

PRIME MARINE SERVICES, INC.

S A F E T Y P R O G R A M P O L I C Y & P R O C E D U R E S M A N U A L



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SECTION I: INTRODUCTION

A. MANAGEMENT POLICY STATEMENT

The safety and health of all employees are of prime importance to Prime Marine Services, Inc. and we hold in the highest regard the safety, welfare and health of employees. It is our belief that accidents injuring persons and damaging equipment cause needless human suffering, inconvenience, and expense. Prime Marine Services, Inc. shall provide our employees a work environment as free of recognized hazards as is possible and practical. Control of potential safety and health hazards and their elimination is the primary objective of Prime Marine Services, Inc. safety program.

One individual in Prime Marine Services, Inc. shall be designated in writing as the Safety Director and shall be responsible for all safety related training records, reports, and inspection activities.

All Supervisory personnel are accountable for safe, efficient work practices and procedures. Each supervisor is responsible to ensure that our safety programs are explained and understood by employees. Employees shall be provided with a copy of Prime Marine Services, Inc. safety manual and is expected to keep it up to date with all additions and modifications as they are distributed.

All employees shall do everything possible and necessary to eliminate accidents. Reducing accidents and related unnecessary losses shall help us to be more competitive in our industry, thus helping, to safeguard our jobs.

It is the intention of Prime Marine Services, Inc. to comply with all applicable federal, state, local and industry safety and health regulations.

All employees shall observe this policy, under the direction of Management and the guidance of the Safety Director and supervisors.

President

B. SAFETY GOALS

Our goal in Safety is to prevent all accidental injuries. Protection of human life is of highest priority and actions undertaken to protect the environment or Prime Marine Services, Inc. assets shall reflect this philosophy. We rely on each employee to actively support and implement both the spirit and letter of this policy.

All employees are responsible for safety, health, and environmental compliance. It is very important for each of us to understand this policy and conduct our daily business in a manner that assures compliance.

This manual includes usage of the verbs SHALL and SHOULD; whichever is more applicable to the function. For the purpose of this manual, the following definitions apply:

SHALL	Indicates that the rule has universal application to the specific activity and implies that the rule is mandatory.
SHOULD	Indicates that the rule is to be used unless there are practical or other sensible reasons to the contrary, and implies that the rule is to be used where good judgment and safety principles indicate it is appropriate.

C. SAFETY RESPONSIBILITIES

1. EMPLOYEES

It is the responsibility of each employee to protect themselves as well as fellow workers from injury. Work shall be conducted according to established safe practices and procedures.

Under no circumstances shall an employee be assigned a task without sufficient training to accomplish it safely and efficiently. Employees transferred to new positions shall be given specific safety instructions relative to their new job assignments.

Employees shall observe all warning signs, particularly those that require the use of personal protective equipment. They should also use common sense and good judgment in the use of this equipment in areas where no signs are posted.

The employees shall attend safety meetings at their particular location unless specifically excused by the supervisor. Attendees should participate in these meetings and contribute to the overall safety program. Each individual's participation is necessary to achieve productive discussions regarding hazards and unsafe work habits, and their corrective measures.

All employees have the responsibility to identify and report all safety hazards to their immediate supervisors as soon as possible. Employees shall correct those that they can without endangering themselves or others. **Employees shall notify their supervisors of the following:**

- Prescription and nonprescription medications being used while on the job (also medications to be avoided in an emergency).
- Job-related accidents resulting in injuries or illnesses (no matter how minor).
- Accidents involving Prime Marine Services, Inc. vehicles.
- Accidents resulting in damage or loss to property or equipment.
- Any situation having the potential to cause serious injury or harm to the environment.
- Unsafe work practices or blatant disregard of rules by another workers.

Employees shall not wrestle, fight, and have strength contests, play practical jokes, or engage in horseplay on the job or on Prime Marine Services, Inc. equipment or premises.

All employees should exercise due care in their off-the-job activities to avoid injuries. Time lost from work due to off-the-job injuries not only affects the employees and their families, but also the job. The direct and indirect costs of unplanned absences from work can hamper Prime Marine Services, Inc. overall success.

Each Employee and Contract Employee is responsible for:

- Reporting to work in fit condition to perform the duties required by his/her job.
- Following established procedures and safe work practices, performing tasks in a safe manner and refusing to perform a task when it cannot be accomplished in a safe and environmentally-sound manner.
- Wearing the correct personal protective equipment as needed for each work activity or as required for the location and maintaining equipment in proper condition.
- Communicating with his/her supervisor whenever a job task or work procedure is not clear or fully understood.
- Complying with the requirements of posted warning signs and labels.
- Cleaning up after each task, maintaining high standards of housekeeping for all work areas and locations and disposing of wastes in a legal manner.
- Surveying work areas on a daily basis, staying alert for potential problem situations and keeping the supervisor aware of situations as they arise.
- Being familiar with procedures for work area emergencies and assigned duties in emergencies.
- Keeping current with training and re-certification requirements.

2. SUPERVISORS

The supervisor is responsible for helping provide a safe workplace for subordinates and for the location's safety program. The success of the safety program requires the commitment and motivation of the supervisor. Meetings, safety audits, hazard corrections, and accident notification and investigation are all major responsibilities of the supervisor.

In addition, the supervisor shall encourage employees to practice safe and approved methods in fulfilling their job responsibilities. On-the-job training, coaching, counseling and motivating are to be utilized frequently to achieve these objectives.

One-on-one meetings between the supervisor and subordinates should be held regularly to make sure all employees understand and agree that safety is paramount in their activities.

3. SAFETY DIRECTOR

The Safety Director shall develop and oversee implementation of safety programs and safety-related training activities to provide effective, compatible programs for Prime Marine Services, Inc. The Director shall keep management informed on safety performance, will advise Management on needed improvements, and provide support and functional guidance to the employees to improve their safety performance and occupational health.

The designated Safety Director for Prime Marine Services, Inc. is Randy Jones.

Specific responsibilities shall include but not be limited to the following:

- Coordinate all safety-related activities,
- Keep and analyze accident records and trends,
- Conduct and/or coordinate safety educational and training programs,
- Coordinate safety interest and motivational programs,
- Evaluate all OSHA recordable case investigations,
- Assist in scheduled facility inspections,
- Coordinate with supervisors or facilitate monthly employee safety meetings,
- Provide safety orientations to all new employees,
- Develop safety recommendations for specific operations,
- Investigate all accidents, near misses,
- Assist in establishing procedures and guidelines for the safety program and update as necessary.

4. MANAGEMENT

The management of Marine Services, Inc. shall set safety and occupational health policies and ensure that they are communicated effectively. They shall ensure that an effective safety program is in place and that Supervisors take an active role in the program in addition to the following:

- Authorize necessary expenditures for the safety program.
- Provide, within reason, a work environment in which identified occupational hazards are controlled when elimination of hazards are not feasible.
- Mandate that all employees follow established safety rules and safe work practices.
- Establish a program, with a system of accountability, in order to audit and track safety performance of all employees, and contractors.
- Actively support the safety program as an example to employees, and with decisions and directives that are required.

- Delegate authority to others under their supervision to expedite and facilitate the application of the safety program.

5. CONTRACTORS

Contractors shall have their own safety programs and provide at least the minimum required safety training to their employees. They should also be invited to participate in Prime Marine Services, Inc. safety meetings when working at Prime Marine Services, Inc. properties. Small contractor companies may require special evaluation. They should be considered for contract work for Prime Marine Services, Inc. only if they can fulfill the intent of these guidelines.

Prime Marine Services, Inc. may require submission of a written program, accident statistics, and training documentation as evidence of a contractor's commitments to safety and occupational health.

Contractors shall be provided a copy of Prime Marine Services, Inc. Safety Policies and Procedures before beginning any work on the Prime Marine Services, Inc. behalf.

NOTE: Contractors shall abide by Prime Marine Services, Inc. safety Policies and Procedures.

All contractors shall be responsible for alerting and training their employees and subcontractors concerning all health and safety hazards to which their employees or subcontractors may be exposed.

All contractors shall supply their employees and subcontractors with all necessary personal protective equipment and enforce such practices as are necessary to provide a safe work environment.

SECTION II: SAFETY POLICY AND PROCEDURES

The goal of accident prevention shall be considered of primary importance in all phases of operation and administration.

It is the intention of the management to provide safe and healthy working conditions and to establish and insist upon safe working practices at all times by all employees.

These Safety Policy and Procedures provide guidance in maintaining a safe and healthy work environment for all employees. Since the prevention of accidents is an objective affecting all levels of Prime Marine Services, Inc. and its activities, it shall be a basic requirement that each Supervisor/Manager make the safety of his or her employees an integral part of his or her regular management function.

A. GENERAL SAFETY RULES

- 1) All accidents with or without injury shall be reported to your supervisor immediately. It is your responsibility to contact the nearest emergency facility/doctor/the Safety Director and initiate post-accident report. In no circumstance, except in an emergency, should an employee leave a shift without reporting an injury.
- 2) Report unsafe conditions in the workplace, including defective tools or other equipment, to your supervisor immediately. It is the supervisor's responsibility to review and correct unsafe Conditions.
- 3) Established safe job procedures including those regulated by Federal/State agencies shall be followed by all employees. Deviations from established procedures require the approval of your immediate supervisor.
- 4) If unsure of how to operate machines/equipment or perform any assigned task, ask your supervisor before proceeding. Training shall be provided to individuals that are not proficient in the use of particular machines/equipment.
- 5) Do not alter machines or equipment. Mechanical safeguards shall be in place and kept in place at all times unless locked out and/or tagged out for maintenance or repair purposes.
- 6) Personal protective equipment, as directed by Federal/State law, shall be worn or used in any area for which it has been issued. **Ask if unsure.**
- 7) Use only the proper tool for the job. Do not use defective tools or equipment if the proper tool is not available.
- 8) Get assistance in lifting any item too bulky, awkward, or heavy to safely lift. Employees should use hoisting & lifting equipment, such as carts, forklift, dolly, etc., before attempting to lift or move any heavy item.
- 9) If a repetitive task causes discomfort, or is unsafe or unhealthy, report it to the supervisor immediately.
- 10) Alcohol and other drugs, unless approved by the Prime Marine Services, Inc. doctor, are prohibited in the workplace.
- 11) Be familiar with the layout of the job site noting "EXIT", "NO EXIT", and appropriate emergency evacuation routes.
- 12) Be familiar with the location and proper use of fire extinguishers.
- 13) In case of emergency, know:
Who to call
What to do
Where to go

If unsure about this information, ask your supervisor where this information is posted.

14) Observe safe and healthy housekeeping practices.

15) Do not use chemicals without a full understanding of their toxic properties and without the knowledge required in safe use. Employees shall complete Hazard Communication and Right-To-Know training upon initial employment.

B. GENERAL DISCIPLINE

Employees who fail to follow safe work practices will be subject to the following disciplinary actions (all counseling will be documented, signed and dated by the employee and placed in the employee's file):

- 1) The first violation of Prime Marine Services, Inc. Safety and/or health regulation will result in counseling, suspension and/or termination. The objective of such counseling will be to make sure the employee understands the safe way to do his/her job. Consequences of repeat infractions will be discussed with the employee.
- 2) The second violation will be reviewed with employee and will result in probation, suspension and/or termination. The suspension can be with or without pay of one, two or three days depending upon the severity of the infraction.
- 3) The third violation will result in termination.

Note: The disciplinary process can be expedited depending upon the severity of the violation. Safety violations that show an overall lack of commitment to company goals will also receive a harsher penalty because of undermining the goals and objectives of the company's safety program.

All good safety programs are very dependent on the immediate supervisor being very involved in the safety of his employees. Prime Marine Services, Inc. does depend on the immediate supervisor to be directly involved in the safety of his personnel and the enforcement of our policies and procedures. Our supervisors are required to inspect locations and enforce company policies and procedures. Company officials inspect locations and have a high expectation from its immediate supervisors in the safety program. Supervisors and managers that do not show the proper commitment to achieving the safety goals shall come under the same level of disciplinary action as any other employee. Our supervisors must be proactive and set the level of expectation for our employees.

C. SAFETY PROGRAM COMMUNICATIONS

Safety and health information shall be communicated to all employees through the following methods:

- Employee orientations, conducted at the time of hire, shall stress the importance of safety at Prime Marine Services, Inc., educate on the Safety Program and requirements, and shall encourage all workers to report all hazards to a supervisor without fear of reprisal.
- Regular safety meetings shall be held monthly to keep employees informed of safety and health matters.

- Some safety and health information may be disseminated through corporate e-mail and a knowledge Statement must be signed by each affected employee and maintained in the office personnel file.
- Periodic training.

A safety violation is failure of not following a verbal or written safety policy or procedure, guidelines, rules, or failure to wear PPE.

D. SAFETY ORIENTATION

All employees, contract employees, and contractors of Prime Marine Services, Inc. shall be oriented to the Safety Program upon implementation or as necessary. All new employees shall complete the safety orientation before beginning their job responsibilities. Employees transferred to new positions will be given specific safety instructions relative to their new job assignments.

The Safety Orientation Checklist shall be utilized by the Safety Liaison and the employee's immediate supervisor to ensure that all areas of the safety program are covered and understood by the employee.

As topics are covered, the employee shall initial by the appropriate topic to indicate completion. Upon completion of the orientation, the immediate supervisor and employee will sign off on the checklist.

The orientation checklist will then become a permanent record in the employee's personnel file.

Each new employee shall be given a copy of the Safety Manual. The "Acknowledgment of Understanding and Agreement" page shall be signed and filed. It is recommended that the orientation checklist be attached to the acknowledgment page.

As a minimum, the employee safety orientation shall consist of the following:

1. Specific instructions regarding any equipment to be operated, the hazards involved, and precautionary measures required.
2. Emergency measures, including fire drills, location of emergency equipment, fire protection equipment, first-aid kits, emergency procedures, and hazardous spill procedures.
3. The employee's responsibility to identify and correct unsafe practices or conditions.
4. The employee's responsibility to report all incidents, near misses, accidents and injuries, no matter how minor.
5. Prime Marine Services, Inc. policy regarding the use or possession of stimulants, drugs, narcotics, firearms, weapons, and alcoholic beverages.

6. The specific, safety, and occupational health programs that are required by Prime Marine Services, Inc. policy and regulatory agencies, which are pertinent to the individual's job assignment.
7. New employees shall be presented a general overview of Prime Marine Services, Inc.
8. The Safety Program of Prime Marine Services, Inc. shall be explained to the employee.
9. The Fire Prevention Program shall be explained to the employee. If the employee will be expected to use fire extinguisher equipment, the employee shall be trained in the use of fire extinguishers.
10. The Hazard Communication Program shall be covered.
11. Individual responsibilities under the Emergency Action Plan shall be covered.
12. All employees shall be informed of the Personal Protective Equipment required.
13. If the new employee shall be expected to utilize respiratory protection, the training required under the Respiratory Protection Program shall be given prior to the employee being exposed to any respiratory hazards.
14. Accident and Injury Reporting procedures shall be explained to the employee.
15. Proper training shall be given to all employees prior to the employees operating or servicing any equipment. This can be accomplished through video presentations or on-the-job training. Documentation of all training will be kept at the corporate office.

VISITORS

Visitors shall be given a safety briefing, and be accompanied by a Prime Marine Services, Inc. employee.

E. INSPECTIONS

Periodic safety inspections shall be conducted to identify and evaluate work place hazards and unsafe work practices. These inspections shall be performed by the Safety Director or his designee and shall be documented utilizing the Inspection Checklist

Reasons for Inspections are:

- To check results against the safety plan.
- To promote an interest in safety.
- To display management's sincerity about safety.
- To collect data for safety meetings.
- To note and act upon unsafe behavior trends.
- To improve safety standards.

- To spot unsafe conditions.
- To check new facilities.
- To identify necessary changes in policy and procedures.

1. The completed Inspection Checklist shall be maintained for a minimum of 3 years as proof of an ongoing safety program.
2. The signed and dated checklist shall be forwarded to the Safety Director to ensure that the proper corrective action shall be taken according to the procedure detailed in the Hazard Correction section of this safety plan.
3. All inspections, findings and recommendations shall be communicated to the employees utilizing one of the methods outlined in the Safety Program Communications section.
4. The initial inspection shall take place within three (3) months of policy distribution and subsequent inspections shall follow at monthly intervals.
5. Additional inspections shall be required under the following circumstances:
 - Whenever new substances, processes, procedures, or equipment are introduced into the workplace that represents a new occupational safety or health hazard.
 - Whenever the employer is made aware of a new or previously unrecognized hazard.
 - As a routine part of every accident investigation.
 - These additional inspections may be limited to the process, equipment, or area in question.

F. HAZARD CORRECTION PROCEDURES

1. When possible, hazards and unsafe work practices shall be corrected by the Supervisor/Manager as soon as they are identified.
2. Any equipment contributing to hazardous conditions shall be placed out-of-service and locked or tagged out.
3. If a hazard cannot be immediately corrected, the Safety Director shall establish a target date for correction based on the following criteria:
 - Imminent Hazard: Immediately dangerous to all employees exposed and will cause death, dismemberment, or disabling injury. Equipment shall be placed out-of-service." Repairs shall be completed prior to equipment start-up.
 - Serious Hazard: Substantial probability that an employee shall suffer serious physical harm.
 - General Hazard: Does not fit definition of serious but may affect the safety and health of exposed employees.
 - Regulatory Hazard: pertaining to permits, posting, record keeping, or reporting requirements established by OSI-IA.

4. Correction time frames will be assigned as follows:

- Imminent Hazard: (Immediate) All exposed employees except those necessary to correct the existing condition shall be removed from work area and hazard abatement begun immediately. Employees necessary to correct the hazardous condition shall be provided with all the necessary safeguards.
- Serious Hazard: all serious hazards shall be corrected at the time of identification or shall be isolated to prevent further exposure to employees and shall be corrected within 15 days of identification.
- General Hazard: all general hazards shall be corrected utilizing the procedure outlined for a serious hazard.
- Regulatory Hazard: all regulatory hazards shall be corrected as soon as all other identified hazards have been abated.

G. ACCIDENT INVESTIGATIONS

It is management's policy at Prime Marine Services, Inc. to establish a program for accident investigation. Thorough investigation of all incidents, both with and without injury or property damage, will lead to identification of causes and help to:

- Reduce economic losses from injuries and lost production time.
- Help employees develop an awareness of workplace problems and hazards.
- Identify areas for process improvement to increase safety and productivity.
- Note areas where training information or methods need improvement.

The goal of the accident investigation program is the prevention of future accidents through use of knowledge derived from the investigation. Additionally, the investigation will be used to prepare reports required by federal and state laws as well as the workmen's compensation carrier.

1) ACCIDENT INVESTIGATION PROCEDURE

- a) The immediate Supervisor and Safety Director and/or Liaison, depending on the severity of the injury or illness, or extent of damage, shall investigate all occupational injuries or illnesses, near misses, fires, or extensive property damage resulting from employment or operations at Prime Marine Services, Inc.
- b) Employees shall report any incident, as stated above, to their immediate supervisor as soon as possible after the accident/incident.
- c) All accident investigations shall be documented utilizing the Accident Investigation Report. NOTE: Accidents resulting in property damage > \$500 or resulting in a Lost-Time-Accident shall also require an additional Causal Factors and Corrective Actions Analysis.
- d) While conducting the accident investigation, particular attention shall be given to suggesting ways of preventing future occurrences.
- e) The Safety Director and Safety Liaison shall review all investigation reports for possible corrective action,

- f) Accident investigation findings and recommendations shall be communicated to the employees utilizing one of the methods outlined in the Safety Program Communications section of this plan.
- g) When an employee/visitor/contract employee is injured on Prime Marine Services, Inc. property, management shall be responsible for offering action such as first-aid or obtaining professional medical attention as soon as possible. In the event that the injured person refuses such, a "Refusal of Care," documentation must be kept.
- h) The Safety Liaison is responsible for ensuring that any necessary corrective measures are taken as a result of an accident investigation.
- i) If the injured person is taken to a doctor, a statement from the doctor should be obtained and attached to the Accident Investigation Form.

2) Accident Investigation Guidelines

- a) Ask the employee involved and any witnesses, in separate interviews, to describe in their own words exactly what happened.
- b) After the employee or others involved have given his/her description of the event, ask appropriate questions that focus on the causes. Ask questions focusing on who, what, when, where, and how.
- c) When you are finished, remind the person that the investigation was to determine the cause and possible corrective actions that can eliminate the cause(s) of the incident.

H. SAFETY MEETINGS

Safety meetings are essential to the success of any safety program. Safety meetings should be designed to encourage feedback and discussions from participants. During this time, management will reaffirm Prime Marine Services, Inc. commitment to safety as well as review procedure and performance.

1. It is the responsibility of the Safety Director to ensure timely and well-conducted safety meetings. The role of the Safety Director is one of advisor, providing support.
2. Meetings will be held on a frequency of no less than once per month. Meetings may be held either jointly (office and field personnel) or separate depending on the topics. A record will be kept showing the topic(s), date, presenter, and a list of the persons attending.
3. Management or outside professional on relevant topics will conduct meetings in a timely manner.
4. Attendance of Prime Marine Services, Inc. employees at safety meetings is mandatory. Attendance and participation of contractor personnel working at the Prime Marine Services, Inc. location is encouraged.
5. Topics will be geared toward training, awareness, and procedures. Meetings are not to become gripe sessions.
6. Accidents, near misses, and inspection reports should be reviewed periodically.
7. Feedback and solutions shall be solicited from all employees.
8. Documentation will be on the "Safety Meeting Report" form.
9. Safety meeting reports will be maintained on file by the Safety Director for a minimum of one (1) year from the year for which records are maintained.

SAFETY SUGGESTION PROGRAM

Prime Marine Services, Inc. shall in their formal safety meeting agenda, allow time for the meeting chairperson to:

- Discuss employee's safety suggestions.
- Discuss the unresolved issues from previous meetings.
- Discuss the resolved issues.
- Answer questions/comments related to environmental, safety, fire, and health that employees may bring up.

All of this information shall be recorded in the Safety Meeting Minutes.

I. SAFETY AND HEALTH TRAINING

Occupational health and safety training shall be provided to all Prime Marine Services, Inc. employees under the following guidelines:

- The Safety Director or Supervisor shall conduct a mandatory safety orientation in order to familiarize all existing employees with the provisions of this Safety Program to reemphasize existing rules and procedures.
- All new employees shall be given a safety orientation at the time of hire. The Safety Director or Supervisor shall conduct the orientation. Subjects discussed shall include the Safety Program as well as pertinent safety rules and procedures.
- Existing and new employees shall be given the required training in compliance with regulatory and Prime Marine Services, Inc. requirements.
- Employees exposed to a new hazard, created by a new substance, process, procedure, or equipment, shall be given safety training prior to working with the new hazard. The immediate supervisor shall conduct this training.
- Employees shall receive additional training any time a new or previously unrecognized hazard is identified.
- All supervisors shall be trained to familiarize them with the safety and health hazards to which employees under their immediate control may be exposed.
- Employees shall be expected to be prompt, attentive and competent in receiving any training.
- The Safety Director shall maintain records of all training sessions. Documentation shall indicate the type of training given, date provided, trainer's name and the employee's signature.
- Managers/Supervisors shall be trained as necessary by:
 - Approved Safety Training Courses/Safety Director
 - Seminars and/or Video Training
- All training requirements and additional training will be evaluated by the Safety Director to assure this training meets regulatory and corporate requirements.

The following is a listing of training courses that employees will need to complete (if applicable to that employee's job responsibilities):

- BASIC FIRE FIGHTING/PREVENTION
- EMERGENCY ACTION PLAN AND EVACUATION PROCEDURES
- HAZARD COMMUNICATION
- FORKLIFT OPERATION
- FIRST AID/ADULT CPR
- RESPIRATORY PROTECTION
- PERSONAL PROTECTIVE EQUIPMENT
- BLOODBORNE PATHOGENS
- ELECTRICAL SAFETY
- MANUAL LIFTING
- HYDROGEN SULFIDE
- FIT TESTING

J. FIRST AID AND CPR

REQUIRED

Prime Marine Services, Inc. will ensure the ready availability of medical personnel for advice and consultation on matters of employee health. These medical personnel will provide the proper and prompt medical attention an injured employee will need in an emergency situation.

In the absence of an infirmary, clinic, or hospital in near proximity to the workplace, which is used for the treatment of all injured employees, a person or persons shall be adequately trained to render first aid. First aid supplies approved by the consulting physician shall be readily available. Supervisor on the job plus one other employee are certified in First Aid/CPR.

Where the eyes or body of any person may be exposed to injurious hazardous materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

Employee medical records, which are work-related, shall be filed by employee number or social security number and kept separately from all other files. Either the employees or their designated representative may request copies of these files.

When required, first aid kits shall be maintained by the Prime Marine Services, Inc. Safety Director and kept in an appropriate and visible area that is accessible to all employees on the job-site. These First Aid Kits shall contain all necessary items related for the type of activity being performed. These First Aid kits are to be checked and re-stocked before being sent out on any project. First aid kits shall consist of appropriate items stored in weatherproof case with individual sealed packages for each type.

EMERGENCY FIRST AID PROCEDURES

The following is a general guideline for providing emergency first aid. Never exceed your level of training.

Initial treatment procedures for injured

Avoid excitement or panic.

Assure scene safety.

If immediate action is necessary to save a life (artificial respiration, control of bleeding, etc.) give the proper treatment without delay.

Make a careful examination of the patient.

If in doubt, never move a badly injured person unless it is necessary to get him/her to fresh air, or to protect him/her from danger.

Call for air evacuation, if needed.

All injuries shall be reported immediately to the supervisor in charge. Emergency phone numbers should be ascertained prior to performing any work.

If eyes or injured or contaminated, quick response will be provided.

Whenever possible a Prime Marine Services, Inc. employee (attendee) shall accompany a fellow employee(s) injured on the job to the appropriate treatment facility. The attendee shall make all reasonable efforts to assist the injured party.

The attendee shall also record as much information as possible regarding: the time of the events associated with the accident; mode of transportation to the treatment facility; any information regarding the care of the injured party.

The attendee rendering first aid shall make every effort to provide the best possible care the injured party until such a time as professional medical care can be provided.

The telephone number of the physician, hospital, and ambulance shall be conspicuously posted. Emergency medical transportation will be provided if needed.

Prime Marine Services, Inc. shall secure and pay for emergency medical transportation, such as emergency helicopter or ambulance service, from field locations to a hospital for any employee, contractor, or consultant who is injured or becomes ill enough to require this type of emergency service.

The Medic, Platform Foreman, and the ill or injured employee/contractor/consultant shall decide whether the individual's condition is critical enough to warrant either helicopter or ambulance service. Since the Medic has received advanced training in emergency care, his/her recommendations should be solicited in making the decision.

Guidelines for calling a Medivac helicopter or the Safety Director. The following examples include, but are not limited to, the types of injuries or illnesses that may require emergency medical helicopter or ambulance service will determine ambulance emergency medical service. This list should serve as a guideline to assist the Prime Marine Services, Inc. Supervisor in deciding when to call an emergency medical helicopter or ambulance service. This type of emergency transportation should definitely be considered for such things as, but not limited to, the following:

Respiratory or chest pains, indicating a possible heart attack;

Injuries resulting in severe bleeding, deep cuts, or amputations;

Compound fractures;

Head injuries and/or altered states of consciousness;

Severe and acute back injuries;

Suspected internal injuries and bleeding;

Gas poisoning;

Respiratory problems requiring artificial respiration, such as, but not limited to, drowning or gas poisoning; severe burns; severe abdominal pain;

Any other injuries or illnesses that the Medic and Platform Foreman deems serious enough that helicopter evacuation is necessary to prevent further aggravation of the condition or pain that could result by utilizing crew boats of local ambulances.

The Medic (doctor, paramedic, emergency medical technician, etc.) in charge, making the transport assessment, will decide where the injured or ill person will be taken. The following is a list of available transport means and hospital locations:

Medical Emergency Contacts		
Air Medical Evacuation		
Location	Service	Telephone Number
Gulf Of Mexico	U.S. Coast Guard	(504) 589-6225
Lafayette Area	Acadian Ambulance Service (Air Med Program)	(800) 088-2733 (318) 267-1111
New Orleans/Venice Area	Air Care Program (West Jefferson Medical Center)	(800) 382-4006
Morgan City Area	Air Logistics	(504) 395-6191

Trauma/Non-Trauma/Emergency					
Name of Facility	Address	City, State, Zip	Main Phone	Coordinates	Radio Frequency
Terrebonne General Medical Center	936 East Main	Houma, L. 70360	(504) 873-4141 ER: 873-4150	29°03'55" N 90°43'08" W	128.875
Lafayette General Hospital	1214 Coolidge	Lafayette, LA 70505	(318) 261-7991 Emergency Room (318) 261-7181	Loran: N-3012.48 W-9201.42	123.05
West Jefferson Medical Hospital	1101 Medical Center Blvd.	Marrero, LA 70072	(504) 347-5511	Loran Coords. N-2953.6 W-9005.8	123.05

Burn Trauma					
Name of Facility	Address	City, State, Zip	Main Phone	Coordinates	Radio Frequency
Baton Rouge General Hospital	3600 Florida Blvd.	Baton Rouge, LA 70806	(504) 387-7000 Burn Unit: (800) 743-7718	30°26'55" N 91°09'11" W	155.340 Mhz

Ground Ambulance		
Ambulance Service	Location	Telephone Number
Acadian Ambulance Service	Lafayette, LA	{800} 259-1111

In life threatening cases, the patient will be taken to the nearest medical facility, stabilized, and then transferred if necessary.

FIRST AID/BLOODBORNE PATHOGENS

When required by any Client, or project, Prime Marine Services, Inc. will train its employees in FIRST AID/CPR, and BLOODBORNE PATHOGENS. This training will be done by one of our in-house instructors.

PROTECT YOURSELF WHILE GIVING ASSISTANCE

KEY DEFINITIONS

Because of the technical nature of some of the words used when talking about bloodborne pathogens, some key definitions are spelled out here. Refer back to these if you do not understand something later in this chapter.

Blood borne pathogens: microorganisms present in human blood that can cause disease in humans. These include, but are not limited to: hepatitis b virus and human immunodeficiency virus-HIV.

Exposure incident: a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious material that results from doing ones job.

Occupational exposure: a reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from doing ones job.

Parenteral: a piercing of mucous membranes or the skin barrier by means of a needle stick, human bite, and/or abrasion.

Universal precautions: an infection control approach whereby all human blood and certain body fluids are treated as if they were known to be infectious for HIV, HBV, or other bloodborne pathogens.

If you are an occupational health professional employed in industry, a designated first responder or first aid provider in your in your company, or involved in maintenance or housekeeping work that could potentially expose you to bloodborne pathogens then you need to know about this standard.

Other types of workers covered by the standard include health-care workers, police officers, firefighters, and employees of correctional facilities and funeral homes.

"Good Samaritan" acts performed by undesignated employees are not covered by the standard, but undesignated first aid responders may want to know exposure controls anyway, to protect themselves if they voluntarily respond in the event of an emergency.

Potentially infectious materials that may present in a first aid emergency include blood, urine and other body fluids, and vomit.

Required elements of the standard

The standard requires that employers develop an exposure control plan.

They must also provide training on the following subjects to those workers affected by these procedures.

- Blood borne diseases and how they are spread
- The exposure control plan
- Engineering and work practice controls
- Personal protective equipment
- Hepatitis B vaccine, exposure evaluation and follow-up
- How to respond to emergency's involving blood
- Signs and labels used to warn off potential hazards.

Engineering controls and work practices

The employer must also institute engineering controls and work practices that will minimize the possibility of exposure. Such things as hand washing, prevention of needle sticks, and minimization of the splashing or of blood, fall under this. Engineering controls eliminate hazards at their source. This includes the use of autoclaves and the containers used for sharps. Engineering controls must be checked and maintained on a regular schedule to keep them **in** good working order. Employers must provide accessible facilities for hand washing.

Wash hands immediately after removing gloves or other protective equipment, and after any hand contact with blood or potentially infectious fluids. If a sink isn't available for hand washing, antiseptic cleansers must be provided. In this case, wash with soap and water as soon as possible.

Do not bend, shear, break, remove or recap any used needle or sharp. Dispose of used sharps in the proper containers. These containers must be puncture resistant, be properly labeled, and have leak proof sides and bottom

Eating, drinking, applying cosmetics or lip balm, and handling contact lenses are prohibited in areas where there is a potential for exposure. Food or drink cannot be stored in refrigerators, freezers, shelves, cabinets or countertops where blood is stored or where blood or other potentially infectious material may be present. Procedures involving blood or potentially infectious material must be performed in a manner that reduces spraying or splashing to a

minimum. Blood or fluid specimens must be placed in a container that does not leak during handling, storage or shipping.

Personal Protective Equipment

Employers must provide, and employees must use, personal protective equipment when the possibility exists of exposure to blood or bodily fluids. This equipment must not allow blood or potentially infectious matter to pass through it to the employee's clothes, skin, eyes or mouth.

Personal protective equipment must be accessible and available in appropriate sizes. (Hypoallergenic or powderless gloves must be available for those allergic to regular gloves.) PPE must be kept clean and in good repair.

Single use gloves must be replaced as soon as possible after they are contaminated or if they become torn or punctured. These gloves should never be washed for re-use. Various other types of PPE include plastic visors, half facemasks, full body gown, goggles, etc.

Whatever it takes to stop exposure to blood or other potentially infectious materials is the level of PPE you should be wearing when you provide first aid.

Housekeeping Techniques

Because housekeeping staff will be occupationally exposed to potentially infectious material when cleaning up after some first aid incidents, the following things need to be done.

Housekeeping staff needs to follow the written cleaning schedule that outlines the method of decontamination to be used and describe the proper disposal of used sharps.

Equipment and work areas must be cleaned and decontaminated as soon as feasible after contact with any blood or potentially infectious fluids.

Protective covers must be removed and replaced when overtly contaminated or at the end of each shift if there is a possibility of contamination during the shift.

Contaminated laundry should be handled as little as possible. Laundry must be bagged where it is contaminated. Wet laundry must be placed in leak- proof bags.

All employees who handle contaminated laundry must wear gloves.

