

Chapter 1 Safety Policy

Chapter 2 Safety Management Plan

Chapter 3 Employee Safety Plan

Chapter 4 Hazardous Communication Plan

Chapter 5 Hazardous Energy Control Plan

Chapter 6 Confined Space Entry Safety Plan

Chapter 7 Hot Work Safety Plan

Chapter 8 Hearing Conservation Plan

Chapter 9 Personal Protective Equipment Plan

Chapter 10 Fall Protection Plan (Harness Training)

Chapter 11 Respiratory Plan

Lingo Staffing, Inc.

SAFETY POLICY

The Management of Lingo Staffing, Inc. considers the safety of all employees to be of paramount importance. As a provider of staffing services to various clients, it is the policy of Lingo Staffing Inc, to ensure that all employees are provided with a safe and healthful workplace, free of recognized hazards and maintained in a healthful and sanitary fashion within our client's organizations.

No task shall be considered of such importance or urgency by anyone that standard safe practices or work safety rules may be ignored, or the method of accomplishment place an employee in danger. No employee shall be compelled to undertake any task for which they do not feel that they may have the training, skills, ability, or equipment to conduct safely.

All managers and supervisors shall consider the safety of employees to be an integral part of their responsibilities. It is the responsibility of all supervisory personnel to ensure that the personnel assigned to our clients are adequately trained and equipped to perform their tasks in a safe manner. Further our employees shall not be placed in an environment where they are exposed to unsafe conditions or required to perform tasks in an unsafe manner.

Employees are expected to comply with all safety practices, procedures and work rules as set forth in the safety program, required by their supervisor either orally or in writing or set forth at the work site by the owner or client organization. Failure to comply with established work rules or conduct endangering the employee or others will result in disciplinary action, up to and including termination. All company personnel, whether engaged as management, administrative or operations functions are expected to actively participate and support the company safety program.

Supervisors, company managers and designated safety representatives have the authority and the responsibility to stop work and remove all employees from any situation posing an immediate danger of injury or illness. Work shall resume only after the hazards have been controlled and it is safe to do so.

Brad Gillespie President/CEO

Lingo Staffing, Inc.

Management of Safety

I. Introduction

The health and well-being of all employees of Lingo Staffing, Inc. is of the greatest importance. We are vitally concerned that all employees be provided with a safe and healthful workplace. As a provider of temporary labor, our employees are our product and our source of revenue. First and foremost, we have a sincere humanitarian interest in the well-being of our employees. Further, we are seen as our employees are seen. Our image is only that of our employees and poor safety habits on their part reflects badly on the quality of our product. Lastly, work related injuries and illnesses are very expensive and this is reflected very quickly in the cost of our workers compensation insurance, which is very expensive even with good experience. The objective of our safety program is to prevent accidents from happening to our employees through working closely with our clients to ensure a safe and healthful workplace and to educate and train our employees in safe work practices and to recognize hazardous situation that they might be exposed to and to protect themselves properly.

II. Purpose

- A. This Safety Plan has been developed and implemented by Lingo Staffing, Inc. to address the safety and loss control concerns of our business and to provide the management guidance necessary for its success. Its primary purpose and ultimate goal are the prevention of accidents before they occur, thereby:
 - 1. Reducing and striving to eliminate the personal injuries and illnesses of all employees.
 - 2. Maximizing the protection of company property and the property of our clients.
 - 3. Achieving greater efficiency in the operations of our clients.
 - 4. Making Lingo Staffing, Inc. workers a better value to our clients.
 - 5. Reducing the direct and indirect costs associated accidents.
- B. This program is intended to create and maintain a safe and healthful workplace for all company employees.

III. Objectives

A. The objectives of this program include at a minimum:

- 1. Gaining and maintaining support for the accomplishments of this safety program throughout all levels of our organization.
- 2. Educating, training and motivating all personnel to recognize and correct or report all hazards in the workplace.
- 3. Removing hazards from the workplace through the inspection of employee work places and working in conjunction with our clients to provide a safe and healthful work place and eliminate present hazards.
- 4. Provide for a system of facilities and equipment inspection and maintenance to ensure safe use and operation.

IV. Responsibilities

A. Managing Responsibilities

- 1. Safety Director of Lingo Staffing, Inc. will have the overall responsibility for the implementations of this Safety Program and achieving the Plan's stated objectives. The Vice Safety Director will assist them in this responsibility. The Safety Director will act to facilitate and ensure that adequate resources are available to meet the requirements of this program.
- 2. The Safety Director will ensure that all management and supervisory personnel understand their responsibilities regarding the Safety Program and support it in the accomplishment of the stated goals. They will also ensure that all managerial personnel are adequately trained and educated to recognize potential hazards and unsafe work practices within their area of responsibility and have the knowledge and ability necessary to correct and control present hazards on a timely basis. Further, they will ensure that all supervisory personnel maintain a positive attitude and a pro-active position regarding maintaining a safe work place.
- 3. The Safety Director will provide for the periodic observation and inspection of client premises and facilities for the express purpose of ensuring that company employees are not being exposed to uncontrolled hazards. They shall designate managers as needed to accomplish these periodic inspections and be informed as to the findings and

recommendations of these inspections. They shall act accordingly to ensure the achievement the objectives of this program.

- B. Administrative Manager Responsibilities
 - 1. The Administrative manager is responsible for the record keeping responsibilities regarding occupational safety and health of the company and complying with the OSHA regulations in this regard.
 - 2. OSHA 300, injury and illness documentation
 - a. On report by an employee of a work-related injury or illness, the OSHA form 301 or state designated substitute will be completed by the Administrative Manager and a copy forwarded to the insurance carrier immediately or as soon as possible.
 - b. Following the completion of the 301, the designated administrative person will enter in the establishment's (OSHA definition) OSHA form 300 log of work-related injuries or illnesses. The log will be maintained in each establishment on a calendar year basis.
 - c. Annually, and before February first, the OSHA 300 log will be summarized by the designated administrative person at each establishment on the OSHA form 300A and the 300A posted in a conspicuous place visible to all employees for a period of at least three months.
 - d. Copies of the OSHA forms 300 and 300A will be forwarded to the Administrative Manager.
 - e. These records will be maintained in an easily retrievable fashion for at least five years.
 - 3. Retention of medical records, medical history data, medical testing results and analysis, exposure to hazardous materials also including possible blood borne pathogen and bio hazards exposure record, surveillance, testing and surveys of work place hazardous materials and other hazards such as noise exposure records.
 - a. The above medical records are to be maintained by the Administrative Manager for a period of at least the affected employee's employment plus thirty years.
 - b. In the event business is purchased by a succeeding company, these records will be maintained for the duration of the period by the succeeding company.
 - c. In the event the company ceases to do business without a succeeding company, the medical records will be transferred to OSHA in accordance with 29 CFR 1910, 1020.

d. Employees will be advised at the initial employment orientation and least annually with respect to the availability of all their personal medical records to themselves or designated representatives in accordance with 29 CFR 1910, 1020.

V. Requirements to comply with safety directives and rules

- 1. Lingo Staffing, Inc. safety policies, directives, and rules shall be considered in the same manner as all other company policies or directives and are to be similarly considered and enforced.
- 2. Enforcement of these requirements shall be enforced in accordance with the company disciplinary guidelines. In general, this should be considered a three-step procedure; a verbal warning and counseling, followed by a written or formal warning and ending in termination for violations of safety directives and rules. Some rules, however, are so simple and straightforward and are highly likely to result in serious injury or death that a single transgression should be considered, such as unauthorized removal or disregard of energy control tags or locks, fighting, or entering unclear and un-inspected confined spaces.
- 3. Disciplinary actions for safety directive violations are to be consistent and equal for all employees. Disciplinary action is also to be taken as soon as feasible after the offense allowing time for adequate investigation and consideration.

VI. Accident and Incident Management

- A. Injury/Accident /Damage reports
 - 1. Accident reporting
 - a. All employees must be aware that they are to report all injuries/accidents/damages as well as near misses to office management immediately. Company employees will be provided with the panel of physicians and elect a treating physician for medical treatment as needed. Project supervisors are responsible for summoning emergency response personnel immediately when warranted.
 - b. The Safety Director is responsible for coordinating accident reports with the client organization and complying with their policies in this regard.

2. Accident Investigation-

The senior on-site manager/supervisor is required to investigate and document all incidents as soon as possible with reports forwarded to the Safety Director. Corrective actions should be developed in coordination with client company management and implemented to prevent recurrence. All thefts and acts of vandalism must be reported to the local police and a report number obtained and be included with the documentation. For other than emergency trauma care, the panel of physicians is available to any injured employee as his or her sole source of medical treatment. Following emergency trauma care, the panel of physicians will be offered for follow-up treatment. This means that a severe laceration occurring out of town is to be treated at the nearest urgent or emergency care facility nearby. Once stabilized, he or she, on their return to local office area, will then be offered the panel of physicians to establish the treating physician if necessary, for continued treatment. *State laws may alter this procedure*.

- 3. Injury/Illness administrative management
 - a. Operations personnel are responsible for providing all injury and illness data to the administrative Manager. The senior supervisor/manager on site is responsible for coordinating this information to the central administrative Manager.
 - b. Injury and illness concerns will be coordinated with the Administrative Manager on an on-going basis.
- B. Returning Employees to Work Following a Work-Related Injury
 - 1. It is our policy to return injured company employees to gainful employment as quickly as possible when released by the treating physical to limited or full duty. Though this is complicated by our position as a labor provider to client companies, often this can be overcome with advance coordination and discussion with their management. Experience has shown that workers heal better and maintain a higher level of selfworth when returned within their capability limits to their familiar work environment. It is of the utmost importance that injured employees receive a high degree of attention and not be forgotten or shuffled aside in the press of normal business. The Administrative Manager must be aware of the location and current status of all injured employees and be aware of any treatments being received and the employee's restrictions. The employee should be required to telephone the office management each day to report his or her current status if not released to restricted duty.
 - 2. Injured workers declining offered work within the prescribed restrictions or failing to report for duty as scheduled shall be reported by operations

personnel to the Administrative Manager immediately with appropriate follow up actions as coordinated.

Lingo Staffing, Inc.

Employee Safety Program

I. To Our Employees

The management of Lingo Staffing, Inc. is vitally concerned with the health and wellbeing of all employees. As such, we are committed to ensuring that all our employees are providing a safe and healthful work place. As in any group of people, standards of conduct must be established for the common good of all the members. The purpose of this plan is to establish this standard and to provide you, the employee, with the guidelines necessary for you to perform your job safely and without undue risk of injury and to inform you of our expectations for your compliance with safe work practices and established procedures.

Lingo Staffing, Inc. as a provider of temporary labor will ensure that you are provided safe working conditions with our clients. Likewise, we expect each employee to perform his or her work in a safe manner without undue risk. This means complying with the safety practices and rules established in this safety plan and the safety rules and procedures of our clients. These rules were established for your health and well-being.

Safety is everyone's job and all employees are expected to help make this company and our client's facilities pleasant and rewarding places to work. This may be as simple as keeping your work area clean and orderly or reporting broken tools or equipment or in some cases you may have to clean up someone else's mess. Either way, it should be done with a positive attitude and the knowledge that you are making things better for all.

The following rules are established to govern the conduct of all employees and to provide for everyone's safety. Your supervisor or other managers will add these standards, either in writing or orally, based upon the situation calls. Everyone is always expected to comply with these rules. Failure to comply with these rules will result in disciplinary action up to and including termination. No job is of such importance or urgency that safe procedures can be ignored.

If you are asked to perform a task that you do not feel you have the training, skills, equipment or ability to perform safely, do not proceed and tell your supervisor immediately. This will not be held against you and is the smart thing to do. If you do not understand your instruction or have any question as to what you are supposed to do, **ASK**! Questions do come up and we expect that from time you will not understand some part of your instructions. Rather than just going ahead, ask your supervisor for directions; he or she is your best source of information.

II. Personal Conduct

- 1. All employees are expected to report for work fit for duty. Reporting for work under the influence of alcohol or drugs is strictly forbidden, as is the consuming of alcoholic beverages or taking drugs while on duty. (See the company drug abuse policy).
- 2. Minimum dress for work includes a shirt (no tank tops), long pants extending to the ankle and steel toed boots meeting ANSI specifications for the type of work that you are doing (no athletic type soft shoes). Clothing may not have large rips or tears or other significant holes.
- 3. Jewelry wear is discouraged in that it can cause very serious accidents. Chains must be worn inside your shirt. Earrings may not protrude more than three-eighths of an inch from the ear. Finger rings are strongly discouraged and should be taped if worn. The company reserves the right to prohibit certain items of jewelry on a case-by-case basis. Where client companies maintain more stringent rules in this regard, the client's rules will prevail.
- 4. Horseplay or tussling is prohibited; even in good fun this can result in serious injury.
- 5. Fighting is prohibited.
- 6. Manual lifting, pushing, pulling must be accomplished with extreme care. Pushing is always preferable to pulling where feasible, as there is less likelihood of back strain. There is no room for heroics or showing macho strength. Correct lifting techniques will always be used. Approach the task on good footing, test the load, if it is too heavy, get help or use mechanical devices, use good body mechanics and techniques to accomplish the move.
- 7. Stay alert to activities and hazards around you. If other people are doing something near you that is creating a hazard for you, such as arc welding, you should move, get them to stop, protect yourself with screens or see your supervisor. If you are creating a hazard for someone else, work out a solution or see your supervisor. In any case do not just allow the exposure to continue.
- 8. Signs, posters, warning devices are placed for your information and protection. Read and follow such warnings and notices. Failure to do so may result in serious injury to yourself or others. If you don't fully understand, see your supervisor.

- 9. While working in an industrial facility or job site, potentially hazardous confined or enclosed spaces shall not be entered unless you have been specifically trained in confined and enclosed space entry safety and until currently posted as "safe for workers." Hot work shall not be performed until posted as "safe for hot work" and all posted conditions and requirements met. Employees are not to enter spaces known to contain hazardous atmospheres.
- 10. All employees are expected to immediately report all unsafe conditions and unsafe acts to their supervisors. Unsafe conditions not immediately corrected must be reported to the company senior on site manager or supervisor. Employees will not be punished in any way for reporting unsafe conditions or acts and all reports will be investigated.
- 11. Smoking is permitted only in authorization areas. Facility or client requirements will be obeyed. You are expected to comply with this requirement.
- 12. Only authorized and qualified (trained) employees may start or operate equipment or drive company vehicles. Do not operate client vehicles or equipment without specific authorization and direction to do so.
- 13. Use of compressed air to blow off dust or dirt from a person is prohibited. Compressed air blow guns will be limited to 30 P.S.I.G. maximum supply air pressure or be equipped with pressure limiting devices. Never direct compressed air jets at another person.

III. Accidents, injuries and incidents

- 1. All accidents, injuries and incidents or "near misses" must be reported to your supervisor immediately, no matter how minor you may think it is. You must also report the accident to the company general office as soon as possible.
- 2. You will be questioned closely as to what happened and how the accident occurred. This is not to fix blame on anyone but to prevent it from happening again.
- 3. The company has selected a panel of physicians based on their quality of medical care and their availability to our employees. The authorized panel of physicians is posted in the office for your information. Naturally, in the event of a severe injury requiring immediate attention, the nearest medical facility or emergency room will be utilized. However, when the trauma is stabilized, employees will be provided with panel physicians to choose from for follow up care.

- 4. Following a work-related accident, our number one objective is to aid in your full recovery. This will best be accomplished as a team: you, the injured employee, the treating physician, the insurance carrier and company management. Should you experience a work-related injury and receive medical treatment, you will either be returned to duty with or without restrictions or excused from duty. You are personally responsible for reporting your status and condition to company management immediately unless your supervisor accompanies you to the care provided and is present when you are released. If your release occurs after company business hours or experience a work-related injury and receive medical treatment, you will either be returned to duty with or without restrictions or excludes from duty. You are personally responsible for reporting your status and condition to company management immediately unless your supervisor accompanies you to the care provider and is present when you are released. If your release occurs after company business hours and you are unable to contact your supervisor or other member of management, you are required to report your treatment and condition as soon as possible. If you are released from the care provider with no duty permitted (total duty restrictions) it is only necessary to telephone company management. If you are released to duty with or without restrictions, you are expected to report for work as scheduled or arranged.
- 5. If you are assigned work within your restrictions by company management, failure to report or perform this duty may result in your loss of certain workers compensation benefits. If there are extenuating circumstances or you do not feel capable of performing the work, you must report and discuss your situation with company management. During your period of recovery, you are required to report the results of all treatment and visits to the physician immediately. All company rules regarding attendance and absence remain unchanged during your recovery period.

IV. Personal Protective Equipment

- 1. You will be issued and required to use personal protective equipment (PPE) such as hard hats, safety glasses, or hearing protection devices. Employees who wear prescription eye wear (glasses) may either obtain at personal expense, safety glasses meeting Z-87 specifications and stamped on the lenses and frames, with side shields attached or wear over glasses designed to fit over your regular glasses. Adding removable side shields to regular glasses does not make them eye protection PPE. If you have any questions or concerns about, he equipment you have been issued, ask your supervisor before using it.
- 2. Hard hats, safety glasses and hard (steel) toed will be worn whenever required by facility at which you are working and any time there is an overhead hazard present.

- 3. Hearing protection is required while involved in or near designated tasks generating loud noise and in areas designated as noise hazard areas. You will be advised of these specified tasks. However, if you are exposed to high-level noise, you are expected to obtain hearing protection and use it. As a rule of thumb, any time you must raise your voice to be understood, you need hearing protection.
- 4. Gloves are to be worn during any material handling tasks where rough material or material with sharp edges is being handled. Hot material also requires the use of gloves. The gloves used must meet the requirements of the task being performed. If in doubt, see your supervisor. Never wear gloves while working around machinery with turning shafts, gears, belts or anything that might catch the glove and pull your hands into the machinery.
- 5. Eye protection is required during all hammering, grinding, chipping, sanding operations or any operation generating flying particles. The eye protection utilized must provide adequate protection for the job; for example, safety spectacles are not adequate for heavy grinding. Eye protection may be required in certain areas or throughout the client's premises. When required you are to comply. If in doubt, see your supervisor.

