a part of the permanent wiring of the building or structure, and cord- and plug-connected equipment required to be grounded:

2.8. All equipment grounding conductors shall be tested for continuity and shall be electrically continuous.

2.9. Each receptacle and attachment cap or plug shall be tested for correct attachment of the equipment grounding conductor. The equipment grounding conductor shall be connected to its proper terminal.

2.10. The company shall not make available or permit the use by employees of any equipment which has not met the requirements of this program.

2.11. Tests performed as required in this program shall be recorded. This test record shall identify each receptacle, cord set, and cord- and plug-connected equipment that passed the test and shall indicate the last date it was tested or the interval for which it was tested. This record shall be kept by means of logs, color coding, or other effective means and shall be maintained until replaced by a more current record. The record shall be made available on the work location for inspection by the Assistant Secretary and any affected employee. A copy of this program is kept on each work location with the Site Supervisor.

2.12. The Site Supervisor is responsible for implementing and monitoring the GFCI and assured grounding program.

2.13. The GFCI is not a replacement for visually checking all cords, wires, and other electrical devices for defects on a daily basis.

2.14. All 120 volt, single phase, 15 and 20 ampere receptacles shall be of the grounding type and their contacts shall be grounded by connection to the equipment grounding conductor of the circuit supplying the receptacles in accordance with applicable requirements of the National Electrical Code.

2.15. All 120 volt cord sets (extension cords) shall have an equipment grounding conductor which shall be connected to the grounding contacts of the connectors on each end of the cord.

2.16. Extension cord sets used with portable electric tools and appliances shall be of the three-wire type and shall be designed for heavy or extra heavy-duty usage. Flexible cords used with temporary and portable lights shall be designed for heavy or extra heavy-duty usage.

2.17. The exposed noncurrent-carrying metal parts of 120 volt cord and plug connected tools or equipment that are likely to become energized shall be grounded in accordance with the applicable requirements of the National Electrical Code.

2.18. Employees shall visually inspect receptacles, flexible cord sets (extension cords), electrical equipment and electrical tools before each day's use for external defects such as:

2.18.1. Deformed or missing pins;
2.18.2. Insulation damage;
2.18.3. Indication of possible internal damage.
2.18.4. Where there is evidence of damage the item shall be taken out of service until tests or any required repairs have been made.

3. TESTING

3.1. All 120-volt, single-phase 15- and 20-ampere receptacle outlets on construction sites, which are not a part of the permanent wiring of the building or structure, 120 volt flexible cord sets and 120 volt cord and plug connected equipment which are in use by employees, shall be tested.

3.2. A qualified person will be designated by the Site Supervisor to be responsible for testing, tagging and documentation of testing of all equipment-grounding conductors.

3.3. All equipment-grounding conductors will be tested for continuity and they shall be electrically continuous. A continuity inspection device will be used or a voltmeter that is specifically designed to test for continuity.

3.4. Each receptacle and attachment cap or plug shall be tested for correct attachment of the equipment-grounding conductor. The equipment-grounding conductor shall be connected to the proper terminal.

3.5. All required test shall be performed:

3.5.1. Before its first use;

3.5.2. Before the equipment is returned to service following any repairs;

3.5.3. Before the equipment is used after any incident that can be reasonably suspected to have caused damage (for example, when a cord is run over).

3.5.4. At intervals not exceeding 3 months, except that cord sets and receptacles, which are fixed and not exposed to damage, shall be tested at intervals not exceeding 6 months.

3.6. Test verification shall be by means of a color coded marking tape on the receptacle, cord set or equipment to identify that it has passed the test and to indicate the quarter as illustrated in the following table:

Quarter	Month	Color Code
1st	January	White
1st	February	White
1st	March	White
2nd	April	Green
2nd	May	Green
2nd	June	Green
3rd	July	Red
3rd	August	Red
3rd	September	Red
4th	October	Orange
4th	November	Orange
4th	December	Orange
	Repair Color	Brown

4. TRAINING & TESTING

4.1. Training about the program shall be provided to all affected employees prior to work assignments involving exposure to electrical hazards. Training will primarily involve a thorough review of what the standard covers (29 CFR 1926.404), company policy and work experiences relating to implementation of this program.

4.2. Personnel so trained shall be tested as a way to help confirm and document their understanding of information presented. A score of between 80% and 100% will require a review of missed questions, if any, and the score corrected to 100%. A score of below 80% will require complete retraining and testing.

4.3. The test format is included as Appendix 1 in this program.

Appendix

Ground Fault Circuit Interrupters (GFCI) and Assured Grounding Program

TEST

Employee Name (Print):_____

Employee Signature:_____ Score:_____
Instructor:_____ Date:_____

Circle the answer that is most correct:

T F 1. This policy applies to all employees and subcontractors working within Icenhower Oil and Gas, Inc. controlled job sites.

T F 2. Employees may use any equipment that has not met the requirements of this program.

T F 3. The GFCI is not a replacement for visually checking all cords, wires, and other electrical devices for defects.

T F 4. All 120 volt cord sets (extension cords) shall have an equipment grounding conductor which shall be connected to the grounding contacts of the connectors on each and of the cord.

T F 5. All 120-volt, single-phase 15- and 20-ampere receptacle outlets on construction sites, which are not a part of the permanent wiring of the building or structure, 120 volt flexible cord sets and 120 volt cord and plug connected equipment which are in use by employees, shall be tested.

T F 6. A qualified person, designated by the Site Supervisor, is responsible for testing, tagging and documentation of testing of all equipment-grounding conductors.

T F 7. Test verification shall be by means of a color-coded marking tape on the receptacle, cord set or equipment to identify that it has passed the test and to indicate the quarter it was tested.

T F 8. All test shall be performed whenever there is time for it.

T F 9. Each receptacle and attachment cap or plug shall be tested for correct attachment of the equipment-grounding conductor.

T F 10. The equipment-grounding conductor shall be connected to the proper terminal.

Ground Fault Circuit Interrupters (GFCI) and Assured Grounding Program
TEST ANSWER KEY

1. T
2. F
3. T
4. T
5. T
6. T
7. T
8. F
9. T
10. T

Proper Tool Usage

1. All tools, whether owned by Hunt Energy Services or employee, must be maintained in a safe condition and inspected regularly. Replace defective tools and tag-out damaged equipment.

2. Do not modify tools. Safety guards must NOT be removed, restrained, or bypassed.

3. Use tools for designed purposes only. Get the right tool for the job.

4. Do not remove guards and/or handles from grinders. Do not operate a grinder without proper training.

5. Be sure power tools are turned off before connecting to an energy source. De-energize equipment before servicing or changing components.

6. If there is any potential for fire or explosion, intrinsically safe tools must be used. Air operated tools should be chosen and compressed gas is never used to operate these tools.

7. With the exception of UL double-insulated tools, the frames of portable electric tools must be grounded, either through a 3-way plug or separate wire. Tools used in or near wet locations must be plugged into a ground-fault protection circuit.

8. Never use one wrench as a cheater for a second wrench. Cheaters shall not be used.

9. Never step or jump on wrenches when additional force is required. Get a larger tool.

10. An air hose is not to be used to blow particles off clothing, hair or skin.

11. Do not use tools, unless a pry bar, as a pry bar.

12. Do not throw tools.

13. Guards or shields must be in place and operable at all times while tool is being operated.

14. Electric cords to power tools must be in good condition and should not be run through door openings or across driveways.

15. Air hoses used for tools should be secured with devices to prevent accidental separation. Hoses under pressure will be secured at end connections to prevent separation or whipping.

16. Do not operate power tools unless you are properly trained.

17. Be aware of twisting/kick-out forces with certain tools. Maintain solid footing and remain alert.

18. Employees will be issued and are required to wear any PPE that is considered necessary to protect them from the potential hazards of the tool or environment (i.e. falling, flying, abrasive, or splashing objects, or harmful dust, fumes, mists, vapors or gases). Compliance is mandatory.

19. Carry tools in appropriate pouches and/or sheaths.

20. Use proper securing devices to hold material in place.

21. Do not place sharp or pointed tools in pockets.

22. Hold and carry tools by designated handles.

23. De-energize all power tools when moving or repairing.

24. Keep cutting tools sharp and lubricated.

25. Do not wear loose jewelry or clothing around rotating equipment. Tie long hair back.

26. During work operations, idle tools will be placed in secure spots where they do not become a tripping or falling hazard.

27. Tools will be secured in the rear of vehicle where they do not become a projectile during vehicle collisions.

28. Tools will not be stored in the rear of vehicles where they obstruct the drivers' vision.

29. Report damaged tools for appropriate repair. Do not use broken tools.

30. Handles will not be taped or painted.

31. Any tool which is not in compliance with any applicable requirement of this program is prohibited and must be identified as unsafe by tagging and/or locking the controls to render it inoperable. If this is not practical or feasible, the tool must be physically removed from its place of operation.

HUNT ENERGY SERVICES	Safety Policy Manual	Number: HES
		Revision: 0 Effective Date: 1/29/2020
	Hazard Communication	Approved by: General Manager Safety Director

PURPOSE

The purpose of this plan is to establish a program and procedures for the safe use of hazardous chemical substances at Hunt Energy Services LLC

The Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS) 29 CFR 1910.1200 (General Industry) and 29 CFR 1926.59 (Construction Industry) call for the development of a hazard communication program when employees may be exposed to any chemical in the workplace under normal conditions of use or in a foreseeable emergency. In

2012, OSHA revised the HCS to align with the Globally Harmonized System of Classificatior and Labeling of Chemicals (GHS). As a result, this program has been revised to comply with the requirements of the OSHA HCS 2012. The written hazard communication program will include and address the following criteria in order to satisfy the minimum requirements of the OSHA HCS 2012:

• List of all hazardous chemicals known to be present in the workplace or individual work area

• Methods used to ensure that all containers, including pipes and holding tanks, are labeled, tagged or marked properly

• Methods used to obtain and maintain safety data sheets (SDSs)

• Methods used to provide employees with information and training on hazardous chemicals in their work areas

• Methods used to inform employees of the hazards of nonroutine work practices

• Methods used to provide the employees of other employers (e.g., consultants, construction contractors and temporary employees) on-site access to SDSs for each hazardous chemical that the other employer's employees may be exposed to while working in the workplace

• Methods used to inform the employees of other employers of precautionary measures that need to be taken to protect themselves during the workplace's normal operating conditions and in foreseeable

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• emergencies

• Methods used to inform the employees of other employers of the labeling system used in the workplace

The hazard communication program will identify the following:

- Key personnel responsible for the program
- Location of chemical inventory list and SDSs
- Workplace labeling system
- Good work practices and procedures to minimize exposures
- How training will be performed
- Procedures to maintain the program and update the required information
- How records will be maintained

RESPONSIBILITIES

The Safety Coordinator is responsible for administering the hazard communication program

This person is also responsible for:

- Reviewing the potential hazards and safe use of chemicals
- Maintaining a list of all hazardous chemicals and a master file of SDSs
- Ensuring that all containers are labeled, tagged or marked properly
- Providing new-hire and annual training for employees
- Maintaining training records
- Monitoring the air concentrations of hazardous chemicals in the work environment

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• Properly selecting and caring for personal protective equipment

• Directing the cleanup and disposal operations of the spill control team

• Identifying hazardous chemicals used in nonroutine tasks and assessing their risks

• Informing outside contractors who are performing work on company property about potential hazards

• Reviewing the effectiveness of the hazard communication program and making sure that the program satisfies the requirements of all applicable federal, state or local hazard communication requirements

• Contacting chemical manufacturers and/or distributors to obtain SDSs and secondary labels for hazardous chemicals used or stored in the workplace

• Reviewing incoming hazardous chemicals to verify correct labeling

• Holding hazardous chemicals in the receiving area until receipt of the SDS for the product

Employees are responsible for the following aspects of the hazard communication program:

• Identifying hazards before starting a job

• Reading container labels and SDSs

• Notifying the supervisor of torn, damaged or illegible labels or of unlabeled containers

• Using controls and/or personal protective equipment provided by the company to minimize exposure

• Following company instructions and warnings pertaining to chemical handling and usage

• Properly caring for personal protective equipment, including proper use, routine care and cleaning, storage, and replacement

• Knowing and understanding the consequences associated with not following company policy concerning the safe handling and use of chemicals

• Participating in training

LABELS AND OTHER FORMS OF WARNING

Each container of hazardous chemicals received from the chemical manufacturer, importer or distributor will be labeled with the following information:

• Product identifier

• Signal word

• Hazard statement(s)

• Pictogram(s)

• Precautionary statement(s)

• Name, address and telephone number of the chemical manufacturer, importer or other responsible party

Hunt Energy Services LLC will use the GHS labeling system for secondary containers. When a chemical is transferred from the original container to a portable or secondary container, the container will be labeled, tagged or marked with a GHS label containing the following information:

• Product identifier

• Signal word

• Hazard statement(s)

• Pictogram(s)

• Precautionary statement(s)

Portable containers into which hazardous chemicals are transferred from labeled containers and that are intended for the immediate use of the employee who performs the transfer do not require a label. If the portable container will be used by more than one employee or used over the course of more than one shift, the container must be labeled. Food and beverage containers should never be used for chemical storage.

Signs, placards, process sheets, batch tickets, operating procedures or other such written materials may be used in lieu of affixing labels to individual, stationary process containers as long as the alternative method identifies the containers to which it is applicable and conveys the information required for workplace labeling.

Where an area may have a hazardous chemical in the atmosphere (e.g., where extensive welding occurs), the entire area will be labeled with a warning placard.

Pipes that contain hazardous chemicals should be labeled in accordance with ANSI/ASME A13.1 and indicate the direction of flow. (Please note that this not a requirement of the OSHA HCS but a best practice or requirement of local jurisdiction.)

Workplace labels or other forms of warning will be legible, in English and prominently displayed on the container or readily available in the work area throughout each work shift. If employees speak languages other than English, the information in the other language(s) may be added to the material presented as long as the information is presented in English as well.
Note: After Dec. 1, 2015, distributors may not ship containers labeled by the chemical manufacturer or importer unless the label on the container meets GHS labeling requirements.

SAFETY DATA SHEETS

An SDS will be obtained and maintained for each hazardous chemical in the workplace. SDSs for each hazardous chemical will be readily accessible during each work shift to employees when they are in their work areas.

SDSs will be obtained from the chemical manufacturer, importer or distributor. The name on the SDS will be the same as that listed on the chemical inventory list. SDSs for chemicals or process streams produced by the company will be developed and provided by the Safety Coordinator.

The Safety Coordinator will maintain the master file of all original SDSs.

SDSs for new products or updated SDSs for existing products will be obtained by the purchasing agent and forwarded to the safety coordinator. The (Safety Coordinator will then update the master file with new and/or updated SDSs.

If problems arise in obtaining an SDS from the chemical manufacturer, importer or distributor, a phone call will be made to request an SDS and to verify that the SDS has been sent. The phone call will be logged and a letter will be sent the same day. The company will maintain a written record of all efforts to obtain SDSs. If these efforts fail to produce an SDS, the local OSHA office will be contacted for assistance.

EMPLOYEE INFORMATION AND TRAINING

Employees included in the hazard communication program will receive the following information and training prior to exposure to hazardous chemicals and when new chemical hazards are introduced to their work area:

• Requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 (General Industry) or 29 CFR 1926.59 (Construction Industry)

• Operations in the work area where hazardous chemicals are present

• Location and availability of the hazard communication program, chemical inventory list and SDSs

• Methods and observations used to detect the presence or release of a hazardous chemical in the work area,

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• such as monitoring devices, visual appearance or odor of hazardous chemicals when being released

• Physical, health, simple asphyxiation, combustible dust and pyrophoric gas hazards, as well as hazards not otherwise classified of the chemicals in the work area

• Measures employees can take to protect themselves from hazards, such as appropriate controls, work practices, emergency and spill cleanup procedures, and personal protective equipment to be used

• Explanation of the labels received on shipped containers

• Explanation of the workplace labeling system

• Explanation of the SDS, including order of information and how employees can obtain and use the appropriate hazard information

Note: To facilitate understanding of the new GHS system, the OSHA HCS requires that employees be trained regarding the new label elements and SDS format by Dec. 1, 2013. Employers are required to update the hazard communication program and to provide any additional training for newly identified physical or health hazards no later than June 1, 2016.

NONROUTINE TASKS

The Safety Coordinator and the immediate supervisor of an employee performing a nonroutine task, such as cleaning machinery and other process equipment, is responsible for ensuring that adequate training has been provided to the employee on any hazards associated with the nonroutine task. Employees share in this responsibility by ensuring that their immediate supervisor knows that the nonroutine task will be performed.

Special work permits are required for the performance of certain nonroutine tasks, such as entry to confined spaces, breaking and opening piping systems, and welding and burning. For some special tasks, employees are required to follow special lockout/tagout procedures

to ensure that all machinery motion has stopped and energy sources are isolated prior to and during the performance of such tasks.

CONTRACTORS (IF NOT APPLICABLE, REMOVE THIS SECTION)

Prior to beginning work, the Safety Coordinator will inform contractors with employees working on company property of any hazardous chemicals that the contractors' employees may be exposed to while performing their work. The Safety Coordinator will also inform contractors of engineering or work practice control measures to be employed by the contractor, personal protective equipment to be worn by the contractors' employees, and any other precautionary measures that need to be taken to protect their employees during the workplace's normal operating conditions and in foreseeable emergencies.

Furthermore, the Safety Coordinator will advise contractors that they must comply with all OSHA standards while working on company property. Appropriate controls will be established with the contractor to ensure that company employees are not exposed to safety and health hazards from work being performed by the contractor and that company operations do not expose contractors' employees to hazards.

The Safety Coordinator will inform contractors of the workplace labeling system and the availability and location of SDSs for any chemical to which contractors' employees may be exposed while performing their work.

RECORDKEEPING

Records pertaining to the hazard communication program will be maintained by the Safety Coordinator. The Safety Coordinator will keep the following records:

• Chemical inventory list

• Hazardous material reviews

• Copies of phone call logs and letters requesting SDSs

• Employee training records

• Warnings issued to employees for not following the hazard communication program

Pictograms were developed to simplify hazard communication on chemical container labels and safety data sheets (SDSs), regardless of manufacturer or country of origin. The pictograms are based on images and symbols employees throughout the world would recognize and understand.

- All pictograms will be a diamond on a point with a red border and a black image associated with the hazard in the center. For pictograms used in transport, the background color may be based on the UN Recommendations for the Transportation of Dangerous Goods.

- Multiple pictograms may appear on a product label. One pictogram will appear for a health hazard and possibly multiple pictograms for the various physical hazards.

- The nine pictograms are listed below with the hazard class and an example chemical for each.

Pictograms	Hazard Class	Example Chemical
	Corrosives	Hydrofluoric acid • Used for etching in silicon semiconductor production and oil refining. • Corrosive to metal.

Irritant or sensitizer

Acetic acid

- Used in film development and as a solvent in various industries.
- Skin irritant.

Health hazard

Formaldehyde

- Used in embalming and as a bacterial and viral disinfectant.
- Known carcinogen, lung and skin irritant and sensitizer.

Pictograms	Hazard Class	Example Chemical
	Acute Toxicity	Chloroform • Used as a solvent in many industries. • May be toxic to kidney, liver and heart.
	Flammables	Hydrogen sulfide • A naturally occurring chemical found in natural gas during oil drilling and used in paper and pulp production. • Flammable gas.
	Explosive	Ammonium perchlorate • Used in rocket fuel and some adhesives. • Oxidizer and explosive hazard under certain conditions.
	Gases under pressure	Oxygen • Used in the medical field for life support and in iron smelting. • Contents under pressure.
	Oxidizer	Silver oxide • Used in portable batteries. • Strong oxidizer.
	Environmental toxicity	Octane • A component of refined gasoline. • Toxic to fish and aquatic invertebrates.

Hazardous chemicals must have labels that list information about the hazards of the chemical, proper handling and what to do in the event of an emergency. As part of the hazard communication standard, labels on chemical containers from manufacturers and secondary transfer containers must have specified information. This information includes supplier information, product identifiers, pictograms, signal words, hazard statements and precautionary statements.

Supplier identification: The supplier of the hazardous chemical must include the following information on each label:

- *The manufacturer name*
- The manufacturer address
- A contact phone number for the manufacturer

Product identifiers: Each hazardous chemical must have a unique product identifier.

- *It must be the same as the identifier listed in Section 1 of the safety data sheet (SDS) and in the hazardous chemical inventory.*
- It must have the same chemical identity and additional identifiers based on international standards, such as International Standards Organization (ISO) or Chemical Abstract Service (CAS) number.
- The chemical identifier for each component of a mixture must be included.

Pictograms: These are graphic images that have been standardized under the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

- They are determined by the hazard class and category.
- A different pictogram appears for each hazard class.
- Pictograms are required to have an image inside a red border with a white background in the shape of a diamond standing on its point.
- Transport pictograms may have colors as noted under the UN Recommendations on the Transport of Dangerous Goods, Model Regulations but will have the same image and shape.

Signal words: Signal words are either “Warning” or “Danger”-.

Gas cylinder

- *They indicate the severity of the hazard.*
    - Only one of the signal words can appear on the label.
    - "Danger" indicates a more severe hazard than "Warning".

Hazard statements: These are standardized statements that are based on scientific

data and the severity of the hazard. A different hazard statement will appear for each physical and health hazard.

- The health hazard statement is specific to each potential route of exposure.
- Sample hazard statements:
  - "Toxic if swallowed"
  - "Flammable aerosol"

Precautionary statements: These are standardized statements that provide information for the proper handling of the chemical to prevent environmental and health exposures.

- Required sections include:
  - **Prevention:** Includes details for safe handling and engineering controls.
  - **Response to spill or exposure:** Steps to be taken if a skin or eye exposure occurs.
  - ***Storage:*** *Indicates required storage cabinets or ventilation.*
  - **Disposal:** Indicates if any special considerations must be made.
- GHS also suggests that first aid information be included in the precautionary statement section.

Supplemental information: Some labels may have additional hazard information not included in the other sections of the label or currently incorporated into GHS.

- This information may be added by the manufacturer or distributor.
- The information must not conflict with what is already presented on the label.
- National Fire Protection Agency (NFPA) and Hazardous Materials Information System (HMIS) labels would go in this section and are allowed as long as they don't contradict any information already on the label.

Hazardous chemical labels and SDSs must be reviewed prior to beginning any work with chemicals

IF Hunt Energy Services LLC employees go on multiple worksites, it must maintain and make available SDS sheets to any customer or contractor if requested. Also this program is available if requested.

If at any time employees have questions in regard to this policy please call your immediate supervisor or any member of management

Hazard Identification and Risk Assessment

Hazard identification and risk assessment are vital components of every safe work environment. Management has implemented a Job Safety Analysis (JSA) program to prevent accidents by identifying hazards, and then developing corrective action to eliminate, or reduce the hazards, both existing and potential, to an acceptable level before initiating work.

The goal is to:

1. Identify the potential hazards
2. Identify appropriate methods to reduce or eliminate the hazards
3. Fulfill requirements of the Customer
4. Create a PPE Hazard Assessment

JSAs must be completed before each job (routine or non-routine) is begun, and whenever a new process is introduced, a procedure is modified, or a change in products, services or operation is implemented. If the scope of the job changes, a new JSA is required, and all affected employees must participate in the completion of the new document.

Every affected employee and subcontractor employee is required to participate in the completion of the JSA, and all are expected to sign the document once it is completed. When the client does not provide a JSA form to complete, Hunt Energy Services will make theirs available and request that the client representative(s) participate.

Work permits (i.e. Hot Work Permits, Confined Space Entry, and Lockout/Tagout) may accompany the JSA.

Who should participate in filling out a JSA?

1. Job Foreman should lead the JSA team
2. Gang Pusher/Supervisor
3. Employees who are experienced in performing the job
4. Technical experts (mechanics, engineers, etc.)
5. Customer representatives
6. Personnel with no experience in performing the job (often bring unique insight)
7. All other affected employees

When this process is executed properly, all employees will have something constructive to learn and contribute. Blank JSA forms are available in the office. Hunt Energy Services employees will be trained on JSA procedures during New Employee Orientation.

Hazard Identification and Mitigation

A JSA is one of the primary means of ensuring that employees return home the way that they came to work. It is a fundamental belief of this organization that all accidents are avoidable.

Pursuant to this goal and belief, all employees must participate in the daily completion of JSAs in order to assist in the identification and mitigation of existing and potential hazards.

A JSA is designed to stimulate discussion between the employees that will ultimately flush out the existing and potential hazards that are either present on the jobsite or applicable to the job being performed. Once identified, hazards must be minimized or eliminated through engineering controls, work practices, or, as a last resort, personal protective equipment (PPE). Whenever possible, engineering controls will be utilized to eliminate the identified hazards. Some examples of engineering controls are:

1. Exhaust and/or Mechanical Ventilation
2. Enclosure/Encapsulation
3. Substitution of Materials
4. Component Replacement
5. Sound Barriers
6. Process or Equipment Modification (i.e. using wet-blasting or vacuum blasting to eliminate hazardous dust)
7. Isolation

It is imperative that corrective measures be documented, and an additional hazard assessment be executed once the corrective measures have been taken in order to ensure that the hazard has been eliminated, and no additional hazards have been created.

If engineering controls and work practices cannot sufficiently minimize or eliminate the hazards that were identified, then PPE must be utilized. Employees must be properly trained in the hazard identification process and on the use, maintenance, and limitations of the PPE they have been provided before they will be authorized to work within the affected jobsite, or perform the applicable task. It is also necessary to make certain that the selected PPE will adequately minimize or eliminate the applicable hazard; for example, if a respirator must be used, it is critical that a competent person be consulted to ensure that the proper respirator is selected and used.

Once identified, hazards must be categorized and prioritized to properly address the most serious first. If an atmospheric hazard, for example, is identified, it may be necessary to evacuate the non-essential personnel and call for additional help to eliminate the hazard. In other situations, a jobsite may need to be isolated by barriers, and the workforce assigned accordingly before any work can be performed. In these situations, it is essential that the appropriate hazards be addressed in order of

significance and severity to minimize the affected employees' exposure to the identified hazard.

Documentation mandated by this program must be maintained for at least 6 months, and dependent on the hazards identified, retention requirements may be extended.

It is the responsibility of the Safety Coordinator to ensure that this program is implemented and managed properly.

Heat Illness Prevention

Introduction

The primary goal of the Heat Illness Prevention program is Hunt Energy Services employee safety. The training and operational elements found in this plan will provide Hunt Energy Services employees, managers and supervisors with the tools necessary to anticipate environmental conditions that contribute to heat related illness, to recognize when work assignments place employees at risk and what job instructions need to be communicated to employees regarding the prevention of heat related illness. Heat prevention procedures shall be in writing and made available to Hunt Energy Services employees.

Scope

This program is intended to control the occurrence of heat related illness. The program applies to all outdoor jobsites where employees can be assigned work, and where environmental conditions cannot be mitigated by engineering controls. Additionally, this program applies to indoor areas where employees may be assigned work, where the indoor temperature meets or exceeds 100ºF. It is also applicable to emergency response personnel, or other employees who are required to wear and perform work in full-body personal protective suits, regardless of exterior or interior ambient temperatures. Physical factors that contribute to heat related illness should be taken into consideration before performing a task. The most common physical factors that can contribute to heat related illness are type of work, level of physical activity and duration, and clothing color, weight and breathability.

Responsibilities

Safety, Risk Management, and Information Security will:

- Draft and distribute the Heat Illness Prevention Program (HIPP) to management
- Provide initial training in the requirements of the program to Hunt Energy Services managers, supervisors and foreman, and employees who are covered by the requirements of this program
- Maintain Hunt Energy Services employee training records for classes conducted

Management will:

- Ensure that employee work assignments both indoors and outdoors are evaluated and the components of this plan are implemented when the established temperature/relative humidity thresholds are met or exceeded
- Ensure that initial and periodic training is provided to employees under their supervision and are consistent with the requirements of this document

- Ensure personal factors that contribute to heat related illness are taken into consideration before assigning a task where there is the possibility of a heat-related illness occurring.

The most common personal factors that can contribute to heat related illness are age, weight/fitness, drug/alcohol use, prior heat-related illness, etc.

- Ensure that active or passive cooling equipment is available to employees who may require its use
- Maintain employee training records for classes conducted

Employees will:

- Comply with the requirements of this program
- Understand the responsibilities of all parties responsible for maintaining compliance with this program
- Take steps to mitigate any personal risk factors that may exist prior to working in a regulated hot environment
- Immediately report any unsafe conditions to their supervisor
- Observe their fellow employees for signs of heat related illness, and take quick action to ensure that rapid assistance is provided if necessary

Training

Employees will be trained on the following:

- The environmental and personal risk factors for heat illness;
- Procedures for complying with the requirements of this standard;
- The importance of frequent consumption of small quantities of water shall be encouraged when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties;
- The importance of acclimatization;
- The different types of heat illness and the common signs and symptoms of heat illness
- The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers;
- Procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary;
- Procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider;
- Procedures for ensuring that, in the event of emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.
- Consumption of energy drinks are not allowed

Supervisors are required to receive the following additional training before assuming their supervisory role:

- The procedures the supervisor is to follow to implement the applicable provisions in this section.
- Supervisors should be trained in the employer's heat illness procedures to prevent heat illness and the procedures to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.
- Basic Heat Stress/Illness First Aid

Outdoor Work Assignments

Hunt Energy Services managers and supervisors shall ensure that they are aware of the most current weather conditions in the areas where they will be assigning employees to work. The manager and/or supervisor shall implement the proper controls when local weather conditions have achieved, or are expected to achieve more than 48 hours with day time temperatures at or above 90ºF and relative humidity at or above 80%.

High-heat procedures include, but are not limited to:

- Effective communication by voice, observation or electronic means
- Observation of employees for alertness and signs/symptoms of heat illness
- Reminding employees to drink water throughout the shift
- Closely supervising employees for their first 14 days of employment

In these conditions, the manager and/or supervisor shall implement the following worker protection controls.

1. Prior to the start of the work shift, when weather conditions require the application of the HIPP, managers and/or supervisors shall meet with their employees, and review the work procedures to be used during the high heat period.
2. Managers and/or supervisors shall ensure that exposed employees have access to cool potable drinking water. Where it is not plumbed or otherwise continuously supplied, water must be provided to employees at the beginning of the work shift in sufficient quantities to ensure that employees can consume one quart of potable water per hour.
3. Employees may be provided with smaller quantities of water if provisions are made to supply one quart per hour per employee.

Indoor Work Assignments

Where employees are assigned work in an indoor environment where ambient temperatures will meet or exceed 100ºF, managers and supervisors will ensure that:

- Prior to the start of the work shift, when interior environmental conditions require the application of the HIPP, managers and/or supervisors shall meet with their employee, and review the work procedures to be used during the high heat period.
- Managers and/or supervisors shall ensure that exposed employees have access to cool potable drinking water. Water must be provided employees at the beginning of the work shift in sufficient quantities to ensure that employees can consume one quart of potable water per hour.
- Managers and/or supervisors shall encourage frequent drinking of water by employees.

Body Protective Clothing

When an Hunt Energy Services employee wishes to wear a full-body protective suit to solely prevent soiling street clothing from a routine work assignment, and no exposure to hazardous materials is anticipated, and the temperature is not expected to meet or exceed the HIPP action thresholds, the manager and/or supervisor shall comply with the following:

- Employees shall be advised to pre-hydrate before donning suit and beginning work.
- Employees shall be advised to continue drinking sufficient water to maintain proper hydration.
- Employees shall be instructed to get out of the direct sun, and into a shaded area, for at least 5 minutes every hour (when shade is available).

When emergency conditions are present, and the responders are required to protect themselves from any chemical, physical or biological hazard, the following work practices shall be implemented:

- Supervisors shall ensure that active cooling equipment is available for employee use, and that employees have been trained in the use of the equipment prior to work assignment.
- Supervisors shall limit work assignments for employees to allow sufficient rest time for fluid replacement and restoration of nominal vital signs.
- Every effort shall be made to schedule work in the coolest part of the day, usually early morning, to mitigate the need for active cooling equipment.

- If conditions do not permit off hours scheduling, supervisors shall ensure that baseline vital signs for employees shall not exceed established thresholds.

Types of Heat Related Illness

1. Heat cramps
2. Heat exhaustion
3. Heat Stroke

Symptoms Include:

- Muscle spasms that usually occur in the legs (hamstrings) and abdomen
- Cool, moist, pale or flushed skin
- Headache, nausea, dizziness
- Weakness, exhaustion
- Heavy sweating
- Vomiting

For employees suffering from heat cramps or heat exhaustion:

- Move the employee out of the heat, to a cool shaded place
- Loosen tight or restrictive clothing, and remove any personal protective equipment over garments
- Remove perspiration soaked clothing
- Apply cool, wet towels to the skin
- Fan the employee gently
    - If the person is conscious, provide small sips of cool water (not a

sports drink) For employees suffering from heat stroke:

- This is a profound medical emergency, and cannot be successfully treated in the field. Immediate and decisive action is required.
- Call 911 and ensure that accurate directions are provided so medical assistance is not delayed.
- Move the employee to a place out of the heat, or provide shade for them.
- Loosen tight clothing, and begin active cooling methods (active fanning, pouring cool water over the body core, placing ice packs in the arm pits, behind the neck, and

in the groin.