Hepatitis B Vaccine

The greatest bloodborne risk is infection by the hepatitis b virus. Because of this, hepatitis b vaccine must be made available after an exposure to any first aid provider who has experienced an exposure to blood.

- Pre-screening cannot be done as a condition of receiving the vaccine. Employees who do not wish to be vaccinated must sign a declination form. Employees who change their minds at a later date must be provided with the vaccination.

Exposure Incident

An exposure incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious material that results from doing one's job or providing first aid as a first responder. When an exposure incident is reported, the employer will arrange for an immediate and confidential medical evaluation.

The medical evaluation must document how the exposure occurred, identify and test the source individual if feasible, test the exposed employee's blood, if consent is obtained, provide counseling, and evaluate any reported illness.

The medical professional doing the exposure assessment must be provided with all relevant data needed to complete the employee's evaluation.

Communication of Hazards

All warning labels must bear the biohazard legend, be printed in fluorescent orange or orange-red, or have lettering of a contrasting color.

Red bags or containers may be used as a substitute for labels. Labels must be placed as close to the container as possible on all packages of regulated waste, refrigerators/freezers containing blood or other potentially infectious material, and other containers used for shipping or storing blood or body fluids.

Blood that has been tested and found free of HIV or HBV and released for clinical use and decontaminated regulated waste do not require labels.

Record Keeping

Records must be maintained on all employees with occupational exposure for the period of their employment plus thirty years.

Each record, which must be available to the employee, should include:

1. Name and social security number
2. Hepatitis B vaccination status
3. Results of all exams, testing and follow-up procedures
4. Copy of healthcare professional's opinion
5. Copy of information provided to healthcare professional

Note: these records are confidential and cannot be released without the employee's written consent or if required by law.

In addition, training session records must be kept for three years. Training records must include a summary of program contents, dates training occurred, trainer's name and qualifications, names of job titles of all participants.

Rendering first aid is a wonderful life-giving thing to do. But if you don't protect yourself in the process, you risk exposing yourself to harmful and sometimes deadly bloodborne pathogens. To protect yourself, follow the blood borne pathogens program your employer has set up.

Work at. Working Safely

Remember the key elements of a blood borne pathogens program. If you're a first aid provider, maintenance or janitorial person responsible for cleaning up potentially infectious materials, or any other potentially exposed employee then you need to know about the following:

1. The written exposure control plan
2. The training provided to you
3. Engineering controls and work practices to minimize chance of exposure
4. Personal protective equipment to provide barriers to exposure
5. Housekeeping techniques to protect you
6. The hepatitis b vaccine you are entitled to
7. The use of labeling and red bags to indicate contaminated waste S.
8. Steps to be taken in the event of an exposure incident.

K. BLOODBORNE PATHOGEN EXPOSURE CONTROL PROGRAM

Purpose

This document serves as the written procedures Blood borne Pathogens Exposure Control Plan for Prime Marine Services, Inc. These guidelines provide policy and safe practices to prevent the spread of disease resulting from handling blood or other potentially infectious materials during the course of work.

This emergency control plan has been developed in accordance with the OSHA Blood borne Pathogens Standard, 29 CFR 1910.1030. The purpose of this emergency control plan includes:

- Eliminating or minimizing occupational exposure of employees to blood or certain other body fluids.
- Complying with OSHA's Blood borne Pathogens Standard, 29 CFR 1910.1030.

Administrative Duties

The Safety Manager is responsible for developing and maintaining the program. Employees may review a copy of the plan that is kept at the corporate office. To review the plan or request a copy of the plan contact our corporate office in Broussard, Louisiana. In addition,

The Safety Manager is responsible for maintaining any records related to the Exposure Control Plan. This plan is current as of May 18, 2007.

Exposure Determination

We have determined which employees may incur occupational exposure to body fluids. 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).

Job Classes: Global Risk of Exposure

This exposure determination *is* required to list all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency. At this facility the following job classifications are in this category:

- Shop employees, office employees and field service hands (We feel that all employees have the same risk no matter what job they perform) While every employee needs to know about the threats posed by diseases found in blood and other bodily fluids such as Aids and Hepatitis B, they also need to know where is the biggest threat to their safety. The biggest risk at Prime Marine Services, Inc. is rendering first aid is a life giving thing to do and trying to help is a natural human response. However, even when providing knowledgeable first aid, if you don't protect yourself, you risk exposing yourself to these harmful and sometimes deadly diseases from blood or other bodily fluids from an injury.

Job Classes: Function-Specific Risk of Exposure

In addition, we have identified job classifications in which some employees may have occupational exposure. Not all employees in these categories are expected to have exposure to body fluids. Therefore, tasks or procedures that would cause occupational exposure are also listed to further specify which employees have occupational exposure. The job classifications and associated tasks for these categories are as follows:

- Employees that are trained in First Aid and CPR face a much higher risk because they will be administering first aid to employees.

Compliance Strategies

This plan includes a schedule and method of implementation for the various requirements of the standard.

Universal precautions techniques developed by the Centers for Disease Control and Prevention (CDC) will be observed at this facility to prevent contact with blood or body fluids. All blood or body fluids will be considered infectious regardless of the perceived status of the source individual.

Engineering and \York Practice Controls

Engineering and work practice controls will be used to eliminate or minimize exposure to employees at this facility. Where occupational exposure remains after institution of these controls, employees are required to wear personal protective equipment. At this facility the following engineering controls are used:

- Placing sharp items (e.g., needles, scalpels, etc.) in puncture-resistant, leak proof, labeled containers.
- Performing procedures so that splashing, spraying, splattering, and producing drops of blood or body fluids are minimized.
- Removing soiled PPE as soon as possible.
- Cleaning and disinfecting all equipment and work surfaces potentially contaminated with blood or body fluids. Note: We use 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.
- Prohibition of eating, drinking, smoking, applying cosmetics, handling contact lenses, and so on in work areas where exposure to infectious materials may occur.
- Use of leak-proof, labeled containers for contaminated disposable waste or laundry.

The above controls are examined and maintained on a regular schedule. The blood borne pathogen policies and engineering practices are reviewed annually and reviewed and updated if changes in facility occur.

Hand washing Facilities

Hand washing facilities are available to employees who have exposure to blood or body fluids. Sinks for washing hands after occupational exposure are near locations where exposure to blood borne pathogens could occur.

At this facility hand washing facilities are located:

- All of our locations have a hand washing station both in the office areas and in the shop area. The hand washing location in the shop is in the main shop building in all locations.

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

- These supplies are located in each one of our hand washing stations.

Supervisors make sure that employees wash their hands and any other contaminated skin after immediately removing personal protective gloves, or as soon as feasible with soap and water.

Supervisors also ensure that if employees' skin or mucous membranes become contaminated with blood or body fluids, then those areas are washed or flushed with water as soon as feasible following contact.

Sharps

Employees may not bend, recap, remove, shear, or purposely break contaminated needles and other sharps. If a procedure requires that the contaminated needle be recapped or removed and no alternative is feasible, then that employee must recap or remove the needle by using a mechanical device or a one-hand technique. At this facility recapping or removal is only permitted in the following situations:

- In the presence of a medic or Physician to assist in an emergency only.

Handling Contaminated Needles and Other Sharps

The procedure for handling contaminated sharps is:

- Contaminated sharps are discarded immediately or as soon as possible in containers that are closable, puncture resistant, leak proof on sides and bottom, and labeled or color-coded.
- During use, containers for contaminated sharps shall be easily accessible to personnel and located as close as possible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., first aid stations).
- The containers are kept upright throughout use and replaced routinely and not allowed to be overfilled.
- When moving containers of contaminated sharps from the area of use, the containers are closed immediately before removal or replacement to prevent spills or protrusion of contents during handling, storage, transport, or shipping.
- The containers are placed in a secondary container if leakage of the primary container is possible. The second container shall be closeable, constructed to contain all contents and prevent leakage during handling, storage and transport, or shipping. The second container shall be labeled or color-coded to identify its contents.
- Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner, which would expose employees to the risk of injury.

Containers for REUSABLE Sharps

Employees must place reusable contaminated sharps immediately or as soon as possible after use, into an appropriate sharps container. At this facility the sharps containers are puncture resistant, labeled with a biohazard label and are leak proof. Reusable sharps containers are located:

- In the main shop building of all district offices near the first aid station.

Specimens

If outside contamination of the primary container occurs, the primary container shall be placed within a secondary container, which prevents leakage during the handling, processing, storage, transport, or shipping of the specimen.

Since we use universal precautions and specimen containers that are easily recognizable as such, we opt to take an OSHA exemption not to label or color code these containers. This exemption applies only while the specimens remain in the facility.

Contaminated Equipment

Prime Marine Services, Inc. requires that equipment which has become contaminated with blood or body fluids must be decontaminated before servicing or shipping as necessary unless the decontamination of the equipment is not feasible. Our procedures for equipment decontamination are as follows:

- The procedure to decontaminate equipment will either be either a solution of 4 parts of water to 1 part of water or a commercial decontamination solution.

Personal Protective Equipment

All personal protective equipment (PPE) used at this facility is provided without cost to employees. PPE is chosen based on the anticipated exposure to blood or body fluids. The protective equipment is considered appropriate only if it does not permit blood or body fluids to pass through or reach the employees' clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of Lime, which the protective equipment will be used.

Prime Marine Services, Inc. makes sure that appropriate PPE in the appropriate sizes is readily accessible at the work site or is issued without cost to employees by:

- Having the employee purchase the required PPE and reimbursing him/her for that product.

They must remove all PPE before leaving the work area. When PPE is removed, employees place it in a designated container for disposal, storage, washing, or decontamination.

Gloves

Employees must wear gloves when they anticipate hand contact with blood, body fluids, non-intact skin, and mucous membranes, when performing vascular access procedures, and when handling or touching contaminated items or surfaces.

Disposable gloves used at this facility are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.

Utility gloves may be decontaminated for re-use provided that the integrity of the glove is not compromised.

Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibits other signs of deterioration or when their ability to function as a barrier is compromised.

Hypoallergenic gloves, glove liners, powder less gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided.

Eye and Face Shields

Employees must wear masks in combination with eye protective devices, such as goggles or glasses with solid side shield, or chin length face shields, whenever splashes splatter, or droplets of blood or body fluids may be generated and reasonably anticipated to contaminate eye, nose, or mouth.

Housekeeping

This facility is cleaned and decontaminated according to the following schedule:

- All shop areas are cleaned daily and decontaminated weekly. Additional cleaning and decontamination will be required following any injury when bodily fluids are lost.

Additional housekeeping requirements to prevent the spread of bloodborne pathogens include:

- Any broken glassware which may be contaminated will not be picked up directly with the hands.
- Reusable sharps that are contaminated with blood or body fluids are not stored or processed in a manner that requires employees to reach by hand into the containers where these sharps have been placed.

Handling Regulated Wastes

When handling regulated wastes, other than contaminated needles and sharps, we make sure it is:

- 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 containers must be closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

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

Handling Contaminated Laundry

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

Note: When Body Substance Isolation or Universal Precautions is used in the handling of all laundry (i.e. all laundry is assumed to be contaminated) no labeling or color-coding is necessary if all employees recognize the hazards associated with the handling of this material.

Our facility ships contaminated laundry off-site to a second facility.

This facility follows Universal Precautions in handling all laundry. Therefore, our facility does not color code or label laundry, which is contaminated with blood or other potentially infectious materials.

Information and Training

Prime Marine Services, Inc. ensures that bloodborne pathogens trainers are knowledgeable in the required subject matter. We make sure that employees covered by the bloodborne pathogens standard are trained at the time of initial assignment to tasks where occupational exposure may occur, and every year thereafter by the following methods:

Training is tailored to the education and language level of the employee, and offered during the normal work shift. The training will be interactive and cover the following:

- The standard and its contents.
 - The epidemiology and symptoms of blood borne diseases.
 - The modes of transmission of blood borne pathogens.
 - Prime Marine Services, Inc. Blood borne Pathogen Exposure Control Plan, and a method for obtaining a copy.
 - The recognition of tasks that may involve exposure.
 - The use and limitations of methods to reduce exposure, for example engineering controls, work practices and personal protective equipment (PPE).
 - The types, use, location, removal, handling, decontamination, and disposal of PPE's.
 - The basis of selection of PPE's.
 - The Hepatitis B vaccination, including efficacy, safety, method of administration, benefits, and that it will be offered free of charge.
 - The appropriate actions to take and persons to contact in an emergency involving blood or body fluids.
 - The procedures to follow if an exposure incident occurs, including the method of reporting and medical follow-up.
 - The evaluation and follow-up required after an employee exposure incident.
- The signs, labels, and color-coding systems.

Additional training is provided to employees when there are any changes of tasks or procedures affecting the employee's occupational exposure. Employees who have received training on bloodborne pathogens in the 12 months preceding the effective date of this plan will only receive training in provisions of the plan that were not covered.

Recordkeeping

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 1910.20. 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:

- The name and social security number of the employee.
- 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.

Availability

All employee records shall be made available to the employee in accordance with 29 CFR 1910.20. All employee records shall be made available to the Assistant Secretary of Labor for the Occupational Safety and Health Administration and the Director of the National Institute for Occupational Safety and Health upon request.

Transfer of Records

If this facility is closed or there is no successor employer to receive and retain the records for the prescribed period, the Director of the NIOSH shall be contacted for final disposition.

Evaluation and Review

This program and its effectiveness is reviewed every year and updated as needed. All provisions required by this standard been implemented.

Hepatitis B Vaccination Program

Prime Marine Services, Inc. offers the Hepatitis B vaccine and vaccination series to all employees who have occupational exposure to blood borne 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, including prophylaxis are:

- 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.

An accredited laboratory at no cost to the employee conducts all laboratory tests. Hepatitis B vaccination is made available:

- After employees have been trained in occupational exposure (see Information and Training).
- Within 10 working days of initial assignment.
- To all employees who have occupational exposure unless a given employee has previously received the complete Hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons.

Participation in a pre-screening program is not a prerequisite for receiving Hepatitis B vaccination. If the employee initially declines Hepatitis B vaccination but at a later date while still covered under the standard decides to accept the vaccination, the vaccination will be made available. All employees who decline the Hepatitis B vaccination offered must sign the OSHA-required waiver indicating their refusal.

If the U.S. Public Health Service recommends a routine booster dose of Hepatitis B vaccine at a future date, such booster doses will be made available.

Post-Exposure Evaluation and Follow-Up

All exposure incidents are reported, investigated, and documented. When the employee is exposed to blood or body fluids, the incident is reported to Safety Director. 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. If consent is not obtained, the proper authority with jurisdiction establishes that legally required consent cannot be obtained. When law does not require the source individual's consent, 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 are made available to the exposed employee, and the employee is 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 will comply with the following:

- The exposed employee's blood is collected as soon as possible and tested after consent is obtained;
- The employee will be offered the option of having their blood collected for testing of the employee's HIV/HBV serological status. The blood sample will 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 will be offered post-exposure evaluation and follow-up according to the OSHA standard. The company Doctor used in each location will perform all post exposure follow-up.

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

- A copy of 29 CFR 1910.1030.
- A had 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.

Prime Marine Services, Inc. obtains and provides the employee with 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 must be limited to whether HBV vaccination is indicated for an employee, and if the employee has received such vaccination.

The healthcare professional's written opinion for post-exposure follow-up is 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 body fluids which require further evaluation or treatment.

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

Labels and Signs

Biohazard labels are affixed to containers of regulated waste, refrigerators and freezers containing blood or body fluids, and other containers used to store, transport or ship blood or body fluids. The universal biohazard symbol is used. The label is fluorescent orange or orange-red. Red bags or containers may be substituted for labels.

Blood products that have been released for transfusion or other clinical use are exempted from these labeling requirements.

SECTION III: WORK AREA SAFETY

A. PERSONAL PROTECTIVE EQUIPMENT

This written program documents steps Prime Marine Services, Inc. has taken to minimize injury resulting from various occupational hazards present at our construction sites by to protecting workers through the use of PPE when the hazards cannot be eliminated.

The safety Director, Randall Jones is the program coordinator, acting as the representative of the plant manager, who has overall responsibility for the program. Randall Jones will designate appropriate job supervisors to assist in training employees and monitoring their use of PPE. This written plan is kept in the corporate office with copies in each district office. The plan will be reviewed and updated as necessary. Copies of this program may be obtained from Randall Jones in the corporate office. Randall Jones is located at our Corporate Office located at 312 S. Bernard Rd. Broussard, LA 70518. We at Prime Marine Services, Inc. believe it is our obligation to provide a hazard free environment to our employees. Any employee encountering hazardous conditions must be protected against the potential hazards. The purpose of protective clothing and equipment (PPE) is to shield or isolate individuals from chemical, physical, biological, or other hazards that may be present in the workplace. Prime Marine Services, Inc.

provides safety equipment that is required for safety protection on the job such as safety glasses, safety harness, breathing equipment, and other type equipment not worn during the normal course of the day. Equipment such as boot are required safety equipment on the job but are not furnished by Prime Marine Services, Inc. because it can be worn in the normal course of the day.

Establishing an overall written PPE program detailing how employees use PPE makes it easier to ensure that they use PPE properly in the workplace and document our PPE efforts in the event of an OSHA inspection. Prime Marine Services, Inc. PPE program covers:

- Purpose
- Hazard assessment
- PPE selection
- Employee training
- Cleaning and maintenance of PPE
- PPE specific information

If after reading this program, you find that improvements can be made, please contact the safety Director. We encourage all suggestions because we are committed to the success of our Personal Protective Equipment Program. We strive for clear understanding, safe behavior, and involvement in the program from every level of the company.

Purpose of Program

The basic element of any PPE program is an in depth evaluation of the equipment needed to protect against the hazards at the workplace; this is the initial hazard assessment for which written documentation is required. Two basic objectives of any PPE program should be to protect the wearer from incorrect use and/or malfunction of PPE. The purpose of this Personal Protective Equipment (PPE) Program is to document the hazard assessment, protective measures in place, and PPE in use at this company. PPE devices are not to be relied on as the only means to provide protection against hazards, but are used in conjunction with guards, engineering controls, and sound manufacturing practices. If possible, hazards will be abated first through engineering controls, with PPE to provide protection against hazards, which cannot reasonably be abated otherwise.

Hazard Assessment

In order to assess the need for PPE the following steps are taken:

1. The Safety Manager, with other appropriate employees on the safety committee, identifies job classifications where exposures occur or could occur. The Safety Director or designee examines the following records to identify and rank jobs according to exposure hazards:

- Injury/illness records
- First aid logs

Once hazards are identified they will be certified by the safety supervisor by signing his name, dating the document, identifying the document, and location of assessment be identified.

2. The Safety Director conducts a walk through survey of workplace areas where hazards exist or may exist to identify sources of hazards to employees. They consider these basic hazard categories:

- Impact
- Heat
- Penetration
- Harmful dust
- Compression (roll over)
- Light (optical) radiation
- Chemical

During the walk through survey the Safety Director observes and records the following hazards along with PPE currently in use for each application:

- Sources of motion; i.e., machinery or processes where any movement of tools, machine elements or particles could exist, or movement of personnel that could result in collision with stationary objects: cranes, forklifts, and trucks.
- Sources of high temperatures that could result in burns, eye injury or ignition of protective equipment, etc., are: the ovens for stress relieving, welding, electrical sparks.
- Types of chemical exposures are: fuels, paints, and diesel
- Sources of harmful dust are from: grinding, dusting, sweeping.
- Sources of falling objects or potential for dropping objects: from cranes and forklift.
- Sources of sharp objects, which might pierce the feet or cut the hands: from cutting metal, moving customer equipment, and from cables and slings.
- Sources of rolling or pinching objects, which could crush the feet: pipe, cables and slings, must be reviewed and documented.
- We must identify certain electrical hazards.

1. Following the walk through survey, the Safety Director organizes the data and information for use in the assessment of hazards to analyze the hazards and enable proper selection of protective equipment.

2. An estimate of the potential for injuries is now made. Each of the basic hazards is reviewed and a determination made as to the frequency, type, level of risk, and seriousness of potential injury from each of the hazards found. The existences of any situations where multiple exposures occur or could occur are considered.

3. The Safety Director documents the hazard assessment via a written certification that identifies the workplace evaluated, the person certifying that the evaluation has been performed, the date(s) of the hazard assessment, and that the document is a certification of hazard assessment.

Selection Guidelines

Once any hazards have been identified and evaluated through hazard assessment, the general procedure for selecting protective equipment is to:

1. Become familiar with the potential hazards and the type of protective equipment (PPE) that are available, and what they can do.
2. Compare types of equipment to the hazards associated with the environment.
3. Select the PPE, which ensures a level of protection greater than the minimum required to protect employees from the hazards.
4. Fit the user with proper, comfortable, well- fitting protection and instruct employees on care and use of the PPE. It is very important that the users are aware of all warning labels for and limitations of their PPE

It is the responsibility of the Safety Director to reassess the workplace hazard situation as necessary, to identify and evaluate new equipment and processes, to review accident records, and reevaluate the suitability of previously selected PPE. This reassessment will take place as needed, but at least once every year.

Elements, which should be considered in the reassessment, include:

- Adequacy of PPE program
- Accidents and illness experience
- Levels of exposure (this implies appropriate exposure monitoring)
- Adequacy of equipment selection
- Number of person hours that workers wear various protective ensembles
- Adequacy of training/fitting of PPE
- Program costs
- The adequacy of program records
- Recommendation for program improvement and modification
- Coordination with overall safety and health program

Employee Training

The Safety Director provides training for each employee who is required to use personal protective equipment. Training includes:

- When PPE is necessary
- What PPE is necessary
- How to wear assigned PPE
- Limitations of PPE
- The proper care, maintenance, useful life, and disposal of assigned PPE

Employees must demonstrate an understanding of the training and the ability to use the PPE properly before they are allowed to perform work requiring the use of the equipment,

Employees are prohibited from performing work without donning appropriate PPE to protect them from the hazards they will encounter in the course of that work.

Employees that are trained will have proper documentation to indicate the type of training, date, and the person who administered the training.

If the Safety Director has reason to believe an employee does not have the understanding or skill required, the employer must be retrain. Since an employee's supervisor is in the best position to observe any problems with PPE use by individual employees, the Safety Director will seek this person's input when making this determination. Circumstances where retraining may be required include changes in the workplace or changes in the types of PPE to be used which would render previous training obsolete. Also, inadequacies in an affected employee's knowledge or use of the assigned PPE will result in retraining. Changes in the workplace that make earlier training obsolete or changes in PPE that make the training obsolete will require the employees to be retrained.

The Safety Director certifies in writing that the employee has received and understands the PPE training.

Because failure to comply with company policy concerning PPE can result in OSHA citations and fines as well as employee injury, an employee who does not comply with this program will be disciplined for noncompliance according to the following schedule:

- Verbal warning for the first offense accompanied by retraining
- Written reprimand for the second offense, which goes in the employee's permanent record
- Suspension without pay for a third offense and documentation in the permanent record
- **Termination is also an option with every offense.**

Inspection, Cleaning and Maintenance

It is important that all PPE be inspected daily before each use, kept clean and properly maintained by the employee to whom it is assigned. Cleaning is particularly important for eye and face protection where dirty or fogged lenses could impair vision. PPE is to be inspected, cleaned, and maintained by employees at regular intervals as part of their normal job duties so that the PPE provides the requisite protection. Supervisors are responsible for ensuring compliance with cleaning responsibilities by employees. If PPE is for general use, the Safety Director has responsibility for cleaning and maintenance. If a piece of PPE is in need of repair or replacement it is the responsibility of the employee to bring it to the immediate attention of his or her supervisor or the Safety Director. It is against work rules to use PPE that is in disrepair or not able to perform its intended function. Contaminated PPE, which cannot be decontaminated, is disposed of in a manner that protects employees from exposure to hazards. All PPE equipment that is damaged must be repaired or discarded. Any PPE equipment that is owned by the employee must meet or exceed the standards that we follow. Any employee failing to comply with this policy cannot work for Prime Marine Services, Inc.

PPE Specific Information

Eye and face protection -- Goggles and face shields

It is the policy of the company that as a condition of employment, all regular full time, part time, and temporary employees working in designated work areas and/or job assignments are required to wear ANSI approved goggles/face shields to help prevent eye and face injuries, including those resulting from flying particles, molten metal, liquid chemicals, acids or caustic liquids,

chemical gases or vapors, or light radiation, for example. Employees in the following designated work areas are required to wear goggles/face shields:

Work Area

Welding and grinding area

Work Area Hazard

Sparks and grinding particles

Type of goggles/face shield

Full-face shield and goggles used for fine dust particles

Employees from temporary work agencies and contractors are required to wear goggles/face shields if assigned to work in the designated work areas.

All supervisors and managers are responsible for ensuring employees under their charge are in compliance with this policy.

All employees who work in designated work areas and/or job assignments are responsible for wearing company provided goggles/face shields to comply with this policy. Failure to comply will result in disciplinary action up to and including termination.

All employees required to wear goggles/face shields must routinely inspect and properly care for their goggles/face shields.

Safety Glasses

It is the policy of the company that all employees, full time and part time, will wear safety glasses in work areas. These glasses will be worn in the field and in the shop at all times to protect from flying debris. Jobs that are very dangerous are sanding, scraping, grinding, chipping, buffing, and blasting. Safety glasses must be worn for the above task and other task that have the possibility of flying debris.

Safety glasses worn must be approved by ANSI and stamped z87 on the frame of the glasses.

Work area

All field and shop jobs that have any possibility of having flying debris.

Hazard

Injury to the eyes from flying debris especially from grinding, sanding, chipping, hammering

Type

Z87 ANSI approved

Foot Protection-Safety Shoes

It is the policy of the company that as a condition of employment, all regular full time, part time, and temporary employees working in designated work areas and/or job assignments are required to wear safety shoes to help prevent foot injuries, ankle injuries, slips, and falls.

Employees in the following designated work areas are required to wear OSHA approved safety shoes:

Work area

All field jobs and all work areas in the shop

Hazard

Falling objects, slipping, pinch points, wet floors, cold, heat,

Type of safety shoe

Either a slip on or tie safety shoe that can withstand a drop of 75 pounds from 75 inches. **The shoe will be leather with a defined heel, and a non-skid sole.**

Employees from temporary work agencies and contractors are required to wear safety shoes if assigned to work in the designated work areas. It is the responsibility of the agency and/or contractor to ensure the employee reports to his/her temporary assignment at this company wearing approved safety shoes.

Those employees who work in non-designated areas of the company and vendors and visitors will be allowed to walk through the designated work areas without safety shoes as long as they remain in outlined aisles or walkways.

Members of the Emergency Response Team are required to wear safety footwear when responding to fire emergency situations. All supervisors and managers are responsible for ensuring their associates are in compliance with this policy.

All employees who work in designated work areas and/or job assignments are responsible for purchasing and wearing safety shoes to comply with this policy. Failure to comply will result in disciplinary action up to and including termination. The employee does purchase of shoes. Personnel are responsible for informing new employees who are assigned to the designated work areas of the safety shoe policy and the procedures for obtaining them. The new employee is responsible for reporting to his/her first day of work wearing approved safety shoes.

Hand Protection -- Gloves

It is the policy of the company that as a condition of employment, all regular full time, part time, and temporary employees working in designated work areas and/or job assignments are required to wear gloves to help prevent hand injuries, including cuts, burns, chemical exposure, for example.

Employees in the following designated work areas are required to wear protective gloves: Work area

AU field locations and shop areas

Hazard

From cuts and scrapes, to prevent slipping, and from objects that are either hot or cold

Type of glove

Standard cotton glove for every day work and dirt

Insulated gloves must be worn when working with heat.

Employees from temporary work agencies and contractors are required to wear protective gloves if assigned to work in the designated work areas.

All supervisors and managers are responsible for ensuring employees under their charge are in compliance with this policy.

All employees who work in designated work areas and/or job assignments are responsible for wearing company provided gloves to comply with this policy. Failure to comply will result in disciplinary action up to and including discharge.

All employees required to wear protective gloves must routinely inspect and properly care for their assigned gloves (if the gloves are not disposable).

Head protection -- Hard hats

It is the policy of the company that as a condition of employment, all regular full time, part time, and temporary employees working in designated work areas and/or job assignments are required to wear ANSI approved hard hats to help prevent head injuries, including those resulting from falling objects, bumping the head against a fixed object, or electrical shock.

Employees in the following designated work areas are required to wear hard hats:

Work area

While on customer locations and operating the crane

Hazard

Hazard is from falling objects

Type of hardhat

Type is class B, Turtle Shell type hardhat.

Employees from temporary work agencies and contractors are required to wear hard hats if assigned to work in the designated work areas.

All supervisors and managers are responsible for ensuring employees under their charge are in compliance with this policy.

All employees who work in designated work areas and/or job assignments are responsible for wearing company provided hard hats to comply with this policy. Failure to comply will result in disciplinary action up to and including discharge.

All employees required to wear hard hats must routinely inspect and properly care for their hard hats.

B. RESPIRATORY PROTECTION

General

In the Respiratory Protection program, hazard assessment and selection of proper respiratory protective equipment (RPE) is conducted in the same manner as for other types of personal protective equipment (PPE). In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures (for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials). When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used. References: OSHA Standards *Respiratory Protection* (29 CFR 1910.134)

All equipment required by employees to prevent contact with harmful vapors and oxygen deficient atmospheres shall be furnished by Prime Marine Services, Inc. The equipment provided will meet or exceed all OSHA and ANSI standards. Equipment will be applicable and suitable for use in work, as well as emergency situations.

Responsibilities

All Employees shall follow the requirements of the Respiratory Protection Program.

Management

- Implement the requirements of this program
- Provide a selection of respirators as required
- Enforce all provisions of this program
 - Appoint a specific designated individual to conduct the respiratory protection program

Program Administrator

The program administrator for Prime Marine Services, Inc. Randall Jones and his office is located in Lafayette, Louisiana. Randall Jones has been properly trained and is Prime Marine Services, Inc. competent person in respiratory training.

- Review sanitation/storage, procedures.
- Ensure respirators are properly, stored, inspected and maintained
- Monitor compliance for this program
- Provide training for affected Employees
- Review compliance and ensure monthly inspection of all respirators
- Provide respirator fit testing

Designated Occupational Health care Provider

- Conduct medical aspects of program

Program Administrator

Each Facility will designate a program administrator who is qualified by appropriate training or experience that is commensurate with the complexity of the program to administer or oversee the respiratory protection program and conduct the required evaluations of program effectiveness.

Voluntary Use of Respirators is Prohibited

OSHA requires that voluntary use of respirators, when not required by the company, must be controlled as strictly as under required circumstances. To prevent violations of the Respiratory Protection Standard Employees are not allowed voluntary use of their own or company supplied respirators of any type. Exception: Employees whose only use of respirators involves the voluntary use of filtering (non-sealing) face pieces (dust masks).

Program Evaluation

Evaluations of the workplace are necessary to ensure that the written respiratory protection program is being properly implemented; this includes consulting with employees to ensure that they are using the respirators properly. Evaluations shall be conducted as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective. Program evaluation will include discussions with employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems. Any problems that are identified during this assessment shall be corrected. Factors to be assessed include, but are not limited to:

- Respirator fit (including the ability to use the respirator without interfering with effective workplace performance);
- Appropriate respirator selection for the hazards to which the employee is exposed;
- Proper respirator use under the workplace conditions the employee encounters; and
- Proper respirator maintenance.

Record Keeping

The Company will retain written information regarding medical evaluations, fit testing, and the respirator program. This information will facilitate employee involvement in the respirator program, assist the Company in auditing the adequacy of the program, and provide a record for compliance determinations by OSHA.

Training and Information

Effective training for employees who are required to use respirators is essential. The training must be comprehensive, understandable, and recur annually and more often if necessary. Training will be provided prior to requiring the employee to use a respirator in the workplace. The training shall ensure that each employee can demonstrate knowledge of at least the following:

- Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator
- Limitations and capabilities of the respirator
- How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions
- How to inspect, put on and remove, use, and check the seals of the respirator
- What the procedures are for maintenance and storage of the respirator
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators
- The general requirements of this program

All training and equipment will be furnished at no cost to employee and that includes fit test and medical examination.

Retraining shall be conducted annually and when:

Retraining will cover all training requirements of new employee plus additional training to make sure employee knows and understands the policies and procedures associated with respiratory training.

- Changes in the workplace or the type of respirator render previous training obsolete
- Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill
- Other situation arises in which retraining appears necessary to ensure safe respirator use

Confine Space training will be conducted by Randall Jones or a qualified safety instructor. Training is divided into the following sections:

Classroom Instruction

1. Overview of the Company Respiratory Protection Program & OSHA Standard
2. Respiratory Protection Safety Procedures
3. Respirator Selection
4. Respirator Operation and Use
5. Why the respirator is necessary
6. How improper fit, usage, or maintenance can compromise the protective effect.
7. Limitations and capabilities of the respirator.
8. How to use the respirator effectively in emergency situations, including respirator malfunctions
9. How to inspect, put on and remove, use, and check the seals of the respirator.
10. What the procedures are for maintenance and storage of the respirator.
11. How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
12. Change out schedule and procedure for air purifying respirators.

Fit Testing

Hands-on respirator Training

1. Respirator Inspection
2. Respirator cleaning and sanitizing
3. Record Keeping
4. Respirator Storage
5. Respirator Fit Check
6. Emergencies

Basic Respiratory Protection Safety Procedures

1. Only authorized and trained Employees may use Respirators. Those Employees may use only the Respirator that they have been trained on and properly fitted to use.
2. Only Physically Qualified Employees may be trained and authorized to use Respirators. A pre-authorization and annual certification by a qualified physician will be required and maintained. Any changes in an Employees health or physical characteristics will be reported to the Occupational Health Department and will be evaluated by a qualified physician.
3. Only the proper prescribed respirator or self-contained breathing apparatus (SCBA) may be used for the job or work environment. Air cleansing respirators may be worn in work environments when oxygen levels are between 19.5 percent to 23.5 percent and when the appropriate air-cleansing canister, as determined by the Manufacturer and approved by the National Institute for Occupational Health (NIOSH) or the Mine Safety & Health Administration (MSHA), for the known hazardous substance is used. SCBA's will be worn in oxygen deficient and oxygen rich environments (below 19.5 percent or above 23.5 percent oxygen).
4. Employees working in environments where a sudden release of a hazardous substance is likely will wear an appropriate respirator for that hazardous substance (example: Employees working in an ammonia compressor room will have an ammonia APR respirator on their person.).
5. Only SCBA's will be used in oxygen deficient environments, environments with an unknown hazardous substance or unknown quantity of a known hazardous substance or any environment that is determined "Immediately Dangerous to Life or Health" (IDLH).
6. Employees with respirators loaned on "permanent check out" will be responsible for the sanitation, proper storage and security. Respirators damaged by normal wear will be repaired or replaced by the Company when returned.

