

# **BAMCO inc.**

---

## **Architectural Wall Systems**

---

# **SAFETY PROGRAM**

Third Edition

June 1, 2015

## **Table of Contents**

- Section 1) Safety Policy Statement
- Section 2) Safety and Health Manual Introduction
- Section 3) Safety Goals, Objectives and Responsibilities
- Section 4) General Safety Rules
- Section 5) Drug-Free Work Place Policy
- Section 6) New Hire Orientation Packet
- Section 7) OSHA Record Keeping Procedure Policy
- Section 8) Incident Reporting & Investigation
- Section 9) PPE
- Section 10) Hearing Conservation
- Section 11) Ergonomics
- Section 12) Housekeeping
- Section 13) Hazard Communication Standard Policy
- Section 14) Hand and Power Tool Safety Policy
- Section 15) Fall Protection Procedure Policy
- Section 16) Stairway and Ladder Safety Procedure Policy
- Section 17) Scaffold and Aerial Lift Safety Procedure Policy
- Section 18) Powered Industrial Trucks
- Section 19) Rigging Procedures
- Section 20) Electrical Safety Policy
- Appendix

**Bamco inc.**  
**Safety Policy Statement**

In completing our construction projects, Bamco, Inc. will perform all work in a manner that results in quality craftsmanship and, at the same time, controls the possibility of injury to our employees, subcontractors, and the general public.

We will adhere to applicable safety regulations and will take the necessary precautions to control damage to adjoining property, our equipment, and to property on the construction sites (s). All officers, management personal, employees and subcontractors will actively participate in meeting this commitment.

Each construction site is unique. As a result some procedures may need to be refined or expanded to meet the site-specific safety and loss control needs of a particular project. The project supervisor may refine or expand these safety procedures as needed, with my approval.

Safety is as critical to our operations as production and quality. Bamco, Inc. is committed to maintaining safe and healthy work places, and to protecting the public against potential hazards caused by our operations. No job is so important or urgent that each and every one of us cannot take the time to perform safely.

All accidents are preventable. It is up to each of us to ensure that safety is a routine part of our daily work.



---

President

6.1.15

---

Date

\*This is the third edition to the Bamco, Inc. Corporate Safety and Health Manual.

# Safety Goals, Objectives and Responsibilities

## Company Safety Goals and Objectives:

The project foreman on each of our sites will be accountable to the Bamco, Inc. President and senior management personnel for the successful achievement of targeting our safety and loss control goals. Our goals for every project are as follows:

- Have no incidents that result in injury to our employees, subcontractors or the general public.
- Have no incidents that result in property damage to the site, equipment, vehicles or adjacent property.

## Responsibilities:

### President/Senior Management Team:

Management is ultimately responsible for the safety of our operations. As such, the President and/or Senior Management will:

- Provide direction, motivation and accountability to ensure an effective safety program for each of our projects.
- Establish annual safety goals and objectives including but not limited to in-house safety and health training for our employees. Examples of training include OSHA 10 and 30 Hour Outreach Training, Confined Space Training and Respiratory Training.
- Establish an adequate project budget to fund the safety and health program. This includes considering the impact on safety for all of our contract bids. When a project is out of the ordinary, ensure that specific safety guidelines are implemented to address the unique safety issues discovered.

### Safety Director:

- Assure that each member of the field supervisory team has a good working knowledge of governmental, (OSHA) and Bamco, Inc. safety requirements. This shall be done through training such as new hire orientations.
- Assist project supervisors and/or foremen in the formulation of site-specific safety and health plans such as HASPs.
- Assure that the OSHA 300/ 300A log and summary forms are maintained at our corporate office as well as our respective job sites.
- Verify the licensure of all employees authorized to drive a Bamco, Inc. vehicle or operate a personally owned vehicle on company business, (MVR check).
- Periodically participate in employee safety training including tool-box talks.
- Make available and strictly enforce the use of personal protective equipment.

## Safety Goals, Objectives and Responsibilities

- Assure that our subcontractors understand their own safety and health responsibilities when working for Bamco, Inc. This includes but is not limited to adhering to Bamco, Inc. safety and health rules as described within this manual.
- Establish necessary action to ensure a successful safety and health program.
- Provide foremen with a safety information package at the start of each job.
- Provide tool-box talk forms as necessary.
- As a part of performance evaluations, hold foremen accountable for the success or failure in achieving specific safety and health goals. This includes but is not limited to completion of self-inspections, tool-box talks, and incident and accident reports.
- Provide general guidance and advice for all project supervisors in regards to safety and health compliance matters.
- Actively partake in an employee return to work program.
- Assist in “serious type accident” investigations.
- Collect and file all accident reports.
- With the assistance of office staff, complete the OSHA 300 and 300A logs on an annual basis.
- When notified, accompany OSHA and insurance company representatives on job site audits.
- Maintain a list of all formal training records for every employee.

### Job Superintendents/Foremen:

The job foreman is responsible for safety and health compliance on his/her job site. As such each of our foremen is deemed to be a “Competent Person” as defined by OSHA and will:

- Set a positive example for all of our workers to follow.
- With the assistance of management, establish safety and health programs per client specifications, OSHA and/or our company program procedures.
- Monitor safety and health compliance on the jobsite by personally conducting daily inspections of the site and taking immediate corrective action if warranted. The Jobsite Inspection Checklist form found within this Manual should be filled out by the foreman on a daily basis.
- Investigate accidents and incidents to determine the root causes. Initiate corrective action to prevent reoccurrence of similar accidents. Foremen should refer to the Incident and Accident Investigation section of this Manual and follow the instructions carefully.
- Notify the corporate office and the safety director of Bamco, Inc. of any serious accident associated with their work/employees. This includes fatalities and/or catastrophes- as defined by OSHA. Further, the foreman will notify the OSHA area office within 8 hours of a fatality or catastrophe.

# Safety Goals, Objectives and Responsibilities

## Job Superintendents/Foremen:

- Prepare and maintain all accident and incident reports. Copies of reports should be sent to the safety director and a copy will remain in custody of the foreman for OSHA compliance purposes.
- Maintain and update any/all necessary OSHA records including material safety data sheets.
- Conduct safety training for all field personnel. This includes new-hire orientations for new workers as well as subcontractor personnel.
- Conduct, at a minimum, weekly safety meetings with the employees of Bamco, Inc. on the job site.
- Ensure that the job site has the necessary safety equipment required by governmental codes, this safety program and contractual requirements.
- Ensure that the job site has a supply of necessary personal protective equipment as well as first aid supplies.
- Ensure that the job site has emergency phone numbers and a fire/emergency evacuation plan.
- Enforce the use of appropriate personal protective equipment with our employees and our subcontractor employees.
- Monitor our subcontractors to assure safety and health compliance is being met and/or notify their management of any infractions found.
- Enforce any disciplinary action necessary to ensure a well-functioning safety program. This includes, but is not limited to stopping unsafe operations, notifying our clients of unsafe conditions caused by others and issuing our own employees discipline warning notices.
- Ensure that all necessary permits, licenses and certifications are obtained and maintained on file for each project. This will be performed regardless of owner/ general contractor requirements.
- Take immediate action to correct any unsafe act or condition identified. This includes shutting down an operation when imminent danger exists or potentially exists.
- Contact any/all utility companies to determine the exact location of underground service prior to commencing any excavation/trench work.
- Notify the safety director of any safety and health regulatory agency visit. This includes, but is not limited to OSHA inspections.

# Safety Goals, Objectives and Responsibilities

## Job Superintendents/Foremen:

### Emergency Preparedness Procedures for Foremen:

Each job foreman will have a working knowledge of fire prevention and protection.

- Emergency phone number signs and directions to the nearest hospitals will be available on each of our projects.
- New-hire orientation training will include the following subjects:
  - The location of the emergency phone number signs
  - The location of fire alarm systems, telephones and firefighting equipment on the job site.
  - The fire/emergency evacuation route and the appropriate muster point(s).

Each job foreman will be responsible for vehicles and equipment assigned to their project site. Each foreman will assure that: All company vehicles and equipment are maintained in accordance with the manufacturer's recommendations. Equipment is inspected for proper operation, including built-in safety features prior to use.

## Employees:

Safety is a management responsibility; however, management cannot solely be responsible for the acts of employees. Each of our employees is expected, as a condition of employment, to work in a manner which will not inflict self-injury or cause injury to anyone else. It is of paramount importance that each employee understands that responsibility for his/her own safety is an integral job requirement. To this end, each of our employees is expected to:

- Comply with all the safety and health rules of Bamco, Inc.
- Report any and all accidents or injuries to their supervisor immediately.
- Use the proper tools and personal protective equipment for their job function.
- Report any and all unsafe conditions to their supervisor.
- Be familiar with emergency phone number signs and the job-specific fire/emergency evacuation plan.
- Assist in maintaining a safe and clean work environment.
- Inspect all equipment, (hand tools/ ladders/ powder actuated tools/ vehicles/ etc...) prior to use.
- Inspect their personal protective equipment and notify their supervisor of any defects found.
- Set a good example for others to follow especially new hires.

## Safety Goals, Objectives and Responsibilities

- Attend and participate in all safety meetings and training sessions offered. This includes, but is not limited to, weekly safety meetings.

### Subcontractors:

Bamco, Inc. expects that all of its subcontractors and vendors will have established their own corporate safety and health program. In the event that this is not the case, then the subcontractor will officially sign-off that they agree to abide by the Bamco, Inc. Safety Program Manual. At a minimum, we will ensure that the subcontractors performing work on our projects adhere to and comply with all Federal, State, City and local regulations at a minimum as well as comply with the requirements and policy of the Bamco, Inc. Corporate Safety Manual.

Each subcontractor is expected to:

- Comply with, adhere to and enforce all Federal, State City and Local Safety and Health regulations as well as the Bamco, Inc. Corporate Safety Program.
- Prior to commencing work on a site, representatives of the subcontractors must meet with Bamco, Inc. project superintendent to review their operation and procedure as well as review and discuss their Job Specific Safety Program as well as Bamco, Inc. Constructions' safety expectations.
- Submit a copy of their Job Specific Safety Program that outlines the scope of their work associated with the project, any special equipment that will be utilized (i.e. cranes, scaffolds, aerial lifts...), exposures to their employees and or the general public associated with or expected to be encountered during the course of their operation; and identification of controls that they will implement and enforce to eliminate these exposures.
- On certain operations OSHA requires specific safety related written programs such as lead, confined space, fall protection and silica. Prior to the start of any operation requiring a written program, the subcontractor must submit a copy of that program to the Bamco, Inc. superintendent for review.
- Designate and name an individual who will be responsible for overseeing and coordinating the safety activities associated with their operation. It is not expected that this will be a full time safety position but rather an individual who meets the OSHA definition of a "Competent Person". Such individual is expected to understand, implement and enforce safety for their company during the course of the respective work.



# Safety Goals, Objectives and Responsibilities

## Subcontractors:

- Supply Bamco, Inc. with copies of their Hazard Communication Program and Material Safety Data Sheets.
- Adequately train their own field personnel on proper safety and health practices.
- Conduct and submit copies of weekly safety meetings held with their employees.
- Attend and participate in formal weekly safety meetings.
- Notify Bamco, Inc. management immediately in the event of an OSHA inspection when no Bamco, Inc. personnel are on site.
- Supply and ensure the proper use of all tools and equipment for their employees. This includes personal protective equipment and safety devices.
- Notify Bamco, Inc. superintendent immediately when an accident has occurred and supply a copy of a fully completed and acceptable accident investigation form. This will be required for all accidents, no matter how minor in nature. All reports will be provided in a timely fashion.

## General Safety Rules

The intent of this section is to provide all Bamco, Inc. employees with general rules of safe conduct while on company property and/or while working on company projects.

It has been estimated that 85% of all construction accidents and injuries are a result of unsafe acts. Before taking on a task, think about what has to be done and how you may get yourself into a dangerous situation. Adjust or alter your routine so that the task can be completed in a safe manner. Use good judgment and never place yourself or a co-worker in danger. Following are ten general rules to keep in mind:

1. **Drugs and Alcohol:** Drugs and alcohol are strictly prohibited on our projects. Under no circumstance will a person be permitted on a project while under the influence of drugs or alcohol. This restriction includes any medications, (over the counter or prescribed by a doctor) which may alter or otherwise inhibit your ability to perform your job safely.
2. **Proper Attire:** Proper attire will be worn while on the job. Work boots/shoes, full-length pants and work shirts are to be worn. Sneakers, sandals, open toed or soft footwear is prohibited.

## Safety Goals, Objectives and Responsibilities

3. **Personal Protective Equipment:** Bamco, Inc. provides PPE. This equipment, (hardhats, eye, face protection, hearing protection, etc...) must be worn where possible exposures may exist. At a minimum, head and eye protection must be worn at all times when working on our project sites. This rule shall apply to all subcontractor personnel as well as our own. Any worker, including flag personnel, working at or adjacent to vehicular traffic will wear reflective vests in accordance with current ANSI and MUTC code.
4. **Horseplay:** Horseplay, running and/or fighting on the job is strictly prohibited.
5. **Housekeeping:** Keep work areas as clean as possible. Aisles, walkways and work areas must remain clean and clear of debris at all times.
6. **Material Handling:** Remember to lift with your legs while keeping your back straight. Turn by moving your feet as opposed to twisting your waist. Make use of material handling equipment and/or get help when lifting heavy loads. It is better form a safety standpoint to push rather than pull.
7. **Tools and Equipment:** Inspect all tools and equipment including ladders, lifts and scaffolds prior to use every day. Damaged or defective tools and equipment will not be used but taken out of service and replaced. Powder-actuated tools will only be used by employees trained and certified by the equipment manufacturer/authorized dealer.
8. **Hazardous Materials:** Know the chemicals that you are working with. Follow labels and Material Safety Data Sheet warnings and instructions. If you are unsure how to handle a particular product, ask your immediate supervisor.
9. **Confined Spaces:** Never enter into a confined space by yourself. Entry into a confined space will only be performed under the Confined Space Entry Program which meets Federal and State requirements.
10. **Extension Cord Sets:** Cords must be the 3-prong type. Worn, frayed or damaged cords must not be used. They will be removed from service and replaced.

# Drug and Alcohol Policy/ Program

## 1. Understanding

Abuse of alcohol and drugs is recognized as a serious problem in today's workplace that affects Bamco, Inc "Company" as well as society and creates a need for guidelines regarding assistance. Accordingly, when it is determined that an employee is suffering from an alcohol or drug abuse problem, the individual is advised to utilize their existing Health & Welfare programs for treatment and rehabilitation. Additionally, efforts will be made to assist the employee using available health care and community resources. However, this does not preclude, under the policy, the Company's right to administer discipline up to and including discharge.

## 2. Policy

Drug and alcohol abuse is a problem of serious concern in society today. In the workplace substance abuse is reflected in increased cost, lower productivity, and increased risk to health and safety of employee and customers. Recognizing that we have an obligation to provide a working environment that is safe and productive and not in any way detrimental to the conduct of the business of Bamco, Inc, the Company has established this policy for addressing alcohol and prohibited substances in the workplace.

It is the policy of the Company that all employees shall at all times be capable of performing safely and up to satisfactory standards while on Company premises or while acting as a representative of the Company. To this end, the Company expressly prohibits the possession, sale, use, or distribution of prohibited substances or related paraphernalia on the company premises. Such an act is round for immediate dismissal. While at work or performing on behalf of the Company, employees shall not have a measurable level of prohibited substances or alcohol in their system. Additionally, the Company will provide training with regard to drug awareness to appropriate levels or supervision.

Prescription medicines for which the employee has a valid prescription, and over the counter medications may be present at the work location in on day supply or must be kept in the original container. Employees shall notify their supervisor when taking medication that may affect job performance.

All subcontractors/supplier personnel and other third parties on company premises will be subjected to this policy. Any such individual found in violation to this policy will be subject to removal from the premises. Violation of this policy by subcontractor/supplier losing the right to do business with Bamco, Inc.

## 3. Definitions

**Company Premises-** Any properties, leased, or occupied by Bamco, INC and/or its subsidiaries including the facilities of clients occupied for the intent of conducting business at Bamco, Inc project location.

**Prohibited Substance-** Substances not authorized by law for sale, possession or use. This includes, but is not limited to prescription medicines for which the possessor has no valid

## Drug and Alcohol Policy/ Program

prescription, marijuana, mood, or mind altering drugs, depressants, stimulants, designer, and synthetic drugs.

**Measurable Level-** Any amount of substance found in the system that exceeds cutoff levels established by the prescribing physician or by the Medical Review Officer.

### 4. Enforcement/Testing

Due to the importance of this policy the Company will utilize the methods outlined below to deduct drug and/or alcohol abuse or use on company premises and to ensure that all employees are in compliance with this policy. When required, a laboratory mutually approved by the Employer and Union will conduct testing. A national Institute of Drug Abuse (NIDA) certified laboratory with chain of custody procedures in place to insure continuity of specimen handling shall perform all testing specified. A company-approved informed consent form will subject the employee to company disciplinary procedures up to and including dismissal. All employees will be subject to Reasonable Suspicion/Post Accident drug and Alcohol Abuse Testing.

#### A. Reasonable Suspicion/Post Accident Drug and Alcohol Abuse Testing.

Employees will be subject to urine tests to detect the presence of drugs and/or alcohol under the following condition:

1. In the opinion of two of the employer's management, one which must be the project/superintendent or designate, there is "reasonable suspicion" of drug/alcohol use or impairment.
2. "Reasonable Suspicion" in the above two instances would include but not be limited to instances where drugs and/or alcohol have been detected on site or in company vehicles; when there are observable signs of impairment to the employee's ability to perform (i.e. difficulty in maintaining balance, slurred speech, significant changes in performance or behavior); or at any time an unusual or unexplained incident occurs where drug or alcohol use could have been a contributing factor.

### 5. Post-Accident Drug and Alcohol Abuse Testing

Employees involved in "work-related" accidents shall be subjected to testing. A "work-related" accident is defined as an accident resulting in an injury requiring treatment by a physician or resulting in damage to property or equipment. In the event of a work-related accident, the Superintendent or Project Manager, and the craft Foreman shall decide which individuals are to be tested.

### 6. Enforcement/Penalties

- A. If an employee tests positive, he/she may be terminated and may be ineligible for rehire for (30) days. In the event an individual is re-dispatched after 30 days and tests positive a second time, the individual may be terminated and ineligible for rehire for a minimum of twelve (12) months or until the individual provides written confirmation of current involvement and completion of a rehabilitation program and successfully passes the drug and alcohol test. Any individual hired or rehired under these circumstances shall be subject to unannounced random testing for an indefinite period of time.

## **Drug and Alcohol Policy/ Program**

- B. All specimens testing will be conducted in accordance with provisions outlined in this policy/program.
- C. Refusal to submit to drug and alcohol abuse testing as described herein shall result in the individual being denied access to the project site. Employees who refuse testing shall be subjected to disciplinary action, and may include termination.
- D. Employees shall be required to sign the attached "Employee Consent Form". Failure to do so may result in termination.
- E. The Employer agrees that the grievance procedure contained in the applicable labor agreement shall apply for dispute resolution relative to this policy, providing that such grievance procedure's final step is impartial and binding third party arbitration.

### **7. Other**

- A. The employer agrees to review this Drug/Alcohol Abuse Policy/Program every six months of the first two year that it is in effect. Any changes to the policy/program will be written and made part of this document.

## Drug and Alcohol Policy/ Program

### EMPLOYEE CONSENT FORM

I, \_\_\_\_\_, hereby consent and agree to give specimens \_\_\_\_\_ of my urine at a medical facility designed by Bamco, Inc, hereinafter referred to as "Employer" in Accordance with the provision of the Company's Drug and Alcohol Policy. Program, and if applicable, the Memorandum, of Understanding regarding drug and alcohol abuser between the Employer and union.

It is agreed that upon my written request, I will be furnished with results of the tests performed on my urine specimens by the testing laboratory.

I acknowledge that I have read and understood the Employer's drug and Alcohol Abuse Policy/Program. I understand that refusal to submit to a drug screening test in Accordance with provisions of these documents will result in termination of Employment and that we presence of one or more of the prohibited substances at or above the defied threshold level will result in termination of employment.

\_\_\_\_\_

**Witness**

\_\_\_\_\_

**Employee Signature**

\_\_\_\_\_

**Employee Social Security #**

# Drug and Alcohol Policy/ Program

This Substance Abuse Program, Including Attachment #1 and the Employee Consent Form, Agreed To This \_\_\_\_\_ Day Of \_\_\_\_\_ 20\_\_\_\_\_.

## For The Employer

\_\_\_\_\_  
Organization  
By: \_\_\_\_\_  
Signature/Date  
\_\_\_\_\_  
Print Name/Title

\_\_\_\_\_  
Organization  
By: \_\_\_\_\_  
Signature/Date  
\_\_\_\_\_  
Print Name/Title

## For The Unions

\_\_\_\_\_  
Organization  
By: \_\_\_\_\_  
Signature/Date  
\_\_\_\_\_  
Print Name/Title

\_\_\_\_\_  
Organization  
By: \_\_\_\_\_  
Signature/Date  
\_\_\_\_\_  
Print Name/Title

\*\*\*\*\*

\_\_\_\_\_  
Organization  
By: \_\_\_\_\_  
Signature/Date  
\_\_\_\_\_  
Print Name/Title

\_\_\_\_\_  
Organization  
By: \_\_\_\_\_  
Signature/Date  
\_\_\_\_\_  
Print Name/Title

\*\*\*\*\*

## Drug and Alcohol Policy/ Program

<b><u>DOT DRUG TESTING PROGRAM DETECTION LEVELS</u></b>				
	<b><u>SCREEN LEVELS</u></b>		<b><u>CONFIRMATORY LEVELS</u></b>	
<b><u>SUBSTANCE</u></b>	<b><u>Bamco, Inc</u></b>	<b><u>DOT</u></b>	<b><u>Bamco, Inc</u></b>	<b><u>DOT</u></b>
Cocaine	300 ng/ml	300 ng/ml	150 ng/ml	
Phencyclidine (PCP)	25 ng/ml	25 ng/ml	25 ng/ml	25 ng/ml
Marijuana	20 ng/ml	100 ng/ml	15 ng/ml	15 ng/ml
Opiates, Codeine, Morphine	300 ng/ml	300 ng/ml	300 ng/ml	300 ng/ml
Amphetamines, Methamphetamines	1000 ng/ml	1000 ng/ml	500 ng/ml	500 ng/ml
Barbiturates	300 ng/ml	Not Required	300 ng/ml	Not Required
Methadone	300 ng/ml	Not Required	200 ng/ml	Not required
Methaqualone	300 ng/ml	Not Required	200 ng/ml	Not Required
Propoxyphene	300 ng/ml	Not Required	300 ng/ml	Not Required
Alcohol	Detection	Not Required	.04 gm/dl	Not Required
Benzodiazepines	300 ng/ml	Not Required	300 ng/ml	Not Required



# New Employee Orientation Packet

The personal safety and health of the general public and each employee of Bamco, Inc. is of primary importance. The prevention of occupationally induced injuries and illnesses is of such consequence that it will be given precedence over operating productivity whenever necessary. To the greatest degree possible, management will provide all mechanical and physical facilities required for personal health and safety of the general public and each employee.

**OUR ULTIMATE GOAL IS ZERO ACCIDENTS.** The objective of our Health and Safety Program (HASP) is to reduce the number of disabling injuries and illnesses to a minimum, not merely in keeping with, but surpassing the best experience of other operations similar to ours.

Corporate management, supervisors and employees must embody the proper attitudes toward injury and illness prevention, for this program to be successful. It also requires cooperation in all health and safety matters, not only between corporate management, supervisors and employees, but also between each employee and his/her fellow workers. Only through such a cooperative effort can a safety record, in the best interest of all, be established and maintained.

## **The General Rules of Construction Safety and Health for Bamco, Inc.**

1. All work related injuries or illnesses must be immediately reported to your foreman or supervisor the day of the injury. All injuries will be thoroughly investigated.
2. New Employee Orientations and Weekly Safety Meetings shall be conducted specific to the hazard exposure for each phase of work. All employees will receive training in our Hazard Communication Program.
3. Never start any hazardous job task without being completely familiar with the safety techniques that apply to it. Check with your foreman or supervisor if in doubt.
4. Proper work clothing will be worn at all times on all our projects. This will include work boots/shoes and full-length pants included. Any type of sneakers, sandals or casual shoes and tank tops are prohibited.
5. Personal Protective Equipment (PPE) is provided by Bamco, Inc. Required equipment such as eye, face and hearing protection, life jackets, traffic vests, personal fall protection devices and respirators must be worn at all times when exposure to the related hazards exist while performing your job task. **ANSI APPROVED HEAD and EYE PROTECTION MUST BE WORN AT ALL TIMES ON ALL OUR PROJECTS.**
6. **ONLY** if other means of fall prevention are not practical, Full Body Harnesses with two deceleration devices shall be used for fall protection when working at heights greater than six feet. **THIS INCLUDES ALL WORK ACTIVITIES ON ALL BAMCO JOBS.**
7. Only trained, authorized or licensed personnel will operate or service equipment. Equipment will be operated in accordance with the manufacturer's recommendations.
8. Tools, equipment, machinery and work areas must be maintained in a clean and safe manner. Unsafe conditions/defective equipment shall be reported to your foreman/supervisor (immediately).
9. Obtain full instructions from your foreman or supervisor before operating an unfamiliar machine.

## NEW EMPLOYEE ORIENTATION PACKET

10. Make sure all safety attachments are in place and properly adjusted before operating any machine.
11. Do not operate any equipment or machine at unsafe speeds. Never oil, clean, repair or adjust any machine while it is in motion.
12. Never repair or adjust any equipment or machine unless you are specifically authorized to do so by your supervisor/foreman or without properly locking out and tagging the main switch.
13. Equipment operators must safeguard other workers at all times.
14. Equipment operators will not engage in any activity that may interfere with the operation of the machinery or equipment that they are in charge of. This activity includes the use of cellular phones and radios.
15. Approved lockout/tag out procedures shall be used whenever employees could be harmed by an accidental system or equipment start-up.
16. All electrical tools/equipment will be protected using Ground Fault Circuit Interrupters (GFCI's).
17. Housekeeping is essential. Put tools and equipment away when not in use. Work areas, machinery and all BAMCO, INC. facilities shall be maintained clean and orderly at all times.
18. Do not lift items that are too heavy or too bulky. Ask for assistance.
19. All posted warning signs, signals and safety rules shall be obeyed.
20. Horse play, rowdiness, profane language, reckless driving of vehicles and equipment or a belligerent attitude on the part of any employee toward other company personnel or the general public is forbidden and will not be tolerated.
21. All BAMCO, INC. sites are considered alcohol and drug free work sites. No drugs or alcohol will be allowed on site.
22. The use, possession or sale of regulated drugs is prohibited without a doctor's written prescription and management's prior knowledge. Violators will be removed from the project.
23. Blatant disregard of BAMCO, INC.'s safety rules is a possible danger to yourself as well as those around you. Any employee found not in compliance with BAMCO, INC. safety rules will be terminated immediately
24. Supervisors and foreman are authorized to enforce these safety rules and instruct new employees to perform their job in a safe and efficient manner.
25. All necessary permits will be obtained by each subcontractor on our projects.
26. All necessary licenses, training certificates, certificates of fitness, etc., will be obtained and copies of such certification will be provided to Bamco, Inc. for on-site filing.
27. All subcontractor construction personnel working on or visiting Bamco, Inc. sites will have, at least, certification of the completion of a US Department of Labor OSHA 10 Hour Outreach Training Course for Construction. Copies of such certification will be made available to Bamco, Inc. for on-site filing.