- Remain with the employee until medical assistance arrives, and provide assistance to responders as required.

INTRODUCTION

The major concern is the potential for overexposure from fumes created by welding or plasma cutting on stainless steel pipe and ducts, dust from grinding on stainless steel and from skin exposure. In most applications, engineering controls such as using localized exhaust ventilation and good welding work practices will mitigate the chances of overexposure. Respiratory protection will be required when adequate ventilation is not achievable.

POLICY

Heavy Metals, Lead, Cadmium, and Hexavalent Chromium Exposure Plan applies to all construction work where an employee may be occupationally exposed. All work related to construction, alteration or repair is included. Under this plan, construction is to include, but not limited to the following: Fumes from welding processes.

1. Training

1.1. All employees who are at risk of exposure to heavy metals, lead, cadmium, and/or hexavalent chromium (chromium) will be required to complete the appropriate training at time of hire, during orientation, or prior to assignment on a potentially hazardous job site. Training records, including the name of the employee, the signature of the trainer and the date of training will be maintained and updated annually with the employee's certification renewal. Training and renewal participation is mandatory. All Hunt Energy Services employees must demonstrate, through either an oral or written assessment, that they:

1.1.1. Understand the hazards associated with working with lead, cadmium, chromium or other heavy metals.
1.1.2. Know proper procedures for working with these substances.
1.1.3. Know where the material could be present, and under what circumstances their risk of exposure is heightened.
1.1.4. Know hygiene and decontamination procedures.
1.1.5. Know personal protective equipment requirements.
1.1.6. Be familiar with control methods and medical surveillance.
1.1.7. Be familiar with all heavy metal standards to include the lead standards.

2. Regulated Areas

2.1. Per the lead standard and information provided by Hunt Energy Services clients, certain work areas may contain heavy concentrations of heavy metals that could cause medical problems if they enter the body. All such areas are

considered Regulated Areas. Hunt Energy Services must list possible locations of lead containing materials such as leaded paints, leaded solders, pipes, batteries, circuit boards, cathode ray tubes, leaded glass, and demolition/salvage materials.

2.2. Due to the elevated risk of heavy metal exposure, Hunt Energy Services will evaluate the need to establish a Regulated Area whenever the following activities are being performed (the evaluation, including air monitoring, must be documented and updated every 6 months):

2.2.1. Electrical grounding with cadmium welding
2.2.2. Cutting, brazing, burning, grinding, or welding on surfaces that are painted with lead/cadmium-containing paints
2.2.3. Cutting and welding cadmium-plated steel
2.2.4. Brazing or welding with cadmium alloys
2.2.5. Fusing of reinforced steel by cadmium welding
2.2.6. Maintaining or retrofitting cadmium-coated equipment

2.3. Regulated Areas must:

2.3.1. Be set apart from the rest of the workplace in a way that establishes and alerts employees to the boundaries of the area
2.3.2. Be entered ONLY by authorized persons
2.3.3. Be entered ONLY by persons using proper respirators and other PPE
2.3.4. Employees must refrain from eating, drinking, smoking chewing tobacco or gum and applying cosmetics in such areas. Employees must not carry, store, or use products associated with such activities in these areas.
2.3.5. Have warning signs containing the following data must be posted at all entrances:
2.3.5.1. Metal/material contaminating area
2.3.5.2. Hazard associated (i.e. cancer, lung/kidney disease, etc.)
2.3.5.3. “AUTHORIZED PERSONNEL ONLY”
2.3.5.4. “RESPIRATORS REQUIRED IN THIS AREA”

2.4. These areas become regulated by air monitoring or other means of testing and subsequent labeling of area.

2.5. These areas are restricted and require special procedures to be followed to gain entrance to include, but not limited to, training, proper respiratory protection, and emergency procedures.

2.6. Site-specific procedures will be developed (and included in the site specific training outlined above) and implemented to protect employees from exposure to cadmium/lead/chromium while maintenance is performed on the ventilation systems and/or while the filters are changed.

2.7. All dust and debris generated inside of the regulated area must be contained and disposed of properly. Surfaces must be cleaned regularly to prevent contaminant accumulation, and equipment such as vacuums with HEPA filters, dry or wet sweeping, shoveling or other methods to minimize exposure should be used to clean the area.

3. Signs and Warnings

3.1. Areas that have been declared hazardous by clients or by testing will be labeled such with signs. These signs will be of quality and size to be read by any person that may enter the area and subsequently be affected by that work area. The information required to be on the sign is listed above—see "Regulated Areas." Appropriate work practices should be followed to ensure the lead containing materials are not disturbed. Containers that contain heavy metals will be labeled as such.

3.2. All signage will state what heavy metals are present, the fact that these metals are poisonous, and the fact that no eating, drinking, or tobacco products are allowed within such area. Also, if respiratory protection is required, this will be stated on the sign. The signs will not be removed or defaced.

3.3. Both employees and visitors will obey all signs. Visitors will be accompanied by a client employee (or Hunt Energy Services employee if necessary), and the hazards will be communicated to the visitor.

4. Nature of the Hazard

4.1. Hunt Energy Services will educate each employee about the hazards associated with the substances they will encounter. Hunt Energy Services relies on its client to disclose all known hazard present at the client facilities. However, Hunt Energy Services will not work in situations where there is daily exposure to hazardous heavy metals. This training will be conducted and all actions taken

before employees are exposed. General hazards associated with lead, cadmium, chromium and heavy metals and the means by which to protect employees will be conducted in training annually.

4.2. Employees shall be informed of Appendices A & B of the lead regulation. All affected employees will be made aware of the potentially adverse effects of lead. Common symptoms of acute lead poisoning are loss of appetite, nausea, vomiting, stomach cramps, constipation, fatigue, headache, joint or muscle aches and anemia. Long term (chronic) overexposure to lead may result in severe damage to the blood-forming, nervous, urinary, and reproductive systems. Likewise, all affected employees will be made aware of the specific hazards associated with cadmium and chromium, including but not limited to, cancer, and lung and kidney disease.

4.3. All affected employees are required to attend all heavy metals training programs. The training shall be provided prior to the time of initial job assignment, or placement into hazardous situations. All employees will be informed of the specific nature of the operations that could result in exposure to lead or other heavy metals above the action level. Per Hunt Energy Services Respiratory Policy, air monitoring data, a detailed schedule for implementation, a work practice program, and a written plan for emergency situations will be trained upon before entering the job site. Furthermore, employees will be informed of any engineering controls that can prevent any contact with hazards.

5. Exposure

5.1. No Hunt Energy Services employee will be exposed to lead, chromium or cadmium at concentrations greater than the PEL: the PEL for lead is fifty micrograms per cubic meter of air averaged over an 8-hour period, and the PEL for chromium and cadmium is 5 ug/m(3) calculated as an 8-hr TWA.

5.2. Hunt Energy Services will follow the work practices listed in “Regulated Areas” to minimize exposure—i.e. no eating, drinking, tobacco or cosmetics in regulated areas. If necessary, engineering controls will be implemented to minimize employee exposure and to ensure that no employee is exposed to more than the permissible limit for more than 30 days per year. Potential engineering controls may include, but not be limited to, the following:

5.2.1. Exhaust and/or Mechanical Ventilation—these systems require testing before use to insure effective operation

5.2.2. Enclosure/Encapsulation

5.2.3. Substitution of materials (if applicable)
5.2.4. Component Replacement (if applicable)
5.2.5. Process/Equipment modification (i.e. altering abrasive blasting techniques to minimize dust—using wet-blasting or vacuum blasting, or example)
5.2.6. Isolation

6. Monitoring Program and Requirements

6.1. Based on client reports, Hunt Energy Services will conduct air monitoring and operate according to the results of the air monitoring, or it will operate per the results of its client's testing. If the results of this monitoring show that the heavy metal content is above the action level, then per that specific heavy metal engineering procedure protocol, actions will be taken to reduce the level to a safe one—see "Exposure" above. Respirators must be used when engineering controls and work practices cannot reduce employee exposure, during work operations where engineering controls and work practices are not feasible, and emergencies. If engineering and work practices do not reduce the levels, then the proper personal protective equipment, to include appropriate respirators, will be used. If these controls are not feasible, then Hunt Energy Services will not do the work.

6.2. Affected areas must be monitored on a regular basis (at least every 6 months) while the measurements are above the action level. The employer must continue monitoring the affected area until two consecutive measurements, taken at least 7 days apart, are below the action level.

6.3. Hunt Energy Services will disclose the results of the monitoring to all affected employees within 15 working days after the receipt of the results. The results of all monitoring will be posted at the jobsite in a location that is readily visible and accessible to all affected employees, and each will notified in writing if the results exceed the action level. If the permissible exposure limit was exceeded, each affected employee will be notified in writing and will be provided with the details of the corrective action the employer has taken to reduce the exposure to or below the permissible exposure limit, including engineering controls, and PPE requirements, etc.

7. Compliance with Written Site-Specific Plans

7.1. All employees will comply with the written site-specific plans of each client. All personnel will be trained and medically tested to work within the confines

of the plan. The written program will be reviewed and updated at least annually to reflect significant changes in Hunt Energy Services compliance status.

8. Actions that Could Cause Exposure

8.1. Per Appendixes A and B, any way that lead may enter the body could be harmful. Other harmful metals to include cadmium and chromium require personal protection equipment as well and proper hygiene practices.

8.2. Cutting, welding, grinding, eating around, drinking, smoking around, chewing tobacco around, breathing around, and other forms of ingestion or inhalation is not allowed.

9. Medical Surveillance Program

9.1. Hunt Energy Services currently does no medical surveillance of employees because the company does not work in these environments. When Hunt Energy Services does work in these environments, medical surveillance, in accordance with the heavy metal hazards, will be conducted.

9.2. Employees who, for 30 days or more per year, perform any task, operation or job for which Regulated Areas are mandated by Hunt Energy Services are covered by the medical surveillance provisions. Medical examinations and procedures shall be performed by or under the supervision of a licensed physician without cost to the employee. With lead, Appendices A and B will be adhered to.

9.3. Blood sampling & monitoring should be conducted every 6 months until two consecutive blood samples & analysis are acceptable. The sampling & monitoring should be performed at least monthly during the removal period. If biological monitoring results are abnormal, Hunt Energy Services will reassess all affected employee's exposures within 30 days, and employees should be notified in writing within five days when lead levels are not acceptable.

9.4. Employees will be removed from jobs with exposure to chromium, cadmium or lead at or above the action level on each occasion that a physician documents that the employee should be removed from chromium, cadmium or lead exposure, or in cases where the employee's biological monitoring results are so high as to mandate medical removal. The employees may return back to work when the enclosure breach is repaired or an initial exposure assessment is performed. A physician may require medical removal on the basis of biological

monitoring results, evidence of illness, inability to wear a respirator, or any other reason deemed medically sufficient. If an employee's removal is due to his/her inability to wear a respirator, he/she can be reassigned to a job at which the exposure to lead/cadmium/chromium is below the PEL.

9.5. If an employee is temporarily medically removed from a job for reasons related to cadmium, chromium, or lead exposure, the employee's normal earnings, seniority, and employee rights will be unaffected for a maximum of 18 months (Medical Removal Protection benefits).

9.6. If employees working immediately adjacent to a lead abatement activity are exposed to lead due to the inadequate containment of such job, their employer shall either remove the employees from the area until the enclosure breach is repaired or perform an initial exposure assessment.

9.7. Hunt Energy Services will maintain all exposure and medical surveillance records, and will make the records available to the employee and his representative.

10. Personal Protective Equipment

10.1. Hunt Energy Services will provide, at no cost to the employee, all necessary PPE to employees based on atmosphere and work area monitoring, as well as client input. NIOSH-certified powered, air purifying respirators (PAPRs) will be provided. Each employee will be trained in the proper fit, usage, and limitations of his/her PPE, including respirators.

10.2. Special PPE to include protective clothing will be issued and proper cleaning provided. Protective clothing will be replaced at least weekly and shall be clean, laundered, properly disposed of and repaired or replaced as necessary. Employees will be required to wear provided protective equipment if the work area requires such protection. Gloves, hats, vented goggles, shoes or disposable shoe covers shall be provided.

11. Emergency Situations and Decontamination Areas

11.1. A job-specific Emergency plan is to be developed, documented and implemented prior to any work being done. While the plan is site-specific, it will include provisions for the use of appropriate respirators and personal protective equipment (PPE), and a mandatory evacuation of all employees who are not essential to resolving the situation. All normal operations will stop until

the emergency situation is corrected. All employees assigned to the job-site are to be trained on and receive a copy of the emergency plan before they begin working.

11.2. If the exposure limits exceed the PEL, Hunt Energy Services will provide facilities to accommodate the needs of its employees, including lunch and changing rooms, decontamination and hygiene facilities, etc. Hygiene facilities will prevent cross-contamination and provide washing facilities for employees. Workers must wash their hands and face or any other potentially exposed skin before eating, drinking, or smoking.

APPENDIX A

I. SUBSTANCE IDENTIFICATION

A. "Substance": Pure lead (Pb) is a heavy metal at room temperature and pressure and is a basic chemical element. It can combine with various other substances to form numerous lead compounds.

B. "Compounds Covered by the Standard": The word "lead" when used in this interim final standard means elemental lead, all inorganic lead compounds and a class of organic lead compounds called lead soaps. This standard does not apply to other organic lead compounds.

C. "Uses": Exposure to lead occurs in several different occupations in the construction industry, including demolition or salvage of structures where lead or lead - containing materials are present; removal or encapsulation of lead - containing materials, new construction, alteration, repair, or renovation of structures that contain lead or materials containing lead; installation of products containing lead. In addition, there are construction related activities where exposure to lead may occur, including transportation, disposal, storage, or containment of lead or materials containing lead on construction sites, and maintenance operations associated with construction activities.

D. "Permissible Exposure": The permissible exposure limit (PEL) set by the standard is 50 micrograms of lead per cubic meter of air (50 ug/m(3)), averaged over an 8-hour workday.

E. "Action Level": The interim final standard establishes an action level of 30 micrograms of lead per cubic meter of air (30 ug/m(3)), averaged over an 8-hour workday. The action level triggers several ancillary provisions of the standard such as exposure monitoring, medical surveillance, and training.

II. HEALTH HAZARD DATA

A. "Ways in which lead enters your body". When absorbed into your body in certain doses, lead is a toxic substance. The object of the lead standard is to prevent absorption of harmful quantities of lead. The standard is intended to protect you not only from the immediate toxic effects of lead, but also from the serious toxic effects that may not become apparent until years of exposure have passed. Lead can be absorbed into your body by inhalation (breathing) and ingestion (eating). Lead (except for certain organic lead compounds not covered by the standard, such as tetraethyl lead) is not absorbed through your skin. When lead is scattered in the air as a dust, fume, or mist it can be inhaled and absorbed through you lungs and upper respiratory tract. Inhalation of airborne lead is generally the most important source of occupational lead absorption. You can also absorb lead through your digestive system if lead gets into your mouth and is swallowed. If you handle food, cigarettes, chewing tobacco, or make-up which have lead on them or handle them with hands contaminated with lead, this will contribute to ingestion. A significant portion of the lead that you inhale or ingest gets into your blood stream. Once in your blood stream, lead is circulated throughout your body and stored in various organs and body tissues. Some of this lead is quickly

filtered out of your body and excreted, but some remains in the blood and other tissues. As exposure to lead continues, the amount stored in your body will increase if you are absorbing more lead than your body is excreting. Even though you may not be aware of any immediate symptoms of disease, this lead stored in your tissues can be slowly causing irreversible damage, first to individual cells, then to your organs and whole body systems.

B. "Effects of overexposure to lead" - (1) "Short term (acute) overexposure". Lead is a potent, systemic poison that serves no known useful function once absorbed by your body. Taken in large enough doses, lead can kill you in a matter of days. A condition affecting the brain called acute encephalopathy may arise which develops quickly to seizures, coma, and death from cardiorespiratory arrest. A short term dose of lead can lead to acute encephalopathy. Short term occupational exposures of this magnitude are highly unusual, but not impossible. Similar forms of encephalopathy may, however, arise from extended, chronic exposure to lower doses of lead. There is no sharp dividing line between rapidly developing acute effects of lead, and chronic effects which take longer to acquire. Lead adversely affects numerous body systems, and causes forms of health impairment and disease which arise after periods of exposure as short as days or as long as several years.

(2) "Long-term (chronic) overexposure". Chronic overexposure to lead may result in severe damage to your blood - forming, nervous, urinary and reproductive systems. Some common symptoms of chronic overexposure include loss of appetite, metallic taste in the mouth, anxiety, constipation, nausea, pallor, excessive tiredness, weakness, insomnia, headache, nervous irritability, muscle and joint pain or soreness, fine tremors, numbness, dizziness, hyperactivity and colic. In lead colic there may be severe abdominal pain. Damage to the central nervous system in general and the brain (encephalopathy) in particular is one of the most severe forms of lead poisoning. The most severe, often fatal, form of encephalopathy may be preceded by vomiting, a feeling of dullness progressing to drowsiness and stupor, poor memory, restlessness, irritability, tremor, and convulsions. It may arise suddenly with the onset of seizures, followed by coma, and death. There is a tendency for muscular weakness to develop at the same time. This weakness may progress to paralysis often observed as a characteristic "wrist drop" or "foot drop" and is a manifestation of a disease to the nervous system called peripheral neuropathy. Chronic overexposure to lead also results in kidney disease with few, if any, symptoms appearing until extensive and most likely permanent kidney damage has occurred. Routine laboratory tests reveal the presence of this kidney disease only after about two-thirds of kidney function is lost. When overt symptoms of urinary dysfunction arise, it is often too late to correct or prevent worsening conditions, and progression to kidney dialysis or death is possible. Chronic overexposure to lead impairs the reproductive systems of both men and women. Overexposure to lead may result in decreased sex drive, impotence and sterility in men. Lead can alter the structure of sperm cells raising the risk of birth defects. There is evidence of miscarriage and stillbirth in women whose husbands were exposed to lead or who were exposed to lead themselves. Lead exposure also may result in decreased fertility, and abnormal menstrual cycles in women. The course of pregnancy may be adversely affected by exposure to lead since lead crosses the placental barrier and poses risks to developing fetuses. Children born of parents either one of whom were exposed to excess lead levels are more likely to have birth defects, mental retardation, behavioral disorders or die during the first year of

childhood. Overexposure to lead also disrupts the blood - forming system resulting in decreased hemoglobin (the substance in the blood that carries oxygen to the cells) and ultimately anemia. Anemia is characterized by weakness, pallor and fatigability as a result of decreased oxygen carrying capacity in the blood.

(3) "Health protection goals of the standard". Prevention of adverse health effects for most workers from exposure to lead throughout a working lifetime requires that a worker's blood lead level (BLL, also expressed as PbB) be maintained at or below forty micrograms per deciliter of whole blood (40 ug/dl). The blood lead levels of workers (both male and female workers) who intend to have children should be maintained below 30 ug/dl to minimize adverse reproductive health effects to the parents and to the developing fetus. The measurement of your blood lead level (BLL) is the most useful indicator of the amount of lead being absorbed by your body. Blood lead levels are most often reported in units of milligrams (mg) or micrograms (ug) of lead (1 mg=1000 ug) per 100 grams (100g), 100 milliliters (100 ml) or deciliter (dl) of blood. These three units are essentially the same. Sometime BLLs are expressed in the form of mg percent or ug percent. This is a shorthand notation for 100g, 100 ml, or dl. (References to BLL measurements in this standard are expressed in the form of ug/dl.)

BLL measurements show the amount of lead circulating in your blood stream, but do not give any information about the amount of lead stored in your various tissues. BLL measurements merely show current absorption of lead, not the effect that lead is having on your body or the effects that past lead exposure may have already caused. Past research into lead - related diseases, however, has focused heavily on associations between BLLs and various diseases. As a result, your BLL is an important indicator of the likelihood that you will gradually acquire a lead - related health impairment or disease.

Once your blood lead level climbs above 40 ug/dl, your risk of disease increases. There is a wide variability of individual response to lead, thus it is difficult to say that a particular BLL in a given person will cause a particular effect. Studies have associated fatal encephalopathy with BLLs as low as 150 ug/dl. Other studies have shown other forms of diseases in some workers with BLLs well below 80 ug/dl. Your BLL is a crucial indicator of the risks to your health, but one other factor is also extremely important. This factor is the length of time you have had elevated BLLs. The longer you have an elevated BLL, the greater the risk that large quantities of lead are being gradually stored in your organs and tissues (body burden). The greater your overall body burden, the greater the chances of substantial permanent damage. The best way to prevent all forms of lead - related impairments and diseases -- both short term and long term -- is to maintain your BLL below 40 ug/dl. The provisions of the standard are designed with this end in mind.

Your employer has prime responsibility to assure that the provisions of the standard are complied with both by the company and by individual workers. You, as a worker, however, also have a responsibility to assist your employer in complying with the standard. You can play a key role in protecting your own health by learning about the lead hazards and their control, learning what the standard requires, following the standard where it governs your own actions, and seeing that your employer complies with provisions governing his or her actions.

(4) "Reporting signs and symptoms of health problems". You should immediately notify your employer if you develop signs or symptoms associated with lead poisoning or if you desire medical advice concerning the effects of current or past exposure to lead or your ability to have a healthy child. You should also notify your employer if you have difficulty breathing during a respirator fit test or while wearing a respirator. In each of these cases, your employer must make available to you appropriate medical examinations or consultations. These must be provided at no cost to you and at a reasonable time and place. The standard contains a procedure whereby you can obtain a second opinion by a physician of your choice if your employer selected the initial physician.

[57 FR 26627, May 4, 1993, as amended at 58 FR 34218, June 24, 1993]

APPENDIX B

This appendix summarizes key provisions of the interim final standard for lead in construction that you as a worker should become familiar with.

I. Permissible Exposure Limit (PEL)—Paragraph (C)

The standard sets a permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air (50 ug/m^3), averaged over an 8-hour workday which is referred to as a time-weighted average (TWA). This is the highest level of lead in air to which you may be permissibly exposed over an 8-hour workday. However, since this is an 8-hour average, short exposures above the PEL are permitted so long as for each 8-hour work day your average exposure does not exceed this level. This interim final standard, however,

takes into account the fact that your daily exposure to lead can extend beyond a typical 8-hour workday as the result of overtime or other alterations in your work schedule. To deal with this situation, the standard contains a formula which reduces your permissible exposure when you are exposed more than 8 hours. For example, if you are exposed to lead for 10 hours a day, the maximum permitted average exposure would be 40 ug/m^3.

II. Exposure Assessment—Paragraph (D)

If lead is present in your workplace in any quantity, your employer is required to make an initial determination of whether any employee's exposure to lead exceeds the action level (30 ug/m^3 averaged over an 8-hour day). Employee exposure is that exposure which would occur if the employee were not using a respirator. This initial determination requires your employer to monitor workers' exposures unless he or she has objective data which can demonstrate conclusively that no employee will be exposed to lead in excess of the action level. Where objective data is used in lieu of actual monitoring the employer must establish and maintain an accurate record, documenting its relevancy in assessing exposure levels for current job conditions. If such objective data is available, the employer need proceed no further on employee exposure assessment until such time that conditions have changed and the determination is no longer valid.

Objective date may be compiled from various sources, e.g., insurance companies and trade associations and information from suppliers or exposure data collected from similar operations. Objective data may also comprise previously - collected sampling data including area monitoring. If it cannot be determined through using objective data that worker exposure is less than the action level, your employer must conduct monitoring or must rely on relevant previous personal sampling, if available. Where monitoring is required for the initial determination, it may be limited to a representative number of employees who are reasonably expected to have the highest exposure levels. If your employer has conducted appropriate air sampling for lead in the past 12 months, he or she may use these results, provided they are applicable to the same employee tasks and exposure conditions and meet the requirements for accuracy as specified in the standard. As with objective data, if such results are relied upon for the initial determination, your employer must establish and maintain a record as to the relevancy of such data to current job conditions.

If there have been any employee complaints of symptoms which may be attributable to exposure to lead or if there is any other information or observations which would indicate employee exposure to lead, this must also be considered as part of the initial determination.

If this initial determination shows that a reasonable possibility exists that any employee may be exposed, without regard to respirators, over the action level, your employer must set up an air monitoring program to determine the exposure level representative of each employee exposed to lead at your workplace. In carrying out this air monitoring program, your employer is not required to monitor the exposure of every employee, but he or she must monitor a representative number of employees and job types. Enough sampling must be done to enable each employee's exposure level to be reasonably represent full shift

exposure. In addition, these air samples must be taken under conditions which represent each employee's regular, daily exposure to lead. Sampling performed in the past 12 months may be used to determine exposures above the action level if such sampling was conducted during work activities essentially similar to present work conditions.

The standard lists certain tasks which may likely result in exposures to lead in excess of the PEL and, in some cases, exposures in excess of 50 times the PEL. If you are performing any of these tasks, your employer must provide you with appropriate respiratory protection, protective clothing and equipment, change areas, hand washing facilities, biological monitoring, and training until such time that an exposure assessment is conducted which demonstrates that your exposure level is below the PEL.

If you are exposed to lead and air sampling is performed, your employer is required to notify you in writing within 5 working days of the air monitoring results which represent your exposure. If the results indicate that your exposure exceeds the PEL (without regard to your use of a respirator), then your employer must also notify you of this in writing, and provide you with a description of the corrective action that has been taken or will be taken to reduce your exposure.

Your exposure must be rechecked by monitoring, at least every six months if your exposure is at or over the action level but below the PEL. Your employer may discontinue monitoring for you if 2 consecutive measurements, taken at least 7 days apart, are at or below the action level. Air monitoring must be repeated every 3 months if you are exposed over the PEL. Your employer must continue monitoring for you at this frequency until 2 consecutive measurements, taken at least 7 days apart, are below the PEL but above the action level, at which time your employer must repeat monitoring of your exposure every six months and may discontinue monitoring only after your exposure drops to or below the action level. However, whenever there is a change of equipment, process, control, or personnel or a new type of job is added at your workplace which may result in new or additional exposure to lead, your employer must perform additional monitoring.

III. Methods of Compliance—Paragraph (E)

Your employer is required to assure that no employee is exposed to lead in excess of the PEL as an 8-hour TWA. The interim final standard for lead in construction requires employers to institute engineering and work practice controls including administrative controls to the extent feasible to reduce employee exposure to lead. Where such controls are feasible but not adequate to reduce exposures below the PEL they must be used nonetheless to reduce exposures to the lowest level that can be accomplished by these means and then supplemented with appropriate respiratory protection.

Your employer is required to develop and implement a written compliance program prior to the commencement of any job where employee exposures may reach the PEL as an 8-hour TWA. The interim final standard identifies the various elements that must be included in the plan. For example, employers are

required to include a description of operations in which lead is emitted, detailing other relevant information about the operation such as the type of equipment used, the type of material involved, employee job responsibilities, operating procedures and maintenance practices. In addition, your employer's compliance plan must specify the means that will be used to achieve compliance and, where engineering controls are required, include any engineering plans or studies that have been used to select the control methods. If administrative controls involving job rotation are used to reduce employee exposure to lead, the job rotation schedule must be included in the compliance plan. The plan must also detail the type of protective clothing and equipment, including respirators, housekeeping and hygiene practices that will be used to protect you from the adverse effects of exposure to lead.

The written compliance program must be made available, upon request, to affected employees and their designated representatives, the Assistant Secretary and the Director.

Finally, the plan must be reviewed and updated at least every 6 months to assure it reflects the current status in exposure control.

IV. Respiratory Protection—Paragraph (F)

Your employer is required to provide and assure your use of respirators when your exposure to lead is not controlled below the PEL by other means. The employer must pay the cost of the respirator. Whenever you request one, your employer is also required to provide you a respirator even if your air exposure level is not above the PEL. You might desire a respirator when, for example, you have received medical advice that your lead absorption should be decreased. Or, you may intend to have children in the near future, and want to reduce the level of lead in your body to minimize adverse reproductive effects. While respirators are the least satisfactory means of controlling your exposure, they are capable of providing significant protection if properly chosen, fitted, worn, cleaned, maintained, and replaced when they stop providing adequate protection.

Your employer is required to select respirators from the types listed in Table I of the Respiratory Protection section of the standard. Any respirator chosen must be approved by the Mine Safety and Health Administration (MSHA) or the National Institute for Occupational Safety and Health (NIOSH). This respirator selection table will enable your employer to choose a type of respirator which will give you a proper amount of protection based on your airborne lead exposure. Your employer may select a type of respirator that provides greater protection than that required by the standard; that is, one recommended for a higher concentration of lead than is present in your workplace. For example, a powered air purifying respirator (PAPR) is much more protective than a typical negative pressure respirator, and may also be more comfortable to wear. A PAPR has a filter, cartridge or canister to clean the air, and a power source which continuously blows filtered air into your breathing zone. Your employer might make a PAPR available to you to ease the burden of having to wear a respirator for long periods of time. The standard provides that you can obtain a PAPR upon request.

Your employer must also start a Respiratory Protection Program. This program must include written procedures for the proper selection, use, cleaning, storage, and maintenance of respirators.

Your employer is required to select respirators from the types listed in Table I of the Respiratory Protection section of the standard (Sec. 1926.62 (f)). Any respirator chosen must be approved by the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 42 CFR part 84. This respirator selection table will enable your employer to choose a type of respirator that will give you a proper amount of protection based on your airborne lead exposure. Your employer may select a type of respirator that provides greater protection than that required by the standard; that is, one recommended for a higher concentration of lead than is present in your workplace. For example, a powered air-purifying respirator (PAPR) is much more protective than a typical negative pressure respirator, and may also be more comfortable to wear. A PAPR has a filter, cartridge, or canister to clean the air, and a power source that continuously blows filtered air into your breathing zone. Your employer might make a PAPR available to you to ease the burden of having to wear a respirator for long periods of time. The standard provides that you can obtain a PAPR upon request.

You must also receive from your employer proper training in the use of respirators. Your employer is required to teach you how to wear a respirator, to know why it is needed, and to understand its limitations.

Your employer must ensure that your respirator facepiece fits properly. Proper fit of a respirator facepiece is critical to your protection from airborne lead. Obtaining a proper fit on each employee may require your employer to make available several different types of respirator masks. To ensure that your respirator fits properly and that facepiece leakage is minimal, your employer must give you either a qualitative or quantitative fit test as specified in Appendix A of the Respiratory Protection standard located at 29 CFR 1910.134.

The standard provides that if your respirator uses filter elements, you must be given an opportunity to change the filter elements whenever an increase in breathing resistance is detected. You also must be permitted to periodically leave your work area to wash your face and respirator facepiece whenever necessary to prevent skin irritation. If you ever have difficulty in breathing during a fit test or while using a respirator, your employer must make a medical examination available to you to determine whether you can safely wear a respirator. The result of this examination may be to give you a positive pressure respirator (which reduces breathing resistance) or to provide alternative means of protection.

V. Protective Work Clothing and Equipment—Paragraph (G)

If you are exposed to lead above the PEL as an 8-hour TWA, without regard to your use of a respirator, or if you are exposed to lead compounds such as lead arsenate or lead azide which can cause skin and eye irritation, your employer must provide you with protective work clothing and equipment appropriate for the

hazard. If work clothing is provided, it must be provided in a clean and dry condition at least weekly, and daily if your airborne exposure to lead is greater than 200 ug/m^3. Appropriate protective work clothing and equipment can include coveralls or similar full-body work clothing, gloves, hats, shoes or disposable shoe coverlets, and face shields or vented goggles. Your employer is required to provide all such equipment at no cost to you. In addition, your employer is responsible for providing repairs and replacement as necessary, and also is responsible for the cleaning, laundering or disposal of protective clothing and equipment.

The interim final standard requires that your employer assure that you follow good work practices when you are working in areas where your exposure to lead may exceed the PEL. With respect to protective clothing and equipment, where appropriate, the following procedures should be observed prior to beginning work:

1. Change into work clothing and shoe covers in the clean section of the designated changing areas;

2. Use work garments of appropriate protective gear, including respirators before entering the work area; and

3. Store any clothing not worn under protective clothing in the designated changing area.

Workers should follow these procedures upon leaving the work area:

1. HEPA vacuum heavily contaminated protective work clothing while it is still being worn. At no time may lead be removed from protective clothing by any means which result in uncontrolled dispersal of lead into the air;

2. Remove shoe covers and leave them in the work area;

3. Remove protective clothing and gear in the dirty area of the designated changing area. Remove protective coveralls by carefully rolling down the garment to reduce exposure to dust.

4. Remove respirators last; and

5. Wash hands and face.

Workers should follow these procedures upon finishing work for the day (in addition to procedures described above):

1. Where applicable, place disposal coveralls and shoe covers with the abatement waste;

2. Contaminated clothing which is to be cleaned, laundered or disposed of must be placed in closed containers in the change room.

3. Clean protective gear, including respirators, according to standard procedures;

4. Wash hands and face again. If showers are available, take a shower and wash hair. If shower facilities are not available at the work site, shower immediately at home and wash hair.

VI. Housekeeping—Paragraph (H)

Your employer must establish a housekeeping program sufficient to maintain all surfaces as free as practicable of accumulations of lead dust. Vacuuming is the preferred method of meeting this requirement, and the use of compressed air to clean floors and other surfaces is generally prohibited unless removal with compressed air is done in conjunction with ventilation systems designed to contain dispersal of the lead dust. Dry or wet sweeping, shoveling, or brushing may not be used except where vacuuming or other equally effective methods have been tried and do not work. Vacuums must be used equipped with a special filter called a high-efficiency particulate air (HEPA) filter and emptied in a manner which minimizes the reentry of lead into the workplace.

