PURPOSE

The purpose of this program is to educate & inform employees on Company’s Management Structure as well as how to recognize, avoid and prevent unsafe acts & conditions in the workplace.

1. COMPANY STRUCTURE AND EMPLOYEE QUALIFICATIONS
2. The Company shall maintain a current Organizational Chart as well as a list of job titles and positions that detail minimum qualifications required to perform each role and job classification, which may be achieved through a combination of formal education and work experience. This information shall be made readily available to all Company Employees.
3. In order to consistently provide a safe work environment for all employees, the Company shall also maintain procedures to ensure that documentation is acquired from employees as proof that they are qualified to perform their job duties. Proof of documentation that employees meet the qualifications of their job shall include, but not limited to, “Annual Test-Outs” & “Hands-On Evaluations” specific to job tasks requirements.
4. Job specific training shall be provided for new or transferred employees. Company Employees shall receive training on the job tasks they perform on a regular basis. A competent person (Company Supervisor and/or Manager) shall verify that an employee is competent to perform their roles and responsibilities before being allowed to work independently.
5. RESPONSIBILITIES
6. To achieve the Company’s safety objectives, Management will comply with all applicable federal, state, local requirements and applicable industry standards and will be ultimately responsible for:

* Conducting, documenting and participating in weekly and monthly scheduled safety meetings,
* Ensuring Employees are trained on all Company Safety Policies, Procedures and Job Specific related tasks,
* Ensuring training is documented and readily available for internal & external audits, and
* Resolving safety related issues brought to their attention by Company personnel.

1. Frontline Supervisors are responsible for providing Management with assistance towards enforcing Company safety standards including but not limited to:

* Conducting, documenting and participating in weekly and monthly scheduled safety meetings,
* Communicating any changes to Company safety policies,
* Advising Client Representatives of all identified hazards in the workplace,
* Resolving deficiencies and implementing safety suggestions at field locations,
* Ensuring that all Company safety and regulatory requirements are adhered to by all personnel under their supervision,
* Report and investigate all accidents, determine the source of the accident and implement corrective actions that will prevent recurrence in a timely manner

1. Company Employees are responsible for:

* Attending and participating in monthly safety meetings,
* Proactively participating in all Company required Safety, Regulatory and Job Specific training,
* Utilizing the training they have received while performing any occupational related task, and
* Adhering to all Company Safety Policies and Job Specific Procedures.

1. WORKING ALONE
2. Prior to the start of any job task, a hazard assessment shall be conducted in order to effectively identify, address and implement necessary control measures to minimize risk associated with working alone.
3. Employees shall carry a cellular phone as well as a two-way radio at all times while working alone.
4. The Onsite Supervisor shall be responsible for verbally contacting the lone employee every hour or sooner based on determinations made during the risk assessment. If the Onsite Supervisor becomes unavailable to maintain verbal communications at scheduled intervals, he/she shall assign a backup communicator to the lone employee prior to being relieved of their duty.
5. The following protocol shall be used in the event that a lone worker does not respond by cell phone or two-way radio after 3 attempts within a 15 minute period:

* Land Operations: 1. Call 911

2. Give Address & Location of Lone Worker

3. Dispatch a Company Representative to Location

* Offshore Operations: 1. Notify Onsite Company Representative

2. Dispatch Field Vessel or Helicopter to Location

1. EQUIPMENT MAINTENANCE
2. The Company shall maintain a current inventory list of machinery & equipment. When new machinery or equipment is acquired, it shall be added to the inventory.
3. Additionally, the Company shall maintain a preventative maintenance schedule based on manufacturer requirements and industry standards. Preventive maintenance performed on machinery or equipment shall be documented and retained for the life of the machinery or equipment. Defects observed in machinery or equipment shall be reported to a Company Supervisor or Manager and must be repaired or replaced before being used again.
4. ALTERNATIVE CUTTING TOOLS
5. The objective of utilizing Alternative Cutting Tools is to reduce and/or eliminate the risk of employees being cut or injured by knifes or hand-held tool blades during cutting operations.
6. Company Employees shall utilize one the following Alternative Cutting Tools during any hand-held cutting operation:

* Self-Retracting Utility Knife,
* Diagonal Cutting Pliers, or
* Ratcheting PVC Cutter