# NEW EMPLOYEE ORIENTATION PACKET

## **PERSONAL PROTECTIVE EQUIPMENT:**

The need to enforce the use of personal protective equipment (PPE) must be done on a daily basis. The purpose of PPE is to minimize employee exposure to possible hazards while performing their jobs and help prevent the possibility of injury.

### **HARD HATS**

ANSI approved hard hats and eye protection must be worn at ALL TIMES on ALL JOBS by ALL EMPLOYEES. Extra hard hats and eye protection must be kept in the office trailer and made available for use by visitors to the jobsite.

## **FALL PROTECTION POLICY:**

Bamco, Inc. is committed to the philosophy of continuous fall hazard control wherever the potential exists for an employee fall from a height of six feet or greater. Accordingly, Bamco, Inc. will take all practical measures to eliminate, prevent and control fall hazards. Work sites and activities shall be surveyed to identify all hazards of personnel falling from elevations. First consideration shall be given to the elimination of those hazards. If a fall hazard cannot be practically eliminated, second consideration will be given to implementing an effective permanent means of fall prevention.

If a fall hazard cannot be eliminated or fall prevention assured, then an effective personal fall protection system shall be planned, implemented and carefully monitored to control the risks of personnel injury due to falls. Fall protection systems will be continuous by design and supervision shall control against their intermittent or improper use.

All personnel and management staff who are working where fall hazards cannot be eliminated or the onset of falls prevented, shall be uniformly equipped, trained, and given refresher training at specified intervals to minimize adverse effects or accidental falls. Fall protection equipment and compliance will be in accordance with OSHA standards. ALL Subcontractors will be required to comply with our Fall Protection Program to work on our projects.

## **NEW EMPLOYEE ORIENTATION PACKET**

### **STAIRWAY AND LADDER POLICY:**

Stairways and ladders are a major source of injuries and fatalities among construction workers.

OSHA estimates that there are 24,882 injuries and as many as 36 fatalities per year due to falls from stairways and ladders used in construction. Nearly half of these injuries are serious enough to require time off the job -- 11,570 lost workday injuries and 13,312 non-lost workday injuries occur annually due to falls from stairways and ladders used in construction. This data demonstrates that work on and around ladders and stairways is hazardous. More importantly, they show that compliance with OSHA'S requirements for the safe use of ladders and stairways could have prevented many of these injuries.

All employees will be trained in the proper use of ladders and stairways.

### **HAZARD COMMUNICATION PROGRAM:**

THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIRES THAT ALL EMPLOYERS DEVELOP AND IMPLEMENT A WRITTEN HAZARD COMMUNICATION PROGRAM. THE BAMCO, INC.'S HAZARD COMMUNICATION PROGRAM IS DESIGNED TO COMPLY WITH AND ENFORCE THE REQUIREMENTS OF THE OSHA STANDARD WITHIN THIS ORGANIZATION.

Employees are our company's most important assets; their safety and health our greatest responsibility. In respect to the policy of our company which states that every employee is entitled to a safe and healthy workplace, we have initiated an Employee Hazard Communication Training Program which all employees must participate in. When employees enter our employ, they have a Right-To-Know what hazardous chemicals they work with, or could be exposed to.

The purpose of this Training Program is to ensure that all employees:

1. receive as much information as needed concerning the possible hazards in their workplace,
2. know what hazardous materials they work with or could be exposed to,
3. know what they can and should do to avoid injury or illness when working with or around these materials.

We provide this information and training in order to reduce the possibility of accidental exposure and to comply with the OSHA Hazard Communication Standard.

## **NEW EMPLOYEE ORIENTATION PACKET**

Successful results from our Hazard Communication Program will depend on the active support and involvement of all company personnel working together to accomplish our goals of providing and maintaining a safe and healthy workplace.

***ALL EMPLOYEES WILL BE TRAINED IN OUR HAZARD COMMUNICATION POLICY.***

***A COPY OF OUR PROGRAM IS AVAILABLE FOR YOUR USE.***

***ALL MATERIAL SAFETY DATA SHEETS (MSDS) FOR PROJECTS ARE ON FILE IN THE OFFICE TRAILER FOR YOUR USE AND REVIEW.***

***POLICY PROHIBITING DISCRIMINATION & HARASSMENT IN THE WORKPLACE***

### **POLICY STATEMENT:**

Bamco, Inc. is committed to providing its employees with a work environment that is free of discrimination, including harassment, on the basis of any legally protected status. Accordingly, Bamco, Inc. expressly prohibits any form of unlawful discrimination and harassment against any Bamco, Inc. employee by anyone, including managers, co-workers, vendors and customers.

This policy applies to all Bamco, Inc. employees. Every Bamco, Inc. employee must avoid any conduct that could be reasonably interpreted as conduct prohibited by this policy. In addition, every employee should endeavor to protect other employees from unlawful discrimination and harassment and maintain a work environment free from unlawful harassment or intimidation.

# NEW EMPLOYEE ORIENTATION PACKET

## PROHIBITED CONDUCT:

Conduct prohibited by this policy includes any verbal or physical conduct that could reasonably be perceived as denigrating or showing hostility toward an individual because of the individual's race, color, religion, gender, national origin, age, disability, or other status protected by law, or because of the protected status of the individual's relatives, friends, or associates. Harassing conduct prohibited by this policy includes, but is not limited to:

- a) Epithets, slurs, negative stereotyping, or intimidating acts that are based on an individual's protected status, and,
- b) Written or graphic material circulated or posted within the workplace that shows hostility toward an individual because of his or her protected status.

## POLICY PROHIBITING DISCRIMINATION & HARASSMENT IN THE WORKPLACE

### SEXUAL HARASSMENT

*Sexual harassment*, according to the Equal Employment Opportunity Commission, and for purposes of this policy, consists of unwelcome sexual advances, requests for sexual favors or other verbal or physical acts of a sexual or sex-based nature, where:

- a) Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment; or
- b) An employment decision affecting an employee is based on that individual's acceptance or rejection of such conduct; or
- c) If such conduct interferes with an individual's work performance or creates an intimidating, hostile or offensive working environment.

Sexual harassment is not limited to explicit demands for sexual favors. It refers to behavior that is not welcome, that is personally offensive, that fails to respect the rights of others, that lowers morale or interferes with work effectiveness. Sexual harassment may take various forms, including the following:

- a) VERBAL – Sexual innuendoes, suggestive comments, teasing and jokes of a sexual nature, sexual advances or propositions, repeated offensive sexual flirtations, sexually degrading words about an individual, graphic verbal commentary about an individual's body, sexually-oriented language and threats.
- b) NON-VERBAL – Displaying or circulating in the workplace obscene or sexually suggestive objects, pictures, or graphic commentaries, leering, whistling and obscene gestures.

## **NEW EMPLOYEE ORIENTATION PACKET**

- c) **PHYSICAL** – Unwelcome physical contact, including touching, pinching, brushing the body and other types of coerced or offensive sexual activity or physical contact.

### **POLICY PROHIBITING DISCRIMINATION & HARASSMENT IN THE WORKPLACE**

#### **PROCEDURES**

Bamco, Inc. encourages individuals who believe they are being harassed to firmly and promptly notify the offender that his or her behavior is unwelcome. Additionally, any Bamco, Inc. employee who has witnessed or experienced any conduct which he or she believes to be inconsistent with this policy, has a responsibility and an obligation to report that conduct promptly to his/her immediate supervisor.

All reports of conduct inconsistent with this policy will be promptly and thoroughly investigated. The investigation will include such fact-finding procedures as are deemed necessary including interviews of the complainant, the person accused, and any other person who may have information regarding the alleged discrimination or harassment.

#### **DISCIPLINE/SANCTIONS**

- a) Any employee found to have engaged in conduct that violates this policy will be subject to discipline. The disciplinary action taken with respect to each violation will be determined in accordance with the seriousness of the particular offense and may include written warnings, suspension, demotion or discharge. Bamco, Inc. has the right to impose any sanction or combination of sanctions to deal with the conduct up to and including termination of employment. Bamco, Inc. will advise the complaining part that corrective action has been taken.

Where a hostile work environment has been found to exist, Bamco, Inc. will take reasonable steps to eliminate the conduct creating such an environment.

Employees may also be subject to discipline for inappropriate conduct established during the investigation of a report made under this policy, even if the conduct does not constitute unlawful harassment or violation of this policy.

- b) Should either the complainant or alleged offender be dissatisfied with the findings or
- c) actions resulting from an allegation or harassment, that individual may further discuss the issues with the E.E.O.C.

# NEW EMPLOYEE ORIENTATION PACKET

## POLICY PROHIBITING DISCRIMINATION & HARASSMENT IN THE WORKPLACE

### PROTECTION AGAINST RETALIATION

Any employee who reports harassment, registers a complaint pursuant to this policy or participates in an investigation of harassment shall be protected from any form of retaliation. Retaliation is a serious violation of this policy and should be reported immediately.

### CONFIDENTIALITY

Bamco, Inc. will endeavor to keep all matters related to investigations conducted under this policy confidential, including statements given by employees. However, no employee can be guaranteed that his or her statement will never be disclosed, as information sometimes must be shared in order to further an investigation. Moreover, in the event of a lawsuit or an administrative proceeding, records and information maintained by Bamco, Inc. and the complainant may not be considered privileged from disclosure.

I HAVE RECEIVED THE BAMCO, INC. "NEW EMPLOYEE ORIENTATION," THEREFORE; I HAVE BEEN INSTRUCTED AND AM AWARE OF THE FOLLOWING:

#### COMPANY SAFETY PROGRAM

I understand that the safety and welfare of employees and the general public is of major concern to Bamco, Inc., (BAMCO, INC.) and that full cooperation from all employees is needed in order for this program to succeed. I also understand BAMCO, INC. incorporates Fall Protection into their Corporate Safety Program.

#### PERSONAL PROTECTION EQUIPMENT

I understand that personal protective equipment will be supplied for my use and that I am required to utilize this equipment for my personal safety. I also understand that failure to utilize this personal protective equipment is a breach of Bamco, Inc.'s Safety Program for which I may receive a disciplinary action.

#### SAFETY VIOLATIONS

I understand that a failure to comply with Bamco, Inc.'s Safety Program and Policies will result in my immediate dismissal.

#### HAZARD COMMUNICATION PROGRAM

I understand that as an employee of Bamco, Inc., I have the Right-To-Know what hazardous chemicals and substances I may be exposed to on the jobsite.

#### EMPLOYEE EQUAL OPPORTUNITY AND SEXUAL HARASSMENT POLICY

I understand that I was hired without regard to age, race, color, religion, sex, marital status, disability or national origin and that sexual harassment is forbidden on the jobsite.



# NEW EMPLOYEE ORIENTATION PACKET

By signing this employee verification sheet, I acknowledge my understanding of Bamco, Inc.'s Safety Program and my responsibilities associated with this program.

Employee Name (Print) \_\_\_\_\_

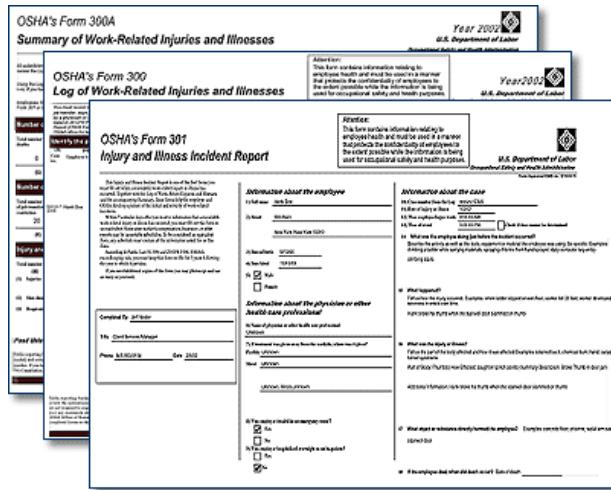
Employee Name (Signature) \_\_\_\_\_

Person providing the Training (Print) \_\_\_\_\_

Person providing the Training (Signature) \_\_\_\_\_

Date \_\_\_\_\_ Project Name \_\_\_\_\_

# OSHA Recordkeeping Procedure Policy



**BASIS:** Records provide employers and OSHA with statistical data to enable safety programs to determine where emphasis should be placed in order to mitigate or eliminate injuries or accidents in the future. The OSHA Recordkeeping Standard establishes uniform requirements to make sure that the illnesses and injuries sustained in U.S. workplaces are evaluated, and that this information is properly collected, compiled, retained, analyzed, and transmitted to all affected workers and to OSHA.

**GENERAL:** This standard practice instruction (SPI) provides for recordkeeping and reporting requirements covered under 29 CFR 1904 as necessary or appropriate for developing information regarding the causes and prevention of occupational accidents and illnesses, and for maintaining a program of collection, compilation, and analysis of occupational safety and health statistics both for Bamco, Inc. and as part of the national system for analysis of occupational safety and health.

# OSHA Recordkeeping Procedure Policy

Bamco, Inc. has developed and will maintain this written OSHA Recordkeeping program. Bamco, Inc. continue to review and evaluate this standard practice instruction on an annual basis, or when changes occur to 29 CFR 1904 that prompt revision of this document, or when facility operational changes occur that require a revision of this document. Effective implementation of this program requires support from all levels of management within Bamco, Inc. This written program shall be communicated where required to all personnel that are affected by it. It encompasses the total workplace, regardless of the number of workers employed or the number of work shifts. It is designed to establish clear goals and objectives.

**General Recordkeeping Requirements** Bamco, Inc. fully understands that companies with eleven (11) or more employees at any time during the calendar year immediately preceding the current calendar year must comply with the provisions of 29 CFR 1904. Records shall be established on a calendar year basis.

**OSHA Recordkeeping** Bamco, Inc. will report under 29 CFR 1904.8 concerning fatalities or multiple hospitalization accidents.

Bamco, Inc. will maintain a log of occupational injuries and illnesses under 29 CFR 1904.2 and to make reports under 29 CFR 1904.21 upon being notified in writing by the Bureau of Labor Statistics that the employer has been selected to participate in a statistical survey of occupational injuries and illnesses.

## Jobsite Responsibilities

- ✓ Provide the necessary first aid.
- ✓ Assist in the transport of the employee to our company's medical or emergency service provider or, if necessary, call the designated emergency number.
- ✓ If possible, remain with the employee during the initial treatment. Be empathetic and reassuring.
- ✓ If the injury is serious or resulted in a fatality, contact our office, safety director and/or our insurance broker.

## OSHA Recordkeeping Procedure Policy

- ✓ Upon employee's request, notify the family or any other person requested.
- ✓ If appropriate, arrange transportation so the injured employee can get home.
- ✓ Secure the area in which the injury occurred to prevent a reoccurrence and identify all witnesses.

### Log & Summary of Occupational Injuries & Illnesses (OSHA 300 Log)

The log shall be used for classifying occupational injuries and illnesses, and for noting the extent of each case. The log shows when the occupational injury or illness occurred, to whom, the regular job of the injured or ill person at the time of the injury or illness exposure, the department in which the person was employed, the kind of injury or illness, how much time was lost, whether the case resulted in a fatality, etc.

Bamco, Inc./safety director will:

Maintain a log and summary of all recordable occupational injuries and illnesses by calendar year.

The form shall be updated to include newly discovered cases and to reflect changes that occur in recorded cases after the end of the calendar year. Although all OSHA injury and illness records shall be retained, only the log must be updated.

If, during the 5-year retention period, there is a change in the extent or outcome of an injury or illness which affects an entry on a previous year's log, then the first entry shall be lined out and a corrected entry made on that log. New entries for previously unrecorded cases that are discovered shall also be documented. Log totals shall also be modified to reflect these changes.

Enter each recordable injury and illness on the log and summary as early as practicable but no later than 5 working days after receiving information that a recordable injury or illness has occurred. For this purpose the OSHA Form No. 300 or an equivalent which is as readable and comprehensible to a person not familiar with it shall be used. The log and summary shall be completed in the detail provided in the form and instructions on form(s) OSHA No. 300/300A.

### Supplementary Records (OSHA 101 Accident Investigation Report)

In addition to the log of occupational injuries and illnesses (OSHA 300/300A) Bamco, Inc. will have available, at each of our facilities, within 6 working days after receiving information that a recordable case has occurred, a supplementary record for each occupational injury or illness for that establishment.

The record shall be completed in the detail prescribed in the instructions accompanying Occupational Safety and Health Administration OSHA Form No. 301. Workmen's compensation, insurance, or other acceptable alternative records if they contain the information required by OSHA Form No. 301 (according to OSHA).

# OSHA Recordkeeping Procedure Policy

## Accident Reporting

- ✓ The office and the safety director must be notified within a one-hour period if an individual has had an accident that will require medical treatment from a hospital or Doctors office.
- ✓ A preliminary report must be filled out by the project superintendent or foreman and faxed to the office and the safety director the same day the accident occurs.
- ✓ When filling out the accident report you must be specific in describing the injury. Identify the type of injury (i.e.: laceration, bruise, fracture), if medication was prescribed, and if lost time was involved or light duty requested by an attending physician.
- ✓ Submit medical reports and Work Modification Forms to the office and safety director.
- ✓ If a person is going to be out of work due to the injury he or she sustained, the office must be notified immediately so that we can process the necessary papers for Workers Compensation benefits. Failure to do so will result in delayed benefits to the claimant.
- ✓ Remember to maintain the OSHA logs.

## Annual Summary

Bamco, Inc. will post an annual summary of injuries and illnesses for each project under our control. This summary shall consist of a copy of the year's totals from the form OSHA No. 300 and the following information from that form:

- ✓ Calendar year covered.
- ✓ Company Name and establishment address.
- ✓ Certification signature, title, and date.

An OSHA No. 300A form shall be used in presenting the summary. If no injuries or illnesses occurred in the year, zeros shall be entered on the totals line, and the form posted. The summary will be completed by February 1 of each calendar year. Bamco, Inc. shall certify that the annual summary of occupational injuries and illnesses is true and complete. The certification shall be accomplished by affixing the signature of the employer, or the officer or employee who supervises the preparation

## OSHA Recordkeeping Procedure Policy

of the annual summary of occupational injuries and illnesses, at the bottom of the last page of the log and summary or by appending a separate statement to the log and summary certifying that the summary is true and complete. Bamco, Inc. will post a copy of the establishment's summary in each facility in the manner required under 29 CFR 1903.2. The summary covering the previous calendar year shall be posted no later than February 1, and shall remain in place until March 1.

### Records Retention

Records maintained by Bamco, Inc. will be retained for the following time periods following the end of the year to which they relate:

- Log and summary of all recordable occupational injuries and illnesses (OSHA 300 or equivalent) as described in 29 CFR 1904.2. 5 years.
- Supplementary records (OSHA 101 or equivalent) for each occupational injury or illness for this facility as described in 29 CFR 1904.4. 5 years.
- Employee exposure and medical records for Bamco, Inc. employees as described in 29 CFR 1910.20. 30 years.

### Access to Records

Bamco, Inc. will provide, upon request, records provided for in 29 CFR 1904.2, 1904.4, and 1904.5, for inspection and copying by any representative of the Secretary of Labor for the purpose of carrying out the provisions of the OSHA Act, and by representatives of the Secretary of Health, Education, and Welfare, or by any representative of a State accorded jurisdiction for occupational safety and health inspections or for statistical compilation.

The log and summary of all recordable occupational injuries and illnesses (OSHA No. 300 or 300A) shall, upon request, be made available to any employee, former employee, and to their representatives, for examination and copying in a reasonable manner and at reasonable times. The employee, former employee, and their representatives shall have access to the log for any establishment in which the employee is or has been employed.

### Reporting Of Fatality or Multiple Hospitalization Accidents

Within 8 hours after the occurrence of an employment accident which is fatal to one or more employees or which results in hospitalization of three (or State minimum) or more employees, Bamco, Inc. shall report the accident either orally or in writing to the nearest office of the Area Director

# OSHA Recordkeeping Procedure Policy

of the Occupational Safety and Health Administration, U.S. Department of Labor. The reporting may be by telephone or telegraph.

The report shall relate the circumstances of the accident, the number of fatalities, and the extent of any injuries. It is understood that the Area Director may require such additional reports, in writing or otherwise, as he deems necessary concerning the accident.

## Recordability and Classifications Case Analysis

The following decision logic shall be followed:

- ✓ Determine whether a case occurred (death, injury, illness). And establish that the case was work related.
- ✓ Case resulting from an event or exposure in the work environment. In addition to the physical location, equipment or materials used in the course of an employee's work are also considered part of the employee's work environment.
- ✓ Case resulting from an event or exposure in other locations where employees are engaged in work-related activities or are present as a condition of their employment.

## Establishing That the Case Was Not Work Related

The case shall be considered not work related when an employee is off duty on our premise as a member of the general public and not as an employee.

The case shall be considered to be not work-related when an employee has symptoms that merely surface on Bamco, Inc. premises, but are the result of a non work related event or exposure off the premises.

## Determining If the Case Is an Illness or Injury

Illness cases. Illnesses usually result from a long term exposure or cases where the illness does not develop as the result of an instantaneous event. This concept of illness includes acute illnesses that result from exposures of relatively short duration.

Injury cases. Injuries are only required to be recorded when they require medical attention (other than first aid). Injuries are usually caused by instantaneous events in the work environment. Cases resulting from anything other than instantaneous events are considered illnesses. This concept of illness includes acute illnesses that result from exposures of relatively short duration

# OSHA Recordkeeping Procedure Policy

## Determining If a Case Is OSHA Recordable

The following criteria shall be used as a basis for recordability. The case shall be recorded on the OSHA 300 Log if the employee has:

- A work related injury, AND
- Medical treatment other than first aid, OR
- Has a loss of consciousness, OR
- Experiences restriction of work or motion, OR
- Been transferred to another job.

## Illness Case

Generally, occupationally induced illnesses should be recorded as a separate entry on the OSHA 300 log. However, certain illnesses, such as silicosis, may have prolonged effects which recur over time. The recurrence of these symptoms shall not be recorded as new cases on the OSHA form. The recurrence of symptoms of a previous illness may require adjustments of entries on the log for previously recorded illnesses to reflect possible change in the extent or outcome of the particular case.

**Categories for Evaluating the Extent of Recordable Cases** Once Bamco, Inc. decides that a recordable injury or illness has occurred, the case must be evaluated to determine its extent or outcome. There are three categories that OSHA recognizes as recordable cases. Every recordable case shall be placed in only one of the following categories:

**Fatalities** All work fatalities must be recorded, regardless of the time between the injury and the death, or the length of the illness.

**Lost Workday Cases** Lost workday cases shall be determined to have occurred when the injured or ill employee experiences either days away from work due to the injury or illness, days of restricted work activity due to the injury or illness, or both.

**Cases Not Resulting In Death or Lost Workdays** These cases consist of the relatively less serious injuries and illnesses which satisfy the criteria for record ability but which do not result in death or require the affected employee to have days away from work or days of restricted work activity beyond the date of injury or onset of illness.

**Return to Work Program** It is the policy of Bamco, Inc. to provide employees that fall under the above category the opportunity to return back to work. Based upon the severity of the alleged injury, supervisors and/or the corporate safety director will contact the employee, (via phone or mail) and provide the individual with an opportunity to return to work. Provisions will be made for light and restricted duty on a case by case basis.



## Incident reporting and Investigation

**1. INCIDENT REPORTING AND INVESTIGATION:** All company and subcontractor employees will cooperate with any internal, client or regulatory agency accident/incident investigation. OSHA requires reporting of work related incidents resulting in the death of an employee or the hospitalization of three or more employees. Owner Clients require all incidents to be reported including, but not limited to, injuries, spills, property damage, fires, explosions, and vehicle damage.

**A. Incident Reporting:** All incidents and accidents resulting in injury or causing illness to employees and events (near-miss accidents) shall be reported in order to:

1. Establish a written record of factors that cause injuries and illnesses and occurrences (near misses) that might have resulted in injury or illness but did not, as well as property and vehicle damage.
2. Maintain a capability to promptly investigate incidents and events in order to initiate and support corrective and/or preventive action.
3. Provide statistical information for use in analyzing all phases of incidents and events.
4. Provide the means for complying with the reporting requirements for occupational injuries and illnesses.

The Incident Reporting System requirements apply to all incidences involving company employees, on-site vendors, contractor employees, and visitors, which result in (or might have resulted in) personal injury, illness, and/or property, and vehicle damage.

**B. Incidents (Occupational Injuries and Illnesses):** Injuries and illnesses that require reporting include those injuries and illnesses occurring on the job which result in any of the following: lost work time, restrictions in performing job duties, requirement for first aid, or outside medical attention, permanent physical bodily damages, or death. Examples of reportable injuries and illnesses include, but are not limited to, heat exhaustion from working in hot environments, strained back muscles from moving equipment, acid burns on fingers, etc.

Other incidents requiring reporting include those incidents occurring on the job which result in any of the following: injury or illness, damage to a vehicle, fire/explosion, property damage of more than \$100, or chemical releases requiring evacuation of at least that immediate spill area.

Examples of "non-reportable" injuries and illnesses include small paper cuts, common colds, and small bruises not resulting in work restrictions or requiring first aid or medical attention.

**C. Events (Near Misses):** Other incidents that, strictly by chance, do not result in actual or observable injury, illness, death, or property damage are required to be reported. The information obtained from such reporting can be extremely useful in identifying and mitigating problems before they result in actual personal or property damage. Examples of near miss incidences

## Incident reporting and Investigation

required to be reported include the falling of a compressed gas cylinder, overexposures to chemical, biological, or physical agents (not resulting in an immediately observable manifestation of illness or injury), and slipping and falling on a wet surface without injury.

**D. Incident Reporting Procedures:** The following procedures are to be followed by all employees in order to effectively report occupational injuries and illnesses and other incidents or events.

**E. Incidents (Injuries and Illnesses):** Serious injury or illness posing a life-threatening situation shall be reported immediately to the local emergency response medical services (Call 911).