V. Work Areas

- 1. Work areas are to be maintained in a clean and orderly condition, free of debris, trash and kept in workmanlike fashion. At the end of your shift or when vacating a work area, the area is to be cleaned and all trash and debris removed and properly disposed of.
- 2. Oil, grease, water or other slippery substance spills are to be cleaned up immediately and thoroughly. Solvents may be necessary to remove oil and grease films, see your supervisor for the correct material, in no case should you use gasoline as a solvent for cleaning purposes.
- 3. Aisles and walkways are always to be kept clear of tripping hazards. This includes keeping electric cords off the floor or in such a manner so as not to present a hazard.
- 4. Running is not permitted except in emergencies.
- 5. Emergency equipment access, such as fire extinguishers and hoses, and exits shall not be blocked.

VI. Tools- Hand and Powered

- 1. Broken or defective tools will not be used. All tools must be in good operating condition and properly maintained. It is the responsibility of each employee to check the condition and inspect all tools before using a tool.
- 2. Homemade or modified tools will not be used unless specifically approved by the responsible manager. Homemade electric, air, hydraulic or other power-operated tools will not be approved for use.
- 3. Hammers, chisels and other impact tools will be kept well dressed and free of chips and mushrooming.
- 4. All tool guards will be in place and properly adjusted before using any powered tools or equipment. Any removal or disabling of guards is strictly prohibited and will result in disciplinary action. Stationary grinders will have the tool rest adjusted to one-eight inch or less from the wheel and the tongue guard adjusted to one-quarter inch or less. The stone will be ring checked and noted on the label before installation. Eye protection must be worn during use (the plastic or glass shield attached to the grinder is not adequate protection and is not considered eye protection). Missing guards are to be reported to your supervisor at once. If a guard must be removed for maintenance, the machine must be disconnected from its power source and tagged and/or locked out of service. (See also the Lingo Staffing, Inc. control of Hazardous Energy, Lockout/ tag out plan)
- 5. Electric tools must have a functional ground circuit unless the tool is UL certified double insulated. All electric cords must have a functioning ground circuit regardless of the application. Cords will have all insulation intact and the conductor insulation or wires shall not be visible. Tape is not an acceptable repair. A person competent to do so may replace plugs. All electric apparatus must use in installation and repair operations and may not be used. Cords must be of adequate gage for the current demands, typically, 14 gage or larger. Only ground fault circuit interrupter (GFCI) protected receptacles may be used.
- 6. Hot work- Persons using an open flame for soldering, flame cutting, welding or other purpose must have a fire extinguisher immediately (within 10 feet) available and provide protection and shielding to prevent starting a fire. Hot work will only be performed in approved and/or designated areas. Hot work permit will likely be required. Know your assigned company rules and requirements regarding hot work before engaging in any hot work. All specified personal protective equipment will be used. Before beginning hot work, the area surrounding the work will be inspected to verify that no other persons or fire hazards will be exposed to the hazards of hot work.

VII. Chemical Safety (see also the Hazard Communication Plan)

- 1. All employees will receive training and information concerning the chemicals and hazardous materials they may be exposed to. If you are not familiar with a chemical or material you are to work with, tell your supervisor and find out about the material. It is your responsibility to know and understand the hazards of all chemicals before you use them.
- 2. All precautions and limitations as stated on the label or in the safety data sheet (SDS) shall be known and observed before, during and after use. If you are not thoroughly familiar with a material, liquid, powder or chemical do not use it until you are trained to do so.
- 3. Protective equipment requirements as stated on the label or the safety data sheet (SDS) will be utilized.
- 4. Chemicals or materials must not be mixed or used in concentrations other than as described by the manufacturer.
- 5. Fire and explosion precautions shall be observed.
- 6. Placing or pouring materials in secondary containers requires the secondary container to be labeled with the name of the material or duration of use regardless of any OSHA exemption.

VIII. Housekeeping and Sanitation

- 1. A clean and orderly workplace is everyone's responsibility. Tools, equipment, materials, and scrap are to be stored in an orderly fashion and picked up at frequent intervals. The work area will be picked up and organized at the end of each day.
- 2. All trash will be disposed of daily. Lunch containers, drink cups and other food wrappers will be disposed of immediately after use. Do not leave containers and wrappers lying around work areas. Foodstuffs are not to be left overnight and are to be kept in a cool and sanitary place prior to consumption. You are required to comply with client rules regarding eating or drinking in work areas and eating or drinking, smoking, applying cosmetics, and chewing tobacco are strictly prohibited in health hazard areas such as where lead, TBT, asbestos, arsenic dusts may be present.
- 3. Drinking water and sanitary cups are provided for your use. Common drinking cups will not be used. Used cups are to be disposed in the containers provided and not thrown on the ground.

4. Toilet facilities and wash water are maintained for your convenience. Every effort must be made by all to maintain the facilities in clean and sanitary condition. Please leave the facility, as you would want it left for you.

IX. Walking and Working surfaces

- A. Fall Protection
- 1. Fall protection is required any time you are exposed to a potential fall of 4 feet or more. This means that any time the walking or working surface edge (other than ladders- see the ladder and scaffolding section) is unprotected by a barrier at least 39 inches and the edge is 4 feet or more above the lower level.
- 2. Fall protection may be in the form of guard railings, safety nets, or personal fall arrest systems such as harnesses and lanyards. Whichever means is selected, employees are always expected to utilize the protection provided when exposed to a potential fall.
- 3. Fall arrest systems consist of three basic components: the harness, a lanyard and an anchor point to tie off to. Safety belts are not permitted for fall protection use except as positioning devices where immediate self-rescue is possible. Harnesses, when worn, must be adjusted for a snug fit with all buckles secured. Only company supplied lanyards manufactured specifically for fall protection shall be used and must be in good serviceable condition without fraying or broken strands. Lanyards will not be knotted for any reason. Anchor points to which the lanyard is secured shall be capable of withstanding 5000 pounds of strain without failure for each worker tying off to that point. The anchor point must be above the standing or working level and preferably overhead. The system must be configured to permit no more than a fall of 4 feet or the lower level whichever is less.
- B. Floors and walking/working surfaces
 - 1. Floor openings include any voids or openings in the walking surface greater that 3" in its least dimension and must be either covered with a covering strong enough to withstand all normal traffic for the area or provided with railings. Window or wall openings with openings or sills lower than three feet must be equipped with either a covering or railing.
 - 2. These fall protection covers, or railings must not be removed, and the hazards left unprotected. Should it become necessary to remove a barrier temporarily, then employees are required to reinstall it to its original configuration. Failure to replace or reinstall fall protection after removal will result in disciplinary action.

- C. Fall protection training
- 1. Employees exposed to potential fall hazards shall be provided with training to enable them to recognize potential fall hazards and understand the adequacy, advantages and disadvantages of the various controls and protective measures.
- 2. Employees shall receive training in at least the following areas:
- 3. Identification and recognition of fall hazards, including the various trigger heights and requirements.
- 4. The three conventional fall protection methods, including safety nets, safety railings, and fall arrest systems and positioning devices.
- 5. The components of each of the conventional fall protection systems and the construction requirements for each as applicable.
- 6. Proper donning and wearing requirements of the fall arrest harness and lanyard anchor point selection requirements.
- 7. Inspection of fall arrest systems components including harnesses, lanyards, shock absorbing devices, safety clips, lifelines, positioning belts and straps or lanyards.
- 8. Inspection of railing components.
- 9. Inspection of safety nets.
- D. Ladders and Work Stands
 - 1. Ladders, and work stands must be strong enough and be without damage. Only ladders and work stand manufactured and designed for the purpose and have at least 225-pound rated capacity and be electrically nonconductive will be used. Employees shall not stand above the step limit identified by the manufacturer. Stepladders will be used with both sides extended and not as straight ladders. Employees are not to stand on the top two steps of the stepladder. Ladders are not to be repaired, except as specifically authorized by the manufacturer using standard parts. Five-gallon plastic buckets and chairs are not to be used for work stands.
 - 2. Straight or extension ladders will be tied off and secured to prevent movement or if infeasible, held by another employee while occupied. When used to gain access to a higher level, the side rails shall extend at least 3 feet above that level. Extension ladders sections shall not be separated and used independently.

- 3. Straight and extension ladders should be erected so that the ladder feet are one-fourth the height from the vertical plane of the ladder and plumb.
- 4. Ladder Training-

Employees required to use ladders and scaffolding in the accomplishment of their assigned duties will be trained in their proper use. This is to include ladder and scaffold construction principles, stability limitations, inherent hazards, inspection criteria, limitations of use and prohibited actions.

- E. Scaffolds and Staging
- 1. Scaffolding and staging will be erected only under the supervision of a competent person able to recognize hazards associated with scaffolding and with the authority to correct or control these hazards.
- 2. Scaffolds will be erected only on secure, stable foundation and in accordance with the manufacturer's design and instructions. All braces and supports will be installed as designed.
- 3. All working levels will be decked completely with no gaps greater than 1 inch. Scaffolding and staging working platforms more than 5 feet in height shall be provided with railings. When the working level edge is facing a vertical surface and has a gap of less than 12 inches the railing may be omitted if it interferes with the work in progress.
- 4. A ladder or means of access to all scaffolding greater than 5 feet in height will be provided.

VIII. Conclusion

- 1. Each employee must take individual responsibility for his or her own safety and the safety of others around them. Every employee must always maintain a mindset of safety. Do not cut safe practices short.
- 2. Specific hazard safety plans have also been developed to address certain tasks and operations that you may be exposed to.
- 3. Despite the length of this document, these procedures only cover the most basic safety rules and job procedures. They do not cover all procedures necessary to protect you against injury or illness. You are expected to also comply with the safe work practices and procedures of all client companies while working in their facilities. These procedures will be supplemented or expanded on from time to time by your supervisor for hazards present on your site. Additionally, these will be supplemented with training and in safety meetings. Whether in writing or orally, these are equally binding, and your compliance is expected. No

attempt has been made to include all regulations dealing with workplace safety, but only those deemed necessary by the company for your immediate protection. Additionally, OSHA, Army Corps of Engineers, local fire codes or other governmental rules and regulations may differ and take precedence in certain situations.

ACKNOWLEDGMENT

I acknowledge that I have received a copy of the Lingo Staffing, Inc. Safety program. I understand that I will be expected to comply with these safe work practices and procedures and will be expected to work and behave in a safe manner while an employee of the company. I agree to comply with these expectations.

I understand that if I suffer a job-related injury or become ill as a result of a jobrelated exposure, I am to report this to the Lingo Staffing, Inc. office as soon as possible. I understand that the posted panel of physicians is available and authorized to provide medical treatment to employees.

Print Name

Sign Name

Date

GS-041 01/08

Lingo Staffing, Inc.

Hazard Communications Plan

I. Introduction- To Our Employees

- A. This document if for your information. It explains the means and methods which have been adopted by Lingo Staffing, Inc. to protect you from the hazardous materials which may be present on the premises of our clients and in your workplace. It also contains a lot of other helpful information that could be quite important to you. Our clients will maintain a master list of their potentially hazardous chemicals and Material Data Sheets for each of these chemicals. This information is readily available to you.
- B. You have a right to know this information and company management wants you to understand your rights. It is our policy to continually provide this kind of information to you as you work through instruction and training, answering questions, posting signs, container labels and other methods. However, it is impossible for us to know unless we hear from you.
- C. It is your obligation to be informed and to obtain immediate help if you get ill as a result of your employment. Ask your supervisor at once! If there is anything you don't understand or whenever you feel there is a work hazard here or if you ever become ill or develop any symptoms of illness as the result of your work or you become aware of any fellow employee who hasimmediately notify your supervisor. This will not only help you and your fellow employees; it will help us know what we must do to make this company an even safer place to work. Providing us with that information is also a requirement of your job.

II. Purpose

- A. This plan is part of our continuing program to inform you about safety and health in your workplace. You should be well informed about the matters discussed here because the more people that know about workplace illness and injury, the greater the opportunity for prevention or prompt treatment.
- B. Lingo Staffing, Inc., as a provider of staffing services to client companies, does not maintain or use potentially hazardous chemicals other than normal office supplies. Client companies do, however maintain such chemicals and Lingo Staffing, Inc. employees will encounter chemicals at the clients' facilities. As such, this plan provides guidance in preparing employees for such exposure and to describe management's responsibilities in assuring company employees of a safe and healthful place to work.

- C. The Safety Director of Lingo Staffing, Inc. is responsible for the overall accomplishment of this program. The Director may designate any such persons as necessary to assist him in these responsibilities.
- D. The senior manager in each company location is responsible for the accomplishment of this plan. The senior manager will coordinate with the client companies regarding potential chemical hazards the Lingo Staffing employees may be exposed to and establish the necessary training responsibilities.

III. Hazardous Chemicals

- A. Any material is hazardous if it is handled in such a way that people encounter it in amounts or in ways that can cause personal injury or property damage. The actual hazard of a material is created by circumstances. Under certain conditions of use or misuse, there is likelihood that any material will have a harmful effect.
- B. The hazard of any material is determined by the chemical, physical, and biological properties of the material and the possibility of exposure to that material. This information is available to you in the Safety Date Sheets maintained by the client company, on the labels of the containers, from your supervisor and members of management. This will be covered more fully later in this plan.
- C. Avoiding Chemical Hazards-
 - 1. A material that is packaged and labeled properly, stored carefully and handled correctly by trained people, presents no practical hazard. During handling, the use of engineering controls such as fume, vapor or dust hoods, or personal protective equipment such as respirators, eye and face protection, gloves minimize the exposure and hazard. This information appears on the Safety Data Sheets and has been covered in training. Labels and signs are also designed to point out safe techniques of handling and using specific chemicals. Observing all these safety precautions is a requirement of your job.
- D. Where are hazardous materials found?
 - 1. Everywhere. Almost all materials, if exposure is great enough can be harmful. Knowing this, you must be aware and knowledgeable of the materials and chemicals in your workplace and their specific hazards. The chemical list and Safety Data Sheets will assist you in

understanding these hazards as well as training, instruction, signs, and labels.

- E. What effects can hazardous materials produce?
 - Before any damage can be done the hazardous material must encounter or enter the body in a concentration high enough to cause a harmful effect. Although there are a multitude of exposure or entry routes, the most obvious ones are mouth, nose, skin, and eyes.
 - 2. Harmful effects may be produced by hazardous materials after either acute or chronic exposure. Chronic exposure occurs over an extended period, after repeated doses. Acute exposure occurs in a short time as in a single dose. You are required to immediately notify your supervisor of any such effects whether acute or chronic.
- F. Protecting yourself from the hazards of chemicals.
 - 1. Protecting yourself from the hazards of chemicals is relatively simple but it does require a little effort on your part.

Know the materials that you work with or are exposed to and understand the harmful effects the chemicals might have and the routes of entry into your body and those around you. If you don't know or have questions-ASK!

Practice good housekeeping, good personal hygiene and safe work practices.

Always use the recommended precautions listed in the SDS.

- G. Information availability for hazardous chemicals.
 - 1. Available written materials providing information.
 - 2. To ensure that you are aware of all the hazards associated with materials you work with, this company has developed this comprehensive Hazard communication (Haz comm., "Right to Know") program. Our program consists of:
 - a. Ensuring that each client company maintains a master list of chemicals for its operations.
 - b. Ensuring that each client company maintains a library of Safety Data Sheets (SDS) of all hazardous chemicals and materials known to be in their work places.

- c. That labels and other identification systems are used to identify hazardous materials by client companies.
- d. On the job training and instruction plus other formal training programs to provide specific information about potentially hazardous materials our employees use.
- e. Supervisors are ready, willing and able to provide whatever information you request and take immediate action to correct hazards as soon as they are identified.
- f. Detailed information on numerous other matters that are important to an effective hazard communication program.

IV. Hazard Communications Coordinator

- A. The Lingo Staffing, Inc. Safety Director has overall responsibility in the administration of his plan as the Hazard Communications Coordinator. Persons he or she may designate may assist the Director. The Hazard Communications Coordinator is responsible for assuring that:
 - 1. Training for all employees is accomplished in accordance with this plan.
 - 2. To coordinate with client companies to ensure that safety data sheets are maintained current and available to our employees.
 - 3. That the least hazardous chemical is used for a purpose in which our employees are exposed.
 - 4. All materials and products are labeled properly.
 - 5. The hazards of various chemicals introduced in the various work locations are coordinated with any affected employees including contractor or other employers.

V. Container Labels

- A. The Safety Director or his designee will ensure through inspection of client facilities that a labeling system of potentially hazardous chemicals is in practice at client facilities.
- B. Each hazardous material container will bear a label, which will list the trade name, chemical name or common name designation of its contents and whatever hazard warnings are appropriate. The name on the container will be marked with the name of the material and principle hazards associated with the material.
- C. Any employee placing or pouring materials or chemicals in secondary containers is responsible to use only suitable containers. For example,

gasoline will be placed only in suitable flammable liquids "safety cans." Additionally, the container will be labeled with name of the contents and principle hazards. For example, gasoline containers will be labeled "gasoline" or "gas" and "Flammable" Note: Safety cans or "Gas cans" do not come from the supplier labeled as gasoline or gas and require labels to be added even though they are labeled as flammable liquid cans. This applies to all secondary containers, regardless of the duration of use.

VI. Safety Data Sheets (SDS)

- A. The OSHA Hazard Communications Standard requires that all employers maintain current SDS for all potentially harmful chemicals in the workplace in a logical fashion, easily recoverable and available to all employees without question.
- B. The company Hazardous Materials Coordinator is responsible for ensuring that all client companies are following this requirement.

VII. Master list of hazardous chemicals and materials

- A. The Hazard Communication Coordinator is responsible for ensuring that the client company maintains an accurate list of all hazardous chemicals and materials.
- B. The list shall be maintained in a well-organized and a logical manner and be maintained in a current fashion.
- C. The list shall include the name of the chemical or material that is both known to employees and appears on the SDS and container label.
- D. The list must be available to all employees.

VIII. Training and Employee Information

- A. Training will be accomplished at the direction of the Safety Director and accomplishment coordinated with the client company. The purpose of this training will be to instill a positive safety attitude among the employees with regards to the safe use of chemicals they are exposed to, make employees aware of the hazardous materials present, learn about the information available to them and how to use this information. Employees will be trained prior to any assignment involving exposure to hazardous materials.
- B. The elements of the training will be as follows:
 - 1. The purpose and requirements of the OSHA Hazard Communication Standard.