VII. Hygiene Facilities and Practices—Paragraph (I)

The standard requires that hand washing facilities be provided where occupational exposure to lead occurs. In addition, change areas, showers (where feasible), and lunchrooms or eating areas are to be made available to workers exposed to lead above the PEL. Your employer must assure that except in these facilities, food and beverage is not present or consumed, tobacco products are not present or used, and cosmetics are not applied, where airborne exposures are above the PEL. Change rooms provided by your employer must be equipped with separate storage facilities for your protective clothing and equipment and street clothes to avoid cross-contamination. After showering, no required protective clothing or equipment worn during the shift may be worn home. It is important that contaminated clothing or equipment be removed in change areas and not be worn home or you will extend your exposure and expose your family since lead from your clothing can accumulate in your house, car, etc.

Lunchrooms or eating areas may not be entered with protective clothing or equipment unless surface dust has been removed by vacuuming, downdraft booth, or other cleaning method. Finally, workers exposed above the PEL must wash both their hands and faces prior to eating, drinking, smoking or applying cosmetics.

All of the facilities and hygiene practices just discussed are essential to minimize additional sources of lead absorption from inhalation or ingestion of lead that may accumulate on you, your clothes, or your possessions. Strict compliance with these provisions can virtually eliminate several sources of lead

exposure which significantly contribute to excessive lead absorption.

VIII. Medical surveillance—Paragraph (J)

The medical surveillance program is part of the standard's comprehensive approach to the prevention of lead-related disease. Its purpose is to supplement the main thrust of the standard which is aimed at minimizing airborne concentrations of lead and sources of ingestion. Only medical surveillance can determine if the other provisions of the standard have effectively protected you as an individual. Compliance with the standard's provision will protect most workers from the adverse effects of lead exposure, but may not be satisfactory to protect individual workers (1) who have high body burdens of lead acquired over past years, (2) who have additional uncontrolled sources of non-occupational lead exposure, (3) who exhibit unusual variations in lead absorption rates, or (4) who have specific non-work related medical conditions which could be aggravated by lead exposure (e.g., renal disease, anemia). In addition, control systems may fail, or hygiene and respirator programs may be inadequate. Periodic medical surveillance of individual workers will help detect those failures. Medical surveillance will also be important to protect your reproductive ability - regardless of whether you are a man or woman.

All medical surveillance required by the interim final standard must be performed by or under the supervision of a licensed physician. The employer must provide required medical surveillance without cost to employees and at a reasonable time and place. The standard's medical surveillance program has two parts -- periodic biological monitoring and medical examinations. Your employer's obligation to offer you medical surveillance is triggered by the results of the air monitoring program. Full medical surveillance must be made available to all employees who are or may be exposed to lead in excess of the action level for more than 30 days a year and whose blood lead level exceeds 40 ug/dl. Initial medical surveillance consisting of blood sampling and analysis for lead and zinc protoporphyrin must be provided to all employees exposed at any time (1 day) above the action level.

Biological monitoring under the standard must be provided at least every 2 months for the first 6 months and every 6 months thereafter until your blood lead level is below 40 ug/dl. A zinc protoporphyrin (ZPP) test is a very useful blood test which measures an adverse metabolic effect of lead on your body and is therefore an indicator of lead toxicity.

If your BLL exceeds 40 ug/dl the monitoring frequency must be increased from every 6 months to at least every 2 months and not reduced until two consecutive BLLs indicate a blood lead level below 40 ug/dl. Each time your BLL is determined to be over 40 ug/dl, your employer must notify you of this in writing within five working days of his or her receipt of the test results. The employer must also inform you that the standard requires temporary medical removal with economic protection when your BLL exceeds 50 ug/dl. (See Discussion of Medical Removal Protection - Paragraph (k).) Anytime your BLL exceeds 50 ug/dl your employer must make available to you within two weeks of receipt of these test results a second follow-up BLL test to confirm your BLL. If the two tests both exceed 50 ug/dl, and you are temporarily

removed, then your employer must make successive BLL tests available to you on a monthly basis during the period of your removal.

Medical examinations beyond the initial one must be made available on an annual basis if your blood lead level exceeds 40 ug/dl at any time during the preceding year and you are being exposed above the airborne action level of 30 ug/m^3 for 30 or more days per year. The initial examination will provide information to establish a baseline to which subsequent data can be compared.

An initial medical examination to consist of blood sampling and analysis for lead and zinc protoporphyrin must also be made available (prior to assignment) for each employee being assigned for the first time to an area where the airborne concentration of lead equals or exceeds the action level at any time. In addition, a medical examination or consultation must be made available as soon as possible if you notify your employer that you are experiencing signs or symptoms commonly associated with lead poisoning or that you have difficulty breathing while wearing a respirator or during a respirator fit test. You must also be provided a medical examination or consultation if you notify your employer that you desire medical advice concerning the effects of current or past exposure to lead on your ability to procreate a healthy child.

Finally, appropriate follow-up medical examinations or consultations may also be provided for employees who have been temporarily removed from exposure under the medical removal protection provisions of the standard. (See Part IX, below.)

The standard specifies the minimum content of pre-assignment and annual medical examinations. The content of other types of medical examinations and consultations is left up to the sound discretion of the examining physician. Pre-assignment and annual medical examinations must include (1) a detailed work history and medical history; (2) a thorough physical examination, including an evaluation of your pulmonary status if you will be required to use a respirator; (3) a blood pressure measurement; and (4) a series of laboratory tests designed to check your blood chemistry and your kidney function. In addition, at any time upon your request, a laboratory evaluation of male fertility will be made (microscopic examination of a sperm sample), or a pregnancy test will be given.

The standard does not require that you participate in any of the medical procedures, tests, etc. which your employer is required to make available to you. Medical surveillance can, however, play a very important role in protecting your health. You are strongly encouraged, therefore, to participate in a meaningful fashion. The standard contains a multiple physician review mechanism which will give you a chance to have a physician of your choice directly participate in the medical surveillance program. If you are dissatisfied with an examination by a physician chosen by your employer, you can select a second physician to conduct an independent analysis. The two doctors would attempt to resolve any differences of opinion, and select a third physician to resolve any firm dispute. Generally your employer will choose the physician who conducts medical surveillance under the lead standard - unless you and your employer can agree on the choice of a physician or physicians. Some companies and unions have agreed in advance, for

example, to use certain independent medical laboratories or panels of physicians. Any of these arrangements are acceptable so long as required medical surveillance is made available to workers.

The standard requires your employer to provide certain information to a physician to aid in his or her examination of you. This information includes (1) the standard and its appendices, (2) a description of your duties as they relate to occupational lead exposure, (3) your exposure level or anticipated exposure level, (4) a description of any personal protective equipment you wear, (5) prior blood lead level results, and (6) prior written medical opinions concerning you that the employer has. After a medical examination or consultation the physician must prepare a written report which must contain (1) the physician's opinion as to whether you have any medical condition which places you at increased risk of material impairment to health from exposure to lead, (2) any recommended special protective measures to be provided to you, (3) any blood lead level determinations, and (4) any recommended limitation on your use of respirators. This last element must include a determination of whether you can wear a powered air purifying respirator (PAPR) if you are found unable to wear a negative pressure respirator.

The medical surveillance program of the interim lead standard may at some point in time serve to notify certain workers that they have acquired a disease or other adverse medical condition as a result of occupational lead exposure. If this is true, these workers might have legal rights to compensation from public agencies, their employers, firms that supply hazardous products to their employers, or other persons. Some states have laws, including worker compensation laws, that disallow a worker who learns of a job - related health impairment to sue, unless the worker sues within a short period of time after learning of the impairment. (This period of time may be a matter of months or years.) An attorney can be consulted about these possibilities. It should be stressed that OSHA is in no way trying to either encourage or discourage claims or lawsuits. However, since results of the standard's medical surveillance program can significantly affect the legal remedies of a worker who has acquired a job - related disease or impairment, it is proper for OSHA to make you aware of this.

The medical surveillance section of the standard also contains provisions dealing with chelation. Chelation is the use of certain drugs (administered in pill form or injected into the body) to reduce the amount of lead absorbed in body tissues. Experience accumulated by the medical and scientific communities has largely confirmed the effectiveness of this type of therapy for the treatment of very severe lead poisoning. On the other hand, it has also been established that there can be a long list of extremely harmful side effects associated with the use of chelating agents. The medical community has balanced the advantages and disadvantages resulting from the use of chelating agents in various circumstances and has established when the use of these agents is acceptable. The standard includes these accepted limitations due to a history of abuse of chelation therapy by some lead companies. The most widely used chelating agents are calcium disodium EDTA, (Ca Na2 EDTA), Calcium Disodium Versenate (Versenate), and d-penicillamine (penicillamine or Cupramine).

The standard prohibits "prophylactic chelation" of any employee by any person the employer retains,

supervises or controls. *Prophylactic chelation* is the routine use of chelating or similarly acting drugs to prevent elevated blood levels in workers who are occupationally exposed to lead, or the use of these drugs to routinely lower blood lead levels to predesignated concentrations believed to be "safe". It should be emphasized that where an employer takes a worker who has no symptoms of lead poisoning and has chelation carried out by a physician (either inside or outside of a hospital) solely to reduce the worker's blood lead level, that will generally be considered prophylactic chelation. The use of a hospital and a physician does not mean that prophylactic chelation is not being performed. Routine chelation to prevent increased or reduce current blood lead levels is unacceptable whatever the setting.

The standard allows the use of "therapeutic" or "diagnostic" chelation if administered under the supervision of a licensed physician in a clinical setting with thorough and appropriate medical monitoring. Therapeutic chelation responds to severe lead poisoning where there are marked symptoms. Diagnostic chelation involved giving a patient a dose of the drug then collecting all urine excreted for some period of time as an aid to the diagnosis of lead poisoning.

In cases where the examining physician determines that chelation is appropriate, you must be notified in writing of this fact before such treatment. This will inform you of a potentially harmful treatment, and allow you to obtain a second opinion.

IX. Medical Removal Protection—Paragraph (K)

Excessive lead absorption subjects you to increased risk of disease. Medical removal protection (MRP) is a means of protecting you when, for whatever reasons, other methods, such as engineering controls, work practices, and respirators, have failed to provide the protection you need. MRP involves the temporary removal of a worker from his or her regular job to a place of significantly lower exposure without any loss of earnings, seniority, or other employment rights or benefits. The purpose of this program is to cease further lead absorption and allow your body to naturally excrete lead which has previously been absorbed. Temporary medical removal can result from an elevated blood lead level, or a medical opinion. For up to 18 months, or for as long as the job the employee was removed from lasts, protection is provided as a result of either form of removal. The vast majority of removed workers, however, will return to their former jobs long before this eighteen month period expires.

You may also be removed from exposure even if your blood lead level is below 50 ug/dl if a final medical determination indicates that you temporarily need reduced lead exposure for medical reasons. If the physician who is implementing your employers medical program makes a final written opinion recommending your removal or other special protective measures, your employer must implement the physician's recommendation. If you are removed in this manner, you may only be returned when the doctor indicates that it is safe for you to do so.

The standard does not give specific instructions dealing with what an employer must do with a removed

worker. Your job assignment upon removal is a matter for you, your employer and your union (if any) to work out consistent with existing procedures for job assignments. Each removal must be accomplished in a manner consistent with existing collective bargaining relationships. Your employer is given broad discretion to implement temporary removals so long as no attempt is made to override existing agreements. Similarly, a removed worker is provided no right to veto an employer's choice which satisfies the standard.

In most cases, employers will likely transfer removed employees to other jobs with sufficiently low lead exposure. Alternatively, a worker's hours may be reduced so that the time weighted average exposure is reduced, or he or she may be temporarily laid off if no other alternative is feasible.

In all of these situation, MRP benefits must be provided during the period of removal - i.e., you continue to receive the same earnings, seniority, and other rights and benefits you would have had if you had not been removed. Earnings includes more than just your base wage; it includes overtime, shift differentials, incentives, and other compensation you would have earned if you had not been removed. During the period of removal you must also be provided with appropriate follow-up medical surveillance. If you were removed because your blood lead level was too high, you must be provided with a monthly blood test. If a medical opinion caused your removal, you must be provided medical tests or examinations that the doctor believes to be appropriate. If you do not participate in this follow up medical surveillance, you may lose your eligibility for MRP benefits.

When you are medically eligible to return to your former job, your employer must return you to your "former job status." This means that you are entitled to the position, wages, benefits, etc., you would have had if you had not been removed. If you would still be in your old job if no removal had occurred that is where you go back. If not, you are returned consistent with whatever job assignment discretion your employer would have had if no removal had occurred. MRP only seeks to maintain your rights, not expand them or diminish them.

If you are removed under MRP and you are also eligible for worker compensation or other compensation for lost wages, your employer's MRP benefits obligation is reduced by the amount that you actually receive from these other sources. This is also true if you obtain other employment during the time you are laid off with MRP benefits.

The standard also covers situations where an employer voluntarily removes a worker from exposure to lead due to the effects of lead on the employee's medical condition, even though the standard does not require removal. In these situations MRP benefits must still be provided as though the standard required removal. Finally, it is important to note that in all cases where removal is required, respirators cannot be used as a substitute. Respirators may be used before removal becomes necessary, but not as an alternative to a transfer to a low exposure job, or to a lay-off with MRP benefits.

X. Employee Information and Training—Paragraph (L)

Your employer is required to provide an information and training program for all employees exposed to lead above the action level or who may suffer skin or eye irritation from lead compounds such as lead arsenate or lead azide. The program must train these employees regarding the specific hazards associated with their work environment, protective measures which can be taken, including the contents of any compliance plan in effect, the danger of lead to their bodies (including their reproductive systems), and their rights under the standard. All employees must be trained prior to initial assignment to areas where there is a possibility of exposure over the action level.

This training program must also be provided at least annually thereafter unless further exposure above the action level will not occur.

XI. Signs—Paragraph (M)

The standard requires that the following warning sign be posted in work areas when the exposure to lead is above the PEL:

DANGER
LEAD WORK AREA
MAY DAMAGE FERTILITY OR THE UNBORN CHILD
CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM
DO NOT EAT, DRINK OR SMOKE IN THIS AREA

Prior to June 1, 2016, employers may use the following legend in lieu of that specified above:

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

XII. Recordkeeping—Paragraph (N)

Your employer is required to keep all records of exposure monitoring for airborne lead. These records must include the name and job classification of employees measured, details of the sampling and analytical techniques, the results of this sampling, and the type of respiratory protection being worn by the person sampled. Such records are to be retained for at least 30 years. Your employer is also required to keep all records of biological monitoring and medical examination results. These records must include the names of the employees, the physician's written opinion, and a copy of the results of the examination. Medical records must be preserved and maintained for the duration of employment plus 30 years. However, if the employee's duration of employment is less than one year, the employer need not retain that employee's

medical records beyond the period of employment if they are provided to the employee upon termination of employment.

Recordkeeping is also required if you are temporarily removed from your job under the medical removal protection program. This record must include your name and social security number, the date of your removal and return, how the removal was or is being accomplished, and whether or not the reason for the removal was an elevated blood lead level. Your employer is required to keep each medical removal record only for as long as the duration of an employee's employment.

The standard requires that if you request to see or copy environmental monitoring, blood lead level monitoring, or medical removal records, they must be made available to you or to a representative that you authorize. Your union also has access to these records. Medical records other than BLL's must also be provided upon request to you, to your physician or to any other person whom you may specifically designate. Your union does not have access to your personal medical records unless you authorize their access.

XIII. Observation of Monitoring—Paragraph (O)

When air monitoring for lead is performed at your workplace as required by this standard, your employer must allow you or someone you designate to act as an observer of the monitoring. Observers are entitled to an explanation of the measurement procedure, and to record the results obtained. Since results will not normally be available at the time of the monitoring, observers are entitled to record or receive the results of the monitoring when returned by the laboratory. Your employer is required to provide the observer with any personal protective devices required to be worn by employees working in the area that is being monitored. The employer must require the observer to wear all such equipment and to comply with all other applicable safety and health procedures.

XIV. For Additional Information

A. A copy of the interim standard for lead in construction can be obtained free of charge by calling or writing the OSHA Office of Publications, room N-3101, United States Department of Labor, Washington, D.C. 20210: Telephone (202) 219-4667.

B. Additional information about the standard, its enforcement, and your employer's compliance can be obtained from the nearest OSHA Area Office listed in your telephone directory under United States Government/Department of Labor.

HEAVY MOBILE EQUIPMENT PROGRAM

Table of Contents

1. PURPOSE

1.1. To establish a program for operational guidelines and training for heavy mobile equipment as defined by OSHA and other regulatory or consensus standards. This program shall cover all Heavy Mobile Equipment. Contractors operating Heavy Mobile Equipment under Hunt Energy Services supervision shall also conform to the same procedures stated in this policy. Heavy Mobile Equipment includes:

Backhoe	Off Road haul Truck (Marooka Buggy)
Bulldozer	Side Boom
Excavator	Skid Steer
Skytrac	Tractor

2. DEFINITIONS

2.1. Attachments - A device that can be attached to a machine to be used for a specific purpose.

2.2. Backhoe - An attachment mounted on the back of an industrial tractor which digs, elevates, swings 180 degrees, and dumps material by action of the boom and arm with bucket.

2.3. Skid Steer - A machine used for moving bulk material, transporting material, or other activities.

2.4. Bulldozers - A track driven with a shovel like blade in front for pushing earth, debris, etc.

2.5. Designated - A person selected or assigned by the employer or the employer's representative as being qualified to perform specific duties.

2.6. Excavators - A self-propelled track driven or rubber-tire mounted machine with an upper structure capable of continuous rotation and which digs, elevates, swings, and dumps material by action of a boom and arm with bucket.

2.7. Skytrac - A self-propelled machine (truck or track mounted) with an upper structure capable of continuous rotation and which digs, elevates, swings, and dumps material by action of a telescoping boom with bucket.

2.8. Haul Truck (Marooka Buggy) - An off road truck used for transporting and dumping loose material.

2.9. Qualified Person - A person who by reason of knowledge, experience, or training is familiar with the operation to be performed and the hazards involved.

2.10. Tractors - A small piece of equipment commonly referred to as a farm tractor or industrial tractor. Tractors do not include rough terrain tractors with permanent fork attachments.

2.11. Transport - A tractor trailer with a lowboy used to haul large pieces of equipment.

3. PROCEDURE

3.1. General Operation Guidelines

3.1.1 Only qualified personnel designated by the company shall operate Heavy Mobile Equipment.

3.1.2 Safety must always be the operator's most important concern. The operator must refuse to operate when he knows it's unsafe and consult the supervisor when safety is in doubt.

3.1.3 Heavy Mobile Equipment shall be inspected using one of the heavy mobile equipment inspection checklists at the beginning of each shift prior to its use. The supervisor must act on the deficiencies noted to ensure repairs are made.

3.1.3.1 All Heavy Mobile Equipment shall have a place to store the Heavy Mobile Equipment checklist.

3.1.3.2 The heavy equipment mobile inspection checklist shall be completed by the first operator each shift and shall be inspected and signed by each subsequent operator during the same shift.

3.1.4 Seat belts shall be worn and properly adjusted at all times while operating Heavy Mobile Equipment.

3.1.5 Only the operator shall be permitted to ride equipment with the exception for training or maintenance purposes only, provided the trainer or observer is secured with a seat belt or safety harness and lanyard of appropriate length.

3.1.6 The operator shall completely walk around the equipment and clear the area of personnel and obstructions before operating Heavy Mobile Equipment.

3.1.7 Engines shall not be started unless gears are in neutral or park and the master clutch disengaged if so equipped.

3.1.8 Mount and dismount equipment correctly. Do not jump off Heavy Mobile Equipment. Face equipment when mounting or dismounting. Maintain three points of contact at all times. Hands shall be free of materials.

3.1.8.1 Before an operator dismounts from Heavy Mobile Equipment, the brakes must be set, gears placed in position to prevent equipment movement, all attachments lowered to the ground and shut the engine off.

3.1.8.2 The special instructions available in the operator's manual on shutdown and safety consideration shall be followed on diesel equipment.

3.1.9 All equipment left unattended at night, adjacent to public roadways in normal use, or adjacent to construction areas where work is in progress, shall have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors to identify the location of the equipment.

3.1.10 A "Do Not Operate" tag must be attached to the heavy equipment anytime service work is performed.

3.1.11 When parked on a grade, the wheels or tracks of Heavy Mobile Equipment shall be either chocked or turned into a bank.

3.1.12 Operation near drop-offs:

3.1.12.1 Equipment being operated along the edge of pits, material piles or draw holes shall be operated perpendicular to the drop-off at a safe distance determined by the nature of the material involved.

3.1.12.2 Equipment being operated on an engineered surface (ex. dams, gyp dikes) may be operated parallel to the drop-off.

3.1.13 Heavy Mobile Equipment, traveling on bi-directional roads, carrying loads that project beyond its sides or 4 feet beyond the rear shall have warning flags at the ends of

projection. Under conditions of limited visibility these loads shall have a warning light at the end of the projection. Flags or lights shall be attached to the end of the projection or be carried by persons walking beside or behind the projection.

3.1.14 The maximum speed of travel shall depend upon the load being carried, current road, weather, and traffic conditions.

3.1.14.1 Limit speed to maintain complete control over the machine.

3.1.14.2 Equipment operators shall not exceed the posted speed limit.

3.1.15 Heavy Mobile Equipment shall come to a complete stop at blind corners and before entering doorways. The horn shall be sounded before proceeding.

3.1.16 Headlights shall be turned on at all times when operated at night, inclement weather, or inside any of the storage buildings.

3.1.17 Operators should keep eyes forward and the load should not block view of path. If load is blocking view the operator should back up with load.

3.1.18 No person shall work or pass under elevated forks, loads, blades or buckets unless properly blocked.

3.1.19 Buckets, forks, or attachments shall be kept as low as possible when traveling.

3.1.20 No modifications shall be made to equipment that affects the safe operations of the piece of equipment without the manufacturer's or distributors written approval. If such modifications or changes are made, the capacity, operation, and maintenance instruction plates, tags, or decals shall be changed accordingly. In no case shall the original safety factor be reduced.

3.1.21 Heavy Mobile Equipment, including attachments, shall not be operated beyond its designed limits.

3.1.21.1 Equipment and attachments shall be operated according to the manufacturer’s operating manual.

3.1.21.2 Decals or placards shall be placed within operator's view, stating load capacities.

3.1.22 Operators should estimate the weight of the load before lifting.

3.1.23 The operator shall not leave his position at the controls while a load is raised.

3.1.24 Raised loads shall be kept clear of all obstructions.

3.1.25 Employees shall not ride equipment sleds or loads being moved which are being pushed or pulled.

3.1.26 Buckets shall not be used for hoisting personnel or as a work platform.

3.1.27 Operators cab shall be clean and free of loose items such as tools, spare parts or personal items that may damage or jam control levers. Cab floor, all windows, controls, steps & handrails should be maintained free of dirt, grease or oils.

3.1.28 Insure all safety guards are in their proper position and all safety warning graphics and decals are in place and readable.

3.1.29 At no time shall an operator ride in the cab of a transported piece of Heavy Mobile Equipment.

3.1.30 The engine shall be shut off and parking brake set during refueling. Smoking is not allowed in the refueling area.

3.1.31 Heavy Mobile Equipment working near or around storage piles having the vertical height of the working face of the material more than six (6) feet above the maximum reach of the equipment shall have falling object protective structure (FOPS) guarding.

3.2 Heavy Equipment Operations Around Power Sources

3.2.3 Operators shall be alert for buried electrical lines and electrical line indicators when performing any type of excavation.

3.2.4 When Heavy Mobile Equipment are operated under, over, by or near power lines, they shall maintain a minimum clearance of ten (10) feet from any part of the machine except where the power lines have been de-energized and visibly grounded at the point of work. (See the distance tables in 29CFR 1910.269 Tables R-6 through R-10 for additional information.)

3.2.5 If Heavy Mobile Equipment should come in contact with the energized wires, the following shall be done:

3.2.5.1 The operator shall stay on the machine until contact is cleared or the current is shut off.

3.2.5.2 Keep everyone on the ground away from the machine and keep any personnel from coming in contact with any part of the load.

3.2.5.3 If it is absolutely necessary to leave the machine, the operator shall leap away from, not step off the machine.

3.3 Bulldozers

3.3.3 The winch cable hook must be secured when the winch is not in use.

3.3.4 Employees must stand clear of winch cables when load is applied.

3.3.5 Personnel guarding shall be provided between the operator and winch.

3.4 Excavators

3.4.3 Load charts, should be affixed in cab, are required when an Excavator is used as a lifting device.

3.4.4 The operator's manual for the particular machine shall be consulted before using an Excavator as a lifting device.

3.5 Skytrac

3.5.3 Load charts, should be affixed in cab, are required when Skytrac is used as lifting device, refer to operator's manual.

3.5.4 The operator’s manual for the particular machine shall be consulted before using a Skytrac as a lifting device.

3.6 Haul Trucks (Marooka Buggy)

3.6.3 Dump bed vehicles shall be equipped with permanently attached safety bars capable of supporting the fully loaded bed. The vehicle bed shall be secured in the raised position by the supplied safety bars before any part of the body is placed between the raised bed and the frame of the truck.

3.7 Equipment Specific

3.7.3 All Heavy Mobile Equipment shall be provided with:

3.7.3.1 Operators and attachment manuals on the equipment or near its normal place of work for reference.

3.7.3.2 Equipment used for lifting shall have posted on the machine:

3.7.3.2.1 A standard hand-signal chart;

3.7.3.2.2 Maximum load capacities; and

3.7.3.2.3 And all safety decals or placards as required by the manufacturer.

3.7.3.3 At least a five pound ABC fire extinguisher mounted on operator's cab, unless equipped with an on-board fire suppression system.
3.7.3.4 Seat belts
3.7.3.5 If equipped on the machine, lights shall be maintained in operating condition.
3.7.3.6 Slow moving vehicle sign (triangle) if it crosses a public highway.
3.7.3.7 Primary walking surfaces of the skid resistant type.
3.7.3.8 Back-up I travel alarm if rear vision is impaired. Exception: Dozers not originally equipped and have a clear unobstructed view to the rear.
3.7.3.9 Manually operated horns or other audible warning safety devices which shall be maintained in functional condition.

4 TRAINING

4.1 Only trained and qualified employees shall be permitted to operate Heavy Mobile Equipment. Employees will be required to attend:
4.1.3 A general awareness class.
4.1.4 Pass written test with 100% accuracy. (Any answeres missed will be reviewed and initialed by operator as to the correct answer to reach 100% accuracy)
4.1.5 Equipment Specific Training, as follows:
4.1.5.1 Before being authorized to operate Heavy Mobile Equipment the operator shall have:
4.1.5.1.1 Been instructed by a Qualified Person in the intended purpose and function of each of the controls.
4.1.5.1.2 Read and understood the manufacturer's operating instructions and user's safety rules, or been trained by a Qualified Person on the contents of the manufacturer's operating instructions and users safety rules.
4.1.5.1.3 Understand by reading or having a Qualified Person explain all decals, warnings, and instructions displayed on the Heavy Mobile Equipment.
4.1.6 Operators currently operating Heavy Mobile Equipment may be evaluated to verify operating skills to satisfy equipment specific training.
4.2 Management responsible for Heavy Mobile Equipment operations must attend a Competent Person Training.

5 PROGRAM REVIEW / INSPECTIONS

5.1 Daily: A daily, prior-to-use inspection will be done by each operator on all Heavy Mobile Equipment before each use. Approval of the supervisor is required prior to commencing work if any deficiencies are noted. The supervisor must act on the deficiencies noted to ensure repairs are made.
5.2 Frequent Inspection: The frequent inspection shall be made by a qualified person on the specific make and model of the Heavy Mobile Equipment. Inspection frequency shall be performed during routine PM or at not more than 250-hour intervals.

6 Re-Training/Re-Certification

6.1 Refresher or corrective training shall be conducted and documented when any of the following exist:

6.1.3 The operator was involved in an incident or observed operating in an unsafe manner

6.1.4 An evaluation reveals that the operator is not operating safely

6.1.5 The operator is assigned to a different type of mobile industrial vehicle

6.1.6 Conditions in the workplace change in a manner that could affect the safe operation of the industrial vehicle

Hunt Energy Services LLC

Every Wednesday we have a MGMT safety meeting by conference call to discuss items revolving around Safety, Human Resources, and DOT.

Safety Director sends out topics to discuss throughout the months as we go along in the year.

2020 Training Plan

COMPRESS GAS EMERGENCY ACTION PLAN
RESPIRATORY
PROTECTION
SHORT SERVICE
EMPLOYEE
HAZARD
COMMUNICATION
PERSONAL PROTECTIVE
EQUIPMENT
H2S
FIRST AID
Emergency Eye Wash
Bloodborne Pathogens
Lead
Benzene
Confined Space
LOTO
Electrical Safety
Hearing Protection
Fire Extinguisher Safety
Hearing Protection
Grinder Safety
Process Safety
Management
Spill Prevention
Behavior Based Safety
Stop Work Authority
Incident Investigation
Heat Related illness
Scaffolding Safety

Hydrogen Sulfide (H2S)

Hunt Energy Services employees may be exposed to various chemicals or products in the workplace. All Hunt Energy Services employees shall be aware of the hazards posed by chemicals and shall be protected from any harm potentially caused by these hazards. Material Safety Data Sheets will be referenced for hazards and guidelines adhered to.

Characteristics of Hydrogen Sulfide

Hydrogen Sulfide is a colorless gas at atmospheric temperature and pressure. It has a foul odor, comparable to rotten eggs, in small concentrations but causes paralysis of the olfactory nerve within 60 seconds in higher concentrations. The paralytic effect of Hydrogen Sulfide on the sense of smell is a significant hazard. The odor threshold for H2S is 0.13 parts per million (PPM). NOTE: The Permissible Exposure Limit (PEL) for H2S in any 8-hr work shift of a 40-hr work week shall not exceed 10 PPM, and the Short Term Exposure Level (STEL) for H2S is 10 PPM for 15 minutes, a maximum of 4 times in an 8-hr work day with at least one hour between each exposure. This STEL can be used for the TLV/TWA.

Additional Characteristics:

- Hydrogen Sulfide is approximately 20% heavier than air.
- H2S forms an explosive mixture with air between 4.3% and 46% by volume concentration.
- H2S is soluble in water: 2.9 volumes of gas per volume of water at 20° C. NOTE: Solubility decreases with an increase in temperature; consequently, the H2S will be released from the oil or water.
- The IDLH (Immediately Dangerous to Life and Health) for H2S is 100 PPM.
- The ignition temperature for Hydrogen Sulfide is 500° F.
- Sulfur Dioxide (SO2) is a toxic byproduct of H2S; SO2 is created during the burning/flaring of H2S. Sulfur Dioxide has a pungent odor and provides ample warning of its presence—the odor threshold is 3 PPM. In high enough concentrations, SO2 is deadly.

Toxicity (Physiological Response):

10 PPM	Obvious and unpleasant odor; beginning eye irritation. Permissible Exposure Limit (PEL) of 8 hrs.
50-100 PPM	Slight conjunctivitis and respiratory tract irritation after 1 hour of exposure
100 PPM	Loss of sense of smell in 3 to 15 mins; altered respiration, coughing, and drowsiness after 15-30 mins followed by throat irritation after 1 hr; symptoms will gradually increase with continued exposure, and death can result within 48 hrs.
200-300 PPM	Quick loss of sense of smell; sting in eyes and throat; respiratory irritation; DEATH within 2 hrs.
300 PPM	Immediately Dangerous to Life or Health (IDLH)
500 PPM	Dizziness; breathing ceases within a few mins; prompt rescue breathing mandatory; SELF-RESCUE IMPOSSIBLE due to loss of muscle control
700 PPM	Quick loss of consciousness
1000 PPM	Immediate loss of consciousness followed by death within minutes

NOTE: There is no evidence that repeated exposures to Hydrogen Sulfide result in accumulative poisoning, but repeated exposures to H2S do appear to cause some increases in susceptibility to the gas.

Potential for Exposure

In most industrial operations, sulfur compounds are undesirable components that have to be removed from the product. There are several possible means by which H2S can permeate a job site:

1. Drilling Rigs
   Some geographical areas are richer in sulfur deposits than others, but there is always a danger of drilling into pockets of gas that will enter the atmosphere. There is always a risk of H2S escaping through a drilling hole, but other means of escape to consider are:

   a. Recycled Drilling Mud because of the weak soluble properties of H2S that are addressed above.

b. Water from Sour Crude Wells (for the same reason)

c. Blowouts

2. Tank Gauging and Field Maintenance

Work around tanks, pipeline and refining operations carries an inherent risk of exposure to H2S. Hydrogen Sulfide will utilize the oxygen in CO2 or water to create carbonic acid and eat through untreated, pitted or otherwise corroded steel. Although the necessary precautions should have already been taken, tank batteries, wells, pipelines and other such premises must be approached and worked in with an attentive regard for corrosion.