The injured employee shall report injuries and illnesses, to his or her supervisor in person or by phone as soon after any life-threatening situation has been addressed. If the injured employee is unable to report immediately, then the incident should be reported as soon as possible. Upon notification of an occupational injury or illness, the supervisor should complete the Incident/Accident Report and forwarded it to Health and Safety Coordinator.

**F. Events:** Incidents not involving injury or illness, but resulting in property damage, must also be reported within 24 hours of the incident. In cases of a fire or explosion that cannot be controlled by one person, vehicular accident resulting in injury or more than \$500 worth of damage, or a chemical release requiring a building evacuation, the involved party must immediately report the incident to the emergency response services in the area (911 - police, fire, etc.).

All near miss incidences also must be reported on the Incident/Accident Report Form within 24 hours of occurrence. In place of indicating the result of the incident (i.e., actual personal or property damage), the reporting person shall indicate the avoided injury or damage.

Events, hazardous working conditions or situations, and incidents involving contractor personnel must be reported to Health and Safety Coordinator immediately.

**2. ACCIDENT INVESTIGATION:** Accident prevention is the key to eliminating possibility of injury to employees and property loss. Learning from past accidents is one of the key elements in accident prevention. This chapter addresses the procedures to be followed for all accidents resulting in employee injury or property damage. All employees must be trained in their roles and responsibilities. All

employees who could be first responders shall be current in first aid and CPR.

## Incident reporting and Investigation

**A. Management:** will conduct accident prevention and investigation training for supervisors and ensure that all accidents and injuries are investigated, ensure immediate and long-term corrective actions are taken to prevent reoccurrence. The Health and Safety Coordinator will maintain Accident Reports permanently on file and ensure proper entries are made on the OSHA 300 Log and First Report of Injury. Management will provide all necessary medical care for injured workers

**B. Safety Committee:** will review all Incident Report/Investigations and management responsible for the department involved ensuring pertinent information is transmitted to all concerned and remedial action taken.

**C. Employees:** will immediately report all accidents & injuries and near misses to their supervisor and assist as requested in all accident investigations.

**D. Supervisor Involvement:** Supervisors will conduct the investigation. Direct supervisors are familiar with employee's work environment & assigned tasks. The Supervisor is the person who must take the accident situation under control and immediately eliminate or control hazards to others. The Supervisor will document the investigation on the Incident/Accident Investigation Report. The Supervisor will take the following immediate steps:

1. Provide First Aid for any injured persons.
2. Eliminate or control hazards
3. Document accident scene information to determine the cause.
4. Interview witnesses immediately.

**E. Rescue:** After immediate rescue, actions to prevent further loss should occur. For example, maintenance personnel should be summoned to assess integrity of buildings and equipment, engineering personnel to evaluate the need for bracing of structures, and special equipment/response requirements such as safe rendering of hazardous materials or explosives employed. Initial identification of evidence immediately following the incident might include a listing of people, equipment, and materials involved and a recording of environmental factors such as weather, illumination, temperature, noise, ventilation, etc.

**F. Investigative Procedures:** The actual procedures used in a particular

## Incident reporting and Investigation

investigation depend on the nature and results of the accident. The Supervisor will gather evidence from many sources during an investigation. Get information from witnesses and reports as well as by observation. Interview witnesses as soon as possible after an accident. Inspect the accident site before any changes occur. Take photographs and make sketches of the accident scene. Record all pertinent data on maps. Get copies of all reports. Documents containing normal operating procedures, flow diagrams, maintenance charts, or reports of difficulties or abnormalities are particularly useful. Keep complete and accurate notes. Record pre-accident conditions, the accident sequence, and post-accident conditions. In addition, document the location of victims, witnesses, machinery, energy sources, and hazardous materials. Equipment needed may include some or all of the following items; writing equipment such as paper and pens, measuring equipment, cameras, small tools, audio recorder, PPE, marking devices, etc...

**G. Problem Solving Techniques:** Accidents represent problems that must be solved through investigations. Several formal procedures solve problems of any degree of complexity. This section discusses two of the most common procedures: Change Analysis and Job Safety Analysis.

**H. Change Analysis:** As its name implies, this technique emphasizes change. To solve a problem, an investigator must look for deviations from the norm. Consider all problems to result from some unanticipated change. Make an analysis of the change to determine its causes. The following steps will be utilized:

1. Define the problem (What happened?).
2. Establish the norm (What should have happened?).
3. Identify, locate, and describe the change (What, where, when, to what extent).
4. Specify what was and what was not affected.
5. Identify the distinctive features of the change.
6. List the possible causes.
7. Select the most likely causes.

**I. Job Safety Analysis:** As discussed Section 3.3 a Job Safety Analysis (JSA) breaks a job into basic steps, and identifies the hazards associated with each step. The JSA also prescribes controls **for** each hazard. A JSA is a chart listing these steps, hazards, and controls. Review the JSA during the investigation if a JSA has been **conducted** for the job involved in an accident. Perform a JSA if one is not available. Perform a JSA as a part of the investigation to determine the events and conditions that led to the accident.

**J. Investigation Report:** An accident investigation is not complete until a report is prepared and submitted to proper authorities. An accident report

## Incident reporting and Investigation

should be clear and concise. The purpose of the investigation is to prevent future accidents. The completed Incident/Accident Investigation Report will be forwarded to the Health and Safety Coordinator.

All accident reports will be maintained on file permanently. Bamco, Inc will maintain a log and summary of all recordable occupational injuries and illnesses by calendar year. Each recordable injury and illness will be entered on the log and summary as early as practicable but no later than 6 working days after receiving information that a recordable injury or illness has occurred. They shall receive timely review by upper management to ensure proper corrective actions have been taken.

**K. Accident Prevention:** Accidents are usually complex. An accident may have 10 or more events that can be causes. A detailed analysis of an accident will normally reveal three cause levels: basic, indirect, and direct.

At the lowest level, an accident results only when a person or object receives an amount of energy or hazardous material that cannot be absorbed safely. This energy or hazardous material is the **DIRECT CAUSE** of the accident. The direct cause is usually the result of one or more unsafe acts, or unsafe conditions, or both. Unsafe acts and conditions are the **INDIRECT CAUSES** or symptoms. In turn, indirect causes are usually traceable to poor management policies and decisions, or to personal or environmental factors. These are the **BASIC CAUSES**.

In spite of their complexity, most accidents are preventable by eliminating one or more causes. Accident investigations determine not only what happened, but also how and why. The information gained from these investigations can prevent recurrence of similar or perhaps more disastrous accidents. Accident investigators are interested in each event as well as in the sequence of events that led to an accident. The accident type is also important to the investigator. The recurrence of accidents of a particular type or those with common causes shows areas needing special accident prevention emphasis.

In an attempt to reduce accidents periodic and regular inspections of jobsite, equipment and material will be conducted. These inspections or audits will identify and unsafe equipment and conditions. All employees will be instructed to avoid unsafe conditions. Should they be presented with unsafe conditions on the works, the employee will inform management. Only qualified employees shall be permitted to operate equipment. Any machinery, tool, equipment or material that is unsafe or presents an unsafe condition will immediately be removed from the worksite. If the equipment cannot be removed from the worksite it will be tagged and its controls will be locked out until the equipment can be repaired by a qualified individual. Lessons learned should be reviewed and communicated. Changes to processes must be placed into effect to prevent reoccurrence or similar events.

**EMERGENCIES:** Each project will post emergency reporting numbers near telephones and in areas frequented by employees. All subcontractors will post emergency numbers for fire, police, rescue, and medical treatment

## Incident reporting and Investigation

facilities selected in the same manner. A copy of the subcontractor emergency listing will be provided to the company project superintendent

### **A. Emergencies are defined as follows:**

- Occupational Injury and/or Illness
- Fires
- Environmental Incidents (spills, leaks, releases)
- Vehicle Accidents
- Equipment Accidents
- Near Miss Incidents

1. Injuries, spills, chemical releases, leaks, and fires rapidly become

life-threatening situations. Emergencies must be reported quickly and accurately to obtain the proper assistance. Failure to report emergencies immediately may result in excess property damage, employee exposure to illness and injury, releases to the atmosphere and surrounding communities.

2. Employees must be aware of our company and client procedures prior to field assignment. The Project Superintendent shall insure that our employees are knowledgeable of client and company procedures. Emergencies shall be reported to the Regional Safety Director immediately.

3. The following are general guidelines for reporting: **(Be clear and concise. Don't panic)**

- a) State your name
- b) Location of the emergency
- c) Nature of the emergency and materials involved.
- d) Type of injury
- e) If possible, remain in the area and provide direction to location to the Emergency Response Teams.
- f) Do not interfere with Emergency Response Teams.

**SPECIAL NOTE: Injuries, spills, chemical releases, leaks and fires can rapidly evolve to a life-threatening situation. Your primary responsibility is to report the emergency quickly and secure the appropriate assistance. Do not wait to contact your supervisor. Failure to report emergencies immediately may result in well-intentioned individuals being overwhelmed by what was initially thought to be a "small problem."**

**3. EMERGENCY RESPONSE:** It is imperative that our employees understand that their role in emergency response is limited, primarily, to reporting and securing assistance. In most cases, our client's procedures require you to follow their emergency notification plan, provide direction to the site (if possible) and evacuate to a safe location as specified in their Site Emergency Evacuation Plan. Once a

## Incident reporting and Investigation

the form up area, remain in place and follow instructions. A head count will be conducted and, if you are missing, Emergency Responders may be placed at unnecessary risk trying to locate you.

**A. OSHA References:** 29CFR 1910.38, 29CFR 1910.119, 29CFR 1910.120, 29 CFR 1926.65

### **B. FIRE CONTROL**

1. In the event of fire, follow the site emergency notification plan posted in this section of the manual.
2. Those individuals assigned to fire watch duties are primarily responsible for spark containment and incipient stage quenching of materials that may have ignited due to hot spark contact. Remember you are not trained or equipped for firefighting duties; immediate notification of emergency personnel is required.
3. The area must be evacuated by following the Site Emergency Evacuation Plan. If your assistance is needed by trained Emergency Responders, it will be requested. Your presence, whether well intentioned or out of curiosity, constitutes an additional hazard and concern to Emergency Responders.
4. Only Halon, Carbon Dioxide or Purple K dry powder extinguishers must be used on or near electrical equipment fires. Special care must be exercised to insure that water does not come in contact with an open electrical bus or circuit.
5. The use of water in chemical or oil production and storage areas must be carefully evaluated. Many chemicals and hot oils react violently when in contact with water. Water can rapidly spread oil and gasoline fires. If needed, firewater should be applied in a fog pattern, not a direct steady stream.
6. If hazardous materials are involved in an incident, or may potentially become involved. The Material Safety Data Sheets shall be provided to the Emergency Responders.

### **C. FIRE FIGHTING EQUIPMENT AND CONTROL DEVICES**

1. All electrical equipment and motorized vehicles operated within the confines of a client's property must be equipped with fire extinguishers.
2. Firefighting equipment must be readily accessible and not blocked by tools, vehicles, debris, or equipment.
3. Use of emergency firefighting equipment for any purpose other than an emergency situation is prohibited.
4. Client's Safety Procedures must be consulted for instructions on use of fire hydrants, lines, and standpipes.
5. Horseplay, involving firewater and hoses, will not be tolerated.
6. Any person or persons that may need to use a fire extinguisher shall be trained in the general use of fire extinguishers and the hazards of

## Incident reporting and Investigation

incipient fire fighting. Where the employer has provided portable fire extinguishers for employees use in the workplace, Bamco, Inc shall provide training to familiarize employees with the general principles of fire extinguisher use and the hazards involved in incipient stage fire fighting. Employees shall receiving training upon initial assignment and at least annually thereafter

7. Any fire extinguisher that is empty, partially used or commissioned must be returned to the Foreman immediately for recharge and replacement.

8. The client's designated representative must be notified if emergency equipment is partially or fully discharged, or requires relocation, and removal to facilitate equipment installation.

9. Fire alarms, fire detectors, smoke detectors, and other emergency signaling devices may not be disconnected or relocated without the express approval of the client's designated representative.

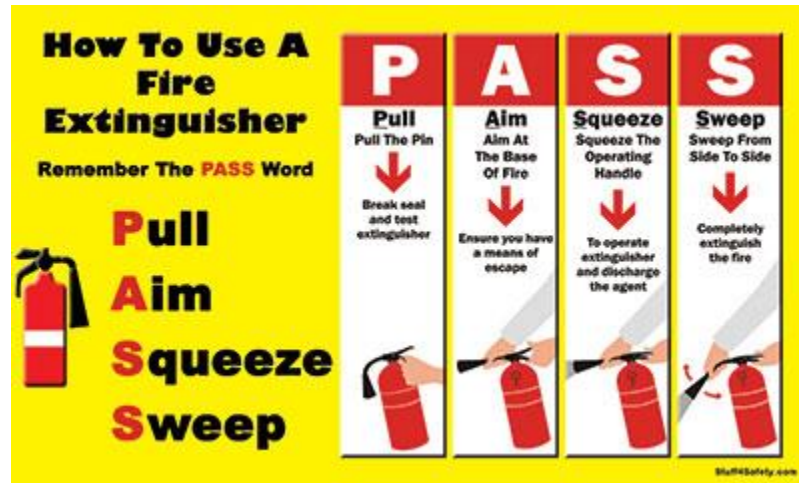
10. Fire alarms and smoke detectors, installed in Bamco, Inc trailers or work locations must be Inspected and tested monthly. Records of these inspections will be kept at the job site and a copy submitted to the main office.

11. Bamco, Inc assigned portable fire extinguishers must be visually inspected monthly for charge and condition of cylinder and hose. Corroded and partially discharged equipment must be returned immediately. Bamco, Inc assigned portable fire extinguishers must also have an annual maintenance check performed. These inspections will be documented and kept on file at the site office, a copy will be sent to the main office.

12. Fire extinguishers used for fire watch duties must be inspected at least daily, at the beginning and end of each daily job. Defective, damaged, or discharged equipment must be returned to the Foreman and replaced immediately.



## Incident reporting and Investigation



**4. FIRST AID:** The purpose of this chapter is to provide general information regarding First Aid. It is not our intent to train, qualify or certify Bamco, Inc employees as First Aid Personnel or Emergency Responders. All Bamco, Inc employees are reminded that their primary duty in the event of an injury or illness is to get help from qualified Emergency Responders!

Bamco, Inc employees having a valid certificate in first aid / CPR/ AED training, the National Safety Council or equivalent shall be available at work sites to render emergency first aid. Provisions shall be made prior to commencement of a project for prompt medical attention in case of serious injury. A competent person will be assigned to post the emergency phone numbers for physicians, hospitals and ambulances and directions to medical facilities around the site so that they are accessible to all employees. Proper equipment for prompt transportation of injured persons to a physician or hospital or a communication system for contacting necessary ambulance service shall be provided. **At least one First Aid Kit per 25 employees will be on each jobsite. The kit will be in an environmentally controlled location and clearly marked as to its whereabouts at the site. The first aid kit shall be readily accessible at all times.** All Safety Kits will be checked prior to shipment to jobsite.

All First Aid Kits will be visually inspected on at least a weekly basis by a competent person assigned this duty prior to start of job. A complete list of all First Aid items, will be provided by the site (**see appendix G**) First Aid kits shall be stored in a weatherproof container with individual sealed packages of each type of item per ANSI Standard Z308.1-1998 or Appendix A of CFR 1910.151(Aug98). In addition one employee on site will be currently certified in Standard First Aid / CPR / AED. Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for flushing of eyes or body shall be provided within the work area.

## Incident Reporting and Investigation

**Bamco, Inc** will provide appropriate PPE in accordance with the 1910.1030(d) (3) “occupational exposure to Blood Borne Pathogens” to employees that may be exposed to blood or other potentially infectious materials. For more information on Blood Borne Pathogens please refer to 29 CFR 1910.1030.

**A.** OSHA References: 29 CFR 1926.21, 29 CFR 1910.1030

**B.** Artificial Resuscitation

1. Check for consciousness.

2. Check for breathing.

a) Look, listen, feel for about 5 seconds.

b) Position victim on back.

c) Open airway using head tilt and chin lift.

d) Recheck breathing.

e) Look, listen and feel for about 5 seconds.

f) If not breathing,

g) Keep head tilted back.

h) Pinch nose shut.

i) Seal your lips tightly around person’s mouth.

j) Give 2 slow breaths.

k) Watch to see that breaths go in.

3. Check for pulse.

a) Locate Adam’s apple, slide fingers down into groove of neck.

b) Feel for pulse for 5-10 seconds.

4. Check for severe bleeding, “head to toe”.

5. Find hand position.

a) Locate notch at lower end of sternum, place heel of other hand on sternum next to fingers.

b) Remove hand from notch and place on top of other hand.

c) Keep fingers off chest.

d) Give 15 compressions and 2 breaths.

e) Compress down and up smoothly, keeping hand contact with chest at all times.

f) Watch chest to see that your breaths go in.

6. Repeat compression / breathing cycles.

7. Recheck pulse

a) After about 1 minute, feel for pulse for about 5 seconds.

b) If person has a pulse and is breathing,

c) Keep airway open.

d) Monitor breathing.

e) If person has a pulse, but isn’t breathing,

f) Perform rescue breathing.

g) If person doesn’t have a pulse and isn’t breathing,

h) Continue compressing / Breathing Cycles.

## Incident reporting and Investigation

**C. Burns:** The rapid stabilization and transport of burn victims is extremely important.

1. **Care for burns:** Three basic steps:

- a) Stop the burning.
- b) Cool the burn.
- c) Cover the burn.

2. **Do's:**

- a) Do cool a burn by flushing with water.
- b) Do cover the burn with a dry clean covering, such as a sterile dressing.
- c) Do keep the victim comfortable and from being chilled or over heated.

3. **Don'ts:**

- a) Don't apply ice directly to any burn, unless it is very minor.
- b) Don't touch a burn with anything except a clean covering.
- c) Don't remove pieces of cloth that stick to the burned area.
- d) Don't try to clean a severe burn.
- e) Don't break blisters.
- f) Don't use any kind of ointment (or butter) on a severe burn.

**D. Chemical Burns – Splash, to Skin or Eyes.**

1. Flush the burn with large amounts of cool running water until the ambulance arrives.
2. Have victim take off any clothes with the chemical on them, if possible.
3. If only one eye has been exposed to the chemical, flush the affected eye from the nose outward to prevent washing the chemical into the unaffected eye.
4. Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities shall be provided within the work area and shall be inspected on a weekly basis.

**E. Electrical Burns:**

1. Sources of electricity include: power lines, lighting, defective electrical household equipment, and unprotected electrical outlets.
2. The burns are often deep and have **two** wounds, one where the current entered the body and one where it left.
3. Never go near a victim you think has been injured by electricity until you're sure the power has been turned off.
4. With an electrical burn, the burn itself will not be the major problem; check breathing and pulse if victim is unconscious. Check for other injuries such as possible fractures, or spinal injury. **DO NOT MOVE THEM.**
4. Cover an electrical burn with a dry, sterile dressing.

# Personal Protective Equipment

## 1. INTRODUCTION

Bamco, Inc and their clients make every effort to eliminate an employee's exposure to hazards in the work place. Our employees are expected to review the job site to identify and, where possible, eliminate hazards prior to commencing work. Additionally, discussion of identified and potential hazards is an important part of any job planning and execution. It is not always possible to eliminate all hazards or potential hazards. The best rule of thumb is to expect the unexpected. Properly selected, used, and maintained personal protective equipment has been proven to protect our employees from hazards in the work place. Personal protective equipment use, however, is not an excuse for taking unacceptable risks. Personal protective equipment must be inspected prior to use and prior to return. It must be kept in a state of good repair and cleanliness. Damaged equipment must be identified and immediately removed from the work site. Equipment temporarily issued by Bamco, Inc or their client's must be returned at the end of each workday. Employees may adjust personal protective equipment for fit. Alteration, change, modification, or use for purposes other than designed and intended is strictly prohibited. Foreman and Site Supervisors are advised to check with client policy manuals for additional personal protective equipment requirements. Hazard assessment forms will be filled out prior to commencement of work to determine the job hazards are present or are likely to be present, which necessitate the use of PPE, personal protective equipment to be worn and signed by all employees on that project. The exposure determination shall be made without regards to the use of personal protective equipment. Certifier must sign and date the form. When it is established that Personal Protective Equipment is needed a training program shall be put in place that will include the following:

**1) When PPE is necessary**

**2) What PPE is necessary**

**3) Limitations**

**4) Proper care**

**5) Maintenance**

**6) Useful life and disposal**

**Retraining is required when:**

**1) Change in workplace occurs**

**2) Type of PPE changes**

**3) Employee shows lack or improper use, or understanding**

Certification for training must include employee name, dates of training, and the certification subject. All Personal Protective Equipment Shall be provided to employees at no cost to the employee. Employees are not permitted to use personally owned PPE unless approved by the Site Supervisor or designated safety representative.

## 2. HEAD PROTECTION

**A. OSHA References:** 29CFR1926.951(a)(2), ANSI Z89.2-1971, 29CFR 1910.135, ANSI Z89.1-1969

## Personal Protective Equipment

1. Head protection for Bamco, Inc employees will comply with ANSI Standard Z89.2-1971 and will provide protection from falling objects, electric shocks, or burns. (Compliance and testing data should be indicated or stamped into the helmet).
2. Head protection is required to be worn while performing all mechanical, construction, and maintenance work.
3. Head protection is required when visiting work sites as described in 2 above.
4. Head protection is not required in buildings, passenger vehicles, trucks, or enclosed heavy equipment cabs, or other areas that have been designated by Bamco, Inc or the client designated representative as not requiring head protection.
5. Aluminum head protection and bump hats will not be worn.
6. Head protection will be used and cared for in the following manner:
  - a) Helmets must be worn straight and squarely on the head with the bill and peak facing forward.
  - b) The cradle must be adjusted so that there is a one-inch minimum clearance between head and the shell.
  - c) Helmet shells and suspension systems may be adjusted but not altered or modified (i.e. drilling ventilation holes in helmet or taping suspension together.)
  - d) Helmets must be inspected daily and replaced at the first sign of damage or excess wear.
  - e) Suspensions and helmets may be cleaned with mild soap and water only. The use of solvents may damage the helmet and suspension material, thereby weakening the capability of the equipment.

# Personal Protective Equipment

## 3. EYE AND FACE PROTECTION POLICY

**A. References:** 29CFR 1926 102 29CFR 1910.133 ANSI Z87.1-1968

**B. Policy:** ANSI approved safety glasses, with side shields, shall be worn at all times on every construction and maintenance site. Visitors to these sites shall comply with this policy. Goggles/face shields shall be worn while working with a pneumatic or electrical tool, which may produce dust, chips, or air born objects. Tools such as a jackhammer, chipping gun, grinder, beveling machine, etc., require the use of face shields.

1. Eyewear worn at Bamco, Inc sites must comply with ANSI requirements for impact and shatter resistance for both lens and frames.

2. All prescription glasses shall have approved safety lens and frames or must be worn under goggles at all times.

3. Eyewear will be examined for scratches, pitting and frame damage. Scratches, pitting, and frame damage weaken the impact and shatter resistance of the eyewear. Worn or damaged equipment will be replaced immediately.

54. Non-conductive eyewear will be worn while working on live, exposed electrical parts.

### C. Selection Guide For Eye Wear And Face Wear:

1. Acetylene burning, cutting, or welding:
  - a) Welding goggles, eyecup type with tinted lenses
  - b) Welding goggles, cover spec type with tinted lenses
  - c) Welding goggles, cover spec type with tinted plate lens
2. Chemical Handling
  - a) Full face shield (preferred for severe exposure hazard)
  - b) Goggles, flexible fitting, with hooded ventilation
  - c) First Break hood with safety glasses or goggles.
3. Electric Arc Welding
  - a) Welding helmet with tinted lenses

## Personal Protective Equipment

4. Employees are reminded that compliance with client requirements is mandated, provided the clients policy meets or exceeds the Bamco, Inc Policy

**E. Eye Wash Facilities:** Where the eyes or the body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body will be provided within the work area for immediate emergency use. These facilities may be portable, but must be located within 50 feet of the hazard and capable of providing 15 minutes of continuous flow. Client provided facility locations should be noted by Bamco, Inc employees and checked for operation prior to commencement of work. Please pay specific attention to the water flow temperature, as many may overheat. If temporary or portable facilities are required, notify your immediate supervisor.

### 4. GENERAL RESPIRATORY PROTECTION PROGRAM

**A. References:** 29 CFR1910.134, 29CFR1926.103

**B. General:** This section provides the Bamco, Inc Policy and procedures for the use, selection, care and issuance of respiratory protective equipment. Bamco, Inc foreman must consult client-established procedures. Where the client's procedures meet or exceed this policy, the client procedure will be used. This program applies to all employees who are required to wear respirators provided by Bamco, Inc during normal work operations, and during some non-routine or emergency operations such as a spill of a hazardous substance.

1. When effective engineering controls are not feasible; Engineering controls are being instituted, but not yet complete or the potential exists for employee exposure to breathing air contaminated with harmful dusts, mists, gases, smokes, sprays or vapors, respiratory protection shall be used.

2. Respiratory protective devices will not be issued to individuals not properly trained in their use, care and selection. Individuals must be fit tested within the last twelve months prior to issuance. Bamco, Inc does not provide "in- house" fit testing and training in respiratory protection. Documentation of training and testing by an approved and qualified individual is required prior to assigning any Bamco, Inc employee to tasks requiring respiratory protective equipment.

3. Employees who voluntarily wear filtering face piece respirators (dust masks) are not subject to the medical evaluation, cleaning, storage, and maintenance provisions of this program.

## Personal Protective Equipment

4. Respiratory hazard determinations will be conducted for each individual job-site and placed in Appendix B of the Bamco, Inc Corporate Safety Manual for that site.

5. Respiratory protection will be based on the requirements of the jobsite if it is deemed there is a need to have them on-site.

6. Medical, respirators, and training shall be provided by Bamco, Inc to each employee at no cost to the employee.

**C. Selection Of Respiratory Protection:** The Program Administrator will select respirators to be used on Bamco, Inc sites, based on the hazards to which workers are exposed and in accordance with all OSHA standards.

The Program Administrator will conduct site-specific hazard evaluations for each operation, process, or work area where airborne contaminants may be present in routine operations or during an emergency. The hazard evaluation will include:

1. Identification and development of site specific lists of hazardous substances used in the workplace, by department, or work process.

2. Site specific review of work processes to determine where potential exposures to these hazardous substances may occur. This review shall be conducted by surveying the workplace, reviewing process records, and talking with employees and supervisors.