1. As part of the Company’s Safe Work Practices, cutting gloves shall be utilized during any hand-held knife (cutting) operation. Note: It is imperative that the glove be the correct size.
2. MATERIAL & STORGE HANDLING (29 CFR 1926.250)
3. Containers, bundles and boxes shall be stacked, blocked, and limited in height so that they are stable and secure against sliding, falling or collapse.
4. Permanent aisles and passageways shall be kept clear to provide for the free and safe movement of material handling, equipment and/or employees. Where mechanical equipment is to be used, sufficient safe clearances shall be allowed for aisles, at loading docks, and through doorways.
5. Materials stored on pallets shall not exceed four (4) pallets in height. If empty pallets are to be stored inside an enclosed storage area or warehouse, they shall be stacked no more than 6 feet in height.
6. Non-compatible materials and chemicals shall be segregated in storage.
7. SANITATION (29 CFR 1926.51)
8. The Company shall ensure that an adequate supply of potable water shall be provided in all places of employment.
9. Outlets for non-potable water, such as water for industrial or firefighting purposes only, shall be identified by signs to indicate clearly that the water is unsafe and is **not** to be used for drinking, washing, or cooking purposes.
10. The Company shall provide adequate washing facilities for employees engaged in the application of chemicals (e.g., paints, coatings, or in other operations where contaminants may be harmful to the employees). The wash facilities shall be in near proximity to the worksite and shall be equipped as to enable employees to remove any harmful chemicals.
11. During any operational procedure that involves the use of chemicals, no employee shall be allowed to consume food or beverages in any restroom or area exposed to a toxic material.
12. SIGN, SIGNALS & BARRICADES (29 CFR 1926.200)
13. During any operational task, the Site Supervisor shall ensure that all applicable hazard signs and symbols are visible at all times when work is being performed, and shall be removed or covered promptly when the hazards no longer exist.
14. Danger signs shall be used only where an immediate hazard exists.
15. Caution signs shall be used only to warn against potential hazards or to caution against unsafe practices.
16. Construction areas shall be posted with legible traffic signs at points of hazard.
17. Accident prevention tags shall be used as a temporary means of warning employees of an existing hazard, such as defective tools, equipment, etc.

*Note: Accident prevention tags shall* ***not*** *be used in place of, or as a substitute for, accident prevention signs.*