- 2. The location and availability of this written Hazard Communication Plan, the inventory list of hazardous materials and safety data sheets.
- 3. That client companies are responsible for advising our employees of the identity and nature of potentially hazardous chemicals that our employees may potentially be exposed to.
- 4. Methods and observations to be used to detect the presence or release of a hazardous substance.
- 5. The measures' employees must take to protect themselves from these hazards, including specific procedures this company has implemented to protect its employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.
- 6. The specific requirements and parameters of the in-house labeling system.
- 7. Actions and precautions to be taken in the event of a spill or inadvertent release.

IX. Outside or subcontractors, prime contractors and owners (Multiemployer work place)

- A. The Hazard Communications Coordinator is responsible for coordinating with the client company's Coordinator regarding preplanning and coordinating with any and all contractors, subcontractors and host organizations regarding hazardous materials that they will bring in the client's work site potentially exposing company employees.
- B. Company employees will receive information and training necessary for their protection regarding these hazardous chemicals.

X. Non-Routine Tasks and Activities

- A. Non-routine tasks and activities, in this context, would include the use and exposure of employees to chemicals out of the ordinary scope of those normally used and maintained by the client company.
- B. When non-routine tasks and activities using unusual chemicals are contemplated, the Hazard Communications Coordinator shall be involved by the client company's coordinator in the planning of the task or activity from the onset as necessary.

- C. The Hazard Communications Coordinator shall work and coordinate closely with the senior management person directly involved with the project to obtain SDS and other information of all intended chemicals and closely examine the potential hazards of the emphasis should be placed on using the least hazardous chemicals capable of accomplishing the objective.
- D. Prior to the introduction of the chemicals into the work place, the Hazard Communication Coordinator of the client company is expected to ensure that all affected employees are trained in the properties and hazards of the chemicals including their labeling requirements, routes of entry and health hazards, proper storage and handling requirements, the hazards of the chemicals and methods of control in the event of accidental spill and proper procedure for use and the necessary personal protective equipment.
- E. Chemicals introduced onto multi-employer work sites for non-routine tasks shall be coordinated as indicated in the procedure above.

Appendix A

Lingo Staffing, Inc.

Designation of Hazard Communications Coordinator

Brad Gillespie is designated as the Hazard Communications Coordinator for the company. Mr. Mann has the necessary authority and resources to accomplish the requirements and responsibilities of the position as described in this plan.

The senior manager at each location is responsible for implementing this plan in coordination with Mr. Mann for facilities served by their location.

Brad Gillespie Safety Director

Appendix B to the Hazard Communications Plan

Lingo Staffing, Inc.

Hazard Communications Program Safety Training

Trainer:_____

Date:_____

Training summary:

Hazard Communication training was conducted on this date with the below listed personnel. The training included the following elements: The company's Hazard Communication Program, the identity of the Hazard Communications Coordinator, the information that can be expected to be dispensed from other than the original packaging or container, the hazardous materials present in the work area, measures that employees can and are required to take to protect themselves, procedures that are in effect to provide for the protection of employees against hazardous materials, methods of detection and indications of the presence of hazardous materials and inadvertent releases and the requirement to comply with the procedures and work practices covered in this plan.

Sign Name

Print Name

Lingo Staffing, Inc.

Hazardous Energy Control Plan

I. To Our Employees:

- A. Energy is the force that makes things happen. It can produce movement, increases in temperature or increases in pressure or stress. It may be kinetic or moving as in a turning wheel or shaft or it may be potential such as a suspended object that when released will fall. Energy is essential to us in producing the things we want and accomplishing the tasks we do. Energy, when released in an uncontrolled or unexpected manner, can also cause serious harm and death. In fact, many if not most injuries and deaths are a direct result of this sudden and unexpected release of energy.
- B. Lingo Staffing, Inc. is a provider of Staffing services to client companies. As such, company employees may work near or in contact with harmful energy transmission devices at client facilities. To provide for the protection and well-being of our employees, this Hazardous Energy Control Plan is established. All company personnel are to be trained, at minimum, to recognize energy controls that have always been put in place to protect from the inadvertent release of hazardous energy and to respect these controls. Employees will also be trained in accordance with their requirements. All company personnel are expected to comply with this plan.
- C. Different companies, organizations and situations will likely result in somewhat different methods and procedures being used in the control of hazardous energy. As such, client or host procedures must be known and complied with. The most significant difference is in the use of locks and lockout procedures. Often the use of locks and lockout devices is not permitted on U.S. Navy vessels and shipboard situations. However, in no case is an employee to work in situations where the energy is not positively known to be controlled or at zero state.

II. Purpose

- A. The purpose of this plan is to provide for the protection of company employees from the inadvertent release of hazardous energy.
- B. This plan is intended to provide Lingo Staffing, Inc. managers with guidance in preparing employees who may be exposed to hazardous energy with a basis of knowledge with which themselves and to understand the controls that client companies have put in places to control this energy.

C. This plan is also intended to enable company managers to recognize situations in which employees are being exposed to uncontrolled hazardous energy or are expected by the client to perform energy control for which company employees are not adequately trained.

III. Definitions

Lockout/Tagout is a method (or process) of shutting down and isolating equipment or energy transmission devices to prevent its unexpected start-up or the sudden release of energy whether potential (stored) or kinetic (active or in motion). Lockout/tagout involves the use of mechanical, pneumatic, thermal, etc.) at energy control devices (switches, circuit breakers, valves, blocking, piping connections, etc.)

An **authorized employee** is a person who by virtue of their education, training and experience is knowledgeable of the hazards associated with specific energies and their sources and is knowledgeable of the procedures and actions necessary for the control of these hazards. The authorized employee is responsible for implementing these procedures whenever these energies pose a threat to themselves or to other workers within their charge.

Lockout is a procedure in which a mechanical device (lock or tamper resistant device and associated hardware) is placed on an energy isolating device (valve, switch, circuit breaker, etc.) in accordance with established procedures to indicate that the energy isolating device being controlled cannot be operated without excess force and the equipment being controlled cannot be operated until the lockout device is removed. Where padlocks are used, they will be standardized and designated for the purpose of lockout only.

Tagout is the placement of a tagout device (written sign or tag indicating that operation of equipment is prohibited) on an energy isolating device (valve, switch, circuit breaker, etc.) in accordance with established procedures to indicate that the energy isolating device and the equipment being controlled may not be operated until the Tagout device is removed.

Blocking refers to the installation of various devices that effectively prevent the movement or operation of a machine or component due to gravity or other energy sources. Blocking, such as blocks, pins, support rods or other such devices must be of adequate strength and be installed in such a manner to be stable and secure.

IV. General Provisions

A. This procedure outlines the steps required to ensure that:

- 1. Equipment and machinery energy control devices are locked in the off or "safe" position when undergoing maintenance or employees are exposed to hazardous energies or the sudden and unexpected start up or movement of machinery or equipment.
- 2. Stored energy is controlled or dissipated, and the sudden and unexpected movement of components or sudden release of energy is controlled.

V. Mandatory Compliance

All employees are required to comply with this policy and plan. Noncompliance with or violations of these procedures will result in immediate disciplinary action on the first offense up to and including termination. **The following actions are strictly prohibited:**

- 1. Attempting to operate or energize locked out or tagged out equipment.
- 2. Removal of other employees' locks and / or tags.
- 3. Willful negligence in complying with Lockout/Tagout procedures.

VI. Responsibilities

- A. The operating manager of each company location is responsible for assuring that all affected personnel are adequately trained to perform their respective tasks regarding this plan and the procedures involved.
- B. When the client and Lingo Staffing, Inc. management agree, Company employees may be authorized to perform the locking and tagging out of hazardous energy. In those instances, the Authorized employees will be trained to recognize jobs, tasks or operations requiring the exercise of this plan and be knowledgeable of the expected or suspected hazards to be encountered. The Authorized employees will have the knowledge and ability to identify the sources of energy and the means of controlling this energy. Authorized employees will have or obtain the appropriate devices and equipment from the client company and ensure that the devices are in serviceable condition. Authorized employees will also assure that any affected personnel within their charge are adequately trained and competent to perform the tasks required and that other affected personnel are notified of the lockout.
- C. Authorized employees, with assistance from appropriate technical support as necessary, shall make a survey to locate and identify all isolating devices so as to be certain that all sources and forms of energy (electrical, mechanical, hydraulic, pneumatic, thermal, radiation, etc.) are positively controlled and isolated in the area of exposure.

- D. When operations or work to be performed requires the isolation of machines, equipment or work areas, the authorized employee will:
 - 1. Coordinate with all affected employees, if any.
 - 2. Assign only competent and trained personnel to perform the work.
 - 3. Identify all potentially harmful energy sources including stored energy and the effective means of control and isolation. Refer to specific energy control procedures where applicable.
 - 4. Ensure that approved Lockout and/ or Tagout devices are available and in serviceable condition and secure the lockout devices to positively lock the control device in the desired position.
 - 5. Ensure compliance with all aspects of this plan and applicable safety procedures.

VII. Training

- A. Affected employees- Lingo Staffing, Inc. will train all affected employees in the importance and required nature of Lockout and Tagout procedures and the purpose and function of those procedures.
- B. Where employees are authorized by the client and authorized to perform the control of hazardous energy, authorized employees will be instructed by the client in the types and magnitudes of energy sources in the workplace, the recognition of those energy sources and the methods and means necessary to isolate and control those sources. Employees will be retrained whenever there is an introduction of new machines, energy sources, or personnel are assigned to a new position involving new exposures or in the event management inspection reveals a deficiency in the knowledge, training or compliance of employees. Documentation of all training will be maintained, including the identities of the employees trained the trainer, date of training and subject matter of the training.
- C. Training topics- conducted as agreed between the Client Company and Lingo Staffing, Inc.
 - 1. Each authorized employee shall receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary isolation and control.

- 2. Each affected employee shall be instructed in the purpose and use of the energy control procedure.
- 3. All other employee whose work operations are or may be in an area where energy controls. Procedures may be utilized, shall be instructed about the procedures, and about the prohibition relating to attempts to restart or reenergize machines or equipment, which are locked out or tagged out.
- 4. When tagout systems are used, employees shall also be trained in the following limitations of tags:
 - a. Tags are essentially warning devices affixed to energy isolating devices, and do not provide the physical restraint on those devices that is provided by a lock.
 - b. When a tag is attached to an energy isolating means, it is not to be removed without authorization of the authorized person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated.
 - c. Tags must be legible and understandable by all authorized employees, affected employees, and all other employees whose work operations are or may be in the area, in order to be effective.
 - d. Tags and their means of attachment must be made of materials which will withstand the environmental conditions encountered in the workplace.
 - e. Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program.
 - f. Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use.
- D. Employee retraining
 - 1. 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.
 - 2. Additional retraining shall also be conducted whenever employee's knowledge or practice indicates a need as shown by the at least annually required inspection conducted by the Client or it has come to the attention of Lingo Staffing, Inc.
 - 3. The retraining shall reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary.

E. Documentation of Training

The local Operations Manager will maintain documentation that employee training has been accomplished and is being kept up to date. The documentation shall contain each employee's name and dates of training and areas of training conducted.

VIII. Tagout procedures for U.S. Navy vessels

- A. U.S. Navy vessels are governed by Navy regulations and have different requirements to provide for the war readiness of the vessel in national emergencies. As such, the captain of the vessel or his designates retain responsibility for all control of hazardous energy. The accomplishment of Tagout will be accomplished by U.S. Navy personnel and inspected daily. Through the importance of energy control is not minimized and personnel must remain equally alert in the certification of energy control the actual control will be maintained by the ships complement. The following variations apply:
 - 1. Tagout will be requested and coordinated through the captain's designate by the senior operations person involved with the work before exposure.
 - 2. Tagout will be applied by ships forces and inspected regularly.
 - 3. Lockout will not be used but tags will represent the same function and respect.
 - 4. Employees will inspect and assure positive tagout before exposure.
 - 5. Employees will test for voltage first before any exposure to circuitry.
 - 6. Release of lockout will be accomplished in essentially the same fashion according to the procedures listed in 5.9 below except that the Captain's designate will accomplish the actual tagging and release from control.

IX. Lockout and/ or Tagout procedure

Step 1: Notify all affected personnel- Notify all affected employees of the systems to be locked out/tagged out, commencement, and the procedures for Lockout/Tagout. This will involve persons affected by turning off the energy source as well as any persons that will be directly involved with work associated with or near the systems.

Step 2: Prepare for shutdown/isolation- Prior to initiating Lockout/Tagout, the authorized employee will:

- 1. Identify the types and amounts of energy involved. On host premises or on shipboard, coordination and support must be sought with the designated representatives of that organization.
- 2. Determine the energy sources and their respective controls and isolation devices including components subject to movement by the forces of gravity.
- IE: switches, valves, circuit breakers, spring such as a compressed air or raised shear blades.
- 3. Determine and acquire equipment necessary to accomplish Lockout/Tagout.

Step 3: Machine or equipment shutdown

- 1. The machine or equipment shall be turned off or shut down using the normal established procedures for this purpose.
- 2. All energy-isolating devices that control energy to the equipment shall be located and operated in such a manner as to isolate the equipment from the energy sources. This should include at least two energy controls if lockout is not to be utilized.

Step 4: Attach lockout devices to each source energy control device. (If permitted)

- 1. Lockout devices shall include at least a designated standardized lock and identifying tag. The tag shall include at least the authorized employee's name. Additionally, devices may include hasps, cables, chains and other specialized devices to prevent the actuation of the control.
- 2. A lockout device will be placed on each energy isolating control by the authorized employee in such a manner to hold the energy control in the off or "safe" position and the tag identifying the employees completed. Circuit breakers used to isolate specific circuits may be switched to the far position and a circuit breaker locking device affixed to the breaker toggle and the device locked with a lockout lock.
- 3. Tagout- Approved warning tags must be affixed in such a manner to clearly indicate that the operation or movement of the energy isolating devices from the "safe" or off position is prohibited. The tag shall be placed as close to the control device as is safe and in an immediately obvious position.
Step 5: Test operate Controls

Tests operate the operating controls for normal start or actuation after verifying all personnel are clear of the equipment or machine. Warning: Turn off or neutralize the controls to off or a "safe" position is prohibited. The tag shall be placed as close to the control device as is safe and in an immediately obvious position.

Step 6: Release, disconnect or restrain all stored or residual energy.

After locking/tagging out all energy sources, release, disconnect, restrain or otherwise render "safe" all stored or residual energy. This may be mechanical, thermal, electrical, hydraulic, gravity or any other form of energy and may include fluids under pressure, springs under tension, raised or suspended objects or components, capacitors retaining an electrical charge or any other form of potential energy. This may involve the blocking of mechanical parts and preventing the movement of parts and components. If there is a potential for a reaccumulation of this stored energy, then this verification of isolation must be continued until work is completed or the potential of accumulation no longer exists.

Step 7: Perform work

- 1. Persons working on electrical circuits or otherwise exposed to potential electrical hazards shipboard shall work standing on insulator mats unless the deck is insulated.
- 2. Maintain or reaffirm Lockout/Tagout daily.
- 3. Maintain identifying tags to indicate accurately all authorized persons performing the lockout. Each authorized person involved shall affix lock to the lockout device or mechanism. Should one authorized person replace another who is leaving the site, and then the second person shall affix their lock and their lock and add their name to the tag before the first removes their lock and identification.

Step 8: Release from Lockout/Tagout: For shipboard activation of systems refer to procedure below.

Prior to removal of Lockout and /or Tagout devices and tags the following procedures must be strictly adhere to:

1. Physically verify that all tools and equipment have been removed from the area and that the machine or equipment is operationally intact, and guarding has been restored.

- 2. Physically verify that all employees have been safely positioned or removed.
- 3. Notify all affected employees that Lockout/Tagout devices are to be removed.
- 4. Authorized employees shall remove the devices they installed.
- 5. Re-energize the equipment/system.

X. Working on or near exposed energized parts- including equipment testing or positioning (jog mode)

This section applies to work performed on exposed live parts (involving either direct contact or by means of tools or materials) or near enough to them for employees to be exposed to any hazard they present.

- A. Only qualified persons may work on electric circuit parts equipment that has not been de-energized under the procedures of paragraph (B) of this section. Such persons shall be capable of working safely on energized circuits and shall be thoroughly trained and familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools. Protective provisions will include at minimum:
 - 1. Insulated deck matting.
 - 2. Attendant with no other distracting duties to render immediate assistance if required.
 - 3. Non-conductive lifeline secured to exposed person and under the direct control of the attendant.
 - 4. Arm length insulated rubber gloves suitable for electrical work and leak tested prior to use.
 - 5. Suitable eye and face, body and head protection.
 - 6. Testing equipment suitable for verifying and differentiation of energized and de-energized components.
- B. Equipment and circuit testing and positioning (jog mode) procedures.
 - 1. The authorized person preparing to perform work will coordinate with all affected persons, ship's controlling authority and host authority.

- 2. The applicable activation checklist (appendix A) will be completed by the authorized person and actions completed in preparation for activation.
- 3. All non-essential and non-authorized personnel will be evacuated from the area of exposure.
- 4. With the participation of ship's controlling authority and host authority as applicable, the system will be activated, minimizing activation to the essential areas only.
- 5. The authorized will have all necessary protective equipment and ensure that the insulated matting and blankets are satisfactorily in place before entering the area of exposure and following procedures for work having exposure to activate circuits or components.
- 6. The authorized person will participate in the reinitiating of energy control and physically verify the controls in place.
- 7. Immediately on completion of work, the authorized person will report to the ship's authority and host authority the completion and requirement to reinitiate energy controls.
- 8. The authorized person will participate in the reinitiating of energy control and physically verify the controls in place.
- 9. Affected persons will be notified of the return to energy control status.

XI. Activation of shipboard systems

A. Specifications of the host organizations typically require certain procedures and notifications be accomplished prior to activating certain systems and components. It is imperative that these procedures and notifications be accomplished prior to activating the system on completion or for testing of repairs. The actual removal of tags and activation of energy will be accomplished by the Captain's designated on Navy vessels.

XII. Requirements for work on radar and radio transmission masts and aloft areas.

- 1. Employees shall not work on masts and aloft areas where a radiation hazard exists from radar and radio transmission devices unless protected through the Tagout and securing of devices capable of emitting this radiation.
- 2. Exemption- Trained radar and radio technicians may for the purpose of testing only, work with these units operating.