1. Exposure monitoring to quantify potential hazardous exposures.

2. Relevant historical data on employee exposures provided by the client.

**D. Updating The Hazard Assessment:** The Program Administrator must revise and update the hazard assessment as needed (i.e., anytime work process changes may potentially affect exposure). If an employee feels that respiratory protection is needed during a particular activity, he/she is to contact his or her supervisor or the Program Administrator. The Program Administrator will evaluate the potential hazard, arranging for outside assistance as necessary. The Program Administrator will then communicate the results of that assessment back to the employees. If it is determined that respiratory protection is necessary, all other elements of



## Personal Protective Equipment

this program will be in effect for those tasks and this program will be updated accordingly.

**E. NIOSH Certification:** All respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) and shall be used in accordance with the terms of that certification. Also, all filters, cartridges, and canisters must be labeled with the appropriate NIOSH approval label.

The label must not be removed or defaced while it is in use.

### F. RESPONSIBILITIES

**1. Program Administrator:** The Program Administrator is responsible for administering the respiratory protection program. The Program Administrator must be knowledgeable of the complexity of the program, conduct evaluations, and be properly trained, address appropriate surveillance, and ensure employees leave the area to wash, change cartridges, or if they detect breakthrough or resistance. Other duties of the program administrator include:

- a) Identifying work areas, processes or tasks that require workers to wear respirators, and evaluating hazards.
- b) Selection of respiratory protection options
- c) Monitoring respirator use to ensure that respirators are used in accordance with their certifications
- d) Arranging for and/or conducting training.
- e) Ensuring proper storage and maintenance of respiratory protection equipment
- f) Conducting qualitative fit testing
- g) Administering the medical surveillance program
- h) Maintaining records required by the program.
- i) Evaluating the program
- j) Updating written program, as needed.

**2. Supervisors:** Supervisors are responsible for ensuring that the respiratory protection program is implemented on their particular jobsite. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by the employees under their charge. In addition, the program should be monitored for program effectiveness these duties of the supervisor include:

- a) Ensuring that employees under their supervision (including new hires) have received appropriate training, fit testing, and annual medical evaluation

## Personal Protective Equipment

- b) Ensuring the availability of appropriate respirators and accessories
  - c) Being aware of tasks requiring the use of respiratory protection
  - d) Enforcing the proper use of respiratory protection when necessary
  - e) Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection plan.
  - f) Ensuring that respirators fit well and do not cause
    - g) Continually monitoring work areas and operations to identify respiratory hazards.
    - h) Coordinating with the Program Administrator on how to address respiratory hazards or other concerns regarding the program
3. **Employees:** Each employee has the responsibility to wear his or her respirator when and where required and in the manner in which they were trained. Employees must also.
- a) Care for and maintain their respirators as instructed, and store them in a clean sanitary location.
  - b) Inform their supervisor if the respirator no longer fits well, and request a new one that fits properly.
  - c) Inform their supervisor or the Program Administrator of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the program.
  - d) Provide feedback to the Program Administrator when asked about fit, selection, use, maintenance so program effectiveness can be verified.

### G. TYPES OF RESPIRATORY PROTECTIVE EQUIPMENT:

1. **Air Purifying Respirators:** These air-purifying respirators are used to filter contaminants from the air. They must be selected for use in accordance with the selection procedures outlined in III B of this section. AIR PURIFYING RESPIRATORS MUST NOT BE USED IN OXYGEN DEFICIENT ATMOSPHERES OR IN AREAS WHERE THE CONCENTRATION OF AIRBORNE CONTAMINANTS EXCEED THE LEVEL FOR WHICH THE CARTRIDGE IS APPROVED

- a) **Filtering Face piece Respirator:** This type of respirator is designed to provide protection from non-hazardous nuisance dusts and non-hazardous vapors.
- b) **Gas Mask (canister) Respirators:** These respirators may be in use at some client locations.

## Personal Protective Equipment

c) **Cartridge Respirators:** These respirators are available in full or half face design. Replaceable cartridges are used to provide filtration of materials. A check valve allows for exhalation of air and closes to prevent intake of unfiltered air. They provide protection against low concentrations of airborne contaminants. It is extremely important that the proper cartridge be selected.

d) **Filtering face piece respirators, Gas Mask (canister) Respirators and Cartridge Respirators** are effective when properly selected, fitted and used. Cartridges, canisters and dust respirators must be replaced when breathing becomes difficult and/or the wearer detects break through of the filtering device by smelling and/or tasting the contaminant.

CAUTION: Many hazardous materials do not possess good warning characteristics. Several will hamper or deaden your sense of smell at higher concentrations. Periodic replacement of cartridge, canister or dust respirator is required.

2. **Self Contained Breathing Apparatus (SCBA):** Selection criteria outlined in III B of this section is required. Warning devices and configuration of SCBA may differ from manufacturer to manufacturer. In addition to proper use of SCBA, training and familiarization with the specific equipment configuration and warning devices of the model are required before use. It is not possible to provide specific manufacturer information on all SCBA that Bamco, Inc employees may encounter. The following information is provided in generic terms.

3. **Escape Capsules:** These devices are generally equipped with a clear plastic over the head hood. They are approved for escape purposes only and may not be used for the performance of work requiring respiratory protection.

## Personal Protective Equipment

4. **Air Packs:** Air packs are the standard self-contained breathing apparatus to be used where oxygen or a hazard exists or may exist. Pure self-contained breathing air from a high-pressure cylinder(s) is supplied to the facemask, continuously, to provide air required for breathing. The mask provides good visibility and can be fitted with an anti-fogging nose cup. The plastic lens is subjected to the same testing as chipping goggles for needle puncture and impact. These devices may provide 1/2 hour or hour (estimated) breathing air. It is important to that several factors, i.e. exertion, heat, physical condition of the user, etc. will determine the amount of time the supply of breathing air will last.
5. **Supplied Air Respirators (SAR):** Selection criteria, as indicated in Section B of this procedure, must be applied. When it is necessary to perform duties of a non-emergency nature in contaminated areas the use of an airline must be considered.
  - a) Supplied air respirators (SAR) provide breathing air to the wearer through a hose from an independent 300 CF breathing air cylinder, air compressor or specially filtered air compressor. (See use instructions for compressor and airline requirements).
  - b) An escape or egress bottle must be used in areas where an Oxygen deficient atmosphere or contaminants that are Immediately dangerous to life and health exists (IDLH).SAR must never be connected to plant utility air or instrument air systems.
6. **Respirator Fitting Requirements:** Bamco, Inc will ensure that all employees using tight fitting face piece respirators pass an appropriate qualitative or quantitative fit test prior initial usage, if a different respirator is used, and annually. SARs are required to be fit tested as well. All fit tests will be conducted in accordance with 29 CFR 1910.134 Appendix A.
  - a) Qualitative fit tests (i.e. Irritant smoke, banana oil) may only be used to fit test negative pressure respirators which must achieve a fit factor of 100 or less.
  - b) Quantitative fit tests (i.e. Porta count) are required for negative pressure respirators which must achieve a fit factor greater than 100.
7. The following table should be used to determine the acceptable fit test for the respirator selected.
8. ACCEPTABLE FIT-TESTING METHODS
9. Respirator Qualitative Quantitative
10. Half Face, Negative Pressure, APR
11. (<100 fit factor)

## Personal Protective Equipment

12. Yes Yes
13. Full Face Negative Pressure, APR
14. (<100 fit factor) used in atmospheres up to 10
15. times the PEL
16. Yes Yes
17. Full Face, Negative Pressure, APR
18. (>100 fit factor)
19. No Yes
20. PAPR Yes Yes
21. SAR or SCBA used in Negative pressure mode
22. (>100 fit factor)
23. No Yes
24. SAR or SCBA Positive Pressure Mode Yes Yes
25. SCBA- Structural Fire Fighting Positive Pressure Yes Yes
26. SCBA/SAR- IDLH, Positive pressure Yes Yes

### ***Mouth bit respirators Fit-Testing Not Required***

#### ***Loose fitting respirators***

**H. Face Seal Protection:** Employees whose job function includes tasks, which require the use of respiratory protective equipment, must be able to achieve a leak tight seal and must have nothing inside the face piece, which interferes with the valve function. The following items are known to interfere with a tight seal:

1. Facial abnormalities or absence of dentures.
  2. Eyeglasses with temple pieces extending under the sealing surface of the mask.
  3. Hairstyles, sideburns, beards and long mustaches that extend into the sealing surface of the mask. (Note: Check clients "facial hair policy")
  4. Sweatbands, helmet liners or other headgear or appliances that come between the sealing surface and the face.
- Job tasks requiring the use of respiratory protective equipment will not be Assigned to employees that cannot obtain and maintain a seal.

**I. Training:** All Bamco, Inc personnel who are required to use a respirator must receive training, at least annually, in the proper selection, use, care and fitting of the respirator. Bamco, Inc will secure the services of a qualified consulting firm for the purpose of providing this training and refresher training on an as needed basis.

**J. Inspection Prior To Use:** All respirators must be inspected prior to use. Specific attention must be paid to cleanliness, condition of mask sealing surface, condition of face plate and face plate seal, cartridges etc. Damaged equipment will not be used and must be identified and returned Immediately

## Personal Protective Equipment

**K. Field Fit Test:** Qualified Bamco, Inc employees required to work in respiratory protection will perform a negative and positive pressure fit test prior to entering the hazardous environment.

1. **Positive Pressure Test:** Cup or other wise close the exhalation valve and exhale gently into the face piece. The fit is considered to be satisfactory, if slight positive pressure can be held without leakage at the seal.

2. **Negative Pressure Test:** Close off the inlet openings of the cartridge with the palms of your hands. Inhale gently, collapsing the face piece slightly against the face. Do not breathe for approximately 10 seconds. If the face piece remains in the collapsed position, the fit is satisfactory.

**L. Care and Maintenance:** Respirators shall be regularly cleaned and disinfected. Respirators used by more than one individual will be thoroughly cleaned and disinfected at the end of each individual use and prior to issuance to the next individual. An individual specifically qualified to perform maintenance on respiratory equipment will perform maintenance. Cleaning and disinfecting of respirators will be done in accordance with 29 CFR 1910.134 Appendix B-2.

**M. Respirator Storage:** Respirators must be stored in a convenient, clean and sanitary location.

**N. Medical Evaluation:** Employees who are either required to wear respirators, or who choose to wear an APR voluntarily, must pass a medical exam before being permitted to wear a respirator on the job.

Employees are not permitted to wear respirators until a physician has determined that they are medically able to do so. Any employee refusing the medical evaluation will not be allowed to work in an area requiring respirator use. Medical Evaluations will be conducted by a Physician or licensed Health care provider in accordance with 29 CFR 1910.134 (e)

1. The employee will be sent directly to a Physician or Licensed Health care Practitioner for medical evaluation.

2. Follow-up medical exams will be granted to employees as required by the standard, and/or as deemed necessary by the designated medical clinic physician.

3. All employees will be granted the opportunity to speak with the physician about their medical evaluation, if they so request.

4. Any employee required for medical reasons to wear a positive pressure air-purifying respirator will be provided with a powered air-purifying respirator.

## Personal Protective Equipment

5. After an employee has received clearance and begun to wear his or her respirator, additional medical evaluations will be provided under the following circumstances:

- a) Employee reports signs and/or symptoms related to their ability to use a respirator, such as shortness of breath, dizziness, chest pains, or wheezing.
- b) Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation;
- c) A change occurs in workplace conditions that may result in an increased physiological burden on the employee.  
All examinations and questionnaires are to remain confidential between the employee and the physician. The medical condition of employees assigned to work requiring respiratory protection is of concern. Those employees having medical conditions, i.e. upper respiratory infections, severe asthma, known heart conditions, or ruptured ear drums must not be assigned respiratory protection required work.  
Program Administrator is required to establish and retain written information regarding medical evaluations, fit testing, and the respirator program. Records of medical evaluations will be retained at Bamco, Inc home office by the Program Administrator. Copies can be obtained from the Program Administrator as needed.

**O. Air Quality:** Breathing air must meet, at a minimum, the requirements of the specification for Grade D breathing air as described in Compressed Gas Association Commodity Specification G-7.1-1966. (Consult 29CFR1910.134 (d) for other air source requirements).

**P. Breathing Air:** Breathing air may be supplied to respirators from cylinders or air compressors.

1. Cylinders shall be tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49CFR part 178).

2. Compressors for supplying air shall be equipped with safety and standby devices. A breathing air type compressor shall be used. Compressors shall be constructed and situated as to avoid entry of contaminated air into the system and suitable in-line air purifying sorbent beds and filters installed to further assure breathing air quality. A receiver of sufficient capacity to enable the respirator user to escape from a contaminated atmosphere in event of Compressor failure, and alarms to indicate compressor failure and

## Personal Protective Equipment

overheating shall be installed in the system. If an oil-lubricated compressor is used, it shall have a high temperature alarm or carbon monoxide alarm or both. If only a high temperature alarm is used, the air from the compressor shall be frequently tested for carbon monoxide to insure that it meets the specifications outlined in this section.

**Q. Air Line Couplings:** Airline couplings shall be incompatible with outlets for other gas systems to prevent inadvertent servicing of airline respirators with non-respirable gases or oxygen.

**R. Containers:** Breathing gas containers shall be marked in accordance with American National Standard Method of Marking Portable Compressed Gas Containers to Identify the Material Contained (ANSI Z48.1-1954).

**S. Safety:** In areas where the wearer, with failure of the respirator, could be overcome by a toxic or oxygen deficient atmosphere, at least one additional man shall be present. Communications by voice, visual or signal line must be maintained between both or all individuals present. Planning shall be such that one individual will be unaffected by any likely incident and have the proper rescue equipment to be able to assist the other(s) in the event of an emergency. When self-contained breathing apparatus or hose masks with blowers are used in atmospheres immediately dangerous to life or health, standby employees must be present with suitable rescue equipment. Persons using air line respirators in atmospheres immediately hazardous to life and health shall be equipped with safety harness and safety lines for lifting or removing persons from hazardous atmospheres or other equivalent provisions for the rescue of persons from hazardous atmospheres shall be used. A standby person (s) with suitable selfcontained breathing apparatus shall be at the nearest fresh air base for emergency protection. This individual will be responsible to monitor compressor alarms and/or air cylinder pressure and must be in visual, verbal contact with the safety observer.

### 5. HAND PROTECTION

#### A. References: 29 CFR 1926.28

**B. General:** Hand protection against heat, flame, cold, corrosive materials, moisture, abrasion, electricity, sharp surfaces, rough surfaces, etc. is available for use. The selection of the proper work glove for the hazard should follow the following guidelines:

1. Heat and cold protective gloves must be used during any job function where contact is probable with hot objects or extremely cold objects i.e. dry ice, liquid nitrogen, liquid oxygen, etc.



## Personal Protective Equipment

2. Welding operations require the use of welder's leather gloves, protective leather sleeves or jacket and chaps.

3. Handling or contact with chemicals, solvents and oils require the use of neoprene and plastic coated gloves. These gloves must be washed or wiped before removal and changed frequently.

4. General cut resistant work gloves are required for most job tasks assigned to Bamco, Inc.

5. Chisel or hand held impact tools should be equipped with hand guards to prevent accidental striking of hands and fingers.

6. Electrically Tested Gloves: Rubber protective equipment for electrical workers must meet the specifications and requirements established in ANSI Standard J6.6.1971. Dates of testing must be stamped on the glove. A visual inspection of these gloves must be performed prior to and after use. An "air" test is required for rubber gloves prior to use. Leather over gloves will be inspected prior to use. Electrically tested gloves that are out of date of inspection or fail visual and/or air testing shall be immediately removed from service.

### 6. BODY HARNESS AND LANYARDS

**A. References:** 29CFR 1926.104, 29CFR 1926.959, 29 CFR 1926.502

**B. General:** The purpose of this section is to define the requirements for safety belts, harnesses, lanyards and lifelines. More detailed information on fall protection is included in the Bamco, Inc Fall Protection Policy. **In Accordance with 29 CFR 1926.502 Body belts are not acceptable as part of a personal fall arrest system**

1. Lifelines, safety belts and lanyards shall be used only for the safeguarding of employees. Lifelines, safety belts and lanyards subjected to in service loading immediately removed from service as an employee protective device and will not be placed back in service as an employee protective device.

2. Lifelines will be secured above the point of operation to an anchorage or structural member capable of supporting a minimum dead weight of 5400 pounds. Lifelines will not be anchored or secured to hot piping, electrical conduit or points with sharp edges that may damage the lifeline by cutting or abrasion.

3. A minimum of 3/4 inch or equivalent manila rope with a minimum breaking strength of 5400 pounds will be used. Shock absorbing lanyards are recommended.

## Personal Protective Equipment

4. Safety belt lanyards shall be a minimum of 1/2-inch nylon, or equivalent, with a maximum length to allow a fall of no greater than 6 feet. The rope shall have a minimum breaking strength of no less than 5400. Shock absorbing lanyards are strongly recommended for safety belt use.

5. Safety belt and lanyard hardware must be drop forged or pressed steel, cadmium plated in accordance with type 1, class b plating as specified in Fed spec QQ-P-416. The surface of the hardware must be smooth and free of burrs or sharp edges.

6. All safety belt and lanyard hardware must be capable of withstanding a tensile loading of 4000 pounds, without cracking, breaking or deforming.

**C. Lineman's Body Belts, Safety Straps And Lanyards:** Lineman's body belts, safety straps and lanyards must comply with the requirements outlined in

### 7. PROTECTIVE EQUIPMENT REQUIREMENTS NEAR OR OVER WATER

**A. Reference:** 29 CFR 1926.106

**B. General:** All Bamco, Inc employees working over or near water, where the danger of drowning exists must be provided with U.S. Coast Guard approved life jackets or buoyant work vests. Foremen are reminded to check client procedures for specific locations requiring near water or over water protective equipment.

1. Each life jacket, work vest or life preserver must be inspected for defects, damage (i.e. rips and damaged straps), or any other defect/damage that would alter its strength. All damaged or defective equipment must be removed from the work site immediately.

2. Ring buoys with a minimum of 90 feet of line attached must be provided and readily available for emergency rescue operations.

2. The distance between ring buoys must not be greater than 200 Feet.

4. Ropes and ring buoys must be inspected for damage and defect prior to use. Defective equipment must be removed and replaced immediately.

5. At least one lifesaving skiff must be immediately available at locations where employees are working over or adjacent to water.

# Hearing Conservation Program

## INTRODUCTION

Hearing conservation is an important aspect of the overall safety and health program. Workplace noise can cause hearing loss, create physical and psychological stress, and contribute to accidents by making it difficult to communicate. An estimated 14 million employees throughout the United States are exposed to hazardous noise. Fortunately, noise exposure can be controlled. Every effort is made to use quieter processes, machinery, and equipment. When feasible engineering controls do not reduce the noise level to or below the OSHA action level of 85dbA with adjustments made for extended shifts, proper hearing protection is used. Also, all employees exposed to noise levels above 85dBA are included in a hearing conservation program. There are many reasons for providing an effective hearing conservation program, including:

- Protecting the organization's most important resource - employees,
- Providing a safe and healthful workplace, and
- Compliance with governmental regulations.

Management, supervisory, and employee commitment to hearing conservation and positive attitude are important aspects of the overall hearing conservation program. The key elements of the organization's hearing conservation program are:

1. Noise exposure measurements
2. Audiometric testing and follow-up
3. Employee Education
4. Engineering and administrative noise exposure control
5. Personal hearing protection
6. Recordkeeping

Judson Filkins has been designated as the program administrator for Hearing Conservation.

# Hearing Conservation Program

## NOISE EXPOSURE MEASUREMENT

The success of the company's hearing conservation program depends on an accurate knowledge of the existing noise environment. Accurate surveys define areas within acceptable guidelines for noise exposure and those areas where potentially harmful noise exposure exists. Effective noise exposure measurement prevents possible loss of hearing by detecting work areas where employees must wear hearing protectors and must be tested.

A Noise survey has been performed in our plant using Dosimetry and Sound Level Meter data in all production areas:

<u>Location</u>	<u>SLM Range (LA<sub>eq</sub>)</u>	<u>Dosimetry Range (L<sub>avg</sub>)</u>
Table #1 – Cutter	85.3	
Table #2	81.4	
Table #3 - Drill	87.0 – 87.5	81.9
Table #4 - Drill	82.7 – 88.8	84.9
Table #5 - Drill	82.3 – 83.3	83.0
Table #6 - Saw	84.2 – 88.0	
Table #7 - Saw	89.3 – 89.6	
Table #9 - Grinder	98.8 – 101.1	
CNC #1	90.2 – 90.4	
CNC #2	86.1 – 88.7	87.4
Table Saw	91.6	
Cutting Station	93.2 – 103.4	91.8
Loading Dock	67.7 – 69.2	80.6
Compressors	84.1 – 84.4	

# Hearing Conservation Program

## Wood Ave.

<u>Location</u>	<u>SLM Range (LA<sub>eq</sub>)</u>	<u>Dosimetry Range (L<sub>avg</sub>)</u>
Table #1 – Grinder/Drill	88.0 – 100.1	
Table #2 – Saw	93.8 – 95.7	
Table #3 – Drill	88.7 – 90.2	
CNC #3	88.5 – 93.3	83.4
Brake Machine #1	78.4 – 79.3	83.1
Brake Machine #2	82.3 – 82.4	
Shearer	89.1 – 90.7	83.1
Table Saw	91.2	
Compressor	89.8 – 90.6	

Additional monitoring will be conducted whenever there are changes in work practices or methods may change workplace noise exposures including addition of new equipment or a change in the workplace layout.

### **AUDIOMETRIC TESTING PROGRAM**

The objective of this hearing conservation program is the preservation of the hearing of our employees. In order to achieve this goal, an effective audiometric testing program has been implemented.

## Hearing Conservation Program

This program includes:

- Audiograms for new employees shall be completed within one year of employee's first exposure.
- Baseline audiograms for existing work force working in all production areas.
- Annual audiograms for all production employees as a "best practices" approach in protection the hearing of our workers.

Testing is conducted by our Mobile Service Provider which includes CAOHC Certified Audiometric Technicians and Occupational Audiologists. Employees will receive their test results at the time of testing.

The Judson Filkins is responsible for reviewing the recommendations of our Consulting Audiologist or physician.

### EMPLOYEE EDUCATION

All employees working in production areas are trained on topics of Hearing Conservation at least annually on the following topics:

- Effects of noise on hearing
- Purpose of hearing protectors
- Advantages and disadvantages of various types of hearing protectors
- Proper use, selection, fit, and care of hearing protectors
- Purpose and procedures of audiometric testing
- Company requirements for "High Exposure" jobs or areas
- Use of specific hearing protectors provided by the company

### ENGINEERING AND ADMINISTRATIVE NOISE CONTROLS

We recognize the desirability of controlling the existing noise levels by engineering and/or administrative controls. Therefore, the feasibility of such controls is carefully considered including possible redesign of existing machinery.

Within the limitation of work schedules and employee skills, administrative controls have also been considered. Work schedules are dictated by production volumes and employee rotation is not a feasible option. Engineering and administrative controls are being considered and implemented where feasible on a continuing basis.

## Hearing Conservation Program

When ordering new equipment, we also consider the manufacturer’s specs on noise levels.

### PERSONAL HEARING PROTECTION

Until such time as engineering and/or administrative controls reduce the amount of noise exposure to or below the allowed limits, appropriate personal hearing protective devices are made available and issued to employees working in all production areas. It is recognized that the use of these devices is considered as a temporary solution to the problem of overexposure until feasible controls are provided.

Hearing protection is provided to all employees in manufacturing when exposed to 85dBA or greater, **regardless of time exposed.**

In addition, hearing protection is **mandatory** for any employee who has incurred a standard threshold shift (STS) as reported by our Consulting Audiologist.

All supervisors will properly enforce hearing protection requirements. Continuing failure of an employee to properly wear the protection provided could result in the termination of employment.

The Supervisors and the Safety Manager are responsible for the training and fitting of hearing protection.

The following hearing protection is provided (but may be periodically updated with other types):

Type	Manufacture	Name	Model	NRR rating
<b>Currently Available:</b>				
<b>Ear Plug - Resuable</b>	3M	Ultra Fit	Ear Plug	25 dB
<b>Ear Plug - Disposable</b>	Howard Leight	Max Corded	Ear Plug	33 dB
<b>Ear Muff</b>	Howard Leight	Leightning L3	Ear Muff	30 dB

***We will insure at least 2 types of earplugs and one type earmuff are available.***

### RECORDKEEPING

The Judson Filkins is responsible for maintaining all records on noise exposures, audiometry, and training.

Records will be maintained for the duration of employment or longer as determined by Human Resources.

# Hearing Conservation Program

## Hearing Conservation Program Training

There are two types of hearing loss:

- A **temporary hearing loss** can be caused by exposure to loud noise for a few hours. Fortunately, hearing is usually restored after a period of time away from noise.
- A **permanent hearing loss** occurs after the ear has been continually exposed to excess noise. Hair cells gradually harden and die, making it increasingly difficult to recover from a temporary hearing loss.

There are warning signs that may be indicative of permanent hearing loss, including:

- inability to hear high-pitched or soft sounds
- trouble understanding conversation, or speech heard over the telephone
- ringing or roaring in the ears (called **tinnitus**)

*There is **NO CURE** for hearing loss caused by noise. Hearing aids do not restore noise-damaged hearing, although they may help most people.*

In addition to hearing loss, excessive noise exposure may contribute to mental and physical stress, certain illnesses, and accidents.

You may be exposed to too much noise if you:

- Have trouble understanding normal conversation at work with someone 3 feet away
- Hear prolonged ringing or other unusual noises after leaving work
- Have trouble hearing TV or speech, but can hear normally again after a few hours away from noise.

There are **LEGAL LIMITS** on noise in the workplace, set by the Occupational Safety and Health Administration (OSHA).

According to OSHA noise regulations, workers:

- May not be exposed to more than an average of 90 dBA, or decibels, over 8 hours
- Must be included in a Hearing Conservation Program if exposure averages 85 dB(A) or more over 8 hours

Hearing protection devices, or HPDs, are your best defense when you are unable to reduce your exposure to loud noise levels. When worn properly, hearing protection can greatly reduce the decibel level that reaches your ear. HPDs act as barriers to reduce sound entering the ear. They are very important, in that they decrease the risk of excessive noise exposure and subsequent hearing loss.



## Hearing Conservation Program

There are two basic types of hearing protection devices:

- Ear Plugs
- Ear Muffs

An important concept to understand regarding HPDs is the assignment of a Noise Reduction Rating, or **NRR**, for each type of device. The NRR is a number that indicates the degree to which that device reduces your noise exposure. In the example to the right, these ear muffs will reduce the noise level you perceive by 25 decibels if strap is worn over the head, 24 decibels if worn behind the head, and 23 decibels if worn under the chin.