The last Employee using a respirator and/or SCBA that are available for general use will be responsible for proper storage and sanitation. Monthly and after each use, all respirators will be inspected with documentation to assure its availability for use.

8. All respirators will be located in a clean, convenient and sanitary location.
9. In the event that Employees must enter a confined space, work in environments with hazardous substances that would be dangerous to life or health should an RPE fail (a SCBA is required in this environment), and/or conduct a hazardous material (HAZMAT) entry, a "buddy system" detail will be used with a Safety Watchman with constant voice, visual or signal line communication. Employees will follow the established Emergency Response Program and/or Confined Space Entry Program when applicable.
10. Management will establish and maintain surveillance of jobs and work place conditions and degree of Employee exposure or stress to maintain the proper procedures and to provide the necessary RPE.
11. Management will establish and maintain safe operation procedures for the safe use of RPE with strict enforcement and disciplinary action for failure to follow all general and specific safety rules. Standard Operation Procedures for General RPE use will be maintained as an attachment to the Respiratory Protection Program and Standard Operation Procedures for RPE use under emergency response situations will be maintained as an attachment to the Emergency Response Program.

Respirator User Policies

Adherence to the following guidelines will help ensure the proper and safe use of respiratory equipment:

- Wear only the respirator you have been instructed to use. For example, do not wear a self-containing breathing apparatus if you have been assigned and fitted for a half-mask respirator.

Wear the correct respirator for the particular hazard. For example, some situations, such as chemical spills or other emergencies, may require a higher level of protection than your respirator can handle. Also, the proper cartridge must be matched to the hazard (a cartridge designed for dusts and mists will not provide protection for chemical vapors)

- Check the respirator for a good fit before each use. Positive and negative fit checks should be conducted.
- Check the respirator for deterioration before and after use. Do not use a defective respirator.
- Recognize indications that cartridges and canisters are at their end of service. If in doubt, change the cartridges or canisters before using the respirator.

- Practice moving and working while wearing the respirator so that you can get used to it.
- Clean the respirator after each use, thoroughly dry it and place the cleaned respirator in a sealable plastic bag.
- Store respirators carefully in a protected location away from excessive heat, light, and chemicals.
- The program administrator must require employees leave the area to wash, change cartridges, or if they detect a break through or resistance in the mask.

Selection of Respirators

The Company has evaluated the respiratory hazard(s) in each workplace, identified relevant workplace and user factors and has based respirator selection on these factors. Also included are estimates of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. This selection has included appropriate protective respirators for use in IDLH atmospheres, and has limited the selection and use of air-purifying respirators. All selected respirators are NIOSH-certified.

Filter Classifications - These classifications are marked on the filter or filter

package N-Series: Not Oil Resistant

- Approved for non-oil particulate contaminants
- Examples: dust, fumes, mists not containing oil

R-Series: Oil Resistant

- Approved for all particulate contaminants, including those containing oil
- Examples: dusts, mists, fumes
- Time restriction of 8 hours when oils are present

P-Series: Oil Proof

- Approved for all particulate contaminants including those containing oil
- Examples: dust, fumes, mists
- See Manufacturer's time use restrictions on packaging

Respirators for IDLH atmospheres.

- The following respirators will be used in IDLH atmospheres:
- A full face piece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes, or
- A combination full-face piece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply.

- Respirators provided only for escape from IDLH atmospheres shall be NIOSHcertified for escape from the atmosphere in which they will be used.

Respirators for atmospheres that are not IDLH.

The respirators selected shall be adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements, under routine and reasonably foreseeable emergency situations. The respirator selected shall be appropriate for the chemical state and physical form of the contaminant.

Identification of Filters & Cartridges

All filters and cartridges shall be labeled and color-coded with the NIOSH approval label and that the label is not removed and remains legible. A change out schedule for filters and canisters has been developed to ensure these elements of the respirators remain effective.

Respirator Filter & Canister Replacement

An important part of the Respiratory Protection Program includes identifying the useful life of canisters and filters used on air-purifying respirators. Each filter and canister shall be equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the contaminant; or

If there is no ESLI appropriate for conditions a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life.

Filter & Cartridge Change Schedule

Stock of spare filters and cartridges shall be maintained to allow immediate change when required or desired by the employee

Cartridges shall be changed based on the most limiting factor below:

- Prior to expiration date
- Manufacturer's recommendations for use and environment
- After each use
- When requested by employee
- When contaminate odor is detected
 - When restriction to air flow has occurred as evidenced by increase effort by user to breathe normally
 - Cartridges shall remain in their original sealed packages until needed for immediate use

Filters shall be changed based on the most limiting factor below:

- Prior to expiration date
- Manufactures recommendations for the specific use and environment

- When requested by employee
- When contaminate odor is detected
- When restriction to air flow has occurred as evidenced by increase effort by user to breathe normally
- When discoloring of the filter media is evident
- Filters shall remain in their original sealed package until needed for immediate use.

Respiratory Protection Schedule by Job and Working Condition

The Company maintains a Respiratory Protection Schedule by Job and Working Condition. This schedule is provided to each authorized and trained Employee. The Schedule provides the following information:

1. Job/Working Conditions
2. Work Location
3. Hazards Present
4. Type of Respirator or SCBA Required
5. Type of Filter/Canister Required
6. Location of Respirator or SCBA
7. Filter/Cartridge change out schedule

The schedule will be reviewed and updated at least annually and whenever any changes are made in the work environments, machinery, equipment, or processes or if respirator different respirator models are introduced or existing models are removed.

Permanent respirator schedule assignments are:

Each person who engages in welding will have his or her own company provided dust-mist-fume filter APR. This respirator will be worn during all welding operations.

Physical and Medical Qualifications

Records of medical evaluations must be retained and made available in accordance with 29 CFR 1910.1020.

Medical evaluation required

Using a respirator may place a physiological burden on employees that varies with the type of respirator worn, the job and workplace conditions in which the respirator is used, and the medical status of the employee. The company provides a medical evaluation to determine the employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace.

Medical evaluation procedures

The designated Occupational Health Care Provider will provide the employee a medical questionnaire

Follow-up medical examination

The company shall ensure that a follow-up medical examination is provided for an employee who gives a positive response to any question among questions in Part B of the questionnaire or whose initial medical examination demonstrates the need for a follow-up medical examination. The follow-up medical examination shall include any medical tests, consultations, or diagnostic procedures that the Physician deems necessary to make a final determination.

Administration of the medical questionnaire and examinations

The medical questionnaire and examinations shall be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. The medical questionnaire shall be administered in a manner that ensures that the employee understands its content. The company shall provide the employee with an opportunity to discuss the questionnaire and examination results with the Physician.

Supplemental information for the Physician

The following information must be provided to the Physician before the Physician makes a recommendation concerning an employee's ability to use a respirator

- The type and weight of the respirator to be used by the employee The duration and frequency of respirator use (including use for rescue and escape)
- The expected physical work effort
- Additional protective clothing and equipment to be worn
- Temperature and humidity extremes that may be encountered
- Any supplemental information provided previously to the Physician regarding an employee need not be provided for a subsequent medical evaluation if the information and the Physician remain the same

The Company has provided the Physician with a copy of the written respiratory protection program and a copy of the OSHA Standard 1910.134

Medical determination

In determining the employee's ability to use a respirator, the Company shall

- Obtain a written recommendation regarding the employee's ability to use the respirator from the Physician. The recommendation shall provide only the following information
- Any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator
- The need, if any, for follow-up medical evaluations

A statement that the Physician has provided the employee with a copy of the Physician's written recommendation

- If the respirator is a negative pressure respirator and the Physician finds a medical condition that may place the employee's health at increased risk if the respirator is used, the Company shall provide a APR if the Physician's medical evaluation

finds that the employee can use such a respirator; if a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then the Company is no longer required to provide an APR

Additional Medical Evaluations

At a minimum, the Company shall provide additional medical evaluations that comply with the requirements of this section if:

- An employee reports medical signs or symptoms that are related to ability to use a respirator
- A Physician, supervisor, or the respirator program administrator informs the Company that an employee needs to be reevaluated
- Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee reevaluation
- A change occurs in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.

Medical evaluations must be kept confidential and kept with medical records. Medicals must be given during normal working hours, must be understandable, and consistent. The employees must be able to discuss medical evaluations with physicians following the exam.

Respirator Fit Testing

Before an employee is required to use any respirator with a negative or positive pressure tight-fitting face piece, the employee must be fit tested with the same make, model, style, and size of respirator that will be used. The Company shall ensure that an employee using a tight-fitting face piece respirator is fit tested prior to initial use of the respirator, whenever a different respirator face piece (size, style, model or make) is used, and at least annually thereafter.

SAR's are required to be fit tested and meet all requirements of employees on the job before they are allowed to wear mask and go into work areas.

The Company has established a record of the qualitative and quantitative fit tests administered to employees including:

- The name or identification of the employee tested
- Type of fit test performed
- Specific make, model, style, and size of respirator tested
- Date of test
- The pass/fail results for Qualitative Fit Test (QLFT) or the fit factor and strip chart recording or other recording of the test results for Quantitative Fit Test (QNFT)

Additional fit tests will be conducted whenever the employee reports, or the Company, Physician, supervisor, or program administrator makes visual observations of, changes in the

employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

If after passing a QLFT or QNFT, the employee notifies the Company, program administrator, supervisor, or Physician that the fit of the respirator is unacceptable; the employee shall be given a reasonable opportunity to select a different respirator face piece and to be retested.

Types of Fit Tests

The fit test shall be administered using an OSHA-accepted QLFT or QNFT protocol. The OSHA-accepted QLFT and QNFT protocols and procedures are contained in Appendix A of OSHA Standard 1910.134.

- QLF I may only be used to fit test negative pressure air-purifying respirators that must achieve a fit factor of 100 or less.
- If the fit factor, as determined through an OSHA-accepted QNFT protocol, is equal to or greater than 100 for tight-fitting half face pieces, or equal to or greater than 500 for tight fitting full face pieces, the QNFT has been passed with that respirator.

Fit testing of tight-fitting atmosphere-supplying respirators and tight-fitting powered air-purifying respirators shall be accomplished by performing quantitative or qualitative fit testing in the negative pressure mode, regardless of the mode of operation (negative or positive pressure) that is used for respiratory protection.

- Qualitative fit testing of these respirators shall be accomplished by temporarily converting the respirator user's actual face piece into a negative pressure respirator with appropriate filters, or by using an identical negative pressure air-purifying respirator face piece with the same sealing surfaces as a surrogate for the atmosphere-supplying or powered air-purifying respirator face piece.
- Quantitative fit testing of these respirators shall be accompanied by modifying the face piece to allow sampling inside the face piece in the breathing zone of the user, midway between the nose and mouth. This requirement shall be accomplished by installing a permanent sampling probe onto a surrogate face piece, or by using a sampling adapter designed to temporarily provide a means of sampling air from inside the face piece.
- Any modifications to the respirator face piece for fit testing shall be completely removed, and the face piece restored to NIOSH approved configuration, before that face piece can be used in the workplace.

Fit test records shall be retained for respirator users until the next fit test is administered. Written materials that are required to be retained shall be made available upon request to affected employees. Employees must take and pass one of the methods used to determine that facemask fit properly before they are able to use in work area.

Respirator Operation and Use

Respirators will only be used following the respiratory protection safety procedure established in this program. The Operations and Use Manuals for each type of respirator will be maintained by the Program Administrator and be available to all qualified users.

Surveillance by the direct supervisor shall be maintained of work area conditions and degree of employee exposure or stress. When there is a change in work area conditions or degree of employee exposure or stress that may affect respirator effectiveness, the Company shall reevaluate the continued effectiveness of the respirator.

For continued protection of respirator users, the following general use rules apply:

- Users shall not remove respirators while in a hazardous environment
- Respirators are to be stored in sealed containers out of harmful atmospheres
- Store respirators away from heat and moisture
- Store respirators such that the sealing area does not become distorted or warped
- Store respirator such that the face piece is protected

Face piece seal protection

The Company does not permit respirators with tight-fitting face pieces to 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; or
- Any condition that interferes with the face-to-face piece seal or valve function.

If an employee wears corrective glasses or goggles or other personal protective equipment, the Company shall ensure that such equipment is worn in a manner that does not interfere with the seal of the face piece to the face of the user. The employee must check the seal every time the mask is put on to ensure that the seal is working.

Continuing Effectiveness of Respirators

The Company shall ensure the following that employees leave the respirator use area:

- To wash their faces and respirator face pieces as necessary to prevent eye or skin irritation associated with respirator use
- If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the face piece
- To replace the respirator or the filter, cartridge, or canister elements.

If the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the face piece, the Company will replace or repair the respirator before allowing the employee to return to the work area.

Procedures for IDLH atmospheres

For all IDLH atmospheres, the Company shall ensure that:

- One employee or, when needed, more than one employee is located outside the IDLH atmosphere
- Visual, voice, or signal line communication is maintained between the employee(s) in the IDLH atmosphere and the employee(s) located outside the IDLH atmosphere
- The employee(s) located outside the IDLH atmosphere are trained and equipped to provide effective emergency rescue

The Company or designee is notified before the employee(s) located outside the IDLH atmosphere enter the IDLH atmosphere to provide emergency rescue

- The Company or designee authorized to do so by the Company, once notified, provides necessary assistance appropriate to the situation

Employee(s) located outside the IDLH atmospheres will be equipped with:

- Pressure demand or other positive pressure SCBA's, or a pressure demand or other positive pressure supplied-air respirator with auxiliary SCBA; and either
- Appropriate retrieval equipment for removing the employee(s) who enter(s) these hazardous atmospheres where retrieval equipment would contribute to the rescue of the employee(s) and would not increase the overall risk resulting from entry; or
- Equivalent means for rescue where retrieval equipment is not required.

Cleaning and Disinfecting

The Company shall provide each respirator user with a respirator that is clean, sanitary, and in good working order. The Company shall ensure that respirators are cleaned and disinfected using the manufacturer's procedures: Cleaning and Disinfecting.

The respirators shall be cleaned and disinfected when:

- Respirators issued for the exclusive use of an employee shall be cleaned and disinfected as often as necessary to be maintained in a sanitary condition

- Respirators issued to more than one employee shall be cleaned and disinfected before being worn by different individuals
- Respirators maintained for emergency use shall be cleaned and disinfected after each use
- Respirators used in fit testing and training shall be cleaned and disinfected after each use.

Cleaning and Storage of respirators assigned to specific employees is the responsibility of that Employee.

Respirator Inspection

All respirators/SCBA's, both available for "General Use" and those on "Permanent Check-out", will be inspected after each use and at least monthly. Should any defects be noted, the respirator/SCBA will be taken to the program Administrator. Damaged Respirators will be either repaired or replaced. The inspection of respirators loaned on "Permanent Check-out" is the responsibility of that trained Employee.

Respirators shall be inspected as follows:

- All respirators used in routine situations shall be inspected before each use and during cleaning
- All respirators maintained for use in emergency situations shall be inspected at least monthly and in accordance with the manufacturer's recommendations, and shall be checked for proper function before and after each use
- Emergency escape-only respirators shall be inspected before being carried into the workplace for use

Respirator inspections include the Following:

- A check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the face piece, head straps, valves, connecting tube, and cartridges, canisters or filters

Check of hoses for pliability and signs of deterioration.

- Self-contained breathing apparatus shall be inspected monthly. Air and oxygen cylinders shall be maintained in a fully charged state and shall be recharged when the pressure falls to 90% of the manufacture's recommended pressure level.
- The Company shall determine that the regulator and warning devices function properly.

For Emergency Use Respirators the additional requirements apply:

- Certify the respirator by documenting the date the inspection was performed, the name (or signature) of the person who made the inspection, the findings, required remedial action, and a serial number or other means of identifying the inspected respirator.
- Provide this information on a tag or label that is attached to the storage compartment for the respirator, is kept with the respirator, or is included in inspection reports stored as paper or electronic files. This information shall be maintained until replaced following a subsequent certification.

Respirator Storage

Respirators are to be stored as follows:

- All respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the face piece and exhalation valve.
- Emergency Respirators shall be:
- Kept accessible to the work area;
- Stored in compartments or in covers that are clearly marked as containing emergency respirators; and
- Stored in accordance with any applicable manufacturer instructions.
- Respirators will be inspected monthly while in storage and prior to usage.

Repair of Respirators

Respirators that fail an inspection or are otherwise found to be defective will be removed from service to be discarded repaired or adjusted in accordance with the following procedures:

- Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such operations and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator;
- Repairs shall be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed; and
- Reducing and admission valves, regulators, and alarms shall be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

Breathing Air Quality and Use

The Company shall ensure that compressed air, compressed oxygen, liquid air, and liquid oxygen used for respiration accords with the following specifications:

- Compressed and liquid oxygen shall meet the United States Pharmacopoeia requirements for medical or breathing oxygen; and
- Compressed breathing air shall meet 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:
 1. Oxygen content (v/v) of 19.5-23.5%;
 2. Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less;
 3. Carbon monoxide (CO) content of 10 ppm or less and warning device be set for to go off at 10 ppm;
 4. Carbon dioxide content of 1,000 ppm or less; and
 5. Lack of noticeable odor;
 6. Compressors will be located in atmosphere with in line purification and tagged to indicate changed out
- Compressed oxygen will not be used in atmosphere-supplying respirators that have previously used compressed air
- Oxygen concentrations greater than 23.5% are used only in equipment designed for oxygen service or distribution
- Cylinders used to supply breathing air to respirators meet the following requirements
- Cylinders are tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR part 173 and part 178)
- Cylinders of purchased breathing air have a certificate of analysis from the supplier that the breathing air meets the requirements for Grade D breathing air
- Moisture content in breathing air cylinders does not exceed a dew point of -50 deg. F (-45.6 deg.C) at 1 atmosphere pressure
- Breathing air couplings are incompatible with outlets for other worksite air or other gas systems. No asphyxiating substance shall be introduced into breathing airlines.
- Breathing gas containers shall be marked in accordance with the NIOSH respirator certification standard, 42 CFR part 84.
- Cylinders meet DOT requirements and other safety issues on the job.

Equipment: Full SCBA are required

Recordkeeping:

To verify written programs effectiveness employees must be asked about fit test, selection of equipment, proper use of equipment and maintenance of equipment. This method of verification makes sure program is implemented and employees understand program.

The Safety Director at the Corporate Office maintains employee's medical records. Randall Jones at the Corporate Office keeps fit test records and current written programs and a copy of the plan is given to each employee and kept at District Offices.

C. CONFINED SPACE PROGRAM

Purpose

The Confined Space Entry Program is provided to protect authorized employees that will enter confined spaces and may be exposed to hazardous atmospheres, engulfment in materials, conditions which may trap or asphyxiate due to converging or sloping walls, or contains any other safety or health hazards. Reference: *OSHA-Permit-Required Confined Spaces* (29 CFR 1910.146).

Responsibilities

Management

- Ensure proper training for entry & rescue teams
- Provide proper equipment for entry & rescue teams
- Ensure confined space assessments have been conducted
- Ensure all permit required confined spaces are posted
- Annually review this program and all Entry Permits
- Evaluate Rescue Teams/Service to ensure they are adequately trained and prepared
- Ensure rescue team at access during entry into spaces with IDLH atmospheres

Employees

- Follow program requirements
- Report any previously identified hazards associated with confined spaces

Entry Supervisor

Entry supervisors are responsible for the overall permit space entry and must coordinate all entry procedures, tests, permits, equipment and other relevant activities. The following entry supervisor duties are required:

- Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure
- Verifies, by checking that the appropriate entries have been made on the permit, all test specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin
- Terminate the entry and cancel the permit when the entry is complete and there is a need for terminating the permit
- Verify that rescue services are available and that the means for summoning them are operable
- Remove unauthorized persons who enter or attempt to enter the space during entry operations
- Determine whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space that entry operations remain consistent with the permit terms and that acceptable entry conditions are maintained.

Entry Attendants

At least one attendant is required outside the permit space into which entry is authorized for the duration of the entry operation. Responsibilities include:

- To know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure
- To be aware of possible behavioral effects of hazard exposure on entrants
- To continuously maintain an accurate count of entrants in the permit space and ensures a means to accurately identify authorized entrants
- To remain outside the permit space during entry operations until relieved by another attendant (once properly relieved, they may participate in other permit space activities, including rescue if they are properly trained and equipped).
- To communicate with entrants as necessary to monitor entrant status and alert entrants of the need to evacuate.

- To monitor activities inside and outside the space to determine if it is safe for entrants to remain in the space and orders the entrants to immediately evacuate if: the attendant detects a prohibited condition, detects entrant behavioral effects of hazard exposure, detects a situation outside the space that could endanger the entrants; or if the attendant cannot effectively and safely perform all the attendant duties.
 - To summon rescue and other emergency services as soon as the attendant determines the entrants need assistance to escape the permit space hazards.

To perform non-entry rescues as specified by that rescue procedure and entry supervisor
- Not to perform duties that might interfere with the attendants' primary duty to monitor and protect the entrants.
- To take the following action when unauthorized persons approach or enter a permit space while entry is under way:
 1. Warn the unauthorized persons that they must stay away from the permit space,
 - Advise unauthorized persons that they must exit immediately if they have entered the space, and
 3. Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space.

Entrants

All entrants must be authorized by the entry supervisor to enter permit spaces, have received the required training, used the proper equipment, and observes the entry procedures and permit. The following entrant duties are required:

- Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
- Properly use the equipment required for safe entry;
- Communicate with the attendant as necessary to enable the attendant to monitor the status of the entrants and to enable the attendant to alert the entrants of the need to evacuate the space if necessary;
- Alert the attendant whenever; the entrant recognizes any warning signs or symptoms of exposure to a dangerous situation, or any prohibited condition is detected; and
- Exit the permit space as quickly as possible whenever; the attendant or entry supervisor gives an order to evacuate the permit space, the entrant recognized any warning signs or symptoms of exposure to a dangerous situation, the entrant detects a prohibited condition, or an evacuation alarm activated.

Hazards

- Explosive / Flammable
- Atmospheres Toxic Atmospheres
- Engulfment
- Asphyxiation
- Entrapment
- Slips & falls
- Chemical Exposure
- Electric Shock
- Thermal / Chemical Burns
- Noise & Vibration

Hazard Control

Engineering Controls

- Locked entry points
- Temporary ventilation
- Temporary Lighting

Administrative Controls

- Signs
- Employee training
- Entry procedures
- Atmospheric Monitoring
- Rescue procedures
- Use of prescribed PPE

Definitions

Confined space:

Is large enough or so configured that an employee can bodily enter and perform work.

Has limited or restricted means for entry or exit (i.e. tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry).

Is not designed for continuous employee occupancy.

Permit required confined space (permit space), is a confined space that has one or more of the following characteristics:

1. Contains or has a potential to contain a hazardous atmosphere.
2. Contains a material that has the potential for engulfing an entrant.
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly covering walls or by a floor, which slopes downward and tapers to a smaller cross-section.
4. Contains any other recognized serious safety or health hazard.

Each Permit-Required Confined Space will be marked "Confined Space - Entry Permit Required".

Entry Standard Operating Procedures

A Standard Operating Procedure (SOP) has been developed for each space to standardize the entry procedure. The SOP outlines:

- Hazards
- Hazard Control & Abatement
- Acceptable Entry Conditions
- Means of Entry
- Entry Equipment Required
- Emergency Procedures

Permit Required Confined Space Entry General Rules

During all Confined Space Entries, the following Safety Rules must be strictly enforced:

1. Only Authorized and Trained Employees may enter a Confined Space or act as Safety Watchmen.
2. No Smoking is permitted in a Confined Space or near entrance/exit area.
3. During Confined Space Entries, a Watchman must be present at all times.
4. Constant visual or voice communication will be maintained between the Safety Watchmen and Employees entering a Confined Space.
5. No bottom or side entry will be made or work conducted below the level any hanging material or material which could cause engulfment.
6. Air and Oxygen Monitoring are required before entering any Permit-Required Confined Space. Oxygen levels in a Confined Space must be between 19.5 and 23.5 percent. Levels above or below will require the use of an SCBA or other approved air supplied respirator. Additional ventilation and Oxygen Level Monitoring is required when welding is performed. The monitoring will check Oxygen Levels, Explosive Gas Levels and Carbon Monoxide Levels. Entry will not be permitted if explosive gas is detected above one-half the Lower Explosive Limit (LEL).
7. To prevent injuries to others, when covers are removed, all openings to Confined Spaces will be protected by a barricade

Confined Space Entry Procedures

Each employee who enters or is involved in the entry must:

1. Understand the procedures for confined Space Entry

2. Know the Hazards of the specific space
3. Review the specific procedures for each entry
4. Understand how to use entry and rescue equipment

Confined Space Entry Permits

Confined Space Entry Permits must be completed before any Employee enters a Permit-Required Confined Space. The Permit must be completed and signed by an Authorized Member of Management before entry.

- Permits will expire before the completion of the shift or if any pre-entry conditions change. Permits will be maintained on file for 12 months.

Contractor Entry

All work by non-company employees that involves the entry into confined spaces will follow the procedures of this program. The information of this program and specific hazards of the confined spaces to be entered will be provided to Contractor Management prior to commencing entry or work.

Training

Training for Confined Space Entry includes:

1. Duties of Entry Supervisor, Entrant and Attendants
2. Confined Space Entry permits
3. Hazards of Confined Spaces
4. Use of Air Monitoring Equipment
5. First Aid and CPR Training
6. Emergency Action & Rescue Procedures
7. Confined Space Entry & Rescue Equipment
8. Rescue training, including entry and removal from representative spaces

Confined Space Hazards

Flammable Atmospheres

A flammable atmosphere generally arises from enriched oxygen atmospheres, vaporization of flammable liquids, by products of work, chemical reactions, and concentrations of combustible dusts. An atmosphere becomes flammable when the ratio of oxygen to combustible material in

the air is neither too rich nor too lean for combustion to occur. Combustible gases or vapors will accumulate when there is inadequate ventilation in areas such as a confined space. Flammable gases such as acetylene, butane, propane, hydrogen, methane, natural or manufactured gases or vapors from liquid hydrocarbons can be trapped in confined spaces, and since many gases are heavier than air, they will seek lower levels as in pits, sewers, and various types of storage tanks and vessels. In a closed top tank, it should also be noted that lighter than air gases may rise and develop a flammable concentration if trapped above the opening.

The byproducts of work procedures can generate flammable or explosive conditions within a confined space. Specific kinds of work such as spray painting can result in the release of explosive gases or vapors. Welding in a confined space is a major cause of explosions in areas that contain combustible gas.

Chemical reactions forming flammable atmospheres occur when surfaces are initially exposed to the atmosphere, or when chemicals combine to form flammable gases. This condition arises when dilute sulfuric acid reacts with iron to form hydrogen or when calcium carbide makes contact with water to form acetylene. Other examples of spontaneous chemical reactions that may produce explosions from small amounts of unstable compounds are acetylene-metal compounds, peroxides, and nitrates. In a dry state, these compounds have the potential to explode upon percussion or exposure to increased temperature. Another class of chemical reactions that form flammable atmospheres arises from deposits of certain substances (carbon, ferrous oxide, ferrous sulfate, iron, etc.) that can be found in tanks used by the chemical and petroleum industry. These tanks containing flammable deposits will spontaneously ignite upon exposure to air.

Combustible dust concentrations are usually found during the process of loading, unloading, and conveying grain products, nitrated fertilizers, finely ground chemical products, and any other combustible material. High charges of static electricity, which rapidly accumulate during periods of relatively low humidity (below 50°k), can cause certain substances to accumulate electrostatic charges of sufficient energy to produce sparks and ignite a flammable atmosphere. These sparks may also cause explosions when the right air or oxygen to dust or gas mixture is present.

Toxic Atmospheres

The substances to be regarded as toxic in a confined space can cover the entire spectrum of gases, vapors, and finely divided airborne dust in the industry. The sources of toxic atmospheres encountered may arise from the following:

1. The manufacturing process (for example, in producing polyvinyl chloride, hydrogen chloride is used as well as vinyl chloride monomer, which is carcinogenic).
2. The product stored [removing decomposed organic material from a tank can liberate toxic substances, such as hydrogen sulfide (H₂S)].
3. The operation performed in the confined space (for example, welding or brazing with metals capable of producing toxic fumes).

During loading, unloading, formulation, and production, mechanical and/or human error may also produce toxic gases, which are not part of the planned operation.

Carbon monoxide (CO) is a hazardous gas that may build up in a confined space. This odorless,

colorless gas that has approximately the same density as air is formed from incomplete combustion of organic materials such as wood, coal, gas, oil, and gasoline; it can be formed from microbial decomposition of organic matter in sewers, silos, and fermentation tanks. Carbon monoxide is an insidious toxic gas because of its poor warning properties. Early stages of CO intoxication are nausea and headache. Carbon monoxide may be fatal at 1000 ppm in air, and is considered dangerous at 200 ppm, because it forms carboxyhemoglobin in the blood, which prevents the distribution of oxygen in the body.

Carbon monoxide is a relatively abundant colorless, odorless gas; therefore, any untested atmosphere must be suspect. It must also be noted that a safe reading on a combustible gas indicator does not ensure that CO is not present. Carbon monoxide must be tested for specifically. The formation of CO may result from chemical reactions or work activities, therefore fatalities due to CO poisoning are not confined to any particular industry. There have been fatal accidents in sewage treatment plants due to decomposition products and lack of ventilation in confined spaces. Another area where CO results as a product of decomposition is in the formation of silo gas in grain storage elevators. In another area, the paint industry, introducing the various ingredients into a kettle, and heating them in an inert atmosphere, usually town gas, which is a mixture of carbon dioxide and nitrogen, manufacture varnish.

In welding operations, oxides of nitrogen and ozone are gases of major toxicological importance, and incomplete oxidation may occur and carbon monoxide can form as a byproduct.

Another poor work practice, which has led to fatalities, is the recirculation of diesel exhaust emissions. Increased CO levels can be prevented by strict control of the ventilation and the use of catalytic converters.

Irritant (Corrosive) Atmospheres

Irritant or corrosive atmospheres can be divided into primary and secondary groups. The primary irritants exert no systemic toxic effects (effects on the entire body). Examples of primary irritants are chlorine, ozone, hydrochloric acid, hydrofluoric acid, sulfuric acid, nitrogen dioxide, ammonia, and sulfur dioxide. A secondary irritant is one that may produce systemic toxic effects in addition to low surface irritation. Examples of secondary irritants include benzene, carbon tetrachloride, ethyl chloride, trichloroethane, trichloroethylene, and chloropropene.

Irritant gases vary widely among all areas of industrial activity. They can be found in plastics plants, chemical plants, the petroleum industry, tanneries, refrigeration industries, paint manufacturing, and mining operations.

Prolonged exposure at irritant or corrosive concentrations in a confined space may produce little or no evidence of irritation. This may result in a general weakening of the defense reflexes from changes in sensitivity. The danger in this situation is that the worker is usually not aware of any increase in his/her exposure to toxic substances.

Asphyxiating Atmospheres

The normal atmosphere is composed approximately of 20.9% oxygen and 78.1% nitrogen, and 1% argon with small amounts of various other gases. Reduction of oxygen in a confined space may be the result of either consumption or displacement.

The consumption of oxygen takes place during combustion of flammable substances, as in welding, heating, cutting, and brazing. A more subtle consumption of oxygen occurs during bacterial action, as in the fermentation process. Oxygen may also be consumed during chemical reactions as in the formation of rust on the exposed surface of the confined space (iron oxide). The number of people working in a confined space and the amount of their physical activity will also influence the oxygen consumption rate.

A second factor in oxygen deficiency is displacement by another gas. Examples of gases that are used to displace air, and therefore reduce the oxygen level are helium, argon, and nitrogen. Carbon dioxide may also be used to displace air and can occur naturally in sewers, storage bins, wells, tunnels, wine vats, and grain elevators. Aside from the natural development of these gases, or their use in the chemical process, certain gases are also used as inerting agents to displace flammable substances and retard pyrophoric reactions. Gases such as nitrogen, argon, helium, and carbon dioxide, are frequently referred to as non-toxic inert gases but have claimed many lives. The use of nitrogen to inert a confined space has claimed more lives than carbon dioxide. The total displacement of oxygen by nitrogen will cause immediate collapse and death. Carbon dioxide and argon, with specific gravities greater than air, may lie in a tank or manhole for hours or days after opening. Since these gases are colorless and odorless, they pose an immediate hazard to health unless appropriate oxygen measurements and ventilation are adequately carried out.

Oxygen deprivation is one form of asphyxiation. While it is desirable to maintain the atmospheric oxygen level at 21% by volume, the body can tolerate deviation from this ideal. When the oxygen level falls to 1.7%, the first sign of hypoxia is deterioration to night vision, which is not noticeable until a normal oxygen concentration is restored. Physiologic effects are increased breathing volume and accelerated heartbeat. Between 14-16% physiologic effects are increased breathing volume, accelerated heartbeat, very poor muscular coordination, rapid fatigue, and intermittent respiration. Between 6-10% the effects are nausea, vomiting, inability to perform, and unconsciousness. Less than 6%, spasmodic breathing, convulsive movements, and death will result in minutes.

Mechanical Hazards

If activation of electrical or mechanical equipment would cause injury, each piece of equipment should be manually isolated to prevent inadvertent activation before workers enter or while they work in a confined space. The interplay of hazards associated with a confined space, such as the potential of flammable vapors or gases being present, and the build-up of static charge due to mechanical cleaning, such as abrasive blasting, all influence the precautions, which must be taken.