Casing, tubing, drill pipe, couplings and the like that are used around hydrogen sulfide should meet the standards as described in NACE STD MR-01-75: Standard material requirements sulfide stress cracking resistant metallic materials for oilfield equipment.

Exposure Prevention—Personal and Area Monitors/Alarms

All areas where there is a potential for exposure to Hydrogen Sulfide must be monitored. Although there are numerous types of monitors available (i.e. electronic, direct reading colorimetric tubes, wet chemistry and lead acetate methods), all monitors used for employee exposure prevention must adhere to the following:

1. All monitors should be portable, weighing no more than 10 lbs.

2. Monitors should provide a direct readout of hydrogen sulfide concentration in parts per million (PPM) by volume.

3. Monitoring equipment should be readily operable by all jobsite personnel.

4. All users should refer to or be trained on the material within the manufacturer's book before use.

5. At least one designated jobsite supervisor must be trained on the proper procedure to calibrate and reset area monitors, and employees that are issued personal monitors

must be trained and equipped to calibrate and reset the issued equipment.

6. All portable monitors should contain integrated audible, visual or physical presentation alarms.

7. All monitors should be rugged, but should be protected from extreme conditions (i.e. Water, chemical sprays and abuse).

   Only electronic monitors are suitable for standard jobsite safety; the personal and area electronic monitors issued on a job site must alarm when the PEL exceeds 10 PPM.

Safety Precautions and Contingency Plan

When the Hydrogen Sulfide concentration exceeds 10 PPM (ACGIH) at some area on site, all personnel must proceed to the upwind muster area (to be determined before work commences and modified if necessary to accommodate weather conditions). Remaining essential personnel must wear breathing apparatuses.

NOTE: Before work commences on any job site, a site-specific contingency plan will be established, and ALL employees working on-site must be trained on it.

NOTE: The only breathing apparatuses authorized for use around Hydrogen Sulfide are NIOSH-certified self-contained breathing apparatuses or an airline respirator with an escape SCBA.

PURPOSE:
The Safety Incident Investigation Procedure provides a systematic approach to safety incident investigation to determine initiating events, contributing events, root cause, and contributing causes. The incident investigations must identify appropriate recommendations that address the problems and identify root causes. These may include and are not limited to engineering controls, standard procedures and policies, personal protective equipment, and/or training for affected employees. Implementation of this procedure is intended to prevent and/or mitigate similar incidents and accidents in the future.

POLICY:
All safety incidents, including work-related injuries, accidents, regulatory violations, and near misses, will be investigated to determine root causes, and recommendations will be developed, communicated, and implemented to prevent recurrence of the accidental incident. All safety incidents, accidents, and near misses are included within the scope of this policy. ***(A near miss is a condition or an incident where but if not for a fortunate break in the chain of events, there is near certainty that an injury or property damage would have occurred).***

1. IDENTIFICATION OF RESPONSIBILITIES

1.1. **SAFETY OFFICER** is responsible to:

1.1.1. Timely review all OSHA recordable injuries, vehicular accidents, accidents involving property damage, and near miss events to assess cause and prevention;
1.1.2. Monitor corrective actions as appropriate to remedy an unsafe working condition, facility, equipment, location or practice;
1.1.3. Ensure correct documentation and report the results of the incident investigation, including findings and recommendations, to the department manager(s) involved. Ensure report results have been adequately reviewed by key managers and supervisors prior to final issuance of report findings.
1.1.4. Ensure procedures and policies are updated by the responsible manager to reflect improvements based on the findings or recommendations of the investigation.

1.2. **SUPERINTENDENTS** are responsible to:

1.2.1. Immediately report accidents and near miss events to the Safety Officer;

1.2.2. Participate in investigations of serious incidents

1.2.3. Review all accidents/injuries of subordinates and implement corrective action(s) and safety modification and/or employee training as recommended by the incident investigation.

1.3. **SUPERVISORS/FOREMEN** are responsible to:

1.3.1. Immediately report accidents and near miss events to their Superintendents, perform an initial investigation, and timely submit Accident/Injury Reports to the Safety Officer within 24 hours.

1.3.2. Review all accidents/injuries of subordinates and assess corrective action(s) and the need for safety modification and/or employee training.

1.4. **ALL EMPLOYEES** are responsible to immediately inform supervisors/foremen/pushers of accidents, near miss events, unsafe conditions, unsafe equipment, and known unsafe practices, and participate in the incident investigation as required to meet the objectives of this administrative procedure. Should there be any doubt to whether an incident be reported, employees should err on the side of conservative reporting and communication.

2. INVESTIGATION PROCEDURES:

2.1. All safety incidents are to be reported immediately (internally and to facility/client). Incidents are to be investigated in a timely manner (no more than 24 hours) to determine the root cause(s) and contributing factors involved. The extent of the investigation depends on a number of factors including the severity or potential severity of the incidents.

2.2. The employee's supervisor is responsible for performing an initial investigation within 24 hours to find out the root cause(s) of the incident, notifying and consulting with the Safety Officer as needed to complete the investigation and for correcting the situation, in consultation with the Safety Officer, to prevent its recurrence. The purpose of safety incident investigation is **not** to fix or find blame, but to identify the root cause and find preventative measures that can help to prevent future accidents.

2.3. Accident Investigate Approach

2.3.1. As with most other tasks, skill in conducting effective accident investigations improve with experience. A good basic approach is to find out what caused the accident and what can be done to prevent or minimize the chances of a similar accident occurring. Some suggestions that may help supervisors get the facts and reach a conclusion include:

2.3.2. Maintain objectivity throughout the investigation. Its purpose is to find the cause of the accident, not to assign blame for its occurrence.

2.3.3. Check the accident site and circumstances thoroughly before anything is changed.

2.3.4. Discuss the accident with the injured person, but only after first aid or medical treatment has been given.

2.3.5. Also talk with anyone who witnessed the accident and those familiar with conditions immediately before and after it occurred.

2.3.6. Ensure unbiased testimony

2.3.7. The need for follow-up interview should also be addressed

2.3.8. Be thorough. Small details may point to the real cause.

2.3.9. Reconstruct the events that resulted in the accident, considering all possible causes. Determine unsafe conditions or actions that separately or in combination were contributing factors.

2.4. Initial identification of evidence immediately following the incident might include a listing of people, equipment, and materials involved and a recording of environmental factors such as weather, illumination, temperature, noise, ventilation, and physical factors such as fatigue, age, and medical conditions.

2.5. SECURE THE AREA. To protect evidence and to avoid further injuries or damage, people should be kept out of the incident scene until the investigators arrive (except to relieve suffering). Investigator should take pictures of the scene, positions of equipment, parts, and papers must be preserved and secured.

2.6. Upon notification of an accident or near miss, the supervisor in consultation with the Safety Officer as needed, must:

ACCIDENT	NEAR MISS
• Provide for immediate medical attention	
• Assemble and complete necessary reporting and investigation forms	Assemble and complete necessary reporting and investigation forms
• Interview injured personnel and	Interview witnesses

witnesses	
• Examine the injured employee's work area including field evaluation, for causative factors	Examine the employee(s) work area for causative factors
• Review established procedures to ensure they are adequate and were followed	Review established procedures to ensure they are adequate and were followed
• Review training records of affected employees	Review training records of affected employees
• Determine all contributing causes to the accident	Determine all contributing causes to the near miss
• Report the incident to the Safety Officer	Report the incident to the Safety Officer
• Take corrective actions, in consultation with Safety Officer, to prevent the accident/exposure from reoccurring	Take corrective actions to prevent recurrence
• Record all findings and actions taken or to be taken	Record all finding and actions taken or to be taken
• Communicate "lessons learned" in safety training/meetings	Communicate "lessons learned" in safety training/meetings
NOTE: The guidelines listed provide a checklist for an initial investigation. Additional or modified steps should be used as appropriate to fit the case.	

2.7. The supervisor's initial findings and any immediate corrective actions must be documented on accident/injury forms and sent to the Safety Officer within 24 hours of notification of the incident / near miss. The supervisor shall determine appropriate corrective actions in consultation with the Safety Officer. It is important that information collected be objective, accurate and complete.

2.8. If an incident results in the hospitalization of an employee or fatalities, the supervisor or department manager must notify the Safety Officer immediately. The Safety Officer will lead the investigation (not the **Supervisor/Superintendent**) and must report the incident to the local OSHA office within 8 hours. Environmental incidents are to be reported within an 8-hour time frame.

2.9. The Safety Officer will review each accident or injury report within 24 hours of receipt to ensure that the investigation was thorough, that all immediate corrective actions are completed, and that long-term actions are clearly defined with adequate schedule and resources for completion. Investigations and/or corrective actions that are incomplete will be routed back to the supervisor for further follow-up, with specific recommendations noted by the Safety Officer. Investigations should strive to clarify discrepancies and conflicts of information so to identify root causes. However, in the case of conflicts of information that cannot be resolved, all relevant information should be included in the investigation to ensure a complete perspective of the event.

2.10. The supervisor, superintendent and/or manager will work with the Safety Officer to establish action deadlines. Corrective actions not implemented in a reasonable period of time as identified by the agreed deadline will be brought to the attention of the supervisor's manager by the Safety Officer.

3. REPORTING AND COMMUNICATION

3.1. All incidents will be routed from the Safety Officer to supervisors for discussion at safety tailgate meetings. Supervisors' review of minor injury/incidents should also be discussed at safety tailgate or staff meetings.

3.2. Managers are responsible for correcting any deficiencies found during the investigation process, and communicating the incident investigation results to Safety Department.

3.3. The Safety Officer is responsible for verifying that corrective action(s) is/are implemented. All serious incidents are tracked and communicated on an incident log maintained by the Safety Officer.

4. TRAINING

4.1. All personnel must be trained in their roles and responsibilities for incident response and investigation techniques. Training requirements relative to incident investigation and reporting should be identified. All training should be documented and kept on file.

4.2. Employees who could be first responders when an incident occurs should be trained and qualified in first aid techniques to control the degree of loss during the immediate post-incident phase.

5. EQUIPMENT

5.1. To properly address incident investigations certain equipment may be needed to include some or all of the following items:

- 5.1.1. Writing equipment such as pens/paper
- 5.1.2. Measurement equipment such as:
  - 5.1.2.1. Tape measures and rulers
- 5.1.3. Cameras
- 5.1.4. Small tools
- 5.1.5. Audio recorder
- 5.1.6. PPE
- 5.1.7. Marking devices such as flags
- 5.1.8. Equipment manuals, etc.

INJURY/ILLNESS RECORD KEEPING PROGRAM

POLICY

Documentation and record keeping is a critical component of any effective safety program. Furthermore, documentation is necessary to substantiate the training and other performance markers the company maintains to support the demands of federal regulations, and operator/client requirements.

1. OSHA Logs (OSHA 300 & 300A Logs)

1.1 OSHA logs are used to document work-related injuries, illnesses, and fatalities. Proper record keeping is paramount to maintaining accurate logs. Employees charged with the responsibility to maintain the company's OSHA logs must be properly trained on the federal recording protocols prior to assuming the responsibility.

1.2 Only recordable cases are added to the OSHA 300 Log. The employee responsible for maintaining the log must ensure that an injury or illness meets the following stipulations:

- 1.2.1 Injury or illness is work-related
- 1.2.2 Injury or illness is a new case (new injury/illness—not the result of a previous recordable)
- 1.2.3 Injury or illness meets one or more of the general recording criteria

1.3 Recordable cases must be investigated and documented within seven (7) calendar days of receiving information that a recordable injury or illness has occurred. An OSHA 301 Incident Report or other equivalent form must be completed within the same time period. (Follow the guidelines of the **Accident/Incident Reporting and Investigation** chapter of this manual while completing the investigation.)

1.4 At the end of the year, the employee(s) responsible for maintaining the OSHA 300 Log must complete the OSHA 300A Summary utilizing the information contained in the 300 Log. The OSHA 300A Summary will be signed by a company authorized representative. The OSHA 300A Summary must be posted from February 1st through April 30th in a visible location such that all employees can view it. The posting must be in a conspicuous place where

notices to employees are customarily posted. If the document is obstructed, tampered with or otherwise damaged during the allotted timeframe, it must be replaced.

1.5 All of the relevant injury, and illness information and documentation collected, including the OSHA 300, 301, and 300A Logs) must be maintained for at least five (5) years following the end of the calendar year that the incident occurred.

ALL OSHA LOGS (300, 301, 300A) MUST BE MAINTAINED AS COMPLETELY AS POSSIBLE WITH THE INFORMATION AVAILABLE. EVERY EFFORT MUST BE MADE TO ENSURE THAT THE DOCUMENTED INFORMATION IS COMPLETE AND ACCURATE.

2.0 Additional Records

2.1 Below is a table of required records, minimum retention times, and inspection/audit frequencies. While Hunt Energy Services does not generate all of these records at this time, work situations may change that would require additional record retention.

2.2 The Safety Department, along with Human Resources, is responsible for generating and storing these records. These records shall be stored in a manner where there is no potential for damage.

2.3 Note: When Hunt Energy Services joins a client in completion of a work permit, the Hunt Energy Services Supervisor shall make an attempt to obtain a copy of the permit for record keeping purposes.

2.4 Safety records are kept for the following reasons:

- 2.4.1 Trend analysis
- 2.4.2 Medical and health records
- 2.4.3 Training documentation
- 2.4.4 Audit requirements
- 2.4.5 Legal requirements
- 2.4.6 OSHA requirements
- 2.4.7 Personal protective equipment requirements
- 2.4.8 Client requirements

Required Records	Minimum Retention Period	Inspection/ Audit Frequency
Accident/Incident reports	6 years (indefinitely)	As needed
Audiometric Tests	Indefinite	Annually
Dosimetry samples	Duration of Employment + 30 years	When a change occurs
Hearing Conservation Program	3 years	As needed
Sound Level Surveys	Indefinite	As needed
Location Diagram of Sound Levels	Current	As needed
Employee notification of Dosimetry results	Duration of Employment + 30 years	As needed
Employee exposure records (including monitoring, samples, medical records)	Duration of employment + 30 years	As needed
Bloodborne Pathogen Exposure Control Plan	Current	Annually
Bloodborne Pathogen Immunization/Declination Forms	Duration of employment + 30 years	As needed
Bloodborne Pathogen Incidents and Exposures	Duration of employment + 30 years	As needed
Bloodborne Pathogen Training	3 years	As needed
CPR/1st Aid Training Records	3 years	As needed
CDL Driver Qualification File	Duration of employment + 30 Years	Annually
Confined Space Entry Permits	Current year + 1 Year	Annually
Confined Space Program Review	Current	Annually
Confined Space Training Records	3 years	As needed
Material Safety Data Sheets	Indefinitely	Annually
OSHA 5-in-1 poster	Current	Annually
OSHA citations	Current/Hold Indefinitely	Annually if applicable
Hazard Communication Program	Current	Annually

Master Chemical List	Current	Annually
Hazard Communication Training Records	3 years	As needed
HAZWOPER Incident Management Plan	Current	Annually
HAZWOPER Training Records	3 years	Annually
Employee Orientation	Duration of Employment	As needed
Job Safety Analysis (JSA)	Current + 6 months	As needed
Safety Meeting attendance	3 years	As needed
Safety Training Records	3 years	As needed
Vehicle Registration, Insurance	Current	As needed
Insulating equipment test documentation and certification	Life of Equipment	Annually
Electrical Safety Training	3 years	Annually
Emergency Alarm and Evacuation Procedures (Drills)	Current	Annually
Forklift Training Records	3 years	As needed
Daily Forklift Inspections	1 year	Daily
Lock Out/Tag Out training records	3 years	Annually
LO/TO program review	Current	Annually
Personal Protective Equipment Hazard Assessment	Current	As needed
PPE Training Records	3 years	As needed (such as change in hazards)
Respiratory Protection Program Evaluation	Current	Annually
Respiratory Hazard Assessment	Current	As needed
Respiratory Protection Procedures	Current	As needed
Respiratory Protection Training	3 years	As needed

Medical Evaluations	Duration of employment + 30 Years	Annually
Respirator Use Questionnaire	Duration of employment + 30 Years	As needed
Fit Tests	Current	As needed
Respirator Inspections	Current	Monthly

Grade D Breathing Air: 1. Purchased Air 2. Produced Air	1. 10 years 2. 10 years	1. Batch 2. Every 90 days or before each use
Hot Work Permits	Current, 1 – 6 months	As needed
NORM Survey	Indefinitely	As needed
H2S Training	3 years	As needed
H2S Medical Records	Duration of employment + 30 Years	As needed

INCIDENT ANALYSIS FORM

This form should be completely filled out and turned into the Safety Department of Hunt Energy Services within 24 hours.

Incident is a	☐ Recordable ☐ Non-Recordable	**Identified as an**	☐ Injury ☐ Near-Miss ☐ First Aid ☐ Medical Treatment Days ☐ Fatality ☐ Lost Work ☐ Other Specify: _____
Disposition:	Days away from work _____	Restricted work days _____	Date returned to work _____

Report Date	Incident Date	Incident Time	Name of Employee *(Last, First MI*	Soc. Sec.# (last 4)	Sex
		☐AM ☐PM			☐F ☐M

Employment Category	Status	Job Title	Supervisor's Name	Length in Seniority
☐ Regular ☐ Contract	☐ Full-time ☐ Part-time			Years Months

Time in Position	Incident Worksite	Location Name *(Job,Well,Site)*
Years Months	☐ HES or ☐ Customer	

Surface Condition	Property Damage
☐ Wet ☐ Dry ☐ Rock ☐ Uneven ☐ Flat ☐ Sloped ☐ Muddy	☐ Vehicle ☐ Equipment ☐ Other:

Affected Body Parts (check all that apply)

☐ Skull,Scalp	☐ Jaw	☐ Abdomen	☐ Shoulder	☐ Wrist	☐ Knee	☐ Foot
☐ Eye	☐ Neck	☐ Side Abdomen	☐ Upper Arm	☐ Hand	☐ Thigh	☐ Toe
☐ Nose	☐ Spine	☐ Back	☐ Elbow	☐ Finger	☐ Lower Leg	☐ Ankle
☐ Mouth	☐ Chest	☐ Pelvis	☐ Forearm	☐ Hip	☐ Other	

Nature of Injury or Illness

☐ Puncture	☐ Bruise,Contusion	☐ Skin Disorder	☐ Amputation	☐ Muscle Sprain	☐ Cumulative Trauma Disorder
☐ Laceration	☐ Dislocation	☐ Burn	☐ Insect Bite	☐ Animal Bite	☐ Muscle Strain
☐ Irritation	☐ Fracture	☐ Abrasion	☐ Respiratory	☐ Foreign Body	☐ Heat/ColdStress
☐ Hernia	☐ Chemical Exposure	☐ Hearing Loss	☐ Infection	☐ Other	

What CONDITION of Tools, Equipment, or Work Area contributed to INCIDENT?

☐ Close Clearance/Congestion	☐ Floors/Work Surfaces	☐ Inadequate Housekeeping	☐ Defective Tools/Equipment
☐ Hazardous Placement	☐ Inadequate Ventilation	☐ Equipment Failure	☐ Illumination
☐ Inadequate Warning System	☐ Equipment/Workstation Design	☐ Inadequate Guards/Barrier	☐ Inadequate/Improper P.P.E.
☐ Abuse or Misuse	☐ Inadequate Supervision	☐ Inadequate Purchasing	☐ Inadequate Engineering
☐ Inadequate Maintenance	☐ Improper Work Surfaces	☐ Wear and Tear	☐ Inadequate Tools/Equipment Maintenance

What CONDITION of Tools, Equipment, or Work Area contributed to INCIDENT (CONTINUED)

☐ Lack of Knowledge/Training	☐ Improper Motivation	☐ Inadequate Capacity	☐ Lack of Skill
☐ Failure to Make Secure	☐ Under Influence Drugs/Alcohol	☐ Failure to Warn/Signal	☐ Inadequate/Improper P.P.E used
☐ Nullified Safety/Control Devices	☐ Used Defective Equipment	☐ Horseplay/Distractive Active	☐ Operating at Improper Speed
☐ Used Equipment Improperly	☐ Improper Lifting	☐ Operation Procedure Deviation	☐ Running/Rushing/Acting in Haste
☐ Improper Position	☐ Servicing/Operating Equipment	☐ Used Wrong Tool/Equipment	☐ Improper Technique
☐ Temperature:	☐ Weather:	☐ Other:	☐ Other:

Description of Incident (Attach sheet for additional comments)

Preventive Measures: (What corrective actions have been taken or are planned to prevent a recurrence?)

☐ Improve Enforcement	☐ Improve Clean-up Procedures	☐ Repair/Replace Equipment	☐ Corrective Counseling
☐ Improve Storage/Arrangement	☐ Rotation of Employee	☐ Eliminate Congestion	☐ Improve/Change Work Method
☐ Identify/Improve P.P.E	☐ Install/Revise Guards/Devices	☐ Task Analysis to Be Completed	☐ Task Analysis/Procedure Revision
☐ Improve Design/Construction	☐ Job Reassignment of Employees	☐ Use Other Materials/Supplies	☐ Improve illumination
☐ Mandatory Pre-Job Instructions	☐ Improve Ventilation	☐ Reinstruction of Employees	

Corrective action(s) taken	Person Responsible	Target Date	Date Completed

Employee Signature	Date	Supervisor Signature	Date	Safety Supervisor Signature	Date

Witness Name (please print)	Signature	Date	Witness Name (please print)	Signature	Date

JOB COMPETENCY POLICY

PURPOSE
The purpose of this program is to establish general job competency requirements.

SCOPE
This procedure applies to all HUNT ENERGY SERVICES operations.

POLICY

1. HUNT ENERGY SERVICES Safety Manager

   1.1 Identifies, updates and monitors minimum qualification requirements, job titles and training documentation
   1.2 Supplies training reports to clients and HUNT ENERGY SERVICES management.

2. Site Manager and Supervisors

   2.1 Shall ensure all employees assigned to their project meet job competency Requirements and complete training identified in the training matrix.

   2.2 Shall ensure that any work that may endanger an employee must be completed by an employee who is competent to do the work.

   2.3 Shall ensure all employees have sufficient experience to safely perform work without supervision or with only a minimal degree of supervision.

3. **Employees**

   3.1 Attend and follow requirements of safety and health management training.

4. **General**

   4.1 Competence is a combination of knowledge, understanding and skill, and the appropriate level of competence cannot be acquired simply by attending a training session. The understanding and skill are acquired by experience. For individuals involved in exposure to HSE hazards and risks experience and

training are essential. The following components are to be considered for each worksite's delivery team for competency assurance:

Experience **Level of Knowledge** **Capability to Perform**

4.2 At HUNT ENERGY SERVICES our view of competency assurance involves the continuous assessment of training and development needs against a person's responsibilities, abilities and critical activities. This process enables the continuous improvement loop that feeds back into training and development activities that ensure competency assurance is an ongoing career cycle process.

4.2.1. Job Description Identified → Candidate Selection and Hiring Process (Reference and Background Check, Drug Screen, Physical Assessment) → Person Assessed and Hired for Open Position

4.2.2 Experience, Qualifications Assessed for Initial Training ↔ Initial Induction Training Completion

4.2.3 Further Training Required? If no → Ready for Work → On the Job Training → Competency Continually Assessed

4.2.4 Annual Performance Appraisal → Ready to Promote? → Employee Promoted → Further Training Required?

4.3 Competency is verified before employees are permitted to perform tasks independently. A competent person (supervisor, lead hand, instructor, etc.) must verify that an employee is competent to perform their roles and responsibilities before being allowed to work independently. If there is a site Short Service Employee (SSE) program established the new or transferred employee will fall under the SSE requirements as well.

5. **Identification of Documentation**

   5.1 Documentation is obtained from employees to demonstrate they meet the qualifications of their job. Based on the job description requirements documentation may include educational, certifications, licenses, prior acceptable training course completion, etc. Documentation is reviewed and confirmed as actual during the employee hiring process.

6. **Identification of Positions**

   6.1 An organizational chart and list of job titles has been established by ICENHOWER OIL AND GAS. Based on the positions and their exposure to risk their required training is entered into each worksite's training matrix. Job descriptions are prepared for each job title.

7. **Identification of Qualifications**

   7.1 Minimum qualification requirements for each job title have been established by ICENHOWER OIL AND GAS. Qualifications may include a combination of education, certifications and work experience. Safety training completion for the indicated job title is required before full qualifications are met to allow an employee to begin work.

8. **Identification of Training and Competency Needs**

   8.1 Employees (new or transferred) are provided job specific training related to their roles and responsibilities and trained on the tasks they perform on a regular basis. Training is identified in our training matrix which specifies safety and health training needs by job title. Our training matrix is updated based on changing risks.

9. **Training Records**

   9.1 All training records are maintained on site either by the ICENHOWER OIL AND GAS Safety Manager or senior representative of management or their designee.

10. **Delivery of Induction, Transfer & Refresher Training**

    10.1 Employees receive initial induction training. No work by any employee is allowed to begin until the orientation is completed.

10.2 Training requirements are tracked by the ICENHOWER OIL AND GAS Safety Manager and formal training sessions are conducted either on or off site by the Safety Manager or competent/qualified instructor for the required subject matter.

11. **Supervisor Safety Management Training**

11.1 Supervisors and managers receive annual, documented safety management system training.

JOURNEY MANAGEMENT PROGRAM

PURPOSE

The purpose of this program is to establish HUNT ENERGY SERVICES written safety practices associated with vehicle hazards and work related road trips. All affected employees will receive a copy of Journey Management Plan during new hire process and will receive refresher training on an annual basis.

1.0 AFFECTED EMPLOYEES

The Journey Management Plan shall be reviewed with all applicable Drivers and Employees before they perform any driving on company business. A copy of the plan must be readily available at the workplace. Drivers shall carry a copy of the plan on each road trip.

2.0 ROUTING & SCHEDULING

Routing and scheduling procedures are location-specific and should be developed and managed in accordance with the hazards and risks associated with driving and transporting.

3.0 MODE OF TRAVEL CONSIDERATIONS

When mode-of-travel options exist, the following guidelines should be considered to assess and help decide whether driving or road transport is the best solution for moving people and/or goods and services between two or more points:

> If the distance from origin to destination is over 300 miles, involves a significant amount of night driving, requires more than five hours of driving, then "flying" may be the better alternative.

4.0 REDUCING RISKS & COST

Road journeys shall be taken only when necessary. Whenever possible, HUNT ENERGY SERVICES shall try to complete multiple tasks in single trips to reduce the amount of driving for improved safety and efficiency. If the trip is being taken to meet with someone, management shall determine if the meeting can be done over the phone instead. Before leaving on a trip, Drivers shall ensure that weather conditions are safe for driving and the vehicle being used is adequate for the weather conditions. Additionally, Drivers shall conduct a pre-trip inspection to ensure emergency supplies are in the vehicle including, but not limited to water, first-aid kit, warning triangle,

flashlight, booster cables, mobile phone and/or a CB Radio. In particularly harsh conditions, management shall consider canceling or rescheduling the trip.

5.0 PLANNING AHEAD

Before taking a trip to an unfamiliar location, Drivers shall ensure that they have printed driving directions available. Drivers shall not plan to read directions from a mobile phone while driving. A GPS device may be used, but printed directions should be kept as a back-up. Drivers shall notify their Immediate Supervisor or a member of Management who is not traveling with them of their travel plans. This includes where they are going, when they should be getting there, and when they plan to return. Although some driving in adverse weather is unavoidable, all drivers shall check weather prior to departure. If adverse weather conditions are encountered, decrease speed and increase vehicle distance as required. If weather conditions warrant, travel shall be halted until conditions improve.

6.0 SELECT THE BEST ROUTE

Minimizing exposure to roadway-related driving hazards and risks should involve the following types of considerations:

Maximize time on freeways and major roads, and
Minimize time on rural roads, congested urban areas and city streets

7.0 PLANNING REST BREAKS

When driving long distances, sufficient breaks shall be taken to prevent fatigue. When driving alone and having trouble staying awake, pull *off* the road and get out of the vehicle for fresh air, or take a power nap. If driving late at night, every Company Driver shall consider getting a hotel room and starting fresh the next day. If two licensed drivers are in the vehicle, take turns driving. Drivers shall get plenty of rest before beginning their journey.

8.0 NIGHT DRIVING

Driving at night is a hazardous activity because of reduced visibility as well as driver fatigue. Whenever possible, driving should be done during daylight hours rather than after dark. Drivers shall follow posted speed limits which include reducing speed when driving at night and should remain aware of the potential for wildlife to be on the road, especially when driving at dusk or dawn.

9.0 MAXIMUM HOURS OF OPERATION

HUNT ENERGY SERVICES has established a 15 hour work limitation on Driving, Production or Standby. In addition, the Operations Manager will be responsible for controlling job rotation schedules in order to control fatigue, allow for sufficient sleep and increase mental fitness. Employees are encouraged to report fatigue/tiredness and lack of mental acuity to their immediate Supervisor. Management must take appropriate actions to prevent loss or risk to personnel.

10.0 FATIGUE MANAGMENT

HUNT ENERGY SERVICES will also periodically evaluate and improve work tasks to control fatigue. Where possible we shall use ergonomic friendly equipment to reduce/release and control worker fatigue. Employees are prohibited from chronically using over-the-counter or prescription drugs to increase mental alertness. Furthermore, Supervisors shall discouraged employees from taking any substance known to increase fatigue in that employee, including fatigue that sets in after the effects of the drug wear off.

11.0 DRIVER SAFETY REQUIREMENTS & FATIGUE TRAINING PROGRAM

A. Only authorized employees will drive a motor vehicle in the course and scope of work or operate a company- owned vehicle. Drivers should be appropriately assessed, licensed and trained to operate the vehicle. Minimum driver qualifications shall include but not limited to:

B. Drivers shall not operate a motor vehicle while under the influence of alcohol, illegal drugs, or prescription or over-the counter medications that might impair their driving skills. Authorized drivers will report any collision or traffic violation while driving on Company time to the appropriate personnel.

C. Driver shall ensure all loads are secure prior to departure. Company vehicles shall only be used for business purposes and shall meet load specifications & manufacturer requirements. Vehicles loads shall **not** exceed legal limits and shall be the correct size and design for the intended use.

D. All Company vehicles shall be maintained in safe working order. Seatbelts shall be worn by all occupants at all times whenever a vehicle is in motion. Authorized drivers shall follow safe driving practices.

12.0 DRIVER & FATIGUE MANAGEMENT TRAINING

ICENHOWER OIL & GAS's Driver training program shall address initial skills for new drivers, continuing education for existing drivers and instances where remedial training shall be required. HUNT ENERGY SERVICES will provide initial and annual training on how to recognize fatigue, how to control fatigue through appropriate work and personal habits, and reporting of fatigue to Supervisors and Management. Training shall also include, but not limited to, the following Safe Driving Practices:

Load Securement
Company Disciplinary Policy
Following Posted Speed
Limits
Motor Vehicle Inspections and Maintenance
Hours of Service and Log Book Requirements
Maintaining Safe Travel Distance between Vehicles;
Incident reporting and the use of the Incident Investigation Kit;
Company Policy That Prohibits the Use of Cell Phones and/or Electronic Devices While the Vehicle is In Motion

Note: All DOT drivers will comply with all49 CFR standards.

Ladder Safety

1. Safety climbs that are installed on ladders attached to equipment must be used. Safety climbs have safety belt attachments that allow personnel to climb without detaching their safety belts after each step.

2. Hunt Energy Services ladders must be maintained in good condition. When portable ladders are used on hard surfaces, they must be equipped with nonskid footing or securely fastened to prevent slipping. The top of the ladder should be secured, or another person should hold the ladder. The base of the ladder should be placed away from the wall by a distance of about one foot for every four feet in height. Ladders will extend three feet past point of contact; if this is not feasible, the ladder must be secured at the top to a rigid support that will not deflect.

3. All permanent ladders must be securely fastened at both top and bottom. Long ladders should also be secured at intermediate points.

4. Hunt Energy Services ladders should be closely inspected when purchased or installed and re-inspected at least twice a year. Check the condition of the ladder before it is used and correct any defects. The combined weight of the employee and load should not exceed the load limit of the ladder. Remove any oil, grease, or slippery material from the ladder and from the shoes.

5. Wooden and fiberglass ladders must not be painted. Wooden ladders should be coated with clear varnish or shellac or treated with boiled linseed oil.

6. Ladders must not be placed in front of doors that open toward the ladder unless the door is locked or guarded.

7. When climbing or descending a ladder, a person should face the ladder and hold the side rails, not the rungs. Climbers should not carry tools or other encumbrances in their hands. A tool belt or pouch should be used for holding small tools, and a hand line should be used to raise or lower heavy or bulky objects. When a climbing belt is supplied, the person ascending or descending the ladder must use it.

8. When working from a ladder, never extend farther than the arm's length to reach work.

When working on a portable ladder, move the ladder to avoid the possibility of an accident.

9. No more than one person should be on a ladder at the same time where possible. If a job requires more than one person, a second ladder or a scaffold should be considered.

10. Never work on an unsecured ladder in windy conditions.

11. A person should not stand on the top two steps or the spreader of a stepladder.
12. A stepladder should not be used as a straight ladder (i.e. used while still folded).

13. It is a good safety practice for someone to hold or steady a stepladder for a person working near its top.

14. Ladder rungs, cleats, and steps shall be parallel, level, and uniformly spaced, when the ladder is in position for use.