Ear plugs have several advantages over ear muffs, such as:

- lighter weight
- can be worn without interference from eyeglasses, headgear, earrings or hair
- more comfortable in hot/humid environments
- less expensive than ear muffs

One of the disadvantages of ear plugs is that the amount of protection may vary among workers.

There are several styles of ear plugs, including flanged type and malleable foam.

When inserting your ear plugs:

1. Before putting ear plugs in, wash your hands to prevent infections from entering the ear.
2. Inspect the ear plugs for tears, cracks or hardening.
3. To insert a malleable foam plug, roll the plug between your fingers and thumb to make it thinner, making sure there are no wrinkles or creases in the plug.
4. Reach one hand behind your head and pull your ear outward and upward to widen the auditory canal. Insert the plug well into the ear and hold it in place until it expands. Don't be afraid to place the plug into the ear canal. You cannot hurt your eardrum because the plugs are too short to reach it. If the seal is not tight, the earplug will not be effective.



Remember to properly clean and store your ear plugs

## Hearing Conservation Program

Ear muffs are hearing protection devices that are worn over the head, like headphones. Some advantages of wearing ear muffs include:

- provide more consistent protection than plugs
- one size fits most heads
- easy to put on and take off
- good for short jobs

The disadvantages of ear muffs:

- heavier than ear plugs
- may be uncomfortable in hot environments
- eyeglass wearers may not get a good seal
- more expensive than other types of HPDs
- resonate (vibrate) at lower sound frequencies (<400 Hz)

If you wear ear muffs, remember that anything that comes between your ear and the ear muff will make them less effective and reduce your level of protection! Also, you should choose eyewear with thin temples so they don't interfere with the seal. Some ear muffs attach to hard hats to form



a good seal when wearing a hard hat (right).

## Hearing Conservation Program

Also, when putting on ear muffs, remember to push your hair away from your ears. Center the ear muffs over your head and make sure the seal is tight. Adjust the headband so the ear muffs are resting comfortably on your head. The cups should entirely cover your ears. Before you put on your earmuffs, it is important to inspect them for cracks, tears or other signs of wear. If you are enrolled in the Hearing Conservation Program, you will have an audiometric test (or hearing test) conducted on you annually. The purpose of this hearing test is to measure your hearing ability over time. Before you began your job in a high noise area, you should have had a **baseline audiogram**. Subsequent audiograms are then compared to this baseline to see if your hearing ability has degenerated since the baseline was taken. A **Standard Threshold Shift (STS)** occurs when the hearing threshold has changed by an average of 10 decibels (dB) or more in either ear at 2000, 3000 or 4000 Hertz. If audiometric testing reveals that you have a STS, you will be notified. The last component of the Hearing Conservation Program requires **employee training**. You must be trained at least annually on the material presented in this training module. The purpose of a Hearing Conservation Program is to **prevent hearing loss from exposure to loud noise and all associates are expected to comply.**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Trainer: \_\_\_\_\_

(Signature)

## Hearing Conservation Program

### Employee Q&A on our Hearing Conservation Training

1. Temporary hearing loss can be caused by exposure to loud noises for a few hours.
  - a. True
  - b. False
  - c.
2. The inability to hear high-pitched or soft sounds may be a sign of:
  - a. Temporary hearing loss
  - b. Permanent hearing loss
  - c. Low warehouse temperatures
  - d. All of the above
3. Hearing loss caused by noise is curable:
  - a. True
  - b. False
4. List the two basic types of hearing protection devices.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
5. Hearing protection that has an NRR rating of 33 has \_\_\_\_\_ noise protection than hearing protection with an NRR rating of 25.
  - a. the same
  - b. less
  - c. more
  - d. none of the above
6. When inserting your ear plugs you should:
  - a. Wash your hands to prevent infections from entering your ear.
  - b. Roll the plug between your fingers and thumb to make thinner.
  - c. Reach one hand behind your head, pull your ear outward and insert the plug into the ear canal.
  - d. All of the above
7. Advantages to wearing ear muffs are:
  - a. May be uncomfortable in hot environments
  - b. Provide more consistent protection than plugs.
  - c. One size fits most heads.
  - d. Both B and C.
  - e.
8. OSHA states that a Standard Threshold Shift is an averaged change in hearing at 2000, 3000 & 4000Hz of at least 10 dB when compared to your baseline hearing test.
  - a. True
  - b. False
9. The purpose of an annual hearing test is to:
  - a. Measure your hearing ability over time.
  - b. Compare to the baseline test to see if your hearing ability has changed.
  - c. Make sure your able to hear instructions from your supervisor
  - d. Both A & B

## Hearing Conservation Program

10. The purpose of a hearing conservation program is to prevent hearing loss from exposure to loud noise.
- a. True
  - b. False

Trainee: \_\_\_\_\_

(Signature)

Trainer: \_\_\_\_\_

(Signature)

# Ergonomics Program

## ***Purpose***

The purpose of this program is to effectively eliminate or control Work-related Musculoskeletal Disorders (WMSD) and hazards by providing management leadership and employee involvement in the identification and resolution of hazards and by providing training, medical management and evaluation as an on-going process.

***Ergonomics:*** is the science of fitting jobs to people. Ergonomics encompasses the body of knowledge about physical abilities and limitations as well as other human characteristics that are relevant to job design. Ergonomic design is the application of this body of knowledge to the design of the workplace (i.e., work tasks, equipment, environment) for safe and efficient use by workers. Good ergonomic design makes the most efficient use of worker capabilities while ensuring that job demands do not exceed those capabilities.

**Ergonomics program** is a **systematic process** for anticipating, identifying, analyzing and controlling WMSD hazards.

- A **process** is the activities, procedures, and practices that you set up to control WMSD hazards.
- **Systematic** means these actions are ongoing and conducted on some routine basis that is appropriate to the workplace conditions.

## **Covered Tasks**

**This program covers all jobs involved in manufacturing and material handling and other jobs where there are work related musculoskeletal disorder hazards.**

## **Program Goals**

**The Primary permanent goals of this program are:**

1. Reduction in injuries & illnesses
2. Reduction in absenteeism
3. Reduction in employee turnover
4. Increased productivity & quality

# Ergonomics Program

**Short term goals may be established as a means of meeting the permanent goals**

## **Program Elements**

1. Management Leadership & Employee Participation
2. Hazard Identification & Information
3. Job Hazard Analysis & Control
4. Training
5. Medical Management
6. Program Evaluation
7. Records

## **Element 1: Management Leadership & Employee Involvement**

**Policy:** Bamco, Inc. Employees are highly encouraged to bring their concerns to supervisors and management. Feedback from employees is an important means of identifying ergonomic hazards. When an WMSD is identified, the Bamco, Inc. Corporate Safety Director will provide a response and recommended action within 48 hours of receiving notification of the hazards or condition.

### **Bamco, Inc. Management will:**

- (1) Assign and communicate responsibilities for setting up and managing the ergonomics program so managers, supervisors and employees know what is expected of them and how they are held accountable for meeting those responsibilities.
- (2) Provide those persons with the authority, resources, information and training necessary to meet their responsibilities.
- (3) Examine existing policies and practices to ensure they encourage reporting and do not discourage reporting.
- (4) Identify at least one person to:
  - (i) Receive and respond promptly to reports about signs and symptoms of WMSDs, WMSD hazards and recommendations
  - (ii) Take action, where required, to correct identified problems
- (5) Communicate regularly with employees about the program and their concerns about WMSDs. This shall be accomplished through safety and health committees, postings on employee bulletin boards and routine safety training meetings.

# Ergonomics Program



**Employee Participation:** Bamco, Inc. Employees (and their designated representative) will be provided:

- (1) A way to report signs and symptoms of WMSDs and WMSD hazards, and to make recommendations about appropriate ways to control them. Reporting procedures include notification of immediate supervisor, ergonomic suggestion forms and medical management forms. Any one of these methods constitute a means of reporting and will require action on the part of the Program Administrator.
- (2) Prompt responses to their reports and recommendations. 48 hour response will be provided for all reports of WMSDs and WMSD hazards..
- (3) Access to information about the ergonomics program. This program is available to all employees for review.
- (4) Ways to become involved in developing, implementing and evaluating:
  - (i) Job hazard analysis and control. This is accomplished by participation on safety & health committees, suggestions for supervisors & management, review and comment on existing job hazard analysis and other appropriate means of communication.
  - (ii) Training. Feedback from employees on the quality and usefulness of ergonomic training will be reviewed by the Bamco, Inc. Safety Director to be used for training modifications to improve effectiveness.
  - (iii) The effectiveness of the program and control measures. Safety & Health Committees are the primary means of employee involvement in this area. Additionally, all comments, recommendations and suggestions will be forwarded to the program administrator for action and response comment.

## **Element 2: Hazard Identification & Information**

**Identification** Hazard identification is accomplished by:



# Ergonomics Program

- (1) Reports (written or verbal) WMSD of signs, symptoms hazards or control recommendations from employees and supervisors.
- (2) Review of existing safety & health records for WMSDs and WMSD hazards.
- (3) Routine facility safety & health inspections by management and supervisors

## Employee Information

For those current and new Bamco, Inc. employees in manufacturing operations, manual handling operations, and other jobs with WMSDs, the following information will be provided.

- (1) How to recognize the signs and symptoms of WMSDs, and the importance of early reporting of signs and symptoms
- (2) Hazards that are reasonably likely to be causing or contributing to WMSDs
- (3) How to report signs and symptoms of WMSDs and WMSD hazards, and make recommendations

**Information Methods** include, but are not limited to, information sheets, videotapes, or classes. Information will be provided in a way that employees are able to understand. Employees will be given an opportunity to ask questions, receive answers, and be provided information in the languages employees use and at levels they comprehend.

## Element 3: Job Hazard Analysis & Control

### Job Hazard Analysis

The purpose of Job Hazard Analysis is to identify WMSD hazard elements to provide information for effective control measure. When WMSD hazards are identified, a full JHA will be conducted and control measures implemented to eliminate or control the hazards to the extent feasible. **NOTE:** The purpose of job hazard analysis is to pinpoint the cause of the problem. If the cause is obvious, you may move directly to controlling the WMSD hazards without conducting all of the steps of job hazard analysis.

- (1) Make a list of (or a representative sample of):
  - (i) Employees in the problem job; and
  - (ii) Employees who perform the same physical work activities but in another job. This is called a similar job. If employees in a similar job are exposed to the same WMSD hazards as employees in the problem job, the similar job also is a problem job. You must expand your ergonomics program to include that job and those employees;
- (2) Ask those employees:
  - (i) Whether they are experiencing signs or symptoms of WMSDs;

# Ergonomics Program

(ii) Whether they are having difficulties performing the physical work activities of the job, and

(iii) Which physical work activities they associate with the problem;

(3) Observe employees performing the job in order to identify job factors that need to be evaluated; and

(4) Evaluate those job factors to determine which ones are reasonably likely to be causing or contributing to the problem.

## Control Measures

Successful control measure include the following either separately or in combination. **NOTE:** Where solutions are obvious and the hazards may be eliminated quickly, implementation of controls is permitted without following all of the steps of the control process. Interim control measures may be implemented, if practical, until permanent control measures are in place

## The Control Measure Process involves:

(1) Identification, evaluation and implementation of feasible control measures (interim and permanent) to control the WMSD hazards. This includes prioritizing the control of WMSD hazards, where necessary.

(2) Tracking progress in controlling the WMSD hazards, particularly if prioritizing of control of the hazards is necessary.

(3) Communication of results of the job hazard analysis to other areas of the workplace (e.g., procurement, human resources, maintenance, design, and engineering) whose assistance may be needed to successfully control the WMSD hazard.

(4) Identification of hazards when equipment is changed, re-designed or purchased and when change occurs in processes or facilities.

# Ergonomics Program

## Control Methods

**(1) Engineering Controls**, where feasible, are the preferred method for controlling WMSD hazards. Engineering controls are the physical changes to jobs that control exposure to WMSD hazards. Engineering controls act on the source of the hazard and control employee exposure to the hazard without relying on the employee to take self-protective action or intervention. Examples of engineering controls for WMSD hazards include changing, modifying or redesigning the following:

- Workstations
- Tools
- Facilities
- Equipment
- Materials
- Processes

**(2) Work Practice Controls** are controls that reduce the likelihood of exposure to WMSD hazards through alteration of the manner in which a job or physical work activities are performed. Work practice controls also act on the source of the hazard. However, instead of physical changes to the workstation or equipment, the protection work practice controls provide is based upon the behavior of managers, supervisors and employees to follow proper work methods. Work practice controls include procedures for safe and proper work that are understood and followed by managers, supervisors and employees. Examples of work practice controls for WMSD hazards include:

- Safe and proper work techniques and procedures that are understood and followed by managers, supervisors and employees.
- Conditioning period for new or reassigned employees.
- Training in the recognition of MSS hazards and work techniques that can reduce exposure or ease task demands and burdens.

**(3) Administrative Controls** are procedures and methods, typically instituted by the employer, that significantly reduce daily exposure to WMSD hazards by altering the way in which work is performed. Examples of administrative controls for WMSD hazards include:

- Employee rotation
- Job task enlargement
- Adjustment of work pace (e.g., slower pace)
- Redesign of work methods
- Alternative tasks
- Rest breaks

# Ergonomics Program

**(4) Personal Protective Equipment (PPE)** may be used as an interim control, but will not be used as a permanent control where other controls are feasible. PPE used for this purpose will be provided it at no cost to Bamco, Inc. employees.

## Continuing Control Process

After implementation of feasible permanent controls, the possibility exists that WMSD may continue or re-occur. In these cases the following steps will be taken.

- (1) Promptly check out employee reports of signs and symptoms of WMSDs to determine whether medical management is needed.
- (2) Promptly identify and analyze the WMSD hazards, and develop a plan for controlling them
- (3) Track progress in implementing the plan and measure success in eliminating or reducing WMSDs further; and
- (4) Continue to look for solutions for the problem job and implement feasible ones as soon as possible.

## Element 4: Training

### Training will be provided to

- (1) All Bamco, Inc. employees in problem jobs, and all employees in similar jobs that have been identified as problem jobs;
- (2) Their supervisors; and
- (3) All persons involved in setting up and managing the ergonomics program.

# Ergonomics Program

## Training Topics

FOR	Employees must understand
Employees in problem jobs, employees in similar jobs that are problem jobs, and their supervisors	<p>How to recognize WMSD signs and symptoms, and the importance of early reporting.</p> <p>How to report WMSD signs, symptoms and hazards, and make recommendations.</p> <p>WMSD hazards in their jobs and the general measures they must follow to control WMSD hazards.</p> <p>Job-specific controls and work practices that have been implemented in their jobs.</p> <p>The ergonomics program and their role in it.</p> <p>The requirements of this standard</p>
Persons involved in setting up and managing the ergonomics program	<p>The ergonomics program and their role in it.</p> <p>How to identify and analyze WMSD hazards.</p> <p>How to identify, evaluate and implement measures to control WMSD hazards.</p> <p>How to evaluate the effectiveness of ergonomics programs.</p>

## Training Frequency

FOR	Training will be provided
Employees in problem jobs, employees in similar jobs that are problem jobs, and their supervisors	<p>When the program is first set up in their jobs.</p> <p>When they are initially assigned to problem jobs.</p> <p>After control measures are implemented in their jobs.</p> <p>Periodically as needed (i.e., significant changes to the job, new WMSDs or WMSD hazards are identified in the job, unsafe work practices observed) and at least every 3 years.</p>
Persons involved in setting up and managing the ergonomics program	<p>When they are initially assigned to setting up and managing the ergonomics program.</p> <p>Periodically as needed (i.e., program deficiencies revealed in evaluation, significant changes in ergonomics program) and at least every 3 years.</p>

**Element 5: Medical Management** Bamco, Inc. will make available prompt and effective medical management whenever an employee has a WMSD. (This means that when an employee reports signs or symptoms of a WMSD. All reports will be processed to determine whether medical management is necessary). Medical management, including recommended work restrictions, will be provided at.

# Ergonomics Program

no cost to the employee. Medical treatment protocols for WMSDs will be established by the health care professions.

## Reports of WMSDs

- (1) When reports of WMSDs are made, employees will be provided with prompt access to health care professionals (HCPs) for effective evaluation, treatment and follow up; and
- (2) Information will be provided to HCPs to help ensure medical management is effective, and
- (3) Written medical opinion will be obtained from the HCP and the employee will be promptly provided a copy.

## Information to be provided to the health care professional

- (1) Descriptions of the employee's job and hazards identified in the hazard analysis,
- (2) Descriptions of available changes to jobs or temporary alternative duty to fit the employee's capabilities during the recovery period,
- (3) A copy of this program and OSHA standard, with medical management requirements pointed out; and
- (4) Opportunities to conduct workplace walkthroughs.

## Health care professional written opinion

- (1) The HCP's written opinion must contain:
  - (i) The work-related medical conditions related to the WMSD reported;
  - (ii) Recommended work restrictions, where necessary, and follow-up for the employee during the recovery period;
  - (iii) A statement that the HCP has informed the employee about results of the evaluation and any medical conditions resulting from exposure to WMSD hazards that require further evaluation or treatment; and
  - (iv) A statement that the HCP has informed the employee about other physical activities that could aggravate the WMSD during the recovery period.
- (2) To the extent permitted and required by law, employee privacy and confidentiality will be maintained regarding medical conditions identified during the medical management process. HCPs will be instructed not to reveal in the written opinion or in any other communication with you specific findings, diagnoses or information that is not related to WMSD hazards in the employee's job.

# Ergonomics Program

## Work Restriction Policy

- (1) Work restrictions recommended for the employee will be provided during the recovery period;
- (2) The employee's total normal earnings, seniority, rights and benefits will be maintained when work restrictions are prescribed or are voluntarily provided by the company; and
- (3) Necessary periodic follow-ups with the HCP will be provided for the employee during the recovery period.

## Continuance of Work Restrictions Policy

Employee's total normal earnings, seniority, rights and benefits will be maintained when work restrictions are recommended by the HCP or voluntarily provided by the company until the first of the following occurs:

- (1) The employee is recovered and able to return to the job, OR
- (2) Effective measures are implemented that control WMSDs hazards to the extent the job does not pose risk of harm to the employee even during the recovery period; OR
- (3) There is a final medical determination that the employee is permanently unable to return to the job, OR
- (4) 6 months have passed.

## Compensation Policy

Direct compensation (total normal earnings, seniority, rights and benefits) may be reduced by the amount an employee receives during the work restriction period from any of the following:

- (1) Workers' compensation payments for lost earnings
- (2) Payments for lost earnings from a compensation or insurance program that is publicly-funded or funded by the company
- (3) Income from employment with another employer made possible by virtue of the work restrictions.

## Element 6: Program Evaluation

Evaluation of the ergonomics program and controls will be conducted periodically, and at least every 3 years, to ensure effective administration and management and compliance with regulatory requirements.

## Program Evaluation Process

The following procedures will be used to evaluate the effectiveness of the ergonomics program and control measures.

# Ergonomics Program

- (1) Monitoring of program activities to ensure that all the elements of your ergonomics program are functioning.
- (2) Selection and implementation of effectiveness measures, both activity and outcome measures, to evaluate the program and the controls to ensure that they are in compliance with regulatory requirements.
- (3) Establishment of baseline measurements to provide a starting point for measuring the effectiveness of the program and the controls.

## Program Evaluation Findings

All program deficiencies found will be corrected promptly.

EXAMPLES OF ACTIVITY MEASURES	EXAMPLES OF OUTCOME MEASURES
Plan to implement ergonomics program has been developed. Number of employee reports and recommendations. Average time between employee reports and your response Length of time since the last review of safety and health records. Number of hazards identified. Number of employees who have received ergonomics information. Number of jobs analyzed. Number of jobs awaiting analysis. Number of employees interviewed for job analyses and remaining to be interviewed. Number of symptom surveys conducted. Number of jobs controlled. Number of job changes made. Number of employees trained and waiting to be trained. Number of worker hours devoted to the ergonomics program. Annual expenditures on program and controls.	Number of OSHA recordable MSDs. Reported symptoms of WMSDs. WMSD incidence rates per job title. Number of workers' compensation claims. Number of lost-workdays WMSDs. Average lost workdays per WMSD. Severity rate of WMSDs. Symptom survey results. Annual medical costs for WMSDs. Average medical costs per WMSD. Annual workers' compensation costs. Average workers' compensation costs per WMSD. Number of job transfer requests per job title. Employee absentee rates per job title. Annual employee turnover rates per job title.



# Ergonomics Program

## Element 7: Records

Written records of the program will be maintained if:

- (1) There is more than one worksite or establishment in which this job is performed by employees; OR
- (2) The job involves more than one level of supervision; OR
- (3) The job involves shift work

### Records and Retention Requirements

The following table lists the required records and retention periods

Required Records	Retention Period
Employee reports and company responses	3 years
Results of job hazard analysis Plans for controlling WMSD hazards Evaluations of program and controls	3 years or until replaced by updated record
Medical management records	The duration of the injured employee's employment plus 3 years

**NOTE:** Other regulatory requirements for record keeping of the Access to Employee Exposure and Medical Records Standard (29 CFR 1910.1020) will be followed in addition to the requirements of this program

# Ergonomics Program

This program covers the following job factors:

<b>THIS PROGRAM COVERS THESE JOB FACTORS</b>	<b>INCLUDING THESE COMPONENTS OF JOB FACTORS</b>
<b>Physical demands of the work tasks or job</b>	<ul style="list-style-type: none"> <li>w Force</li> <li>w Repetition</li> <li>w Work postures</li> <li>w Duration</li> <li>w Local contact stress</li> </ul>
<b>Workstation layout and space</b>	<ul style="list-style-type: none"> <li>w Work reaches</li> <li>w Work heights</li> <li>w Seating</li> <li>w Floor surfaces</li> <li>w Contact stress</li> </ul>
<b>Equipment used and objects handled</b>	<ul style="list-style-type: none"> <li>w Size and shape</li> <li>w Weight and weight distribution</li> <li>w Handles and grasp surfaces</li> <li>w Vibration</li> </ul>
<b>Environmental conditions</b>	<ul style="list-style-type: none"> <li>w Cold and heat</li> <li>w Glare (as related to awkward postures)</li> </ul>
<b>Work organization</b>	<ul style="list-style-type: none"> <li>w Work-recovery cycles</li> <li>w Work rate</li> <li>w Task variability</li> </ul>

# Ergonomics Program

**Known hazard** means hazards in your workplace that you know are reasonably likely to cause or contribute to a WMSD. The following are known hazards covered by the OSHA ergonomic standard:

- WMSD hazards identified in insurance reports.
- WMSD hazards identified in consultant reports.
- WMSD hazards identified in prior OSHA inspections.
- WMSD hazards identified in self audits.
- WMSD hazards identified and communicated to you by HCPs.
- Accepted WMSD workers' compensation claims.

Manual handling operations are physical work activities meeting these criteria:

- (1) They involve **lifting/lowering, pushing/pulling, or carrying; AND**
- (2) They involve exertion of considerable force because the particular load is heavy **OR** the cumulative total of the loads during a workday is heavy (i.e., substantial loads); **AND**
- (3) These manual handling work activities are a significant part of the employee's regular job duties.

Manufacturing operations cover a range of jobs that are directly involved in producing durable and non-durable goods. Manufacturing production jobs involve working supervisors and all non-supervisory employees who engage in fabricating, processing, assembling, and other services closely associated with manufacturing production. In this standard, manufacturing operations are limited to those that meet these criteria:

- (1) They are performed in **manufacturing industries; AND**
- (2) They are **production jobs** performed by employees and their supervisors in those industries; **AND**
- (3) The production work activities are a significant part of the employee's regular job duties.

# Ergonomics Program

While each job must be considered on the basis of its actual duties, the following table lists job categories that typically fall inside and outside this definition:

<b>EXAMPLES OF MANUFACTURING PRODUCTION JOBS</b>	<b>EXAMPLES OF JOBS THAT TYPICALLY ARE NOT MANUFACTURING PRODUCTION JOBS</b>
<ul style="list-style-type: none"> <li>w Assembly line jobs producing:</li> <li>z Products (durable and non-durable)</li> <li>z Subassemblies</li> <li>z Components and parts</li> <li>w Paced assembly line jobs (assembling and disassembling)</li> <li>w Piecework assembly jobs (assembling and disassembling) and other time critical assembly jobs</li> <li>w Product inspection jobs (e.g., testers, weighers)</li> <li>w Meat, poultry, and fish cutting and packing</li> <li>w Bindery jobs</li> <li>w Machine operation</li> <li>w Machine loading/unloading</li> <li>w Apparel construction jobs</li> <li>w Food preparation assembly line jobs</li> <li>w Commercial baking jobs</li> <li>w Cabinetmaking</li> <li>w Tire building</li> <li>w Warehouse jobs in manufacturing facilities</li> <li>w Rework specialists</li> <li>w Maintenance personnel</li> </ul>	<ul style="list-style-type: none"> <li>w Administrative personnel</li> <li>w Clerical staff</li> <li>w Supervisors and managers who do not perform production job</li> <li>w Technical staff (e.g., engineering, product development)</li> <li>w Analysts and programmers</li> <li>w Sales and marketing</li> <li>w Buyers/procurement</li> <li>w Customer service employees</li> <li>w Mail room</li> <li>w Security guards</li> <li>w Cafeteria personnel</li> <li>w Grounds personnel (gardeners, grounds keepers)</li> <li>w Jobs in power plant in manufacturing facility</li> <li>w Janitors</li> </ul>

**NOTE:** Some jobs that are not manufacturing production jobs may still be manual handling jobs under this program or the OSHA standard.

# Ergonomics Program

**Medical management** is the process for assuring that employees with WMSDs are provided with the following at no cost to employees:

- A mechanism for early reporting of signs and symptoms of WMSDs;
- Early assessment of reports;
- Access to prompt and effective evaluation, treatment and follow-up by HCPs;
- Work restrictions recommended by HCPs;

Medical management also includes the process of communicating with HCPs. Medical management does not include establishing specific medical treatments for WMSDs. Medical treatment protocols and procedures are established by the health care professions.

**Musculoskeletal disorders (MSDs)** are injuries and disorders of the muscles, nerves, tendons, ligaments, joints, cartilage and spinal disks. Examples of MSDs include:

- |                          |                           |
|--------------------------|---------------------------|
| w Carpal tunnel syndrome | w Tendinitis              |
| w Epicondylitis          | w Rotator cuff tendinitis |
| w Synovitis              | w De Quervains' disease   |
| w Muscle strains         | w Carpet layers knee      |
| w Raynaud's phenomenon   | w Trigger finger          |
| w Sciatica               | w Low back pain           |

No cost to employees means that training, medical management and other requirements of this standard are provided to employees free of charge and while they are "on the clock."

Periodically means that a process or activity, such as records review or training, is performed on a **regular basis** which is appropriate for the conditions in the workplace. Periodically also means that the process or activity is conducted **as needed**, such as when significant changes are made in your workplace.