3. Work of this nature is best accomplished during periods when the area involved is free of work in progress.

XIII. Specific energy control procedures for boilers, piping systems and anchor control systems.

A. Boilers

Before work is performed in the fire, steam, or water spaces of a boiler where employees may be subjected to injury from the direct escape of a high temperature medium such as steam, water, oil, or other medium at a high temperature entering from an interconnecting system, the employer shall insure that the following steps are taken:

- 1. The isolation and shutoff valves connecting the dead boiler with the live system or systems shall be secured, blanked, and tagged indicating that employees are working in the boiler. This tag shall not be removed nor the valves unbanked until it is determined that this may be done without creating a hazard to the employees working in the boiler, or until the work in the boiler is completed. Where valves are welded instead of bolted, at least two isolation and shutoff valves connecting the dead boiler with the live system or systems shall be secured, locked, and tagged.
- 2. Drained connections to atmosphere on all the dead interconnecting systems shall be opened for visual observation of drainage.
- 3. A warning sign calling attention to the fact that employees are working in the boilers shall be hung in a conspicuous location in the engine room. This sign shall not be removed until it determined that the work is completed, and all employees are out of the boilers.
- B. Piping

Before work is performed on a valve, fitting, or section of piping in a piping system where employees may be subject to injury from the direct escape of steam, water, oil, or other medium at a high temperature, the employer shall insure that the following steps are taken:

1. The isolation and shutoff valves connecting the dead system with the life system or systems shall be secured, blanked, and tagged indicating that employees are working on the systems. This tag shall not be removed nor the valves unbanked until it is determined that this may be done without creating a hazard to the employees working on the system, or until the work on the system is completed. Where valves are welded instead of bolted at least two isolation and shutoff valves connecting the dead system with the live system or systems shall be secured, locked, and tagged.

- 2. Drain connections to atmosphere on all the dead interconnecting systems shall be opened for visual observation of drainage.
- C. Propulsion Systems

Before work is performed on the main engine, reduction gear, or connecting accessories, the employer shall ensure that the following steps are taken:

- 1. The jacking gear shall be engaged to prevent the main engine from turning over. A sign shall be posted at the throttle indicating that the jacking gear is engaged. This sign shall not be removed until the jacking gear can be safely disengaged.
- 2. If the jacking gear is steam driven, the stop valves to the jacking gear shall be secured, locked, and tagged indicating that employees are working on the main engine.
- 3. If the jacking gear is electrically driven, the circuit controlling the jacking gear shall be de energized by tripping the circuit breaker, opening the switch or removed the fuse, whichever is appropriate. The breaker, switch, or fuse location shall be tagged indicating that employees are working on the main engine.
- 4. Before the jacking engine is operated, the following precautions shall be taken:
 - a. A check shall be made to ensure that all employees, equipment, and tools are clear of the engine, reduction gear, and its connecting accessories.
 - b. A check shall be made to ensure that all employees, equipment and tools are free of the propeller.
- 5. Before work is started on or in the immediate vicinity of the propeller, a warning sign calling attention to the fact that employees are working in that area shall be hung in a conspicuous location in the engine room. This sign shall not be removed until it is determined that the work is completed, and all employees are free of the propeller.
- D. Deck Systems and Anchor Controls

Before work is performed on the anchor windlass or any of its attached accessories, the employer shall ensure that the following steps are taken:

- 1. The devil claws shall be made fast to the anchor chains.
- 2. The riding pawls shall be in the engaged position.
- 3. In the absence of devil claws and riding pawls, the anchor chains shall be secured to a suitable fixed structure of the vessel.

Lingo Staffing, Inc.

Confined and Enclosed Space Entry Safety Program 29 CFR 1915

I. To Our Employees

- A. Confined and enclosed spaces with hazardous atmospheres are probably one of the most insidious killers we can experience. Confined spaces may contain hazardous atmospheres, which are often undetectable with our senses. Even while we are dying, we may not realize that anything is wrong. The condition also plays on our concern for our fellow man and draws would be rescuers into the area, often claiming them too. In fact, more would be rescuers die in hazardous confined spaces than initial entrants because often more than one rescuer will enter the space and succumb to the hazardous atmosphere. Accident files are filled with accounts where one worker entered unprepared into a space with a hazardous atmosphere and succumbed, only to be followed by others, one after another, all suffering the same fate. These situations where they may occur and the characteristics of hazardous confined and enclosed spaces.
- B. Confined and enclosed spaces may also contain engulfment hazards where liquids or particulates like sand, grain or other finely divided materials, could suddenly and unexpectedly enter the space through piping, trapping and suffocating workers. Likewise, the sudden and unexpected release of energy in a confined space can leave a worker with no escape and a high likelihood of injury or death.
- C. Lingo Staffing, Inc., is a provider of temporary labor for various clients. As such, company management must work with client companies in the identification of hazardous confined spaces and determine the potential for entry by our employees and the procedures necessary for the protection of employees.

II. Purpose

A. This Confined and Enclosed Space Program has been developed for the protection of company employees in relation to confined and enclosed spaces in accordance with the Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1915 Subpart B and others as applicable. The purpose of this program is to ensure that proper precautions and controls are implemented for all company employees required to work in confined and potentially hazardous enclosed spaces.

B. This plan is also developed to guide company management in preparing employees to safely enter confined and enclosed spaces and identify situations in which employees require additional training or are being exposed to hazardous situations beyond the scope of their training.

III. General Program Management

- A. Responsibility.
 - 1. It is the responsibility of company management to protect their employees regarding confined spaces. Management will:
 - a. Evaluate client requirements for supplied labor to determine or identify a likelihood of company employees entering confined spaces. Company management has determined that there are no confined spaces in their facilities at any of their locations that employees will be permitted to enter. However, employees may be required to enter client shipboard confined and enclosed spaces in the course of accomplishing ship repair and construction work. This work will be accomplished in accordance with the requirements of 29 CFR 1915.
 - b. All employees potentially entering confined and enclosed spaces shipboard are to be trained in the hazards of confined and enclosed spaces and the procedures to be utilized in accordance with elements of training as stated in this safety plan prior to assignment involving confined and enclosed space entry.
 - c. This plan has been developed and implemented to provide for safe entry into confined and enclosed spaces and the control of present hazards.
 - 2. It is the policy of Lingo Staffing, Inc., that no employee shall enter a confined space known to contain a hazardous atmosphere or one immediately dangerous to life or health.
 - 3. The Safety Director has ultimate responsibility, ensuring that all company personnel potentially exposed to confined and enclosed spaces are trained to be capable of identifying these spaces and understanding the safe entry requirements.
- B. Program Review and Update
 - 1. The confined and Enclosed Space Entry Program will be reviewed and/or updated whenever company management has reason to believe that

measures taken under the confined space program may not adequately protect employees and revise the program to correct deficiencies before authorizing subsequent entries.

IV. Definitions:

"Adjacent spaces" means those spaces bordering a subject space in all directions, including all points of contact, corners, diagonals, decks, tank tops, and bulkheads.

"Certified Industrial Hygienist (CIH)" means an industrial hygienist who is certified by the American Board of Industrial Hygiene.

"Coast Guard authorized person," means an individual who meets the requirement of Appendix B to Subpart B of this part 1915 for tank vessels, for passenger vessels, and for cargo and miscellaneous vessels.

"Dangerous atmosphere" means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (i.e., escape unaided from a confined or enclosed space), injury, or acute illness.

"Enter with Restrictions" denotes a space where entry for work is permitted only if engineering controls, personal protective equipment, clothing, and time limitations are as specified by the Marine Chemist, Certified Industrial Hygienist, or the shipyard competent person.

"Entry" means the action by which a person passes through an opening into a space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

"Hot" work means any activity involving riveting, welding, burning, and the use of powder actuated tools or similar fire-producing operations. Grinding, drilling, abrasive blasting, or similar spark-producing operations are also considered hot work except when such operations are isolated physically from any atmosphere containing more than 10 percent of the lower explosive limit of a flammable or combustible substance.

"Immediately dangerous to life or health (IDLH)" means an atmosphere that poses an immediate threat to life or that is likely to result in acute or immediate severe health effects.

"Inert" or "inert atmosphere" means an atmospheric condition where:

[1] The oxygen content of the atmosphere in the space is maintained at a level equal to or less than 8.0 percent by volume or at a level at or below 50 percent of the amount required to support combustion, whichever is less: or

[2] The space is flooded with water and the vapor concentration of flammable or combustible materials in the free space atmosphere above the water line is less than 10 percent of the lower 3 explosive limit for the flammable or combustible material.

"Labeled" means identified with a sign, placard, or other form of written communication, including pictograms, that provides information on the status or condition of the workspace to which it is attached.

"Lower explosive limit (LEL)" means the minimum concentration of vapor in air below which propagation of a flame does not occur in the presence of an ignition source.

"Marine Chemist" means an individual who possesses a current Marine Chemist certificate issued by the National Fire Protection Association.

"Not Safe for Hot Work" denotes a space where hot work may not be performed because the conditions do not meet the criteria for Safe for Hot Work.

"Not Safe for Workers" denotes a space where an employee may not enter because the conditions do not meet the criteria for Safe for Workers.

"Oxygen-deficient atmosphere" means an atmosphere having an oxygen concentration of less than 19.5 percent by volume.

"Oxygen-enriched atmosphere" means an atmosphere that contains 22.0 percent or more oxygen by volume.

"Safe for Hot Work" denotes a space that meets all the following criteria:

[1] The oxygen content of the atmosphere does not exceed 22.0 percent by volume:

[2] The concentration of flammable vapors in the atmosphere is less than 10 percent of the lower explosive limit:

[3] The residues or materials in the space are not capable of producing a higher concentration than permitted in paragraph (1) or (2) of the above, under existing atmospheric conditions in the presence of hot work and while maintained as directed by the Marine Chemist or competent person, and

[4] All adjacent spaces have been cleaned, inert, or treated sufficiently to prevent the spread of fire.

"Safe for Workers" denotes a space that meets the following criteria:

[1] The oxygen content of the atmosphere is at least 19.5 percent and below 22 percent by volume:

[2] The concentration of flammable vapors is below 10 percent of the lower explosive limit (LEL):

[3] Any toxic materials in the atmosphere associated with cargo, fuel, tank coatings, or inert media are within permissible concentrations at the time of the inspection: and

[4] Any residues or materials associated with the work authorized by the Marine Chemist, Certified Industrial Hygienist, or competent person will not produce uncontrolled release of toxic materials under existing atmospheric conditions while maintained as directed.

"Space" means an area such as, but not limited to: cargo tanks or holds: pump or engine rooms: storage lockers: on a vessel or vessel section or within a shipyard: tanks containing flammable or combustible liquids, gases, or solids: rooms within buildings: crawl spaces: tunnels: or access ways. The atmosphere within a space is the entire area within its bounds.

"Upper explosive limit (UEL)" means the maximum concentration of flammable vapor in air above which propagation of flame does not occur on contact with a source of ignition.

"Vessel section" means a sub-assembly, module or other component of a vessel being built, repaired, or broken.

"Visual inspection" means the physical survey of the space, its surroundings and contents to identify hazards such as, but not limited to, restricted accessibility, residues, unguarded machinery, and piping or electrical systems.

V. Methods of Compliance

- A. The company management has determined that employees may be required to enter spaces governed by 29 CFR 1915 and subject to the client organization's additional established safe work practices.
- B. Company personnel will be trained to recognize potentially hazardous confined and enclosed spaces and to understand the limitations for safe entry.

Specific training will be accomplished for all employees likely to enter these spaces in accordance with 29 CFR 1915, Subpart B.

- C. Company employees shall not enter confined, enclosed and adjacent spaces until those spaces have been inspected by a marine chemist, competent person or industrial hygienist who has labeled the space as safe for workers within the previous seven days and that the space has been re-inspected by a confined space competent person (OSHA definition) and certified that the space remains safe for workers. Entrants shall observe that the posting at the space entrance is current and not expired: that the posting applies to the work intended by company forces, and that if hot work is intended than the space is posted as "safe for hot work". The entrants shall also observe any restrictions or conditions for entry in the space and comply with the restrictions.
- D. Procedures for entry into shipboard confined and enclosed spaces:
 - 1. Only trained personnel may enter confined and enclosed spaces.
 - 2. Employees shall observe the labeling of any confined or enclosed space certified by a Marine Chemist or Certified Industrial Hygienist that the space is "safe for workers" or "safe for hot work" and any restrictions or necessary precautions prior to entry. Employees shall observe that the labeling is currently inspected by a marine chemist and that re inspection by a competent person, CIH, or marine chemist are also current. Employees shall not enter a space that does not meet these criteria.
 - 3. Company employees shall not enter confined or enclosed spaces for the purpose of performing hot work that has not been certified as "safe" for hot work by a marine chemist, competent person or industrial hygienist.
 - 4. Tag-out and /or lockout procedures shall be complied with on all confined and potentially hazardous enclosed spaces. This includes at least the control of hazardous energy and all pipelines that potentially could carry hazardous or engulfing materials.
- E. Coordination with other employers and the client organization.
 - 1. The client organization is responsible for coordinating with other employers where two or more employers have workers in the same or adjacent spaces affected by work in progress. The senior company management person on site will survey and remain informed of work being performed by company employees to ensure that employees are not working in potentially hazardous conditions.

2. Should company employees be found to be working in potentially hazardous conditions, the senior operations superintendent or supervisor shall act immediately to remove company employees and correct the situation through the client organization.

VI. Cleaning and cold work

- A. The client is responsible to ensure that manual cleaning and other cold work is not performed in the following spaces until (B) below has been accomplished:
 - 1. Spaces containing or having last contained bulk quantities of combustible or flammable liquids or gases; and
 - 2. Spaces containing or having last contained bulk quantities of liquid, gases or solids that are toxic, corrosive or irritating.
- B. The following tasks are to be performed prior to cleaning or cold work:
 - 1. Obtain a cold work permit from the responsible/designated person within the client organization.
 - 2. Thoroughly remove liquid residues of hazardous materials from workplaces.
 - 3. Determine the concentration of flammable, combustible, toxic, corrosive or irritant vapors within the space through competent person testing.
 - Provide continuous ventilation at volumes and flow rates enough to ensure that the concentrations of flammable vapors are maintained below 10% of the LEL and toxic, corrosive or irritant vapors are maintained within the PEL when necessary.
 - C. A competent person will conduct testing periodically during cleaning, spray, painting, or other cold work to assure that air contaminants and oxygen levels remain within permissible limits. The competent person will order immediate evacuation of the space if testing indicates unacceptable levels.

VI. Hot Work – See Also Hot Work Safety Plan

The client organization is responsible for implementation of the following procedures. The senior superintendent or supervisor on site is responsible, through survey and other means, for determining that these safe work practices are accomplished.

- A. Hot work will be conducted only in confined and enclosed spaces that are labeled by a marine chemist as "safe for hot work". A label stating that the space is "safe for hot work" will be issued by the marine chemist, competent person or industrial hygienist and be posted in the immediate vicinity of the affected operations while they are in progress.
- B. A hot work permit is required to be posted prior to performing any hot work shipboard.
- C. Ventilation will always be maintained to remove atmospheric hazards to the maximum extend feasible during welding operations.
- D. Hot work including flame cutting, welding, brazing and heating will not be accomplished on metals containing lead, beryllium, cadmium, chromium, zinc, mercury or metals with coatings containing these materials without adequate personal protection including ventilation and suitable respiratory protection.
- E. A trained and clearly identifiable fire watch will be maintained during all hot work operations.

VII. Maintenance of Safe Conditions

- A. The company will rely on the client organization and local authorities to organize and perform rescue operations.
- B. Pipelines that can carry hazardous or engulfing materials into spaces that have been certified "safe for workers" will be positively controlled in accordance with the Hazardous Energy Control Plan.
- C. When a change occurs that altars the conditions within a tested confined space, work will be stopped, and the space vacated by all workers immediately until the space is again found to be safe for the work contemplated.

VIII. Training

- A. Accomplishment of training
 - 1. Employees entering confined spaces will be trained in safe entry and work procedures regarding confined spaces. The responsibility for this training will be coordinated with the client company to assign responsibility and ensure accomplishment.
 - 2. Training will be provided:
 - a. Before the employee is a first assigned duty under this regulation;

- b. Whenever the employer has reason to believe there are inadequacies in employee's knowledge of these procedures.
- c. Whenever there is a change in confined space operating procedures.
- B. Elements of training
 - 1. Employees will be trained to:
 - a. Recognize the characteristics of a confined and enclosed space and other areas where a hazardous atmosphere may be present.
 - b. Anticipate and be aware of the hazards that may be faced during entry.
 - c. Understand the labeling system for authorizing work in confined spaces as posted by the marine chemist, competent person or industrial hygienist including expiration period of not more than 7 days and restriction requirements. Understand the requirement for re inspection at least daily by a competent person, CIH, or marine chemist.
 - d. Recognize the adverse health effects that may be caused by the exposure to a hazard.
 - e. Understand the physical signs and reactions related to exposures to such hazards.
 - f. Know what personal protective equipment is needed for safe entry into and exit from the space, the capabilities of that equipment and the inspection criteria of that equipment.
 - g. Understand the signals used to order immediate evacuation of the space and the requirement to do so without hesitation.
- C. Hazards of confined and hazardous enclosed spaces to be discussed in training
 - 1. Fire and explosion hazards the combination of fuel, ignition, and oxygen.
 - a. Fuel discussion of sources of flammable vapors and gases potentially present in spaces.
 - b. Ignition sources of heat sources. IE: open flame, sparks, and hot surfaces
 - c. Oxygen present in all spaces and inhabitable atmospheres in enough quantities to support combustion.
 - d. Control of fire and explosion hazards through the elimination of one of the three components.
 - i. Discussion of removal of fuel as the most likely component for control and minimizing ignition as an additional option.
 - ii. Discussion of methods of control of components.