To prevent vapor leaks, flashbacks, and other hazards, workers should completely isolate the space. To completely isolate a confined space, the closing of valves is not sufficient. All pipes must be physically disconnected or isolation blanks bolted in place. Other special precautions must be taken in cases where flammable liquids or vapors may re-contaminate the confined space. The pipes blanked or disconnected should be inspected and tested for leakage to check the effectiveness of the procedure. Other areas of concern are steam valves, pressure lines, and chemical transfer pipes. A less apparent hazard is the space referred to as a void, such as double walled vessels, which must be given special consideration.

Thermal Effects

Four factors influence the interchange of heat between people and their environment. They are: (1) air temperature, (2) air velocity, (3) moisture contained in the air, and (4) radiant heat. Because of the nature and design of most confined spaces, moisture content and radiant heat are difficult to control. As the body temperature rises progressively, workers will continue to function until the body temperature reaches approximately 102°F. When this body temperature is exceeded, the workers are less efficient, and are prone to heat exhaustion, heat cramps, or heat stroke. In a cold environment, certain physiologic mechanisms come into play, which tend to limit heat loss and increase heat production. The most severe strain in cold conditions is chilling of the extremities so that activity is restricted. Special precautions must be taken in cold environments to prevent frostbite, trench foot, and general hypothermia.

Protective insulated clothing for both hot and cold environments will add additional bulk to the worker and must be considered in allowing for movement in the confined space and exit time. Therefore, air temperature of the environment becomes an important consideration when evaluating working conditions in confined spaces.

Noise

Noise problems are usually intensified in confined spaces because the interior tends to cause sound to reverberate and thus expose the worker to higher sound levels than those found in an open environment. This intensified noise increases the risk of hearing damage to workers, which could result in temporary or permanent loss of hearing. Noise in a confined space, which may not be intense enough to cause hearing damage, may still disrupt verbal communication with the emergency standby person on the exterior of the confined space. If the workers inside are not able to hear commands or danger signals due to excessive noise, the probability of severe accidents can increase.

Vibration

Whole body vibration may affect multiple body parts and organs depending upon the vibration characteristics. Segmental vibration, unlike whole body vibration, appears to be more localized in creating injury to the fingers and hands of workers using tools, such as pneumatic hammers, rotary grinders or other hand tools which cause vibration.

Other Hazards

Some physical hazards cannot be eliminated because of the nature of the confined space or the work to be performed. These hazards include such items as scaffolding, surface residues, and structural hazards. The use of scaffolding in confined spaces has contributed to many accidents caused by workers or materials falling, improper use of guardrails, and lack of maintenance to insure worker safety. The choice of material used for scaffolding depends upon the type of work to be performed, the calculated weight to be supported, the surface on which the scaffolding is placed, and the substance previously stored in the confined space.

Surface residues in confined spaces can increase the already hazardous conditions of electrical shock, reaction of incompatible materials, liberation of toxic substances, and bodily injury due to slips and falls. Without protective clothing, additional hazards to health may arise due to surface residues.

Structural hazards within a confined space such as baffles in horizontal tanks, trays in vertical towers, bends in tunnels, overhead structural members, or scaffolding installed for maintenance constitute physical hazards, which are exacerbated by the physical surroundings. In dealing with structural hazards, workers must review and enforce safety precautions to assure safety.

The Confined Space Entry Program is provided to protect authorized employees that will enter confined spaces and may be exposed to hazardous atmospheres, engulfment in materials, conditions which may trap or asphyxiate due to converging or sloping walls, or contains any other safety or health hazards. Reference: *OSHA-Permit-Required Confined Spaces* (29 CFR 1910.146).

D. STATIONARY MACHINERY/GUARDING & OPERATION

Machine guarding shall be provided to protect the operator and other employees from hazards such as those created by the point of operation, retakin^g parts, flying chips and sparks. Guards shall be affixed to the machine where possible and secured elsewhere (if attachment to the machine is not possible). Machine guards shall be constructed of expanded metal, perforated or solid sheet metal, wire mesh or other material of equivalent or greater strength. Such material shall be free of burrs and sharp edges.

Openings in guards to allow lubrication, adjustment or inspection shall be equipped with hinged, sliding or bolted cover plates of a design that will stay closed while the opening is not in use.

Belts, sheaves, shaft couplings, flywheels, gears, drive chains and sprockets shall be fully enclosed by a removable guard. Machinery shall not be operated without guards in place.

Bench and pedestal mounted grinders shall have tool rests and shields mounted to the grinder. The tool rest shall be maintained at a distance not to exceed 1/8 inch from the grinding wheel. All shields shall be in place before the grinder is operated. In addition, operators shall wear impact goggles or full-face shields while grinding (See Eye Protection).

Only thoroughly instructed and competent workers shall be allowed to operate machinery.

Do not grind on the side of a grinding wheel, unless it is specifically designed for side grinding. Make sure the grinding wheel is rated for the rpm of the grinder.

Lifting devices should be provided to handle heavy tools or material.

A brush should be used for removing chips from the machine. Air hoses should not be used. Permanent machinery should be securely anchored to prevent unwanted movement.

Operators are not permitted to wear jewelry or loose clothing while operating rotating machinery.

Long hair must be contained in a hat or ponytail.

Operators shall never leave a machine while it is in operation.

Adjustments and repairs shall not be made on any machine until the machine is turned off and the power supply is locked-out (See Lock-Out/Tag-Out Procedures).

Good housekeeping is essential to good safety practices. Keep all, work areas clean and orderly.

E. HOT WORK - WELDING - CUTTING

Purpose

Welding and Hot Work, such as brazing or grinding present a significant opportunity for fire and injury. Company employees or contractors must apply all precautions of this program prior to commencing any welding or hot work. Reference: OSHA 29 CFR 1910.252

Responsibilities

Management

- Provide training for all employees whose task includes heat, spark or flame producing operations such as welding, brazing, or grinding.
- Develop and monitor effective hot work procedures
- Provide safe equipment for hot work

- Provide proper and effective PPE for all hot work

Supervisors

- Monitor all hot work operations
- Ensure all hot work equipment and PPE are in safe working order
- Allow only trained and authorized employees to conduct hot work
- Ensure permits are used for all hot work outside authorized areas

Employees

All employees must be trained in operating welding and cutting equipment. Training must be done at time of hire. Retraining is required when employees receive new equipment or procedures, when employees are found not be following policies and procedures.

- Follow all hot work procedures
- Properly use appropriate hot work PPE
- Inspect all hot work equipment before use
- Report any equipment problems
- Not use damaged hot work equipment.

Definitions

Welding/Hot Works Procedures: any activity, which results in sparks, fire, molten slag, or hot material, which has the potential to cause fires or explosions.

Examples of Hot Works: Cutting, Brazing, Soldering, Thawing Pipes, and Torch Applied Roofing, Grinding and Welding.

Special Hazard Occupancies: Any area containing Flammable Liquids, Dust Accumulation, Gases, Plastics, Rubber and Paper Products.

Hazards

- Fires & Explosions
- Skin burns
- Welding "blindness"
- Respiratory hazards from fumes & smoke

Training

Training shall include:

- Review of requirements listed in OSHA 1910.252
- Use of Hot Works Permit System
- Supervisor Responsibilities

- Fire Watch Responsibilities - specifically, the fire watch must know:
 1. That there ONLY duty is Fire Watch
 2. When they can terminate the watch
 3. How to use the provided fire extinguisher
 4. How to activate fire alarm if fire is beyond the incipient stage
- Operator Responsibilities
- Contractors Responsibilities
- Documentation requirements
- Respirator Usage
- Fire Extinguisher training

Compressed Cylinders

Oxygen and acetylene cylinders will be stored up right. Oxygen and acetylene must be stored 20 feet or more from each other or have a 5-foot firewall between the two gases. Oxygen must be stored more than 20 feet away from petroleum products. Cylinder should not be lifted to move but rolled into place.

Equipment

Workers assigned to operate or maintain equipment must be familiar with the American welding Society Standard. Operators of equipment should report any equipment defects or safety hazard and discontinue use of equipment until its safety has been assured, Qualified personnel must make repair.

Hot Works Procedures

OSHA 29 CFR 1910.252 required fire prevention actions for welding/hot works.

Where practicable all combustibles shall be relocated at least 35 feet from the work site. **Where relocation is impractical, combustibles shall be protected with flame proof covers, shielded with metal, guards, curtains, or wet down material to help prevent ignition of material.**

Ducts, conveyor systems, and augers that might carry sparks to distant combustibles shall be protected or shut down.

Where cutting or welding is done near walls, partitions, ceilings, or a roof of combustible construction, fire-resistant shields or guards shall be provided to prevent ignition.

If welding is to be done on a metal wall, partition, ceiling, or roof, precautions shall be taken to prevent ignition of combustibles on the other side, due to conduction or

radiation of heat. Where combustibles cannot be relocated on the opposite side of the work, a fire watch person shall be provided on the opposite side of the work.

Welding shall not be attempted on a metal partition, wall, ceiling or roof having a covering or on walls having combustible sandwich panel construction.

Cutting or welding on pipes or other metal in contact with combustible walls, partitions, ceilings, or roofs shall not be undertaken if the work is close enough to cause ignition by combustion.

Cutters, welders and their supervisors must be trained in the safe operations of their equipment and the safe use of the process.

Cutting or welding shall not be permitted in the following situations:

- In areas not authorized by management.
- In sprinkled buildings while such protection is impaired.
- In the presence of potentially explosive atmospheres, e.g. a flammable
- In areas near the storage of large quantities of exposed, readily ignitable materials.
- In areas where there is dust accumulation of greater than 1/16 inch within 35 feet of the area where welding/hot works will be conducted. All dust accumulation should be cleaned up following the housekeeping program of the facility before welding/hot works are permitted.
- If the object to be welded or cut cannot readily be moved all movable fire hazards should be removed.
- Before cutting or welding is permitted the area shall be inspected by someone responsible for inspection and granted authorization for welding and cutting operation. Procedures will be in the form of a written permit.
- If the object to be welded or cut cannot be moved and if all the fire hazards cannot be removed, then guard shall be used.
- Suitable extinguishers shall be provided and maintained ready for instant use. Fire extinguishers must be readily available for fire watch personnel.
- A fire watch person shall be provided during and for 2 hours past the completion of the welding project. Fire watch personnel must be trained in the use of fire extinguishing equipment and familiar with the facilities alarm system.
- A cutting/welding permit will be issued on all welding or cutting outside of the designated welding area.
- Welding & Hot Work fire prevention measures

A designated welding area should be established to meet them following requirements:

a. Floors swept and clean of combustibles within 35 ft. of work area.

- b. Flammable and combustible liquids and material will be kept 35 ft. from work area.
- c. Adequate ventilation providing 20 air changes per hour, such as a suction hood system should be provided to the work area.
- d. At least one 10 lb. dry chemical fire extinguisher should be within access of the 35 ft. of work area.
- e. Protective dividers such as welding curtains or non-combustible walls will be provided to contain sparks and slag to the combustible free area.
- f. Do not have wall or floor openings within 35 feet radius exposed to combustible materials.

Requirements for welding conducted outside the designated welding area.

- a. Portable welding curtains or shields must be used to protect other workers in the welding area.
- b. A hot works permit must be completed and complied with prior to welding operation.
- c. Respiratory protection is mandatory unless an adequate monitored airflow away from the welder and others present can be established and maintained.
- d. Plastic materials be covered with welding tarps during welding procedures
- e. Fire Watch must be provided for all hot work operations.

Confined Space

While working in a confined space ventilation must be provided or respiratory protection must be provided. The confined space must be checked to make sure area does not present life-threatening conditions. Oxygen and acetylene bottles cannot be brought in or stored in confined space. Check hoses often for leaks. Welding in confined area requires a lifeline to remove welding from confined space area without entering in the event of an emergency.

Welding Standard Operating Procedures

The following pages list the *Welding Standard Operating Procedures* (SOP) and are applicable for all electric and gas welding. These SOPs are to be posted at each Designated Welding & Hot Work Area for quick reference and review. If all safety standards cannot be followed the welding and cutting shall not be done.

SOP - Electric Welding

Perform Safety Check on all equipment

Ensure fire extinguisher is charged and available

Ensure electrical cord, electrode holder and cables are free from defects (no cable splices arc allowed within 10 feet of the electrode holder.

Ensure PPE (welding hood, gloves, rubber boots/soled shoes, aprons) are available and have no defects.

Ensure the welding unit is properly grounded.

All defective equipment must be repaired or replaced before use.

Remove flammables and combustibles

No welding is permitted on or near containers of flammable material, combustible material or unprotected flammable structures.

Place weldin^g screen or suitable barricade around work area to provide a fire safety zone and prevent injuries to passersby (Do not block emergency exits or restrict ventilation)

Ensure Adequate Ventilation and Lighting

Adequate ventilation is very critical when welding, cutting or burning of lead base metals; zinc, cadmium, mercury, beryllium or exotic metals or paints not tested here shall have proper ventilation or respiratory protection.

Execute Hot Work Permit procedures

Set Voltage Regulator

No higher than the following for:

Manual Alternating Current Welders - 80 volts

Alternating Current Welders - 100 volts

Manual or automatic Direct Current Welders -100 volts

Uncoil and spread out welding cable

To avoid overheating, ensure proper contact of work leads and connections, remove any metal fragments from magnetic work clamps (to avoid electric shock do not wrap welding cables around a body part and avoid welding in wet conditions)

Fire watch for one hour after welding & until all welds have cooled

Perform final fire watch and terminate permit.

SOP: Gas Welding

Perform Safety Check on all equipment

Ensure tanks have gas and fittings are tight

Ensure fire extinguisher is charged and

available Ensure hoses have no defects

Ensure PPE (welding hood, gloves, rubber boots/soled shoes, aprons) are available and have no defects.

All defective equipment must be repaired or replace before uses.

Workers in charge of oxygen or fuel gas supply equipment must be instructed and judged competent for such work.

Remove flammables and combustibles

No welding is permitted on or near containers of flammable material, combustible material or unprotected flammable structures.

Place welding screen or suitable barricade around work area to provide a fire safety zone and prevent injuries to passersby (Do not block emergency exits or restrict ventilation)

Ensure Adequate Ventilation and Lighting

Execute Hot Work Permit procedures

Open Valves on Oxygen and Gas tanks to desired flow

Shut Tank Valves & relieve hose pressure. Store hoses

Fire watch for one hour after welding & until all welds have cooled

Perform final fire watch and terminate permit.

First Aid Kits

First aid kits will be provided in welding areas at all times. Personnel working in the area will be certified in first aid and CPR.

F: LOCKOUT/TAGOUT (CONTROL OF HAZARDOUS ENERGY)

Purpose

Lockout/Tagout is an energy control system, which is intended to isolate personnel from sources of potential energy when servicing, or maintenance requires the disabling or removal of normal guards and safety devices. Randall Jones is Prime Marine Services, Inc. Safety Director and is in charge of our Lockout/Tagout program. Randall Jones is located at our corporate office, which is located in Broussard, Louisiana.

The standard covers the servicing and maintenance of machines and equipment in which the unexpected start-up or release of stored energy could cause injury. Normal production operations, cords and plugs under exclusive control, and hot tap operations are not covered in this standard. Sources of potential hazardous energy include any electrical, mechanical, hydraulic, heat, chemical nuclear and pneumatic energy.

Site-specific lockout/tagout procedures shall be developed pertaining to each major group of equipment. This will include, but is not limited to procedures for:

Electric Motors	Pumping units
Electric Panels	Compressors
Internal combustion engines	Pipelines/vessels
Pumps	Forklifts

Shut Down Procedures

These procedures shall contain the following six common elements:

1. Shut down and deactivation by knowledgeable personnel.
2. Isolation of energy to the equipment by trained personnel.
3. Attachment of a lock and tag by each employee working on the equipment.
4. Release, after lockout, of all potentially hazardous or stored energy, including the release of gas or hydraulic pressure, the discharge of capacitors or the lowering of weights against physical stops.
5. Verification of isolation by attempting to start the equipment by normal means, and.
6. Release from lockout/tagout after personnel, tools and parts have been cleared and protective guards replaced.

Authorized Person

Before an authorized or affected employee turns off a machine or equipment, the authorized employee shall have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the methods or means to control the energy. The machine or equipment shall be turned off or shutdown using the procedures established for the machine or equipment. An orderly shutdown must be utilized to avoid any additional or increased hazards to employees as a result of the equipment stoppage. All energy isolating devices that are needed to control the energy to the machine or equipment shall be physically located and operated in such a manner as to isolate the machine or equipment from the energy source. Authorized employees shall affix lockout and tagout devices to each energy-isolating device. Lockout devices, where used, shall be affixed in a manner that will hold the energy isolating devices in a safe or off position. Tagout devices, where used, shall be affixed in such a manner as will clearly indicate that the operation or movement of energy isolating device from the safe or off position, where tagout devices are used with energy. Isolating devices designed with the capability of being locked, the tag attachment shall be fastened at the same point at which the lock would have been attached. Where a tag cannot be affixed directly to the energy isolating device, the tag shall be located as close as safely as possible to the device in a position that will immediately be obvious to anyone attempting to operate the device. Following the application of lockout or tagout devices to energy isolating devices, all potentially hazardous stored or residual energy shall be relieved, disconnected, restrained and otherwise rendered safe. If there is a possibility of re-accumulation of stored energy level, verification of isolation shall be continued until the servicing or maintenance is completed, or until the possibility of such accumulation no longer exists. Prior to starting work on machines or equipment that have been locked or tagged out, the authorized employee shall verify that isolation and de-energizing of the machine or equipment have been accomplished. Shop foreman and crew supervisors on location are authorized to lockout and tagout equipment during servicing or maintenance. Following repairs and maintenance only the shop foreman or the crew supervisor can remove a lock and tag from the equipment. Each crew is made up of several members, the crew supervisor is the authorized person and the rest of the crew is the affected personnel.

Affected Employee

Affected employees are those employees who operate machinery or equipment upon which lockout or tagging out is required under this program. Training of these individuals will be less stringent in that it will include the purpose and use of the lockout procedures.

Other Employee

Other employees are identified as those that do not fall into the authorized, affected or qualified employee category. Essentially, it will include all other employees. These employees will be provided instruction in what the program is about and not to touch any machine or equipment when they see that it has been locked or tagged out.

Lockout Equipment

The following equipment will be used both at the office and in the field to lockout/tagout equipment:

Locks- Lockout devices must be durable and substantial. They must be standardized to be recognized by all employees. The lock must identify the person who applied the lock. The locks must only be used for the purpose of locking out equipment.

Tags- Tags must be durable and substantial enough to endure all types of weather and chemicals. The tag must require a force of more than 50 pounds of force to remove the tag. The tag must be attached by hand, non-reusable and self-locking. The tag must contain the words such as do not start, do not operate, do not open, do not close, or do not energize. The tag shall be standardized in color, size and shape to be easily recognized.

Should a piece of equipment malfunction and or not operate properly all hands are authorized and trained to shut down the equipment, lock it out, and place a tag. Prime Marine Services, Inc. feels that from a safety standpoint all personnel are authorized to shut down equipment or a job if they feel that there is some imminent danger or equipment is malfunctioning. Only shop foreman and crew supervisors are authorized to shut equipment down for maintenance and servicing.

All new machines and equipment shall be equipped with lockout devices. Existing equipment with a lockout device shall be modified whenever major replacement or repair takes place. Lockout is the placement of a lockout device on an energy isolation device (circuit breaker, slide gate, line valve, disconnect switch,) to ensure that the energy isolation device and equipment being controlled cannot be operated until the lockout device is removed. A lockout device utilizes a positive means such as a lock (key or combination type) to hold an energy-isolating device in a safe position and prevent the energizing of a machine or piece of equipment. The lockout device must be substantial enough to prevent removal without use of excessive force or unusual techniques. Locks shall be either single key or single combination type. Prime Marine Services, Inc. uses keyed locks for locking out any equipment. Tags are required with all locks and shall be lettered with an appropriate warning, such as **Danger- Do not Operate**, and shall include space to identify the date, the reason for the lockout and the name of the person attaching the tag. Should a lock not be able to be placed on a piece of equipment to lock it out then a tag will be placed on the equipment. The tag shall read **Danger- Do not Operate**, and shall be dated, a reason given for putting the equipment off line will be given, and the person tagging the equipment will be on the tag.

If several different groups of employees or different crafts are working on the equipment then the lockout device must be equipped to handle multiple locks from each group. Each authorized

person in each group will place their own lock on the device to lockout the equipment. As each group has completed their work they will be able to remove their lock. At the end of a shift change if equipment is not yet complete the oncoming crew will place their lock on the equipment, rendering it not useable, and the person getting off of duty can remove his lock.

Following the application of lockout or tagout devices to energy isolating devices, all potentially hazardous stored or residual energy shall be relieved disconnected, restrained and otherwise rendered safe. If there is a possibility of re-accumulation of stored energy level, verification of isolation shall be continued until the servicing or maintenance is completed, or until the possibility of such accumulation no longer exists.

Prior to starting work on machines or equipment that have been locked or tagged out, the authorized employee shall verify that isolation and de-energizing of the machine or equipment have been accomplished. Should testing of the machine be done before it is totally completed the following must be done: clear away tools, remove employees, remove the lockout tagout devices, energize and proceed with testing. Once testing is complete go through the same stages as before to shut the unit down.

Tagout is the placement of a tagout device (a tag or other prominent warning device and a means of attachment) on an energy isolation device to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed. The use of tags alone for the purpose of lock out shall never be acceptable for energy lockout/tagout, the area supervisor shall communicate their respective policies. Tags must be made of material that will not be removed easily, requiring minimum of 50 pounds of pressure, and can withstand all types of weather conditions. Tags are not to be removed without proper authorization.

Whenever contractors or outside servicing personnel are engaged in activities requiring lockout/tagout the area supervisor shall communicate their respective policies.

Training

Training shall be conducted for all personnel whose work is in an area where lockout/tagout procedures may be utilized. Following initial training, retraining shall occur whenever job assignments or job site changes make it necessary, changes in equipment, changes in hazards are introduced, or whenever an inspection or audit indicates retraining is needed. An authorized competent employee will do training of employees. The affected employees shall be instructed in purpose and use of the energy control procedure and all other employees whose work operations are or may be in an area where energy control procedures may be utilized. When tags are used to tagout equipment, employees must be instructed in the limitations of these devices. Employees retraining shall be provided for all authorized and affected employees whenever there is a change in their job assignments, a change in machines, equipment or processes that present a new hazard, or when there is a change in the energy control procedures. Whenever replacement or major modification of a machine or equipment is performed, and whenever new machines or equipment are installed, energy isolation devices for such machines or equipment shall be designed to accept a lockout device.

Upon completion of training the employer must certify that the required training has been accomplished. The certification shall include employee name, trainer signature/initials, and date of training. Certification must be made available to employees and their authorized representative.

Each piece of equipment must have specific procedures for locking out and tagging out that piece of equipment and releasing all stored energy.

Periodic Inspections

All lockout equipment and training documentation must be inspected and documented by a qualified designated inspector. Someone qualified in lockout/Tagout but not someone using the system in progress will do inspection of the lockout/Tagout program yearly. That representative must document date inspected, what equipment inspected, and what employee records reviewed. This review will be done at least annually and will be done by Prime Marine Services, Inc. Safety Director, Randall Jones. Randall Jones does field audits and shop audits and has the authority to enforce all company policies and procedures. Employees who do not follow the policies and procedures for lockout/tagout will be written up and warned that failure to follow policies can and will lead to further disciplinary action including and up to termination.

G. ELECTRICAL SAFETY

Purpose

The Electrical Safety program is designed to prevent electrically related injuries and property damage. This program also provides for proper training of maintenance employees to ensure they have the requisite knowledge and understanding of electrical work practices and procedures. Only employees qualified in this program may conduct adjustment, repair or replacement of electrical components or equipment. Electricity has long been recognized as a serious workplace hazard, exposing employees to such dangers as electric shock, electrocution, fires and explosions. References: NEPA 70E, Electrical Safety Requirements for Employee Workplaces, National Electrical Code (NEC) and OSHA Standard (Electrical Safety) 29 CFR 1910.331 to 1910.339.

Safe work practices shall be employed to prevent electric shock or other injuries resulting from either direct or indirect electrical contact, when work is performed near or on equipment that is energized.

Training for qualified employees must be done prior to letting employees begin work on a job. Retraining must be done if employee is found not following approved procedures and policies. Retaining must be done if employee receives new equipment or policies and procedures change. Employees will be trained in safety related work practices that pertain to their respective job assignments. Employees will be trained in hazard identification and ways to reduce those hazards.

Responsibilities

Management

- Provide training for qualified and unqualified employees
- Conduct inspections to identify electrical safety deficiencies
- Guard and correct all electrical deficiencies promptly
- Ensure all new electrical installations meet codes and regulations

Employees

- Report electrical deficiencies immediately
- Not work on electrical equipment unless authorized and trained
- Properly inspect all electrical equipment prior to use

Hazard Control

Engineering Controls

- All electrical distribution panels, breakers, disconnects, switches, junction boxes shall be completely enclosed
- Water tight enclosure shall be used where there possibility of moisture entry either from operations or weather exposure
- Electrical distribution areas will be guarded against accidental damage by locating in specifically designed rooms, use of substantial guard posts and rails and other structural means
- A clear approach and 3 foot side clearance shall be maintained for all distribution panels.
- All conduits shall be fully supported throughout its length. Non-electrical attachments to conduit are prohibited.
- All non-rigid cords shall be provided strain relief where necessary.

Administrative Controls

- Only trained and authorized employees may conduct repairs to electrical equipment.

- Contractors performing electrical work must hold a license for the rated work
- Areas under new installation or repair will be sufficiently guarded with physical barriers and warning signs to prevent unauthorized entry
- Access to electrical distribution rooms is limited to those employees who have a need to enter
- All electrical control devices shall be properly labeled
- Work on energized circuits is prohibited unless specifically authorized by senior facility management
- All qualified employees will follow established electrical safety procedures and precautions

Protective Equipment

- Qualified employees will wear electrically rated safety shoes/boots.
- All tools used for electrical work shall be properly insulated
- Electrically rated gloves shall be available for work on electrical equipment
- Electrically rated matting will be installed in front of all distribution panels in electric utility rooms

Electrical Equipment

Examination

Electrical equipment shall be free from recognized hazards that are likely to cause death or serious physical harm to employees. Safety of equipment shall be determined using the following considerations:

- Mechanical strength and durability, including, for parts designed to enclose and protect other equipment, the adequacy of the protection thus provided.
- Electrical insulation.
- Heating effects under conditions of use.
- Arcing effects.
- Classification by type, size, voltage, current capacity, and specific use.
- Other factors which contribute to the practical safeguarding of employees using or likely to come in contact with the equipment.

Identification of Disconnecting Means and Circuits

Each disconnecting means for motors and appliances shall be legibly marked to indicate its purpose. Each service, feeder, and branch circuit, at its disconnecting means or over current

device, shall be legibly marked to indicate its purpose. These markings shall be of sufficient durability to withstand the environment involved.

A disconnecting means is a switch that is used to disconnect the conductors of a circuit from the source of electric current. Disconnect switches are important because they enable a circuit to be opened, stopping the flow of electricity, and thus can effectively protect workers and equipment.

Each disconnect switch or over current device required for a service, feeder, or branch circuit must be clearly labeled to indicate the circuit's function and the label or marking should be located at the point where the circuit originates. For example, on a panel that controls several motors or on a motor control center, each disconnect must be clearly marked to indicate the motor to which each circuit is connected. In the figure below, the Number 2 circuit breaker in the panel box supplies current only to disconnect Number 2, which in turn controls the current to motor Number 2. This current to motor Number 2 can be shut off by the Number 2 circuit breaker or the Number 2 disconnect.

All labels and markings must be durable enough to withstand weather, chemicals, heat, corrosion, or any other environment to which they may be exposed.

Definition of Terms

Qualified Worker: An employee trained and authorized to conduct electrical work.

Unqualified: Employees who have not been trained or authorized by management to conduct electrical work.

Training

Training for Unqualified Employees

Training for Unqualified Employees is general electrical safety precautions to provide an awareness and understanding of electrical hazards.

Electrical Safety Rules for Non-Qualified Workers

1. Do not conduct any repairs to electrical equipment
2. Report all electrical deficiencies to your supervisor
- 3 Do not operate equipment if you suspect an electrical problem
4. Water and electricity do not mix.
5. Even low voltages can kill or injure you
6. Do not use cords or plugs if the ground prong is missing
7. Do not overload electrical receptacles

Training for Qualified Employees

Training for Qualified Employees includes specific equipment procedures and requirements of:

Electrical Safety, 29 CFR 1910.331 to 1910.339

Personal Protective Equipment

Employees working in areas where the potential contact with exposed electrical sources is present and likely, will be provided and shall use Personal Protective Equipment (PPE). The following rules apply to the use and care of PPE:

- I. PPE shall be used where contact with exposed electrical sources are present and likely.
2. PPE shall be designed for the work being performed and environment in which it is used.
3. PPE shall be visually inspected and/or tested before use. Any defects or damage shall be replaced, repaired or discarded.
4. In cases where the insulating capabilities of the PPE may be damaged during the work, a protective outer cover, such as leather, must be used.
5. Employees shall wear non-conductive head protection wherever there is a danger of injury from electrical burns or shock from contact with exposed energized parts.
6. Employee shall wear protective eye/face equipment whenever there is a danger from electrical arcs or Clashes or from flying objects resulting from an electrical explosion.

Electrical PPE Inspection Schedule

Type of Equipment	When to Test
Rubber Insulating Line Hose	Upon indication that insulating value is suspect.
Rubber Insulating Covers	Upon indication that insulating value is suspect.
Rubber Insulating Blankets	Before first issue and every 12 months.
Rubber Insulating Gloves	Before first issue and every 6 months.
Rubber Insulating Sleeves	Before first issue and every 12 months.

Electrical Lockout & Tagout Requirements

Application of locks and tags.

A lock and a tag shall be placed on each disconnecting means used to de-energize circuits and equipment on which work is to be performed, except as provided for below.

1. The lock shall be attached so as to prevent persons from operating the disconnecting means unless they resort to undue force or the use of tools.
2. Each tag shall contain a statement prohibiting unauthorized operation of the disconnecting means and removal of the tag.
3. If a lock cannot be applied a tag may be used without a lock.
4. A tag used without a lock must be supplemented by at least one additional safety measure that provides a level of safety equivalent to that obtained by use of a lock. Examples of additional safety measures include the removal of an isolating circuit element, blocking of a controlling switch, or opening of an extra disconnecting device.
5. A lock may be placed without a tag only under the following conditions:
 - a. Only one circuit or piece of equipment is de-energized, and
 - b. The lockout period does not extend beyond the work shift, and
 - c. Employees exposed to the hazards associated with reenergizing the circuit or equipment is familiar with this procedure.

Lockout/Tagout applies to other sources of energy other than electric such as hydraulic, gravity, steam, and other forms of energy.

Working at Elevated Locations

Any person working on electrical equipment on a crane or other elevated must take necessary precautions to prevent a fall from reaction to electrical shock or other causes. A second person, knowledgeable as a safety watch, must assume the best possible position to assist the worker in case of an accident. Portable ladders shall have non-conductive side rails if they are used where the employee or the ladder could contact exposed energized parts.

General Protective Equipment and Tools

General Protective Equipment and Tools shall be used when in the proximity of, or working on, exposed energized parts. The following rules apply:

1. When working on or near exposed energized parts, Qualified Employees shall use insulated tools or handling equipment suitable for the voltage present and working environment. In cases where the insulation may be damaged, a protective outer layer should be employed.
2. Fuse handling equipment, insulated for the circuit voltage, shall be used to remove or install fuses when the terminal is energized.

3. Ropes and other hand lines used near exposed energized equipment shall be non-conductive.
4. When working in confined space the employee shall use protective shields, protective barriers, or insulating materials as necessary shall be provided for his/her protection.
5. Employees who are subject to handle long dimensional conductive objects, metal ducts, or pipe shall take steps to protect themselves and list those steps.
6. Ladders used while working on electrical circuits shall be non-conductive.

Warnings and Barricades

Warnings and barricades shall be employed to alert unqualified Employees of the present danger related to exposed energized parts. The following rules apply:

1. Safety signs, warning tags, etc., must be used to warn Unqualified Employees of the electrical hazards present, even temporarily, that may endanger them.
2. Non-conductive barricades shall be used with safety signs to prevent Unqualified Employees access to exposed energized parts or areas.
3. Where barricades and warning signs do not provide adequate protection from electrical hazards, an Attendant shall be stationed to warn and protect Employees.

Powered Equipment Safety Rules

Electrical equipment is defined as cord or plug-type electrical devices, which includes the use of flexible or extension cords. Examples of portable electrical equipment included powered hand tools, powered bench tools, fans, radios, etc. The following safety rules apply to portable electrical equipment (PEE):

1. PEE shall be handled in such a manner as to not cause damage. Power cords may not be stapled or otherwise hung in a way that may cause damage to the outer jacket or insulation.
2. PEE shall be visually inspected for damage, wear, cracked or spilt outer jackets or insulation, etc., before use or before each shift. PEE that remains connected once put in place need not be inspected until relocated. Any defects; such as cracked or split outer jackets or insulation must be repaired, replaced or placed out of service.
3. Always check the compatibility of cord sets and receptacles for proper use.
4. Ground type cord sets may only be used with ground type receptacles when used with equipment requiring a ground type conductor.
5. Attachment plugs and receptacle may not be altered or connected in a way that would prevent the proper continuity of the equipment-grounding conductor. Adapters may not be used if they interrupt the continuity of the grounding conductor.
6. Only portable electrical equipment that is double insulated or designed for use in areas that are wet or likely to contact conductive liquids may be used.

7. Employees that are wet or have wet hands may not handle PEE (plug-in, un-plug, etc.). Personal protective equipment must be used when handling PEE that are wet or covered with a conductive liquid.
8. Locking-type connectors shall be properly secured after connection to a power source.

Electrical Circuit Safety Procedures

Electrical power and lighting circuits are defined as devices specifically designed to connect, disconnect or reverse circuits under a power load condition. When these circuits are employed, the following rules apply:

1. Cable connectors (not of load-break type) fuses, terminal plugs or cable splice connectors may not be used, unless an emergency, to connect, disconnect or reverse in place of proper electrical circuits.
2. After a protective circuit is disconnected or opened, it may not be connected or closed until it has been determined that the equipment and circuit can be safely energized.
3. Over current protectors of circuits or connected circuits may not be modified, even on a temporary basis, beyond the installation safety requirements.
4. Only Qualified Employees may perform test on electrical circuits or equipment.
5. Test equipment and all associated test leads, cables, power cords, probes and connectors shall be visually inspected for external damage before use.