Personal protective equipment (PPE) are interim control devices worn or used while working to protect employees from exposure to WMSD hazards. In this standard, PPE includes items such as gloves and knee pads.

Physical work activities are the physical demands, exertions or functions of the task or job.

# Ergonomics Program

Problem job is any job in which you must set up a full ergonomics program, including job hazard analysis. The following are problem jobs in this standard:

- (1) A manufacturing or manual handling job where a known hazard exists or a WMSD is reported; **AND**
- (2) Any other job in your workplace where a WMSD is reported; **AND**
- (3) A similar job in which employees are exposed to the same WMSD hazard as employees in a problem job.

Representative sampling is a strategy to adequately characterize exposure of a group of employees (i.e., employees in a problem job) by analyzing the exposure of a subset of that group rather than all members of the group. The employees selected for representative sampling analysis must be those who are reasonably believed to have the greatest exposure to WMSD hazards in the problem job, including each workshift, to correctly characterize and not underestimate the exposure of any employee in the problem job.

Resources mean the provisions necessary to develop, implement and maintain an effective ergonomics program. Resources include monetary provisions (e.g., equipment to perform job hazard analysis, training materials, controls) as well as other provisions (e.g., time to conduct job hazard analysis or review safety and health records).

Safety and health records are information generated at or for your workplace. Records include, for example, OSHA 200 logs, workers' compensation claims, WMSD-related medical reports and infirmary logs, employee reports of WMSDs or WMSD hazards, and insurance or consultant reports prepared for your workplace.

**Signs** (of WMSDs) are objective physical findings that are the basis for an OSHA recordable MSD.

Examples of signs of WMSDs include:

w Decreased range of motion	w Swelling
w Decreased grip strength	w Cramping
w Loss of function	w Redness/loss of color
w Deformity	

Similar jobs are jobs that involve the same physical work activities as a problem job, even if they are not defined by the same title or classification.

# Ergonomics Program

**Symptoms** (of WMSDs) are physical indications that your employee may be developing an WMSD. Symptoms can vary in their severity depending on the amount of exposure the employee has had. Often symptoms appear gradually as muscle fatigue or pain at work that disappears during rest. Usually symptoms become more severe as exposure continues (e.g., tingling continues when your employee is at rest, numbness or pain makes it difficult to perform the job, and finally pain is so severe that the employee is unable to perform physical work activities). Examples of symptoms WMSDs include:

w Numbness	w Tingling
w Burning	w Aching
w Pain	w Stiffness

**Temporary alternative duty jobs** are assignments given to employees with WMSDs during the recovery period until the health care provider releases the employee from work restrictions.

**Work practice controls** are controls that reduce the likelihood of exposure to WMSD hazards through alteration of the manner in which a job or physical work activities are performed. Work practice controls also act on the source of the hazard. However, instead of physical changes to the workstation or equipment, the protection work practice controls provide is based upon the behavior of managers, supervisors and employees to follow proper work methods. Work practice controls include procedures for safe and proper work that are understood and followed by managers, supervisors and employees. Examples of work practice controls for WMSD hazards include:

- Safe and proper work techniques and procedures that are understood and followed by managers, supervisors and employees.
- Conditioning period for new or reassigned employees.
- Training in the recognition of MSD hazards and work techniques that can reduce exposure or ease task demands and burdens.

## Ergonomics Program

Work-related means that the physical work activities or workplace conditions in the job are reasonably likely to be causing or contributing to a reported MSD. For this standard, an MSD is work-related if:

- (1) **WMSD hazards** are present in a job where an MSD has been reported; **AND**
- (2) The hazards are reasonably likely to cause or contribute to the **type** of MSD reported; **AND**
- (3) A **significant part** of the employee's **regular job duties** involves exposure to these WMSD hazards (i.e., not incidental exposure).

Work restrictions are any limitation placed on the manner in which an employee with an WMSD performs a job during the recovery period. Work restrictions include modifications and restrictions to the employee's current job, such as limiting or reducing the intensity or duration of exposure; and reassignment to temporary alternative duty jobs. Work restrictions also include complete removal from the workplace.

**WMSD hazards** are workplace conditions or physical work activities that cause or are reasonably likely to cause or contribute to an WMSD.



# HOUSEKEEPING

## GENERAL REQUIREMENTS

1. Housekeeping is a fundamental and necessary activity on all projects and is the responsibility of every individual working on the project. Good housekeeping promotes good production.
2. There shall be unobstructed access at all times to such areas as electrical panels, safety disconnect switches, fire extinguishers, emergency exits, etc.
3. Suitable containers shall be provided for waste disposal. Combustible waste, such as oily rags, paper, etc. shall be stored in a safe place such as covered metal containers. All containers shall be labeled to indicate the permissible contents.
4. Trash which does not contain any hazardous waste shall not be stored or disposed in bags or containers marked for hazardous waste.
5. Lunchroom area trash disposal cans shall be provided, their use for trash collection shall be enforced, and they shall be emptied daily.
6. Lunch and break areas shall be kept clean and free of all food scraps, wrappers, cups, and other disposable items.
7. Protruding nails shall either be removed or bent over in such a way that they no longer present a risk. This shall be done as the hazard develops and not at a later time.
8. When nails are removed from lumber, the nails shall be collected and disposed of properly to eliminate puncture hazards.
9. Storage and laydown areas shall be kept clean and materials neatly stacked or placed.

# Hazard Communication Policy



**GENERAL:** Bamco, Inc. shall ensure that the hazards of all chemicals used within our facility are evaluated, and that information concerning their hazards is transmitted to all employees. This program is intended to address comprehensively the issues of evaluating the potential hazards of chemicals, communicating information concerning these hazards, and establishing appropriate protective measures for employees.

# Hazard Communication Policy

## Table of Contents

1. Written Program.
2. Training Program.
3. Labeling Program.
4. Material Safety Data Sheets Program.
5. Non-Company Employees Program.
6. Trade Secrets.
7. Definitions.
8. Sample Letter Requesting an MSDS

1. **Written Program.** This program shall be maintained in accordance with 29 CF1910.1200 and updated as required. Where no update is required this document shall be reviewed annually. Effective implementation of this program requires support from all levels of management at Bamco, Inc.

This written program shall be communicated to all personnel that are affected by it. It encompasses the total workplace, regardless of the number of workers employed or the number of work shifts. It is designed to establish clear goals and objectives. Bamco, Inc. shall:

- 1.1. Annually review and revise this written hazard communication program based on Bamco, Inc. operational requirements or as required by the OSHA Hazard Communication Standard.
- 1.2. Provide a program for the proper labeling of containers, describe other needed forms of warning, and detail the use and purpose of material safety data sheets (MSDS). Describe how employee information and training requirements shall be met, to include the following:
  - 1.2.1. Generate a list of the hazardous chemicals known to be present at each jobsite using an identity that is referenced from the appropriate MSDS. This list shall be available to all employees at the site and/or facility, and shall be located as a minimum at the site/facility "Worker Right-To-Know Center".
  - 1.2.2. Detail the method Bamco, Inc. shall use to inform employees of the hazards of non-routine tasks (for example: cleaning of heat treatment pits). Immediate supervisors of affected employees shall oversee this requirement.

# Hazard Communication Policy

## Written Program and Training Program

- 1.2.3. Notify employees of the hazards associated with chemicals contained in process or facility piping routed through their work area. Immediate supervisors of affected employees shall oversee this requirement. The Safety Director may be consulted to provide any hazard analysis assistance required. Any unlabeled pipes in their work areas must be immediately reported to the respective project safety engineer and/or Bamco, Inc. assigned "competent person" for labeling.
- 1.2.4. The methods Bamco, Inc. shall use to inform employee(s) of any precautionary measures that need to be taken to protect employees during normal operating conditions and in foreseeable emergencies. Immediate supervisors of affected employees shall oversee this requirement. The Project Manager and/or the Safety Director may be consulted to provide any task hazard analysis assistance required.
- 1.2.5. Bamco, Inc. shall make the written hazard communication program available to all employees, during each work shift.

2. **Training Program.** Bamco, Inc. shall provide employees with information and training on hazardous chemicals in their work area at the time of their initial assignment, annually, and whenever a new chemical is introduced into their work area that could present a potential hazard.

### 2.1. **Information.** Bamco, Inc. employees shall be informed of:

- 2.1.1. Any operations in their work area where hazardous chemicals are present.
- 2.1.2. The location and availability of the written hazard communication program, including a list of hazardous chemicals used at their jobsite and the associated material safety data sheets (MSDS). This information shall be centrally located at each Bamco, Inc. jobsite in a "Worker Right-To-Know Center". All employees shall have convenient access to this location and materials during each shift. A chemical list shall be provided.

# Hazard Communication Policy

## Training Program

2.2. **Training.** Employee hazard communication training at Bamco, Inc. shall be conducted annually by the jobsite. This training shall be conducted by an approved training instructor. Newly hired personnel shall be briefed on the general requirements of the OSHA hazard communication standard by the Project Manager or Superintendent, as well as duty specific hazards by their immediate supervisor before they begin any duties at the jobsite. Jobsite transferred personnel shall also be briefed on the duty specific hazards by their immediate supervisor before they begin any new duties. This training shall include at least the following:

- 2.2.1. Methods (subjective and objective) that may be used to detect the presence or release of a hazardous chemical in the work area. This shall include any monitoring conducted by Bamco, Inc., continuous monitoring devices, visual appearance of substance, or odor of hazardous chemicals when being released, etc... MSDS shall be used augment this requirement where ever possible.
- 2.2.2. The physical and health hazards of the chemicals present in the work area (MSDS).
- 2.2.3. The measures employees can take to protect themselves from these hazards. Specific procedures Bamco, Inc. has implemented to protect employees from exposure to hazardous chemicals, to include but not be limited to, appropriate work practices, policies, emergency procedures, and personal protective equipment (PPE).
- 2.2.4. An explanation of the labeling system used at Bamco, Inc., the MSDS, and how employees can obtain and use the appropriate hazard information.
- 2.2.5. The chemical (formal) and common name(s) of products used, and all ingredients which have been determined to be health hazards.
- 2.2.6. Physical and chemical characteristics of the hazardous chemical including vapor pressure and flash point.
- 2.2.7. The physical hazards of the hazardous chemical, including the potential for fire, explosion, and reactivity.

# Hazard Communication Policy

## Training Program

- 2.2.8. The health hazards of the hazardous chemical, including signs and symptoms of exposure, and any medical conditions which are generally recognized as being aggravated by exposure to the chemical.
  - 2.2.9. The primary route(s) of entry; inhalation, absorption, ingestion, injection, and target organs.
  - 2.2.10. The OSHA Permissible Exposure Limit (PEL), ACGIH Threshold Limit Value (TLV), including any other exposure limit used or recommended by the chemical manufacturer.
  - 2.2.11. Whether the hazardous chemical has been found to be a potential carcinogen by the International Agency for Research on Cancer (IARC).
  - 2.2.12. Any generally applicable precautions for safe handling and use which are known, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for clean-up of spills and leaks.
  - 2.2.13. Any generally applicable control measures which are known appropriate engineering controls, work practices, or PPE.
  - 2.2.14. Emergency and first aid procedures.
  - 2.2.15. How to determine the date of preparation of the MSDS concerned, and/or the last change to it.
  - 2.2.16. Specific chemical identity such as the chemical name, Chemical Abstract Service (CAS) Registry Number, synonyms, or any other information pertinent to the training session.
- 2.3 Documentation. All training shall be documented using a standard company attendance roster. Certificates of completion shall be issued to attendees. A copy of the completion certificate shall be maintained as part of the employee's permanent company record.

# Hazard Communication Policy

## Labeling Requirements

3. **Labeling Requirements.** Labeling requirements of containers of chemicals used at Bamco, Inc., as well as of containers of chemicals and hazardous materials being shipped off site. The following procedures apply:
  - 3.1. **Unmarked Containers.** No unmarked container containing chemicals may be used in conjunction with any duties or operations at Bamco, Inc. Unless the container is a **portable** container in the control of a specific person for their immediate use. **Container** means any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For the purposes of this program, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers. **Immediate use** means that the hazardous chemical shall be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.
  - 3.2. **Container Labeling.** Bamco, Inc. shall maintain and provide a container labeling kit to any employee requesting its use. Employees shall ensure that labels on incoming containers of hazardous chemicals are not removed or defaced. Containers containing hazardous chemicals shall be properly disposed of and their labels defaced after use. Once they are emptied, chemical containers can never be used in the place of any other container (for example, trash receptacles).
  - 3.3. **Label Information for A Single Chemical (Non-Mixture).** Bamco, Inc. shall provide the appropriate hazard rating and chemical compatibility charts to label containers. The MSDS shall be consulted first to determine labeling requirements. The label as a minimum shall contain:
    - 3.3.1 Information concerning the PPE required to use or handle the chemical.
    - 3.3.2 The DOT hazard class i.e., whether the chemical is Flammable, Toxic, Irritating, Corrosive, Water Reactive, or is an Oxidizer.
    - 3.3.3 The chemical name **as reflected on the MSDS.**
    - 3.3.4 The normal operational use of the chemical.
    - 3.3.5 Name, address, and emergency phone number of the chemical manufacturer, importer, or other responsible party.

# Hazard Communication Policy

## Labeling Requirements

3.4. **Label Information (Mixtures).** Bamco, Inc. shall provide the appropriate hazard rating and chemical data to label containers. The MSDS of the chemicals used to create the mixture shall be consulted first to determine labeling requirements, see paragraph 3.3.

3.4.1. If a mixture has been tested by an approved laboratory as a whole to determine its hazardous characteristics, the results of such testing shall be used to determine whether the mixture is hazardous and to provide the appropriate labeling information.

3.4.2. If a mixture has not been tested as a whole to determine whether the mixture is a health hazard, the mixture shall be assumed to present the same health hazards as do the components which comprise one percent (by weight or volume) or greater of the mixture. Scientifically valid data such as that provided on the MSDS to evaluate the physical hazard potential of the mixture must be used. The Safety/Environmental Administrator may be consulted to provide any hazard analysis assistance required.

3.5. **Where Labels Are Not Required.** Questions concerning any of the exceptions listed below should be directed to the Safety Administrator for clarification. Bamco, Inc. generally should not be affected by these requirements, however they are provided for information and because they are included in the Hazard Communication Standard. The Hazard Communication Standard does not require labeling of the following chemicals:

3.5.1. Any pesticide as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency,

3.5.2. Any food, food additive, color additive, drug, cosmetic, or medical or veterinary device or product, including materials intended for use as ingredients in such products (e.g. flavors and fragrances), as such terms are defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) or the Virus-Serum-Toxin Act of 1913 (21 U.S.C. 151 et seq.), and regulations issued under those Acts, when they are subject to the labeling requirements under those Acts by either the Food and Drug Administration or the Department of Agriculture;



# **Hazard Communication Policy**

## **Labeling Requirements and MSDS**

3.5.3. Any distilled spirits (beverage alcohols), wine, or malt beverage intended for nonindustrial use, as such terms are defined in the Federal Alcohol Administration Act (27 U.S.C. 201 et seq.) and regulations issued under that Act, when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Bureau of Alcohol Tobacco, and Firearms.

3.5.4. Any consumer product or hazardous substance as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, when subject to a consumer product safety standard or labeling requirement of those Acts, or regulations issued under those Acts by the Consumer Product Safety Commission.

3.6. **Labeling Of Containers Of Chemicals And Hazardous Materials Being Shipped Off Site Designated As Hazardous Waste.** Where these materials are classified as hazardous waste they fall under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 et seq.), and the provisions of 40 CFR. And as such shall be subject to regulations issued under that Act by the Environmental Protection Agency. Consult with the Safety and Environmental Administrator where this determination is unclear or assistance is required.

#### **4. Evaluation and Distribution of Material Safety Data Sheets to Employees.**

4.1. Bamco, Inc. shall maintain copies of any MSDS that are received with incoming shipments of the sealed containers of hazardous chemicals, shall obtain a MSDS for sealed containers of hazardous chemicals received without a MSDS if an employee requests the MSDS, and shall ensure that the MSDS are readily accessible during each work shift.

4.2. Each MSDS shall be entered into the MSDS log book maintained at the jobsite. Bamco, Inc. employees shall have access to this book upon request.

# Hazard Communication Policy

## MSDS and Non-Company Personnel Procedures

- 4.3. Master copies of each MSDS shall be maintained at the field office.
- 4.4. Right-To-Know (worker) copies shall be available to all employees at the site.
- 4.5. MSDS copies shall be maintained for all chemicals abandoned for use for a period of 30 years.
- 4.6. MSDS requests. A request letter shall be forwarded to any vender who does not provide an MSDS with a product received by this company. The letter shall be forwarded within three (3) days of receipt of the material. The format shall be the same as the sample letter located at the back of this instruction.
- 4.7. Employees must be familiar with the various sections of the MSDS.

<u>Section</u>	<u>- Contents</u>
Section I	- Product Identity
Section II	- Hazardous Ingredients
Section III	- Physical/Chemical Characteristics
Section IV	- Fire and Explosion Hazard Data
Section V	- Reactivity Data
Section VI	- Health Hazards Data
Section VII	- Precautions for Safe Handling and Use
Section VIII	- Control Measures/Protection Information
Section IX	- Additional Information

- 5. **Non-Company Personnel Program.** Visitors, Contract Employees, Contractor Personnel and in-house Representatives. The principle company escort or contact shall advise visitors, contract employees, contractor personnel, and in-house representatives of any chemical hazards that may be encountered in the normal course of their work on the premises, the labeling system in use, the protective measures to be taken, the safe handling procedures to be used, and availability of MSDS. Any contractor bringing chemicals on-site must provide Bamco, Inc. with the appropriate hazard information on these substances, including the labels used and the precautionary measures to be taken in working with these chemicals. Consult with the Safety Engineer where this determination is unclear or assistance is required.

# Hazard Communication Policy

## Trade Secrets

6. **Trade Secrets.** To protect trade secrets, the chemical manufacturer, importer, or employer may withhold the specific chemical identity, including the chemical name and other specific identification of a hazardous chemical, from the MSDS. To ensure the safety of our employees, Bamco, Inc. shall obtain any information not shown on a MSDS from a supplier when such information is needed to determine the hazardous constituents of chemicals used within our facility or by our employees. Bamco, Inc. employees shall not use a specific chemical if they cannot determine from the MSDS (or other approved source) proper protective measures to be used. The following conditions apply:
- 6.1. **Emergency Situations.** Where a treating physician or nurse determines that a medical emergency exists and the specific chemical identity of a hazardous chemical is necessary for emergency or first-aid treatment, Bamco, Inc. suppliers are required by law to immediately disclose the specific chemical identity of a trade secret chemical to that treating physician or nurse, regardless of the existence of a written statement of need of a confidentiality agreement.
- 6.2. **Non-Emergency Situations.** The following OSHA guidelines apply when requesting information designated as a trade secret from a MSDS. Requesters of trade secret information shall:
- 6.2.1. Provide the request in writing.
  - 6.2.2. Explain in detail why the disclosure of the specific chemical identity is essential.
  - 6.2.3. Agree (when required) in a written confidentiality agreement that the information shall not be used for any purpose other than the health need(s) asserted and agree not to release the information under any circumstances other than to OSHA, as provided in 29 CFR 1910.1200.
  - 6.2.4. Use the information for the following reasons:
    - 6.4.2.1. To assess the hazards of the chemicals to which employees shall be exposed.
    - 6.4.2.2. To conduct or assess sampling of the workplace atmosphere to determine employee exposure levels.
    - 6.4.2.3. To conduct pre-assignment or periodic medical surveillance of exposed employees.

# Hazard Communication Policy

## Trade Secrets and Definitions

6.4.2.4. To provide medical treatment to exposed employees.

6.4.2.5. To select or assess appropriate PPE for exposed employees.

6.4.2.6. To select or improve engineering controls or other protective measures for exposed employees, and to conduct studies to determine the health effects of exposure.

### 7. Definitions Commonly Found In The OSHA Hazard Communication Standard Or That Relate To The Contents Of The Standard.

**Article** means a manufactured item:

1. Which is formed to a specific shape or design during manufacture.
2. Which has end use function(s) dependent in whole or in part upon its shape or design during end use.
3. Which does not release, or otherwise result in exposure to, a hazardous chemical under normal conditions of use.

**Assistant Secretary** means the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, or designee.

**Chemical** means any element, chemical compound or mixture of elements and/or compounds.

**Chemical Manufacturer** means an employer with a workplace where chemical(s) are produced for use or distribution.

**Chemical Name** means the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name which shall clearly identify the chemical for the purpose of conducting a hazard evaluation.

**Combustible Liquid** means any liquid having a flashpoint at or above 100 F (37.8 C), but below 200 F (93.3 C), except any mixture having components with flashpoints of 200 F (93.3 C), or higher, the total volume of which make up 99 percent or more of the total volume of the mixture.

# Hazard Communication Policy

## Definitions

**Common Name** means any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

**Compressed Gas** means:

1. A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70 F (21.1 C); or
2. A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130 F (54.4 C) regardless of the pressure at 70 F (21.1 C); or
3. A liquid having a vapor pressure exceeding 40 psi at 100 F (37.8 C) as determined by ASTM D-323-72.

**Designated Representative** means any individual or organization to whom an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

**Director** means the Director, National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designee.

**Distributor** means a business, other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers.

**Employee** means a worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers such as office workers or bank tellers who encounter hazardous chemicals only in non-routine, isolated instances are not covered.

**Employer** means a person engaged in a business where chemicals are either used, distributed, or are produced for use or distribution, including a contractor or subcontractor.

**Explosive** means a chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

**Exposure or Exposed** means that an employee is subjected to a hazardous chemical in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption, etc.), and includes potential (e.g. accidental or possible) exposure.

# Hazard Communication Policy

## Definitions

**Flammable** means a chemical that falls into one of the following categories:

1. **Aerosol, flammable** means an aerosol that, when tested by the method described in 16 CFR 1500.45, yields a flame projection exceeding 18 inches at full valve opening, or a flashback (a flame extending back to the valve) at any degree of valve opening.
2. **Gas, flammable** means:
  - a) A gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of thirteen (13) percent by volume or less.
  - b) A gas that, at ambient temperature and pressure, forms a range of flammable mixtures with air wider than twelve (12) percent by volume, regardless of the lower limit.
3. **Liquid, flammable** means any liquid having a flashpoint below 100 °F (37.8 °C), except any mixture having components with flashpoints of 100 °F (37.8 °C) or higher, the total of which make up 99 percent or more of the total volume of the mixture.
4. **Solid, flammable** means a solid, other than a blasting agent or explosive as defined in § 190.109(a), that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious hazard. A chemical shall be considered to be a flammable solid if, when tested by the method described in 16 CFR 1500.44, it ignites and burns with a self-sustained flame at a rate greater than one-tenth of an inch per second along its major axis.

**Flashpoint** means the minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite when tested as follows:

1. **Tagliabue Closed Tester** (See American National Standard Method of Test for Flash Point by Tag Closed Tester, Z11.24-1979 (ASTM D 56-79)) for liquids with a viscosity of less than 45 Saybolt University Seconds (SUS) at 100 °F (37.8 °C), that do not contain suspended solids and do not have a tendency to form a surface film under test; or

# Hazard Communication Policy

## Definitions

2. **Pensky-Martens Closed Tester** (See American National Standard Method of Test for Flash Point by Pensky-Martens Closed Tester, Z11.7-1979 (ASTM D 93-79)) for liquids with a viscosity equal to or greater than 45 SUS at 100 °F (37.8 °C), or that contain suspended solids, or that have a tendency to form a surface film under test; or
3. **Setaflash Closed Tester** (see American National Standard Method of Test for Flash Point by Seta flash Closed Tester (ASTMD 3278-78)). Organic peroxides, which undergo auto accelerating thermal decomposition, are excluded from any of the flashpoint determination methods specified above.

**Foreseeable Emergency** means any potential occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment which could result in an uncontrolled release of a hazardous chemical into the workplace.

**Hazardous Chemical** means any chemical which is a physical hazard or a health hazard.

**Hazard Warning** means any words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the hazard(s) of the chemical(s) in the container(s).

**Health Hazard** means a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term health hazard includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, and neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes. Appendix A, to 29 CFR 1910.1200 provides further definitions and explanations of the scope of health hazards covered by this section, and Appendix B, 29 CFR 1910.1200 describes the criteria to be used to determine whether or not a chemical is to be considered hazardous for purposes of this program.

**Identity** means any chemical or common name which is indicated on the material safety data sheet (MSDS) for the chemical. The identity used shall permit cross-references to be made among the required list of hazardous chemicals, the label and the MSDS.

**Immediate Use** means that the hazardous chemical shall be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred

# Hazard Communication Policy

## Definitions

**Importer** means the first business with employees within the Customs Territory of the United States which receives hazardous chemicals produced in other countries for the purpose of supplying them to distributors or employers within the United States.

**Label** means any written, printed, or graphic material, displayed on or affixed to containers of hazardous chemicals.

**Material Safety Data Sheet (MSDS)** means written or printed material concerning a hazardous chemical which is prepared in accordance with 29 CFR 1910.1200, paragraph (g).

**Mixture** means any combination of two or more chemicals if the combination is not, in whole or in part, the result of a chemical reaction.

**Organic Peroxide** means an organic compound that contains the bivalent -O-O-structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

**Oxidizer** means a chemical other than a blasting agent or explosive as defined in 29 CFR 1910.109(a), that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.

**Physical Hazard** means a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.

**Produce** means to manufacture, process, formulate, or repackage.

**Pyrophoric** means a chemical that shall ignite spontaneously in air at a temperature of 130° F (54.4° C) or below.

**Responsible Party** means someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

**Specific Chemical Identity** means the chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

**Trade Secret** means any confidential formula, pattern, process, device, information or compilation of information that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it.



# Hazard Communication Policy

## Definitions

**Unstable (Reactive)** means a chemical which in the pure state, or as produced or transported, shall vigorously polymerize, decompose, condense, or shall become self-reactive under conditions of shocks, pressure or temperature.

**Use** means to package, handle, react, or transfer.

**Water-Reactive** means a chemical that reacts with water to release a gas that is either flammable or presents a health hazard. Often when the water is heated it goes into a gaseous state allowing oxygen to be released which can help feed a fire.

**Work Area** means a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

**Work Place** means an establishment, job site, or project, at one geographical location containing one or more work areas.

# Hazard Communication Policy

## Sample MSDS Request Letter

### 8. Sample Letter Requesting an MSDS.

XYZ Manufacturing Company  
1234 Street  
Anytown, USA 11222

Dear Sir:

The Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) requires employers be provided Material Safety Data Sheets (MSDS) for all hazardous substances used in their facility, and to make these MSDS available to employees potentially exposed to these hazardous substances.