15. Ladders must be placed on a stable and level surface.

All Hunt Energy Services ladders will be inspected by a competent person for visible defects on a periodic basis and after any occurrence that could affect their safe operation. Any ladder that is deemed defective by the competent person is to be tagged and removed from the premises.

Portable and fixed ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, corroded components, or other faulty or defective components, shall either be immediately marked in a manner that readily identifies them as defective, or be tagged with “Do Not Use” or similar language, and shall be withdrawn from service until repaired.

When performing electrical work that requires the use of a ladder, use a wooden or approved fiberglass ladder. Metal (aluminum) ladders cannot be used.

When raising a ladder, make sure it will not contact an electrical line.

Extension ladders should properly overlap between sections.

Ladders must not be used as scaffold members or for any purpose for which they are not intended. Do not place ladders on top of boxes, barrels, crates, etc.

Unsecured portable ladders should not be left standing unattended.

Always use an approved ladder or stool to reach articles high above the floor. Never use a swivel chair or other makeshift device to reach high places.

Appendix A - Ladder Inspection

Date:_____ Ladder Number:_____

Inspector:_____ Location:_____

	Yes	No	Comment
Are non-slip bases in good condition?			
Any visible cracks?			
Any loose steps or rungs?			
Any loose screws, bolts, or other parts?			
Are braces, steps, or rungs excessively dented?			
Are hinge spreaders tight and functioning properly?			
Are extension locks in place and in good condition?			
Are identification marks legible?			
Is overall condition acceptable for use?			
Are casters in place and in good condition?			
Are handrails tight and functioning properly?			

If ladder is found to be in safe condition sign inspection tag located on ladder.

If ladder is found to be in unsafe condition, it is to be immediately taken out of service.

Lifting Equipment and Materials

Different types of hoisting and rigging devices and lifting equipment may be used at Hunt Energy Services for lifting, pulling, and moving equipment. Only qualified and authorized individuals shall operate these devices. The safety rules and guidance in this program apply to all operations at Hunt Energy Services that involve the use of wire rope, slings, chains, and lifting equipment such as cranes and to all Hunt Energy Services employees and/or supplemental labor who use such devices. The company's Safety Personnel are responsible for the administration and periodic review of this program.

Employee Responsibilities

Supervisors are responsible for:

- Ensuring that employees under their supervision receive the required training and are competent in the use of equipment using wire rope and cable in their areas.
- Providing training for prospective operators in order to prevent property damage and injury.
- Evaluating trainees using the equipment and competency testing.
- Ensuring the equipment is inspected and tested monthly by a responsible individual and that rigging equipment is inspected monthly as well and prior to use.

Equipment Operators are responsible for:

- Operating lifting and pulling equipment safely
- Conducting functional tests prior to using the equipment
- Selecting and using rigging equipment appropriately
- Selecting the proper sling
- Properly storing all rigging so as to prevent damage
- Determining the sling capacity
- Learning sling configurations
- Identifying and evaluating sling deterioration
- Determining the proper size for slings and components
- Not using manila rope for rigging
- Making sure that shackle pins and shouldered eyebolts are installed in accordance with the manufacturer's recommendations
- Making sure that ordinary (shoulderless) eyebolts are threaded in at least 1.5 times the bolt diameter
- Using safety hoist rings (swivel eyes) as a preferred substitute for eye bolts wherever possible
- Padding sharp edges to protect slings
- Not using slings, eyebolts, shackles or hooks that have been cut, welded or

brazed.

Company Safety Personnel are responsible for:

- Performing annual maintenance and inspection of all Hunt Energy Services equipment, slings, and pickup lines that are not covered by a program with maintenance responsibility.
- Conducting periodic inspections of wire rope, shackles, eyes, sockets, etc.
- Maintaining written records of inspections and tests, and placing copies of all inspections and test results in a file
- Inspecting equipment following modification or extensive repairs
- Conducting training for all equipment having wire rope and cables attached to them
- Periodically verifying monthly test and inspection reports
- Interpreting wire rope and cable safety rules and standards
- Removal of defective slings and cables from service and destroying or disposing of them to prevent inadvertent reuse
- Checking to ensure that all responsible parties are properly storing rigging and related hardware.

Safe Operating Requirements

All workers who use Icenhower Oil & Gas' equipment shall be deemed competent in its use: authorized employees who have been specifically trained in the operation and safety of the machinery/equipment.

General Safety Rules

At the start of each work shift, operators shall do the following steps before using equipment having wire rope slings and/or cables attached to them:

- Visually inspect the wire rope, eyes and sockets as much as possible; in most instances, this will be done at the work site before starting the job.
- Never overload the lifting equipment or rigging—load capacities must be posted.
- Make certain there are no obstructions between the equipment and where the rope is attached.
- Make certain the pickup line is operating smoothly by lifting the equipment up and downward to verify that the line is in the shieve groove.
- Plan and check the travel path to avoid personnel and obstructions.
- Defective cables and slings shall be tagged out of service until properly repaired or disposed of. Disposal will consist of destruction of defective equipment. The inspector shall initiate corrective action by notifying the company Safety Officer.

General Rigging Safety Requirements

Company policy requires a minimum safety factor of 5 to be maintained for wire rope slings. The following types of slings shall be rejected or destroyed:

Wire rope slings with

- Kinking, crushing, bird-caging, or other distortions
- Evidence of heat damage
- Cracks, deformation, or worn end attachments.
- Six randomly broken wires in a single rope lay
- Three broken wires in one strand of rope

Note: Rotation resistant rope has different strand break requirements; therefore, follow the manufacturer's requirements.

Alloy steel chain slings with

- Cracked, bent, or elongated links or components.
- Cracked hooks, shackles, eyebolts, turnbuckles, or other components that are damaged or deformed.

Inspections, Maintenance, and Testing

All tests and inspections shall be conducted in accordance with the manufacturer's recommendations.

Slings shall have appropriate test data when purchased. It is the responsibility of the purchaser to ensure that the appropriate test data is obtained and maintained.

Pickup lines that have been overloaded shall be inspected prior to being returned to service.

Records

Hunt Energy Services Safety Personnel shall maintain records for all slings, cables, and other rigging equipment.

Rigging Storage

Sun, dirt, and wet conditions will potentially damage rigging equipment. When any lifting equipment is not being used, it shall be stored out of the elements. Rigging can be stored in storage compartments on equipment or designated storage cases, but must be removed from the immediate work area when not in use. Both the equipment operator and rigger are responsible for ensuring that all equipment is stored properly. Equipment will be thoroughly inspected before use. Certification of rigging should include the date of inspection, ID of the rope inspected, and the signature of the person performing the inspection.

All damaged equipment will be made inoperable (destroyed) and removed from the work area. Failure to properly store rigging will result in employee sanctions.

Personnel Precautions

Personnel:

- Must be in the clear at all times
- Must not walk, stand, or work under suspended loads.
- Each person participating in the operation must
- BE ALERT!!
- Watch the crane block, sling and load, and
- Be able to move freely, if necessary.
- Never ride on a load that is being hoisted

Operating Hoisting Equipment

A load must not be left hanging on the hoist any longer than necessary. When possible, use a hoist or crane to lift a heavy load, and always rig the hoist down and secure it after the work is completed.

While operating hoisting equipment, never place a part of the machine or load within fifteen feet, either laterally or vertically, of an energized power line. (See Power Line Restrictions) Never use hoisting equipment for lifting personnel, unless the equipment is certified, designed, and rated for that purpose. Personnel lifts must be accompanied by completing test and trial lifts per ANSI and OSHA standards.

Load Capacity

The manufacturer's maximum load specification for the hoist must be noted on the hoist. All operators of cranes, cherry pickers, and other lifting equipment must know the load capacities of the equipment they are operating; operators are forbidden to exceed the capacities of their equipment. Capacity charts, operating speeds and hazard signs must be posted by the controls so the operator can see them clearly.

Load tests are to be performed by the company Safety Personnel, and the written reports and records of these tests are to be maintained. In addition, written reports are to include the testing procedures used and documentation of any repairs made.

Boom angle indicators must be permanently attached to the boom and functioning properly. Indicators must show the operating angle and corresponding radius.

Never overload the hoist by trying to lift objects that are heavier than the equipment is rated to lift, or by overextending the length of the boom.

Tag Lines

When safe to do so, tag lines must be used to control loads. Before a hook is moved, personnel using tag lines must inspect the lines for knots. Tag lines must not be wrapped around the employee's hand or wrist. The operator, signal person, and load handlers are responsible for ensuring that the load is never over any person.

Outriggers

USE YOUR OUTRIGGERS! Make sure outriggers are on firm timber or steel matting. Outriggers are better than rubber chocks.

Hooks

Hooks on all blocks, including snatch blocks, must have bolts or latches, which must be used each time a load is lifted. The only time bolts or latches are not mandatory is while lowering-in during pipeline construction.

An inspection of all hooks must be performed monthly. A record will be kept of all inspections and will include the date of inspection, the signature of the inspector, and the serial number or other identifier of the hook. Welding is not permitted under any circumstances on any part of the hook.

Handling Cable

Always maintain tension on the cable when reeling it in or out. Leather-palm gloves will be used when handling cables.

Hoist Rotation

For a hoist with manual rotation, ensure that the locking mechanism is working properly, and lock the hoist in the desired position before lifting the load.
Caution: The load can easily swing out of control if the hoist is not correctly locked.

Do not attempt to manually rotate a loaded hoist until all personnel are positioned clear of the load, and an adequate number of tag lines are in place.

A hoist with power rotation should be used, if available, for jobs that require horizontal positioning of a load after it has been picked up.

Signal Persons

A qualified signal person(s) must work with the hoist or crane operator when

- Personnel assisting with the load are out of the range of the operator's vision
- The moving load is out of the range of the operator's vision, or
- The person is charge of the lift determines it to be necessary.
- The appropriate ANSI standard signals will be used, and illustrations of the signals shall be posted at the job site.

Inspecting Hoisting Equipment

The hoist and its cable must be inspected before each use by a competent person, and if heavy loads are being lifted, then inspections must be performed throughout the day to ensure no problems arise.

All hooks on hoisting equipment should be visually inspected for cracks and twists before the equipment is used.

Lifting equipment of any kind must be inspected before each use by a competent person and a record of the results must be maintained. In addition, a monthly inspection of all hoisting equipment must be performed. An annual inspection must also be performed. A record of all inspections will be kept and will include the date of

inspection, the signature of the inspector, and the serial number or other identifier of the equipment. Inspection records will remain with the equipment while it is assigned to a jobsite and forwarded to the administrative offices to be added to the equipment's file. Equipment must not be used if it is not working properly. All wire rope and chains must be taken out of service when wear or corrosion exceeds that allowed by the manufacturer's recommendations.

Inspecting Slings

Slings, fittings, and fastenings should be inspected before each use. Additional inspection must be performed throughout the day to ensure no damage has occurred. Inspections are to be performed by a designated competent person, and should include each sling, the fastenings and attachments. Slings found to be defective must be destroyed.

Using Slings

- Pad or block sharp corners
- Lift and lower loads slowly
- Use the appropriate chart to ensure that slings of adequate capacity are used
- Know how much weight you are lifting.
- Do not use knots to make slings.
- Do not jerk loads.

Applying Wire Rope Clips

- Use the number and spacing of clips recommended in the following table.
- Make sure the U-bolts of all wire ropes are on the short (dead) end of the rope
- Tighten nuts evenly to the manufacturer's recommended torque
- Before lifting, be sure that all clips have been torqued.
- After several lifts, re-torque all clips.

Number and Spacing of U-Blot Wire Rope Clips

Imp. Plow Steel Rope	Drop Forged	Other Material	Min. Spacing
½	3	4	3
5/8	3	4	3 ¾
¾	4	5	4 ½
7/8	4	5	5 ¼
1	5	6	6
1 1/8	6	6	6 ¾
1 ¼	6	7	7 ½
1 3/8	7	7	8 ¼
1 ½	7	8	9

Requirements for Crane Operators/Cherry Picker Operators

Only designated personnel are authorized to use cranes; these persons must be certified through written and practical testing. The crane operator will not operate the crane until the employees assigned to work with the load have explicit instructions and understand their function. The person responsible for the lift and the crane operator must jointly

- Check the load chart (load chart must be accessible to operator inside cab at all times and this chart must be legible)
- Check the boom length against the chart
- Establish the load weight and maximum operating radius, or
- Establish the corresponding minimum boom angle.

For cherry picker operations, transport loads at slow speeds on smooth, level surfaces with the boom over the front and swing lock engaged.

Fire Extinguishers

All hoisting equipment will be equipped with a dry chemical or CO2 fire extinguisher. Personnel will be familiar with Hunt Energy Services Fire Prevention policy and corresponding fire-related training.

Change Request Form

SUBMITTER - GENERAL INFORMATION				
CR#				
Submitter Name				
Brief Description of Request				
Date Submitted				
Date Required				
Priority	☐ Low	☐ Medium	☐ High	☐ Mandatory
Reason for Change				
Other Artifacts Impacted				
Assumptions and Notes				
Attachments or References	☐ Yes	☐ No		
	Link:			

INITIAL ANALYSIS		
Hour Impact		
Duration Impact		
Schedule Impact		
Comments		
Recommendations		

CHANGE CONTROL BOARD - DECISION				
Decision	☐ Approved	☐ Approved w/Conditions	☐ Rejected	☐ More Info
Decision Date				
Decision Explanation				
Conditions				

MANAGEMENT OF CHANGE POLICY

PURPOSE

The purpose of the Management of Change policy is to manage changes in a rational and predictable manner so that Hunt can: 1) provide the guidelines and strategy for management and control of the Management of Change (MOC) process and 2) to clarify the organizational responsibilities for that management.

The intent is to ensure the capability to accommodate expansion of operations while establishing a common and consistent Management of Change process across the IOG. The Management Framework describes processes, roles and responsibilities to ensure compliance and ongoing sustainability.

SCOPE

The scope of the Management of Change Management is applicable to personnel in MOC management roles within Hunt Energy Services. Planned and unplanned material changes are identified and managed.

POLICY

1. INTRODUCTION

1.1 PURPOSE OF THE MANAGEMENT OF CHANGE

The Change Management Plan documents and tacks the necessary information required to effectively manage project change from project inception to delivery.

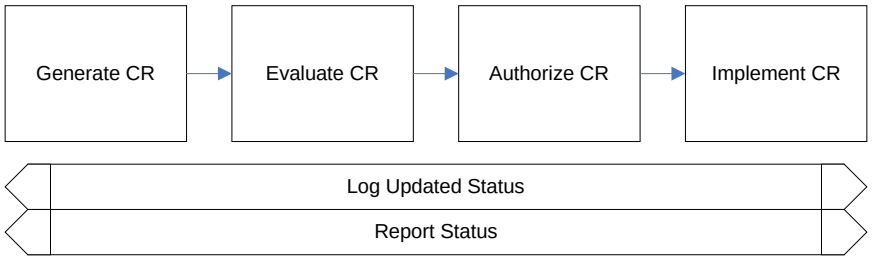
The Change Management Plan is created during the Planning Phase of the project. Its intended audience is the project manager, project team, project sponsor and any senior leaders whose support is needed to carry out the plan.

2. MANAGEMENT OF CHANGE PROCESS

The Management of Change process establishes an orderly and effective procedure for tracking the submission, coordination, review, evaluation, categorization, and approval for release of all changes to the project's baselines.

2.1 CHANGE REQUEST PROCESS FLOW REQUIREMENTS

Step	Description
Generate CR	A submitter completes a CR Form and sends the completed form to the Change Manager
Log CR Status	The Change Manager enters the CR into the CR Log. The CR's status is updated throughout the CR process as needed.
Evaluate CR	Project personnel review the CR and provide an estimated level of effort to process, and develop a proposed solution for the suggested change
Authorize	Approval to move forward with incorporating the suggested change into the project/product
Implement	If approved, make the necessary adjustments to carry out the requested change and communicate CR status to the submitter and other stakeholders



2.1 CHANGE REQUEST FORM AND MANAGEMENT OF CHANGE LOG

Element	Description
Date	The date the CR was created
CR#	Assigned by the Change Manager
Title	A brief description of the change request
Description	Description of the desired change, the impact, or benefits of a change should also be described
Submitter	Name of the person completing the CR Form and who can answer questions regarding the suggested change
Phone	Phone number of the submitter
E-Mail	Email of the submitter
Product	The product that the suggested change is for
Version	The product version that the suggested change is for
Priority	A code that provides a recommended categorization of the urgency of the requested change (High, Medium, Low)

2.3 EVALUATING AND AUTHORIZING CHANGE REQUESTS

Change requests are evaluated using the following priority criteria:

Priority	Description
High	*<Insert the definition the project assigns to a high priority CR>*
Medium	*<Insert the definition the project assigns to a medium priority CR>*
Low	*<Insert the definition the project assigns to a low priority CR>*
<priority>	*<Insert the definition the project assigns to this level of priority CR>*

Change requests are evaluated and assigned one or more of the following change types:

Type	Description
Scope	Change affecting scope
Time	Change affecting time
Duration	Change affecting duration
Cost	Change affecting cost
Resources	Change affecting resources

Deliverables	Change affecting deliverables
Product	Change affecting product
Processes	Change affecting process
Quality	Change affecting quality
<change type>	*<define this change type>*

Change requests are evaluated and assigned one of the following status types:

Status	Description
Open	Entered/Open but not yet approved or assigned
Work in Progress	CR approved, assigned, and work is progressing
In Review	CR work is completed and in final review prior to testing
Testing	CR work has been reviewed and is being tested
Closed	CR work is complete, has passed all tests, and updates have been released.
<status type>	*<define this status type CR>*

2.3.1 Change Control Board

[A Change Control Board (CCB) is a formally constituted group of stakeholders responsible for approving or rejecting changes to the project baselines. This group may meet on a predefined schedule or on an as needed basis. The table below provides a brief description of personnel acting as the Change Control Board (CCB) and their role/level of authority within that group.]

Role	Name	Contact	Description
[Insert Role]	*[Insert Name]*	*[Insert Contact #]*	*[Insert Role Description]*

3. RESPONSIBILITIES

[Provide a brief description of persons responsible for each step of the change management process for the project.]

Role	Name	Contact	Description
Project Manager			
Change Manager			

[Insert Role]	*[Insert Name]*	*[Insert Contact #]*	*[Insert Role Description]*

Appendix A: Change Management Plan Approval

The undersigned acknowledge they have reviewed the *<Project Name>* **Change Management Plan** and agree with the approach it presents. Changes to this **Change Management Plan** will be coordinated with and approved by the undersigned or their designated representatives.

[List the individuals whose signatures are desired. Examples of such individuals are Business Steward, Project Manager or Project Sponsor. Add additional lines for signature as necessary. Although signatures are desired, they are not always required to move forward with the practices outlined within this document.]

Signature: _____ Date: _____

Print Name: _____

Title: _____

Role: _____

Signature: _____ Date: _____

Print Name: _____

Title: _____

Role: _____

Signature: _____ Date: _____

Print Name: _____

Title: _____

Role: _____

Appendix B: References

[Insert the name, version number, description, and physical location of any documents referenced in this document. Add rows to the table as necessary.]

The following table summarizes the documents referenced in this document.

Document Name and Version	Description	Location
<Document Name and Version Number>	*[Provide description of the document]*	*<URL or Network path where document is located>*

Appendix C: Key Terms

[Insert terms and definitions used in this document. Add rows to the table as necessary. Follow the link below to for definitions of project management terms and acronyms used in this and other documents.

The following table provides definitions for terms relevant to this document.

Term	Definition
[Insert Term]	*[Provide definition of the term used in this document.]*
[Insert Term]	*[Provide definition of the term used in this document.]*
[Insert Term]	*[Provide definition of the term used in this document.]*

Appendix D: Change Request Form Example

The example Change Request From attached below can be used to submit changes during the life of the project.

HUNT ENERGY SERVICES		Number: HES
		Revision: 0 Effective Date: 1/28/2020
	MANUAL LIFTING	

Purpose and Background

To protect employees from the hazards of improper lifting techniques and overexertion during lifting.

Scope

An employee may conduct manual handling tasks as part of their job responsibility. This program is intended to minimize the potential for a back injury caused by lifting heavy objects. Employees should not lift any object 50 pounds or greater without assistance. All employees whose work requires heavy lifting shall be properly trained.

Policy

This program has the following objectives:

- Ensuring employees are not required to manually lift materials or objects greater than 50 pounds as part of their job functions;
- Assist in identifying, assessing, and controlling risks associated with manual handling tasks;
- Reducing the incidence of manual handling injuries; and
- Establishing an effective system for manual handling

1. **Authority and Responsibility**
   EHS has overall responsibility for the establishment and implementation of this program. Specific responsibility of all departments follows.

   1.1. EHS shall be responsible for:
   - 1.1.1. Evaluating material handling tasks as requested;
   - 1.1.2. Providing force measurements for material handling tasks as requested;
   - 1.1.3. Providing training as requested; and
   - 1.1.4. Assisting in the selection of appropriate assist devices as requested.

   1.2. Each Area shall be responsible for:
   - 1.2.1. Identifying operations which involve lifting or material handling tasks that may place individuals at risk for back injuries;
   - 1.2.2. Instituting engineering controls to reduce manual lifting injury potential;
   - 1.2.3. Ensuring that all affected employees are trained in the appropriate requirements of this program;
   - 1.2.4. Providing training in proper material handling as needed; and
   - 1.2.5. Providing employees with personnel assistance or lift assisting devices as necessary.

   1.3. The Supervisors shall be responsible for:
   - 1.3.1. Ensuring affected employees are trained;

1.3.2. Ensuring that employees use proper lifting techniques;
1.3.3. Making assistance available to employees who manually handle or lift 50 pounds or greater;
1.3.4. Contact EHS for assistance in equipment selection, evaluations, and training; and
1.3.5. Ensuring all employees who experience work-related injuries follow the appropriate procedures.

1.4. The Employee shall be responsible for:

1.4.1. Attending the required training;
1.4.2. Using proper lifting and material handling techniques;
1.4.3. Limiting manual lifting or handling tasks to objects less than 50 pounds;
1.4.4. Getting assistance whenever manual handling or lifting materials or objects that are 50 pounds or greater; and
1.4.5. Reporting injuries within 24 hours of their occurrence

2. General Lifting Techniques

2.1 Whether it is during leisure activities or as a part of paid work, everyone lifts, holds, carries, pushes and pulls on a daily basis. Manual material handling involves lifting light, heavy and awkward objects. Safe lifting is a critical aspect of daily activities and should be the focus of any manual material handling. Before you lift, remember the following:

2.1.1. Wear supportive shoes;
2.1.2. Use lift assist devices (hand dollies, carts, lift tables, forklifts);
2.1.3. Carry all movements out horizontally (e.g., push and pull rather than lift and lower);
2.1.4. Always use your body weight and not your feet when pushing;
2.1.5. Always keep objects in the comfort zone (between hip and shoulder height);
2.1.6. Keep all loads close to and in front of the body;
2.1.7. Keep the back aligned while lifting;
2.1.8. Maintain the center of balance;
2.1.9. Let the legs do the actual lifting; and
2.1.10. Reduce the size of the material to keep it light, compact and safe to grasp

2.2. **PLAN THE LIFT** prior to lifting as follows:

2.2.1. Size up the load, its weight, shape and position;
2.2.2. Determine if the load is too large, too heavy or too awkward to move alone;
2.2.3. Get help from a coworker or use a mechanical aid device to help with the lift when necessary;
2.2.4. Decide on the route to take;

2.2.5. Check for any problems or obstacles such as slippery or cluttered floors;
2.2.6. Investigate the location where the load is going to be placed in order to anticipate any difficulties; and
2.2.7. Always exercise or warm-up the back prior to lifting.

2.3. **SQUAT LIFTING** should be done for a majority of all lifts. Squat lifting should be performed as follows:
2.3.1. Stand as close to the load as possible;
2.3.2. Move your feet shoulder width apart;
2.3.3. Tighten your stomach muscles so you can tuck your pelvis;
2.3.4. Bend at the knees, keeping your back straight and stomach tucked;
2.3.5. Get a good firm grip on the load;
2.3.6. Hug the load close to the center of your body;
2.3.7. Lift smoothly with your legs gradually straightening the knees and hips into a standing position; and
2.3.8. Avoid twisting your body as you lift.

2.4. **CARRYING LOADS** should be done as follows:
2.4.1. Keep the load close to the center of your body to take full advantage of the mechanical leverage of your body;
2.4.2. Do not change your grip on the load unless it is weight supported;
2.4.3. Avoid twisting your body without pivoting your feet at the same time;
2.4.4. If you must change direction, move your feet in that direction instead of twisting your trunk in that direction;
2.4.5. Make sure you can see over the load;
2.4.6. Move carefully toward your destination; and
2.4.7. If a heavier load is carried for some distance, consider storing it closer.

2.5. **UNLOADING OBJECTS** should be done the same way as lifting objects, but in the reverse order as follows:
2.5.1. Slowly bend your knees to lower the load;
2.5.2. Keep your back straight and the weight close to the center of your body;
2.5.3. Allow enough room for fingers and toes when the load is set down;
2.5.4. Secure the load to ensure that it will not fall, tip over, roll or block someone's way.

2.6. **ONE-ARM LOADS** are used when carrying items such as pails or buckets. Lifting and carrying one-arm loads should be performed as follows:
2.6.1. Bend the knees and at the waist keeping your back straight;
2.6.2. Reach for the load;
2.6.3. Grasp the handle of the load firmly;
2.6.4. Lift with your legs not your shoulders and upper back; and
2.6.5. Keep your shoulders level while switching hands regularly to reduce overexertion on

one side of the body while carrying the load.

2.7. **TEAM LIFTS** are used when objects are too heavy, too large or too awkward for one person to lift. Team lifts should be performed as follows:

2.7.1. Work with someone of similar build and height, if possible;
2.7.2. Choose one person to direct the lift (e.g., "lift on the count of three");
2.7.3. Lift with your legs and raise the load to the desired level at the same time;
2.7.4. Always keep the load at the same level while carrying;
2.7.5. Move smoothly and in unison; and
2.7.6. Set the load down together.

2.8. **OVERHEAD LIFTS** should be conducted as follows:

2.8.1. When lifting or lowering objects from above the shoulders, lighten the load whenever possible;
2.8.2. Stand on something sturdy such as a step stool or platform to decrease the vertical distance; and
2.8.3. When you are lowering objects from above the shoulders, slide the load close to your body, grasp the object firmly, slide it down your body and proceed with your move.

2.9. **Mechanical Aids**

Alternative material-handling techniques for carrying or moving loads are to be used whenever possible to minimize lifting and bending requirements. These alternate techniques include the use of: hand trucks, carts, dollies, forklifts, hoists and wheelbarrows. Although mechanical aids are used, safe lifting procedures should still be followed by maintaining the natural curvature of the back, using the legs for any lifting that is encountered and avoid twisting the back.

3. **Back Belts**

3.1. After a review of the scientific literature, the National Institute for Occupational Safety and Health (NIOSH) has concluded that, because of limitations of the studies that have analyzed workplace use of back belts, the results cannot be used to either support or refute the effectiveness of back belts in injury reduction. Although back belts are being bought and sold under the premise that they reduce the risk of back injury, there is insufficient scientific evidence that they actually deliver what is promised. NIOSH does not recommend the use of back belts to prevent injuries among workers who have been injured because the Institutes primary focus is on the prevention of injury. **Therefore, the use of back belts are prohibited.**

4. **Lifting Restrictions**

4.1. When employees are not able to conduct their task fully due to an injury, they could be placed on work restrictions that may contain weight or lifting restrictions. If an employee is placed on any weight

restrictions, they may not handle or lift any object heavier than what they have been restricted to until they are cleared to return to normal duties. If a re-evaluation has been conducted and the weight restriction has been modified or lifted the employee must follow the new restrictions.

5. **Work Restrictions - Return to Work**

5.1. One aspect of the medical management of an injury is determination of appropriate activity. An employee may be given certain restrictions regarding physical activity. Employees are to follow those restrictions. The restrictions will be readdressed each time they are seen at hospital/clinic. Please note that in most cases, continuing usual activity with some restrictions leads to a better outcome than severely limiting activity. When conditions have improved enough, the restrictions will be lifted.

5.2. If employees have experienced a non-work related injury, they will receive care from their primary care provider, or another health care professional. Employees should follow the treatment regimen of their providers. Supervisors should be promptly notified of any work restrictions given by the primary care physician.

Mobile Equipment Operations < 10,0000 lbs.

PURPOSE

The purpose of this Mobile Equipment Operations < 10,000 lbs. Policy is to reflect the safety attitude of Hunt Energy Services, Inc. and prevent injuries that could result from the improper use of mobile equipment used in our manufacturing and distribution process.

SCOPE

This policy applies to all Hunt Energy Services employees

POLICY

This Policy represents the Mobile Equipment Operations < 10,000 lbs. rules governing all employees. Any employee who fails to abide by this policy is subject to progressive disciplinary action up to and including termination.

1. **CERTIFICATION AND TRAINING** - You must be a current Certified Mobile Equipment Operator prior to operating mobile equipment. Certification consists of Classroom Training and Performance Evaluation.

1.1. Classroom Training must be attended at least every three (3) years.

- 1.1.1. Classroom Training will consist of a variety of lecture, powerpoint presentations, policy review, videos and handouts.
- 1.1.2. Classroom Testing must be completed with at least an 80% prior to Performance Evaluation.
- 1.1.3. Upon successful completion of the classroom training, a Performance Evaluation Form will be given to the trainee.
- 1.1.4. Unsafe Acts could result in disciplinary actions, Operator's Certification being voided and/or additional training and instructions being required.

1.2. Mobile Equipment Performance Evaluations

- 1.2.1. Adequate hands-on time will be given to an operator trainee to familiarize themselves with the operations and controls of the equipment.
- 1.2.2. This time must be done in a well lit area with minimal pedestrian and other mobile equipment traffic. Precautions will be taken to minimize traffic by use of cones, taping, etc.
- 1.2.3. ALL items on the Performance evaluation must be completed satisfactorily prior to certification being approved.
- 1.2.4. Upon sign-off from HR/Safety Manager or competent person, the trainee will receive his/her Certification card, sticker, and the records will be updated to reflect such certification.
- 1.2.5. Certification cards will be given to the operator and must be kept with

them during times of mobile equipment operations.

1.2.6. Certification will expire after 36 months. Prior to expiration, the operator is to notify Supervisor the re-certification is needed.

2. **INSPECTION** - Mobile equipment must be inspected prior to work. For intermittent users, inspection is to take place prior to initial use for that shift.

2.1. If at anytime, the equipment is found to need repairs, is defective or in anyway unsafe, the equipment is to be immediately parked. Once the equipment is taken out of service you are to notify your Supervisor/Pusher.

2.1.1.1.Maintenance is to be notified of the location and problem with equipment.

2.1.1.2.Maintenance will Lock Out equipment until proper repairs can be made.

2.2. Mobile Equipment Inspection Forms

2.2.1. Blank forms are available on the Intranet or in Supervisor/Pusher's possession.

2.2.2. Form must be completed during the inspection process. All fields are required, as well as the Operator/Inspector signature.

2.2.3. Form is to be kept on the equipment through the end of the day.

2.2.4. Completed form is to be turned in at the end of the day.

2.2.5 Completed forms are to be turned in to Supervisor

2.3 Visual Operator Inspections

2.3.1 Oil level in crankcase

2.3.2 Radiator water level

2.3.3 Hydraulic sump tank oil level

2.3.4 Tires

2.3.5 Head and tail lights

2.3.6 Fire extinguisher

2.3.7 Cleanliness - paying special attention to oil, grease, or other slippery matter on the steps or under the forklift.

2.3.8 Braces holding propane tank

2.3.9 Valve on propane tank

2.3.10 Forks – cracks, bends, dents

2.4 Operational Operator Inspections

2.4.1.1 Horn

2.4.1.2 Steering

2.4.1.3 Service and parking brakes

2.4.1.4 Hydraulic controls

2.4.1.5 Obvious damage and leaks

2.4.1.6 Hand brakes / emergency brakes
2.4.1.7 Seat belt
2.4.1.8 Steering and turning
2.4.1.9 Mast - Full range of motion
2.4.1.10 Forks – Full Range of Motion

2.5 Maintenance Personnel Inspections
2.5.1 Service Contractor is to perform required inspections at 500 hour intervals.

3 PPE's

3.1 PPE's are required while operating and must be worn. (Safety glasses, etc.)

3.2 Cryo gloves must be worn during filling of tanks and tank exchange.
3.3 Safety glasses or safety goggles must be worn during tank exchange.
3.4 Seat belts are required to be worn during equipment operations. If you are in the seat, you are required to have your seat belt on.

4 GENERAL CONSIDERATIONS

4.1 An operator's first priority is the safe operations of the equipment.

4.2 All precautions should be taken to avoid pedestrian interactions.

4.3 When mounting/dismounting a forklift, 3 points of contact must be maintained.

4.4 Forklifts are to be entered from the side that does not have the mast and fork controls.

4.5 You must always make turns gradually and always be aware of the tail swing on forklifts.

4.6 All accidents, incidents, near misses are to be reported to your Team Leader immediately.

4.7 Keep to the right at all times.

4.8 Never pass vehicles traveling in your direction.

4.9 Maintain a minimum distance of 25 feet when traveling behind another piece of mobile equipment traveling in the same direction.