- 2. Toxic Atmospheres
 - a. Discussion of toxic materials potentially to be encountered and sources.
 - b. Discussion of reasons for suspecting the presence of harmful atmospheres.
 - c. Discussion of methods of detection, measurement.
- 3. Oxygen deficient atmospheres
 - a. Discussion of normal oxygen content of ambient air and the acceptable range of oxygen content for human habitation.
 - b. Discussion of potential causes for the reduction of oxygen in the atmosphere of a confined space.
- 4. Energy sources posing hazards to workers in confined spaces
 - a. Refer to the Control of Hazardous Energy Plan.
 - b. Discussion of the requirements to identify sources of energy such as electrical, thermal, mechanical, and others that may pose a hazard to workers in confined spaces.
 - c. Discussion of mandatory energy controls that must be initiated, emphasizing and referencing the Control of Hazardous Energy Plan. Host policies in this regard will be complied with.
- D. Documentation of training
 - 1. All training activities performed by Lingo Staffing, Inc. will be documented and maintained in the company's main offices.
 - 2. Training documentation will include at a minimum:
 - a. Date
 - b. Title of training topic
 - c. Signature of trainer
 - d. Synopsis of training conducted
 - e. Printed and signed name of trainee(s) Refer to Page 11

Lingo Staffing, Inc.

Training Roster of Attendance

Trainer:

Date:

Topic: Confined and Enclosed Space Entry Safety Training

Outline of Training: Training based on 29 CFR 1915. 1. Overview of confined space dangers. 2. Company Confined Space Policy. 3. Definitions. 4. Duties and responsibilities of Marine Chemists, Competent Persons, entrants. 5. Entry Labeling. 6. Hazards of Confined Spaces – Atmospheric: flammable, toxic, corrosive or irritant, asphyxiating; Mechanical hazards, thermal hazards, noise, vibration, structural hazards such as entrapment hazards. 7. Methods of compliance. 8. Procedures for entry. 9. Hot Work. 10. Maintenance of safe conditions. 11. Atmospheric testing equipment. 12. Emergency and rescue procedures. 13. Recognition of confined and enclosed space hazards.

Attendees

Print Name	S	ign Name

Lingo Staffing, Inc.

Hot Work Safety Plan

I. To our employees:

Few activities expose the number and variety of hazards to employees as hot work if done or approached improperly or in an unsafe manner. Hot work includes at least arc and gas welding and cutting, brazing, flame cutting or burning, grinding, powder actuated tools and soldering. Hot work has been associated with the causes of more shipboard fires than any other cause. Hot work introduces contaminants to the air potentially producing respiratory hazards, both long term and acute. The radiation produced in welding and cutting causes flash burns to the eyes and skin if not shielded against. The use of compressed gases in welding introduces the potential for a violent release of energy and catastrophic explosion if mishandled or abused.

II. Purpose

This plan establishes the minimum safety requirements and work practices for our employees while conducting hot work. This is for the protection of our employees and other personnel that may be affected by this work and our clients and their property. The plan is also intended to provide guidance for compliance with Federal Occupational Safety and Health requirements, state plans, as well as compliance with military and governmental safety and health requirements.

III. Responsibilities

- A. The Safety Director is ultimately responsible for the overall management and compliance with this plan in coordination with the Client Company.
- B. All employees performing hot work shall be familiar with the requirements of this plan and perform hot work in accordance with these directives.
- C. Employees are to be trained in any known client requirements and are expected to comply with those requirements.
- D. The Safety Director will act on any reports from the client organization regarding noncompliance or violations of this plan.

IV. General requirements

A. Only qualified and trained workers shall engage in hot work.

- B. A person trained as a fire watch shall be assigned the duties of fire guard (or watch) for each hot work operation. A fireguard may perform this function for up to and not exceeding four workers performing hot work. The fireguard will be clearly identifiable by colored safety vest, badge or insignia on the hard hat or other designation in accordance with locally established safety procedure. The fireguard shall remain on duty at the hot work location for at least ½ hour after the conclusion performing the hot work shall be considered as the responsible person for directing the activities and observations of the fireguard.
- C. Personnel performing hot work shall inspect the area of the intended work for present hazards and dangers to other personnel prior to performing work.
- D. Flammable and combustible material will be removed from the area of hot work. Typically, 35 feet will be considered minimum distance from the point of operation. When the removal of combustible material (only) is not feasible, a fire watch will be posted with the watch being the only duties assigned and the materials protected from contact. Firewatchers shall be trained and knowledgeable of the duties of a fire watch including being familiar with and have a means to summon emergency response teams.
- E. When floor openings, cracks in flooring or other potential exists for sparks or molten metal to fall to lower levels, fireguards shall be placed below, and personnel shall not be permitted to enter the area below.
- F. All personnel performing hot work shall have fire extinguishers with a B and C rating of at least #5 capacity immediately available. Typically, this will be a CO2 type fire extinguisher however this is not used in a confined space. Host and locally established procedures will be followed regarding the type and size fire extinguisher maintained at the site.
- G. Welding or burning shall not be performed in adjacent spaces to flammable materials or on piping containing flammable materials or connected to vessels, tanks or spaces not certified safe for workers.
- H. Forced ventilation is required when welding in enclosed spaces. Blowers or exhaust fans must be placed in clear air locations so as not to introduce other contaminants and ducted to the area of operation.
- I. It is the responsibility of the client supervisor to be informed as to whether the metal or coatings on the metal being welded or heated contains heavy metals in other than trace amounts, including lead, beryllium, chromium, zinc, mercury and cadmium. Further, it is the responsibility of the client supervisor to be informed as the flammability of any coatings that are affected by welding operations. Where coatings can feasibly be removed by grinding

away the coatings to at least four inches from the heated areas this will be accomplished provided that the grinding does not produce harmful dusts in the process. Where hazardous dust and fumes will be produced, respiratory PPE, ventilation and body protection will be utilized. Ventilation should not cause these contaminates to be spread to other occupied spaces. The client supervisor is expected to advise the welder of these concerns. Hot workers will be trained to expect these notices and to ask if not offered by client management.

- J. Appropriate personal protective equipment shall be worn by all persons performing hot work as required. Welders, burners, and fireguards shall wear fire resistant clothing covering arms, legs and head. Eye protection is required and at least the minimum shade required by OSHA or manufacture's guidelines. Face protection is required for all arc welding and cutting. Welders' aprons should be worn for welding and cutting. Ear and eye protection are required for all powder-actuated tools. All lenses shall be free of pitting and distortion.
- K. Welders, brazers and burners shall note all rod and filler materials manufacturers warnings concerning hazardous fumes. Where hazardous fumes are warned of a marine chemist or industrial health hygienist shall be utilized to determine adequate ventilation or other protective means before continuing.
- L. Hot work involving hollow metal containers and structures.
 - 1. Drums, containers, or hollow structures which have contained flammable substances shall, before welding, cutting, or heating is undertaken on them, either be filled with water or thoroughly cleaned of such substances and ventilated and tested.
 - 2. Before heat is applied to a drum, container, or hollow structure, a vent or opening shall be provided for the release of any built-up pressure during the application of heat.
 - 3. Before welding, cutting, heating or brazing is begun structural voids such as skegs, bilge keels, fair waters, masts, booms, support stanchions, pipe stanchions, or railings, a competent person shall inspect the object and if necessary, test it for the presence of flammable liquids or vapors. If flammable liquids or vapors are present, the object shall be made safe.
 - 4. Objects such as those listed in paragraph (c) of this section shall also be inspected to determine whether water or other non-flammable liquids are present which, when heated, would build up excessive pressure. If such liquids are determined to be present, the object shall be vented, cooled, or otherwise made safe during the application of heat.

5. Jacketed vessels shall be vented before and during welding, cutting or heating operations in order to release any pressure, which may build up during the application of heat.

V. Hot work permits

A. Most facilities and organizations require hot work permits prior to the commencement of hot work. This will include most of not all shipboard work. The client organization's requirements shall be complied with. Hot work will not be undertaken until the permit is obtained.

VI. Arc Welding

- A. Welding equipment, leads, holders, wire feeders, ground clamps, etc. shall be inspected prior to use. Leads shall not be repaired within 10 feet of the holders. The welding unit shall be in serviceable condition with all covers in place and secure and all controls and indicators functional.
- B. Welders shall inspect the work area prior to initiating hot work for flammables, combustibles, affected personnel, tripping hazards and other present hazards. Leads should not be configured to permit the molten metal to fall on them nor looped or draped on welding personnel.
- C. Ground clamp attachment should be as close to the work as feasible and have a solid metal connection to the work area.
- D. Appropriate personal protective equipment in addition to standard required clothing, must include fire resistant clothing (no synthetic materials), long sleeve shirts, leather welder's aprons, eye and face protection to include shaded lenses of at least shade #10 and in accordance with the specifications of the wire or rod manufacturer.
- E. Welding machines shall be turned off when not in use.
- F. Where wet conditions are present or perspiration is a factor, reliable automatic controls for reducing no load voltage is recommended.
- G. Used drums, pails and other used containers will not be welded or flame cut.

VII. Gas welding and burning

A. Fuel cylinders will be stored separately from Oxygen cylinders, at least 20 feet apart or separated by a barrier with at least a one-half hour fire rating at least 5 feet high and away from highly combustible materials such as oil. Note: Few steel or metal partitions provide the required ½ hour fire rating

unless the metal is 1" thick. Metal may be used if it encases low heat conduction material such as gypsum board. Cylinders should be stored in assigned places away from elevators, stairs, or gangways, assigned storage spaces shall be located where cylinders will not be knocked over or damaged by passing for falling objects, or subject to tampering by unauthorized persons. Cylinders shall not be kept in unventilated enclosures such as lockers and cupboards. Empty cylinders shall have their valves closed. Valve protection caps, where a cylinder is designed to accept a cap, the cap shall always be in place, hand-tight, except when cylinder is in use or connected for use.

- B. Where the hot work shall not be performed in enclosed and confined spaces until the space has been inspected by a competent person, Marine Chemist or Coast Guard Authorized Person and currently labeled as "Safe for Workers" "Safe for Hot Work." All restrictions will be observed and complied with.
- B. Where the hot work will potentially generate toxic fumes or vapors, supplied air respiratory protection will be utilized by all occupants of the space.
- C. Compressed gas cylinder is not to be taken inside of the enclosed or confined space.
- D. Torches are to be brought into the space immediately prior to the welding, heating or cutting operation and removed immediately on completion of the task.
- E. The work site supervisor shall frequently observe condition within enclosed and confined spaces. In the event a deterioration of the atmosphere is observed, a competent person shall retest and re-evaluate the atmospheric conditions prior to continuing work.
- F. A fire watch shall be posted and provided with a fire extinguisher that does not produce harmful vapors, or toxic gases.

IX. Training

- A. All persons authorized to perform gas or arc welding, flame cutting, brazing or heating will receive the necessary training to perform these tasks in a safe manner without endangering themselves, others or property. The responsibility is assigned to ensure accomplishment.
- B. Retraining will be accomplished any time the performance of hot work is determined to be not in accordance with the procedures outlined herein and that gaps or lapses in the knowledge of employees is noted.

- C. Elements of training
 - 1. Fire prevention training and inspection and effective use of fire extinguishing equipment and firefighting decisions.
 - 2. Requirement for and effective use of fire watch personnel.
 - 3. Hot work permits obtaining, purpose, and information contained and required conditions and requirements, period of use, applicability.
 - 4. Observation of work area and surrounding areas in evaluating fire and other hazards.
 - 5. Environmental health concerns when heating or melting materials containing or coated with heavy metals (zinc, cadmium, chromium, lead, beryllium, mercury) and requirements for safe work practices.
 - 6. Safe work practice requirements when contemplating hot work in confined spaces.
 - 7. Prohibition of heating closed containers.
 - 8. Safe work practice requirements for use of welding equipment.
 - 9. Ventilation requirements.

Lingo Staffing, Inc.

Hearing Conservation Plan

I. To Our Employees:

This document is for your information. It explains the means and methods that have been adopted at this company to protect you from the effects of high noise levels occurring on our premises and at our work sites. It also contains other helpful information that could be very important to you.

It is your obligation to be informed and to obtain immediate help if you get ill as the result of your employment. See your supervisor at once! Whenever you feel there is a work hazard or if you ever become ill or injured as a result of your work or you become aware of any fellow employee who has – immediately notify your supervisor.

II. Purpose

The purpose of this safety plan is to provide employees of Lingo Staffing, Inc. with the information and instructions necessary to protect themselves from harm induced by hazardous noise levels and to identify activities and situations where protection is required and to provide a basis for requiring the use of personal protective equipment. This document is also to provide for compliance with applicable occupational safety and health regulations.

III. Responsibility

The Lingo Staffing, Inc. Directing Manager is responsible for implementing the requirement of this program and ensuring the protection of all employees from harmful noise exposure. They may be assisted by such persons as they may designate. The Safety Director will coordinate with client representatives regarding noise hazards and methods of abatement and hazard control in place by the client. The Safety Director will be alert to high noise level exposures while visiting the client's facilities and work places and act to protect company employees.

IV. Harmful Noise

Although all noise in non-dangerous, long term exposure to damaging noise levels can cause loss of hearing and contribute to other health problems. Scientific studies have concluded that sustained exposure to noise levels of 90 decibels (DB), and above, is harmful to an average person and that exposure at lower levels may be harmful to persons who are particularly sensitive to noise. Studies also show that these exposures can be prevented if employees wear hearing protective devices. As a result, the Occupational Safety and Health Administration (OSHA) has adopted standards designed to limit such exposures and has designated 85 dB exposure over eight hours as the action level. This company is committed to the observance and implementation of those standards.

V. Noise Surveys

- A. The Safety Director will coordinate with representatives of client companies regarding noise surveys and the presence of noise hazards within their company. Noise hazards should be expected in any operation where paint and corrosion removal with needle guns, grinding, metal hammering, metal sawing, and certain fabrication operations are in progress.
- B. All employees exposed to a noise hazard exposure (TWA 85 dB in eight hours) will be notified of the exposure hazard, the requirement to use hearing protection, the availability of the personal protective equipment selected (See section VI, Training, below) and that they will be required to participate in the hearing evaluation testing program as described below in section VI.

VI. Control of Noise Exposure

- A. It is the policy of Lingo Staffing, Inc. to reduce noise levels of occasional high-level activities below hazardous levels by engineering means whenever feasible. Clients will be encouraged to pursue this objective.
- B. When engineering means of controlling noise levels is not feasible or the noise is produced by activities not under the control of company management, hearing protection is mandatory for all personnel exposed.
- C. The company provides a variety of suitable hearing protectors for the use of employees. Client will be sought as to the noise reduction rating for needed hearing protection and most effective designs in their operation. The Operations Manager will ensure that employees are provided with the equipment that will ensure optimal protection.
- D. Employee use of hearing protection is **mandatory** while working in the vicinity of operations generating high noise levels. Use of hearing protection is also mandatory in any area designated "Hearing Protection Required" or any noise hazard task. Hearing protection is also freely available to any employee who desires it regardless of the assigned task.

VII. Training

A. All employees will receive documented training prior to performing tasks involving exposure to hazardous noise levels. The responsibility for this training will be coordinated between the companies and the client and responsibility will be assigned to ensure accomplishment. This training will include:

- 1. Noise/Sound principles of sound energy.
- 2. How it affects the body and how it can be harmful.
- 3. Hearing protection types available.
 - a. Capabilities of each
 - b. Limitations of each
- 4. Proper donning procedures.
- 5. Cleaning and personal hygiene regarding use.
- B. Documentation of training will be maintained by the company in the employee's permanent records file and maintained for the employee's period of employment plus 30 years.

VIII. Hearing Tests

- A. Employees exposed to noise levels in excess of 85 dB, as a part of their assigned duties will receive base level audiometric testing on employment. Employees will be retested annually, and the results reviewed by the company physician. The results of the audiogram will be reviewed with the employee by the medical care provider and the results explained to them. Concerns noted by the physician will result in the reassignment of the employee to a hearing specialist for evaluation and potential treatment. The responsibility for this testing will be coordinated with the Client Company and responsibility assigned and accomplished by that party.
- B. Employees will be notified of annual audiometric testing 30 days prior to testing and advised to avoid non-work-related noise hazards.
- C. Employees undergoing audiometric testing have a right and will freely be provided with the results of all audiometric testing. Employees will be notified of threshold shifts in their hearing ability and referred to the appropriate specialist physician for further evaluation and treatment.

IX. Conclusion

Good hearing is important to the enjoyment of life's many pleasures. Some reduction in you hearing ability will occur naturally as you grow older. There is no way to prevent that. Hearing loss as a result of noise exposure is permanent and cannot be restored. There are measures that can be taken to retard hearing loss caused by exposure to excessive noise. But the exposed person is in the best position to recognize the need for hearing protection and act to protect them. This plan is designed to help you to recognize those situations and inform you as to what actions to take.

Lingo Staffing, Inc.

Personal Protective Equipment

I. To our employees:

It is the desire of Lingo Staffing, Inc. to control hazards through engineering means whenever possible. This means that dangers to employees are to be eliminated at the source by changing the design of the equipment, using less hazardous material, installing guards or shields or using other methods of control to eliminate the hazard rather than the exposed employee having to use special equipment such as eye, hearing, head, foot or body protection for protection. Lingo Staffing, Inc. managers will encourage clients to follow this course of action where feasible. However, in many situations, personal protective equipment is not optional to the employee. Should you find that a certain piece of equipment is not appropriate for your situation will be corrected. Do not just continue without protective equipment, as this is likely to result in disciplinary action and expose you to significant harm.

II. Purpose

A. Availability of PPE

Lingo Staffing, Inc. or the client, as mutually agreed, will provide all employees with required PPE to suit the task and known hazards with the exception of steel toed boots and general purpose gloves as these are of a personal nature and may be used in a variety of situations beyond the control of the company. If an employee prefers to use equipment of their own, this equipment will have to be approved for use by the Safety Director and the client company before use on the job. Personally, owned respiratory protection equipment will not be permitted. This plan covers the requirements for personal protective equipment apart from PPE used for hearing conservation and respiratory protection, which are addressed in their specific plans.

B. Design

All personal protective clothing and equipment will be selected for design and construction for the work performed. Only those items of protective clothing and equipment that meet National Institute of Occupational Safety and Health (NIOSH) or American National Standards Institute (ANSI) standards will be procured or accepted for use.

C. Minimum Dress for Work

Due to the nature of our client's work in steel fabrication and repair, steel toed work boots, fire resistant clothing (synthetic fabrics such as nylon and rayon

are not acceptable for wear) hard hat, and safety spectacles are required for work for production employees. Clothing must be free of large holes and tears. Tank tops or cut-off tee shirts are not acceptable attire.