1. HYDRO-BLASTING
2. Prior to the start of any operation, the Operator shall conduct a pre-use inspection of the equipment to include visual inspections of high pressure hoses for defects, properly sized/rated end fittings and proper fluid levels and filters.
3. Any defective machine, tool, material or equipment shall either be identified as being unsafe by tagging and/or locking the controls to render them inoperable or shall be physically removed from its place of operation.
4. When utilizing hydro-blasting equipment, a pre-operational, operational, and post-operational hydro-blasting permit must be developed by the Company’s onsite Supervisor performing the work. At minimum, the permit shall include: job description and equipment being cleaned, precautions taken to protect electrical equipment, maximum operating pressure, and list of qualified personnel.
5. Employees performing hydro-blasting work should, at a minimum, shall wear waterproof body protection, eye protection, head protection (full face shield), waterproof foot protection with steel toe caps, appropriate hand protection, and hearing protection. At minimum the hydro-blasting team shall consist of a pump operator and a nozzle operator. Objects to be cleaned shall never be held manually. All hydro-blasting must be completed from a stable work surface. No ladders, step stools, benches, etc. are to be used. Use only approved scaffolding or platforms that are job specific.
6. All hydro-blasting nozzles shall be equipped with an operating valve (on the gun or foot pedal) which must be held open manually and always under the control of the operator. The minimum total length of a hydro-blasting gun (hand-operated control valve, lance and nozzle resembling a gun layout) shall be 66 inches from the shoulder pad to the nozzle.
7. When hydro-blasting, properly sized anti-reversal device (stinger assembly attached to a nozzle to prevent it from turning around inside a pipe or large tube) shall be used throughout the task. The combined length of the hose connection, stinger, and nozzle shall be a minimum of 1.5 times the diameter of the pipe being cleaned unless the pipe being cleaned has a "T" then the combined length shall be 3 times the diameter of the largest pipe. A moleing device or lance shall require minimum 2 feet end identification when a pipe flange is available. If no flange or other means to secure anti-reversal device is used, the hose/lance shall require a 2 feet end identification marking and a 4 feet end identification marking of a different color or different pattern.
8. Adequate barricades and signs should be in place to protect personnel when approaching all ends of the equipment being hydro-blasted.
9. The hydro-blast system shall be shut down and depressurized anytime the barricade is violated, the equipment malfunctions (special attention should be given to the dump control valve), repairs need to be made, or the system is left unattended. Note: The system is not to be operated above the working pressure (40% of the burst pressure) of any of its components.
10. INERT SPACE ENTRIES
11. The Company’s Onsite Supervisor shall perform a written JSA, specific to the vessel being entered and the work being undertaken. The JSA needs to address all the risks associated with the work such as: setting up the inert entry and catalyst handling equipment at the work site, access and egress to the equipment, provisions for adequate lighting, control of employee access, lifting and rigging activities, removal of vessel internals, and installation of warning sign. The Onsite Supervisor will communicate the JSA to all affected personnel.
12. Prior to the start of the operation, the Company’s Onsite Supervisor shall establish a written emergency plan and shall ensure that all specialized equipment has been inspected and in good working order. The written emergency plan must include but is not limited to the following elements: Loss of Nitrogen supply, high Nitrogen pressure, high vessel oxygen, high vessel temperature, loss of breathing air supply, emergency inside the vessel, and plant emergency outside the vessel. Trained personnel shall be available to respond in a timely manner to provide emergency first aid and cardiopulmonary resuscitation. All Stand-by personnel shall be instructed not to leave their post until relieved. Additionally, the Onsite Supervisor shall establish a documented heat stress plan, including a work/rest regimen, based on the ACGIH Threshold Limit Value.
13. The Company shall establish a system that is capable of simultaneous communications with all affected personnel. The Onsite Supervisor shall maintain a communications system for use by the employees working inside the inert atmosphere and those monitoring the work from the outside. If for any reason the primary communication link fails, the persons working inside the space must be evacuated.
14. Company employees entering the inert space must wear a helmet which is sufficiently secured to prevent inadvertent removal. (i.e., Clam Type Helmet with integral breathing air, which cannot be accidentally removed or dislodged).
15. Air supply used for Inert Spaces shall be Certified Grade D quality breathing air and must be checked and tagged by Health & Safety Department before use at the site. Only bottled air is permitted. All employees entering the space must wear an auxiliary escape air bottle.
16. During the entry, the Onsite Supervisor shall maintain a periodic log or checklist of continuous air monitoring results. Log entries should not exceed 15 minutes.
17. The area around the Inert Entry Operation must be barricaded to limit personnel in the area. The perimeter of this regulated area will be a minimum of 4-feet from the vessel opening or man-way.
18. PERFORATING OPERATIONS
19. Prior to any perforating operations, an assessment shall be conducted to include helicopter operations, radio transmissions in the vicinity of explosives, and a grounding assessment.
20. Notifications of perforating shall be made to helicopter pilots and/or their base operations and nearby manned platforms. Additionally, notice to Airmen (NOTAM) system should be activated along with temporary headlock closures.
21. Radio warning signs shall be clearly visible to passing pilots. A radio warning should include a temporary marker in the shape of an "X" with "NO RADIO" stenciled in red on the legs of the diagonals. The letters shall be 24 inches high and 12 inches wide.
22. Pilots must avoid radio transmissions within 1000' of known perforating operations or upon observing the “NO RADIO” warning. Landing on the deck is also prohibited during known perforating operations.
23. Radio communications shall be turned off and when possible, all radio calls to the platform being approached, or to the communications center should be completed at least one mile out. The onsite dispatcher shall ensure that all communications are completed outside the 1,000-foot hazard distance.
24. When no response is received, approaching pilots should not make further radio transmissions until visual contact with the deck indicates it is open for operations (no "X" marker).
25. NFPA 70E
26. The Company shall advise all Clients of any unique hazards related to services being provided, unanticipated and/or observed hazards found during operations, and the measures that the On-Site Supervisor will take to prevent such hazards from recurring in the future.
27. Unqualified Persons: Employees shall **not** be permitted to enter spaces that are restricted to qualified employees only, unless the electric conductors and equipment involved are in an electrically safe work condition.
28. Company employees shall be trained in the skills and techniques:

* to distinguish exposed energized electrical conductors and circuit parts from other parts of electrical equipment;
* to determine the nominal voltage of exposed energized electrical conductors and circuit parts;
* including the approach distances specified in Tables 130.4(C)(a) and 130.4(C)(b); and
* the decision making process necessary to determine the degree and extent of the hazard and the personal protective equipment and job planning necessary to perform the task safely.