4.10 Before starting, make sure load and equipment are clear of obstructions.

4.11 Drive smoothly, avoid jerky stops and starts.

4.12 At blind intersections, stop, sound horn, listen, and proceed with caution.

4.13 Always sound the horn in blind or congested areas or if you are unsure.

4.14 Do not joy ride and never indulge in horse play.

4.15 Never reach through the mast for any purpose.

4.16 Keep feet, arms, and legs inside the truck at all times.

4.17 Do not use forks to open or close doors.

4.18 Do not drop loads in areas that block aisles, exits, electrical or control boxes, or fire fighting equipment. A minimum of 36" clearance must be maintained around these items.

4.19 Never allow anyone under your forks, loaded or unloaded, unless jacks stands are used as indicated below.

4.19.1.1 Approved jack stands may be used by Maintenance Personnel for inspections, equipment repair, etc.

4.19.1.2 Jack stands must be inspected prior to use

4.20 Any material that falls from the lift is the responsibility of the driver and/or helper to pick it up.

4.21 Do not enter areas that are hazardous.

4.22 All inside mobile equipment operations are to cease upon power failure/lighting failure.

4.23 May not use counter balances

5 PICKING UP THE LOAD

5.1 You must know the weight lifting capacity of the mobile equipment you are driving.

5.1.1.1 Weight capacity is located on the nameplate.

5.2 Each fork can only lift 1/2 the lifting capacity marked on the nameplate of the mobile equipment if the load is halfway or greater down the fork to the backrest. The further toward the tip a load is lifted, the less weight the fork is capable of lifting and the more stress is put on the forks. Picking up a load on the tip can result in breaking a fork, causing danger to yourself or anyone else around.

5.3 Do not exceed the load capacity of the equipment. Both forks must be used in order to lift the total weight capacity of the equipment.

5.4 Make sure load is stable, safe, and within lifting capacity of the lift truck prior to lifting.

5.5 Forks should be spread according to the width of the load.

5.6 Do not allow anyone around the pick-up area when loading or unloading.

5.7 Check the pallet, paper cylinder to see that it is sound and balanced for lifting.

5.8 Approach the load slowly and straight with forks parallel to the floor.

5.9 Stop in front of the load before raising the forks.

5.10 Make sure the load is against carriage and load backrest. Mast should be slightly tilted backwards.

6 DRIVING WITH THE LOAD

6.1 Always start the truck slow and in low gear if applicable.

6.2 Avoid fast starts and stops.

6.3 Loaded or empty, raise forks just high enough to clear obstructions.

Rule of thumb: Inside lifts - 4 inches
Outside lifts - 12 inches or 1 foot

6.4 Do not run over obstructions large or small.

6.5 Always look in the direction you are traveling. When traveling backwards, repositioning yourself in the seat is required. Generally by pivoting hips and placing arm behind the seat you will have a clear line of sight to your direction of travel.

6.6 Keep an eye on overhead obstructions. Make sure the mast will clear.

6.7 When unable to see over the load, drive backwards.
Rule of thumb: If you could not see someone bending down tying their shoe in front of your lift, then your view is obstructed.

7 **RAMPS/INCLINES** – Grade that exceeds 10% is considered to be a ramp/incline.

7.1 Take special care when operating on ramps and other inclines:

7.2 Travel slowly with caution.

7.3 Always travel with the load uphill.

7.4 Never do any fancy maneuvering.

7.5 Never park on an incline unless absolutely necessary, then rest forks flatly on the floor or ground, apply all brakes, and put blocks behind both drive wheels.

7.6 Do not drive up a ramp/incline unless you are square to the ramp/incline.

7.7 Do not enter a ramp until all pedestrians have cleared the ramp area or they are behind the bolsters in the pedestrian walkway.

8 LOADING/UNLOADING

8.1 Before driving into or onto a trailer make sure the trailer wheels are chocked.

8.2 Inspect the trailer floor for weaknesses or damage prior to entry.

9 DROPPING THE LOAD

9.1 Slowly approach drop point.

9.2 Stop and clean drop area as necessary.

9.3 Never stop your lowering action suddenly.

9.4 Position your load squarely

9.5 Do not allow anyone around the drop off area when loading or unloading.

10 STACKING THE LOAD

10.1 Approach to within a foot or so of the stack with the load held low. Stop, raise load slowly, incline forward to desired level. Position the load over the stack so it lines up squarely.

10.2 Be sure that the bottom load is sturdy enough to support the top load. The top load should never be larger than the bottom load.

10.3 Center the weight of the top load.

10.4 Restack or band the top and bottom loads together if the load is unstable.

11 STOPPING/PARKING

11.1 An attended mobile equipment is one that can be seen by the operator and the operator is within 25 feet of the mobile equipment.

- 11.1.1.1 Fully lower the forks.
- 11.1.1.2 Put controls in neutral.
- 11.1.1.3 Set all brakes.
- 11.1.1.4 Outside lifts must always block/chock the wheels.

11.2 An unattended mobile equipment is one that cannot be seen by the operator or the operator is not within 25 feet of the mobile equipment.

- 11.2.1.1 Fully lower the forks.
- 11.2.1.2 Put controls in neutral.
- 11.2.1.3 Set all brakes.
- 11.2.1.4 Outside lifts must always block/chock the wheels.
- 11.2.1.5 Turn the truck off and remove the key.

11.3 On trucks with propane tanks, the tank must be turned off if left unattended for I hour or longer.

11.4 Do not park equipment in areas that would block aisles, exits, electrical or control boxes, or fire fighting equipment. A minimum of 36” clearance must be

maintained around these items.

12 TANK EXCHANGE

12.1 Park the vehicle as set out in this policy.

12.2 Turn off the motor.

12.3 Wear safety glasses or goggles, and Cryo gloves

12.4 Propane tanks must be secured on the lift with straps before operating.

12.5 Tanks must never be carried on the forks.

12.6 Tanks with leaks and/or other defects are to be identified.
- 12.6.1.1 Indicate on the tag what the defect is.
- 12.6.1.2 Tagged tanks are to be serviced by Propane vendor only.

13 OPERATORS RESPONSIBILITY

13.1 You as a trained mobile equipment operator, have responsibilities to yourself, to the equipment you operate, to other employees, and to the company.

13.2 Your responsibility to yourself should include the following:
- 13.2.1 Observe all safety rules for operation of mobile equipment.
- 13.2.2 Be alert at all times and operate your mobile equipment in such a manner to try and be prepared for whatever the other person might or might not do.
- 13.2.3 Do not operate mobile equipment if you are on medication/drugs that will or can cause you not to be alert at all times.

13.3 Your responsibility to the equipment you are operating should include the following:
- 13.3.1 Remember you are not a repair man, but you are responsible to make checks before beginning your shift. (Exception: those operators and mechanics authorized to work on the mobile equipment.)
- 13.3.2 If you notice a problem on your mobile equipment, it needs to be turned in to your Supervisor/Pusher immediately.

13.4 Your responsibility to others should include the following:
- 13.4.1 You may be safe on your mobile equipment, but are other employees

safe with you there?

13.4.2 Be especially careful and alert going around blind corners, moving across the yard/pad, and entering the building.

13.4.3 Be careful unloading and loading. Incorrect loading could damage both property and your fellow employees.

13.4.4 Never elevate/lift anyone without using a secured safety cage.

13.4.4.1 Inspection and sign-off of safety cage must be done prior to use.

13.5 Your responsibility to the company should include the following:

13.5.1.1 To operate in such a manner as to not damage property, equipment, fellow employees, or yourself.

13.5.1.2 To observe safety rules.

13.5.1.3 To operate the mobile equipment as set out in this policy.

14 PHYSICAL REQUIREMENTS

14.1 Must maintain a minimum of 20/40 corrected vision in each eye during operation. If you are required to wear prescription glasses while driving, wear them while operating mobile equipment.

14.2 Must be able to pass the standard 5 ft. whisper hearing test.

14.3 Must be able to physically perform the duties as set out in this policy.

15 **DISCIPLINARY ACTION GUIDANCE** - The following is a partial list of mobile equipment safety rules to help you understand the type of rules for which violations could be ruled serious and result in immediate discharge:

15.1 Not wearing a seat belt while operating mobile equipment.

15.2 Driving too fast or in a reckless manner.

15.3 Not watching the direction in which you are traveling.

15.4 Driving into or onto a trailer without insuring the trailer wheels are locked/chocked and/or the trailer floor is safe.

15.5 Driving with obstructed view (without a helper).

15.6 Horse playing while driving mobile equipment.

15.7 Carrying any fuel tank on the lift forks.

15.8 Blocking aisles, exits, control valves, or fire fighting equipment.

15.9 Leaving mobile equipment running while unattended.

15.10 Lifting someone on your forks without the use of a secure safety cage.

15.11 Allowing someone under your forks, loaded or unloaded without the use of jack stands.

15.12 Failure to immediately report any accidents/incidents/near misses to your Team Leader.

Operating a lift while on medication/drugs that will or can cause you not to be alert at all times. Violations of the above items (which is not an all inclusive list) will require further documented training and/or re-certification in order to operate the mobile equipment.

Mobile Equipment Operations Test

1. Any employee who fails to abide by the Mobile Equipment Operations policy is subject to progressive disciplinary action up to and including termination.

   True False

2. In order to be a certified mobile equipment operator an employee must have satisfactory passed the classroom training and a performance evaluation.

   True False

3. Classroom training must be attended at least every _____ years:
   A. 4
   B. 1
   C. 3
   D. 2

4. Mobile equipment must be inspected prior to performing any work.

   True False

5. You are not required to wear the seat belt when operating mobile equipment.

   True False

6. When mounting/dismounting a forklift, ____ point(s) of contact must be maintained.
   A. 2
   B. 4
   C. 1
   D. 3

7. All incidents and near misses must be immediately reported

   True False

8. It is o.k. to allow people under the forks of the mobile equipment as long as the operator does not move the equipment.

   True False

9. It is fine to exceed the load capacity of the forks as long as the operator uses counterbalances.

True False

10. Each fork can only lift ____ the lifting capacity marked on the nameplate of the mobile equipment if the load is halfway or greater down the fork to the backrest.
    A. 1/2
    B. 3/4
    C. 1/3
    D. 2/3

11. If you cannot see someone bending down tying their shoe in front of your lift, then your view is obstructed and it is an acceptable practice to drive backwards.

    True False

12. Parking on an incline is acceptable as long as the operator rests the forks flatly on the floor or ground, apply all brakes, and put blocks behind both drive wheels.

    True False

13. If the operator is further than 25 feet away from the mobile equipment the operator does not have to turn off the equipment and remove the key.

    True False

14. It is the operator's responsibility to observe all safety rules and to operate the mobile equipment as set out in the policy.

    True False

15. If an operator has an incident or is seen operating in an unsafe manner, the operator must be removed from operating the equipment until the operator has been retrained to operate safely. This would include classroom discussion and further evaluation of operating the equipment.

    True False

Nitrogen Awareness

PURPOSE

The purpose of this procedure is to advise employees in areas where nitrogen is being used and to supply on an awareness level basis about the properties and hazards of nitrogen, general guidelines and training requirements.

SCOPE

This procedure applies to Hunt Energy Services operations where employees whose work activities may involve working with or around nitrogen. When work is performed on an non-owned or operated site, the operator's program shall take precedence, however, this document covers HUNT ENERGY SERVICES employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

1. RESPONSIBILITIES

1.1. Managers and Supervisors

1.1.1. In coordination with the Safety Department, develop and implement nitrogen awareness training.

1.1.2. Ensure personnel are aware of work that has the potential of exposure to nitrogen

1.1.3. Identify possible locations where nitrogen in the workplace may be used

1.1.4. Inform the Safety Department of upcoming work involving nitrogen, allowing the Safety Department to provide any necessary monitoring or other required actions

1.1.5. Ensure employees comply with the nitrogen awareness requirements

2. Safety Manager

2.1. Coordinate annual nitrogen awareness training activities

3. Employees

3.1. Comply with the nitrogen awareness requirements and direct any questions or concerns to the Safety Department

3.2. Attend required annual training

4. PROCEDURE

4.1. Hazards of Nitrogen

4.1.1. Nitrogen is an inert gas, which means that it does not react with other chemicals under most normal circumstances. Nitrogen is often used in industrial settings to displace other gases that are toxic, corrosive, reactive or prevent fire or explosion hazards, making processes safer. Using nitrogen to remove oxygen from process equipment decreases the chances of a fire or explosion, but it also can make the atmosphere in an around the equipment hazardous for humans to breathe.

5. Hazard Identification

5.1. Oxygen-deficient atmospheres in confined spaces can be deadly in only a few breaths. An oxygen-deficient atmosphere rapidly overcomes the victim. There is no warning before being overcome.
5.2. An oxygen-deficient atmosphere should never be attempted under any circumstances without training and proper air-supplied breathing equipment.
5.3. Pre-job planning and walk downs with the entry work team should emphasize confined space entry restrictions, especially when unsecured confined space access points are in the work area.
5.4. Confined space hazard warnings must be maintained at all times while the access opening is not secured.
5.5. Pre-job walk downs should accurately identify all equipment where inert gas purging may be venting into the work area.
5.6. Barriers and warnings should be maintained around open purge vents at all times during purging activities.
5.7. Rescuers must strictly follow safe rescue procedures

6. Pre-Job Planning for Nitrogen Related Work

6.1. Pre-job planning or site assessment will be conducted prior to starting work and that the assessment will be documented. Documented planning will be conducted for those operations involving potential nitrogen exposure and this includes anytime an active purge is being applied to a system in or around equipment associated with work. Some planning or assessment elements include:
6.2. All proposed work requires a jobsite visit by the requestor and a unit operator to identify special precautions, equipment status, and personal safety equipment requirements.
6.3. The conditions for marking a “nitrogen purge or inerted”

6.4. The permit must clearly identify all hazards and special personal protective equipment requirements.
6.5. "Fresh Air" work restrictions apply to "Set up only" permits whenever an IDLH atmosphere is suspected or know to be present in the work area.
6.6. The requirements to maintain posted warnings at all access points to confined space temporary openings.
6.7. Appropriate barricades will be utilized if determined by the site assessment. As determined by the hazard assessment, nitrogen vent / purge point will be labeled and barricaded. Barricades will provide a safe zone of 3' in diameter or greater if determined by oxygen monitoring results (must be greater than 19.5% outside the barrier).
6.8. Appropriate signage will be utilized and adhered to. Appropriate signage will include adequate warning by stating Danger, Inert Gas Present or Possible Oxygen Deficient Environment.

7. Safe Rescue Awareness

7.1. The powerful human instinct to help someone in distress, especially a friend or co-worker, all too frequently results in multiple confined space incident victims.
7.2. Workers suddenly involved in emergency activities must not allow emotions to override safe work procedures and training. Only qualified and trained personnel equipped with the necessary safety equipment should attempt a rescue.

8. Cylinder Handling and Storage

8.1. All nitrogen cylinders shall contain an identifying label. Nitrogen cylinders shall contain an identifying label UN1066. See below as an example:

8.2. Proper handling and storage of nitrogen cylinders includes the requirements that the cylinder(s) shall be upright, properly supported and stored outdoors or in a

well-ventilated area. Cylinder(s) shall be chained or otherwise secured to prevent movement.

8.3. Data sheets must be available for nitrogen.

8.4. A protective cap must be in place when the cylinder is not in use

8.5. The correct size and type of trolley or cart should always be used for the safe transportation of gas cylinders.

8.6. Nitrogen must not be used to power pneumatic tools or blowers. Nitrogen must not be used to power pneumatic tools or blowers except when they are used in an inert atmosphere.

9. Employees will be trained in nitrogen hazards. HUNT ENERGY SERVICES shall provide training for all affected employees including any HUNT ENERGY SERVICES employee working with or near nitrogen and the training shall emphasize:

9.1. An oxygen-deficient atmosphere rapidly overcomes the victim

9.2. There is no warning before being overcome

9.3. An oxygen-deficient atmosphere might exist outside a confined space opening

9.4. Rescuers must strictly follow safe rescue procedures

10. Documentation of Training – Nitrogen awareness training shall be documented including dates of training, location of training, employee name and trainer name.

11. Training records shall be provided upon request all materials relating to the employee information and training program to regulatory agencies.

Occupational Noise Exposure Program

Hunt Energy Services employees are not normally exposed to high levels of sound. However, we will ensure that the noise hazards within our facility and those that we inspect are evaluated, and that information concerning the hazards of noise exposure is transmitted to all employees.

Responsibility

The company Safety Director is solely responsible for all facets of this program and has full authority to make necessary decisions to ensure the success of the program.

Objective

When employees are subjected to sound levels equaling or exceeding the 8 hour time-weighted average of 85 db, Hunt Energy Services will administer or have administered by qualified personnel, audiometric examinations, obtain valid audiograms, and ensure proper controls are reviewed and implemented where feasible. If such controls fail to reduce sound levels to within the levels listed above, personal protective equipment will be provided at no cost to the employee.

Training program

This employer will institute a training program for all employees who are exposed to noise at or above an 8 hour time weighted average of 85 decibels, and will ensure employee participation in such program.

The training program will be provided to employees before assignment and repeated annually for each employee included in the hearing conservation program. Information provided in the training program will be updated to be consistent with changes in protective equipment and work processes. Each employee will be informed of the following:

- The effects of noise on hearing.
- The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care.
- The purpose of audiometric testing, and an explanation of the test procedures.
- Access to information and training materials. This employer can make available, upon request, to affected employees or their representatives copies of this standard practice instruction and 29 CFR 1910.95.

This employer will provide to affected employees upon request any informational materials pertaining to 29 CFR 1910.95 that are supplied by OSHA.

Personal Protective Equipment (PPE)

HES will make hearing protectors available to all employees exposed to an 8 hour time weighted average of 85 decibels or greater to the employees. Furthermore, hearing protectors will be replaced whenever necessary to the employee.

In all cases where the sound levels exceed the values shown herein, a continuing, effective hearing conservation program shall be administered:

Duration per day, hour	Sound Level dBA slow response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ or less	115

This employer will ensure that hearing protectors are worn:

- By any employee who is required by previous testing to wear personal protective equipment.
    - By any employee who is exposed to an 8 hour time weighted average of 85 decibels or greater.

Employees will be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided.

Training shall be updated consistent to changes in PPE and work processes and include the proper techniques of wearing hearing protection.

This employer will provide training in the use and care of all hearing protectors provided to employees.

This employer will ensure proper initial fitting and supervise the correct use of all hearing protectors.

Environment Specific PPE

This employer will evaluate hearing protector attenuation for the specific noise environments in which the protector will be used.

Selected hearing protectors will attenuate employee exposure at least to an 8 hour time weighted average of 90 decibels.

For employees who have experienced a standard threshold shift, selected hearing protectors must attenuate their exposure to an 8 hour time weighted average of 85 decibels or below.

The adequacy of hearing protector attenuation will be re-evaluated whenever employee noise exposures increase to the extent that the hearing protectors provided may no longer provide adequate attenuation. More effective hearing protectors will be provided where necessary.

Baseline Audiogram & Auditory Testing

Within 6 months of an employee's first exposure at or above the action level, Hunt Energy Services will establish a valid baseline audiogram against which subsequent audiograms can be compared. Hunt Energy Services will obtain a valid baseline audiogram within 1 year of an employee's first exposure at or above the action level. Where baseline audiograms are obtained more than 6 months after the employee's first exposure at or above the action level, employees will wear hearing protectors for any period exceeding six months after first exposure until the baseline audiogram is obtained.

Testing to establish a baseline audiogram will be preceded by at least 14 hours without exposure to workplace noise. Hearing protectors may be used as a substitute for the requirement that baseline audiograms be preceded by 14 hours without exposure to workplace noise.

This employer will notify employees of the need to avoid high levels of non-occupational noise exposure during the 14 hour period immediately preceding the audiometric examination.

When information indicates that employee exposure may equal/exceed the 8 hour time weighted average or 85 decibels, a monitoring program shall be implanted to identify employees to be included in the hearing conservation program.

Each employee's audiogram will be compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift has occurred. This comparison may be done by an individual trained to technician level. If the audiogram shows that an employee has suffered a standard threshold shift, a retest will be administered within 30 days and the results considered as the annual audiogram. The shift will be documented on the OSHA 300 log. If it is determined by a qualified physician that the shift is not a work-related incident, the documented recordable shall be stricken from the OSHA 300 log.

If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift has occurred, the employee will be informed of this fact in writing, within 21 days of the determination.

A standard threshold shift is a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.

Unless a physician determines that the standard threshold shift is not work related or aggravated by occupational noise exposure, this employer will ensure that the following steps are taken when a standard threshold shift occurs:

1. Employees exposed or potentially exposed to high noise will be fitted with hearing protectors, trained in their use and care, and required to use them. For known high noise job assignments, employees will be fitted and trained prior to job assignment.

2. Employees already using hearing protectors will be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary.
3. Employees will be referred for a clinical audiological evaluation or an otological examination, as appropriate, if additional testing is necessary or if it is suspected that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors.

4. Employees will be informed of the need for an otological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected.

Recordkeeping

This employer will maintain an accurate record of all employee exposure measurements.

This employer will retain all employee audiometric test records. This record will include as a minimum:

- Name and job classification of the employee.
- Date of the audiogram.
- The examiner's name.
- Date of the last acoustic or exhaustive calibration of the audiometer.
- Employee's most recent noise exposure assessment.
- This employer will maintain accurate records of the measurements of the background sound pressure levels in audiometric test rooms.

This employer will retain audiometric and related records for at least the following periods.

- Noise exposure measurement records will be retained for two years.
- Audiometric test records will be retained for the duration of the affected employee's employment.

All records cited in this standard practice instruction will be provided upon request to employees, former employees, representatives designated by the individual employee, and representatives of OSHA. The provisions of 29 CFR 1910.20 apply to access to records under this section.

If this employer ceases to do business, the records will be transferred to the successor employer and maintained by the successor employer. Should the company cease to

function entirely the records will be provided to the respective employees, or as required by current law.

HUNT ENERGY SERVICES	Safety Policy Manual	Number: HES
		Revision: 0 Effective Date: 1/29/2020
	NORM Naturally Occurring Radioactive Materials	Approved by: General Manager Safety Director

NORM (Naturally Occurring Radioactive Material)

Naturally Occurring Radioactive Materials (NORM) are present in oil and gas operations at some locations and can collect, usually in the form of scale, in well tubulars, surface piping, vessels, pumps and other processing equipment. The presence of NORM in equipment above regulatory levels can be determined by external radiation measurements. Although external radiation is seldom at levels considered to be hazardous to personnel, when equipment is opened for inspection or repair, NORM can be inhaled or ingested, subjecting an employee to exposure to radioactivity. To prevent exposure to internal radiation, Hunt Energy Services employees must follow the clients' Worker Protection Plan when opening NORM-contaminated equipment or piping.

Hunt Energy Services does not own any equipment or process that would produce NORM; therefore, Hunt Energy Services employees must follow the clients' procedures for NORM potential. In addition, it is the responsibility of the Safety Manager or his designee to ensure that this program is implemented, and the facilities in which employees are stationed are compliant with **16 Texas Administrative Code (TAC), Title 16, Part 1, Chapter 4, Subchapter F** (paying particular attention to Rules §4.605 and §4.608). In the event that a jobsite is outside of the state of Texas, the regulations adhered to must be at least as stringent.

Hunt Energy Services will not work on a NORM-contaminated location until testing has been completed, by the client, and the degree of contamination, source, and applicable risks are determined. A Ludlum NORM meter, or its equivalent, must be utilized for testing, and the levels for the respective geographic area referenced to establish a comparison of the levels.

Training

Hunt Energy Services employees will not enter a NORM–contaminated location or vessel until they have satisfied the necessary training and licensing requirements. The training curriculum must include the following:

1. A comprehensive explanation of Naturally Occurring Radioactive Materials (NORM)— including a list of the radionuclide's (sources) that may be present, such as Uranium, Thorium or Radium.
    a. Review of Title 16, Part 1, Chapter 4, Subchapter F Oil and Gas NORM.
    b. Review of 25 Texas Administrative Code§289.57 (TRCR Part 46)Licensing of NORM Texas regulations for Control of Radiation
    c. 25 Texas Administrative Code §289.202 Standards for Protection Against Radiation from Radioactive Material
2. The hazards related to NORM.
3. The locations where exposure may occur—including Technology Enhanced

NORM (TENORM) and the facilities and processes where they are most prevalent (mineral extractions and refining, hydrocarbon production, and water treatment, etc.).

4. Methods to identify NORM contamination.
5. Techniques to protect oneself from exposure to NORM once contamination is identified.

   These techniques should be addressed in training:
   a. Time
   b. Distance
   c. Shielding
   d. A thorough explanation of the benefits of personal hygiene in relation to exposure prevention.
   e. PPE—including HEPA filters on respirators and limitations)

****NOTE:** The mandatory training outlined here is general in nature. ALL employees must be given a site-specific training and/or refresher prior to assignment at a potentially hazardous jobsite. This site-specific training must include both normal and emergency situations. Training must be done on an annual basis prior to exposure.

Precautions

The following precautions are general in nature and each site should have its own site-specific plan:

- Do not eat, drink, smoke, dip snuff, or apply sunscreen or lip balm in the immediate work area where NORM-contaminated equipment or soil is being handled.
- Where maintenance activities can be planned in advance, survey the equipment to measure the internal radiation exposure.
- Avoid direct skin contact with NORM scale and sludge to the extent reasonably possible.
- To the extent possible, contaminated equipment that is to be opened should be removed from service and vented for four hours before work commences. If the equipment cannot be left idle for four hours, shield the source by placing lead, steel, or iron between the NORM scale or sludge and personnel.
- Keep NORM scale or sludge wet during maintenance or dismantling activities (when vessels or piping will be open) to minimize dust generation during handling.
- When moving or handling open equipment that has been identified as NORM-contaminated, wear plastic gloves at a minimum. If there is any likelihood that

NORM scale or sludge will become loose or airborne, wear coveralls, safety glasses and an approved respirator for radionuclides. This applies even if the material is wet. Such work may include cutting, grinding, drilling, polishing or welding. At a minimum, the respiratory protection should consist of a half-face piece respirator with HEPA rated cartridges approved for radionuclide dust. The cartridges have a magenta or hot pink color.

- The number of personnel in the work area will be kept to a minimum.
- After working on contaminated equipment, personnel should thoroughly wash their hands and face before eating, drinking, smoking, and chewing, and at the end of the day to prevent ingestion of NORM-contaminated material.
- Where there is potential for significant dust containing radionuclides to be generated from material deposited on the ground, temporary plastic ground covers should be used when or where possible to contain any displaced NORM contamination.
- If possible, openings on NORM-contaminated equipment should be capped, sealed or wrapped in plastic to minimize the generation of any dust or the displacement of scale or sludge that may contaminate the surrounding soil.
- Contaminated protective clothing should be segregated in a drum until it can be scanned with a meter. If it exceeds regulatory limits, it will be handled as NORM waste.

Removal of NORM-Contaminated Equipment from Service

When equipment or piping is removed from service and has been identified by the client through external radiation surveys as NORM-contaminated, Hunt Energy Services will assist in covering the openings, to the extent possible, with plastic to prevent soil contamination, and the equipment will be labeled as contaminated (at the clients' request)

Hunt Energy Services is not licensed for NORM removal and disposal, so if these situations exist, the client is responsible for these actions. H u n t E n e r g y S e r v i c e s personnel are not permitted to transport NORM-contaminated materials.

Personal Protective Equipment Policy

Personal protective equipment is designed to be a front line of defense for the employee where engineering controls cannot eliminate a hazard. The purpose of PPE is to shield and isolate the employee from potential hazards that could not be controlled by any other means. PPE, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation of physical contact.

Hazard Assessment

A hazard assessment must be conducted to determine the proper personal protective equipment to be worn or utilized per job assignment. OSHA 29 CFR 1910, Subpart I, Appendix B, gives the proper methodology for conducting such assessments. Hunt Energy Services generally requires, on all jobs, hard hats, fire retardant clothing (FRC), gloves, steel-toe foot protection, and safety glasses. The company supervisor (or representative) over the job will conduct the hazard assessment during the pre-job safety meeting to determine if additional protective equipment is needed, such as, but not limited to, earplugs, respiratory protection or special gloves per SDS requirements. The pre- job safety meeting serves as the hazard assessment documentation and must include name, signature, and date of assessment. Every Hunt Energy Services jobsite must have a documented hazard assessment, and all personnel are required to wear the PPE that is determined to be necessary. Hunt Energy Services always requires engineering practices to be implemented to control hazards before PPE will be relied upon to control any hazards.

Compliance

In order to ensure that Hunt Energy Services not only protects its employees, but also stays in compliance with current regulations, the following PPE plan will be utilized:

- Conduct a hazard assessment to identify potential hazards and ensure that affected employees are equipped with the appropriate protective equipment;
- Provide PPE training based on the findings of the hazard assessment.
- Employees will be fitted for and provided with PPE, and it will be used and maintained in a sanitary and reliable condition.
- If PPE is damaged or defective, it shall not be used. A replacement must be provided or repairs made before the employee can return to work.
- Employee-owned PPE must be inspected by a Competent Person before it can be used on the jobsite. In addition, employee-owned PPE used on a jobsite will be governed by this program; it will be used, maintained and inspected according to the same guidelines that company-owned PPE will be. If employee-owned PPE does not meet the standards set forth in this program, the company will issue the employee a no-cost replacement to use for the duration of the job.

Personal Protective Equipment is required to protect employees from hazards of process or environment. PPE will protect body parts from inhalation, absorption or physical contact.

Training

Each employee that will be required to utilize PPE must be trained in the following areas regarding the PPE they are to use:

- What PPE is needed for his/her job and why it is needed;
- When PPE is to be worn;
- The limitations of their particular PPE;
- How to put on, take off and adjust their PPE; and
- How to properly maintain, clean and dispose of their PPE.
- Proper fitting of PPE

Training is conducted at new hire orientation (before the employee is exposed to a hazard). Retraining is required in the following situations:

- when changes in the workplace dictate a change of PPE
- when changes in the workplace make the former training obsolete
- when the provided and/or available PPE itself changes
- when an employee cannot properly use and/or demonstrate an adequate knowledge of his/her assigned PPE.

All training and retraining must be documented; the name(s) of the person(s) trained, the date of training, the training topic, and the instructor's name must be recorded.

Hardhats

Hardhats are designed to offer the user protection from vertical and horizontal impact and limited electrical protection. All hardhats must be ANSI Z-89 approved.

Hardhats need to be inspected often to ensure that the liner is not damaged, that the dome has not sustained sun damage, that it is not cracked, or that any modifications have been made. That dome should not be brittle or soft, and there should be no holes whatsoever anywhere on the hardhat.

The application of too many hardhat stickers hinders the wearer from making a complete and thorough inspection.

Do not carry or hide anything inside the hardhat where it can hinder the shock absorption effect of the liner.

The hardhat should be worn with the visor facing forward and the hardhat level on the head. It must not be worn backward, or tilted to the side. If you are to use a winter liner, do so in accordance with the manufacturers' guidelines. Chinstraps should be considered when working at heights under windy conditions.

Clean hardhats with mild soap and water and avoid using gasoline, kerosene or any other such solvent.

The following is a chart used to determine ANSI classifications:

Application	New ANSI Designation
Protects against falling objects and insulates against 2,200 Volts	G
Protects against falling objects and insulates against 20,000 Volts	E
Protects against falling objects and offers no electrical protection	C

**Refer to your PPE Hazard Assessment for your required hardhat.

Eye and Face Protection

All safety glasses must be approved ANSI Z-87.1-1989 type—designated Z87. Eye and face protection shall be worn where any of the following hazards are present:

- Flying particles;
- molten metals;
- liquid chemicals;
- acid or caustic liquids;
- chemical gases or vapors; and/or
- light radiation

Safety glasses are the most basic form of eye protection available. Their effectiveness is limited to the hazards they are designed to protect against. They are designed to protect the user from flying objects or particles. Side shields are required at all times. Inspect regularly for scratches on the lenses and continual proper fit.

Goggles will need to be worn instead of safety glasses for a variety of reasons. Those being, but not limited to:

- Grinding
- Chipping
- Weed Eating
- Any other activity that could cause an impact hazard of the eye

Goggles also protect from splash hazards such as when handling chemicals or performing first aid on a victim with arterial bleeding. Prime examples of jobs requiring splash protection include:

- Pouring Acid
- Pumping out a sump
- Spraying any type of cleaner or solvent

Be careful to not use impact protection goggles for splash protection as some impact goggles are vented for comfort.

Face shields are designed to protect the entire face from a splash or flying particle impact. They are never to be worn by themselves without safety glasses or goggles underneath. They are to use when conducting the following or similar tasks:

- Chipping
- Scraping
- Blowing
- Buffing
- Grinding
- Dispensing paints, coatings, or solvents;
- Using pneumatic tools.
- Handling of molten metal (wire mesh face shield behind plastic shield is a must).

Welding Protection

Only approved welding hoods or pancake hoods can be used. If the welder chooses to use the pancake hood, then it must be fitted to the welder's individual face with no space or gaps. If the pancake is properly fitted, then no other eye protection is required under the pancake. ANSI approved pancake hoods are considered primary eye protection when they are fitted properly

Grinding

You must wear both primary and secondary eye protection when grinding. That means you will wear a face shield and safety glasses or goggles whenever you grind.