Any damage or defects shall be repaired before use or placed out of service.

6. Test equipment shall be rated to meet or exceed the voltage being tested and fit for the environment in which it is being used.
8. Where flammable or ignitable materials are stored, even occasionally; electrical equipment capable of igniting them may not be used unless measures are taken to prevent hazardous conditions from developing.

Standard Operating Procedure

Electrical Pre-Work Procedure

Except in extreme cases, work on electrical equipment will be done with all electrical circuits in the work area de-energized by following the Lockout/Tagout procedure. When working on or near energized electrical circuits with less than 30 volts to ground, the equipment need not be de-energized if there will be no increased exposure to electrical burns or to explosion from electric arcs.

To prepare for work on electrical systems or components, the following procedure applies:

Caution: Treat all electrical circuits as "Live" until they have been Tagged and Locked Out and tested by the following procedure.

1. Obtain permission from supervisor to conduct work
2. Lockout and Tagout all sources of electrical power
3. Verify de-energized condition before any circuits or equipment are considered and worked as de-energized.
 - A. A qualified person shall operate the equipment operating controls or otherwise verify that the equipment cannot be restarted.
 - B. Verify proper operation of the Voltmeter at a live electrical source of the same rated voltage as the circuit to be worked.
 - C. Using the Voltmeter, check all exposed circuits phase to phase and phase to ground for evidence of voltage/current in the circuit.
 - D. Conduct work on the circuit only after determining that there is no voltage in any of the exposed circuits.
 - E. If voltage is detected in any exposed circuit; STOP, inform supervisor and determine source and procedure to eliminate voltage.
4. Conduct work
5. Close up all exposed circuits, boxes, controls, and equipment.
6. Remove Lockout/Tagout
7. Obtain supervisor permission to energize circuits

Standard Operating Procedure

Working on or Near Exposed Energized Circuits

In the rare situation when energized equipment (or working in near proximity to energized equipment) cannot be de-energized, the following work practices must be used to provide protection:

Caution: Unqualified Employees are prohibited from working on or near exposed energized circuits.

Only qualified employees can work on exposed energized circuits. These employees will be trained in use of special precautionary equipment such as insulated tools, and insulated shielding.

1. Obtain permission from Manager to work on or near energized electrical circuits.

2. Lockout and Tagout all circuits possible
3. Treat all circuits as energized.
4. Remove all conductive clothing and jewelry (rings, watches, wrist/neck chains, metal buttons, metal writing instruments, etc.). Conductive items such as jewelry shall not be worn unless they are rendered non-conductive by covering or wrapping or use some other non-conductive wrap.
5. Use proper personal protective equipment, shields and/or barriers to provide effective electrical insulation from energized circuits. This may include electrically rated insulated gloves, aprons, rubber soled shoes, insulated shields, insulated tools, etc.
6. Provide adequate lighting. Do not enter areas with exposed energized parts unless illumination (lighting) is provided so that Employee may work safely. Do not reach around obstructions of view or lighting (blindly) into areas where exposed energized parts are located.
7. Employees entering a Confined Space with exposed energized parts must use protective barriers, shields, or equipment or insulated materials rated at or above the present voltage to avoid contact.
8. Doors or other hinged panels shall be constructed and secured to prevent them from swinging into an Employee and causing contact with exposed energized parts.
9. Housekeeping in areas of exposed energized parts may not be completed in areas with close contact unless adequate safeguards (insulation equipment or barriers) are present. Conductive cleaning material (Steel Wool, Silicon Carbide, etc.) or liquids may not be used unless procedures (Lock and Tag Out, etc.) are in place and followed.
10. Station a safety observer outside work area. The sole function of this person is to quickly de-energize all sources of power or pull worker free from electrical work area with a non-conductive safety rope if contact is made with an energized electrical circuit.
11. A person qualified in CPR must be readily available to the scene.
12. Minimum approach distance should be used for qualified and unqualified employees. Several key safety measures need to be followed to work safe.

Standard Operating Procedure

Reenergizing Electrical Circuits after Work Completed

These requirements shall be met, in the order given, before circuits or equipment is reenergized, even temporarily

1. A qualified person shall conduct tests and visual inspections, as necessary, to verify that all tools, electrical jumpers, shorts, grounds, and other such devices have been removed, so that the circuits and equipment can be safely energized.
2. Warn employees exposed to the hazards associated with reenergizing the circuit or equipment to stay clear of circuits and equipment.
3. Remove each lock and tag. They shall be removed by the employee who applied it or under his or her direct supervision. However, if this employee is absent from the workplace, then the lock or tag may be removed by a qualified supervisor designated to perform this task provided that:
 - A. The supervisor ensures that the employee who applied the lock or tag is not available at the workplace, and
 - B. The supervisor ensures that the employee is aware that the lock or tag has been removed before he or she resumes work at that workplace.
4. Conduct a visual determination that all employees are clear of the circuits and equipment.

Working under overhead lines

The lines will be de-energized and grounded to make sure that the lines have no energy.

H. HOUSEKEEPING

Purpose

Attention to general cleanliness, storage and housekeeping can prevent numerous accidents. This chapter covers items not discussed in other areas and is not intended to cover all specific housekeeping requirements. Good housekeeping efforts are a part of the company fire prevention and accident prevention program.

Management and Employee Responsibility

All Employees share the responsibility for maintaining good housekeeping practice and following the established housekeeping procedures. The Manager, Supervisors, Safety Director and Safety Committee will be responsible to monitor housekeeping as part of their facility safety inspection procedures, note any hazards or areas of non-compliance, initiate clean-up procedures and provide follow-up. Management has the additional responsibility to provide disciplinary action when necessary to reinforce compliance with this program.

Smoking Policy

Smoking is not permitted inside buildings and/or within 50 feet of material storage. This includes all offices, rest rooms, locker rooms, production floor, storage areas, coolers, etc. Smoking is permitted outside in designated areas and in the Smoking Section of authorized break areas before work, after work and during breaks. To prevent fires and keep the grounds neat and

orderly, all cigarette/cigar ashes and butts are to be disposed in the provided butt cans or ashtrays only.

Hazards

Improper housekeeping and material storage can create or hide numerous hazards such as:

- Slip & trip hazards
- Chemical exposure
- Contact with sharp objects
- Fire & Explosion hazards
- Over loading of storage shelves and bins

Hazard Control

Offices - Office areas are to be kept neat and orderly. The following general rules apply to prevent injuries and maintain a professional appearance.

1. All aisles, emergency exits, fire extinguishers, etc., will be kept clear (a minimum of three feet of either side) of material storage (temporary and permanent) at all times.
2. Storage areas will be maintained orderly at all times. When supplies are received, the supplies will be stored properly.
3. Spills will be cleaned-up immediately and wastes disposed of properly.
4. All waste receptacles will be lined with a plastic trash bag to avoid direct contact while handling. Custodial Employees will use rubber gloves and compaction bar when handling wastes.
5. Keep file and desk drawers closed when not attended to avoid injuries. Open only one drawer at a time to prevent tipping of file cabinets.
6. At the end of the business day turn off all office equipment (area heaters, lamps, coffee-maker, PCs, etc.) and lights to save energy and prevent fires. All space heaters are un-plugged at the end of the day to assure they have been turned-off.

Production Areas - Production areas will be kept neat and orderly, during operations and as follows:

1. All aisles, emergency exits, fire extinguishers, eye wash stations, etc., will be kept clear (a minimum of three feet in front of and to either side) of product storage, material storage, fork trucks and pallet jacks at all times.
2. Spills will be cleaned up immediately.
3. All process leaks will be reported to supervision and maintenance for immediate repair and clean up.
4. Utility Employees will be responsible to keep aisles and work floors clear of excessive debris and waste materials during shift operation, between breaks and at shift change when necessary or directed by supervision; however, all Employees are responsible to communicate slippery floors to supervision for immediate clean-up.

5. All refuse and waste materials will be placed in the recognized waste containers for disposal.

Rest Rooms, Locker Rooms and Cafeteria - Rest rooms, locker rooms and cafeteria are provided as a convenience for all Employees. The following rules will apply:

1. Employees are expected to clean up after themselves as a common courtesy to fellow Employees.
2. Flammable materials (fireworks, explosives, gasoline, etc.) may not be stored in lockers or brought on company property.
3. Personal food items will not be stored in lockers or cafeteria overnight.
4. All waste receptacles will be lined with a plastic trash bag to avoid direct contact while handling and Custodial Employees will use rubber gloves and compaction bars when handling wastes.
5. All refuse and waste materials will be placed in the recognized waste containers for disposal.

Maintenance Areas

1. All aisles, emergency exits, fire extinguishers, etc., will be kept clear (a minimum of three feet of either side) of material storage (temporary and permanent) at all times.
2. Storage Areas will be maintained orderly at all times:
 - a. Pipe stock stored horizontally on racks and sorted by size
 - b. Metal stock stored horizontally on racks and sorted by size
 - c. Sheet metal stock stored vertically in racks and sorted by type
 - d. All fittings, etc., stored in bins on shelves and sorted by type and use
 - e. All flammables stored in OSHA-approved Fire Cabinets and self-closing cans where necessary.
3. Spills will be cleaned up immediately by the person responsible and wastes disposed properly.
4. All refuse and waste materials will be placed in the recognized waste containers for disposal.

Grounds - The grounds surrounding the plant are an extension of the work place. Grounds that are kept neat and orderly show pride by the Company for Employees, customers and neighbors to enjoy.

The following general rules will apply:

1. All trash will be discarded only in the waste containers provided.
2. Park only in the designated assigned area.

3. The Maintenance Department will be responsible for grounds keeping (mowing, trimming, etc.) as needed. Maintenance will also establish procedures for ice/snow removal, when necessary, prior to operations each day.

Material Storage - Proper storage procedures are required for dry, raw materials, finished product flammables and compressed gases storage to prevent fires, keep exits and aisles clear and avoid injuries and illnesses. General rules for material storage are as follows:

Materials and Finished Products Storage

1. Materials may not be stored any closer than 18 inches to walls or sprinkler heads. A minimum of 3 feet side clearance will be maintained around doorways and emergency exits. Passageways and aisle will be properly marked and a minimum of six feet in width. Materials, forklifts, pallet jacks, etc., may not be stored in aisles or passageways.
2. Aisles and passageways will be kept clear of debris. All spills of materials will be immediately cleaned-up by the person responsible.
3. All platforms and racks will have maximum load capacity displayed. The weight of stored material will not exceed the rated load capacity.

Flammable Storage

1. All flammables will be stored in OSHA-approved flammable storage cabinets or stored outside (at least 50 feet from any structure)
2. Fuels, solvents and other flammables (not stored in original shipping containers) will be stored in OSHA-approved self-closing containers with flame arresters. Flammables may not be stored in open containers (open parts baths, etc.).
3. Flammable storage areas will be kept dry and well ventilated. No storage of combustible materials, open flames or exposed electrical components is permitted in the flammable storage area.
4. Flammable or combustible materials may not be stored in electrical rooms. Electrical rooms must be kept clean and dry at all times.

Compressed Gas Safety

- Gas Cylinder Shipment Receiving
- Inspect bottle for defects & proper marking/labels
- Ensure stamped date on bottle has not expired
- Inspect valve assembly and adapter thread area
- Ensure MSDS is on file or with shipment
- Follow MSDS requirements for storage
- Gas Cylinder Storage
- Cylinder cap securely in place when not in use.
- Marked with contents and if empty/full.
- Stored up right and secured to a stationary structure in a shaded and well-ventilated area.
- Cylinders not stored within 50 feet of exposed electrical components or combustible materials.
- Cylinders are protected from accidental rupture.

- Chemically reactive gases not stored within 50 feet of each other.
- Gas Cylinder Movement
- Must be secured to a cart or cylinder trolley
- Cap securely fastened
- Gas Cylinder Usage
- Inspect valve adapter threads.
- Inspect all fasteners, hoses & regulators prior to hooking up to cylinder.
- Use only for approved purposes.
- Use in up-right position.
- Fasten cylinder to structure or cart.
- Regulators must be of same rated pressure as cylinder
- Keep cylinder valve shut when not in use; don't depend on regulators

I. WALKING AND WORKING AREAS

Holes in the ground, grating or walking surfaces shall be guarded to prevent stepping or falling into or through them.

Overhead hazards shall be identified and guarded at all times.

Standard handrails shall be provided when four or more steps are present. One hand shall be kept free to hold onto the handrail when ascending or descending stairs.

All steps, walkways and stairs shall be free of obstructions, tools, grease and oils to prevent slips, trips, and falls. Tripping hazards shall be clearly identified and eliminated if possible.

Material on shelves or in file cabinets shall be stored in an orderly fashion. Work areas shall be kept clean and free of tripping hazards such as cords, drawers, books, files, etc. by all employees.

J. TOOLS (Hand and Power)

The use of defective tools is strictly prohibited!

Use the correct tool for the job.

Make sure tools are in good condition. Inspect them before each use.
Insulate and ground properly all electric tools.

Keep the face of all hammers, chisels, punches, wedges and hammer wrenches smooth.

Use only non-arcing, intrinsically safe electric tools approved for use in classified areas.

Tools should be kept in safe working condition. Inspect all tools before use. Always use the proper tool for a job. Never use a screwdriver as a chisel or a wrench as a hammer.

Don't throw tools from one floor level to another; pass them by hand or use a line. Tools should not be left on ledges, tops of step-ladders, beams or any place where they can fall. Never leave tools lying on moving machinery.

Never step or jump on wrenches when additional force is needed. The wrench must fit; use care when working with adjustable wrenches.

Make sure all handles are properly wedged into the tool's head.

Keep tools clean, stored properly when not in use. Keep all cutting edges sharp.

All electric hand tools shall be grounded or double insulated. Electrical tools shall not be used when standing on a wet surface.

A face shield or approved goggles shall be worn when using power tools.

Do not use power tools without the proper guards in place.

Protective shields and tool rests shall be mounted on all abrasive wheel grinders. The tool rest shall be positioned a maximum of 1/8" from the wheel. Shields must be in place.

Replace defective electrical cords as soon as possible; do not tape cords.

Use the recommended amount of air pressure for all air tools. Before disconnecting an air tool, shut off the air and bleed the pressure from the line.

Power tools are to be used in the manner for which they were designed.

K. LADDERS

All ladders shall be inspected prior to use. Ladders in an unsafe condition shall not be used. Homemade or improvised wooden ladders shall not be used. Ladders shall not be painted as this may cover any defects.

Both feet should be kept on the ladder rungs and hips kept within ladders side rails to prevent the ladder from sliding. Do not lean on the sides.

When climbing a ladder, carry tools in a belt or pocket, or raise and lower them by a rope, basket or sturdy sack. Both hands shall be free for climbing. Always consider wind forces when working on ladders.

Only one person at a time shall be on the ladder. Personnel should face the ladder when climbing or working on it.

All portable ladders shall be rated OSHA A-1, extra heavy duty. Portable ladders shall be equipped with anti-slip safety feet.

Portable straight ladders are to be set at the correct angle. The correct angle is obtained by putting the base of the ladder out from the support a distance equal to one-fourth the working length of the

ladder. The working length runs from the bottom of the ladder to the point where it is supported. Portable ladders shall be secured at the top. Another person should steady the ladder if necessary. When working on electrical equipment, use wooden ladders or ladders with fiberglass rails.

All fixed ladders shall be designed, constructed, and installed in accordance with Prime Marine Services, Inc. standards. Fixed ladders exceeding twenty (20) feet in height shall be caged in accordance with OSHA guidelines.

All ladders shall be maintained in good condition at all times. Rungs should be kept free of grease and oil.

Safety feet and other auxiliary equipment shall be kept in good condition to insure proper performance. Portable ladders shall be inspected monthly and those which have defects shall be withdrawn from services for repair or destruction and tagged or marked as "DANGEROUS, DO NOT USE."

Ladders shall not be used in a horizontal position as platforms, runaways or scaffolds.

Portable ladders are designed as a one-man working ladder. If a job requires more than one man, a second ladder or a scaffold is to be used.

Ladders shall not be placed on boxes, barrels, or other unstable bases to obtain additional height.

Short ladders shall not be spliced together to provide long sections.

Tops of ordinary types of stepladders shall not be used as steps.

Never lean from a ladder to reach work. Move the ladder.

When climbing or descending a ladder, the person should face the ladder and have free use of both hands. Grip the side rails when climbing, not the rungs.

L. COMPRESSED GAS CYLINDERS

Compressed gas cylinders, including "empty" cylinders, shall be secured at all times. Never secure a cylinder with a sharp clamp or screws.

When not in use cylinder valves shall be closed and protective caps in place.

Keep cylinders in vertical position. This is of critical importance with acetylene cylinders.

Stored or transported oxygen cylinders shall be separated from fuel gas cylinders by at least 20 feet or by a noncombustible barrier at least five (5) feet high. Never connect oxygen to anything that contains or has contained hydrocarbons. Never apply oil or grease to oxygen cylinders, regulators, gauges or hoses. All oxygen gauges shall be marked "use no oil." Never wear oily gloves when handling oxygen equipment.

Never stand directly in front of a cylinder regulator when pressure is first applied.

Racks that are designed for storage and transportation of compressed gas cylinders shall be used in offshore operations. Boat skippers are responsible to see that loose cylinders are not loaded onto boats.

M. WAREHOUSE SAFETY

Warehouses shall have posted smoking and nonsmoking areas.

All storage areas shall be kept free of materials that can cause tripping, fire, explosion or pest harborage. Aisles, stairways, walkways and loading platforms shall also be kept free of such materials.

All highly volatile or flammable materials shall not be stored in a warehouse. Appropriate outside storage should be provided.

Large quantities of paint and thinners should also be stored outdoors or in approved lockers. Lockers shall be labeled to identify the paint and thinner contents.

A nonskid surface should be provided on ramps and walkways where there is danger of slipping.

Do not overload shelves. Periodically inspect shelves for strength.

Bins and racks should be spaced and located to allow safe access to materials.

When storing heavy objects such as fittings in bins, place strips across the lower part of the bin to keep the fittings from rolling out.

N. FALL PROTECTION

Purpose

The purpose of the fall protection program is to:

- Ensure all construction areas are free from uncontrolled fall hazards
- All employees are properly trained in fall prevention and protection
- Fall prevention systems are inspected and monitored to ensure effectiveness

Policy

It is the policy of Prime Marine Services, Inc. to take all practical measures possible to prevent employees from being injured by falls. We will take necessary steps to eliminate, prevent, and control fall hazards. We will comply fully with the OSHA Fall Protection standard (CFR 1926, Subpart M, Fall Protection). The first priority is given to the elimination of fall hazards. If a fall hazard cannot be eliminated, effective fall protection will be planned, implemented, and monitored to control the risks of injury due to falling. The fall protection plan is written by Randall Jones a competent and well trained in fall protection. Randall Jones is the Corporate Safety Director and he works with supervisors on each job to make them a competent to recognize fall hazards and to develop a program to overcome those hazards.

All employees exposed to potential falls from heights will be trained to minimize the exposures. Fall protection equipment will be provided and its use required by all employees. Supervisors will be responsible for implementation of a fall protection plan for their jobsite.

Hazard Identification

The Supervisors on each jobsite will be responsible for identifying fall hazards on their jobsite. The Supervisors will evaluate each situation or work procedure where employees may be exposed to a fall of 6 feet or more. The Supervisors will be responsible for developing a plan to eliminate the exposures, if possible, or to select the appropriate fall protection systems and/or equipment.

Hazard Control

Engineering Controls

- Personal Fall Protection
- Guard Rail Systems
- Positioning Devices
- Warning Line Systems
- Floor Opening Covers
- Safety Nets

Administrative Controls

- Controlled access zones
- Employee training
- Audits
- Inspections
- Supervision
- Signs

Fall Protection Required

The following are examples of situations where fall protection would be needed. This listing is by no means complete, and there are many other situations where a fall of 6 feet or more is possible. It should be noted that ladders and scaffolding are not included in this list because they are covered by other OSHA standards and other requirements of our safety program.

Wall Openings

Each employee working on, at, above, or near wall openings (including those with chutes attached) where the outside bottom edge of the wall opening is 6 feet (1.8 meters) or more above lower levels and the inside bottom edge of the wall opening is less than 39 inches (1.0 meter) above the walking/working surface must be protected from falling by the use of a guardrail system, a safety net system, or a personal fall arrest system.

Holes

Personal fall arrest systems, covers, or guardrail systems shall be erected around holes (including skylights) that are more than 6 feet (1.8 meters) above lower levels.

Leading Edges

Each employee who is constructing a leading edge 6 feet (1.8 meters) or more above lower levels shall be protected by guardrail systems, safety net systems, or personal fall arrest systems.

Hoist Areas

Each employee in a hoist area shall be protected from falling 6 feet (1.8 meters) or more by guardrail systems or personal fall arrest systems. If guardrail systems (or chain gate or guardrail) or portions thereof must be removed to facilitate hoisting operations, as during the landing of materials, and a worker must lean through the access opening or out over the edge of the access opening to receive or guide equipment and materials, that employee must be protected by a personal fall arrest system.

Fall Protection Systems

When there is a potential fall of 6 feet or more regardless of the use of PPE. Falling six feet or greater to a lower level includes around excavations. The following type methods are used to protect employees:

Guardrail Systems

Guardrail systems must meet the following criteria. Top rails and mid rails of guardrail systems must be at least one-quarter inch (0.6 centimeters) nominal diameter or thickness to prevent cuts and lacerations. If wire rope is used for top rails, it must be flagged at not more than 6 feet intervals (1.8 meters) with high-visibility material. Steel and plastic banding cannot be used as top rails or mid rails. Manila, plastic, or synthetic rope used for top rails or mid rails must be inspected as frequently as necessary to ensure strength and stability.

The top edge height of top rails, or (equivalent) guardrails must be 42 inches (1.1 meters) plus or minus 3 inches (8 centimeters), above the walking/working level. When workers are using stilts, the top edge height of the top rail, or equivalent member, must be increased an amount equal to the height of the stilts.

Screens, mid rails, mesh; intermediate vertical members, or equivalent intermediate structural members must be installed between the top edge of the guardrail system and the walking/working surface when there are no walls or parapet walls at least 21 inches (53 centimeters) high. When mid rails are used, they must be installed at a height midway between the top edge of the guardrail system and the walking/working level.

When screens and mesh are used, they must extend from the top rail to the walking/working level and along the entire opening between top rail supports. Intermediate members, such as balusters, when used between posts, shall not be more than 19 inches (48 centimeters) apart.

Other structural members, such as additional mid rails and architectural panels, shall be installed so that there are no openings in the guardrail system more than 19 inches (48 centimeters).

The guardrail system must be capable of withstanding a force of at least 200 pounds (890

newtons) applied within 2 inches of the top edge in any outward or downward direction. When the 200 pound (890 newtons) test is applied in a downward direction, the top edge of the guardrail must not deflect to a height less than 39 inches (1 meter) above the walking/working level.

Mid rails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members shall be capable of withstanding a force of at least 150 pounds (667 newtons) applied in any downward or outward direction at any point along the mid rail or other member.

Guardrail systems shall be surfaced to protect workers from punctures or lacerations and to prevent clothing from snagging.

The ends of top rails and mid rails must not overhang terminal posts, except where such overhang does not constitute a projection hazard.

When guardrail systems are used at hoisting areas, a chain, gate or removable guardrail section must be placed across the access opening between guardrail sections when hoisting operations are not taking place.

At holes, guardrail systems must be set up on all unprotected sides or edges. When holes are used for the passage of materials, the hole shall have not more than two sides with removable guardrail sections. When the hole is not in use, it must be covered or provided with guardrails along all unprotected sides or edges.

If guardrail systems are used around holes that are used as access points (such as ladder ways), gates must be used or the point of access must be offset to prevent accidental walking into the hole.

If guardrails are used at unprotected sides or edges of ramps and runways, they must be erected on each unprotected side or edge.

Personal Fall Arrest Systems

These consist of an anchorage, connectors, and a body belt or body harness and may include a deceleration device, lifeline, or suitable combinations. If a personal fall arrest system is used for fall protection, it must do the following:

- Limit maximum arresting force on an employee to 900 pounds (4 kilonewtons) when used with a body belt
- Limit maximum arresting force on an employee to 1,800 pounds (8 kilonewtons) when used with a body harness
- Be rigged so that an employee can neither free fall more than 6 feet (1.8 meters) nor contact any lower level
- Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet (1.07 meters)

- Have sufficient strength to withstand twice the potential impact energy of an employee free falling of a distance of 6 feet (1.8 meters) or the free fall distance permitted by the system, whichever is less.

The use of body belts for fall arrest is prohibited and a full body harness is required.

Personal fall arrest systems must be inspected prior to each use for wear damage, and other deterioration. Defective components must be removed from service.

All equipment purchased for use in fall arrest systems must meet or exceed OSHA and ANSI standards before employees can use them.

Positioning Device Systems

Body harness systems are to be set up so that workers can free fall no farther than 6 feet. They shall be secured to an anchorage capable of supporting a least twice the potential impact load of an employee's fall or 5,000 pounds whichever is greater.

Safety Monitoring Systems

When no other alternative fall protection has been implemented, the employer shall implement a safety monitoring system. Employers must appoint a competent person to monitor the safety of workers and the employer shall ensure that the safety monitor:

- Is competent in the recognition of fall hazards
- Is capable of warning workers of fall hazard dangers and in detecting unsafe work practices
- Is operating on the same walking/working surfaces of the workers and can see them
- Is close enough to work operations to communicate orally with workers and has no other duties to distract from the monitoring function.

Mechanical equipment shall not be used or stored in areas where safety-monitoring systems are being used to monitor employees engaged in roofing operations on low-sloped roofs.

Warning Line Systems

Warning line systems consist of ropes, wires, or chains, and supporting stanchions and are set up as follows:

- Flagged at not more than 6-foot (1.8 meters) intervals with high-visibility material
- Rigged and supported so that the lowest point including sag) is no less than 34 inches (0.9 meters) from the walking/working surface and its highest point is no more than 39 inches (1 meter) from the walking/working surface
- Stanchions, after being rigged with warning lines, shall be capable of resisting, without tipping over, a force of at least 16 pounds (71 newtons) applied horizontally against the stanchion, 30 inches (0.8 meters) above the

walking/working surface, perpendicular to the warning line and in the direction of the floor, roof, or platform edge

- The rope, wire, or chain shall have a minimum tensile strength of 500 pounds (2.22 kilonewtons) and after being attached to the stanchions, must support without breaking the load applied to the stanchions as prescribed above
- Shall be attached to each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in the adjacent section before the stanchion tips over.

Warning lines shall be erected around all sides of roof work areas. When mechanical equipment is being used, the warning line shall be erected not less than 6 feet (1.8 meters) from the roof edge parallel to the direction of mechanical equipment operation, and not less than 10 feet (3 meters) from the roof edge perpendicular to the direction of mechanical equipment operation.

When mechanical equipment is not being used, the warning line must be erected not less than 6 feet (1.8 meters) from the roof edge.

Controlled Access Zones

Controlled access zones are not used by Prime Marine Services, Inc. Prime Marine Services, Inc. requires that all employees be tied off when working above six feet.

Training

Employees will be trained in the following areas:

- (a) The nature of fall hazards in the work area.
- (b) The correct procedures for erecting, maintaining, disassembling, and inspecting fall protection systems.
- (c) The use and operation of controlled access zones and guardrail, personal fall arrest, safety net, warning line, and safety monitoring systems.
- (d) The role of each employee in the safety monitoring system when the system is in use.
- (e) The limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roofs.
- (f) The correct procedures for equipment and materials handling and storage and the erection of overhead protection.
- (g) Retraining will be done when deficiencies in training are seen, equipment changes, procedures change, or employees are observed not following policies and procedures.
- (h) The employer will provide training so that employees are able to recognize the hazards of falling and the procedures to follow to minimize these hazards. Employees will have written certification records showing that they were trained and the date they were trained. The person doing the training and the one receiving the training must sign their names on the signing sheet for the class.

- (i) Training must be done for fall protection while using scaffolds, ladders, and work platforms.

Inspection

- Inspect your equipment daily.
- Replace defective equipment. If there is any doubt about the safety of the equipment, do not use it.

Replace any equipment, including ropes, involved in a fall. Refer any questionable defects to a trained inspector.

- A trained inspector should examine equipment at least yearly.
It is advisable to use shock absorbers if the arresting forces of the lanyard alone can cause injury.
- Use the right equipment for the job. Refer to CSA Standard Z259.1-95 "Safety Belts and Lanyards" or Z259.10-M90 "Full Body Harnesses".

How to inspect the webbing (body of belt, harness or lanyard)

- Inspect the entire surface of webbing for damage. Beginning at one end, bend the webbing in an inverted "U." Holding the body side of the belt toward you, grasp the belt with your hands six to eight inches apart.
- Watch for frayed edges, broken fibers, pulled stitches, cuts or chemical damage. Broken webbing strands generally appear as tufts on the webbing surface.
- Replace according to manufacturers' guidelines.

How to inspect the buckle

- Inspect for loose, distorted or broken grommets. Do not cut or punch additional holes in waist strap or strength members.
- Check belt without grommets for torn or elongated holes that could cause the - buckle tongue to slip.
- Inspect the buckle for distortion and sharp edges. The outer and center bars must be straight. Carefully check corners and attachment points of the center bar. They should overlap the buckle frame and move freely back and forth in their sockets. The roller should turn freely on the frame.
- Check that rivets are tight and cannot be moved. The body side of the rivet base and outside rivet bun should be flat against the material. Make sure the rivets are not bent.
- Inspect for pitted or cracked rivets that show signs of chemical corrosion. **How to inspect the rope**
- Rotate the rope lanyard and inspect from end to end for fuzzy, worn, broken or cut fibers. Weakened areas have noticeable changes in the original rope diameter.

- Replace when the rope diameter is not uniform throughout, following a short break-in period.
- The older a rope is and the more use it gets, the more important testing and inspection become.

Inspect hardware used in fall protection

- Inspect hardware for cracks or other defects. Replace the belt if the "D" ring is not at a 90° angle and does not move vertically independent of the body pad or "D" saddle.
- Inspect tool loops and belt sewing for broken or stretched loops.

Check bag rings and knife snaps to see that they are secure and working properly. Check tool loop rivets. Check for thread separation or rotting, both inside and outside the body pad belt.

Inspect snaps for hook and eye distortions, cracks, corrosion, or pitted surfaces. The keeper (latch) should be seated into the snap nose without binding and should not be distorted or obstructed. The keeper spring should exert sufficient force to close the keeper firmly.

How to inspect the safety strap

- Inspect for cut fibers or damaged stitches inch by inch by flexing the strap in an inverted "U." Note cuts, frayed areas or corrosion damage.
- Check friction buckle for slippage and sharp buckle edges.
- Replace when tongue buckle holes are excessively worn or elongated.

How to clean equipment

Basic care prolongs the life of the unit and contributes to its performance.

- Wipe off all surface dirt with a sponge dampened in plain water. Rinse the sponge and squeeze it dry. Dip the sponge in a mild solution of water and commercial soap or detergent. Work up a thick lather with a vigorous back and forth motion.
- Rinse the webbing in clean water.
- Wipe the belt dry with a clean cloth. Hang freely to dry.
- Dry the belt and other equipment away from direct heat, and out of long periods of sunlight.
- Store in a clean, dry area, free of fumes, sunlight or corrosive materials and in such a way that it does not warp or distort the belt.

Investigations

All accidents and serious incidents must be investigated and changes to the fall protection plan must be implemented when necessary. These changes will require training of all new employees and all existing employees in new policies and procedures.

O. SCAFFOLDS

It is the responsibility of Prime Marine Services, Inc. to make sure that all of its employees are trained on scaffolds prior to doing any work while on a scaffold. All new employees will be trained, any employee found in violation of policies and procedures will be retained, and anytime new equipment is used employees will be retained improper use of scaffolds.

Prime Marine Services, Inc. will use a third party training provider for our scaffolding training. Trainin^g and retraining will cover potential fall hazards, height requirements, electrical hazards, falling hazards, requirements of scaffold building, and load capacities

1. It is the field superintendent's responsibility to demand safe scaffolding on his job.
 - a. Scaffolding shall be erected, dismantled and/or altered only under the supervision of an OSHA defined competent person.
 - b. An OSHA defined competent. person shall do inspections of scaffolding at the beginning of each shift.
2. The footing or anchorage for scaffolds must be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Unstable objects such as barrels, boxes, loose brick, or concrete blocks must not be used to support scaffolds or planks.

Guardrails and toe boards must be installed on all open sides and ends of platforms more than ten (10) feet above the ground. Guardrails should all be 2 x 4 inches or the equivalent, installed no less than thirty-six (36) inches or not more than forty-two (42) inches high, with a mid-rail, when required, of 1 x 4 inch lumber or equivalent. Supports should be at intervals not to exceed ten (10) feet. Toe boards must be a minimum of four (4) inches in height. Scaffolds four (4) feet to ten (10) feet in height with a minimum dimension of forty-five (45) inches either way will have the standard railings. On scaffolds six (6) feet to ten (10) feet in hei^ght and there are no guardrails, a body harness and lanyard will be utilized. (1926.451, A, 4)

4. Scaffolds and their components must be capable of supporting, without failure, at least four times the maximum intended load.

Scaffolds must be maintained in safe condition. Scaffolds must not be altered or move horizontally while they are in use or occupied.

6. Any scaffold damaged or weakened from any cause must be immediately repaired and must not be used until repairs have been completed.
7. Scaffolds must not be loaded in excess of the working load for which they are intended.

8. Nails or bolts used in the construction of scaffolds must be of adequate size and in sufficient numbers at each connection to develop the designed strength of the scaffold. Nails must not be subjected to a straight pull and must be driven full length.
9. All planking or platforms must be overlapped (minimum twelve (12) inches) or secured from movement.
10. An access ladder or equivalent safe access must be provided. Cross braces shall not be used for access.
11. Scaffold planks must extend over their end supports not less than six (6) inches or more than eighteen (18) inches.
12. The poles, legs, or uprights of scaffolds must be plumb, and securely and rigidly braced to prevent swaying and displacement.
13. Materials being hoisted onto a scaffold must have a tag line.