III. Hazard analysis and equipment selection

A. Hazard analysis and selection of equipment

Hazard analysis procedures shall be used to assess the workplace to determine if hazards are present or are likely to be present, which necessitates the use of personal protective equipment. Coordination with client companies is essential in this area as they are likely to have already done research in this area and established requirements as a result of their experience and research. Where the client has performed a hazard analysis and specifies the PPE requirements and these requirements appear adequate in the opinion of the Safety Director, such specifications will be accepted and complied. If the client has not accomplished such analysis, the following actions will be taken:

- 1. Identify all the hazards to be controlled in a situation in detail and establish the minimum protection criteria to be afforded by PPE.
- 2. Research available PPE and select equipment based on the adequacy of protection afforded, the capability of affected personal to effectively use the PPE including sizing to fit affected employees, the comfort factor affecting the employee that the PPE doesn't create other hazards through its use and other human engineering aspects of the equipment.
- 3. Communicate selection decisions to each affected employee.
- 4. Establish procedures to ensure that damaged or defective PPE will not be used.
- 5. Ensure adequate availability of the PPE to affected employees and communicate requirement to utilize the PPE.
- 6. Utilize feedback from the employees using the equipment for determining the effectiveness and comfort of the selected equipment.
- 7. Remain informed as to the use of the equipment, the protection provided to the user through accident reports and employee comments and the availability of new equipment that may improve the effectiveness of the item.

IV. Inspection of protective equipment

- A. Before each use, employees are required to inspect each article of personal protective equipment for serviceability. This includes all aspects of the articles condition capability for providing the needed protection and that the article is sized to fit the individual wearer properly. Employees shall not use or wear defective equipment and continue the exposure.
- B. Defective equipment is to be returned to the issuing organization with an explanation of the specific defect(s) and replace as necessary. Non-repairable items will be disposed of by the issuing organization only and in such a way

as to ensure that it is not used again. Repairable items will be repaired, but until the item is rendered serviceable the item shall be marked or tagged as unserviceable. The item is not to be used or left where another person could use it. Failure to return the article to the issuing organization may result in your being charged for the replacement.

V. Maintenance and storage of Personal Protective Equipment

- A. Personal protective equipment is to be maintained and stored accessible to work areas where the article is likely to be required and in enough quantities for all exposed personnel.
- B. Articles of equipment shall be stored in such a manner to be protected from damage and abuse relative to the specific equipment. This would include clean and sanitary conditions for all worn articles. For example, eye protection equipment must be stored so as to prevent scratching and protected from dirt and dust, fall arrest harnesses and lanyards stored so as to protect it from direct sunlight (ultra violet light deterioration), abrasion and cutting damage, respirators must be stored separately in sealed sanitary plastic bags with nothing placed on top that may crush or deform the mask and not be stored in sunlight or otherwise exposed to high temperatures.
- C. Persons competent to do so shall only repair personal protective equipment; using parts and components made for the purpose and shall not be modified from the original manufacturer's design.

VI. Training

- A. The accomplishment of this training will be coordinated between the company and the client and the assignment of responsibility made to ensure its accomplishment. All employees who are required to use PPE shall be trained and deemed competent in understanding:
 - 1. When and why specific PPE is necessary.
 - 2. The protections afforded and the limitations of specific articles of PPE.
 - 3. Guides and directives for the selection and use of PPE.
 - 4. The inspection of PPE prior to use.
 - 5. How to don, remove, adjust and wear the PPE.
 - 6. The care, maintenance, useful life span and disposal of the PPE.

- B. Each employee shall demonstrate an understanding of the training and the ability to use PPE properly, before being allowed to perform work requiring the use of PPE.
- C. Training will be documented by the accomplishing group and the documentation maintained in the employees' permanent records.

VII. Hazard assessments and required personal protective equipment

The following hazard analysis is generic to the clients of Lingo Staffing, Inc. as all employees can generally be expected to encounter the identified hazards and requirements for PPE either through the performance of the task and generating the hazard.

- A. Eye and face hazards
 - Eye and face injuries due to flying particles and radiation are the most frequent of all injuries in industry. Many of these injuries could have been prevented using appropriate safety spectacles, goggles, or shields. Appropriate eye and face protection shall be worn whenever these hazards are present or the work area is posted as eye and or face protection required, either by the company or the client organization. All eye and face protection selected and utilized will meet the construction and protection standards of ANSI Z87.1 for the specific hazard.

Source	Hazard	Protection
Impact –		
Hammering, chipping, grinding, sawing, chiseling, drilling, riveting, hammer forming	Flying fragments, objects, chips, particles of all types	Safety spectacles with Side protection for minor Exposure, tight fitting goggles for moderate exposure generating chips and larger or higher velocity
Heat - Welding, brazing, soldering, heat forming	Hot sparks, molten metal, radiation	chips
Chemicals Chemical handling, dispensing, use	Caustic splash, skin irritation, Burns, poisoning, allergic reaction	
Dust General cleaning and sweeping, woodworking	Nuisance dust	

4

These shields will be provided to protect workers' eyes and face from infrared or radiant light burns, flying sparks, metal spatter and slag chips encountered during welding, brazing, soldering, resistance welding, bare or shielded electric arc welding and oxyacetylene welding and cutting operations.

The following is a guide for the selection of the proper shade numbers and should be minimum protective shade densities.

Welding operation

Shade No.

Shielded metal-arc welding – 1/16-, 3/32-, 1/8-, 5/32-inch electrodes	10
Gas-shielded arc welding (nonferrous) – 1/16-, 3/32-, 1/8-, 5/32-inch electrodes	11
Gas-shielded arc welding (ferrous) – 1/16-, 3/32-, 1/8-, 5/32-inch electrodes	12
Shielded metal-arc welding: 3/16, 7/32, 1/4-inch electrodes	12
5/16-, 3/8-inch electrodes	14
Carbon arc welding	14
Torch soldering	2
Torch brazing 3	or 4
Light cutting, up to 1 inch	3 or 4
Medium cutting, 1 inch to 6 inches	4 or 5
Heavy cutting, 6 inches and over	5 or 6
Gas welding (light) up to 1/8 inch	4 or 5
Gas welding (medium) 1/8 inch to 1/2 inch	5 or 6
Gas welding (heavy) ½ inch and over6	5 or 7

NOTE: In gas welding or oxygen cutting where the torch produces a high yellow light, it is desirable to use a filter or lens that absorbs the yellow or sodium line in the visible light of the operation.

C. Head protection

Head protection selected and utilized will meet the construction and protection standards established in Z89.1 for non-conductive head protection Class E and G.

Source	Hazard	Protection
Falling objects, horizontally moving objects, moving the head into unseen objects or materials.	Blows to the head from objects striking the head	Hard hat constructed of impact resistant, heat, and water resistant and electrically insulating structure.
Head encountering energized circuits or conductors.	Electrical shock	
Hot sparks, molten metal Falling onto head	Burns	

Hard hats have been designed and manufactured to provide workers protection from impact, heat electrical and fire hazards. These protectors consist of the hard shell and the suspension and combine as a protective system. Hard hats are to be worn with the suspension system installed in accordance with the manufacturers direction with the intended front of the hat facing in that direction. The hat will be worn on the top of the head and not tilted back to an excessive angle. Hard hats will not be painted or cleaned with petroleum-based solvents as these may severely weaken the shell strength.

D. Foot protection

Equipment selected and utilized to provide foot protection will meet the requirements of ANSI standard Z41, class 75.

Source	Hazard	Protection
Raised or elevated heavy	Falling objects striking	Hard soled boots
Sharp objects and Protrusions in walking Working surfaces	Objects puncturing the foot sole	Sole penetration, Metatarsal protection and ankle support
Energized electrical Circuits or components	Electrical shock or electrocution	
The shares see :	C . 1 C	· · · · · · · · · · · · · · · · · · ·

The above-specified footwear shall be considered as a part of minimum dress while working shipboard, in ship repair facilities and shops other than in the administrative areas.

E. Hand protection

Source	Hazard	Protection
Rough and shard edged Materials.	Abrasions, lacerations, Contusions	Gloves with leather or suitable cut and abrasion Resistant palms and digit Protection.
Heat	Burns	Welders and foundry Workers gloves made from leather or burn Resistant material with Wrist and lower arm Protective cuffs.
Caustic materials	Skin irritation, chemical Burns	Chemical resistant rubber gloves, suitable for the Chemical exposure Contemplated, elbow Length for wrist and lower Arm protection.
Electrically energized Circuits or components	Electrical shock, electrocution	Electrically insulating rubber gloves provide electrical Protection

Gloves are not to be worn when working around turning shafts or other exposed operating machinery that could Potentially catch the glove and draw the hand into pinch and nip points.

- F. Body protection
 - a. The senior on site supervisor will ensure that each affected employee uses appropriate protective clothing where there is exposure to hazards such as skin absorption of harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, harmful temperature extremes, and sharp objects.
 - b. Hot work operations. The employer shall ensure that no employee wears clothing impregnated or covered in full or in part with flammable or combustible materials (such as grease or oil) while engaged in hot work operations or working near an ignition source.
- G. Fall arrest equipment

Equipment selected and utilized for fall arrest will meet ANSI requirements Z359.1.

Source	Hazard	Protection
Falls from otherwise	Fall to lower level resulting in injury or	Fall arrest harness
work areas and surfaces	death	Lanyard with suitable self-locking attaching clips
		Shock absorbing device
		Anchor point for system Capable of withstanding at Least 5000# strain.
		Safety belts may be used In conjunction with positioning device systems only instances where lanyards or positioning straps less than 18" in length are used and Self-rescue by the climber is highly

H. Life Saving Equipment

- 1. Personal flotation devices
 - a. Personal flotation devices (PFD) (life preservers, life jackets and work vest) worn by each affected employee shall be any United States Coast Guard (USCG) approved and marked Type I PFD, Type II PFD, or Type III PFD; or PFDs shall be a USCG approved Type V PFD which is marked for use as a work vest, for commercial use, or for use on vessels. USCG approval is pursuant to 46 CFR part 160, subpart Q, Coast Guard Lifesaving Equipment Specifications.

feasible.

- b. Prior to each use, personal flotation devices shall be inspected for dry rot, chemical damage, or other defects, which may affect their strength and buoyancy. Defective personal flotation devices shall not be used.
- 2. Ring life buoys and ladders
 - a. When work is being performed on a floating vessel 200 feet (61 m) or more in length, at least three 30-inch (0.76 m) U.S. Coast Guard approved ring life buoys with lines attached shall be in readily visible and accessible places. Ring life buoys shall be located one forward, one aft, and one at the access to the gangway.
 - b. On floating vessels under 200 feet (61 m) in length, at least one 30inch (0.76 m) U.S. Coast Guard approved ring life buoy with line attached shall be located at the gangway.
 - c. At least one 30-inch (0.76 m) U.S. Coast Guard approved ring life buoy with a line attached shall be located on each staging alongside of a floating vessel on which work is being performed.
 - d. At least 90 feet (27 m) of line shall be attached to each ring life buoy.
 - e. There shall be at least one portable or permanent ladder in the vicinity of each floating vessel on which work is being performed. The ladder shall be of enough length to assist employees to reach safety in the event they fall into the water.

Note: Respiratory protection is covered in the separate Respiratory Protection Plan

Lingo Staffing, Inc.

Comprehensive Fall Prevention Program

I. To Our Employees

- A. Slips, trips and falls constitute many general industry serious accidents. They cause 15% of all accidental deaths and are second only to motor vehicles as a cause of fatalities. Active participation by management, supervisors and employees is required to prevent hazardous conditions that could result in slips, trips or falls.
- B. It is essential that where our employees are assigned to work in client companies that the issues addressed in this plan are coordinated and that employees are trained and reminded frequently concerning fall hazards and preventing falls in general.

II. Responsibilities

A. Management

- 1. Conduct routine inspections of client facilities and work places to ensure all walking and working surfaces are free from slip, trip and fall hazards.
- 2. Coordinate with clients to improve and correct fall hazards.
- 3. Provide training for employees who use ladders, scaffolds or other elevated platforms.
- 4. Provide training in use and inspection of fall prevention and arrest equipment.
- 5. Provide adequate serviceable fall prevention and arrest equipment.
- B. Employees
 - 1. Maintain work areas free from slip, trip and fall hazards.
 - 2. Correct or immediately report slip, trip and fall hazards.
 - 3. Use proper ladders for assigned tasks.
 - 4. Always follow established safe work practices.

III. Hazard Control

- A. Engineering Controls
 - 1. Proper construction of elevated locations.
 - 2. Use of hand, knee and toe rails where required.
 - 3. Proper design of fixed ladders and rails.
 - 4. Adequate lighting in all areas.
 - 5. Providing correct work stands for the purpose or use aerial lifts in lieu of ladders.
- B. Administrative Controls
 - 1. Fall prevention training all employees who work at elevated locations.
 - 2. Routine inspections of ladders, stairs, walking and working surfaces.
 - 3. Following Housekeeping Program requirements.
 - 4. Immediate cleanup of material spills.

IV. General Requirements

- A. Simple housekeeping methods can prevent slip-trip fall hazards:
 - 1. All work areas, passageways, storerooms and service rooms shall be kept clean and orderly and in a sanitary condition.
 - 2. The floor of every work area shall be maintained in a clean and, so far as possible, a dry condition. Where wet processes are used, drainage shall be maintained and gratings, mats, or raised platforms shall be provided.
 - 3. Every floor, work area and passageway shall be kept free from protruding nails, splinters, holes, or loose boards.
- B. Aisles and Passageways
 - 1. Aisles and passageways shall be kept clear and in good repair with no obstruction across or in the aisles that could create a hazard.
 - 2. Permanent aisles and passageways shall be appropriately marked.
- 3. Where mechanical handling equipment is used, aisles shall be sufficiently wide.
- C. Floor Loading Protection
 - 1. Load rating limits shall be marked on plates and conspicuously posted. It shall be unlawful to place, or cause, or permit to be placed, on any floor or roof of a building or other structure a load greater than that which such floor or roof is approved.
 - 2. Guarding Floor and Wall Openings
 - a. Floor openings and holes, wall openings and holes, and the open sides of platforms create hazards. People may fall through the opening or over the sides to the level below. Objects, such as tools or parts, may fall through the holes and strike people or damage machinery on lower levels.
- D. Protection for Floor Openings
 - 1. Standard railings shall be provided on all exposed sides of a stairway opening, except at the stairway entrance. For infrequently used stairways, where traffic across the opening prevents the use of a fixed standard railing, the guard shall consist of a hinged floor opening cover of standard strength and construction along with removable standard railings on all exposed sides, except at the stairway entrance.
 - 2. A "standard railing" consists of a top rail, mid rail, and posts, and shall have a vertical height of 42 inches nominal from the upper surface of top rail to the floor, platform, or ramp level. Nominal height of med rail is 21 inches.
 - 3. A "standard toe board" is 4 inches nominal in vertical height, with not more than ¼ inch clearance above floor level.
 - 4. Floor openings may be covered rather than guarded with rails. When the floor opening cover is removed, a temporary guardrail shall be in place, or an attendant shall be stationed at the opening to warn personnel.
 - 5. Every floor hole into which persons can accidentally walk shall be guarded by either:
 - a. A standard railing with toe board, or
 - b. A floor hole cover of standard strength and construction.

- c. While the cover is not in place, the floor hole shall be consistently attended by someone or shall be protected by a removable standard railing.
- E. Protection of Open-Sided Floors, Platforms, and Runways
 - 1. Every open-sided floor or platform 4 feet or more (5 feet on shipboard) above adjacent floor or ground level shall be guarded by a standard railing on all open sides, except where there is an entrance to a ramp, stairway, or fixed ladder. The railing shall be provided with a toe board wherever, beneath the open sides:
 - a. Persons can pass
 - b. There is moving machinery
 - c. There is equipment with which falling materials could create a hazard.
 - d. Every runway shall be guarded by a standard railing, or the equivalent, on all sides 4 feet or more above floor of ground level. Wherever tools, machine parts, or materials are likely to be used on a runway, a toe board shall be provided on each exposed side.
- F. Stairway Railings and Guards
 - 1. Every flight of stairs with four or more risers shall have standard stair railings or standard handrails as specified below. Stair width is measured clear of all obstructions except handrails.
 - 2. On stairways less than 44 inches wide having both sides enclosed, at least one handrail shall be affixed, preferably on the right-side descending.
 - 3. On stairways less than 44 inches wide with one open side, at least one stair rail shall be affixed on the open side.
 - 4. On stairways less than 44 inches wide having both sides open, two stair rails shall be provided, one for each side.
 - 5. On stairways more than 44 inches wide, but less than 88 inches, one handrail shall be provided on each enclosed side and one stair rail on each open side.
 - 6. On stairways 88 inches or more in width, one handrail shall be provided on each enclosed side, one stair rail on each open side, and one intermediate stair rail placed approximately in the middle of the stairs.
 - 7. A "standard stair railing" (stair rail) shall be of construction like a standard railing, but the vertical height shall be not more than 34 inches nor less than 30 inches from the upper surface of the top rail to the surface

of the tread in line with the face of the riser at the forward edge of the tread.

- G. Fixed Industrial Stairs
 - 1. Fixed industrial stairs shall be provided for access to and from places of work where operations necessitate regular travel between levels. Requirements include:
 - 2. Fixed industrial stairs shall be strong enough to carry five times the normal anticipated live load.
 - 3. At the very minimum, any fixed stairway shall be able to safely carry a moving concentrated load of 1000 pounds.
 - 4. All fixed stairways shall have a minimum width of 22 inches.
 - 5. Fixed stairs shall be installed at angles to the horizontal of between 30° and 50°.
 - 6. Vertical clearance above any stair tread to an overhead obstruction shall be at least 7 feet measured from the leading edge of the tread.

H. Ladders

- 1. Portable Ladders
 - a. The chief hazard when using a ladder is falling. A poorly designed, maintained, or improperly used ladder may collapse or fall under the load placed upon it and cause the employee to fall.
 - b. A ladder is an appliance consisting of two side rails joined at regular intervals by crosspieces on which a person may step to ascend or descend.
 - c. The various types of portable ladders include:
 - i. Stepladder A self-supporting portable ladder, non-adjustable in length, having flat steps and hinged back.
 - ii. Single Ladder A non-self-supporting portable ladder, nonadjustable in length, consisting of but one section. Its size is designed by overall length of one side rail.
 - iii. Extension Ladder A non-self-supporting portable ladder adjustable in length.
- 2. Portable Ladder Requirements:
 - a. Portable step ladders longer than 40 feet shall not be used.