Hand Protection

Hand injuries are the most prevalent of injuries in most industries. Gloves are the easiest form of protection. However, gloves are very limiting. The glove must be fit

to the hazard in order to provide the best protection. Common hazards include but are not limited to:

- Abrasions;
- Burns, thermal or chemical;
- Cuts;
- Punctures;
- Skin absorption
- Temperature extremes

The term "rubber" is generically used for all synthetic type gloves available. However, not all "rubber" gloves can be used for the same type of job. Some rubber gloves are highly conductive, while others are used to protect against electricity.

To determine the proper "rubber" glove to utilize, you can:

- Ask your supervisor;
- Read the SDS on that particular chemical;
- Refer to the local PPE Hazard Assessment for your local working environment

Leather gloves address a completely different set of hazards then "rubber" gloves. These hazards include but are not limited to:

- Abrasive materials;
- Sharp edges;
- Hot work; and
- Cold work

Cloth gloves are considered a general duty type of glove and they do offer some light protection from abrasion also.

Keep in mind that leather and cloth gloves are not to be used around chemicals as they will absorb rather than repel the chemical.

Gloves are not to be worn when working around rotating machinery.

Foot Protection

ANSI Z-41 approved footwear is the only acceptable footwear allowed. Some hazards that might be encountered in the working environment are, but not limited to:

- Falling object

- Rolling objects
- Piercing objects
- Chemicals
- Electricity

The most commonly used form of footwear used will be the steel-toed work boot. Steel toes are designed to protect against falling objects that might crush the toes.

Class “C” steel toes are designed to protect from 75 lbs. dropped from 75 inches.

You are required to read the PPE Hazard Assessment for your local working environment.

	Human Resources	Number:
	Administration Procedure/Guidelines	Revision: 0 Effective Date: 01/29/2020
	Personal Vehicles for Company Business – Adequate Limits of Liability	Approved by: Human Resources/Safety Director General Manager

The purpose of this policy is to ensure the safety of those individuals who drive our vehicles, or drive their personal vehicles on behalf of Hunt Energy Services Vehicle accidents are costly to our organization, but more importantly, they may result in injury to you or others. It is the driver's responsibility to operate the vehicle in a safe manner and to drive defensively to prevent injuries and property damage. As such, Hunt Energy Services (IOG) endorses all applicable state motor vehicle regulations relating to driver responsibility. We expect each driver to drive in a safe and courteous manner pursuant to the following safety rules. The attitude you take when behind the wheel is the single most important factor in driving safely.

Any employee and or contractor operating his/her personal vehicle on company business will be required to carry adequate limits of liability insurance coverage.

In the event that an employee is involved in an accident while driving his/her own vehicle on company business, we may be liable if you do not have insurance or if the loss exceeds your policy limits. Employees/Contractors who use their personal vehicles for company business are required to carry adequate limits of liability, with a suggested minimum of $100,000 for property damage and $300,000 for bodily injury. A copy of the declaration page of your personal automobile insurance policy must be provided to (IOG).

Employees/Contractors must get proper approval from HUNT ENERGY SERVICES for use of private vehicles for company business. If proper insurance documentation is not recorded for approval, no mileage and/or reimbursement for equipment will be allowed.

Process Safety Management (PSM)

A set of requirements designed to assure that operations at facilities where chemicals are processed are conducted safely. Process Safety Management (PSM) is an OSHA regulation found in 29 CFR 1910.119.

PSM applies to facilities that use hazardous materials in their processes. The purpose of a PSM program is to prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable or explosive chemicals in various industries, such as refineries, chemical plants or other processing facilities.

Training and Testing

PSM/SEMP requires that operators document their process and the hazards associated with it. Once the hazards are identified, a detailed safety plan and training must be developed to minimize the potential for accidents. The safety plan and training must include:

- Employee Participation
- Process Safety Information
- Process Hazard Analysis
- Operating Procedures
- Contractors/Subcontractors
- Pre-Startup Safety Review
- Mechanical Integrity
- Hot Work Permits
  - NOTE: All Hot Work Permits must be obtained before any hot work will be done. The permit must document that provisions of CFR 1910.252(a) have been met.
- Management of Change
- Incident Investigation
- Emergency Planning and Response to releases
- Compliance Audits
- Trade Secrets
- Material Safety Data Sheets (All MSDS requirements will be followed)

Once the PSM training has been completed, the employees that are present must sign the PSM Roster Sheet and pass a comprehensive written exam before reporting to work. All PSM training will be documented, and the records stored in the employees permanent file; training documentation must include the date of training, and the instructor's name.

Hunt Energy Services Requirements (as Contractor)

Hunt Energy Services does not own any Process Safety Management (PSM) systems; however, as a contractor, Hunt Energy Services employees may work in a PSM facility. When Hunt Energy Services employees work in a PSM facility, each employee will follow all applicable PSM rules.

1. PSM requires that operators use only contractors that can perform their work safely.

2. Operators must verify that contractor employees are trained to perform their jobs safely. Hunt Energy Services will participate in this verification as requested.

3. PSM requires that operators look out for the safety of contractor employees working at their facilities.

4. Per the PSM regulations, so far as safety is concerned, the operator has nearly as much responsibility for contractor employees as they do for their own employees. While this is true, all Hunt Energy Services employees, by following each safety rule within the PSM facility, will ensure his safety as well as those around him. Hunt Energy Services employees will follow all client permit and safety considerations.

5. Hunt Energy Services will insure that its employees trained on any hazards present at the operator's facility, such as potential fire, explosion or toxic-release hazards related to his/her job. Each employee must also be trained on the process and applicable provisions of the emergency action plan. Hunt Energy Services will inform the operator of any hazard potentially created by Hunt Energy Services work tasks.

6. Hunt Energy Services is responsible, as a contractor, for advising the operator of any special hazards associated with the contractor's work.

7. The exchange of job-specific information will take place during the pre-job Job Safety Analysis and this will be documented.

8. Hunt Energy Services employees will not divulge client trade secrets. Cameras are only allowed after the client has approved these devices in writing. Icenhower Oil

& Gas employees are subject to immediate termination if information is divulged and Hunt Energy Services will cooperate with clients in civil/criminal sanctions.

9. Hunt Energy Services will report any and all incidents no matter how severe to the client. Hunt Energy Services will conduct an internal investigation into factors related to the incident and participate with client in their investigation. Incidents will be reported within one hour or sooner as situation dictates. Employees must immediately report all accidents, injuries and near misses. An incident investigation must be initiated within 48 hours. Resolutions and corrective actions must be documented and maintained 5 years.
10. All Hunt Energy Services employees will adhere to the safety work practices implemented in the facility, such as lockout/tagout, confined space entry, opening process equipment, or piping and controls over the entrance to the facility.

PURCHASE ORDER PROCESS

PURPOSE
The intent of this document is to account for all purchases and rentals by ensuring all purchases are approved and accounted for.

SCOPE
This document is limited to the Purchase Order Process

POLICY

In an effort to prevent unauthorized purchases and losing re-billable dollars, the following procedure for all purchases and rentals is to be set in motion and followed along with the current process we have now as far as assigning and recording Purchase Orders.

> All Purchases and Rentals should be pre-approved through your Superintendent first, before ordering or renting anything from our vendors no matter how minimal the price and with NO EXCEPTIONS.

Icenhower employee must perform the following steps:

1. A Purchase Order is always required on any purchase or rental and should always be on the invoice or receipt along with:
   - 1.1 The name of the person who is placing the order, and either;
   - 1.2 Truck number or,
   - 1.3 Job Trailer number or,
   - 1.4 Job name (if it's for a job)

Above steps must be completed at the time of purchase or rental

2. If the Purchase Order is a RE-BILLABLE ITEM, the Purchase Order must be sent in with the Job Field ticket it was for so that it can be adjusted and invoiced to the customer. ALL invoices or receipts are to be kept and sent to the Bossier City Office in a timely manner:

Hunt Energy Services
PO BOX 5593
Bossier City, LA 71171

3. The following items can be scanned and emailed to Scott Kennedy's attention (jhunt@huntenergys.com)

    3.1 Purchase Orders for a Truck or Trailer can be sent in with the weekly driver log and truck inspection sheets.
    3.2 All rental outbound and inbound receipts
    3.3 Equipment pick-up
    3.4 Returning equipment

4. Rental equipment must have a job name and Purchase Order on the ticket that covers the rental.

5. Purchase Orders will be given during normal business hours 7:00 a.m. – 5:00 p.m., Monday – Friday. For Saturday/Sunday purchases, use the following guideline:

    5.1 Call your immediate Supervisor for approval
    5.2 Supervisor will need to inform the office of the purchase by email or phone (no later than Monday morning by 10:00 a.m.)
    5.3 Instruct the store to call you or the Corporate office on Monday to receive a purchase order

NOTHING SHOULD BE PURCHASED, RENTED, OR BE DELIVERED WITHOUT GOING THROUGH THE ABOVE STEPS…….NO EXCEPTIONS UNLESS ITS CLEARED THROUGH YOU'RE SUPERINTENDENT FIRST.

Note: If anything is sold and put on an Icenhower account without the above instructions followed in order, (unless approved under special circumstances) we will assume it to be a private transaction between you, the employee making the purchase and whichever vendor that sold too you without the proper approval and Icenhower WILL NOT BE RESPONSIBLE FOR ANY PAYMENT OF THESE TRANSACTIONS.

Respiratory Protection Program

Policy

It is the policy of Hunt Energy Services to protect its employees from hazardous atmospheres through a comprehensive program of recognition, evaluation, engineering, administrative and work practice controls, including respirators and other personal protective equipment (PPE). To the greatest extent possible, hazard elimination, and engineering and work practice controls shall be employed to ensure employee exposure is within allowable exposure limits. However, while these measures are being developed, or if they are not feasible or fully effective, Icenhower Oil & Gas will provide affected employees with the appropriate respirators, as prescribed by this program. Hunt Energy Services is committed to full compliance with applicable federal and state regulations pertaining to employee respirator protection.

Purpose

The purpose of this program is to protect the health of Hunt Energy Services employees who may be exposed to hazardous atmospheres while working, and to provide the appropriate protection from these hazards without creating new hazards. This program provides information and guidance for the proper selection, use, and care of respirators, and contains requirements for establishing and maintaining a respirator program.

Scope

The program applies to all Hunt Energy Services employees who are approved to wear a respirator to perform assigned duties.

Roles and Responsibilities

1. **Safety Director**

    a. Is responsible for the Respiratory Protection Program: including the implementation of the program, the monitoring of respiratory hazards, maintaining records and conducting program evaluations. The Safety Director is responsible for supervising the execution of this program at all levels.

    b. Has knowledge about respiratory protection and maintains an awareness of current regulatory requirements and good practices.

    c. Approves job-specific Respiratory Protection Programs for each operation that involves the use of respirators.

    d. Approves respiratory training programs for employees.

e. Approves fit test procedures for employees.

f. Approves respirator makes and models for use at each worksite.

g. Ensures that employees using respirators have appropriate surveillance and that employees leave the work area to wash, change cartridges, or if they detect a break-through or encounter breathing resistance.

h. The effectiveness of this program shall be monitored by surveying our employees about their experiences with fit, selection, maintenance, etc. of our respirators while they are employed with our company.

i. Ensure that employees have the compulsory training, fit testing, and medical clearances necessary before authorizing them to wear a respirator.

j. Prohibit any employee with lapsed or incomplete respirator clearances to work in hazardous atmospheres. Enforce any restrictions imposed by the occupational physician on individual employees, including the need for corrective lenses.

k. Performs employee exposure monitoring upon initial work in a potentially hazardous atmosphere and whenever work conditions change that may affect employee exposure.

l. Performs employee exposure monitoring in accordance with Federal OSHA regulations.

m. Uses generally accepted sampling techniques and analytical methods, including generally accepted quality assurance and control measures.

n. Reports all findings to the supervisor with five days of receipt of analytical results from the laboratory, at a minimum.

o. Upon request, performs surveys and makes recommendations for hazard control.

2. Supervisors

a. Must hold a safety meeting on respiratory protection issues at the start of each new project or task that involves respiratory hazards for affected employees under their supervision.

b. Is responsible for enforcing the written Respiratory Protection Program and Worksite Specific Respiratory Protection Plan that has been approved and implemented by Safety Director, or designee. All respirator use must comply with the written programs in effect at the jobsite.

c. Record any complaints related to respirator usage, act promptly to investigate the complaints, correct any hazards, and get medical assistance when indicated. Report all first aid and/or medical treatment administered on a jobsite. Report every respirator-related incident to the Safety Director before the end of the work shift.

d. Physically check each respirator prior to its assignment to their employees to be sure that it is of the type specified in the written plan.

e. Inform each affected employee of the results of exposure monitoring within one day of receiving such results and assure inclusion of all exposure reports in the company, and/or specific site record keeping system.

f. Monitor employee compliance with the respirator program requirements.

3. Employees

a. Use respiratory protection in accordance with the instructions and training provided.

b. Immediately report any defects in the respiratory protection equipment and whenever there is a respirator malfunction, immediately evacuate to a safe area and report the malfunction.

c. Promptly report to the supervisor any symptoms of illness that may be related to respirator usage or exposure to hazardous atmospheres.

d. Report any health concerns related to respirator use or changes in health status to the occupational physician.

e. Wash their assigned reusable respirators at the end of each work shift when used and disinfects assigned respirators at least weekly.

f. Store respirators in accordance with instructions received.

g. Observe and enforce any restrictions placed on employee work activities by the occupational physician.

h. Be clean-shaven in all facial areas that seal to the respirator face piece.

i. Do not allow headpieces, Band-Aids or other items beneath a respirator seal or head strap assembly.

j. Inspect the respirator immediately before each use, in accordance with training provided.

k. Perform a user seal, negative and positive respirator fit check each time a respirator is donned in accordance with training provided.

l. Glasses, facial hair or anything that could affect the face piece seal are prohibited. Respirators with tight-fitting face pieces shall not be worn by employees who have facial hair that comes between the sealing surface of the face piece and the face or that interferes with valve function.

Definitions

- Air Purifying Respirator (APR): A type of respirator that removes specific contaminants from air by use of filters, cartridges or canisters by passing ambient air through the air- purifying element. APRs do not supply oxygen.

- Allowable Limit: The maximum concentration of a substance in air that is permitted by regulation or voluntary standards to protect employee health. These concentrations may be expressed in terms of an 8-hourtime-weighted average, a 15-minute short-term average or as an instantaneous upper ceiling limit. An example is the OSHA permissible exposure limits (PEL).

- Atmosphere-supplying respirator: A type of respirator that supplies the user with breathing air from a source independent of the ambient atmosphere, and includes supplied air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

- Employee Exposure: Exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

- Escape only respirator: Respirator intended to be used only for emergency exit.

- Fit test: Use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual.

- Hazardous atmospheres: An atmosphere that contains a contaminant(s) in excess of the allowable limit or contains less than 19.5 percent oxygen.

- Immediately dangerous to life and health (IDLH): An atmosphere that poses an immediate threat to life would cause irreversible adverse health effect, or would impair an individual's ability to escape from a dangerous atmosphere.

- Negative pressure respirator (tight fitting): A respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

- Positive pressure respirator: A respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

- Qualitative fit test (QLFT): A pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

- Quantitative fit test (QNFT): An assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

- Self-contained breathing apparatus (SCBA): An atmosphere-supplying respirator for which the breathing air sources is designed to be carried by the user.

- Service life: The period of time that a respirator, filter or sorbent or other respiratory equipment provides adequate protection to the wearer.

Permissible Practices

1. Safety Director, or his designee, shall issue all respirators worn by Company employees.
2. Respirators shall be issued by Hunt Energy Services and worn by exposed employees whenever airborne contamination levels are not otherwise reduced to within the allowable limits.

3. A written Respiratory Protection Program and a Worksite specific Respiratory Protection Plan shall be prepared and approved by Safety Director before any employee is permitted to use a respirator, including voluntary or emergency use. This plan shall identify the location and tasks, identify and quantify the air contaminants or oxygen deficiency, specify the appropriate respirator, and specify any limitations, such as air monitoring, respirator cartridge replacement frequency, etc. The form entitled "Worksite Specific Respiratory Protection Plan" at the end of this section may be used to document your Plan. Each operation involving respirator use must have a signed and approved written plan.

4. An employee may request for a voluntary use of a respirator after the company has performed a thorough hazard assessment and industrial hygiene study and determined that a respiratory protection program is not necessary for potential exposure. For example of a voluntary use of respirator: exposure to nuisance dusts, molds, pollen, etc. Reasonable efforts should be made to reduce such exposures. Prior to employee donning a respirator on a voluntary basis, the form in Appendix C - VOLUNTARY USERS OF RESPIRATORS must be filled out.

5. Affected employees already assigned a respirator may request a respirator that provides a higher protection factor than the one provided by Hunt Energy Services for that work.

6. Company Emergency Response Plans required for chemical spills or releases, fire response, pathogen exposures, etc. shall include a Respiratory Protection Program and Worksite Specific Respiratory Protection Plan whenever there is a reasonable potential for a respiratory hazard. If an emergency plan calls for complete employee evacuation and no Hunt Energy Services employee is assigned response activities, a plan is not required as a component.

7. At no time, however briefly, shall a Hunt Energy Services employee be exposed to contaminant levels that are more than three times the allowable 8-hour time weighted average limits without respiratory protection.

8. When SCBAs are worn, at least one standby person, located outside the hazardous atmosphere and equipped with an SCBA, shall be in constant attendance, ready to provide immediate assistance and call for emergency help, if needed or required by a host company.

Respiratory Protection Program and Worksite-Specific Respiratory Protection Plan

1. Each operation that involves respirator use shall have a Worksite Specific Respiratory Protection Plan that is approved and signed by Safety Director and job supervisor.

2. This plan, which may be a part of a job hazard analysis, site safety plan, confined space entry permit or other document, shall contain an identification of the atmospheric hazard(s) and the respective measured or expected concentration(s) at each location or operation, the respective allowable concentration limits, the type of respirator(s) approved, monitoring requirements, emergency response procedures, and limitations, such as the frequency of respirator cartridge change out.

3. This document shall be updated annually and more frequently if conditions change. This Worksite Specific Respiratory Protection Plan shall be available at the job location and shall be maintained for 30 years as an exposure record.

Recognition and Evaluation of Airborne Contaminants

1. The Host Company, Corporate Safety Director, Supervisor or other designee shall initially perform a hazard assessment in each workplace. Where the presence or potential presence of airborne contaminants is recognized or suspected, the above evaluator shall

perform evaluations to determine if allowable limits are exceeded or potentially exceeded. The results of the hazard assessment shall be communicated to the Project Manager and affected supervisors and employees. A written record of this assessment, including identification of the work area, the name of the assessor and the date of the assessment, shall be maintained for a period of 30 years if atmospheric hazards were identified. This file shall be maintained in the office of Safety Director.

2. For workplaces in which the hazard assessment produces no findings of potential exposures, Supervisors shall monitor the workplace and request a hazard assessment whenever materials or processes change.

3. Whenever the hazard assessment identifies potential exposures to hazardous atmospheres, an annual reassessment shall be performed, unless OSHA requires a more frequent assessment. In addition, the Supervisor is responsible for requesting a reassessment whenever materials or processes change.

Evaluation of Airborne Contaminant Controls

1. When hazardous atmospheres are recognized, elimination of the hazardous material or feasible engineering and work practice controls shall be instituted to reduce contaminant levels to within allowable limits. If such measures are not completely successful or if the condition is temporary, personal protective equipment, including respiratory protection shall be selected and worn.

2. The Host Company, Corporate Safety Director, Subsidiary Company Safety Coordinator, Supervisor or other designee shall assess the workplace when controls are instituted to measure their effectiveness in reducing employee exposure to hazardous atmospheres.

Selection and Issuance of Respirators

1. Selection of the appropriate respirator shall be documented in the written Worksite Specific Respiratory Protection Plan. If the atmosphere is uncharacterized, it must be assumed to be IDLH and a positive pressure SCBA or combination supplied air respirator with SCBA must be worn. Respirator selection shall comply with OSHA requirements for specific substances, such as asbestos, lead, etc. At a minimum, the assigned protection factor of the selectee's respirator shall be equal or exceed the hazard ratio.

2. All respirators used by Hunt Energy Services shall be approved by NIOSH. No components shall be substituted, unless they are approved by NIOSH.

    a. Any change or modification to a respirator may void the respirator approval and may adversely affect its performance. Refer to the table "Listing of Approved Respirators" for assistance in selecting the proper respirator.

3. Any restrictions or limitations recommended for a particular respirator by the respirator manufacturer shall be observed.

4. The Respirator Technician or other appointed person/outsource company shall inspect each respirator or component prior to issuance and shall assure that the respirator assembly is complete, sanitary and in good working order upon issuance. Atmosphere supplying respirators shall be returned to the Respirator Technician or other appointed person/outsource company at least monthly for periodic inspection and air-purifying respirators shall be returned for periodic inspection at least semi-annually. A log shall be maintained of these periodic inspections.

5. Hunt Energy Services shall provide employees using atmosphere-supplying respirators (supplied-air and SCBA) with breathing gases of high purity and shall require third-party providers of breathing air to certify that:

    a. Compressed breathing air meets at least the requirements for Grade D breathing air described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989, to include:

        i. Oxygen content (v/v) of 19.5-23.5%;

        ii. Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less;

        iii. Carbon monoxide (CO) content of 10 ppm or less;

        iv. Carbon dioxide content of 1,000 ppm or less; and

        v. Lack of noticeable odor.

6. Supervisors are responsible to ensure that each respirator user under their supervision is currently approved for respirator use, including medical, fit testing and training certifications. Employees with expired certifications shall not be permitted to work in hazardous atmospheres or to voluntarily wear a respirator until their lapsed requirements are updated.

7. Each respirator must be inspected by its wearer immediately prior to each use, according to instructions provided in the respirator training. Any defects shall be reported to the Supervisor before entry into a hazardous atmosphere. The wearer, immediately prior to entering the hazardous atmosphere, shall perform a user seal check.

8. Employees who are issued a respirator are responsible for its maintenance, daily inspection and storage while the unit is in their control.

9. Respirators and all associated costs related to maintaining them shall be borne by the employer.

NOTE: All work environments will be evaluated for respiratory hazards. In the absence of analytical data establishing the amount of airborne contaminants, all atmospheres will be considered IDLH.

Fit Testing

1. Each respirator wearer shall be qualitatively (QLFT) and quantitatively (QNFT) fit tested at least annually, using protocols approved by the Safety Director. More frequent testing shall be performed if required by OSHA regulations for specific substances or if the wearer's facial contours change, such as by weight gain or loss, facial surgery, etc.

2. On the occasion of each fit test, employees will have the option to choose their respirator from an array of face pieces from different manufacturers and sizes approved by the Safety Director.
3. Fit test certification shall be prepared and signed by the person performing the fit test and must name the tested employee; the make, model and size of the respirator fit tested; and the result of the fit test. A copy shall be provided to the Supervisor.

4. Hunt Energy Services shall pay for all required fit tests.

Medical Approval for Respirator Use

All medical evaluations will be confidential, conducted during normal working hours, convenient and understandable (an interpreter will be provided as necessary). Any employee has the right to discuss findings with the PLHCP (Physician or other Licensed Health Care Professional) and this is done confidentially.

The PLHCP will be given a copy of the Respiratory Protection Policy, a copy of 29 CFR 1910.134, and a listing of anticipated work levels, additional PPE required, duration of work while using respiratory protection, weather extremes, and the types of respirators to be worn. The PLHCP will utilize this information in determining the employee's suitability for wearing respiratory protection.

1. Prior to fit testing, each respirator wearer shall be approved for respirator use by the appointed company physician or other licensed health care professional (PLHCP) at least annually. The occupational physician shall be provided a copy of the employee's duties, respirator types to be worn, and air contaminants, as well as any

applicable OSHA standards governing the medical evaluation, such as the Respiratory Protection standard and applicable substance-specific standards.

2. Hunt Energy Services shall commission a licensed physician to perform medical evaluations; Hunt Energy Services will pay all costs associated with the respirator medical evaluation. Hunt Energy Services will approve payment for the medical diagnostic procedures necessary to assess the ability of an employee to safely wear a respirator.

3. Medical records created under this program shall be handled in accordance with OSHA requirements for confidentiality, employee access and retention. Fit testing and medical records will be maintained in the employee's confidential file by the human resources department.

Required Training

1. Each respirator wearer, supervisor of a respirator wearer, respirator technician and the Administrator must be trained. Training must be comprehensive, understandable, and repeated annually—more often if necessary.

2. Upon successful completion of respirator training, the instructor shall sign a certification that names the employee trained, the type(s) of respirator and the training date. A copy shall be provided to the supervisor. A record shall be maintained of the training topics covered.

3. Each employee trained shall demonstrate knowledge of at least the following:

   a. Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator;

   b. What the limitations and capabilities of the respirator are;

   c. How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions;

   d. How to inspect, put on and remove, use, and check the seals of the respirator;

   e. What the procedures are for maintenance and storage of the respirator;

   f. How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators; and

   g. The general requirements of 29 CFR 1910.134.

4. Hunt Energy Services shall provide the training prior to requiring the employee to use a

respirator in the workplace at no cost to the employee.

5. An employer who is able to demonstrate that a new employee has received training within the last 12 months that addresses the elements specified in paragraph 3a through 3g above, is not required to repeat such training provided that the employee can demonstrate knowledge of that element(s). Previous training not repeated initially by the employer must be provided no later than 12 months from the date of the previous training.

6. Retraining shall be administered annually, and when the following situations occur:

    a. Changes in the workplace or the type of respirator render previous training obsolete;

    b. Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill; or

    c. Any other situation arises in which retraining appears necessary to ensure safe respirator use.

7. Hunt Energy Services shall provide basic information on respirators to employees who wear respirators. This basic advisory information on respirators shall be provided in any written or oral format.

Record Keeping

Medical records will be maintained for the duration of employment plus thirty (30) years. The medical records of employees who are employed for less than one year will be provided to the employee upon termination and will not be retained following the termination of his/her employment. Employee exposure records will also be retained for a period of thirty years. With the exception of chest x-rays, Hunt Energy Services reserves the right to retain records in either paper or digital format.

Employee records are available for examination and/or copying by the employee or his/her designated representative in the administrative offices. Records will be made available within a reasonable amount of time, not to exceed fifteen business days, following the employee and/or representative's initial request.

If Hunt Energy Services ceases to do business, all medical and exposure records will be transferred the employee's successor employer, and the successor employer shall maintain the records in accordance with state and federal regulations. If there is not a successor employer to transfer the records to, current employees will be notified three months prior to the cessation of the employer's business of their rights of access to the records. Furthermore, the Director of the NIOSH will be notified in writing of the impending

disposal of records at least three months prior to the disposal of the records. Hunt Energy Services will notify the Director of NIOSH in writing at least three months prior to disposing of records required to be preserved for at least thirty years.

Employees will be notified of the existence, location and availability of their medical and exposure records on an annual basis beginning on the date of their new-hire orientation. Employees will also be given the name of the individual or department responsible for maintaining and providing access to records. Employees will be made aware of their rights to access the material in their medical and exposure records.

Listing of Approved Respirators (NIOSH-approved)

Brand	Model	Style*	Comments
3M	N-series	Full or Half facepieces and specific cartridge model must be selected once the contaminants in the breathing zone have been determined.	Use only in those atmospheres free of oil aerosols.
3M	P-series	Full or Half facepieces and specific cartridge model must be selected once the contaminants in the breathing zone have been determined.	Use to remove any particulate including oil-based aerosols.
SCOTT	AV2000	Full Face	Most used mask for fresh air work. Can also be used with cartridges.
3M	3M6000	Half Face	

NOTE: Refer to the 3M Respirator Selection Guide for proper selection of facepiece and cartridge once the airborne hazards in the workplace have been identified. The most up-to-date Selection Guide can be found on 3M's website: www.3M.com.

Worksite Specific Respiratory Protection Plan

Task description:

_____

_____

Atmospheric hazards:

- Oxygen levels: _____
- Is this oxygen level deficient?
- Monitoring (List the monitoring frequency and method for each atmospheric hazard)

Controls to be implemented to reduce employee exposure to atmospheric hazards:

1. _____
2. _____
3. _____

Respirators to be worn (List type, cartridge type if APR, concentration and limits for use):

_____

_____

_____

Authorized employees (list with employee number):

1. _____
2. _____
3. _____
4. _____
5. _____(List additional on back of page)

Emergency Response:

- Signs and symptoms of overexposure

_____

_____

- Evacuation procedures

  _____

  _____

- First aid and emergency medical procedure

  _____

  _____

- Reporting procedures

  _____

  _____

Signature of the Safety Director (or designee):

_____ Date: _____

Signature of the Jobsite Supervisor:

_____ Date: _____

Hunt Energy Services FIT
TEST AND USER SEAL
CHECK RESULT SHEET

Employee: _____ Date: _____

Company: _____ Social Security #: _____

Fit Test Method Used: Qualitative (QLFT) _____ Quantitative (QNFT) _____

Irritant Smoke_____Isoamyl Acetate_____Saccharin_____

Portacount_____Aerosols_____

Respirator Type: _____ Model: _____ Size: _____

1. Move Head Up & Down:
2. Bend At Waist:
3. Run In Place:
4. Move Head Side To Side:
5. Talk:
6. Breathe Deeply
7. Grimace
8. Rainbow Passage

Fit Test Results: Pass / Fail

Comments:

_____

_____

_____

Employee's Signature: _____ Date:

Test Administered By: _____

Hunt Energy Services
Scaffolding Safety

Objective

It is the objective of this policy to inform Hunt Energy Services personnel of the basic OSHA and company requirements regarding the use of scaffolds on job sites. When owner company requirements exceed Hunt Energy Services rules and regulations, the more stringent shall be adhered to.

Employee Responsibilities

The company safety director shall maintain the scaffold user policy. All changes to the policy will be documented and distributed to all Hunt Energy Services job sites. Site specific plans shall be administered by the safety coordinators at the project level to ensure compliance with owner company policies.

Supervisors are responsible to ensure that all employees are properly trained in the health and safety hazards, personal protective equipment requirements and work practices.

Employees are responsible for following the required safety rules, methods and procedures outlined to prevent potential accidents.

Inspections

1. All scaffolds shall be inspected prior to the beginning work, when there is a change in circumstances at the scaffold location and at the change of shift.

2. A competent person shall complete all scaffold inspections. If during the inspection the scaffold is found to be unsatisfactory or that a situation deems that the scaffold is unsafe for human occupancy, the competent inspector shall tag the scaffold as unsafe and notify the builder.

Training

1. Scaffold user training will be provided to all Hunt Energy Services employees whose job requires the use of scaffolds. The company safety director will assign an in-house competent and "qualified" scaffold person or approved third-party company to conduct the training of employees. Training will be conducted in the pre-job stage, as an annual refresher, when deficiencies occur or when changes are made to company policy or state/federal regulations. **If the conditions on a job site change, employees must be re-trained prior to returning to work.**

2. All documentation of training will be kept in the employee files.

3. Components of training shall cover the following topics:

a. Tagging systems, owner driven or company

- Hunt Energy Services complete scaffolds shall be tagged with a GREEN ready to use tag. The signature of the competent builder, the date, and the checklist user shall be documented on the tag.
  (See Attachment A)

- Hunt Energy Services incomplete scaffolds shall be tagged in RED (not for use) and deficiencies documented on the tag.
  (See Attachment B)

- Hunt Energy Services scaffolds that require special circumstances, i.e. safety harnesses, head obstructions shall be tagged with a YELLOW tag denoting the warning or PPE requirements to use the scaffold.
  (See Attachment C)

- Scaffold user checklist shall be reviewed before each use.
  (See Attachment D)

- Owner driven programs and tagging systems will supercede Hunt Energy Services tagging programs while on their premises so that consistency at owner projects is achieved.

- Potential users will not use an untagged scaffold.

b. Falling objects and debris to lower levels.

- Containment by toe boards, tool bags or buckets.

- Stacking of material and tools.

- Ensuring that only items being used occupy the scaffold.

c. Scaffold ratings and load limits reference CFR 1926.451

- Light Duty Scaffolds- 25p.s.f.

- Medium Duty Scaffolds-50p.s.f.

- Heavy Duty Scaffolds-75p.s.f.

d. Electrical hazards.

- High voltage lines and equipment.
- Conductive scaffold components.

e. Types of fall protection

- Harnesses
- Handrails and mid-rails
- Safety nets.

f. Modifications/altering scaffolds and consequences.

- All Repairs to the scaffold deficiencies shall be repaired in accordance with CFR 1926 Subpart L. Any Hunt Energy Services employee that occupies a scaffold tagged incomplete will be subject to immediate disciplinary action, up to termination.
- Modifications to scaffolds and their components shall only be conducted under the supervision of a competent builder and with the permission of the scaffold owner.
- No scaffold parts may be interchanged with other manufactured scaffold systems parts that could lower the integrity of the scaffold.
- Any Hunt Energy Services employee that modifies a scaffold without the supervision of a competent person will be subject to immediate disciplinary action up to termination.