We therefore request a copy of the MSDS for your product listed as Stock Number \_\_\_\_\_. We did not receive an MSDS with the initial shipment. We also request any additional information, supplemental MSDS, or any other relevant data that your company or supplier has concerning the safety and health aspects of this product.

Please consider this letter as a standing request to your company for any information concerning the safety and health aspects of using this product that may become known in the future.

The MSDS and any other relevant information should be sent to us within 5 days. Delays may prevent use of your product. Send the information to the address listed below.

Please be advised that if we do not receive the MSDS for the above chemical by \_\_\_\_\_, we may have to notify OSHA of our inability to obtain this information.

Your cooperation is greatly appreciated. Thank you for your timely response to this request. If you have any questions please contact me at (123) 456-7890.

Sincerely,

---

## HAND AND POWER TOOLS



### General Requirements

All hand and power tools and similar equipment shall be maintained in a safe condition.

When power operated tools are designed to accommodate guards, they shall be equipped with such guards when in use. Should the guard obstruct the work it will not be removed.

Belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating or moving parts of equipment shall be guarded if such parts are exposed to contact by employees or otherwise create a hazard.

Impact tools, such as drift pins, wedges, and chisels, shall be kept free of mushroomed heads.

The wooden handles of tools shall be kept free of splinters or cracks and shall be kept tight in the tool.

## HAND AND POWER TOOLS

### Power-operated Hand Tools

Electric power operated tools shall either be the approved double-insulated type or grounded.

Do not use a power tool with broken or defective insulation on the cord, broken or defective plugs, or loose or broken switches.

The use of electric cords for hoisting or lowering tools shall not be permitted.

If the tool is provided with a side mounted handle it must remain on the tool to prevent a wrist injury should the tool bind during operation.

### Powder-actuated Tools



Only employees who have been trained in the operation of the particular tool in use shall be allowed to operate a powder-actuated tool. Users should possess a qualified operator's card, which is issued by the manufacturer's representative. Records of this certification will be maintained on file and users should carry the original card on their person at all times.

The tool shall be tested each day before loading to see that the safety devices are in proper working condition. The method of testing shall be in accordance with the manufacturer's recommended procedure.

Any tool found not in proper working order, or that develops a defect during use, shall be immediately removed from service and not used until properly repaired.

Tools shall not be loaded nor are empty tools to be pointed at any employees.

Hand shall be kept clear of the open barrel end.

Loaded tools shall not be left unattended.

## HAND AND POWER TOOLS

### **Powder-actuated Tools**

Fasteners shall not be driven into very hard or brittle materials including, but not limited to, cast iron, glazed tile, surface-hardened steel, glass block, live rock, face brick, or hollow tile.

Driving into materials easily penetrated shall be avoided unless such materials are backed by a substance that will prevent the pin or fastener from passing completely through and creating a flying missile hazard on the other side.

No fastener shall be driven into a spalled area caused by an unsatisfactory fastening.

Tools shall not be used in an explosive or flammable atmosphere.

All tools shall be used with the correct shield, guard, or attachment recommended by the manufacturer.

Live loads/cartridges must be stored in an approved, locked storage cabinet to meet applicable OSHA regulations and, for projects within the five boroughs of New York City, the NYFD Fire Prevention Unit requirements. Do not throw explosive charges into trash containers or leave them lying around. Return them to your supervisor.

Use the lowest velocity on the tool until penetration is found.

Personal protective equipment, including eye, ear, head, and hand protection is to be worn by all tool operators.

## HAND AND POWER TOOLS

### Air Powered Tools



Air hoses will be inspected prior to use looking for bends, kinks, or swelled areas.

Hoses that are not in good condition shall be removed from service. DUCT TAPE IS NOT TO BE USED FOR REPAIRS.

Hoses used under compressed air conditions must be reinforced or braided type.

Hoses used for water service may be standard airline hose.

Hoses will not be placed in access ways or across ladder passage.

Whip-checks will be used on all air lines and tools to prevent against the hazards when uncoupling occurs. Whip-checks shall be positioned on the hose rather than the fitting - if the hose should break, the fitting may stay connected while the hose will whip around.

Air powered tools and compressed air create certain health hazards where fine particles of dust, or chemicals are blown into the air. This air contamination should be eliminated by wetting agents, or exhaust ventilation.

Loose clothing, which can get caught in the moving parts of equipment, should not be worn while working with rotary tools.

## HAND AND POWER TOOLS

**Air Powered Tools** All air hose clamps must be crimped into place. Do not use worm gear clamps to attach couplings and fittings to air hoses. Compressed air should not be used to clean off clothing. Air pressure against the skin can penetrate causing internal hemorrhaging and intense pain. Air that enters body openings can burst internal organs and lead to death. When air powered tools create hazards to others, warning signs or placards shall be posted detailing the type of hazard(s) and directions for protection.

### Abrasive Tools



### Hand-held Grinders

- Guards shall remain in place at all times.
- Abrasive blades shall be used only on designated materials.
- Blades shall be mounted per manufacturer's instructions only by a qualified person.
- Blades should be stored in a climate controlled area.
- Use blades only on designated tool. (i.e., Do not use chop saw blades on a cut – off saw.)
- Discard all abrasive blades with illegible labels.

# HAND AND POWER TOOLS

## Abrasive Tools

### Hand-held Grinders

- Inspect all blades prior to use.
- The arbor hole should match the arbor of the tool, use only manufactured arbor adaptors.
- The R.P.M. of the wheel shall equal or exceed the R.P.M. of the tool.
- Blades are to be removed from the tool whenever:
  - The tool is transported by vehicle
  - The tool is being stored, and the condition of the blade is suspect.
- Allow newly mounted wheels to run at full R.P.M. for at least 1 minute prior to use.
- Using the side of the “cutting” blade as a grinder is strictly prohibited.
- Do not remove the manufacturers’ handle from the tool.
- Grinders shall be labeled with maximum R.P.M.
- Only abrasive wheels, which are compatible with the rated R.P.M., will be used.
- Only approved blades authorized through our purchasing department will be used.
- Abrasive blades shall be used only on designated materials.

### Pipe-bending and threading machines

Operation and maintenance will be in accordance with the manufacturer’s recommendations including P.P.E. requirements.

Foot petals will remain in place.



## Fall Protection Procedure Policy



**BASIS:** Approximately 300,000 disabling injuries occur in work-related falls each year. 85 percent of workers surviving falls lose time from their jobs. This poses a serious problem for exposed workers and their employer. The OSHA Safety Standards establish uniform requirements to make sure that the hazards elevated falls in U.S. workplaces are evaluated, and that this hazard information is transmitted to all affected workers.

**GENERAL:** Bamco, Inc. shall ensure that the hazards of all elevated falls at our sites are evaluated, and that information concerning their hazards is transmitted to all employees. This standard practice instruction is intended to address comprehensively the issues of; evaluating potential fall hazards, communicating information concerning these hazards, and establishing appropriate protective measures for employees.

### Written Program

This standard practice instruction shall be maintained in accordance with 29 CFR and updated as required. Where no update is required this document shall be reviewed annually. Effective implementation of this program requires support from all levels of management within this company. This written program shall be communicated to all personnel that are affected by it. It encompasses the total workplace, regardless of number of workers employed or the number of work shifts. It is designed to establish clear goals, and objectives. Bamco, Inc. shall:

- ❖ Annually review and revise this written program based on company operational requirements or, as required by OSHA Safety Standards.
  
- ❖ Review the program any time fall protection procedures fail.

### Statement of Policy

This instruction describes a systematic approach that must be used to protect people from falls and how to eliminate fall hazards, prevent falls, and eliminate or reduce injury if a fall does occur. No unprotected work over 6 feet is permitted. This instruction also lists some of the most common fall hazards, and provides recommendations and guidelines for selecting fall-arrest systems.

# Fall Protection Procedure Policy

## Jobsite/Activity Evaluation

The workplace shall be assessed before each assigned job for potential fall hazards. Proper fall arrest equipment shall be used for jobs requiring fall protection when elimination of the hazard(s) is not possible. This company shall evaluate our Jobsites to determine known fall hazards. This preliminary evaluation shall detail the required steps for protecting employees from fall hazards. An Activity/Fall prevention plan shall be used to document fall hazard assessments. A complete listing of fall hazard locations and protective measures procedures shall be maintained.

## Training

A training program shall be provided for all employees who shall be exposed to fall hazards in the work area. The program must include but is not limited to a description of fall hazards in the work area, procedures for using fall prevention and protection systems, equipment limitations, the elements encompassed in total fall distance, and inspection and storage procedures for the equipment. Generally, workers shall be trained to recognize the hazards of falling from heights and to avoid falls to lower levels through holes or openings in walking/working surfaces and walls. Training programs shall include prevention, control and fall-arrest systems. It must be ensured that appropriate fall-arrest systems are installed and that employees know how to use them before beginning any work that requires fall control.

## Initial Training

Training shall be conducted prior to job assignment. Bamco, Inc. shall provide training to ensure that the purpose, function, and proper use of Fall Protections is understood by employees and that the knowledge and skills required for the safe application and usage is acquired by employees. This policy instruction shall be provided to, and read by all employees receiving training. The training shall include, as a minimum the following:

- ✓ Types of fall protections equipment appropriate for use.
- ✓ Recognition of applicable fall hazards associated with the work to be completed.
- ✓ Load determination and balancing requirements.
- ✓ Procedures for removal of a fall protection devices from service.
- ✓ All other employees, whose work operations are or may be in an area where protection devices fall may be utilized, shall be instructed to an awareness level concerning hazards associated with fall protection operations.
- ✓ Fall protection equipment identification. Fall protection equipment having identification numbers shall be checked for legibility.

# Fall Protection Procedure Policy

## Certification

Bamco, Inc. will certify that employee training has been accomplished and is being kept up to date. The certification shall contain each employee's name and dates of training. Fall Protection trainers shall include the Safety Director, Superintendents, and Foremen.

## Refresher training

This standard practice instruction shall be provided to, and read by all employees receiving refresher training. The training content shall be identical to initial training. Refresher training shall be conducted on an ongoing basis or when the following conditions are met, which ever event occurs sooner:

- ✓ Retraining shall be provided for all authorized and affected employees whenever (and prior to) there being a change in their job assignments, a change in the type of fall protection equipment used, or when a known hazard is added to the work environment which affects the fall protection program.
- ✓ Additional retraining shall also be conducted whenever a periodic inspection reveals, or whenever this employer has reason to believe, that there are deviations from or inadequacies in the employee's knowledge or use of fall protection equipment or procedures.
- ✓ Whenever a fall protection procedure fails.
- ✓ The retraining shall reestablish employee proficiency and introduce new or revised methods and procedures, as necessary.

## Certification

Bamco, Inc. will certify that employee training has been accomplished and is being kept up to date.

# Fall Protection Procedure Policy

## Control Procedures Development

Once a jobsite evaluation has been accomplished, procedures shall be developed, documented and utilized for the control of potential fall hazards. Fall prevention plans shall be designed by company qualified individuals, usually engineers and Safety supervisors. Company engineers and safety supervisors shall be provided with any required special training to recognize fall hazards, to understand fall prevention techniques, and to become familiar with fall-arrest equipment and procedures. It is critical that they consider fall protection design for the safety of operations where workers must work at elevated heights. Safety during access and egress from elevated work sites shall also be considered. The following guidelines shall be used when planning work at heights:

- Involve office management early in the project planning/job planning so that they can recommend appropriate fall-protection measures and equipment.
- Involve Engineering and/or Safety when load rating of anchorage points must be determined or is in doubt.
- Involve Engineering and/or Safety when anchorage points must be installed.
- Be specific in dealing with fall hazards when developing contracts. Require subcontractors to provide a written fall protection program which describes subcontractor fall protection policies and procedures when they shall be working at heights.

## Procedural Format

The following format shall be followed when developing fall control procedures. The Project Superintendent or Foreman shall be responsible for the implementation of these procedures. The procedures shall clearly and specifically outline the scope, purpose, authorization, rules, and techniques to be utilized to control fall hazards, and the means to enforce compliance including, but not limited to, the following:

- A specific statement of the intended use of the procedure.
- A review of accident records, including OSHA 300 logs and Workers' Compensation documentation.
- Interviews with employees and groups of employees whose work environment includes or may include these fall hazards.
- Physical observations of the work environment(s) that involve fall hazards or the potential of such.

# Fall Protection Procedure Policy

- Observations of individuals and their job tasks and work habits that expose them to existing or potential fall hazards.
- The identification of all hazards in the work area.
- The procedures contained in the company fall-protection program.
- Specific procedural steps for the use and operation of guardrail systems, body harness systems, and other fall protection systems.
- Specific procedural steps for the placement, erecting, inspecting, maintaining, disassembly and transfer of fall protection systems or devices and the person(s) responsible for them.
- Specific requirements for testing fall protection systems or equipment to determine and verify the effectiveness of the fall protection control measures.
- The correct procedures to use to rescue employees who have fallen.
- The role of each employee in fall protection plans and applicable policies.
- Specific requirements for testing fall protection systems or equipment.

## Protective Materials and Hardware

Appropriate fall protection devices shall be provided for the control of potential fall hazards. Selection of the equipment shall be based on the fall protection evaluation.

## Selection Criteria

Fall Protection devices shall be singularly identified; shall be the only devices(s) used for controlling falls; shall not be used for other purposes; and shall meet the following requirements:

- Capable of withstanding the environment to which they are exposed for the maximum period of time that exposure is expected.
- Constructed so that exposure to weather conditions or wet and damp locations shall not cause deterioration or lessen the protection provided.
- Anchor points shall not deteriorate when located in corrosive environments such as areas where acid and alkali chemicals are handled and stored.
- Capable of withstanding the anticipated weights to which they are exposed for the maximum period of time that exposure is expected.
- Standardization within the jobsite. Fall protection devices shall be standardized within the site whenever possible.

## Fall Protection Systems

When fall hazards cannot be eliminated through any other means, fall-arrest systems shall be used to control falls. Proper training on use of fall-arrest equipment is essential and shall be provided prior to use.

# Fall Protection Procedure Policy

## Full-Body Harness Systems

A full body harness system consists of a full-body harness, lanyard, energy shock absorber, and self-locking snap hook. Before using a full-body harness system, the supervisor and/or the user must address such issues as:

- ✓ Has the user been trained to recognize fall hazards and to use fall-arrest systems properly?
- ✓ Are all components of the system compatible according to the manufacturer's instructions?
- ✓ Have all components of the system been inspected within the last six months?
- ✓ Have appropriate anchorage points and attachment techniques been reviewed?
- ✓ Has free-fall distance been considered so that a worker shall not strike a lower surface or object before the fall is arrested?
- ✓ Have pendulum swing fall hazards been eliminated?
- ✓ Have safe methods to retrieve fallen workers been planned?
- ✓ Have the full-body harness and all of its components been inspected both before each use and on a regular semi-annual basis?
- ✓ Is any of the equipment, including lanyards, connectors, and lifelines, subject to such problems as welding damage, chemical corrosion, or sandblasts?

## Retractable Lifelines

A retractable lifeline is a fall-arrest device used in conjunction with other components of a fall-arrest system. Retractable lifelines should be used by only one person at a time.

A properly inspected and maintained retractable lifeline, when correctly installed and used within the fall-arrest system, automatically stops a person's descent in a short distance after the onset of an accidental fall.

Retractable lifelines shall be considered when working in areas such as on roofs and scaffolds, or in tanks, towers, vessels, and manholes. Also, retractable lifelines should be considered when climbing such equipment as vertical fixed ladders and telescoping derricks.

## **Fall Protection Procedure Policy**

Before using a retractable lifeline, the supervisor and/or the user must address the following questions:

- ✓ Has the user been trained to use a retractable lifeline correctly?
- ✓ Is the retractable lifeline being used in conjunction with a complete fall arrest system?
- ✓ Is the equipment under a regular maintenance program?
- ✓ Has the equipment been inspected within the last six months?

### **Standard Harnesses**

Harnesses for general purpose work should be Class III, constructed with a back D-ring, and integral hip D-rings for work positioning capability. Standard harnesses are suitable for continuous fall protection while climbing, riding, or working on elevated platforms. They are suitable for positioning, fall arrest, and the rescue and evacuation of people who are working at heights.

### **Inspection and Maintenance**

To ensure that fall protection systems are ready and able to perform their required tasks, a program of inspection and maintenance shall be implemented and maintained.

The following as a minimum, shall comprise the basic requirements of the inspection and maintenance program:

- Equipment manufacturer's instructions shall be incorporated into inspection and preventive maintenance procedures.
- All fall protection equipment shall be inspected at intervals not to exceed 6 months or in accordance with the manufacturer's guidelines.
- The user shall inspect his/her equipment prior to each use and check the inspection date.
- Any fall protection equipment subjected to a fall shall be removed from service immediately.
- Check all equipment for mold, damage, wear, mildew, or distortion.

## Fall Protection Procedure Policy

- Hardware should be free of cracks, sharp edges, or burns.
- Ensure no straps are cut, broken, torn or scraped.
- Special situations such as radiation, electrical conductivity, and chemical effects shall be considered.
- Equipment that is damaged or in need of maintenance shall be tagged as unusable, and **shall not be stored** in the same area as serviceable equipment.
- A detailed inspection policy shall be used for equipment stored for long periods of time.
- All fall equipment shall be inspected before each use by the user and supervisor.
- Anchors and mountings shall be inspected before each use by the user and supervisor.

### Most Common and Most Dangerous Fall Hazards

The tasks and situations listed below present inherent fall hazards. Give special attention to providing fall prevention and/or fall control for them, remembering that this attention is necessary in the design, engineering, planning, and execution stages of work. Give special consideration to fall protection for the following tasks:

- ✚ Work that involves fall hazards, such as on concrete decks, etc.
- ✚ Working on roofs, with deteriorating or unsupported sections and framing.
- ✚ Working over plating systems, acid tanks or open pits.
- ✚ Working from a fixed or portable ladder or climbing system.
- ✚ Performing work on water towers, bridges silos, pipe racks, presses, and floor pits.



# Fall Protection Procedure Policy

## **Definitions:**

Anchorage means a secure point of attachment for lifelines, lanyards or deceleration devices.

Body belt means a strap with means both for securing it about the waist and for attaching it to a lanyard, lifeline, or deceleration device.

Body harness means straps which may be secured about the employee in a manner that shall distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system.

Competent person means a person who is capable of identifying hazardous or dangerous conditions in any personal fall arrest system or any component thereof, as shall as in their application and use with related equipment.

Connector means a device which is used to couple (connect) parts of the personal fall arrest system and positioning device systems together. It may be an independent component of the system, such as a carabineer, or it may be an integral component of part of the system.

Deceleration device means any mechanism, such as a rope grab, rip stitch lanyard, tearing or deforming lanyards, self-retracting lifelines, etc. which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy imposed on an employee during fall arrest.

Energy shock absorber means a device that limits shock-load forces on the body.

Failure means load refusal, breakage, or separation of component parts. Load refusal is the point where the ultimate strength is exceeded.

Fall arrest system means a system specifically designed to secure, suspend, or assist in retrieving a worker in or from a hazardous work area. The basic components of a fall arrest system include anchorage, anchorage connector, lanyard, shock absorber, harness, and self-locking snap hook.

Free fall means the act of falling before a personal fall arrest system begins to apply force to arrest the fall.

Free fall distance means the vertical displacement of the fall arrest attachment point on the employee's body belt or body harness between onset of the fall and just before the system begins to apply force to arrest the fall. This distance excludes deceleration distance, and lifeline/lanyard elongation, but includes any deceleration device slide distance or self-retracting lifeline/lanyard extension before they operate and fall arrest forces occur.

Hole means a gap or void 2 inches or more in its least dimension, in a floor, roof, or other walking/working surface.

Lanyard means a flexible line of rope, wire rope, or strap which generally has a connector at each end for connecting the body belt or body harness to a deceleration device, lifeline or anchorage

## Fall Protection Procedure Policy

Leading edge means the edge of a floor roof, or formwork for a floor or other walking/working surface which changes location as additional floor, roof, decking, or formwork sections are placed, formed or constructed. A leading edge is considered to be an unprotected side and edge during periods when it is not actively and continuously under construction.

Lifeline means a component consisting of a flexible line for connection to an anchorage at one end to hang vertically or for connection to anchorages at both ends to stretch horizontally and which serves as a means for connecting other components of a personal fall arrest system to the anchorage.

Opening means a gap or void 30 inches or more high and 18 inches or more wide, in a wall or partition, through which employees can fall to a lower level.

Personal fall arrest system means a system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, a body belt or body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these. As of January 1, 1998, the use of a body belt for fall arrest is prohibited.

Positioning device system means a body belt or body harness system rigged to allow an employee to be supported on an elevated vertical surface, such as a wall, and work with both hands free while leaning.

Qualified person means one with a recognized degree or professional certificate and extensive knowledge and experience in the subject field who is capable of design, analysis, evaluation and specifications in the subject work, project, or product.

Retractable lifeline means a fall arrest device that allows free travel without slack rope, but locks instantly when a fall begins.

Rope grab means a deceleration device which travels on a lifeline and automatically, by friction, engages the lifeline and locks so as to arrest the fall of an employee. A rope grab usually employs the principle of inertial locking, cam/level locking, or both.

Safety-monitoring system means a safety system in which a competent person is responsible for recognizing and warning employees of fall hazards.

Self-retracting lifeline/lanyard means a deceleration device containing a drum-wound line which can be slowly extracted from, or retracted onto, the drum under slight tension during normal employee movement, and which, after onset of a fall, automatically locks the drum and arrests the fall.

Snap hook means a connector comprised of a hook-shaped member with a normally closed keeper, or similar arrangement, which may be opened to permit the hook to receive an object and, when released, automatically closes to retain the object. Snap hooks are generally one of two types:

## Fall Protection Procedure Policy

- The locking type with a self-closing , self-locking keeper which remains closed and locked until unlocked and pressed open for connection or disconnection; or
- The non-locking type with a self-closing keeper which remains closed until pressed open for connection or disconnection. As of January 1, 1998, the use of a non-locking snap hook as part of personal fall arrest systems and positioning device systems is prohibited

Toe-board means a low protective barrier that shall prevent the fall of materials and equipment to lower levels and provide protection from falls for personnel

Walking/Working surface means any surface, whether horizontal or vertical on which an employee walks or works, including, but not limited to, floors, roofs, ramps, bridges, runways, formwork and concrete reinforcing steel but not including ladders, vehicles, or trailers, on which employees must be located in order to perform their job duties

Warning line system means a barrier erected on a roof to warn employees that they are approaching an unprotected roof side or edge, and which designates an area in which roofing work may take place without the use of guardrail, body belt, or safety net systems to protect employees in the area.

Work area means that portion of a walking/working surface where job duties are being performed.

## Stairway and Ladder Safety Procedure Policy



### General Safety Requirements

- Ladders used with scaffolds are governed by the OSHA scaffold standard and the procedure policy for scaffolds found within this corporate manual.
- Stairway or ladder will be provided whenever there is a break in elevation of 19" or more.
- Double ladder will be used when there is no other means of access for 25 or more employees or when there is two way traffic.
- Landings will be clear and free of debris.

# Stairway and Ladder Safety Procedure Policy

## Stairway Safety Requirements

- Project supervision will ensure that at least twenty inches of clearance exists on any platform when a stairway leads up to a doorway such as temporary field offices.
- Metal pan stairs will be poured immediately, temporarily filled or effectively closed off until the stair can be poured or otherwise filled.
- Stairs with four or more risers will have at least one handrail.
- Screens, netting or mesh will be provided when tools, material, equipment, etc. can fall from the stairway and/or platforms.
- Handrails and guardrails will be able to support 200 pounds.
- The height of a handrail will be installed between 37" to 30" from top of tread, unless the handrail is also acting in the capacity of a guardrail, then 37"-36" from the top of the tread.
- Rails will not be able to cause cuts, punctures or snagging of employees.
- Rails will not project beyond the top step so as not to cause projection hazard.
- A minimum of 3" clearance will be maintained between a handrail and the adjacent wall.

## Ladder Safety Requirements

- All ladders to be put into service will be checked beforehand to ensure that the selected ladder will be able to withstand the intended loads.
- Ladder surfaces will not cause cut, puncture or snagging hazards.
- Fixed ladders will have fall protection if the length of travel is greater than 24 feet.
- Portable ladders will extend at least three feet from landing level or a solid grasping device will be provided.
- All ladders will be maintained free from grease, oil or any other slipping hazards.
- The user of the ladder will ensure he/she is provided with a stable and level surface.
- Barricades will be provided if a ladder is located in a busy area or where it may be displaced.
- Ladders will not be moved, shifted or extended while in use.
- Ladders will be non-conductive type if located near any source of electrical energy.
- The top step is not to be used as a step.
- A Competent person will inspect ladders on a periodic basis or after any occurrence that could have affected safe use.
- Defective ladders will be taken out of use and replaced immediately.
- The user must face the ladder.
- At least one hand will be in contact with the ladder at all times (three point contact).
- No load or object will be transported by the employee using a ladder.

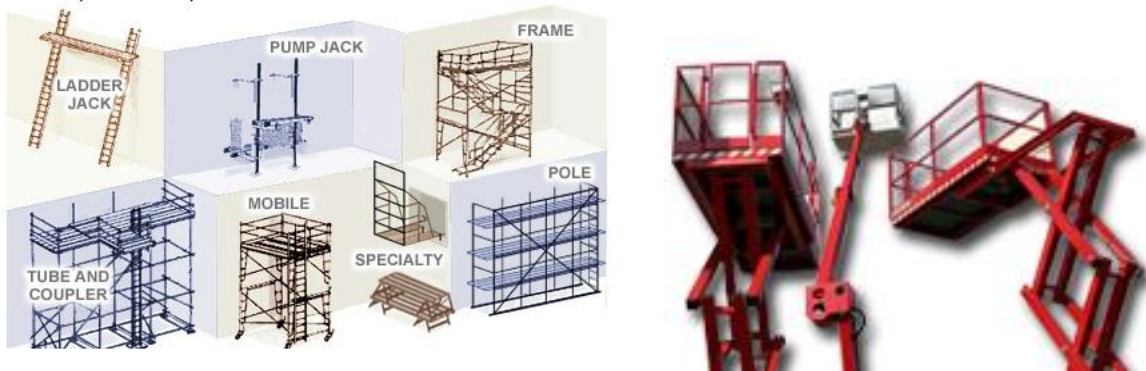
# Stairway and Ladder Safety Procedure Policy

## Training Requirements

Each Bamco, Inc. project site team will designate at least one competent person to train the employees in the nature of hazards associated with stairs and ladders and:

- ✓ The OSHA Subpart X Standard
- ✓ Safe and unsafe practices
- ✓ Proper construction, use, handling and placement
- ✓ Maximum intended loads
- ✓ Fall Protection systems
- ✓ Retraining will be provided as necessary

## Scaffold and Aerial Lift Safety Procedure Policy



The Scaffold regulations are found at 29 CFR 1926.450-.454 and should be followed by all Bamco, Inc. personnel. This section of the OSHA Standards is also commonly referred to as Subpart L. The requirements for Scaffolds within Subpart L are divided into five sections:

- **Scope and application** – This rule applies to all scaffolds used in construction, alteration, repair (including painting and decorating), and demolition.
- **General requirements** – Requirements for capacity, construction, access, use, fall protection, and falling object protection when working on scaffolds.
- **Additional requirements** – Pinpoints specific types of scaffolds in use and applies additional requirements for working safely with them.
- **Aerial lifts** – Includes safety requirements for extensible boom platforms, aerial ladders, articulating boom platforms, vertical towers, and a combination of any such devices.
- **Training** – Provides specific training requirements for: employees who work on scaffolds and employees who assemble, disassemble, move, operate, repair, maintain, or inspect scaffolds. Retraining is covered.