- b. Step ladders shall be equipped with a metal spreader or locking device of enough size and strength to securely hold the front and back sections in an open position.
- c. Single ladders longer than 30 feet shall not be used.
- d. Extension ladders longer than 60 feet shall not be used.
- e. Ladders shall always be maintained in good condition.
- f. Ladders shall be inspected frequently and those which have developed defects shall be withdrawn from service for repair or destruction and tagged or marked as "Dangerous, Do Not Use."
- g. Proper use of ladders is essential in preventing accidents. Even a good ladder can be a serious safety hazard when used by workers in a dangerous way.
- h. Only commercially manufactured ladders will be used. Shop built or "homemade" ladders will not be used.
- i. Fiberglass or composite non-destructive portable ladders are the preferred type. The use of metal portable ladders is discouraged and prohibited where used in the vicinity of electrical conductors.
- 3. Portable Ladder Safety Precaution
 - a. Ladders shall be placed with a secure footing, or they shall be lashed, or held in position.
 - b. Ladders used to gain access to a roof or other area shall extend at least 3 feet above point of support.
 - c. The foot of a ladder shall, where possible, be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is one-quarter of the working length of the ladder (the length the ladder between the foot and the support).
 - d. The worker shall always face the ladder when climbing up or down.
 - e. Short ladders shall not be spliced together to make long ladders.
 - f. Ladders shall never be used in the horizontal position as scaffolds or work platforms.
 - g. The top of a regular stepladder shall not be used as a step.
 - h. Use both hands when climbing and descending ladders.
 - i. Metal ladders shall never be used near electrical equipment.
- 4. Fixed Ladders
 - a. A fixed ladder is a ladder permanently attached to a structure, building or equipment. A point to remember is that fixed ladders, with a length of more than 20 feet to a maximum unbroken length of 30 feet shall be equipped with cages or a ladder safety device. A "cage" is a guard that is fastened to the side rails of the fixed ladder or to the structure to encircle the climbing space of the ladder for the safety of the person who must climb the ladder.

- b. Cages shall extend a minimum of 42 inches above the top of a landing, unless other acceptable protection is provided.
- c. Cages shall extend down the ladder to a point not less than 7 feet nor more than 8 feet above the base of the ladder.
- 5. Ladder Inspection

Prior to ladder use, each employee shall inspect ladders for defects including but not limited to:

- a. Slide rails or legs- straight without splits, bends, cracks, significant nicks or gouges.
- b. Rungs- securely attached to side rails without movement, dry and free of grease or foreign substances, without bends or deformation.
- c. Spreaders or extension hardware- free of bends, securely attached, free movement without slop or binding.
- d. Foot pads- Present, anti-slip pads or covering not peeling, deteriorated or missing.
- e. Screws rivets and other fasteners- present, tight and original manufacture or equivalent.
- L. Scaffolding Safety- See also Scaffolding Safety Plan for Host Facilities.
 - 1. The footing or anchorage for scaffolds shall 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 shall not be used to support scaffolds or planks.
 - 2. Scaffolds and their components shall be capable of supporting at least four times the maximum intended load.
 - 3. Scaffolds shall be maintained in a safe condition and shall not be altered or moved horizontally while they are in use or occupied.
 - 4. Damage or weakened scaffolds shall be immediately repaired and shall not be used until repairs have been completed.
 - 5. A safe means must be provided to gain access to the working platform level using a ladder, ramp, etc.
 - 6. Overhead protection must be provided for personnel on a scaffold exposed to overhead hazards.
 - 7. Guardrails, mid rails, and toe boards must be installed on all open sides and ends of platforms more than 10 feet above the ground or floor. Wire mesh must be installed between the toe board and the guardrail along the

entire opening, where persons are required to work or pass under the scaffolds.

- 8. Employees shall not work on scaffolds during storms or high winds or when covered with ice or snow.
- 9. As noted earlier, there are several scaffold types, and 1910.28 should be reviewed for special requirements that apply to each type.
- M. Fall arrest systems
 - 1. In situations where employees are required to work exposed to fall hazards greater than 4 feet, 5 feet shipboard, and other engineering controls cannot be implemented, fall arrest systems shall be implemented.
 - 2. Fall arrest systems consist of three basic components: the harness, a lanyard and an anchor point to secure the system to. Safety belts are not permitted for fall protection use except as positioning devices where self-rescue of the worker is highly feasible. Harnesses, when worn, must be adjusted for a snug fit with all buckles secured. Only company supplied lanyards manufactured specifically for fall protection shall be used and must be in good serviceable condition without points to which the lanyard is secured shall be capable of withstanding 5000 pounds to strain without failure. The system must be configured to permit no more than a fall of 6 feet or arrest the fall before contacting a lower level, whichever is less.
 - 3. Personal fall arrest equipment will be issued to employees and maintained by them as their personal equipment. Fall arrest gear is not to be loaned or borrowed and is to be used only by the person to whom it was issued. Each employee issued fall arrest equipment is required to maintain their equipment in clean and serviceable conditions. Each employee assigned fall arrest equipment shall inspect the equipment prior to each use as described in the sections below. Employees with equipment in questionable condition or found to be unserviceable shall return the equipment to the issuing organization and disposition made.
 - 4. Prior to issuing fall arrest equipment, the issuing organization will inspect all components of the fall arrest equipment prior to issue. This will include at minimum: 1. lanyard- adequate construction and free of damage, eye splices, hooks, and safety latches for fraying, manufacturing defects, sun damage. 2. Harness construction- all stitching secure, webbing for fraying, sun or ultra violet ray damage, burns, rips, or tears, hardware including buckles and adjustment hardware, and D-rings for corrosion, deformation, and manufacturing defects.

Only fall arrest equipment having no noted defects shall be issued. Equipment with noted defects shall be returned to the manufacturer for repairs or rendered unusable and disposed of.

N. Fall protection training

Employees exposed to potential fall hazards shall be provided with training to enable them to recognize potential fall hazards and understand the adequacy, advantages and disadvantages of the various controls and protective measures. Employees shall receive training in at least the following areas:

- 1. Identification and recognition of fall hazards, including the various trigger heights and requirements.
- 2. The three conventional fall protection methods, including safety nets, safety railings, and fall arrest systems and positioning devices.
- 3. The components of fall arrest systems including harness, lanyards and locking snap hooks, shock absorbers and anchor points and the construction requirements for each as applicable.
- 4. Inspection requirements and criteria for fall arrest systems.
- 5. Donning of fall arrest systems.

Techniques and use of fall arrest systems to maximize protection and minimize hazards.

Respiratory Protection Plan

I. To Our Employees

The inhalation of harmful vapors, fumes, toxic materials, dust, fogs, sprays, mists, gases and other air contaminants has long been known to present serious health hazards to workers. Often these air contaminants are very insidious, having no immediate signs such as odors, irritants or visible indications that a serious hazard is present. Also, the health hazards may not be immediately known or sensed but take years before the exposure is manifested as a serious illness. In this respiratory protection plan, Lingo management is seeking to implement the management procedures necessary to provide for the respiratory protection of all exposed employees. Employees are expected to support and actively participate in this program.

II. General

In this respiratory protection program, hazard assessment and selection of proper respiratory PPE is conducted in conjunction with knowledgeable client company representatives to ensure the identification of respiratory hazards and initiation of adequate controls. In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, vapors, the primary objective shall be to prevent atmospheric contamination. Where this is not feasible, the use of air purifying or supplied air respirators may be utilized. Reference: OSHA Standards Respiratory Protection (29 CFR 1910.134, 1915.152).

III. Responsibilities

A. Management responsibilities:

The client company will have specific knowledge and control of the chemicals and hazardous atmospheres that Lingo employees will be exposed to and therefore be best suited to manage this program. The Safety Director of Lingo will serve to oversee the program to ensure the protection of company employees. These program responsibilities include but are not limited to:

- 1. Implementation of the requirements of this program.
- **2.** Provide the resources necessary for the accomplishment of this program including a selection of respirators as required
- **3.** Implement and maintain all provisions of this program.
- **4.** Appoint a designated individual to conduct the respiratory protection program (Program Administrator).

IV. Program Administrator

The Program Administrator is responsible for ensuring the accomplishment of the following areas.

- 1. Perform in-depth investigation and research to determine and identify specific respiratory hazards employees may be exposed to.
- 2. Research and evaluate potential control systems of respiratory hazards.
- 3. Select control systems for implementation.
- 4. Develop management procedures for implementation.
- 5. Review sanitation/storage procedures, ensuring respirators are properly, stored, inspected and maintained.
- 6. Monitor compliance for this program.
- 7. Provide training for affected Employees.
- 8. Review compliance and ensure monthly inspection of all respirators.
- 9. Provide respirator fit testing.

V. Use of Respirators

To provide for the effective use of respirators and ensure the protection of company employees only company or client issued respirators will be used. Employees may not be required to provide their own respiratory protection equipment. Likewise, may not do so voluntarily. This is to ensure that employees are in fact protected adequately. Only employees who have been qualified through medical evaluation, fit testing and training may use respirators.

VI. Respiratory Program Effectiveness Evaluation

- A. Evaluations of the workplace are necessary to ensure that the written respiratory protection program is being properly implemented and that the employees are protected adequately from present hazards. The designated Program Administrator will perform evaluations regularly and at least annually. This includes consulting with employees and observing to ensure that they are using the respirators properly and inspecting/testing for respiratory hazards in the work environment. Evaluations will consider the protective capability of the equipment in use and the protection afforded by this equipment against respiratory hazards in the work environment. 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.
- B. 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:

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

VII. Record Keeping

- A. The company performing medical evaluations, fit testing will retain the written information 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. Employees will be provided access and information regarding all records and medical data.
- B. Records maintained will include the following:
 - 1. Fit testing administered including identity of employee and type of test performed.
 - 2. Specific make, model, style, and size of respirator tested, and date tested.
 - 3. The pass/fail results for qualitative fit tests (QLFTs) or the fit factor and strip chart recording or other recording of the test results for quantitative fit tests (QNFTs).
 - 4. Fit test records shall be retained for respirator users until the next fit test is administered.
 - 5. The employer shall retain a written copy of the current respirator program.
 - 6. The most current documents of the above listed record items, except the medical approval wear the designated respirator, will be maintained by the company until the employee no longer uses a respirator in the course of his or her own duties or is no longer employed by the company.
 - 7. The medical approval to wear a respirator will be maintained for the employment
 - 8. period of the employee plus thirty years.

VIII. Respiratory Protection Training and Information

- A. 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 a least the following:
 - 1. Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
 - 2. Limitations and capabilities of the respirator.
 - 3. How to inspect, put on and remove, use, and check the seals of the respirator.
 - 4. What the procedures are for maintenance and storage of the respirator.
 - 5. How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
 - 6. The general requirements of this program.
- B. Re-training shall be conducted annually and when:
 - 1. Changes in the workplace or the type of respirator render previous training obsolete.
 - 2. Inadequacies in the employees' knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill.
 - 3. Another situation arises in which retraining appears necessary to ensure safe respirator use.
- C. Training curriculum

Training is divided into the following sections:

- D. Classroom Instruction
 - 1. Overview of the Company Respiratory Protection Program and 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.
- E. Hands-on Respirator training Employees will demonstrate:
 - 1. Repair Inspection
 - 2. Respirator cleaning and sanitizing
 - 3. Record keeping
 - 4. Respirator storage
 - 5. Respirator donning and Fit Check field

IX. Basic Respiratory Protection Safety Procedures

- A. 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.
- B. Only physically qualified employees may be trained and authorized to use respirators. Pre-authorization and annual certification by a qualified physician will be required and maintained. A qualified physician will evaluate any changes in an Employees health or physical characteristics.
- C. Only the proper prescribed respirator may be used for the job or work environment. Air cleansing respirators may be used 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 NIOSH or MESA, for the known hazardous substance is used.
- D. Company employees will not work in atmospheres known to be immediately dangerous to life and health (IDLH), containing toxic materials or classified as dangerous atmospheres.

- E. 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.
- F. All respirators will be in a clean, convenient and sanitary location.
- G. 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 respiratory protection equipment (RPE).
- H. 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.

X. Selection of respiratory protection equipment

The following job descriptions are generic tasks involving respiratory hazards typical to some client companies. All selected respirators are NIOSH-certified.

Job Description

Sanding, grinding, metal surface preparation, sweeping, cleaning and other generation of nuisance dust

Painting, sealant, adhesive and waterproofing applications in ventilated areas.

<u>Minimum</u> <u>Respiratory</u> <u>Protection</u>

N-95 particulate disposable filter mask, TC- 84A. N or P-100 filters may be substituted for the N-95 as needed or where client policy requires.

Minimum protection will include a half face respirator mask with organic vapor cartridge. Approval # TC- 23C. Additionally, an N-95 prefilter will be utilized. Multipurpose vapor cartridges providing protection from additional contaminants may also be used as needed or client policy requires, and N or P 100 filters may be used.

Job Description

Electric arc and gas welding and flame cutting of metals potentially generating hazardous fumes.

Minimum Protection Required

Half face mask with P- 100 filter cartridge approval TC- 21C

Confined space application: supplied air system.

XI. Respirator Filter & Canister Replacement

Filter & Cartridge Change Schedule

- 1. Stocks of spare filters and cartridges shall be maintained to allow immediate change when required or desired by the employee.
- 2. Cartridges shall be changed based on the most limiting factor below:
 - a. Prior to expiration date
 - b. Manufacturer's recommendation for use and environment
 - c. When requested by employee
 - d. When contaminate odor is detected
 - e. When restriction of air flow has occurred (Breathing in requires effort)
- 3. Cartridges shall remain in their original sealed packages until needed for immediate use.
- 4. Filters shall be changed based on the most limiting factor below:
 - a. Prior to expiration date
 - b. Manufactures recommendations for the specific use and environment.
 - c. When requested by employee
 - d. When restriction of air flow has occurred (breathing in or out requires effort)
 - e. When discoloring of the filter media is evident
- 5. Filters shall remain in their original sealed package until needed for immediate use.

XII. Supplied Breathing Air Quality

- A. The client company is responsible for ensuring that all compressed air, compressed oxygen, liquid oxygen use for respiration accords with the following specifications:
 - 1. The supplied air source will meet the United States Pharmacopoeia requirements for medical or breathing oxygen and meet at least the requirements of Grade D breathing air as described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989.
 - 2. Employees will not use compressed oxygen or oxygen enriched air from compressed welding gas cylinders.
 - 3. Employees will not use breathing air from compressed air cylinders.
 - 4. The company Plan Administrator and the client Plan Administrator will ensure that compressors used to supple breathing air to respirators are constructed and situated to:
 - a. Prevent entry of contaminated air into the air supply system;

- b. Minimize moisture content so that the dew point at 1 atmosphere pressure is 10 degrees F (5.56 deg. C) below the ambient temperature;
- c. Have suitable in-line air-purifying sorbent beds and filters to further ensure breathing air quality. Sorbent beds and filters shall be maintained and replaced or refurbished periodically following the manufacturer's instructions.
- d. Have a tag containing the most recent date and the signature of the person authorized by the employer to perform the change. The tag shall be maintained at the compressor.
- e. For compressors that are not oil-lubricated, the employer shall ensure that carbon monoxide levels in the breathing air do not exceed 10 PPM.
- f. For oil-lubricated compressors, the client company shall use a high temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply shall be monitored at intervals enough to prevent carbon monoxide in the breathing air from exceeding 10 PPM.
- g. The client company shall ensure that breathing air couplings are incompatible with outlets for non-repairable worksite air or other gas systems. No asphyxiating substance shall be introduced into breathing airlines.

XIII. Physical and Medical Qualifications

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 to employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace.

- A. Medical evaluation procedures
 - 1. All employees, prior to exposure to respiratory hazard exposure shall complete the medical questionnaire included as appendix A of this document in its entirety.
 - 2. The completed medical questionnaire shall be forwarded to the Occupational Health Care Provider together with the following supplemental information:
 - a. Type and weight of intended RPE
 - b. Duration and frequency of RPE use
 - c. Expected physical work effort
 - d. Additional protective clothing and equipment to be worn
 - e. Temperature and humidity extremes that may be encountered
 - f. Other pertinent information
 - 3. Follow-up medical examination as required by the occupational health care provider prior to approval for RPE use.

- 4. Obtain and maintain documentation of employee's physical and medical qualifications, including any restrictions for RPE use.
- 5. Additional Medical Evaluations required:
 - a. Annual re-evaluation required
 - b. An employee reports medical signs or symptoms that are related to ability to use a respirator.
 - c. A Physician, supervisor, or the respirator program administrator informs the company that an employee needs to be re-evaluated.
 - d. Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee re-evaluation.
 - e. A change occurs in workplace conditions (e.g., physical work effort, protective clothing, and temperature) that may result in a substantial increase in the physiological burden placed on an employee.

XIV. Respirator Fit Testing

- A. Before an employee is required to use any respirator with tight-fitting face piece, the employee must be fit tested with 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.
 - B. The company has elected to use qualitative fit testing procedures (QLFT) as the normal means of fit testing personnel for respirator wear. Further, company management has also elected to use the irritant smoke (stannic chloride) protocol as primary protocol in fit testing except where employees have experienced a high sensitivity to the irritant smoke.
 - C. Documentation fit test

The company will maintain a record of the qualitative and quantitative fit tests administered to employees, including:

- 1. The name or identification of the employee tested.
- 2. Type of fit test performed
- 3. Specific make, model, style, and size of respirator tested
- 4. Date of test
- 5 The pass/fail results for QLFT5

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, 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.

XIV. Respiratory protection equipment maintenance and use

A. Use

- 1. Respirators will only be used following the respiratory protection safety procedures 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.
- 2. 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 re-evaluate the continued effectiveness of the respirator.
- 3. For continued protection of respirator users, the following general use rules apply:
 - a. Users shall not remove respirators while in a hazardous environment
 - b. Respirators are to be stored in sealed containers out of harmful atmospheres
 - c. Store respirators away from heat and moisture
 - d. Store respirators such that the sealing area does not become distorted or warped
 - e. Store respirator such that the face piece is protected
- 4. 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.
- 5. If an employee wears corrective glasses or goggles or other personal protective equipment, management 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.
- B. Cleaning and Disinfecting
 - 1. All employees requiring non-disposable RPE shall be provided with a respirator that is clean, sanitary, and in good working order. Employees are responsible for cleaning and disinfecting their equipment using the standard procedure enclosed in appendix B after each use.
- C. Respiratory Equipment Inspection

- 1. All respirators and RPE equipment will be inspected after each use and at least monthly. Should any defects be noted, the respirator will be taken to the program Administrator. Damaged respirators will be either repaired or replaced.
- 2. Respirator inspections include the following:
 - a. All respirators used in routine situations shall be inspected before each use and during cleaning.
 - b. 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 elastomeric parts for pliability and signs of deterioration.
- D. Respirator Storage

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.