Scaffold User Checklist

Scaffold User Checklist will be reviewed by the builder of the scaffold.
This list will be reviewed and the scaffold inspected by a competent person prior to, and during each use. If during the inspection the scaffold is found to be unsatisfactory or that a situation deems that the scaffold is unsafe for human occupancy, the competent inspector shall tag the scaffold as unsafe and notify the builder.

The following Checklist is provided for user. In the event the user finds that any item on the Checklist is not true, the user should tag the scaffold with the red tag and indicate the discrepancy. For items that deal with the construction of the scaffold, a qualified person should be contacted.

1. The scaffold must have a tag that is properly filled out. Do Not Use An Untagged Scaffold!

2. The maximum intended load that will be placed on the scaffold is known and is less than the maximum load-carrying capability of the scaffold.

3. The scaffold bays appear to be plumb and level and scaffold base plates are on firm footing.

4. Scaffold bracing is in place.

5. Scaffold platforms are fully planked and extend at least 6 inches over the end supports.

6. Guardrails are in place.

7. Overhead obstructions are noted on the yellow tag.

8. No unprotected electrical lines are within 10 feet of the scaffold.

9. Safe access is provided.

10. Rolling scaffolds must have wheels locked and diagonal braces present to keep uprights squared properly.

11. If the ladder extends into a roadway, roadway is marked and scaffold access ladders are protected from vehicle traffic.

ATTACHMENT A

This is an example of a GREEN (Scaffold Ready for Access) scaffolding tag. It is used to identify complete scaffolds.

Any scaffold with this tag may be accessed.

Scaffold Ready for Use Builder Signature: Date Completed: Pre-Use Checklist reviewed:

Green in color

ATTACHMENT B

This is an example of a RED (Scaffold Not Ready for Access) scaffolding tag. It is used to identify incomplete scaffolds.

Any scaffold with this tag shall not be accessed.

Scaffold NOT Ready For Use List Hazards: Reviewed by:

Red in color

ATTACHMENT C

This is an example of a YELLOW (Scaffold Ready for Access) scaffolding tag. It is used to identify complete scaffolds.

Any scaffold with this tag may be accessed.

Scaffold USE WITH CAUTION Builder: Date: List Hazards: Reviewed by:

Yellow in color


HUNT
ENERGY SERVICES

Hunt Energy Services
Short Service Employee

Purpose

This procedure provides guidelines for a Short Service Employee Program to appropriately supervise, train and monitor new experienced and inexperienced employees. The program must address the time frame under which an employee is considered a Short Service Employee. This definition should take into account experience in the same job with his/her present employer rather than total work experience.

Hunt Energy Services defines a “short term” worker as:

An employee that is hired for a short duration or a temporary job and will discontinue work after the job is completed. The worker may or may not have sufficient oilfield experience (6 months or more).

Hunt Energy Services defines an “inexperienced worker” as:

An employee with less than 6 months of oilfield experience. The highest risk employee would be both inexperienced and short term.

Notification

Prior to the job mobilization, contractors will communicate/notify the project coordinator, contractor contact, or on-site supervisor for all jobs containing SSE personnel. The project coordinator, contractor contact, or on-site supervisor will determine approval status of the crew makeup.

All JSAs conducted on the jobsite will include mention of short term and inexperienced workers and the additional precautions that will be taken. Topics for the JSA should include experience level of the crewmembers, the “mentoring process”, and ways to minimize health, safety, and environmental exposure with inexperienced workers in the crew. While some workers do not like this additional attention, all persons must “crawl before they walk”.

Supervisor Responsibilities

- Ensure Short Service Employee Mentor maintains proper knowledge and skills in the particular job task designed
- Ensure Short Service Employee Mentor is adequately training SSE
- Ensure Short Service Employee is gaining the particular knowledge and skills in the particular job tasks
- Ensure Short Service Employee is appropriately identified per this plan, and follow all safety rules and company policies of the company

- To be sure that a single person crew is not to be an SSE and crew sizes of less than five shall have no more than one SSE

SSE Mentor Responsibilities

The responsibilities of Mentors in the Short Service Employee Program are to:

- Have the desire, a patient disposition, and be willing to devote the necessary time to succeed as a mentor
- Only be assigned one SSE per crew and the mentor must be onsite with the SSE to be able to monitor the SSE
- Possess knowledge and skills in the job tasks assigned to the SSE
- Be willing and able to effectively listen to the SSE to determine if the SSE is learning and retaining the knowledge being shared including answer any questions or concerns from the SSE
- Be willing to watch a SSE perform a job without interfering as long as the SSE is not in a position to hurt themselves, others or damage equipment
- Provide a positive SAFETY attitude, avoid criticism, and strive to build confidence and self-esteem in the SSE
- Be able to teach the SSE the proper way to create a quality JSA and to follow that JSA in performing tasks
- Keep abreast of new equipment in their fields of expertise
- Refrain from taking short cuts and doing anything hazardous to health or safety
- Demonstrate a positive work ethic at all times
- Follow all company policies and procedures
- Notifies the client that a short term/inexperienced worker are on site.

All Short Term/Inexperienced Workers will attend all client required training before any work is done on a client facility. The Mentor is responsible for asking the client representative for this training.

Short Service Employee Responsibilities

The responsibilities of the Short Service Employee are to:

- Be willing to watch and listen to the Mentor
- Establish a positive SAFETY attitude towards assigned job tasks
- Participate and learn the proper development of JSA's and to follow JSA in performing tasks
- Be willing to gain the knowledge and skill in a particular job task to be able to perform in a safe and environmentally sound manner
- Stop and report unsafe conditions at any time

- Participate in safety meetings
- Follow all safety rules and policies of the company
- The SSE will be given a sticker to place on his hard hat to distinguish either short term and/or inexperienced

Training

The supervisor shall ensure that each SSE is properly trained in:

- The hazard(s) present in the work place
- The policies, procedures, processes and PPE utilized to control these hazards to prevent illnesses, injuries, property damage and/or environmental incidents
- The skills necessary to conduct their assigned jobs safely and efficiently while providing quality and economy

The supervisor shall ensure that each SSE is properly trained per Federal, State, Industry, Company, and Operator requirements before starting work when:

- The employee is first hired
- The employee is appointed a new job assignment
- The employee is exposed to new substances, processes, procedures, equipment, etc. that represent a new hazard to the employee

Supervision

The supervisor and the mentor will provide supervision and not allow the SSE to perform any task in which they have not been properly trained. The Supervisor and the SSE Mentor shall ensure that the SSE understands the task to be performed and the associated hazards.

Contractors

Contractors shall monitor its employees, including SSE personnel, for HES awareness. If, at the end of the designated time period, the SSE has worked safely, adhered to HES policies and has no recordable incident attributed to him/her, the SSE identifier may be removed at the contractor's discretion. Contractor shall require any employee that does not complete the designated time period recordable free to get operator approval in writing prior to returning to operator property. Contractors will manage their sub-contractors in alignment with this process.

The SSE will be identified by the wearing of a decal that recognizes the employee as a SSE

employee. The decal will be placed on each side of the hard hat. The hard hat will have a label placed under the decal indicating the expiration date of the SSE term.

The supervisor shall remove the decals upon expiration of the SSE term, and after verifying that SSE exhibits a knowledge and skill level to perform the job tasks assigned.

Hunt Energy Services
Stop Work Authority

Purpose

The purpose of this procedure is to ensure that all Hunt Energy Services employees are given the responsibility and authority to stop work whenever any of the following conditions exist:

1. Employees believe that a situation exists that places them, their coworker(s), contracted personnel, or the public at risk or in danger
2. That could adversely affect the safe operation or cause damage to the facility
3. That could result in a release of chemical or radiological effluents to the environment above regulatory requirements or approvals
4. This procedure extends the authority to stop work to situations where an employee believes there is a need to clarify work instructions, or to propose additional controls

Hunt Energy Services employees are encouraged to contribute ideas towards or provide a method for resolving the issue.

Scope

This procedure is applicable to all personnel working at the jobsite.

Responsibilities and Roles

Hunt Energy Services employees are responsible to initiate a Stop Work intervention when warranted, and management is responsible to create a culture where Stop Work Authority is exercised freely.

Employees

- The responsibility and authority to stop work or decline to perform an assigned task without fear of reprisal, to discuss and resolve work and safety concerns. The Stop Work may include discussions with co-workers, supervision, or safety representative to resolve work-related issues, address potential unsafe conditions, clarify work instructions, or propose additional controls.

- The responsibility and authority to initiate a Stop Work immediately when the employee believes a situation exists which places himself/herself, a coworker(s), or the environment in danger or at risk.

- All employees have the authority and obligation to stop any task or operation where concerns or questions regarding the control of HSE risk exist.

- Are expected to report any activity or condition for which they have initiated a Stop Work. Notification should be made to the affected worker(s), and to the supervisor or their supervisor's designee at the location where the activity or condition exists.

Stop Work

- The responsibility to notify their supervisor if a raised Stop Work issue has not been resolved to their satisfaction through established channels prior to the resumption of work.

- All Stop Work Interventions shall be documented for lessons learned and corrective measures to be put into place.

- Stop Work reports shall be reviewed by supervision in order to measure participation, determine quality of interventions and follow-up, trend common issues, identify opportunities for improvement, and facilitate sharing of learnings.

- Employee can contact their safety representative with a concern, or to initiate a stop work, if the employee prefers to remain anonymous.

Management/Supervisor/Person in Charge (PIC)/ Field Work Supervisor (FWS)

Management and supervision are committed to promptly resolve issues resulting from an employee-raised Stop Work [10 CFR 851.20]. Management (e.g., Directors, Managers, Supervisors) responsibilities are to:

- Resolve any issues that have resulted in an individual stopping a specific task(s) or activity before returning to work.
- Provide feedback to individual/s and the affected work group who have exercised their Stop Work responsibility on the resolution of their concern prior to resuming work. If the employee that issued a stop work is not available due to reasons such as vacation, shift change, or training, then the supervisor provides the feedback to the safety representative prior to resuming work.
- Ensure no actions are taken as reprisal or retribution against individuals who raise safety concerns or stop an activity they believe is unsafe.

Safety Representatives are expected to:

- Assist employees, supervision and management in the resolution of safety issues and concerns.

- Immediately contact management and work to resolve issues when an employee has called a situation to their attention that has not been resolved.

- Discuss resolution with employees involved in a work stoppage where resolution was completed after their shift or when they were unavailable, or where he/she acted as their representative in reaching resolution.

- Work as the agent of an employee that prefers to remain anonymous to work directly in the resolution of the stop work.

- Be sure that all employees have received Stop Work Authority training before any initial assignment. The training must be documented including the employee's name, the dates of training and subject.

Process

1. **STOP**
2. Notify
3. Correct
4. Resume

When an unsafe condition is identified the Stop Work Intervention will be initiated, coordinated through the supervisor, initiated in a positive manner, notify all affected personnel and supervision of the stop work issue, correct the issue, and resume work when safe to do so.

1. Stop work if an activity or condition is believed to be unsafe, such as:

    a. A situation exists that places them, their coworker(s), contracted personnel, or the public at risk or in danger;
    b. A situation could adversely affect the safe operation or cause damage to the facility; or
    c. A situation could result in a release of chemical or radioactive effluents to the environment above regulatory requirements or approvals.
    d. To clarify work instructions or to propose additional controls

2. Ensure the work/activity is in, or placed in a safe condition and immediately notify supervision/management and affected workers when you stop work or decline to perform an activity.

3. Resolve any issues that have resulted in an employee stopping work or an activity.

SUBCONTRACTOR MANAGEMENT SAFETY POLICY

Good communication is a necessary element of maintaining safety. Communication among subcontractor groups must identify safety hazards and prevention practices that each bring to the worksite. Therefore, HUNT ENERGY SERVICES has implemented the following Subcontractor Safety Program so that on the job injuries are minimized and work practices may be standardized.

PURPOSE

This written Subcontractor Safety Policy establishes guidelines to be followed for contractors working at HUNT ENERGY SERVICES. This policy establishes uniform requirements designed to ensure that contractor safety orientation, coordination, and safety administration practices are communicated to and understood by all subcontractor employees.

Theses policy & procedures shall:

- Provide a safe working environment.
- Govern facility relationships with outside contractors.
- Ensure that contractor employees and our employees are trained to protect themselves from all potential and existing hazards.

The effectiveness of the Contractor Safety Program depends upon the active support and involvement of all employees. This plan is intended to implement a program to ensure that all contractor work practices are carried out safely to minimize the possibility of injury or harm to the contractors' employees or our own employees. It is intended to serve as an additional tool in safeguarding the health and safety of employees.

HUNT ENERGY SERVICES reserves the right to:

- Remove the subcontractor from the project temporarily or void the contract.
- Remove a subcontractor employee.
- Remove a faulty piece of equipment.
- Stop the subcontractor's work until the unsafe condition is corrected.

GUIDELINES FOR CONTRACTOR PRE-QUALIFICATION

The following standard procedures for evaluating and choosing contractors who will work on-site at this company shall be used to pre-qualify subcontractors. Subcontractors that do not have an established safety program, have poor safety records, high incidences of injuries, or fail to submit the requested documentation shall not be considered for subcontract work with HUNT ENERGY SERVICES

HUNT ENERGY SERVICES shall obtain and evaluate information regarding a contractor employer's safety performance and programs when selecting a contractor to perform any type of contract work. This information will provide the company with a solid background on that contractor's safety performance and adherence to safety rules and regulations.

To determine past safety performance, HUNT ENERGY SERVICES shall consider the contractor's:

- Employee injury records and statistics, such as the subcontractors, TRIR, DART, fatality rate, Experience Modification Rate (EMR or MOD) for workers' compensation for the past three years and the contractor's past safety record in performing jobs of a similar nature.
- OSHA log, including the injury and illness rates for the past three years.
- Incidence rates for lost-time accidents and recordables for the past three years.
- Written safety program and training system.
- Requesting copies of any citations for violations occurring within the last three years, to determine the frequency and type of safety laws violated.
- Having contractor(s) describe in detail any safety programs in place, any infractions of regulatory agency regulations, and any accidents, and workers' compensation claims within the last three years.

For contractors whose safety performance on the job is not known, information on injury and illness rates and experience and contractor references shall be obtained.

Contractor work methods and experience shall be evaluated prior to. Ensure that for the job in question the contractor and its employees have the appropriate:

- Job skills.
- Equipment.

- Knowledge, experience, and expertise.
- Any permits, licenses, certifications, or skilled tradespeople necessary to be capable of performing the work in question.

Each contractor is responsible for ensuring that its employees comply with all applicable local, state, and federal safety requirements, as well as with any safety rules and regulations set forth by this company, at which it is performing the contracted work.

The contractor must be willing and able to provide a current Certificate of Insurance for Workers' Compensation and General Liability Coverage.

SPECIFIC RESPONSIBILITIES

COMPANY RESPONSIBILITIES: HUNT ENERGY SERVICES have specific safety responsibilities when hiring contractors to come onto the worksite, onto the grounds, or into the buildings or facilities to perform work. Company responsibilities when hiring contractors include the following listed steps. HUNT ENERGY SERVICES will:

- Take steps to protect contract workers who perform work on or near a potentially hazardous process.
- Obtain and evaluate information regarding the contract employer's safety performance and programs.
- Inform the contractor of known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.
- Explain the applicable provisions of the emergency action plan to the contractor, and require that the contractor disperse that information to all workers who will work at this site.
- Develop and implement safe work practice procedures to control contract employee entry into hazardous work areas.
- Maintain a contract employee injury and illness log.
- Periodically evaluate the contract employer’s fulfillment of his or her responsibilities under this policy.

CONTRACTOR RESPONSIBILITIES: Contract employees must perform their work safely. Contractors often perform very specialized and potentially hazardous tasks, such as, but not limited to, confined space entry activities and non-routine repair activities, their work must be controlled. Contractor responsibilities when accepting work with this company include the following listed steps. The contract employer will:

- Assure that the contract employee is trained in the work practices necessary to safely perform his or her job.
- Instruct the contract employee in the potential fire, explosion, or toxic release hazards related to his or her job and the process.
- Assure that the contract employee knows the applicable provisions of the emergency action plan and document contract employee training.
- Inform contract employees of and then enforce safety rules of the facility, particularly those implemented to control the hazards of the contracted process during operations.
- Require that all subcontractors abide by the same rules to which the contractor is bound by this section.

After conclusion of the contractors work, a designated representative of HUNT ENERGY SERVICES shall complete a post-project assessment of the contractor's safety performance to be used for future reference, with a recommendation on whether or not to re-hire the contractor.

CONTRACTOR GUIDELINES:

Before the contract work begins ns, the contractor must:

- Designate a representative to coordinate all safety and health issues and communicate with the HUNT ENERGY SERVICES designated representative.
- Provide documentation of safety training, when and where required, to the
- HUNT ENERGY SERVICES designated representative.
- Provide information to the designated representative on the safety and health hazards that may arise during the course of the contractor's work and the means necessary to avoid danger from those hazards.
- Obtain from the HUNT ENERGY SERVICES designated representative any safety rules and regulations in effect at the site or potential hazards present that may affect the contractor's work.

- Ensure that they have been informed of emergency signals and procedures that may be put into operation in areas where the contractor's employees are working. Know who to call and what to do in emergencies, including where first aid and medical services are located.
- Advise and train contract employees on hazards associated with the work to be performed, including any Hazard Communication or other hazard information provided to the contractor by this company's designated representative.
- Keep the designated representative of HUNT ENERGY SERVICES fully informed of any work which may affect the safety of this company's employees or property. This includes providing the designated representative appropriate safety data sheets (SDSs) or other required information about chemicals the contractor will bring onto the site.
- Participate in pre-job meetings and safety orientations, tailgate safety meetings, regular job safety inspections, hazard assessments, and job safety analysis.

During the contract work, the contractor will:

- Ensure that all subcontractors are abiding by the terms of this plan.
- Establish necessary safe practices to permit work under operating conditions without endangering this company's associates and property. This includes but is not limited to barricading, sign-posting, and fire watches.
- Make sure that any equipment, chemicals, or procedures used by the contractor to perform contracted work meet all OSHA requirements.
- Be held responsible and accountable for any losses or damages suffered by this company and/or its employees as a result of contractor negligence.
- Provide its employees with medical care and first-aid treatment.
- Provide supervisors and employees who are competent and adequately trained.
- Provide all tools and equipment for the work, including personal protective equipment (PPE), and ensure the equipment is in proper working order and employees are instructed in its proper use.
- Maintain good housekeeping in the workplace.
- Follow specific instructions supplied by HUNT ENERGY SERVICES should emergency alarms be activated.

- Notify the designated representative immediately of any OSHA recordable injury or illness to contractor employees or subcontractor employees occurring while on the site of this company. Provide a copy of each accident report to the designated representative.

After conclusion of the contract work, the contractor is responsible for cleaning all work areas and disposing of any discarded materials in a proper and legal manner.

MINIMUM EXPECTATIONS AND REQUIREMENTS

The following are the requirements for subcontractors working on HUNT ENERGY SERVICES projects. These requirements are the minimum expectations for subcontractor safety performance. Subcontractors are responsible for complying with all federal, state and local regulations.

The HUNT ENERGY SERVICES designated representative should be notified anytime a hazardous material is to be used on site which may affect HUNT ENERGY SERVICES employees or other contractors. Notification must include the nature of the hazards, location of the operation involving hazardous materials, and measures employees need to take to protect themselves.

FIRST AID AND MEDICAL SERVICES: Subcontractors are responsible for providing first aid services and provisions for medical care for their own employees.

FIRE PREVENTION: Subcontractors are responsible for providing their own fire protect on and suppression equipment.

HOUSEKEEPING: Subcontractors are responsible for keeping their work areas free from debris, scrap and excess materials. Work areas, passageways, stairs and other areas of HUNT ENERGY SERVICES projects must be kept clear of scrap and debris at all times.

PERSONAL PROTECTIVE EQUIPMENT {PPE): Subcontractors are responsible for requiring the wearing of all appropriate PPE as required by site conditions or operations, or as

required by HUNT ENERGY SERVICES The following PPE is required for all subcontractor employees on HUNT ENERGY SERVICES locations:

- Hardhats meeting the specifications of ANSI Z89 are required at all times for all employees, regard less of craft, job site activity, or location on project. Equipment Operators with overhead protection need not wear hardhats while in the piece of equipment.
- Employees shall be provided with eye and face protection when machines or operations present potential eye or face injury from physical, chemical or radiation hazards. Eye and face protective equipment must meet the Specifications of ANSI Z87.1. Eye and face protection must be readily available for employee use at all times.
- Steel toe work boots are required for all subcontractor employees. Sneakers and sandals are prohibited.
- Gloves are to be worn when handling sharp or rough materials.
- Fire Retardant Clothing (FRC) are required on all projects.

TRAINING REQUIREMENTS

TIM HUNT ENERGY SERVICES , INC., shall make sure that affected company employees receive training on all hazards to which they will be introduced by a contractor. In addition, we emphasize to the contractor that it is the contractor's responsibility to convey to its employees any safety information provided by the company to the contractor.

THE CONTRACTOR must:

- Train all employees on all safety and health hazards and provisions applicable to the type of work being done, and provide documentation of such training to this company's designated representative.
- Train employees on where to obtain first-aid and medical services.

RECORDKEEPING REQUIREMENTS

The designated representative for HUNT ENERGY SERVICES will:

- Have a copy of the contract on file and be thoroughly familiar with its contents, and with the safety and health aspects of the work.
- Keep records of all training done with HUNT ENERGY SERVICES employees regarding hazards to be caused by the contracting company.
- Keep copies on file of all forms or statements related to the contract that are required by HUNT ENERGY SERVICES to be filled out before or during contract work.

THE CONTRACTOR will:

- Keep records of all training done with contract workers and all documentation provided to the contracting company regarding such t raining.
- Keep copies on file of all forms or statements related to the contract that are required by the company to be filled out before or during contract work.
- Have on filed the telephone numbers of the nearest hospital, ambulance service, and fire department.
- Have copies on-site of all safety data sheets (SDSs) or other required information about chemicals relevant to the work on-site.
- Keep an OSHA recordable injury and illness log for the project, as well as copies of accident reports on all accidents that occur in the course of the project.

Appendix A

Health & Safety Contractor Pre-Qualification

Please complete all blanks and/or check the correct response

General Information:

NAICS Code _____ SIC Code_____

Company Name _____

Company Primary Address _____

City _____ State _____ Zip _____

Doing Business as (DBA) or Parent Companies:

_____ _____

Person Completing Form (Name & Title) _____

Please describe the service that you will be providing specifically for Hunt Energy Services , Inc.

_____

Health and Safety Statistics – Data Entry

***Please populate entire table indicated below indicating the last three (3) years:

	YEAR _____	YEAR _____	YEAR _____
1. Average Number of Employees			
2. Total YTD Man Hours for Reporting Entity			
3. Total Number of First Aid Cases			
4. Total Number of Recordable Cases			
5. Recordable Incident Rate			
6. Total Number of Restriction or Transfer Cases			
7. Restriction and Transfer Rate			
8. Total Number of Lost Time Cases			
9. Lost Time Injury Rate			
10. Number of Fatalities			
11. Experience Modification Rate (EMR)			

Regulatory Compliance

1. Has your company received any Health and Safety related notice of violations (NOV's), improvement notices, prohibition notices or citations within the last five (5) years?

Yes	No	N/A

If yes, please provide the following information:
Number of citations or NOV's _____

Agency issuing citations, NOV's _____
Have citations and/or NOV's been resolved? _____
Comments or Clarification on above date, if any:

2. Does your company have a method for identifying people who need to be trained on Health and Safety regulations?

Yes	No	N/A

If yes, please provide details:

Health and Safety Programs

1. Does your company have a clearly written Health and Safety method endorsed by upper management?

Yes	No	N/A

If yes, please provide details:

2. Are roles and responsibilities for Health and Safety within the company defined in your program?

Yes	No	N/A

If yes, please provide details:

3. Does your company have a "Code of Conduct" in place which reflects your company's value and standards?

Yes	No	N/A

If yes, please provide details:

Safe Work Practices and Procedures

1. Does your company have a documented method for the management for drugs and alcohol within the workplace?

Yes	No	N/A

If yes, please provide details:

2. Does your company have a method for driving safety?

Yes	No	N/A

If yes, please provide details:

3. Does your company have a documented procedure for reporting and following up on Health and Safety incidents?

Yes	No	N/A

If yes, please provide details:

4. Does your company have a case management procedure or program?

Yes	No	N/A

If yes, please provide details:

Training and Competency

1. Does your company maintain documentation that all Health and Safety regulatory required training is completed?

Yes	No	N/A

If yes, please provide details:

2. Does your company have a Health and Safety orientation program for all personnel?

Yes	No	N/A

If yes, please provide details:

Drug and Alcohol Program

1. Does your company have a drug and alcohol program?

Yes	No	N/A

If yes, please provide details:

2. Does your company have a documented process to identify and manage the use of drugs and alcohol within the workplace?

Yes	No	N/A

If yes, please provide details:

3. Circle the circumstances in which your company's employees may be subject to drug/alcohol screening.

Employment (Pre-hire) Reasonable Suspicion Random
Post-Accident Other

Certification By Contractor

This questionnaire is not a binding contract.

Certification of Contractor:

Signature: _____

Printed Name: _____

Contact Number: _____

Email Address: _____

Date: _____

Hunt Energy Services , Inc. Evaluation of Competency, Insurance, Health and Safety, and Drug & Alcohol Programs

Contractor meets essential Health and Safety requirements and criteria:

Approved	Denied	Hold

Contractor advised of information required to meet criteria:

Approved	Denied	Hold

Evaluation Completed by: _____

Date: _____

Comments:

Hunt Energy Services
Welding, Cutting and Hot Work

General Requirements

Precautions that are to be taken shall be in the form of a written permit. Before cutting or welding is permitted the area shall be inspected and a written permit shall be used to authorize welding and cutting operations.

A hot work permit must be issued before hot work is performed:

- Within 150 feet of an area where combustible/flammable vapors or dust are or could exist; or

- Within 35’ of a solid combustible material.

Hot work is defined as any work that will generate sufficient heat to ignite combustible and/or flammable materials. Combustible materials are substances that will freely support combustion once ignited. The following activities are examples of hot work; however, there may be more that are applicable at specific locations:

- Welding
- Flame Cutting
- Grinding
- Portable Heaters or Steamers
- Electrical Tools/Equipment (that are not explosion proof or intrinsically safe)
- Sandblasting operations (static charges)

The supervisors are responsible for the pre-work inspection, and once completed, they must ensure that all work is permitted prior to authorizing the commencement of any hot work. The pre-work inspection and subsequent preventative actions must all be documented.

Hot Work Procedures

Hunt Energy Services employees must obtain authorization from the supervisor overseeing the work before beginning any hot work. Any person may authorize the stoppage of work if there is reason to believe an unsafe condition or situation exists.

The company representative responsible for supervising hot work must complete the hot work permit before work may begin. (Host facility permits and gas tests are acceptable provided they meet the requirements of this section.)

The permit must be reviewed and signed by the person performing the work, the person authorizing the work, and the person approving the work to ensure his/her acknowledgment of the conditions set forth in the permit. If contract personnel are performing the hot work, the contractor's representative at the location where the hot work is being conducted must retain a

copy of the permit.

The person giving approval for the hot work to begin must ensure that the area is periodically surveyed to ensure the conditions remain suitable for hot work. If the object to be welded or cut cannot be moved, all moveable fire hazards must be removed. If all the fire hazards cannot be removed, then guards shall be used to confine the heat sparks and slag and to protect the immovable fire hazards. If removal and/or guards are not feasible, then the work cannot be done.

Operators of equipment should report any equipment defect or safety hazards to their supervisor and discontinue use of the equipment until it has been inspected, and its safety has been assured. Repairs shall be made only by qualified personnel.

Ventilation and/or respirators must be utilized if any employee inside of a work area is welding, cutting or burning lead base metals, zinc, cadmium, mercury, beryllium or any other potentially hazardous metal not listed here.

If hot work conditions change and a permit expires due to a potential danger (i.e., leak, wind change, evolution of hazardous fumes, gases or dust, lower explosive limit (LEL) reading above 10 percent, etc.), no work will be performed until additional testing is conducted. The source of the hazard must be determined, controlled and the area re-inspected and permitted before work can resume.

Expired hot work permits will be kept on file at the facility for at least one month beyond their expiration date.

Permits will not be valid for shifts other than the one in which the work started. Each permit will be dated and will carry an expiration time.

The checking and testing that precedes the issuing of a permit should be as close as practical to the time the work is to be done. The percent of the lower explosive limit will be recorded on the permit.

Hot work shall not begin if a lower explosive limit (L.E.L.) greater than 10 percent is measured. No exceptions to this rule shall be made. Non-direct reading instruments are not permitted for hot work or confined space entry jobs.

When a fire watch is necessary, he/she must be on duty at all times during the performance of the work.

In the event the hot work will extend past the permit's expiration time, a new permit must be obtained.

When the work is complete, the company representative that is responsible for the hot work

must be notified.

Welders assigned to operate arc welding equipment must be properly trained and qualified to operate the equipment. Cutters, welders and supervisors must be suitably trained in the safe operations of their equipment and/or the equipment for which they are responsible.

Welders must be trained on and familiar with 29 CFR 1910.254, and 1910.252(a)(b) & (c). If gas shielded arc welding is done they must be familiar with the American Welding Society Standard A6-1-1966. Before work will be permitted, a welder's training and credentials must be verified.

A first aid kit must be available at all times and for all work areas in case of an injury or emergency.

Fire Watch

The operating supervisors are responsible for assigning a fire watch when the welding, flame cutting, grinding, use of portable steamer equipment, etc. is within 35 feet of a potential combustible or vapor source. The fire watch must be trained in the proper use of a fire extinguisher. The fire watch must also be familiar with the facilities so he/she can sound an alarm in the event of a fire, where applicable. Supervisors must be familiar with the duties of a fire watch, including:

1. Understanding the location and nature of the hot work.
2. Survey the area to be sure the necessary fire protection equipment is in place and ready for use.
3. Survey the area for combustible or flammable materials.
4. Remain in the area while the work is being performed and remain in constant communication range with person(s) doing the hot work.
5. Never leave the area for any reason without a replacement.
6. When bulkheads or walls are involved in hot work, both sides require a fire watch.

The fire watch must be in the ready position at all times while hot work is being performed. The ready position consists of being attentive and having the fire extinguisher readily available, and in position prior to the start of work.

The extinguisher must be returned to its assigned location when the hot work is complete.

The fire watch must periodically survey the area with an LEL monitor to ensure the area is suitable for hot work. The work will stop immediately if the combustible gas indicator registers 10 percent or greater of the lower explosive level (L.E.L.) in the atmosphere.

The fire watch is authorized to stop the work whenever he/she believes the conditions are not suitable for such work. The fire watch is also authorized to stop the work if the work description on the permit is being exceeded.

The fire watch shall be equipped with the personal protective equipment (PPE) needed to perform the work safely.

A fire watch shall be maintained at least a half an hour after the welding or cutting operation was completed.

A fire watch must be present when:

- Work is performed at a location where a fire might develop.
- Combustible materials are closer than 35 ft. (10.7M) to point of operation..
- Combustibles are 35 ft. (10.7M) or more away but are easily ignited.
- Wall or floor openings within 35 feet (10.7M) radius expose combustible materials.
- Combustible materials are adjacent to the opposite side of metal partitions, ceilings or roofs.
- For a minimum of 30 minutes following completion of the job.

Compressed Gas Cylinders

Rules for handling cylinders:

1. Do not accept damaged cylinders.

2. Keep protective caps on cylinders while they are not in use.

3. Keep cylinders away from direct flame, heat and sources of ignition.

4. Properly secure cylinders at all times. While moving a cylinder, avoid rough handling and the striking of cylinders.

5. Cylinder contents must be properly labeled; do not rely on the color of the cylinder, and return improperly labeled cylinders to the vendor.

6. Close all valves when not in use.
7. While in use, cylinder valves must have a handle or other shutoff mechanism in.

8. Regulators are to be removed from cylinders when not in use unless the regulator is designed to be capped or the cylinders are in an approved welding cart.

9. Discharge leaking cylinders outdoors by opening the discharge valve slowly one-fourth of a turn.

10. Use proper lifting cradles for cylinders. Do not lift by the valve or protective cap. Ropes and slings are not to be used for lifting cylinders.

11. Compressed gas cylinders are not used for any purpose other than for containing compressed gas—bottles, for example, are not to be used as rollers.

Using Cylinders

1. Never use a cylinder of compressed gas without a pressure-reducing regulator connected to the cylinder valve.

2. Always close the cylinder valve before attempting to stop leaks.

3. Do not use oil or grease as a lubricant on valves or attachments to oxygen cylinders.

4. Threads on fittings must correspond to cylinder valve outlets.

5. Check valves/flame arrestors are to be utilized on fuel gas/oxygen systems.

6. Do not use oxygen in place of compressed air.

7. Use safety equipment that matches the hazards of the compressed gas.

Storing Cylinders

1. Store cylinders in an upright, secured position, and store empty and full cylinders separately.

2. Do not store oxygen cylinders within 20 feet of combustible materials or fuel

gases unless divided by a 5 foot fire resistant wall that is fire-rated for one-half hour.

3. Mark empty cylinders ‘Empty,’ and they can only be refilled by their owner. A cylinder is considered empty when it only has 25 psi of gas remaining.

4. Cylinders shall not be subjected to temperatures either above 125 degrees F