Outrigger Scaffolds

1. Outrigger beams must extend not more than six (6) feet beyond the face of the building. The inboard end of outrigger beams, measured from the fulcrum point to the extreme point of support, must be not less than one and one-half times the outboard end in length. The beams must rest on edge, the sides must be plumb, and the edges must be horizontal. The fulcrum point of the beam must rest on a secure bearing at least six (6) inches in each horizontal dimension. The beam must be secured in place against movement and must be securely braced at the fulcrum point against tipping.
2. The inboard ends of outrigger beams must be securely supported either by means of struts bearing against sills in contact with the overhead beams or ceiling, or by means of tension members secured to the floor joists underfoot, or by both if necessary. The inboard ends of outrigger beams must be secured against tipping and the entire supporting structure must be securely braced in both directions to prevent any horizontal movement.
3. Unless outrigger scaffolds are designed by a licensed professional engineer, they must be constructed and erected in accordance with the table shown below. Outrigger scaffolds designed by a registered professional engineer must be constructed and erected in accordance with such design. A copy of the detailed drawings and specification showing the sizes and spacing of members must be kept on the job.
4. Planking must be laid tight and must extend to within three (3) inches of the building wall. Planking must be nailed or bolted to outriggers.

MINIMUM NORMAL SIZE AND MAXIMUM SPACING OF MEMBERS OF OUTRIGGER SCAFFOLDS

	Light Duty	Medium Duty
Maximum Scaffold Load	25 p.s.f	50 p.s.f.
Outrigger size	7 x 10 in	3 x 10 in.
Maximum Outrigger Spacing	10 ft. 0 in.....	6 ft. 0 in.
Planking	2 x 9 in	2 x 9 in.
Guardrail	2 x 4 in	2 x 4 in.
Guardrail Uprights	2 x 4 in	2 x 4 in.
Toe boards	4 in.(minimum)	4 in.(minimum)

Walking and Working Surfaces

1. Whenever it becomes feasible in the construction process, all openings in floors or guardrails must be closed with 2 x 4 lumber or the equivalent. This guardrail may be removable but should be permanently secured as soon as possible.
2. Guardrails must conform to the standards set in the Federal Register and basically, should be no lower than thirty (30) inches or higher than forty-two (42) inches.
2. All openings in floorings or decking must be closed promptly, whether temporarily or permanently, prior to the area being used by other crafts, sub-contractors or any other persons. These openings can be closed either by use of substantial plywood, or preferably with steel grating.

Modification of Scaffolds

Scaffolds that are modified by an employee that is not competent will be written up. Should the employee be found to modify scaffolds a second time without authorization he will be terminated.

Inspection of Scaffolds

After scaffolds are built they will be inspected by competent person and tagged ready for use if found to be constructed per standard. The job supervisor will inspect scaffolds daily prior to use and approve scaffolding for use each day. The supervisor will undergo scaffold training to make him a competent person on scaffold building and working on scaffolds.

Employees will be instructed on proper use and identification of tagging system to be used with scaffolding. Should employees be required to use scaffolds they will be inspected prior to use and tagged as follows: Scaffolds will be tagged with a green tag indicating scaffolds have been inspected and approved. Scaffolds with a red tag indicate scaffolds have been inspected and do not meet standards.

P. PROCESS SAFETY MANAGEMENT

Purpose

This standard establishes the minimum procedures necessary to provide for the safety of personnel and facilities due to changes and modifications. These procedures should serve to communicate changes or modifications to affected employees and contractors. Changes to equipment or operating procedures, which are not replacement in kind, require appropriate review. Prime Marine Services, Inc. employees shall assume that each of its employees is trained in the work practices necessary to perform his/her job. This program is to prevent or minimize consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals from various industries such as refineries.

Scope

The standard applies to any change or modification at any of Prime Marine Services, Inc. Client facilities. The following minimum criteria should apply:

- The supervisor reviews the proposed change to determine how the management of change applies
- Copy of chemicals used by Prime Marine Services, Inc. is in the MSDS sheets.
- At all offshore platforms, and facilities covered by the OSHA Process Safety Management (PSM) rule, all sections of the standard shall apply including preparation of a Facility Change Request Form (FCR).
- This standard applies to changes (except for replacement in kind) to process equipment, technology, procedures, and chemicals or for any temporary modifications that impact the original design, safety or control system. This includes piping, valves, equipment and components, instrumentation and controls, metallurgy changes, programmable logic controllers and software, and processing chemicals.

Training

Prime Marine Services, Inc. employees shall document that each employee has received and understood the required training. Prime Marine Services, Inc. shall prepare a record, which will contain the identity of the employee; the date of the training, and means used to verify the employee understood material. All new employees will be trained at time of hire and retrained when equipment, physical facility, or procedures change.

Examples:

- Replacement of equipment with the equipment having the same technical specifications.
- Operating procedures that are in agreement with approved operating practices.
- Adjusting operational set points for non-safety controllers or valves, such as dump valves.

- Changing emulsion breakers or inhibitors.
- Routine testing of safety devices and alarms.
- Other examples as determined and documented by local supervision.
- The following changes are not considered to be "in kind" changes:
 - Valves – if style, material, pressure rating, size, packing seals, or Pressure Safety Valves (PSV) settings change.
 - Piping and flanges – if size, schedule, material, flange rating, facing or gasket type changes.
 - Pumps and compressors – if material (including internals), flange size, rating, capacity, head, or type of seals change.
 - Vessels/tanks – if nozzles, service or configuration, Maximum Allowable Working Pressure (MAWP) or relief capacity is changed, or welding on shell, heads, or walls.
 - Instrumentation – if changing device range, multiplier, measuring unit, or resetting critical alarm points.
 - Chemicals for process – if composition, function or reaction is changed.
- Operational Procedures – if there are procedural changes, or changes to operational software, computer or Programmable Logic Controller (PLC) control scheme, or if they involve resetting control perimeters outside of normal high or low limits, or permanent bypasses of safety devices for equipment in service.
- Maintenance – if conducting in-service welding, hot tap, stopple work or changes to standard welding procedures.

Procedures for Offshore and PSM Facilities

1. Any employee (including contractor employees) shall notify his or her immediate supervisor of any proposed change in the process equipment, technology, procedures, and chemicals or for any temporary modifications that impact the original design, safety or control system.
2. The supervisor must review the proposed change to determine if change is "replacement in kind" or not.
3. If the proposed change is determined not to be "replacement in kind" an FCR shall be prepared and approved prior to the change.
4. Affected employees shall be informed of all changes requiring an FCR in a timely manner. In addition, appropriate training shall be provided prior to startup of the process or affected part of the process.
5. In emergency situations, changes may be implemented with verbal approval of the line manager/superintendent who is a direct report to the area manager. However, appropriate personnel, at the earliest practical opportunity, using the Management of Change Standard, must review the change.
6. Copies of process changes shall be kept in an accessible location to insure that design changes are available to operating personnel

7. Prime Marine Services, Inc. will advise the employees of any unique hazards presented by the work being performed. If any other hazard is found Prime Marine Services, Inc. employees will be informed
8. Prime Marine Services, Inc. employees shall not perform hot work until hot works permit is obtained from employer. The hot work permit will document that all of CFR 1910.252 has been met. Incident investigation must immediately be reported and investigated within 48 hours. Actions must be documented and maintained for 5 years.

Prime Marine Services, Inc. Corporation Employees

Prime Marine Services, Inc. employees are required upon arrival on any of our Client's Platform, vessel, or at any Client facility to conform to the policies and requirements instilled by that facility. Prime Marine Services, Inc. employees will be instructed in the known potential such as fire, explosion, or toxic release hazards related to his/her job and the process and the applicable provisions of the emergency action plan.

Work Practices

Prime Marine Services, Inc. employees shall abide by employers safety work practices during operations such as lockout/tagout, confined space entry, opening process equipment or piping and controls over entrance to facility. Employees must report all accidents, injuries, or incidents immediately to their supervisor.

SECTION IV: MATERIAL HANDLING SAFETY

A. DRUM HANDLING

- Handling drums requires special tools such as dollies, winches, etc.
- No person(s) should attempt to manually lift a filled or partially filled drum.
- A torch or spark-generating tool shall not be used to open or cut drums.
- Whenever possible, used drums shall be returned to the manufacturer or distributor for disposal.

B. FORKLIFT SAFETY

Purpose

Material handling is a significant safety concern. During the movement of products and materials there are numerous opportunities for personal injury and property damage if proper procedures and caution are not used. This chapter applies to all powered industrial trucks, hoists & lifting gear. The information in this chapter shall be used to train prospective industrial truck operators and provide the basis for refresher and annual retraining. OSHA reference for Powered Industrial Trucks is 1910.178. The Forklift Operator shall be qualified, trained in accordance with OSHA 29 CFR 1910.178, and become thoroughly familiar with the_ forklift before using it and shall read the operator's manual carefully.

- Forklifts should be visually inspected daily for conditions adversely affecting the safety of the vehicle.
- The forklift should carry a nameplate showing its weight and rated capacity.
- The forklift should have a horn or other warning device loud enough to be heard above the other local noise. This horn should be sounded when leaving or entering a building or when approaching blind corners. Forklifts should be equipped with a backup warning signal.
- Never overload the forklift.
- Material shall be piled securely on the pallet at all times. Round objects such as pipe or drums shall be blocked or secured so they cannot roll.
- A red flag shall be placed on material that projects over the side of the pallet.
- Before lifting, be sure that the load is stable and properly balanced.
- Always lower the load slowly; a sudden stop may cause the forklift to tilt forward.
- Be sure stacked materials are not too heavy. When placing or picking up pallets, do not unbalance the stack.
- All roadways or aisles must be kept clear and shall be clearly marked for forklift travel.
- Employees other than the operator shall stand clear of the forklift while it is being used to stack or remove material.
- Do not pile material too high for safe lifting and handling.

- The operator shall not permit anyone to ride on any part of the forklift.
- Do not use gasoline or diesel powered forklifts in small building without proper ventilation.
- Park the forklift with forks under a flat pallet or bench to prevent tripping.
- When a forklift is left unattended, the forks should be completely lowered, controls in neutral, power shut off and brakes set. If parked on an incline, wheels should be blocked.
- Never drive over objects lying on floors. Such material may cause damage to the forklift and may shift or topple the load.
- When driving with or without a load, keep the forks six to twelve inches above the ground.
- Avoid sudden stops and starts as they may cause skidding or topple the load.
- If the load obstructs forward view, the operator must travel with the load trailing (in reverse).
- Avoid carrying loose material on forks. Use pallets whenever possible.
- Never stand under elevated loads.
- Gasoline or diesel powered forklifts shall be refueled outside buildings with the engine shut off and brakes set.

The following forms should be used to document inspection, maintenance and operating activities:

- a. Managers Forklift Inspection Checklist - monthly inspections and maintenance/repair procedures
- b. Forklift Inspection - daily/shift inspections
- c. Forklift Operating Procedures - operator valuations
- d. Signatory Page - authorization to operate

Responsibilities:

Management

- Provide adequate training in safe operation of all equipment used to move or access materials
- Provide equipment that is safe to operate
- Implement an "Out of Service" program for damaged equipment
- Not allow modification to equipment except those authorized in writing by the equipment manufacturer
- Establish safe operating rules and procedures

Supervisors

- Monitor safe operations of material handling equipment
- Ensure all equipment is safety checked daily
- Tag "Out of Service" any damaged equipment

Employees

- Operate only that equipment for which they have been specifically trained and authorized
- Conduct required daily pre-use inspections
- Report any equipment damage or missing safety gear
- Follow all safety rules and operating procedures

Hazards

- Falling loads
- Overloading of equipment
- Impact with equipment
- Piercing of containers
- Loading clock roll off
- Chemical contact - battery acid
- Fires during refueling

Hazard Controls

- Control of equipment keys
- Authorized fueling & recharge areas
- Proper palletizing of material
- Marked travel lanes
- Equipment warning lights
- Seat belts
- Mounted Fire Extinguishers

Pre-Qualification

All candidates for Powered Industrial Truck (PIT) operators must meet the following basic requirements prior to starting initial or annual refresher training:

- Must have no adverse vision problems that cannot be corrected by glasses or contacts
- No adverse hearing loss that cannot be corrected with hearing aids
- No physical impairments that would impair safe operation of the PIT
- No neurological disorders that affect balance or consciousness
- Not taking any medication that affects perception, vision, or physical abilities

Training

An experienced operator, selected by Management, shall conduct. Training for Powered Industrial Truck (PIT) Operators. All operational training shall be conducted under close supervision. All training and evaluation must be completed before an operator is permitted to use

a Powered Industrial Truck (forklift, etc.) without continual & close supervision.

Training consists of:

Trainees may operate a powered industrial truck only:

- Under the direct supervision of persons, selected by management, who have the knowledge, training, and experience to train operators and evaluate their competence; and
- Where such operation does not endanger the trainee or other employees.

Training Content

Training consists of a combination of formal instruction, practical training (demonstrations performed by the trainer and practical exercises performed by the trainee), and evaluation of the operator's performance in the workplace.

Initial Training: Powered industrial truck operators shall receive initial training in the following topics:

Truck-related training topics:

- I. Operating instructions, warnings, and precautions for the types of truck the operator will be authorized to operate
2. Differences between the truck and the automobile
3. Truck controls and instrumentation: where they are located, what they do, and how they work
4. Engine or motor operation
5. Steering and maneuvering
6. Visibility (including restrictions due to loading)
7. Fork and attachment adaptation, operation, and use limitations
8. Vehicle capacity
9. Vehicle stability
10. Any vehicle inspection and maintenance that the operator will be required to perform
 - 1 Refueling and/or charging and recharging of batteries
12. Operating limitations
13. Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicle that the employee is being trained to operate.

Workplace-related topics:

1. Surface conditions where the vehicle will be operated
2. Composition of loads to be carried and load stability
3. Load manipulation, stacking, and unstacking
4. Pedestrian traffic in areas where the vehicle will be operated
5. Narrow aisles and other restricted places where the vehicle will be operated
6. Hazardous (classified) locations where the vehicle will be operated
7. Ramps and other sloped surfaces that could affect the vehicle's stability
8. Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust
9. Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation

Refresher training and evaluation

Refresher training, including an evaluation of the effectiveness of that training, shall be conducted to ensure that the operator has the knowledge and skills needed to operate the powered industrial truck safely. Refresher training in relevant topics shall be provided to the operator when:

1. The operator has been observed to operate the vehicle in an unsafe manner
2. The operator has been involved in an accident or near-miss incident
3. The operator has received an evaluation that reveals that the operator is not operating the truck safely
4. The operator is assigned to drive a different type of truck
5. A condition in the workplace changes in a manner that could affect safe operation of the truck
6. Once every 3 years an evaluation will be conducted of each powered industrial truck operator's performance.

Safe Operating Procedures (SOP) & Rules

- Only authorized and trained personnel will operate PITs.
- All PITs will be equipped with a headache rack, fire extinguisher, rotating beacon, back-up alarm and seat belts. Seat belts will be worn at all times by the Operator.
- The operator will perform daily pre- and post-trip inspections.

- 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) will be reported for immediate repair or have the PIT taken "Out of Service".
- Operators will follow the proper recharging or refueling safety procedures.
- Loads will be tilted back and carried no more than 6 inches from the ground. Loads that restrict the operator's vision will be transported backwards.
- PITs will travel no faster than 5 mph or faster than a normal walk.
- PIT Operators in high lift areas will wear hard hats..
- Operator will sound horn and use extreme caution when meeting pedestrians, making turns and cornering.
- Passengers may not ride on any portion of a PIT. Only the operator will ride PITs. "NO PASSENGERS" decals will be affixed on all PITs.
- If PITs are used as a man lift, an appropriate man lift platform (cage with standard rails and toe-boards) will be used.
- Aisle will be maintained free from obstructions, marked and wide enough (six foot minimum) for vehicle operation.
- Lift capacity will be marked on all PITs. Operator will assure load does not exceed rated weight limits.
- When un-attended, PITs will be turned off, forks lowered to the ground and parking brake applied.
- All PITs (with exception of pallet jacks) will be equipped with a multi-purpose dry chemical fire extinguisher. (Minimum rating; 2A: IOB:C)
- Operators are instructed to report all accidents, regardless of fault and severity, to Management. Management will conduct an accident investigation.
- When loading rail cars and trailers, dock plates will be used. Operators will assure dock plates are in good condition and will store on edge when not in use.
- Rail cars and trailers will be parked squarely to the loading area and have wheels chocked in place. Operators will follow established Docking/Un-Docking Procedures.

Changing and Charging Storage Batteries

- Battery charging installations shall be located in areas designated for that purpose.
- Facilities shall be provided for flushing and neutralizing spilled electrolyte, for fire protection, for protecting charging apparatus from damage by trucks, and for adequate ventilation for dispersal of fumes from gassing batteries.
- A conveyor, overhead hoist, or equivalent material handling equipment shall be provided for handling batteries.

- Reinstalled batteries shall be properly positioned and secured in the truck.
- A carboy tilter or siphon shall be provided for handling electrolyte.
- When charging batteries, acid shall be poured into water; water shall not be poured into acid.
- Trucks shall be properly positioned and brake applied before attempting to change or charge batteries.
- Care shall be taken to assure that vent caps are functioning. The battery (or compartment) cover(s) shall be open to dissipate heat.
- Smoking is prohibited in the charging area.
- Precautions shall be taken to prevent open flames, sparks, or electric arcs in battery charging areas.
- Tools and other metallic objects shall be kept away from the top of uncovered batteries.

Operations

- If at any time a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition.
- Trucks shall not be driven up to anyone standing in front of a bench or other fixed object.
- No person shall be allowed to stand or pass under the elevated portion of any truck, whether loaded or empty.
- Unauthorized personnel shall not be permitted to ride on powered industrial trucks.
- Arms or Legs shall not be placed between the uprights of the mast or outside the running lines of the truck.
- When a powered industrial truck is left unattended, load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off, and brakes set. Wheels shall be blocked if the truck is parked on an incline.
- A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, or platform or freight car. Trucks shall not be used for opening or closing freight doors.
- There shall be sufficient headroom under overhead installations, lights, pipes, sprinkler system, etc.
- An overhead guard shall be used as protection against falling objects. It should be noted that an overhead guard is intended to offer protection from the impact of small packages, boxes, bagged material, etc., representative of the job application, but, not to withstand the impact of a falling capacity load.
- A load backrest extension shall be used whenever necessary to minimize the possibility of the load or part of it from falling rearward.

- Trucks shall not be parked so as to block fire aisles, access to stairways, or fire equipment.

Traveling

- Ail traffic regulations shall be observed, including authorized speed limits. A safe distance shall be maintained approximately three truck lengths from the truck ahead, and the truck shall be kept under control at all times.
- The right of way shall be yielded to ambulances, fire trucks, or other vehicles in emergency situations.
- Other trucks traveling in the same direction at intersections, blind spots, or other dangerous locations shall not be passed.
- The driver shall be required to slow down, and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.
- Railroad tracks shall be crossed diagonally wherever possible. Parking closer than 8 feet from the center of railroad tracks is prohibited.
- The driver shall be required to look in the direction of, and keep a clear view of the path of travel.
- Grades shall be ascended or descended slowly. When ascending or descending grades in excess of 10 percent, loaded trucks shall be driven with the load upgrade. On all grades the load and load engaging means shall be tilted back if applicable, and raised only as far as necessary to clear the road surface.
- Under all travel conditions the truck shall be operated at a speed that will permit it to be brought to a stop in a safe manner.
- Stunt driving and horseplay shall not be permitted.
- The driver shall be required to slow down for wet and slippery floors.
- Dock board or bridge plates, shall be properly secured before they are driven over. Dock board or bridge plates shall be driven over carefully and slowly and their rated capacity never exceeded.
- Running over loose objects on the roadway surface shall be avoided.
- While negotiating turns, speed shall be reduced to a safe level by means of turning the hand steering wheel in a smooth, sweeping motion. Except when maneuvering at a very low speed, the hand steering^g wheel shall be turned at a moderate, even rate.

Loading

- Only stable or safely arranged loads shall be handled. Caution shall be exercised when handling off-center loads, which cannot be centered.
- Only loads within the rated capacity of the truck shall be handled.
- The long or high (including multiple-tiered) loads, which may affect capacity, shall be adjusted.
- Trucks equipped with attachments shall be operated as partially loaded trucks when not handling a load.
- A load engaging means shall be placed under the load as far as possible; the mast shall be carefully tilted backward to stabilize the load.
- Extreme care shall be used when tilting the load forward or backward, particularly when at high angles. Tilting forward with load engaging means elevated shall be prohibited except to pick up a load. An elevated load shall not be tilted forward except when the load is in a deposit position over a rack or stack. When stacking a load, use only enough backward tilt to stabilize the load that is being stacked.

Fueling Safety

- Fuel tanks shall not be filled while the engine is running. Spillage shall be avoided.
- Spillage of oil or fuel shall be carefully washed away or completely evaporated and the fuel tank cap replaced before restarting engine.
- No truck shall be operated with a leak in the fuel system until the leak has been corrected.
- Open flames shall not be used for checking electrolyte level in storage batteries or gasoline level in fuel tanks.

Maintenance of Powered Industrial Trucks

- Any power-operated industrial truck not in safe operating condition shall be removed service. Authorized personnel shall make all repairs.
- Those repairs to the fuel and ignition systems of industrial trucks, which involve fire hazards, shall be conducted only in locations designated for such repairs.
- Trucks in need of repairs to the electrical system shall have the battery disconnected prior to such repairs.
- Only parts equivalent as to safety with those used in the original design shall replace all parts of any such industrial truck requiring replacement.
- Industrial trucks shall not be altered so that the relative positions of the various parts are different from what they were when originally received from the manufacturer, nor shall they be altered either by the addition of extra parts not provided by the manufacturer or by the elimination of any parts. Additional counter-weighting of fork trucks shall not be done unless approved by the truck manufacturer.

- Industrial trucks shall be examined before being placed in service, and shall not be placed in service if the examination shows any condition adversely affecting the safety of the vehicle. Such examination shall be made at least daily. Where industrial trucks are used on a round-the-clock basis, they shall be examined prior to use each shift. Defects when found shall be immediately reported and corrected.
- When the temperature of any part of any truck is found to be in excess of its normal operating temperature, thus creating a hazardous condition, the vehicle shall be removed from service and not returned to service until the cause for such overheating has been eliminated.
- Industrial trucks shall be kept in a clean condition, free of lint, excess oil, and grease. Noncombustible agents should be used for cleaning trucks. Low flash point (below 100 deg. F.) solvents shall not be used. High flash point (at or above 100 deg. F.) solvents may be used.

Safe Operation Procedure for Charging LPG Tank

1. No Smoking.
2. Move LPG PIT outside for refueling.
3. Turn off PIT.
4. LPG tanks will be removed in the following order:
 - shut off service valve
 - disconnect tank from hose
 - unbuckle and remove tank from bracket
5. LPG tanks will be replaced in to following order:
 - place tank in bracket and re-buckle
 - reconnect hose to tank and tighten firmly
 - open valve slowly and assure proper seal

NOTE: Federal Law Prohibits dispensing an improper fuel type into any Vehicle or into a non-approved fuel container.

In Case of LPG Leaks or Tank Rupture

1. DO NOT start or move the PIT.
2. If fuel hose is leaking, Close valve immediately and place PIT "Out of Service" until repaired.
3. If tank ruptures, warn other, immediately leave the area (at least 50 feet) and notify Management. Do not re-enter the area until cleared by Management.

Powered Industrial Truck Pre-Use Checklist

A check of the following items (as applicable) is to be conducted by the operator prior to use each shift.

- Lights
- Horn
- Brakes
- Leaks
- Warning Beacon
- Backup Warning Alarm
- Fire Extinguisher

If any deficiencies are noted, the unit is to be placed OUT OF SERVICE until the problem has been corrected. Additionally, it is the operator's responsibility to notify the immediate supervisor and fill out a maintenance request.

C. BACK SAFETY

1. Don't try to lift a heavy object that may be too heavy or too bulky without assistance. (This usually applies to boxes, office equipment, and receptacles holding trash).
2. When carrying anything make sure you can clearly see where you are going.
3. Use the following techniques for lifting:
 - Place your feet close to the object about shoulder width apart and center yourself over the load.
 - Bend at the knees to grasp the object and keep your back straight.
 - Keep the object close to the body and lift straight up. Let your legs do the work, not your back.
 - Avoid overreaching or stretching to pick up or sit down a load.
 - Try to lift objects from between knee and shoulder height,
4. Do not twist or turn your body once you have made the lift. Use your feet to turn.
5. Always push, not pull an object when possible.

SECTION V: OFFICE SAFETY

A. OFFICE FURNITURE AND EQUIPMENT

Whenever possible, arrange filing cabinets side-by-side and bolt them together. For single cabinets, do not overload the upper drawers, and have only one drawer open at a time. Close desk and file cabinet drawers when they are not in use. Never leave an open drawer unattended.

Avoid placing cabinets and files so that open drawers block passageways. Never stack separate two-drawer filing cabinets unless they are designed to be stacked and can be fastened together.

Do not stack bookcases or file cabinets on top of tables or desks unless designed for such use. Even if bolted to a wall, they may fail if the table is moved because of excessive unsupported weight.

Large files, cabinets and bookshelves should be bolted to the wall, particularly in libraries or file rooms. Never attempt to move heavy file cabinets without proper assistance.

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.

Sharp burrs on metal furniture and splintered edges on wooden furniture should be repaired or replaced. Glass desktops are not recommended and should not be replaced when broken.

Keep furniture in proper repair. Repair sticky drawers, replace broken casters, and replace warped, cracked or broken seats and chair. Warped, cracked, or broken chair mats, which create a stumbling hazard, should be replaced.

Use typewriter stands or platforms designed to carry the weight and size of the machine. Use caution when pulling out a spring-loaded typewriter platform from the desk. Never use such a platform for anything other than its intended purpose.

Avoid storing heavy objects above eye level in the office.

Secure pictures and wall hangings with the proper fasteners.

Desk chairs should be stable and level. You should not tilt back or put your feet on top of the desk.

Make aisles wide enough for easy passage and always keep them clear of obstructions.

B. MECHANICAL DEVICES

Keep items such as paper clips, thumbtacks, rubber bands and pencils off the floor. Such items should be kept in containers in the desk, not loose in drawers.

Remove staples with a staple puller, and dispose of used staples properly.

Use a moistener to seal envelopes in order to avoid both mouth cuts and germs. Avoid cuts by picking up an individual sheet of paper at the corner, not at the side. Exercise caution when turning book pages or going through files.

Pass scissors handle first, blades together and keep them where they cannot fall.

Handle sharpened pencils carefully. Do not place pointed objects upright in a container or upright in a pocket. Pocket protectors for carrying pencils and pens are recommended.

Use staplers and paper cutters with care. Never overload or force them. Paper cutters should be left in a closed and latched position when not in use.

C. ELECTRICAL EQUIPMENT

Arrange to have worn electrical cords replaced promptly by qualified personnel. Never attempt electrical repairs unless you are qualified to do the work.

Keep walking areas clear of telephone and electrical cords. Tape down cords that temporarily cross sideways and walkways.

Electrical outlets shall not be overloaded. Bear this in mind when using portable electric heaters. Use only properly grounded three-pronged plugs or Underwriters Laboratories (UL) approved double-insulated appliances.

Dry your hands thoroughly before plugging, unplugging, or operating electrical equipment.

Turn off the power overnight for copiers, coffee machines, desk lamps and other electrical devices as required to meet the building safety requirements. Always turn off and unplug portable electric heaters when leaving the office.

Where a microwave oven or other radiation device may be in use, signs announcing the possibility of this activity must be posted at all entrances to the area.

Keep coffee and other beverages away from electrical equipment such as copy machines.

Paper shredders should be operated with extreme caution. Keep ties, dangling jewelry and loose clothing from machines by standing to the side of the machine. Always stand in a position that is accessible to the "off" switch. Always turn off after each use and do not force paper. Do not attempt to un-jam the shredder unless the power is turned off.

Unplug electric staplers and pencil sharpeners before opening them for cleaning or repair.

Replace burned-out light bulbs or fluorescent bulbs promptly.

D. FLAMMABLE AND HAZARDOUS MATERIALS

Keep all flammable materials away from possible ignition sources and in approved containers, with the contents labeled for identification.

Do not use aerosol sprays, cleaners or insect repellents near ignition sources.

Keep portable electric heater away from furniture and other flammable materials. Never block forced-air heater outlets.

Do not allow paper or other flammable material to accumulate behind copy machines.

Do not use solvents to clean a copy machine, printer or tape drive until it has cooled.

Spilled liquid should be identified and removed immediately. Follow recommended safe-handling procedures if warranted.

Fumes or gases generated from equipment, such as ammonia gas from blue line reproduction machines, must be properly ventilated or exhausted as required.

E. DOORS, WALKWAYS

Open all doors slowly. If a door opens toward you, approach it from the side. When working alone, never carry items that prevent you from opening a door easily with a free hand.

Use the handrails on stairs.

Never run on stairs and always keep at least one hand free.

Keep doors and hallways clear of boxes and other obstructions.

Clearly mark all exits and replace burned-out light bulbs in exit signs promptly.

Report or tack down loose or torn carpeting.

Approach blind corners with caution.

Remove snow and ice from walkways between office buildings. Apply salt or sand to icy walkways. Always use caution when walking on slippery surfaces, especially when wearing leather-soles shoes.

SECTION VI: FIRE PREVENTION PLAN

A. PURPOSE

OSHA'S Fire Prevention Plan regulation, found at 29 CFR 1910.38(b), requires Prime Marine Services, Inc. to have a written fire prevention plan (FPP). This plan applies to all operations in our Company where employees may encounter a fire.

This FPP is in place at this company to control and reduce the possibility of fire and to specify the type of equipment to use in case of fire. This plan addresses the following issues:

- * Major workplace fire hazards and their proper handling and storage procedures.
- * Potential ignition sources for fires and their control procedures.
- * The type of fire protection equipment or systems that can control a fire involving them.
- * Regular job titles of personnel responsible for maintenance of equipment and systems installed to prevent or control ignition of fires and for control of fuel source hazards.

Under this plan, our employees will be informed of the plan's purpose, preferred means of reporting fires and other emergencies, types of evacuations to be used in various emergency situations, and the alarm system. The plan is closely tied to our emergency action plan where procedures are described for emergency escape procedures and route assignments, procedures to account for all employees after emergency evacuation has been completed, rescue and medical duties for those employees who perform them. Please see the emergency action plan for this information.

The Safety Director, Randall Jones, is the program coordinator, who has overall responsibility for the plan. Day to day adherence to these guidelines is the responsibility of the Safety Liaisons. The written program is part of the overall Safety Program and copies are available from the Safety Liaisons. The Safety Director, Safety Liaisons, and other appropriate personnel will review and update the plan as necessary.

The FPP communicates to employees, policies and procedures to follow when fires erupt. This written plan is available, upon request, to employees, their designated representatives, and any OSHA officials who ask to see it.

If after reading this program, you find that improvements can be made, please contact the Safety Liaison. We encourage all suggestions because we are committed to the success of our emergency action plan. We strive for clear understanding, safe behavior, and involvement in the program from every level of the company.

B. SAFETY MANAGER and SAFETY LIAISON RESPONSIBILITIES

The Safety Manager along with Prime Marine Services, Inc. designated Safety Liaisons is responsible for the following activities. They shall:

1. Develop a written fire prevention plan for regular and after-hours work conditions.
2. Immediately notify the local fire or police departments, and the building owner/superintendent in the event of a fire affecting the office. The local fire departments are to be notified at each respective location.
3. Integrate the fire prevention plan with the existing general emergency plan covering the building occupied.
4. Distribute procedures for reporting a fire, the location of fire exits, and evacuation routes to each employee.
5. Conduct drills to acquaint the employees with fire procedures, and to judge their effectiveness.
6. Satisfy all local fire codes and regulations as specified.
7. Train designated employees in the use of fire extinguishers and the application of medical first-aid techniques.
8. Keep key management personnel home telephone numbers in a safe place in the office for immediate use in the event of a fire. Distribute a copy of the list to key persons to be retained in their homes for use in communicating a fire occurring during non-work hours.
9. Decide to remain in or evacuate the workplace in the event of a fire.
10. If evacuation is deemed necessary, the safety Liaison ensures that:
 - * All employees are notified and a head count is taken to confirm total evacuation of all employees.
 - * When practical, equipment is placed and locked in storage rooms or desks for protection.
 - * The building owner/superintendent is contacted, informed of the action taken, and asked to assist in coordinating security protection.
 - * In locations where the building owner/superintendent is not available, security measures to protect employee records and property are arranged as necessary.

In addition, the safety Liaison is responsible for duties unique to this facility.

- * List responsibilities unique to each facility.

Varies Depending on Facility

C. WORKPLACE FIRE HAZARDS

It is the intent of this company to assure that hazardous accumulations of combustible waste materials are controlled so that a fast developing fire, rapid spread of toxic smoke, or an explosion will not occur. Employees are to be made aware of the hazardous properties of materials in their workplaces, and the degree of hazard each poses.

* What fire hazards exist in each work area at each location?

Varies by location based on specific job being done.

Fire prevention measures must be developed for all fire hazards found. Once employees are made aware of the fire hazards in their work areas, they must be trained in the fire prevention measures developed and use them in the course of their work. For example, oil soaked rags must be treated differently than general paper trash in office areas. In addition, large accumulations of waste paper or corrugated boxes, etc., can pose a significant fire hazard. Accumulations of materials that can cause large fires or generate dense smoke that are easily ignited or may start from spontaneous combustion are the types of materials with which this fire prevention plan is concerned. Matches may easily ignite such combustible materials, welder's sparks, cigarettes and similar low-level energy ignition sources. It is the intent of this company to prevent such accumulation of materials.

* What steps are taken to prevent accumulation of materials?

Based on job-by-job basis and the work being done on each location.

Certain equipment is often installed in workplaces to control heat sources or to detect fuel leaks. An example is a temperature limit switch often found on deep-fat food fryers found in restaurants. There may be similar switches for high temperature dip tanks, or flame failure and flashback arrester devices on furnaces and similar heat producing equipment. If these devices are not properly maintained or if they become inoperative, a definite fire hazard exists. Again employees and supervisors should be aware of the specific type of control devices on equipment involved with combustible materials in the workplace and should make sure, through periodic inspection or testing, that these controls are operable. Manufacturer's recommendations should be followed to assure proper maintenance procedures.