1. An employee shall receive additional training (or retraining) under any of the following conditions:

* If the supervision or annual inspections indicate that the employee is not complying with the safety-related work practices;
* If new technology, new types of equipment, or changes in procedures necessitate the use of safety-related work practices that are different from those that the employee would normally use; or
* If he or she must employ safety-related work practices that are not normally used during his or her regular job duties.
* *Note: Retraining shall be performed at intervals not to exceed 3 years.*

1. The training program elements might include, but not limited to:

* Evaluations,
* Work permits
* Anticipating unexpected events,
* Electrical flash arc hazard analysis, and
* All electrical parts are considered live until proven otherwise

1. Hazard Analysis shall contain event severity, frequency, probability and avoidance to determine the level of safe practices employed.
2. A job briefing shall be held before starting each job and include all employees involved. The briefing should cover hazards associated with the job, work procedures involved, special precautions, energy source controls, PPE requirements, and the information on the energized electrical work permit, if required. Additional job briefings shall be held if changes that might affect the safety of employees occur during the course of work.
3. Only qualified persons shall perform tasks such as testing, troubleshooting, and voltage measuring within the limited approach boundary of energized electrical conductors or circuit parts operating at 50 volts or more or where an electrical hazard exists.
4. Test instruments, equipment, and their accessories shall meet the requirements of ANSI/ISA-61010-1-Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use -Part 1 General Requirements, for rating and design requirements for voltage measurement and test instruments intended for use on electrical systems 1000 Volts and below.
5. When test instruments are used for the testing for the absence of voltage on conductors or circuit parts operating at 50 volts or more, the operation of the test instrument shall be verified before and after an absence of voltage test is performed.
6. All insulating PPE must be inspected before each day's use and immediately following any incident that can reasonably be suspected of having caused damage. Insulating gloves shall be given an air test, along with the inspection.
7. Such tests include:

* Blankets-before first issue/every 12 months thereafter,
* Gloves-before first issue and every 6 months,
* Sleeves before first issue and every 12 months, and
* Covers and Line hose shall be testing if insulating value is suspect.

1. Work on energized electrical conductors or circuit parts that are not placed in an electrically safe work condition, shall be considered energized electrical work and shall be performed by written permit only.
2. Company Employees shall not enter spaces containing electrical hazards unless illumination is provided that enables the employees to perform the work safely. Where lack of illumination or an obstruction precludes observation of the work to be performed, employees shall not perform any task within the Limited Approach Boundary of energized electrical conductors or circuit parts operating at 50 volts or more or where an electrical hazard exists.
3. Company Employees shall be trained in safety-related work practices and procedural requirements as necessary to provide protection from the electrical hazards associated with their respective jobs. Employees shall be trained to identify and understand the relationship between electrical hazards and possible injury.
4. The Company shall maintain documentation on all employees’ demonstrated proficiencies for the duration of employment including the content of the training, each employee's name, and date of training.
5. GENERAL EMPLOYEE SAFETY
6. Employees are exposed to many hazards, which might not be easily recognizable to the untrained eye. To avoid injury, they must exercise reasonable care and good judgment in the performance of their daily work.
7. Consequently, the following safety precautions shall be adhered to by all employees with an ultimate goal of preventing bodily injury or damage to property:
8. No horseplay of any kind is allowed in the office. Examples of unacceptable horseplay may include, but not be limited to practical jokes as well as those incidents bordering on sexual harassment.
9. Good housekeeping is paramount to promoting office safety, and assisting in effective fire prevention. Additionally, good housekeeping has been proven to be effective in reducing the number of slip, trip and fall accidents occurring in the work place.
10. Take your time when exiting doorways into halls or from other rooms.
11. Evaluate all items which will be manually lifted, and get help when lifting an object which is clearly too heavy for one person to lift safely.
12. Use caution when going down stairs. Always maintain “three-points of contact” (at least one foot, eyes on path, and one hand on the railing or rung at all times) when ascending or descending stairs.
13. Supervisors or a Competent Person shall conduct daily inspections of job sites, materials and equipment.
14. Smoking is only permitted in “Designated Smoking Areas” only.
15. Due to “Hot Work” operations, employees are required to have shirt-tails tucked in at all times.
16. Report all work related incident and injuries to your immediate Supervisor, regardless of severity.
17. GENERAL EMPLOYEE TRAINING
18. The Company shall instruct each employee in the recognition and avoidance of unsafe acts & conditions as well as regulations applicable to their work environment to control or eliminate any hazards or other exposures that could cause injury or illness.
19. Only qualified employees by training or experience shall operate equipment and machinery. Before being assigned any work tasks, employees shall be trained on the hazards of equipment, machinery operations and maintenance including mobile and hydro-blast equipment. Training shall address the potential bodily hazards specific to each type of equipment (i.e., penetration of the skin by high pressure water, etc.). If an accident occurs, medical attention must be given immediately.
20. Training shall be provided for all employees whose duties include working in or around an Inert Space. The Company shall certify that the required training has been accomplished. The certification shall include employee name, trainer signature/initials, and dates of training. Certification shall be made available to employees & their authorized representative.

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| **Reviewed and Approved** |
| Quality Manager or President |  |  |
|  | Date |