E. Repair of Respirators

- 1. 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:
 - a. Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such operations and designated by the Respiratory Protection Program Administrator. Only the respirator manufacturer's NIOSH-approved parts designed for the respirator shall be used.
 - b. Repairs shall be made according to the manufacturer's recommendations and specifications for the type and extent authorized.

Fit Testing Procedures

Fit testing will be accomplished using the following procedures.

- 1. The employee shall be allowed to pick the most acceptable respirator from a enough respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.
- 2. Prior to the selection process, the employee will be shown how to put on a respirator, how it should be positioned on the face, how to set strap tension and how to determine an acceptable fit. A mirror shall be available to assist the subject in evaluating the fit and positioning of the respirator. This instruction may not constitute the subject's formal training on respirator use, because it is only a review.
- 3. The employee will be informed that he/she is being asked to select the respirator that provides the most acceptable fit. Each respirator represents a different size and shape, and if fitted and used properly, will provide adequate protection.
- 4. The employee will be instructed to hold each chosen face piece up to the face and eliminate those that obviously do not give an acceptable fit.
- 5. The more acceptable face pieces are noted in case the one selected proves unacceptable; the most comfortable mask is donned and worn at least five minutes to assess comfort. Assistance in assessing comfort can be given by discussing the points in the following item A.6. If the test subject is not familiar with using a particular respirator, the test subject shall be directed to don the mask several times and to adjust the straps each time to become adept at setting proper tension on the straps.
- 6. Assessment of comfort shall include a review of the following points with the test subject and allowing the test subject adequate time to determine the comfort of the respirator:
 - (a) Position of the mask on the nose
 - (b) Room for eye protection
 - (c) Room to talk
 - (d) Position of mask on face and cheeks

- 7. The following criteria shall be used to help determine the adequacy of the respirator fit:
 - (a) Chin properly placed;
 - (b) Adequate strap tension, not overly tightened;
 - (c) Fit across Nose Bridge;
 - (d) Respirator of proper size to span distance from nose to chin;
 - (e) Tendency of respirator to slip;
 - (f) Self-observation in mirror to evaluate fit and respirator position.
- 8. The employee will conduct a user seal check, either the negative and positive pressure seal checks or those recommended by the respirator manufacturer, which provide equivalent protection. Before conducting the negative and positive pressure checks, the subject shall be told to seat the mask on the face by moving the head from side-to-side and up and down slowly while taking in a few slow deep breaths. Another face piece shall be selected and retested if the test subject fails the user seal check tests.
- 9. The test shall not be conducted if there is any hair growth between the skin and the face piece sealing surface, such as stubble beard growth, beard, mustache or sideburns which cross the respirator sealing surface. Any type of apparel, which interferes with a satisfactory fit, shall be altered or removed.
- 10. If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician or other licensed health care professional, as appropriate, to determine whether the test subject can wear a respirator while performing his or her duties.
- 11. If the employee finds the fit of the respirator unacceptable, the test subject shall be given the opportunity to select a different respirator and to be retested.
- 12. Exercise regimen. Prior to the commencement of the fit test, the test subject shall be given a description of the fit test and the test subject's responsibilities during the test procedure. The description of the process shall include a description of the test exercises that the subject will be performing. The respirator to be tested shall be worn for at least 5 minutes before the start of the fit test.
- 13. The fit test shall be performed while the test subject is wearing any applicable safety equipment that may be worn during actual respirator use, which could

interfere with respirator fit.

- 14. Test Exercises. (a) The following test exercises are to be performed for all fit testing methods prescribed in this appendix, except for the CNP method. A separate fit testing exercise regimen is contained in the CNP protocol. The test subject shall perform exercises, in the test environment, in the following manner:
 - (1) Normal breathing. In a normal standing position, without talking, the subject shall breathe normally.
 - (2) Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.
 - (3) Turning head side to side. Standing in place, the subject shall slowly turn his/her head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.
 - (4) Moving head up and down. Standing in place, the subject shall slowly move his/her head up and down. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling).
 - (5) Talking. The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.

Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

- (6) Grimace. The test subject shall grimace by smiling or frowning. (This applies only to QNFT testing; it is not performed for QLFT)
- (7) Bending over. The test subject shall bend at the waist as if he/she were to touch his/her toes. Jogging in place shall be substituted for this exercise in those test environments such as shroud type QNFT or QLFT units that do not permit bending over at the waist. (8) Normal breathing. Same as exercise (1).

- (b) Each test exercise shall be performed for one minute except for the grimace exercise, which shall be performed for 15 seconds. The test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried. The respirator shall not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.
- B. Qualitative Fit Test Irritant Smoke (Stannic Chloride) Protocol

This qualitative fit test uses a person's response to the irritating chemicals released in the "smoke" produced by a stannic chloride ventilation smoke tube to detect leakage into the respirator.

- (a) General Requirements and Precautions
 - (1) The respirator to be tested shall be equipped with high efficiency particulate air (HEPA) or P100 series filter(s).
 - (2) Only stannic chloride smoke tubes shall be used for this protocol.
 - (3) No form of test enclosure or hood for the test subject shall be used.
 - (4) The smoke can be irritating to the eyes, lungs, and nasal passages. The test conductor shall take precautions to minimize the test subject's exposure to irritant smoke. Sensitivity varies, and certain individuals may respond to a greater degree to irritant smoke. Care shall be taken when performing the sensitivity screening checks that determine whether the test subject can detect irritant smoke to use only the minimum amount of smoke necessary to elicit a response from the test subject.
 - (5) The fit test shall be performed in an area with adequate ventilation to prevent exposure of the person conducting the fit test or the build-up of irritant smoke in the general atmosphere.
- (b) Sensitivity Screening Check

The person to be tested must demonstrate his or her ability to detect a weak concentration of the irritant smoke.

(1) The test operator shall break both ends of a ventilation smoke tube containing stannic chloride and attach one end of the smoke tube to a low flow air pump set to deliver 200 milliliters per minute, or an aspirator squeeze bulb. The test operator shall cover the other end of the smoke tube with a short piece of tubing to prevent potential injury from the jagged end of the smoke tube.

- (2) The test operator shall advise the test subject that the smoke can be irritating to the eyes, lungs, and nasal passages and instruct the subject to keep his/her eyes closed while the test is performed.
- (3) The test subject shall be allowed to smell a weak concentration of the irritant smoke before the respirator is donned to become familiar with its irritating properties and to determine if he/she can detect the irritating properties of the smoke. The test operator shall carefully direct a small amount of the irritant smoke in the test subject's direction to determine that he/she can detect it.
- (c) Irritant Smoke Fit Test Procedure
 - (1) The person being fit tested shall don the respirator without assistance and perform the required user seal check(s).
 - (2) The test subject shall be instructed to keep his/her eyes closed.
 - (3) The test operator shall direct the stream of irritant smoke from the smoke tube toward the face seal area of the test subject, using the low flow pump or the squeeze bulb. The test operator shall begin at least 12 inches from the face piece and move the smoke stream around the whole perimeter of the mask. The operator shall gradually make two more passes around the perimeter of the mask, moving to within six inches of the respirator.
 - (4) If the person being tested has not had an involuntary response and/or detected the irritant smoke, proceed with the test exercises.
 - (5) The exercises identified in section I.A. 14. of this appendix shall be performed by the test subject while the respirator seal is being continually challenged by the smoke, directed around the perimeter of the respirator at six inches.
 - (6) If the person being fit tested reports detecting the irritant smoke at any time, the test is failed. The person being retested must repeat the entire sensitivity check and fit test procedure.
 - (7) Each test subject passing the irritant smoke test without evidence of a response (involuntary cough, irritation) shall be given a second sensitivity screening check, with the smoke from the same smoke tube used during the fit test, once

the respirator has been removed, to determine whether he/she still reacts to the smoke. Failure to evoke a response shall void the fit test.

(8) If a response is produced during this second sensitivity check, then the fit test is passed.

Respiratory Protection Questionnaire

To be completed by all employees for which respiratory protection will be necessary during the performance of intended tasks or exposures

Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination.

To the employee:

Can you read (circle one): Yes/No

Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Part A. Section 1. (Mandatory) The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1.	Today's date:	
2.	Your name:	
3.	Your age	(to
4.	Sex (circle one): Male/Female	
5.	Your height: ft in.	
6.	Your weight: lbs.	
7.	Your job title:	
8.	A phone number where you can be reached by the health care professional who reviews this questionnaire (include the area code):	
9.	The best time to phone you at this number:	
10.	Has your employer told you how to contact the health care professional who will	
	review this questionnaire (circle one): Yes/No	

- 11. Check the type of respirator you will use (you can check more than one category):
 a. _____ N, R, or P disposable respirator (filter-mask, non- cartridge type only).
 b. _____ Other type (for example, half- or full-face piece type, powered-air purifying, supplied-air, self-contained breathing apparatus).
- 12. Have you worn a respirator before? (circle one): Yes/No If "yes," what type(s):

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle "yes" or "no").

1. Do you currently smoke tobacco, or have you smoked tobacco in the last month: Yes/No

- 2. Have you ever had any of the following conditions?
 - a. Seizures (fits): Yes/No
 - b. Diabetes (sugar disease): Yes/No
 - c. Allergic reactions that interfere with your breathing: Yes/No
 - d. Claustrophobia (fear of closed-in places): Yes/No
 - e. Trouble smelling odors: Yes/No
- 3. Have you ever had any of the following pulmonary or lung problems?
 - a. Asbestosis: Yes/No
 - b. Asthma: Yes/No
 - c. Chronic bronchitis: Yes/No
 - d. Emphysema: Yes/No
 - e. Pneumonia: Yes/No
 - f. Tuberculosis: Yes/No
 - g. Silicosis: Yes/No
 - h. Pneumothorax (collapsed lung): Yes/No
 - i. Lung cancer: Yes/No
 - j. Broken ribs: Yes/No
 - k. Any chest injuries or surgeries: Yes/No
 - 1. Any other lung problem that you've been told about: Yes/No

Do you currently have any of the following symptoms of pulmonary or lung illness?

- a. Shortness of breath: Yes/No
- b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes/No
- c. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes/No

d.Have to stop for breath when walking at your own pace on level ground: Yes/No

- e. Shortness of breath when washing or dressing yourself: Yes/No
- f. Shortness of breath that interferes with your job: Yes/No
- g. Coughing that produces phlegm (thick sputum): Yes/No
- h. Coughing that wakes you early in the morning: Yes/No
- i. Coughing that occurs mostly when you are lying down: Yes/No
- j. Coughing up blood in the last month: Yes/No

- k. Wheezing: Yes/No
- 1. Wheezing that interferes with your job: Yes/No
- m. Chest pain when you breathe deeply: Yes/No

n.Any other symptoms that you think may be related to lung problems: Yes/No

- 5. Have you ever had any of the following cardiovascular or heart problems?
 - a. Heart attack: Yes/No
 - b. Stroke: Yes/No
 - c. Angina: Yes/No
 - d. Heart failure: Yes/No
 - e. Swelling in your legs or feet (not caused by walking): Yes/No
 - f. Heart arrhythmia (heart beating irregularly): Yes/No
 - g. High blood pressure: Yes/No
 - h. Any other heart problem that you've been told about: Yes/No
- 6. Have you ever had any of the following cardiovascular or heart symptoms?
 - a. Frequent pain or tightness in your chest: Yes/No
 - b. Pain or tightness in your chest during physical activity: Yes/No
 - c. Pain or tightness in your chest that interferes with your job: Yes/No
 - d. In the past two years, have you noticed your heart skipping or missing a beat: Yes/No
 - e. Heartburn or indigestion that is not related to eating: Yes/ No
 - f. Any other symptoms that you think may be related to heart or circulation problems: Yes/No
- 7. Do you currently take medication for any of the following problems?
 - a. Breathing or lung problems: Yes/No
 - b. Heart trouble: Yes/No
 - c. Blood pressure: Yes/No
 - d. Seizures (fits): Yes/No

8. If you've used a respirator, have you ever had any of the following problems? (If you've never used a respirator, check the following space and go to question 9:)

- a. Eye irritation: Yes/No
- b. Skin allergies or rashes: Yes/No
- c. Anxiety: Yes/No
- d. General weakness or fatigue: Yes/No
- e. Any other problem that interferes with your use of a respirator: Yes/No

9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes/No

Questions 10 to 15 below must be answered by every employee who has been selected to use either a full-face piece respirator or a self-contained breathing apparatus (SCBA). If not, skip to part B below.

For employees who have been selected to use other types of respirators, answering these questions is voluntary.

10. Have you ever lost vision in either eye (temporarily or permanently): Yes/No

11. Do you currently have any of the following vision problems?

- a. Wear contact lenses: Yes/No
- b. Wear glasses: Yes/No
- c. Color blind: Yes/No
- d. Any other eye or vision problem: Yes/No
- 12. Have you ever had an injury to your ears, including a broken eardrum: Yes/No

13. Do you currently have any of the following hearing problems?

- a. Difficulty hearing: Yes/No
- b. Wear a hearing aid: Yes/No
- c. Any other hearing or ear problem: Yes/No
- 14. Have you ever had a back injury: Yes/No
- 15. Do you currently have any of the following musculoskeletal problems?
 - a. Weakness in any of your arms, hands, legs, or feet: Yes/No
 - b. Back pain: Yes/No
 - c. Difficulty fully moving your arms and legs: Yes/No
 - d. Pain or stiffness when you lean forward or backward at the waist: Yes/No
 - e. Difficulty fully moving your head up or down: Yes/No
 - f. Difficulty fully moving your head side to side: Yes/No
 - g. Difficulty bending at your knees: Yes/No

- h. Difficulty squatting to the ground: Yes/No
- i. Climbing a flight of stairs or a ladder carrying more than 25 lbs: Yes/No
- j. Any other muscle or skeletal problem that interferes with using a respirator: Yes/No

Part B. Mandatory for persons completing this questionnaire.

1. In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen: Yes/No

If "yes," do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions: Yes/No

2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals: Yes/No

If "yes," name the chemicals if you know them: _____

3. Have you ever worked with any of the materials, or under any of the conditions, listed :

a.: Asbestos: Yes/No

- a. Silica (e.g., in sandblasting): Yes/No
- b. Tungsten/cobalt (e.g., grinding or welding this material): Yes/No
- c. Beryllium: Yes/No
- d. Aluminum: Yes/No
- e. Coal (for example, mining): Yes/No
- f. Iron: Yes/No
- g. Tin: Yes/No
- h. Dusty environments: Yes/No
- j. Any other hazardous exposures: Yes/No
- If "yes," describe these exposures:

4. List any second jobs or side businesses you have:

5. List your previous occupations:

- 6. List your current and previous hobbies
- 7. Have you been in the military services? Yes/No

If "yes," were you exposed to biological or chemical agents (either in training or combat):

Yes/No

8. Have you ever worked on a HAZMAT team? Yes/No

9. Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications): Yes/No If "yes," name the medications if you know them:

10. Will you be using any of the following items with your respirator(s)?

- a. HEPA Filters: Yes/No
- b. Canisters (for example, gas masks): Yes/No
- c. Cartridges: Yes/No

11. How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you)?:

- a. Escape only (no rescue): Yes/No
- b. Emergency rescue only: Yes/No
- c. Less than 5 hours per week: Yes/No
- d. Less than 2 hours per day: Yes/No
- e. 2 to 4 hours per day: Yes/No
- f. Over 4 hours per day: Yes/No

12. During the period you are using the respirator(s), is your work effort:

a.

Light (less than 200 kcal per hour): Yes/No

If "yes," how long does this period last during the

average shift: _ hrs. _____ mins.

Examples of a light work effort are sitting while writing, typing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs.) or controlling machines.

b. Moderate (200 to 350 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift: _ hrs. _____ mins.

Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic; standing while drilling, nailing, performing assembly work, or transferring

moderate load (about 35 lbs.) at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing a wheelbarrow with a heavy load (about 100 lbs.) on a level surface.

c. Heavy (above 350 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift: ______hrs. ______mins. Examples of heavy work are lifting a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; shoveling; standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).

13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator: Yes/No

If "yes," describe

this protective clothing and/or equipment:

14. Will you be working under hot conditions (temperature exceeding 77 deg. F): Yes/No

- 15. Will you be working under humid conditions: Yes/No
- 16. Describe the work you'll be doing while you're using your respirator(s):

17. Desc

ribe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):

18. P

rovide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):

Name of the first toxic substance: _____

Estimated maximum exposure level per s	shift:
--	--------

Duration of exposure per shift _____

Name of the second toxic substance:

Name of the third toxic substance:

Estimated maximum exposure level per shift:

Duration of exposure per shift:

The name of any other toxic substances that you'll be exposed to while using your respirator:

19. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, security):

Respirator Cleaning Procedures Per OSHA 29 CFR 1910.134, appendix B-1 (Mandatory)

The following procedures are applicable to reusable respirator masks only and not to disposable, single use masks which are not cleanable and are to be disposed of after use. Disposable masks are to be used only by one employee and not shared or reused by another employee.

These procedures are provided for use when cleaning reusable respirators. They are general in nature, and the manufacturer's instructions for cleaning may supersede these cleaning

I. Procedures for Cleaning Respirators

A. Remove filters, cartridges, or canisters. Disassemble face pieces by removing speaking diaphragms, demand and pressure- demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.

B. Wash components in warm (43 deg. C [110 deg. F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.

C. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.

D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:

1. Sodium hypo chlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach (5% sodium hypo chlorite) to one liter of water at 43 deg. C (110 deg. F); or,

2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F); or,

3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.

E. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be

over emphasized. Detergents or disinfectants that dry on face pieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

- F. Components should be hand-dried with a clean lint-free cloth or air-dried.
- G. Reassemble face piece, replacing filters, cartridges, and canisters where necessary.
- H. Test the respirator to ensure that all components work properly.