D. POTENTIAL IGNITION SOURCES

Flammable or combustible materials may not ignite on their own without an external source of ignition. The following procedures are used to control known ignition sources at Prime Marine Services, Inc.

List sources and control measures:

Based on job-by-job situation and the work being performed on each location.

E. FIRE PROTECTION EQUIPMENT

Fire protection equipment, selected and purchased by upper management, in use at Prime Marine Services, Inc. includes type ABC extinguishers located in various places in each facility (refer to building floor plan for locations) to protect from the various types of fire hazards. These extinguishers are appropriate for Class A, B, and C fires that would be anticipated at Prime Marine Services, Inc. facilities.

FIRE EXTINGUISHERS

1. Properly maintained firefighting equipment is an essential part of fire control; such equipment should conform to the requirements of Underwriters Laboratory.
2. Firefighting equipment shall be located in the most accessible places (OSHA 1910.157) in a bracket and should be clearly marked with a sign above eye level.
3. All Prime Marine Services, Inc. vehicles shall be equipped with a fire extinguisher.
4. A monthly visual check is to be performed by the Safety Director or Safety Instructor at each location to give reasonable assurance that the extinguisher is fully charged and operable.

This inspection ensures that the extinguisher:

- * Is in its designated place
- * Has not been actuated
- * Has not been tampered with
- * Has no obvious physical damage
- * Has no external corrosion
- * Has no other impairments and is properly tagged

If the extinguisher fails any of the above, full maintenance is to be performed.

In addition, the following are also present to control fires. They are located at various places throughout the plant as indicated on the building floor plan as part of this FPP (alarm systems, hoses, sprinkler systems).

To be determined on the needs of each location and the job being performed on each location.

F. MAINTENANCE OF FIRE PROTECTION EQUIPMENT

Once hazards are evaluated and equipment is installed to control them, that equipment must be monitored on a regular basis to make sure it continues to function properly. An outside vendor has been contracted to provide maintenance, repair, and annual inspection services. These individuals follow strict guidelines for maintaining the equipment (if applicable).

The following provides guidance on inspection and maintenance of all in-house portable fire extinguishers:

1. Thorough maintenance shall be performed at regular intervals but never less than yearly or when indicated by an inspection. This is intended to ensure that an extinguisher will operate effectively and safely. It includes a thorough examination and any necessary repair, recharging or replacement by a certified technician.
2. Extinguishers shall be hydrostatically tested in intervals not exceeding 12 years or whenever there is evidence of corrosion, welding, physical or mechanical damage.
3. A spare extinguisher of equal size and capability shall immediately replace extinguishers removed from designated locations for recharge or maintenance purposes.
4. Each fire extinguisher shall have a durable tag securely fastened or label attached to the unit, which indicates when the monthly inspection and regular maintenance is performed.
5. Records of maintenance, inspection and hydrostatic testing shall be maintained for 5 years.

G. GENERAL PREVENTION AND PROTECTION

1. Employees are not expected to expose themselves to any unnecessary risk or injury associated with extinguishing a fire.
2. Access to all available firefighting equipment will be maintained at all times.
3. All firefighting equipment will be conspicuously located.
4. All firefighting equipment will be visually inspected on a monthly basis and maintained in good operating condition. Defective equipment will be replaced immediately.
5. Electrical wiring and equipment for light, heat, and power purposes will be installed in compliance with applicable requirements and regulations.
6. Smoking will be permitted in designated areas only.
7. Good housekeeping practices shall be utilized as an effective way to prevent fires.
8. Containers shall be provided for the collection and separation of trash, oily rags and other refuse.
9. Exits must be clearly marked by readily visible signs and must be kept free of debris and obstructions.

The following procedures have been developed to eliminate or minimize the risk of fire due to improperly stored or disposed of materials.

1. Only approved metal safety cans may be used to store or transport flammable liquids. The can shall be colored red, with the contents identified in yellow lettering. Containers shall also have the proper: hazard communication label if the contents are not drained completely each day. Containers shall be properly secured when transported.
2. The use of plastic buckets or hoses for draining, sampling or bleeding of hydrocarbons or other flammable or combustible fluids is prohibited.
3. Oily rags shall be placed in covered metal containers until cleaned or disposed of correctly.
4. Gasoline shall never be used as a solvent or cleaning fluid. This applies to any fluid with a flash point normally below ambient temperatures.
5. Paints, primers are usually flammable so their use near open flames or other sources of ignition shall be avoided. Read container labels.
6. A diagram or listing indicating the location of all fire equipment, exits and alarm stations shall be developed for each facility.
7. Whenever employees provide fire-fighting equipment for use, training shall be held at least annually. Hands-on training with equipment is recommended. New field employees shall be given instruction on the use of fire extinguishers within the first week of employment.
8. Fire drills shall be held at least annually to familiarize employees with egress routes and associated safety procedures.
9. Report all fires on Prime Marine Services, Inc. property to your Supervisor immediately.
10. Good housekeeping and equipment maintenance shall be followed.
11. "NO SMOKING" rules are to be strictly enforced in areas marked by signs and other areas where smoking could constitute to a fire hazard.
12. Local management should designate any area subject to contamination by a flammable liquid as a "NO SMOKING" area, and signs to that effect should be installed.
13. Containers of oil, solvent, paint, gasoline, etc. shall be stored in approved, ventilated storage cabinets.
14. All hazardous chemical inventories are to be kept to a minimum.
15. Oil should not be allowed to accumulate on machinery or floors.

16. Monthly inspections are to be conducted by the Safety Liaisons to ensure compliance with fire prevention rules.

H. TRAINING

1. Fire Prevention Plan

At the time of a fire, employees should know what type of evacuation is necessary and what their role is in carrying out the plan. In cases where the fire is large, total and immediate evacuation of all employees is necessary. In smaller fires, a partial evacuation of nonessential employees with a delayed evacuation of others may be necessary for continued facility operation. We must be sure that employees know what is expected of them during a fire to assure their safety.

Training, conducted on initial assignment (new or transferred employees), includes:

- ◆ What to do if employee discovers a fire
- ◆ Demonstration of alarm, if more than one type exists
- ◆ How to recognize fire exits
- ◆ Evacuation routes
- ◆ Assisting employees with disabilities
- ◆ Measures to contain fire (e.g., closing office doors, windows, etc. in immediate vicinity)
- ◆ Head count procedures (see Emergency Action Plan for details)
- ◆ Return to building after the "all-clear" signal

Documentation of completion will be evidenced on the Safety Orientation Checklist. All employees will receive annual refresher training in safety meetings or dedicated training sessions followed by a fire drill. This training shall be documented through sign-in sheets.

If the Safety Director/Instructor has reason to believe an employee does not have the understanding required, the employee must be retrained.

Because failure to comply with Prime Marine Services, Inc. policy concerning fire prevention can result in OSHA citations and fines as well as employee injury, an employee who does not comply with this program will be disciplined.

2. Fire Prevention Equipment

The Safety Director provides training for each employee who is required to use fire prevention equipment. Employees shall not use fire prevention equipment without appropriate training. Training, before an individual is assigned responsibility to fight a fire, includes:

- * Types of fires
- * Types of fire prevention equipment
- * Location of fire prevention equipment

- * How to use fire prevention equipment
- * Limitations of fire prevention equipment
- * Proper care and maintenance of assigned fire prevention equipment

Employees must demonstrate an understanding of the training and the ability to use the equipment properly before they are allowed to perform work requiring the use of the equipment.

If the Safety Director has reason to believe an employee does not have the understanding or skill required, the employee must be retrained.

Documentation of training and understanding of training shall be completed after each session.

We have attached to this plan floor plans, lists, samples, or procedures that ensure better understanding of our written program.

TYPES OF FIRES AND EXTINGUISHING AGENTS

<u>CLASS</u>	<u>CHARACTERISTICS</u>	<u>EXTINGUISHING AGENT</u>
A	Ordinary Combustibles- Wood, paper, textiles, plastics, cardboard, etc.	Water, multipurpose dry chemical, foam, light water (AFFF).
B	Hydrocarbons-Liquids or gases, greases.	Multipurpose dry chemical, light water, dry chemical, CO ₂ , Halon.
C	Energized Electrical Equipment-Danger of electrical shock is present. (Electrical insulation materials are Class A).	Multipurpose dry chemical ,dry chemical, CO ₂ , Halon.
D	Combustible Metals- Magnesium, sodium. (Some lawnmower and VW engines will burn. These take lots of heat to start and lots of cooling to stop).	Special agents.

SECTION VII: OCCUPATIONAL HEALTH PROGRAMS

Occupational Health is the anticipation, recognition, evaluation and control of any environmental factors and stress arising in the workplace, which may cause sickness or significant discomfort among workers.

Evaluation of the risks associated with those hazards is:

- *Engineering
- * Substitution (use of a less hazardous material)
- * Administrative (e.g., work practices, work schedules)
- *Personal Protective Equipment (PPE)

A. VENTILATION

Ventilation is often used to reduce employee exposures to airborne contaminants. It is also useful in preventing the accumulation of flammable or explosive concentrations of gases, vapors or dusts. There are two major types of ventilation:

- 1) Dilution or general ventilation; and
- 2) Local exhaust.

With dilution ventilation, air flowing into and through a workroom "dilutes" contaminants released. Dilution ventilation can be used when

- 1) The release rate of the contaminant is fairly low and uniform;
- 2) Distance from workers to contaminant generation source is sufficient to provide dilution to acceptable levels; and
- 3) Contaminants have low toxicity.

Local exhaust systems capture contaminants at their source before they can be released into the work environment. Two major advantages to local exhaust ventilation are:

- 1) They remove contaminants rather than just dilute them, and
- 2) These systems require significantly less airflow than dilution ventilation systems.

B. HAZARD COMMUNICATION PROGRAM

Purpose

Our company is complying with the requirements of OSHA's Hazard Communication Standard for construction by compiling a list of hazardous chemicals, using MSDSs, ensuring that containers are labeled, and training our workers present at a given construction site. In addition, we provide this same information to subcontractors involved in a specific project so that they may provide this information and train their employees. The person in charge of our program is Randall Jones, Safety Director. Randall Jones is located in our Corporate Office at 312 S. Bernard Rd., Broussard, Louisiana.

This program applies to all work operations in our company where employees may be exposed to hazardous substances under normal working conditions or during an emergency situation.

The Safety Director, Randall Jones is the program coordinator, and has overall responsibility for the program. The Program Coordinator will review and update the program, as necessary. Copies of the written program may be obtained from Randall Jones in his office in Broussard LA. All employees, or their designated representatives, can obtain further information on this written program, the hazard communication standard, applicable MSDSs, and chemical information lists from Randall Jones under this program, our employees will be informed of the contents of the Hazard Communication Standard, the hazardous properties of chemicals with which they work, safe handling procedures, and measures to take to protect themselves from these chemicals. Our employees will also be informed of the hazards associated with non-routine tasks, such as the cleaning of reactor vessels and the hazards associated with chemicals in unlabeled containers and pipe. A list of the hazardous chemicals and labels used to identify those chemicals will be found in our employee training Manual, which specifically list chemicals by name.

If after reading this program, you find that improvements can be made, please contact the Safety Director, Randall Jones. We encourage all suggestions because we are committed to the success of our written hazard communication program. We strive for clear understanding, safe behavior, and involvement in the program from every level of the company.

Hazard Evaluation Procedures

Our chemical inventory is a list of hazardous chemicals known to be present in our workplace. Anyone who comes into contact with the hazardous chemicals on the list needs to know what those chemicals are and how to protect him or herself. That is why it is so important that hazardous chemicals are identified, whether they are found in a container or generated in work operations (for example, welding fumes, dusts, and exhaust fumes). The hazardous chemicals on the list can cover a variety of physical forms including liquids, solids, gases, vapors, fumes, and mists. Sometimes hazardous chemicals can be identified using purchase orders. Identification of others requires an actual inventory of the facility. We take a physical inventory of all chemicals to know what we have and to make sure all chemicals are properly labeled in their container. Randall Jones updates the inventory as necessary in each district office. The inventory list is kept in each district office as well as a copy is kept with our corporate office in Lafayette. The Safety Director, Randall Jones, keeps the chemical inventory list, along with related work practices used in our facility located in Broussard, Louisiana where it is accessible during work hours.

Upon arriving at a job site the supervisor on the job gets with the location manager and reviews the job, the hazards of the job, and finds out what chemicals may have been previously used in

that area. He also asks and locates the MSDS book for that facility and lets the crew know of its location. The crew supervisor will get a list of any chemical used on the job so that he can make his crew aware of any hazards on location before they start the job. The company does not manufacture any chemicals and, therefore, does not make any hazard determinations. After the chemical inventory is compiled, it serves as a list of every chemical for which an MSDS must be maintained. The chemical manufacturers are responsible for developing MSDS sheet on each chemical they provide to Prime Marine Services, Inc.

Material Safety Data Sheets (MSDSs)

The MSDS we use are fact sheets for chemicals, which pose a physical, or health hazard in the workplace. MSDS provide our employees with specific information on the chemicals they use. The supervisor is responsible for obtaining/maintaining the MSDS at each one of our facilities. Randall Jones will contact the chemical manufacturer or vendor if additional research is necessary. Randall Jones must clear all new procurement of chemicals for the company.

The material safety data sheets are kept at the Corporate Office. Employees can obtain access to them by checking with the Supervisor or by looking near the time clock in each location. If MSDS sheets are not received at time of first shipment then:

- a. Inform all employees that the chemical is not to be used until we receive additional information on this product.
- b. Contact the company you purchased the product from and have them either fax a copy, e mail a copy or have someone hand deliver a copy.
- c. Prime Marine Services, Inc. will have a MSDS sheet on every chemical used or stored in their facilities.

Labels and Other Forms of Warning

Labels list at least the chemical identity, appropriate hazard warnings, and the name and address of the manufacturer, importer or other responsible party. The chemical identity is found on the label, the MSDS, and the chemical inventory. Therefore, the chemical identity links these three Sources of information. The chemical identity used by the supplier may be a common or trade name, or a chemical name. The hazard warning is a brief statement of the hazardous effects of the chemical (i.e., "flammable," or "causes lung damage"). Labels frequently contain other information, such as precautionary measures (i.e., "do not use near open flame"), but this information is provided voluntarily by our company and is not required by the rule. Our labels are legible and prominently displayed, though their sizes and colors can vary. Employer or employees shall not remove or deface labels on incoming containers of hazardous chemicals.

The supervisors in each location are responsible for ensuring that all hazardous chemicals in each plant's containers are properly labeled and updated, as necessary. The supervisors also ensure that newly purchased materials are checked for labels prior to use.

The supervisors in each location are responsible for ensuring the proper labeling of any shipped containers.

The supervisors in each location and the local Safety Director will refer to the corresponding MSDS to assist employees in verifying label information and answer any questions they may have. The shop foreman at each location is responsible for changing damaged labels at his facility.

A poster is displayed to inform employees about the hazard communication standard. The poster is hung near the bulletin board in the shop area.

The labeling system used in our warehouse and shipped containers is a combination of words, pictures, symbols or combinations thereof. Labels will be in English since all of our employees are English speaking. In the event that we have employees that are non-English speaking we will do the training in their language and we will use labels that are in both English and in the language of our non-English speaking personnel.

If employees transfer chemicals from a labeled container to a portable container that is intended only for their IMMEDIATE use, no labels are required on the portable container as long as the container is in his possession.

The following procedures are used to review and update label information when necessary and to ensure that labels that fall off or become unreadable are immediately replaced:

- a. Any container that does not have a proper tag when seen will be properly identified by markings on the drum, identifying the material by sight, or by purchase order.
- b. Do not pick up any label or markings that are lying on the ground and place on any container containing chemicals. All chemicals must be properly identified by purchasing, operations, or by a vendor before putting any label on the product.

Training

Everyone who works with or is potentially "exposed" to hazardous chemicals will receive initial training and any necessary retraining on the Hazard Communication Standard and the safe use of those hazardous chemicals by the Safety Director/Instructor. "Exposure" means "an employee is subjected to a hazardous chemical in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption, etc.) and includes potential (e.g., accidental or possible) exposure." Whenever a new hazard is introduced or an old hazard changes, additional training is provided. All new hires will be trained at their initial assignment of hazardous chemicals in their work area.

Employers shall provide employees and new hires at their initial assignment effective information and training on hazardous chemicals in their work area along with:

1. Requirements of the program.
2. Identifying any areas of operations area where hazardous chemicals are present.
3. Location of written hazard communication program, a listing of hazardous chemicals present and MSDS sheets.

Information and training is a critical part of the hazard communication program. We train our employees to read and understand the information on labels and MSDSs sheets, determine how the information can be obtained and used in their own work areas, and understand the risks of exposure to the chemicals in their work areas as well as the ways to protect themselves. We want our employees to be able to know how to take care of themselves and the people around them. They can do a better job of this if they can:

- a. Know methods and observations that may be used to detect the presence or release of hazardous chemicals by use of monitoring devices, visual appearance or odor.
- b. The physical and health hazards of chemicals in the work area.
- c. Know what protection measures to be utilized to prevent exposure, appropriate work practice, emergency procedures a proper PPE to be used.
- d. Know the details of the hazard communication program, explanation of the labeling system and the MSDS and how employees can obtain and use the appropriate hazard information.

Our goal is to ensure employee comprehension and understanding including being aware that they are exposed to hazardous chemicals, knowing how to read and use labels and MSDSs, and appropriately following the protective measures we have established. We ask our employees to ask our Supervisors and Safety Director questions. As part of the assessment of the training program, the safety director asks for input from employees regarding the training they have received, and their suggestions for improving it. In this way, we hope to reduce any incidence of chemical source illnesses and injuries.

All employees receive training for hazard communication.

Training Content

The training plan emphasizes these elements:

- Summary of the standard and this written program, including what hazardous chemicals are present, the labeling system used, and access to MSDS information and what it means.
- Chemical and physical properties of hazardous materials (e.g., flash point, reactivity) and methods that can be used to detect the presence or release of chemicals (including chemicals in unlabeled pipes).
- Physical hazards of chemicals (e.g., potential for fire, explosion, etc.).
- Health hazards, including signs and symptoms of exposure, associated with exposure to chemicals and any medical condition known to be aggravated by exposure to the chemical.

Procedures to protect against hazards (e.g., engineering controls; work practices or methods to assure proper use and handling of chemicals; personal protective equipment required, and its proper use, and maintenance; and procedures for reporting chemical emergencies).

The procedure to train new employees at the time of their initial assignment is a job for our local shop foreman. We train employees when a new hazard is introduced by sending literature with the product, having the local sales representative meet with our personnel, and receiving a letter or memo from our safety director. A meeting discussing our safety plan in much more detail is held once a year and is put on by the safety director.

The instructor and the local manager that the employee took and successfully completed a training class in hazardous communication sign certificates. The employees fill out a roster that they took the class and it is kept by the safety director.

Hazards of Non-routine Tasks

When employees are required to perform any of the following hazardous no routine tasks including cleaning of pipe and tanks that have the potential to expose workers to hazardous chemicals, we inform employees of these hazards by:

- a. Holding a meeting with the local manager, the local shop foreman and the employees that will be on the job.
- b. Reviewing MSDS sheets on possible hazardous chemicals they may be exposed to.

- c. Have the crew supervisor get with local people on the job site and ask what the equipment was used for and what are the possible chemical hazards.

Hazards of Unlabeled Pipes

We inform employees of the hazards of chemicals contained in unlabeled pipes in their work areas by documenting how and who informed employees of the hazards of non-routine tasks and the hazards associated with chemicals contained in unlabeled pipes in their work areas. The information can be either verbal or written but we choose to do it both ways.

Multi-Employer Facility

When contractors or any other employers' workers (i.e., painters, electricians, or plumbers) will be working at this workplace, the safety and health manager, Safety Director, will:

- Provide the other employer(s) with MSDSs for any of our chemicals to which their employees may be exposed in the following manner: The book containing our hazardous communication policy and the MSDS sheets that apply to this job will be set up at the primary location. If there is no primary location then the employees will be given a copy of the book to keep with them.

Each contractor bringing chemicals on-site must provide the Safety Director with the appropriate hazard information on these substances, including the MSDS, the labels used and the precautionary measures to be taken in working with these chemicals.

Where employees must travel between locations during the work shift the written plan will be located at the main job site. If there is no main job site then the employees will keep the written record with them.

Additional Information

All employees, of their designated representatives, can obtain further information on this written program, the hazard communication standard, applicable MSDS, and chemical information lists from their Supervisor or Safety Director. When an employee travels to a job site he may have to take a hazard communication program there. Should the program not be available, at the site then one will be sent with the employee.

Non-Speaking English employees

All training and labels will be done in English and in the language of any non-English-speaking employees. The labels will be legible in both English and in the language of our non-English-speaking employees. Currently all of our employees are English speaking.

Employee information, training, and documentation

Prime Marine Services, Inc. shall provide employees and new hires at their initial assignment effective information and training on hazardous chemicals in their workplace. We shall continue

to monitor our employees and should we feel that the employee's competency level is not acceptable, Prime Marine Services, Inc. will require additional training for that employee.

Prime Marine Services, Inc. shall provide to the employee all the requirements of the Hazardous Communication program. We will identify those areas where hazardous chemicals are present. In those areas we will also identify the hazardous materials present and provide them training in how to read MSDS sheets to provide them with additional training for their safety. The employee will be shown the area that the MSDS book is located and how to use the book. We will review the chemicals in the MSDS book.

Prime Marine Services, Inc. will show the employee methods and observations that may be used to detect the presence or release of hazardous chemicals by use of monitoring devices, visual appearance or odor. The employee will be introduced to the chemicals in his work area and the physical and health hazards of chemical sin the work area.

Each employee will be shown the proper PPE to use for their protection, how to use this equipment, how to clean the equipment and the proper storage of this equipment. The employee will be instructed in the proper method for using the chemicals involved and what dangers to expect from the use of these chemicals. Using the appropriate work practices should minimize the risk to our employees but our training program will train employees in the proper response to take in the event of an emergency.

C. MEDICAL SURVEILLANCE

As stated in the company's Safety Program, "employees exposed to potential health hazards on the job shall be given periodic physical examinations". The Safety Manager shall determine health hazards. The frequency and scope of the examinations shall be examined periodically.

In addition to the general examination program, supplemental medical surveillance may be required based upon actual workplace exposures. Examples include respirator qualification and noise.

Employee participation in these programs is to be based on appropriate exposure monitoring, regulatory requirements.

D. RESPIRATORY PROTECTION

Respiratory protection is designed to protect employees from hazardous levels of airborne contaminants. Respirator use may be necessary in situations where engineering controls are not feasible or until they can be installed for non-routine operations.

Prime Marine Services, Inc. requires that all personnel exposed to danger from inhalation of harmful airborne contaminants wear an appropriate respirator. The purpose is to prevent respiratory-related injuries, illnesses, and deaths.

In the control of those occupational diseases caused by breathing air contaminated with harmful dust, fogs, fumes, mists, gases, smokes, sprays or vapors, the primary objective shall be to prevent atmospheric contamination if feasible through implementation of accepted engineering control

measures. When effective engineering controls are not feasible, or while they are being instituted or evaluated or during emergency situations with high exposure, appropriate respirators shall be used.

Respirators, which are applicable and suitable for the purpose intended, shall be provided by Prime Marine Services, Inc. when such equipment is necessary to protect the health and ensure the safety of the employee.

The employee shall guard against damage to the respirator and shall use the respirator in accordance with instructions and training provided.

Written standard operating procedures covering a complete respiratory protection program shall be established and implemented to include:

- | | |
|-----------------------------|------------------------------|
| (1) Hazard monitoring, | (2) Respirator selection, |
| (3) Program administration, | (4) Health evaluation, |
| (5) Training, | (6) Respirator fit, |
| (7) Respirator issue, | (8) Respirator inspection, |
| (9) Respirator use, | (10) Work area surveillance, |
| (11) Respirator maintenance | (12) Program evaluation. |

1. EMPLOYER RESPONSIBILITY

- a. The employer shall provide respirators when they are necessary to protect the health of the employee.
- b. Employer shall provide a respirator that is applicable and suitable for the intended purpose.
- c. The employer shall be responsible for the establishment and maintenance of its respiratory protection program.

2. EMPLOYEE RESPONSIBILITY

- a. The employee shall use the respiratory protection in accordance with instructions and training received.
- b. The employee shall guard against damage to the respirator.
- c. The employee shall report any trouble or malfunction of the respirator to his Supervisor.

Annual training is required of all employees with a potential exposure to airborne hazards.

E. SMOKING

Smoking is allowed in designated areas only.

If not positive that an immediate area is safe for smoking DO NOT SMOKE.

F. HYDROGEN SULFIDE

Prime Marine Services, Inc., when required by any client or job specification will train any of its employees who will be performing his or her job in the presence of Hydrogen Sulfide. Randall Jones, Prime Marine Services, Inc. Safety Director, will do this training. It will include classroom training, and the practical training using respirators and SCBA's. Records of this training will be kept in the employee's safety training file.

INVISIBLEEXPLOSIVE.....FLAMABLE DEADLY

The aforementioned words all describe hydrogen sulfide, one of the leading causes of workplace death. Hydrogen sulfide is a by-product formed when organic matter decays. Therefore, workers who may have to work around Hydrogen **Sulfide, (H₂S)**, include those in oil and gas operations, mining and sewage, landfills, laboratories and public utilities. Employees for Prime Marine Services, Inc. have exposure to hydrogen sulfide in the drilling operation; work over operation, from blowouts, drilling mud, sour crude wells, and water from petroleum operations.

Because hydrogen sulfide is so dangerous, your employer is required to follow certain safety standards, such as monitoring the air in your workplace and providing engineering controls. But, most importantly, you must know how to protect yourself from H₂S. If you recognize the hazards and follow specific procedures, you can work around this material safely.

L. PROPERTIES AND CHARACTERISTICS

Hydrogen sulfide is invisible, but there are several ways to recognize conditions when it is important to be on the lookout for H₂S

1.1 H₂S smells like rotten eggs at low concentrations. However, don't trust your sense of smell to warn you because:

1.1.1 Other chemical odors can hide or mask the smell.

1.1.2 With continued exposure, your ability to smell will become paralyzed. Then, you could make the mistake of thinking that no rotten-egg smell means any hydrogen sulfide - and more critical symptoms could develop.

1.2 H₂S is heavier than air, so it collects in low-lying areas.

1.3 H₂S is highly flammable. If there is enough hydrogen sulfide in the air between 43,000 and 460,000 ppm and the temperature is right, it will explode.

1.4 Remember that burning H₂S emits another dangerous chemical, sulfur dioxide, or SO₂. This chemical can severely irritate your, eyes, nose, throat and respiratory system.

1.5 H₂S is soluble in water, oils, and most organic liquids, but when it is agitated or when temperatures increase, solubility decreases and higher concentrations of H₂S are released. Also, acidic solutions containing H₂S can severely irritate your skin and eyes.

1.6 Hydrogen sulfide reacts violently to strong oxidizers, metal oxides, peroxides, strong alkalis, active metals, and some plastics and rubbers. It is corrosive, forming the spontaneously ignitable by-product "iron sulfide scale." This by-product is often found in vessels and pipes containing H₂S. So if you clean such equipment, keep all surfaces wet to avoid ignition.

1.7 Characteristics of hydrogen sulfide are it is toxic, colorless, odorless in large quantities, and smells like rotten eggs in low concentrations, is soluble, very flammable, and has toxic byproducts. Hydrogen sulfide is known as sulfuretted hydrogen, hepatic gas, sulfur hydride, rotten egg gas and stink damp.

2. EFFECTS OF EXPOSURE

- Breathing hydrogen sulfide is the most dangerous route of exposure. But how you are affected depends on the concentration you're exposed to and the length of exposure. For example, you can lose your sense of smell within minutes if exposed to more than 100ppm. But you can lose your ability to smell if you breathe more than 50ppm over an hour's time.
- Hydrogen sulfide has poor warning properties. You may not realize you are breathing hazardous levels of H₂S until more serious symptoms develop. Although you should not rely on them to tell you if you've been exposed, these general guidelines may help you understand what can happen to you physically, when you are exposed.
- At up to 100ppm, you will experience:
 1. Rotten egg smell
 2. Burning eyes
 3. Respiratory tract irritation
- If prolonged, exposure up to 100ppm will also cause:
 1. Loss of smell
 2. Headache
 3. Dizziness
 4. Coughing
- From 100 to 300ppm, in addition to the above, side effects will include:

1. Drowsiness
2. Severe eye and throat irritation
3. Possible pulmonary edema (respiratory difficulty due to fluid in the lungs.)

• Exposure of up to 700ppm will cause:

1. Loss of reasoning and balance
2. Eventual unconsciousness

Remember that these are just guidelines. Reaction to H₂S varies from person to person and depends on its concentration and the length of exposure. But one thing is certain; exposure to more than 700ppm will kill you almost immediately.

Also be aware that even though breathing h₂s is the most dangerous kind of exposure, other kinds of exposure can also be harmful. For example, contact with liquids containing h₂s can severely irritate your skin and eyes.

Health effects usually start with eye irritation; it affects the nerve center of the brain, which also controls breathing.

3. EXPOSURE LIMITS To help you avoid these severe effects, OSHA has

established exposure limits:

3.1 PEL---permissible exposure limit. The pel for hydrogen sulfide is 10ppm. This is an amount you can safely breathe, based on an eight-hour day over a five-day workweek.

3.2 STEL---short-term exposure limit. The stel for h₂s is 15ppm. This is how much you can safely be exposed to average over a 15-minute period. The stel should be checked four times a day, when your risk is likely to be the greatest.

4. AIR MONITORING

OSHA requires your employer to monitor the air in your work area. A variety of equipment can be used to do this:

1. Fixed monitors located where widespread h₂s contamination is possible.
2. Alarms that can be seen and heard when h₂s levels exceed the pel or stel.
3. Portable monitors that you either hold in your hand or attach to yourself.

No matter what devices you and your employer use to monitor the air in your work area, know how to use, respond to, and maintain them. Most critical of all: do not place all of your trust in air monitors. If you suspect h₂s, immediately move upwind, out of the area.

Monitors must be able to detect I-12S at 2.0 ppm level. The alarm on the monitor is set to go off at PEL so employees do not come in contact with high levels of toxic gas.

5. ENGINEERING CONTROLS

Engineering controls are another measure **OSHA** requires your employer to take in ensuring your safety. The most widely used engineering control is ventilation--- either natural or mechanical.

5.1 Natural ventilation comes from normal airflow. If you are relying on natural ventilation, remain alert for the safest way to escape by noting which way windsocks, streamers, and flags are blowing. This is called being "wind conscious."

5.2 Mechanical ventilation is common in confined spaces where only fans and blowers can move the air. But do not become too comfortable knowing fans and blowers are ventilating your workspace. If you suspect h₂s evacuate the area immediately.

6. PERSONAL PROTECTIVE EQUIPMENT

Three types of personal protective equipment used by workers at risk of exposure to hydrogen sulfide are:

- Escape units
- Air-line or supplied-air units
- Self-contained breathing apparatus (scba)

ESCAPE UNITS

- Are completely self-contained
- Equipped with air cylinder rated for five minutes
- Used only to escape from (not enter) a hazardous area.

AIR-LINE UNITS

- Have an airline or hose that supply air during normal use.
- Equipped with a self-contained emergency-escape air cylinder in case the airline supply

SCBA's

- Have an air cylinder rated for 15 or more minutes.
- Used to enter a hazardous environment.
 - The most flexible because they allow you to move from one area to area, even if you have to disconnect from the air supply.
 - Equipped with devices that warn you when approximately five minutes of air remain.

Remember that your respirator should always be positive-pressure type to prevent h₂s from entering. Never use air purifying or cartridge type breathing apparatus when working around hydrogen sulfide

7. RESPIRATORY PROGRAM

Prime Marine Services, Inc. will institute a respiratory protection program to protect you from hydrogen sulfide. This program will follow the respiratory standards set by OSHA and the American national standards institute (ANSI). Each year, your company will train you to use respiratory protection. This training will include fit testing, proficiency drills, maintenance programs and medical surveillance. Training and working with H₂S gas requires wearing NIOSH certified breathing apparatus.

Fit testing ensures that your respiratory equipment is properly adjusted, with a snug seal between the mask and your face.

1. Do not wear a beard and side burns.
2. If you wear glasses, get fitted with a face piece spectacle kit, which will allow you to wear your glasses under the face piece.

Proficiency drills will help you know how to wear and use respiratory protection properly.

Maintenance programs will help ensure that you know how to care for your breathing apparatus.

Medical surveillance will help make sure that you do not have a health condition that would:

1. Be aggravated by exposure to hydrogen sulfide.
2. Prevent you from wearing your breathing apparatus properly.
3. Keep you from escaping in an emergency situation.

S. EMERGENCY PROCEDURES

Knowing what to do when you or e co-worker is exposed to hydrogen sulfide can mean the difference between life and death.

- 8.1.1. Force your eyelids open if necessary.
- 8.1.2 Seek medical attention.

8.2 FOR SKIN EXPOSURE

- 8.2.1 Remove contaminated clothing
- 8.2. 2 Rinse skin thoroughly.
- 8.2. 3 Wash clothes before wearing again.

There are four steps to follow if you are in the immediate area of a spill or leak: I.

1. Hold your breath but don't inhale to do so.
2. Move upwind or crosswind and away from the gas.
3. Put on an appropriate breathing unit.
4. Assist anyone in distress and move to a pre-determined safe assembly area.

Always follow company procedures, and policies for escape and rescue, before attempting to rescue anyone else:

- Protect yourself first. Don't become another victim.
- Put on breathing apparatus before attempting rescue.
- Use the buddy system. Don't attempt to rescue anyone alone. Always proceed in pairs.

After taking these precautions, lift or drag the victim to an upwind area. Use caution if the victim has fallen, as the victim may have suffered from a neck or spinal injury. Use a portable h₂s detector to ensure the area is gas-free before removing your mask.

If you are not trained in first aid alert supervisory personnel and activate the emergency response system.

If you are trained in first aid:

1. Check the victim for breathing.
2. If he is not breathing, administer rescue breathing.
3. Then check for a pulse.
4. If the victim has no pulse, begin CPR.
5. Send victim for medical attention.

9. AVOIDING EXPOSURE

To avoid exposure to H₂S:

9.1 Know where to find:

- A.) Emergency exits
- B.) Emergency phone numbers
- C.) Safe assembly areas
- D.) Emergency SCBA's

9.2 Vacate area when alarm sounds and do not return until signal is given to return. Should you need to return before all clear is given, wear proper respirator.

9.3 Remain "Wind Conscious"

- A.) Pay attention to wind- socks, streamers and flags.
- B.) Make sure enough fans and blowers are being used.

9.4 Know how to use air devices.

9.5 Don't smoke. Remember hydrogen sulfide is highly explosive and flammable.

9.6 Be aware of safety rules, warning signs and your company's h₂s procedures.

9.7 Employees and visitors on location must be aware of owners contingency plan.

9.8 Special precautions should be taken when working inside tanks, vessels or areas of confined space. Employees need to be trained in working in confined space and testing of air in confined space.

10. SUMMARY

Hydrogen sulfide is deadly, especially when you don't understand and respect it's dangers. But by following these guidelines and your company's procedures, you can almost guarantee your own safety when working around H2S.

G. HEARING PROTECTION (NOISE)

Purpose

Conservation of hearing is achieved through preventative measures. To reduce occupational hearing loss, all employees, who work in potentially noisy areas, are provided hearing protection, training and annual hearing tests. OSHA's hearing conservation standard is covered in 29 CFR 1910.95. Engineering controls are applied to reduce noise from equipment and operations. Prime Marine Services, Inc. shall institute a training program for all employees who are exposed to action level noise. The training shall be repeated annually for each employee. Training shall be updated consistent to changes in PPE and work processes. The employer shall make available to affected employees copies of the noise exposure procedures and shall also post a copy in the workplace. The employer shall also allow the Assistant Secretary and the Director access to records. Prime Marine Services, Inc. shall administer a continuing effective hearing conservation program when employees are exposed to sound levels greater than 85 dba on an 8 hour time weighted average basis.

Responsibilities

Management

- Use Engineering and Administrative controls to limit employee exposure
 - Maintain accurate records of all employees exposure measurements and that all records are maintained as required by the regulations
 - Provide adequate hearing protection for employees at no cost
 - Post signs and warnings for all high noise areas
 - Conduct noise surveys annually or when new equipment is added
- Conduct annual hearing tests for all employees
- Conduct hearing conservation training for all new employees
- Conduct annual hearing conservation training for all employees

- Implement a monitoring program to identify employees to be included in the hearing conservation program. This program is based on exposure that equals or exceeds the 8 hr. time weighted average of 85 decibels.
- Maintain an audiometric testing program by making audiometric testing available to all employees whose exposures equal or exceed an 8 hr time weighted average of 85 decibels.
- The hearing conservation program will be furnished to employees at no cost.

Employees

- Use company provided, approved hearing protection in designated high noise areas
- Request new hearing protection when needed
- Exercise proper care of issues hearing protection

Training

At time of hire and annually thereafter, all affected Employees must attend Hearing Conservation Training. The initial training is conducted as part of the New Hire Orientation Program by the Human Resource Department and consists of:

1. Rules and procedures
2. Where hearing protection is required
3. How to use and care for hearing protectors
4. How noise affects hearing and hearing loss

Testing

Testing to establish a baseline audiogram shall be proceeded by at least 14 hours without exposure to workplace noise. Hearing protection may be used to meet the requirement. Employees shall also be notified to avoid high levels of noise on their personal time prior to testing.

On an annual basis after obtaining the baseline audiogram, Prime Marine Services, Inc. shall obtain a new audiogram for each employee exposed at or above an 8-hour time weighted average of 85 decibels. Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift occurred. If a comparison of the annual audiogram to the baseline audiogram indicated standard threshold shift, the employee shall be informed of this fact in writing within 21 days of the determination.

Engineering Controls

After it is determined that noise exposure above 85 dB(A) are present, engineering controls should be evaluated and implemented to reduce the noise exposure before administrative controls are initiated. Some examples of engineering controls include:

1. Noise reducing baffles
2. Compartmentalization
3. Installing noise reducing gears
4. Installing rubber pads under machinery

When new equipment or machinery is evaluated for purchase, the Safety Director should be consulted to conduct an evaluation from a safety and health standpoint. One criteria of the evaluation should include the amount of noise the equipment will produce and how it will affect the overall noise exposure.

Administrative Controls

After engineering controls are evaluated for effectiveness or feasibility, administrative controls should be considered to reduce noise exposure. Administrative controls include restricting exposure time or using personal protective equipment (PPE). Within 6 months of an employee's first exposure at or above the action level the employer shall establish a valid baseline audiogram. This will set the basis, which all other audiograms can be compared. When a mobile van is used the baseline shall be established within one year.

Personal Protective Equipment, such as earplugs or muffs, may be used to reduce the amount of noise exposure. Each plug or muff has a noise reductions factor (NR) as evaluated by ANSI Standards (S3.19 - 1974 or 224.22 - 1957). For example, if a work area has an ambient noise exposure of 96 dB(A), the hearing protectors should be rated 6 NR or better to be effective.

According to OSHA Regulations, each location with noise exposures of 85 to 89 dB(A) will provide hearing protectors for the Employee's optional use. Noise exposures at 90 dB(A) or above require the mandatory use of hearing protection. Further, OSHA requires that a variety of hearing protectors be available for Employees to choose (both a variety of plug and muff type hearing protectors).

Types of Hearing Protectors

Hearing protection devices are the first line of defense against noise in environments where engineering controls have not reduced employee exposure to safe levels. Hearing protective devices can prevent significant hearing loss, but only if they are used properly. The most popular hearing protection devices are earplugs, which are inserted into the ear canal to provide a seal against the canal walls. Earmuffs enclose the entire external ears inside rigid cups. The inside of the muff cup is lined with acoustic foam and the perimeter of the cup is fitted with

cushion that seals against the head around the ear by the force of the headband. Use of hearing protection shall be re-evaluated and or refitted and if necessary a medical evaluation may be required if the standard threshold shift occurred. The type of hearing protection provided would be for specific noise environments in which the protector will be used.

Use of Hearing Protectors

Management, Supervision and Employees shall properly wear the prescribed hearing protectors while working in or travelin^g through any section of a Location that is designated a High Noise Area, (excluding offices, break rooms, and rest facilities). The following rules will be enforced:

- Personal stereos, such as Walkmans, etc., will not be permitted in any operating area of company property.
- Hearing protectors, at least two types of plugs and one type of muffs, will be provided and maintained by Company
- Hearing protectors and replacements will be provided free of charge
- Hearing protectors will be properly worn at all times, except in offices, break rooms, rest facilities.

Preformed earplugs and earmuffs should be washed periodically and stored in a clean area, and foam inserts should be discarded after each use. It is important to wash hands before handling pre-formed earplugs and foam inserts to prevent contaminants from being placed in the ear, which may increase your risk of developing infections.

SECTION VIII: RECORDKEEPING

It is important that all areas of Prime Marine Services, Inc. use the same criteria in classifying statistical information. The purpose of this policy is to ensure that all environmental, safety and health data is reported uniformly to avoid possible duplication, overlap or inaccurate record keeping.

Forms used for reporting all required record keeping statistical information on job related accident and illnesses are:

1. OSHA 300 - This is the required OSHA Log and Summary of Occupational Injuries and Illnesses which must be maintained at each work location or establishment in the US:
 - a. The log must be available at all times for review by Prime Marine Services, Inc. and regulatory personnel, as required.
 - b. Each recordable accident or illness must be entered on the log within six workdays following your notification of the occurrence.
 - c. The Summary of Occupational Injuries and Illnesses (the right hand section of the form) must be completed and posted at each establishment by February 1, following the close of the calendar year. The summary must be displayed through the entire month of February, and then may be removed.
 - d. The entire OSHA 300 log and summary must be kept on file for five years after the year it was prepared.
2. OSHA injury form - This is a required supplementary record of occupational injuries and illness for US operations.
 - a. A supplementary record of occupational injury and illness must be completed for each recordable case entered on the OSHA 300 log.
 - b. The OSHA form itself does not have to be used. Workers compensation, insurance and other reports are acceptable if they contain all items found on the OSHA form. If they do not, the missing items must be added somewhere on the same form or on an attachment.
3. OSHA Occupational Injury and Illness Survey (BLS) - This form requests data that will be included in a national "sample" from which the US Department of Labor Statistics determines industry statistics.
 - a. Only selected companies are to complete the OSHA BLS Form, as requested by the Department of Labor Statistics or by State agencies working under contract with the department.
 - b. The office directly concerned with the requesting agency must handle these forms.
4. Prime Marine Services, Inc. Requirements - each area will maintain up-to-date, accurate documentation files of all Prime Marine Services, Inc. reported accidents including accident investigations and first reports of injury.

RECORDS LIST AND FILING SYSTEM

This is a list of the reports and written programs required by Federal and State regulations. Some may not be applicable to Prime Marine Services, Inc.

1. OSHA Form 300

2. Employer's First Report of Injury (for all injuries)
3. Supervisor's Accident Investigation Form
4. OSHA Poster (Posted in Employee Area)
5. Hearing Conservation Program/Noise Exposure Records/Training Records
6. Respiratory Protection Program/Training Records
7. Fire Extinguisher Inspection/Testing
8. Fire Extinguisher Training
9. Emergency Action Plan
10. First Aid/CPR Training
11. First Aid Supplies Inventory
12. Employer's First Report of Injury (for Workman's Compensation)
13. Hazard Communication Program/Training Records
14. MSDS Files/Chemical Inventory
15. Medical Records Access Training Record
16. Location Safety Inspections
17. Safety Meeting Records
18. Lift Truck Training Program/Training Records
9. Lift Truck Inspection Records
20. Emergency Eye Wash/Shower Inspections
21. Portable Ladder Inspections
22. Lock-Out/Tag-Out Program/Training Records
23. Blood borne Pathogens

SECTION IX: EMERGENCY ACTION PLAN

A. PURPOSE

OSHA'S Emergency Action Plan standard, found at 29 CFR 1910.38(a) and the Louisiana Department of Labor, Office of Worker's Compensation Safety Requirements, found in Title 40, Part 1, Chapter 9 (sec. 907) requires Prime Marine Services, Inc. to have a written emergency action plan (EAP). This plan applies to all operations in our Prime Marine Services, Inc. where employees may encounter an emergency.

The EAP communicates policies and procedures to follow in emergencies. This written plan is available, upon request, to employees, their designated representatives, and any OSHA officials who ask to see it.

Within this plan, employees are informed of the purpose, emergency escape procedures, route assignments, procedures to follow in controlling critical plant operations, procedures to account for all employees after emergency evacuation has been completed, rescue and medical duties for those employees who perform them, preferred means of reporting fires and other emergencies, types of evacuations to be used in various emergency situations, and the alarm system.

The Safety Director, Randall Jones is the program coordinator has overall responsibility for the plan. The Prime Marine Services, Inc. designated Safety Liaisons at each location are responsible for daily adherence to the plan. The Safety Director and Liaisons will review and update the plan as necessary. Copies of this plan may be obtained from each location's respective Liaison.

We encourage all suggestions because we are committed to the success of our emergency action plan. We strive for clear understanding, safe behavior, and involvement in the program from every level of Prime Marine Services, Inc.

B. EMERGENCY EXCAPE PROCEDURES AND ASSIGNMENTS

Our emergency escape procedures and assignments are designed to respond to many potential emergencies including:

Fire/Explosion	Medical	Aboveground Tank Leak/Rupture
Bomb Threat	Hostage Situations	Hurricanes

Employees need to know what to do when they are the first persons to discover an emergency and when they are alerted to a specific emergency. The Safety Director, with assistance of Prime Marine Services, Inc. personnel, has developed alternate procedures for responding to an emergency, depending on what the emergency is. The following guidelines apply:

1. All employees are trained in safe evacuation procedures, and refresher training is conducted whenever the employee's responsibilities or designated actions tunder the

plan change, and whenever the plan itself is changed. In addition, the employers must review with each employee, upon initial assignment, those parts of the plan the employee must know to protect them in an emergency

2. The training includes use of floor plans and/or workplace maps that show emergency escape routes included in the Emergency Action Plan. These floor plans and maps are available and posted at all times in every area of the Prime Marine Services, Inc. to provide guidance in an emergency.
3. No employee is permitted to re-enter a building until advised by the Local Manager or designee (Safety Liaison) upon determination has been made that such re-entry is safe.
4. A list of refuges/safe zones is given in this table (a refuge zone is a meeting area designated in a location deemed safe for each group of employees within Prime Marine Services, Inc.
5. Employees are to proceed to the nearest available and safe exit and leave the building as quickly as possible in event of a fire or other emergency requiring evacuation to achieve safety. The following designated assembly areas are assigned for each location:

In the front of each facility

6. All employees are to report to the designated assembly area as quickly as possible upon exiting.
7. The Safety Director is designated to remain behind during evacuation to care for critical facility operations. The procedures to be taken by those employees who have been selected to remain behind to care for essential facility operations until their evacuation becomes necessary include:
 - a. The monitoring of facility power supplies and water supplies, essential services which cannot be shut down for every emergency alarm, and
 - b. Any process which must be shut down in stages where certain employees must be present to assure that safe shut down procedures are completed, including the following processes:

* None are identified.

7. Trained evacuation personnel conduct head counts once evacuation has been completed. There is one trained evacuation person for each twenty employees in the workplace to provide adequate guidance and instruction at the time of an emergency. The employees selected are trained in the complete workplace layout and the various alternative escape routes from the workplace. All trained personnel are made aware of employees with disabilities needing extra assistance, such as the buddy system, and of hazardous areas to be avoided during emergencies. Before leaving, these employees check rooms and other enclosed spaces in the workplace for employees who may be trapped. The following personnel are assigned this role:

Prime Marine Services, Inc.

Title	Department	Location
Randall Jones	Administration	Broussard, LA
Safety Director	Operation	

Once each evacuated group of employees have reached their evacuation destinations, each trained evacuation employee:

- Takes roll of his or her group.
- Makes sure all persons are accounted for
- Reports to the main office notifying Randall Jones, who will then report to/contact, the proper authorities.
- Assumes role of department contact to answer questions.

C. RESCUE AND MEDICAL DUTY ASSIGNMENTS

Rescue and medical aid may be necessary during emergencies. Circumstances calling for rescue and/or medical aid include:

Medical emergency Traumatic injury Vehicle accidents Equipment entrapment

Emergency Response Team (ERT) members are responsible for performing rescue duties in case of an emergency-requiring rescue.

Designated first aid responders are to provide medical assistance within their capabilities to employees requiring it during emergencies. Designated first aid responders include the following individuals:

First Aid Responders - Certified First Aid/CPR responders.
Field locations: to be determined

Professional emergency services responding in an emergency will help with and direct all rescue and medical duty assignments upon their arrival on site.

D. EMERGENCY REPORTING PROCEDURES

Emergency reporting procedures are outlined for each type of emergency Prime Marine Services, Inc. may anticipate occurring. These are outlined in

E. SAFETY DIRECTOR AND SAFETY LIAISON RESPONSIBILITIES

The Safety Director is responsible for the following activities:

1. Develop a written emergency action plan for regular and after hours work conditions.
2. Integrate the emergency action plan with the existing general emergency plan covering the building occupied.
3. Satisfy all local fire codes and regulations as specified.
4. Conduct drills to acquaint the employees with emergency procedures, and to judge the effectiveness of each plan.
7. Train designated employees in the use of fire extinguishers and the application of medical first aid techniques.

Each Safety Liaison is responsible for the following at their respective facilities:

1. Immediately notify the local fire or police departments, and the Safety Director of Prime Marine Services, Inc. in the event of an emergency affecting the office.
2. Distribute procedures for reporting a fire, bomb threat, or other emergency, the location of fire exits, and evacuation routes to each employee.
3. Keep key management personnel home telephone numbers in a safe place in the office for immediate use in the event of an emergency. Distribute a copy of the list to key persons to be retained in their homes for use in communicating an emergency occurring during non-work hours.
4. Decide to remain in or evacuate the workplace in emergencies.
5. If evacuation is deemed necessary, the safety liaison ensures that:
 - All employees are notified and a head count is taken to confirm total evacuation of all employees.
 - When practical, equipment is placed and locked in storage rooms or desks for protection.
 - The building owner/superintendent is contacted, informed of the action taken, and asked to assist in coordinating security protection.
 - In locations where the building owner/superintendent is not available, security measures to protect employee records and property are arranged as necessary.

F. TRAINING

At the time of an emergency, employees should know what type of evacuation is necessary and what their role is in carrying out the plan. In cases where the emergency is very grave, total and immediate evacuation of all employees is necessary. In other emergencies, a partial evacuation of nonessential employees with a delayed evacuation of others may be necessary for continued facility operation.

Training employees will take place according to the following schedule:

- Initially when the plan is developed,
- Whenever the employee's responsibilities or designated actions under the plan change,
- Whenever the plan is changed, and
- Upon hiring, Safety Liaison will review with the employee that individual's responsibilities.

The Safety Director or qualified designee shall hold training sessions as necessary, so that all Prime Marine Services, Inc. employees receive training. Training sessions shall consist of lecture, video, and handout materials covering the following elements:

- Purpose of EAP
- Emergency Escape Procedures
- Critical Facility Operations
- Employee Headcount Procedures
- Rescue and Medical Duty Assignments
- Emergency Reporting Procedures
- Responsible Person List
- Types of Emergency Evacuations

Training will be reinforced through periodic drills (minimum of 1 fire drill annually) and annual reviews of EAP procedures. Documentation shall be evidenced through sign-in sheets and/or safety orientation checklists.

Medical Emergency

In cases where serious injury or illness has or is believed to have occurred:

- a. Immediately notify the supervisor. All Supervisors will be certified in First Aid/CPR and shall respond to the victim to begin lifesaving procedures if necessary.
- b. A designated employee by the Supervisor will call from the nearest phone: 911

The employee shall give the following information:

→ Indicate that it is a medical emergency

→ Indicate the physical address of the facility

→ Answer other questions as prompted by the operator.

→ The employee shall then begin notifying the Emergency Response List (To be notified in emergency situations). This list will be posted in a noticeable place.

- c. Employees shall shut down all equipment and operations per recommended procedure in the immediate area and clear the area so the response team has unimpeded access.
- d. Upon arrival of a person from the emergency response list, that person shall assume authority of the situation.
- e. Normal operations will be reinstated once the situation is cleared.

Fire and Explosions

All employees shall utilize the RACE (Rescue, Alarm, Contain, Evacuate) procedure when responding to these types of emergency situations. The Supervisor responsible for the area involved shall initially assume control and direction of the situation until designee from emergency call list arrives, who will then assume control until response teams arrive.

- a. **Rescue** - Attempt to remove any injured persons from the area.
- b. **Alarm** -
 - 1.) Pull the nearest fire alarm, if facility is equipped and/or;
 - 2.) Notify the operator who will call, depending on location and report a fire or explosion and the location of the facility.
 - 3.) Operator will announce 3 times over the PA "Attention all personnel, Code Red" or if a drill, Code Red, Drill.
 - 4.) Notify the emergency call list.
- c. **Contain** - Close all doors and vents in the area. Shut down ventilation systems and equipment by turning off the main breaker.
- d. **Evacuate** - Remove all personnel, visitors, and contractors from the area and assemble at the designated assembly area until emergency response teams arrive.

Recovery from these situations shall begin at the direction of the Supervisor at each Prime Marine Services, Inc. location once clearance has been given by the appropriate emergency response agency.

Procedure will include:

- a. Cleanup of area.

- b. Inspection of equipment and structures.
- c. Restoration of power to the facility.
- d. Startup of equipment and performance checks.
- e. Resumption of normal operations.

The call/alarm will notify the following local Fire Departments at each location:

Location- Lafayette, LA

Fire alarms (if applicable) are located:

- I. In each hallway and lobby

The Emergency Response Team will perform assigned duties and will meet the fire department to assist them in putting out the fire. Head counts should be given to the responding Fire Chief or firefighter. No employees are to return to the buildings until the Emergency Response Team leader or the responding Fire Chief gives the "all clear".

In the Event of a Tornado/Hurricane:

The Safety Liaison has access to local radio broadcasts (other). When the National Weather Service has issued a tornado watch or hurricane warning, the Safety Liaison or his designee will continuously monitor the National Weather Service reports. The Safety Liaison will use the (alarm/PA) air horn to notify employees of the nature of the evacuation (immediate for tornado or impending preparing for hurricane), and whether to report to shelters (immediate) or prepare to shut down operations (impending). In the event of a tornado, it is corporate policy to provide emergency warning and shelter. At the time the tornado alarm/announcement sounds, all employees are responsible for evacuating to their assigned shelters in a tornado emergency. Following is a table with shelter assignments listed:

Bomb Threat

Bomb threats are a special type of emergency situation in which publicity **MUST** be controlled. In the event of a bomb threat, the individual receiving the threat should do the following:

1. Prolong the conversation as much as possible;
2. Be alert for background noises over phone (music, aircraft, etc.);
3. Ask where and when the bomb will explode;

4. Note any distinguishing voice characteristics;
5. Note if the caller indicates knowledge of the facility, by the description of locations;
6. Notify Supervisor/manager.
7. Complete the Bomb Threat Report Form (Figure 8);
8. Remain available until questioned by local and/or state authorities.

B. Supervisor/manager who is notified about the bomb threat will be responsible for the following:

1. Call **911** to notify the local police and/or Sheriff's Department, local and state police. Local and state authorities will have complete authority in this situation.
2. Notify the Location Supervisor. The Supervisor is responsible for providing direction until authorities arrive.
3. Begin evacuation of personnel, and visitors from the facility to assigned areas.
4. Safety Liaison will ensure by headcount all personnel are evacuated.
5. Follow directions of response team leader until situation is cleared.

Hostage Situation

1. The individual witnessing the situation will immediately notify the supervisor or store manager responsible for the facility and give the following information:
 - A hostage situation
 - Location of hostage
 - Description of captor and means of holding victim hostage (gun, knife, etc.)
 - Demands given if any
2. The supervisor/manager will then call 911 to notify local authorities.
3. The location Manager is responsible for providing direction until authorities arrive.
4. The immediate area will be evacuated but do not cross the line of fire.
5. The first 0-60 minutes are the most dangerous, no one should attempt to make contact until the local police or sheriff's department arrives.

STANDARD INCIDENT REPORT FORM

CHECK TYPE OF INCIDENT

- ☐ ACCIDENT
 ☐ NEAR MISS
 ☐ ENVIRONMENTAL HAZARDOUS OBSERVATION
 ☐ HAZARDOUS / UNSAFE CONDITION
 ☐ INCIDENT INVESTIGATION REPORT

1. Date of Report	2. Date of Incident	3. Time of Report	4. Time of Incident	I Department	
6. Location of Incident		7. Person Making Report		E. Telephone Number	9. Age
10. Name		11. Address			

WHAT HAPPENED? (Describe what took place or what circumstances caused on to make this report

IF INJURY OCCURRED (Describe the nature of the injury.)

IF INJURY REQUIRES MEDICAL ATTENTION ,YOU MUST ALSO COMPLETE EMPLOYER'S REPORT OF INJURY FORM

SUPERVISORS INVESTIGATION AND RECOMMENDATIONS FOR PREVENTION

WHAT SHOULD BE DONE? (Determine which of these 16 items require attention. More than one may apply -under each heading.)

Investigated By:

Reviewed By:

ACCIDENT INFORMATION

DRIVER'S NAME:		DATE:	TIME: AM PM
PLACE OF ACCIDENT:		DESCRIPTION OF ACCIDENT:	

COMPANY VEHICLE INFORMATION

VEHICLE	YEAR	MODEL	PLATE NUMBER	STATE	DEPARTMENT
DESCRIPTION OF DAMAGE:			LOCATION OF VEHICLE:		

OTHER VEHICLE INFORMATION

DRIVER'S NAME:	ADDRESS:	TELEPHONE:
		WORK: ()
		HOME: ()
DRIVER'S LICENSE # (STATE)	CITY STATE ZIP	SOCIAL SECURITY NUMBER
VEHICLE YEAR MODEL	VEHICLE OWNER	VEHICLE PLATE NUMBER (STATE)
INSURANCE COMPANY	POLICY NUMBER	
DESCRIPTION OF DAMAGE:	LOCATION OF VEHICLE:	

INSURED PERSONS OR PROPERTY DAMAGE

NAME:	NAME:	NAME:
ADDRESS	ADDRESS	ADDRESS
Driver's license NO.	Driver's license NO.	Driver's license NO.
DESCRIPTION: INJURY OR LOSS	DESCRIPTION: INJURY OR LOSS	DESCRIPTION: INJURY OR LOSS

WITNESSES

IT IS IMPORTANT TO GET AS MANY AS POSSIBLE

NAME:	NAME:	NAME:
ADDRESS:	ADDRESS:	ADDRESS:
TELEPHONE:	TELEPHONE :	TELEPHONE :

POLICE INVESTIGATION

POLICE NOTIFIED		CITY	OFFICERS	BADGE NUMBER	WHO WAS CITED?
YES	NO	STATE	NAME		YOU OTHER

VARIANCE
for
FALL HAZARD MANAGEMENT

DATE: _____ LOCATION _____

COMPANY: _____

Summarize the reason why the standard fall protection cannot be met and what would be needed to meet the standard.

Alternate fall protection methods to be used including rescue plan.

Estimated duration of Variance:

Endorsed by: _____

SUPERVISOR

Variance Monitor: _____

Approved By: _____ MANAGER _____

HAZARD ASSESSMENT WORKSHEET

Facility: _____ _____ _____	Date: __ _____ Evaluated by: _ _____
Specific Areas Evaluated:	
1. Foot, Head, Eye and Face Hazards	<u>Personal Protective Equipment or Procedures</u>
2. Respiratory Hazards	
3. Mechanical/Electrical Hazards	
4. Material Handling / Storage Hazards	
6. Housekeeping Hazards	
7. Physical hazards (Low Clearance, Incline, Etc.)	<u>Markings, Signs and Procedures</u>
8. Non-Iodizing Radiation Hazards	

Micellaneous Comments: _____

JOB SAFETY ANALYSIS

LOCATION		DATE	SUPERVISOR
TASK OR JOB			
PERSONNEL			
<u>SEQUENCE OF BASIC STEPS</u>	<u>POTENTIAL ACCIDENT OR HAZARDS</u>	<u>RECOMMENDATIONS</u>	
Safety Equipment Required:		Tools Required:	

Lockout/Tagout Device Schedule

Equipment or Process: _____

Location of Equipment: _____

A tag is required on each Isolation Location listed below

Date prepared _____ Prepared by _____

TYPE OF ENERGY	ISOLATION LOCATION	TYPE OF LOCKOUT DEVICE
Electrical		
Potential (Stored)		
Kinetic (in-motion)		
Pneumatic (air — gas pressure)		
Hydraulic		
Thermal		
Chemical		
SPECIAL HAZARDS	PROCEDURES FOR CONTROL OF SPECIAL HAZARDS	
SPECIAL PROCEDURES		
Stored Energy Release Procedures		
Notes		
Isolation Location shall identify the exact breaker, valve, switch or other disconnect or blocking device to be locked and tagged out to isolate the energy source from the ovrk area.		
Type of Lockout shall identify specifically by name the exact type of locking device needed to ensure the disconnect or blocking device slays in the isolated condition/ position_ Examples Breaker clip, Valve handwheel cover, Blank flange, etc.		
Stored Energy: Following the application of the lockout or tagout devices to the energy isolating devices, all potential or residual energy will be relieved, disconnected, restrained and otherwise rendered safe.		

EMPLOYER'S REPORT
O P
OCCUPATIONAL INJURY
OR DISEASE

Injured Social Security Number *
Employer's UI Number *
Fed ID # *
Ins. Policy # *

1. Date of Report 4	2. Date of Injury *	3. Normal Starting Time*	4. Back to Work Date*	5. At Same Wage Y * or N *	DO NOT WRITE IN THIS COLUMN
6. Date of Death *	7. Date Empl.. Notified *	8. Date of Disability *	9. Last Full Day Paid *		Date Received
10. Employee: First Middle Last *			11. male: female:	12. Empl. Telephone #	SIC
13. Address Include Parish and Zip				14. Race *	State- Parish
15. Marital Status.		16. # of children under 16 *		17. Hire Date	Occupation
18. Present Age	19. Occupation *	20. Department or Division *		21. Date of Birth *	Nature of Injury
22. Place of injury. on premises Y* or N*		23. If no? Exact Location *			Part of Body
24. What Was Employee Doing When Injured? (Be specific. If using tools or handling materials name them and tell what he was doing.) *					Source of Injury
25. How Did Injury Occur? (Describe fully the events which resulted in injury or disease. Tell what happened and how it happened. Give full details.) *					Type of Accident
Did injury or disease occur because of:		26. Mechanical Defect Y* or N*	27. Unsafe Act Y* or N*	28. CHECK IF AMPUTATION *	Insurance code
29. Nature and Location of Injury or Disease *				30. Disease -Date of Diagnosis. *	A.O.S.
31. Attending Physician and Address *					Unsafe act
32. Employer *				33. Person Completing This Report *	Agency of acc.
34. Employer's Address *				35. Employer's Telephone # *	Agency of Acc. Part
36. Employer's Mailing Address *				37. Nature of Business *	Hazardous Conditions

Employee Name _____

Employee Sign _____

Service Date:

Location:

Job Title:

CHECK ITEMS COVERED (N/A Items that do not

1. INTRODUCTION

- ☐ Safety and Environmental Policy
- ☐ Safety is a Condition of Employment
- ☐ Intent of Management
- ☐ Specific Job Assignments
- ☐ Employees Responsibilities
- ☐ Supervisors Responsibilities Chain of Command

2. SAFETY PROGRAM REQUIREMENTS

- ☐ Safety Meetings
- ☐ Accident and Incident Reporting
- ☐ Suggestions
- ☐ Read and Understand the Safety Handbook

3. SAFE PRACTICES

- ☐ Alcohol, Weapons, and Drugs
- ☐ Smoking Policies
- ☐ Housekeeping Requirements
- ☐ Hand Tools
- ☐ Power Tools
- Horseplay
- If You Don't Know Ask

4. TRANSPORTATION SAFETY

- ☐ Company Vehicles
- ☐ Seat Belts
- ☐ Aircraft
- ☐ Boats
- ☐ Personal Flotation Devices
- ☐ Swing Ropes and Personnel Baskets
- ☐ Defensive Driving

5. HAZARDS IN THE WORKPLACE

- ☐ Hazard Communications/Right to Know
- ☐ Chemical Lists
- ☐ Chemical Handling and Storage
- ☐ Pressurized Equipment
- ☐ Flammable and Combustible Materials
- ☐ Hearing Conservation
- Electrical Hazards
- Posted Warning Signs

6. PERSONAL PROTECTIVE EQUIPMENT

- ☐ Appropriate Work Clothes
- ☐ Foot Protection
- ☐ Head Protection
- ☐ Eye and Face Protection
- ☐ Hearing Protection
- ☐ Skin Protection (Gloves, Aprons, Boots)
- ☐ Respiratory Protection
- ☐ Fall Protection
- ☐ Prescription Safety Glasses

7. FIRST AID EQUIPMENT

- ☐ First Aid Stations
- ☐ Eye Wash / Safety Showers
- ☐ Bloodborne Pathogen Kits

8. EMERGENCY ACTION PLANS

- ☐ Emergency Contingency Plans
- ☐ Alarms
- ☐ Reporting Emergencies
- ☐ Evacuation Procedures
- ☐ Emergency Phone Numbers

9. ENVIRONMENTAL RESPONSIBILITIES

- ☐ Trash Disposal
- ☐ Hazardous Waste Sensitive Materials

Date of Last Training(If Known):

CPR

First Aid

Water Survival

Fire Fighting Basic

Hazard Communications

Lockout / Tag out

Defensive Driving

Hydrogen Sulfide Safety

Fall Protection

Fork Lift

SAFETY MEETING REPORT

Location:	Date:	Topic:	Time:
Presented By:		Activity:	TEST
PRINT NAME	DEPT.	PRINT NAME	DEPT
1.		11.	
2.		12.	
3.		13.	
4.		14.	
5.		15.	
6.		16.	
7.		17.	
8.		18.	
9.		19.	
10.		20.	

Discussion of safety topic:

Other Issues/Suggestions

Follow-up:

NEXT MEETING DATE: _____ TIME: _____
 SUBJECT: _____
 SUPERVISOR: _____ DATE: _____

[illegible]

CONFINED SPACE SITE ASSESSMENT WORKSHEET

COMPANY:	DATE:
ADDRESS:	TIME:
PHONE:	LOCATION:
Description of Confined Space:	

HAZARD ASSESSMENT

ATMOSPHERIC	PEL	INITIAL	TIME	2ND	TIME	3RD	TIME
°A) OXYGEN	19.5 %-23.5%						
% LEL (combustible)	Any over 10%						
(Toxic) H2S	Over 10ppm						
Benzene	.5ppm						
NORM							
(other)							
Instruments Used	Type	Serial #		Calibration Date			

Atmospheric Tester (Name): _____

HAZARDOUS ENERGIES	YES	NO	LOCKOUT/TAGOUT	FLANGE / BLOCK&BLEED
Electrical				
Pressure				
Mechanical				
Kinetic/Stored				
(Other)				

OTHER HAZARDS	DESCRIPTION of space, conditions and contents	YES	NO
Configuration of Space			
Entrapment			
Temperature Extremes			
Noise Levels			
Chemicals			

COMMENTS AND CONSIDERATIONS

This Site Assessment Worksheet is designed to identify any hazards or potential hazards that may be associated with the above described confined *space*. Should any hazards be identified from this worksheet and the hazard and the potential for hazard cannot be completely eliminated, a permit to enter must be issued prior to entry.

THIS IS NOT A CONFINED SPACE ENTRY PERMIT

Supervisor Authorizing all the above conditions as correct: _____

CLASSIFICATION	SUPERVISOR AUTHORIZATION
NON-PERMIT	
PERMIT REQUIRED	