Remember to follow the OSHA Standard as well as the policy statements within this section. In addition, all employees engaged in contract work within the five boroughs of New York will comply with Chapter 33 of the New York City Building Code and all local laws pertaining to scaffold safety and training requirements.

## Scaffold and Aerial Lift Safety Procedure Policy

A scaffold is defined as any temporary elevated platform constructed of wood, metal, or a combination and its supporting structure used in construction or maintenance as an employee work platform and/or staging area for materials.

### GENERAL REQUIREMENTS:

- Designed to support at least 4 times the anticipated weight of workers and materials.
- Suspension scaffolds designed for a working load of 500 pounds should utilize no more than 2 workers at a time. Suspension scaffolds designed for a working load of 700 pounds should have no more than 3 workers at a time.
- Safe and convenient means of access to the working platform level must be provided. This may be a portable or fixed ladder, a ramp or runway, or a stairway.
- Footings or anchorage must be level, sound, rigid, and capable of carrying the maximum intended load without settling or displacement.
- Brace poles, legs or uprights prevent swaying and displacement.
- Unstable objects such as barrels, boxes, loose bricks, or concrete blocks are not to be used to support scaffolds or planks.
- No scaffold shall be erected, moved, dismantled, or altered except under the supervision of competent personnel.
- The use of shore or lean-to scaffold is prohibited.
- When work is being done below a scaffold, overhead protection must be provided no more than 9 feet above the working platform. It must be made of planking or other strong material.
- Any scaffold or component of a scaffold that is weakened or damaged must be replaced or repaired immediately.
- Slippery conditions on scaffolds must be eliminated as soon as they occur.
- All load carrying timber member of scaffolds shall be a minimum of 1500 fiber (stress-grade) construction grade lumber.
- Wire, synthetic, or fiber rope should be capable of supporting at least 6 times the rated load and should be inspected before each use.



## **Scaffold and Aerial Lift Safety Procedure Policy**

### **Working Platform Construction**

Platforms, on all working levels, will be fully decked between the front uprights and the guardrail supports.

The space between planks, and the platform and uprights, will not be more than one inch wide. Exceptions are made when Tully shows that a wider space is necessary.

Platforms and walkways will be at least 18 inches wide except that ladder jack, top plate bracket, and pump jack scaffolds will be at least 12 inches wide.

If work areas are so narrow that and walkways can't be 18 inches wide, they must be as wide as possible and employees will be protected from falls by guardrails and/or personal fall arrest systems.

The front edge of platforms will not be more than 14 inches from the face of our work unless guardrails are erected along the front edge and/or a personal fall arrest system is being used.

The maximum distance from the face for plastering and lathing work is 18 inches.

The ends of our platform, unless cleated or somehow restrained, will extend over the center line of its support at least six inches, except each end of a platform:

- (1) 10 feet or less in length will not extend over its support more than 12 inches,
- (2) or for greater than 10 feet in length, will not extend over its support more than 18 inches, unless it:

Is designed to support workers and/or materials without tipping; or has a guardrail to block employee access to the platform end.

### **Supported Scaffolds**

For every four feet a scaffold is high, it will be at least one foot wide. If it is not, it will be protected from tipping by tying, bracing, or guying per the OSHA standards.

Supported scaffolds will sit on base plates and mud sills or other steady foundations.

Objects, such as blocks of wood or buckets, will not be used to support scaffolds or be used as working platforms.

Supported scaffold poles, legs, posts, frames, and uprights will be plumb and braced to prevent swaying and movement.

All scaffolds will be tagged by a the competent person and inspected daily. Green tags will indicate a fully compliant scaffold-fall protection not required. Yellow tags will indicate that fall

## Scaffold and Aerial Lift Safety Procedure Policy

protection is required. Red tags indicate that the scaffold is not complete and not suitable for use.

### Suspension Scaffolds

The inboard ends of suspension scaffold outriggers will be stabilized by bolts or other direct connections to the floor or roof deck or stabilized by counterweights.

Bamco's competent person will check the connections before we use a suspension scaffold.

Counterweights will be secured by mechanical means to the outrigger beams. They will not be made of flowable material such as sand or gravel, or construction materials such as masonry units.

Suspension ropes will be inspected by Bamco's competent person prior to each work shift and after every occurrence which could affect a rope's integrity.

Employees are to report any of the following "rope" problems to their Supervisor:

- ✓ Any physical damage which doesn't allow the rope to do what it is supposed to do or makes it weaker.
- ✓ Kinks that might cause a problem during tracking or wrapping around the drum.
- ✓ Broken wire stands.
- ✓ Abrasions, corrosion, scrubbing, flattening or peening causing loss of more than one-third of the original diameter of the outside wires.
- ✓ Evidence that the secondary brake was activated during an over speed condition and has engaged the suspension rope.

Gasoline-powered equipment and hoists will not be used on suspension scaffolds.

Gears and brakes of power-operated hoists used on suspension scaffolds will be enclosed to prevent them from swaying when necessary as determined by Bamco's competent person.

Access to and between scaffold platforms more than two feet above or below the point of access will be made by:

Portable ladders, hook-on ladders, attachable ladders, scaffold stairways, stairway-type ladders (such as ladder stands), ramps, walkways, integral prefabricated scaffold access, or equivalent means; or by direct access from another scaffold, structure, personnel hoist, or similar surface.

## Scaffold and Aerial Lift Safety Procedure Policy

### Fall Protection

All personal fall arrest systems used on scaffolds must meet the requirements of 1926.502(d) and must be attached by lanyard to a vertical or horizontal lifeline or scaffold structural member. When used, vertical and horizontal lifelines and lanyards must meet the requirements of 1926.452(g) (3).

When selected for fall protection, guardrail systems must:

- ✓ Be installed along all open sides and ends of platforms.
- ✓ Be installed before use of the scaffold.
- ✓ Meet the physical requirements of 1926.451(g) (4).
- ✓ Guardrail top-rails must be between 38 and 45 inches high.
- ✓ Screens and mesh, when used, will extend from the top edge of the guardrail system to the platform, along the entire opening between the supports.
- ✓ Steel or plastic banding cannot be used as a top-rail or mid-rail.
- ✓ Cross-bracing is acceptable in place of a rail, but it must meet the requirements of 1926.452(g) (4) (xv). This is not the policy for any project within the five boroughs of New York City. Standard rails must be installed as well as the cross-bracing.

### Falling Object Protection

While working on scaffolding, the employee will be provided with not only hard hats, but additional protection from falling hand tools, debris, and other objects above them. This is usually done by installing equipment that contains or deflects the objects such as:

- Toe boards, screens, or guardrail systems; or
- Debris nets catch platforms, or canopy structures.

When the objects are too large or heavy for the above listed measures to work, workers above will secure the objects away from the edge of the surface from which they could fall.

Where there is a danger of tools, materials, or equipment falling from a scaffold and striking fellow employees below you, your employer must use barricades or toe-boards to protect them.

Where tools, materials, or equipment are piled higher than the top of the toe-board, paneling, screening, a guardrail system with openings small enough to prevent passage of objects, or canopy structures, debris, nets, or catch platforms will be erected.

# Scaffold and Aerial Lift Safety Procedure Policy

## Competent Person

Scaffolds will be erected, moved, dismantled, or altered only under the supervision and direction of a qualified competent person. Such activities shall be performed only by experienced and trained employees selected for such work by the competent person.

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

All scaffolds will be inspected by a Competent Person prior to and during their erection. Daily inspections will be made by the Competent Person, prior to any employee accessing the scaffold to perform work. Special inspections will be made by the Competent Person, when circumstances warrant such as:

- ✓ High Winds
- ✓ Freeze/Thaw Conditions
- ✓ Heavy Rains
- ✓ Snow/Sleet
- ✓ Structure Modifications

Subcontractors will identify their scaffold competent person prior to erecting any scaffold.

## Load Capacity

All scaffolds must be capable of supporting at least four times the maximum intended load. The maximum intended load is the total load of all persons, equipment, tools, materials, transmitted loads, and other loads reasonably anticipated to be applied to a scaffold or scaffold component at anyone time.

## Lumber Standards

All wooden load carrying components of scaffold framing must be a minimum of 1,500 fiber construction grade lumber. All dimensions are nominal sizes as provided in the American Lumber Standards. When rough sizes are noted, only rough or undressed lumber of the size specified will satisfy minimum requirements.

## Planking

All planking must be 2 x 10 inch scaffold grade or equivalent, as recognized by approved grading rules for the specific of wood used. Laminated planking that provides the equivalent strength of scaffold grade planking is also suitable.

# Scaffold and Aerial Lift Safety Procedure Policy

## Training Requirements

All employees who perform work on a scaffold will be trained by a person qualified (Competent Person) in the subject matter to recognize the hazards associated with the type of scaffolding being used. Training will also cover procedures to control or minimize those hazards. Training shall also include the seriousness of scaffold hazards such as

- Falls
- Unsafe Access
- Falling Objects
- Electrocutation
- Structure Collapse
- 

## Retraining

When Bamco, Inc. has reason to believe that an employee lacks the skill or understanding needed for safe work involving the erection, use or dismantling of scaffolds, the employer shall retrain such employee so that the prerequisite proficiency is regained. Retraining is required in at least the following situations:

1. Where changes at the worksite present a hazard about which an employee has not been previously trained; or
2. Where changes in the types of scaffolds, fall protection, falling object protection, or other equipment present a hazard about which an employee has not been previously trained; or
3. Where inadequacies in an affected employees work involving scaffolds indicate that the employee has not retained the requisite proficiency.

## Aerial Lifts

Aerial lifts include the following types of vehicle-mounted aerial devices used to elevate personnel to job sites above the ground: extensible boom platforms, aerial ladders, articulating boom platforms, and vertical towers.

It is the company's policy that all aerial lifts will be considered scaffolds and must comply with general company policy with regards to scaffolds and specific OSHA requirements for each type of aerial lift as well as any recommendations of the manufacturer of the device. This includes formalized and documented training for the particular type of aerial lift to be used on a site. No modifications to AWP will be done with out the written consent of the manufacture.

All employees will implement a personal fall arrest system when using aerial lifts, only retractable lanyards may be used as a connecting device. Employees will be protected with a standard guardrail system when using scissor lifts

## Powered Industrial Trucks

**1. OSHA References:** 29 CFR 1926.602, REF: 29 CFR 1910.126

**B. General:** These procedures will be followed by all Bamco, Inc employees who drive powered industrial trucks will follow these procedures. For additional information, employees should consult the above reference OSHA standard and Client procedures.

1. All Powered Industrial Trucks will be inspected daily by the operator, prior to use. Discrepancies will be noted and vehicles will not be operated until repairs are made.
2. Lift trucks, stacks etc. will have the rated capacity clearly posted on the vehicle so as to be clearly visible to the operator.
3. Only trained and certified personnel will be able to operate Powered Industrial trucks.(employers is required to certify all authorized employees regarding competency on all types of equipment)
4. If two or more trucks in unison lift a load, the total load carried by any one truck shall not exceed its load.
5. All Powered Industrial Trucks used will meet the inspection, design, construction, stability, maintenance and operations as stated in ANSI B56.1-1969.

**C. Training Requirements:** Bamco, Inc will have a qualified trainer that has the knowledge and ability to teach and evaluate operators certify all employees who operate a powered industrial truck have been trained in accordance with 29 CFR 1910.178 requirements, which include: **(each certification will list Operators name, date trained, date evaluated, and the name(s) of the Trainer & Evaluator, as well as the equipment the employee is authorized to operate)**

1. Formal instruction (lecture, discussion, videos, & written materials)
2. Practical exercises (instructor demonstrations & trainee exercises)
3. An evaluation of operators' performance in the workplace. (Critique) monoxide or diesel exhaust;
23. Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operations.

**E. REFRESHER TRAINING:** Bamco, Inc will provide refresher training to the operator every three years or;

1. The operator has been observed operating the vehicle in an unsafe manner.
2. The operator has been involved in a near miss incident.
3. The operator has received an evaluation that reveals that the operator is not operating the truck safely.
4. The operator is assigned to operate a different truck.
5. A condition in the workplace has changed.

## Powered Industrial Trucks

### 2. SAFE OPERATING PROCEDURES:

#### A. TRUCK OPERATIONS

1. **Standing:** Trucks shall not be driven up to anyone standing in front of a bench or other fixed object.
  2. **Raised loads:** No person shall be allowed to stand or pass under the elevated portion of any truck, whether loaded or empty.
  3. **Passengers:** Unauthorized personnel shall not be permitted to ride on powered industrial trucks. A safe place to ride shall be provided where riding of trucks is authorized.
4. **Keep arms in:** The employer shall prohibit arms and legs from being placed between the up rights of the mast or outside the running lines of the truck.
5. **Unattended Trucks:**
- a) When a powered industrial truck is left unattended, load engaging means shall be fully lowered, controls shall be neutralized, power will be shut off, and brakes set. Wheels shall be blocked if the truck is parked on an incline.
  - b) A powered industrial truck is unattended when the operator is 25 ft. or more away from the vehicle, which remains in his/her, view, or whenever the operator leaves the vehicle and it is not in his/her view.
  - c) When the operator of an industrial truck is dismounted and within 25 ft. of the truck still in his/her view, the load engaging means shall be fully lowered, controls neutralized, and the brakes set to prevent movement.
  - d) **Platforms:** A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, or platform or freight car. Trucks shall not be used for opening or closing freight doors.
  - e) **Wheel Blocks:** Brakes will be set and wheel blocks shall be in place to prevent movement of trucks, trailers, or railroad cars while loading or unloading. Fixed jacks may be necessary to support a semi-trailer during loading or unloading when the trailer is not coupled to a tractor. The flooring of trucks, trailers and railroad cars shall be checked for breaks and weakness before they are driven onto.
  - f) **Headroom:** **There shall be sufficient headroom under overhead installations, lights, pipes, sprinkler systems, etc.**
6. **Overhead Guard:** An overhead guard shall be used as protection against falling objects. It should be noted that an overhead guard is intended to offer protection from the impact of small packages, boxes, bagged material, etc., but not to withstand the impact of a

## Powered Industrial Trucks

falling capacity load.

7. **Backrests:** A load backrest extension shall never be used whenever necessary to minimize the possibility of the load or part of it from falling rearward.

8. **Approved trucks:** Only approved industrial trucks shall be used in hazardous locations.

9. **Personnel Lifting:** Whenever a truck is equipped with vertical only, or vertical and horizontal controls within the lifting carriage or forks for lifting personnel, the following additional precautions shall be taken for the protection of the personnel being elevated.

a) Use of a safety platform firmly secured to the lifting carriage and/or forks.

b) Means shall be provided whereby personnel on the platform can shut off the power to the truck.

c) Such protection from falling objects, as indicated necessary by the operating conditions should be provided.

d). **Fire Exits:** Fire aisles, access to stairways, and fire equipment shall be kept clear.

### B. Traveling

1. **Traveling:** All traffic regulations shall be observed, including authorized plant speed limits. A safe distance shall be maintained approximately three trucks lengths from the truck ahead, and the truck shall be kept under control at all times.

2. **Right of Way:** The right of way shall be yielded to ambulances, fire trucks, or other vehicles in emergency situations.

3. **Passing:** Other trucks traveling in the same direction at intersections, blind spots, or other dangerous locations shall not be passed.

4. **View Obstructions:** The driver shall be required to slow down and sound the horn at cross isles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.

5. **Railroad Crossings:** Railroad tracks shall be crossed diagonally whenever possible. Parking closer than 8 feet from the center railroad tracks is prohibited.

6. **Clear View:** The driver shall be required to look in the direction of, and keep a clear view of the path of travel.



## Powered Industrial Trucks

7. **Grades:** Grades shall be ascended or descended slowly.
8. **Stopping:** Under all traveling conditions the truck shall be operated at a speed that will permit it to be brought to a stop in a safe manner.
9. **Horseplay: STUNT DRIVING AND HORSEPLAY SHALL NOT BE PERMITTED OR TOLERATED.**
10. **Wet Floors:** The driver shall be required to slow down for wet and slippery floors.
11. **Loose objects:** Running over loose objects on the roadway surface shall be avoided.
12. **Turning:** While negotiating turns, speed shall be reduced to a safe level by means of turning the hand steering wheel in a smooth, sweeping motion. Except when maneuvering at a very slow speed, the hand steering wheel shall be turned at a moderate, even rate.

### C. LOADING

1. **Unstable Loads:** Only stable or safely arranged loads shall be handled. Caution shall be exercised when handling off-center loads, which cannot be centered.
2. **Capacity:** Only loads within the stated capacity of the truck shall be handled.
3. **Long Loads:** Long or high (including multiple-tiered) loads, which may affect capacity, shall be adjusted.
4. **Attachments:** A truck equipped with attachments shall be operated as partially loaded trucks when not handling a load.
5. **Load Position:** A load engaging means shall not be placed under the load as far as possible; the mast shall be tilted backwards to stabilize the load.
6. **Tilting:** Extreme care shall be used when tilting the load forward backward, particularly when high tiering. Tilting forward with load engaging means elevated shall be prohibited except to pick up a load. An elevated load shall not be tilted forward except when the

## Powered Industrial Trucks

load is in a deposit position over a rack or stack. When stacking or tiering, only enough backward tilt to stabilize the load shall be used.

### 3. OPERATION OF THE TRUCK

1. **Operation:** If at any time a powered industrial truck is found to be in need of repair, defective or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition.

2. **Fuel:** Fuel tanks shall not be filled while the engine is running.

Spillage shall be avoided.

3. **Spillage:** Spillage of oil or fuel shall be carefully washed away or completely evaporated and the fuel tank cap replaced before starting engine.

4. **Leaks:** No truck shall be operated with a leak in the fuel system until the leak has been corrected.

5. **Open Flames:** Open flames shall not be used for checking electrolyte levels in storage batteries or gasoline level in fuel tanks.

## Rigging Procedure Policy



# Rigging Procedure Policy

## 17.1 General Requirements and Responsibilities

1. All rigging work must be performed by or under the continuous supervision of a Certified Rigger.
2. All crane movements will directed be a Certified Signal Person.
3. With the exception of a Critical Pick a Rigging Foreman may be designated by a Certified Rigger. The Rigging Foreman shall have the appropriate qualifications set forth in RCNY Chapter 9:
  - a) the licensee and the rigging foreman at the work site are in frequent and direct contact with each other during the course of the rigging operation
  - b) for work involving the use of cranes, derricks, work platforms, suspension scaffolds or other rigging setup where the safe founding or support of such equipment is a cause of concern (i.e. over sidewalks, roadways or yards where vaults or other subsurface structures exist; or where hooks or clamps are used on parapet walls to support hanging scaffolds, etc.) the licensee personally visits the work site to inspect and approve the rigging equipment founding and setup prior to commencement of rigging operations and each time the founding or support changes
1. All members of the rigging crew must be employees on the payroll of such licensee or where the license is used by the holder thereof for or on a behalf of a partnership, corporation or other business association.

## 17.2 Critical Picks:

1. The licensee must be continuously on site during critical picks and must personally perform or personally supervise all critical picks. ***Offsite supervision of critical picks is not perm***
2. For Critical Picks the licensee must personally plan the equipment set-up and operation of all rigging operations.
3. Routes for suspended loads shall be pre-planned to ensure that no employee is required to work directly below a suspended load.

## Rigging Procedure Policy

1. A Pre Task Plan must be completed prior to a pick being performed.
2. A Job Hazard Analysis must be performed prior to a pick being performed.
3. Pre Pick Meeting must be held and attended by the rigging crew.

### 17.3 Licensing Requirements per NYC Department of Building

NYC Rigging licenses are classified as follows:

- ❖ **Master Rigger:** Authorizes the holder thereof to hoist or lower any article, irrespective of weight, on the outside of any building.
- ❖ **Special Rigger:** Authorizes the holder thereof to hoist or lower any article not exceeding 2,000 pounds in weight on the outside of any building.
- ❖ **Climber or Tower Crane Rigger:** Authorizes the holder thereof to erect or dismantle a tower crane or a climber crane on a building and to use a derrick in their removal.

### 17.4 Sling Use Guidelines

The following guidelines for use of wire rope and synthetic slings were established to standardize the way in which slings are used during lifting operations, and to ensure that adequate measures are taken prior to and during a lift . These guidelines are consistent with 29 CFR 1926.251: Rigging Equipment for Material Handling, and OSHA's guidance document on safe sling use. This document addresses wire and synthetic sling training, condition evaluations, use and maintenance, and storage. These Guidelines shall be revised and amended as necessary based on regulatory changes, best available technologies, and Site observations.

### 17.5 Training

All workers whose job responsibilities include the rigging of loads shall be trained in the visual evaluation and recognition of sling deficiencies, and shall have the authority to remove such slings from service. Only those workers who are trained, consistent with their job function, in accordance with applicable regulation, labor union training programs, or by each contractor shall be permitted to select the type of sling to be used, and method of attachment best suited to safely handle the load to be lifted.

1. On a daily basis, or as required by regulation, the foreman of each rigging crew, who is also trained in the visual evaluation and recognition of sling deficiencies, and has the authority to remove such slings from service, shall ensure that all sling users are visually evaluating each sling prior to use.
2. The foreman shall maintain a daily record of such evaluations, and maintain the record at the worksite.

# Rigging Procedure Policy

## 17.6 Use and Maintenance

Slings shall be selected, used and maintained in accordance with the manufacturers' specifications. Slings shall not be used if damaged or defective (see above), or in excess of its rated load at a given rigging configuration.

If a synthetic or wire rope sling is to be left on a load, the load cannot be placed directly on the ground or be stacked in such a manner causing the sling to be abraded, crushed, or deformed. Loads with slings attached must be supported with sills to prevent sling damage.

In order to protect the sling from deformation or abrasion during a lift, wire and synthetic sling softeners shall be required when at a minimum:

1. The point of sling-to-load contact is at a sharp (90) degree right angle against an edge or surface;
2. The load can deform or abrade the sling;
3. The load needs to be protected from damage during the lift;
4. Softening is recommended by the sling manufacturer.

## 17.7 Condition Evaluations

Each sling shall be required to be inspected by way of a pre-use daily visual evaluation, which shall include, but not be limited to the following:

1. Slings shall have permanently affixed tags stating the following:
  - a. The rated load for the types of hitches, and the angle upon which they are based,
  - b. The diameter or size, and
  - c. The name or trademark of the manufacturer.
2. Slings shall be removed from service if the manufacturer's load capacity identification label is missing or illegible.
3. Additional daily evaluations may be required based on sling use, operating conditions, and loading.
4. Based upon the evaluation, any damaged or defective rigging, rigging that has been over-exposed to environmental elements (rain, snow, ice, prolonged sunlight), or rigging that was sitting in water, snow, or ice shall be immediately removed from service.
  1. Chains will be prohibited as rigging materials for any lifts.
  2. Hoisting hooks shall be of the safety latch-type.
  3. Crane hooks with cracks or with deformation of throat opening more than 15 percent in excess of normal opening or more than 10-degree twist from plane of unbent hook shall be removed from service.
  4. Ropes shall be inspected for proper lubrication, excessive wear, broken strands, and proper weaving.
  5. Slings will be inspected daily. Any wears showing deformation or damage will be permanently removed.
  6. "Free rigging" will not be permitted for any reason.
  7. Fixtures are usually attached to wire rope by the use of wire rope clips. The clips must be attached with the inside curve of the U-bolt against the dead, or short end of the wire rope, and flat clip (saddle) against the live, or long end of the wire rope.

## Rigging Procedure Policy

8. Each day before being used, wire rope slings, alloy steel chain slings, metal mesh slings, and natural and synthetic fiber rope slings, and all fastenings and attachments shall be inspected for damage or defects by a qualified person.

### 17.8 Synthetic Slings:

Make a thorough inspection of slings and attachments. Items to look for include:

1. Missing or illegible sling identification,
2. Acid or caustic burns,
3. Melting or charring of any part of the sling,
4. Holes, tears, cuts, or snags,
5. Broken or worn stitching in load bearing splices,
6. Excessive abrasive wear,
7. Knots in any part of the sling,
8. Discoloration and brittle or stiff areas on any part of the sling,
9. Pitted, corroded, cracked, bent, twisted, gouged, or broken fittings, and
10. Other conditions that cause doubt as to continued use of a sling.

### 17.9 Wire Rope Slings:

#### ***Wire rope clips and hooks:***

1. Do not use knots to fabricate your own slings,
2. Do not use wire rope clips to fabricate wire rope slings, except where the application precludes the use of prefabricated slings and where the sling is designed for the specific application by a qualified person,
3. Install wire rope clips according to the recommendations of the manufacturer or a qualified person,
4. Do not use slings made with wire rope clips in a choker hitch,
5. Use only wire rope clips made from drop-forged steel of the single-saddle (U-bolt) or double-saddle type clip,
6. Do not use malleable cast iron clips to fabricate slings,
7. Refer to the clip manufacturer for spacing, number of clips, and torque values,
8. Attach U-bolts to wire rope clips with the U-bolt over the dead end of the rope and the live rope resting in the clip saddle,
9. Tighten clips evenly to the recommended torque before and after the initial load is applied,
10. Regularly inspect clips to ensure that the recommended torque remains, and
11. Inspect clips periodically for wear, abuse, or damage.

### 17.10 Inspection:

In order to determine proper time for replacement, a continuing inspection record shall be maintained for hoisting ropes. Conditions such as the following shall be reason for replacement:

## Rigging Procedure Policy

1. In running ropes, 6 randomly distributed broken wires in one rope lay, or 3 broken wires in one strand in one lay.
2. Wear of 1/3 the diameter of outside individual wires.
3. Kinking, crushing, bird caging, or other damage resulting in distortion of the rope structure.
4. In stranding ropes, more than 2 broken wires in one lay in sections beyond end connections or more than one broken wire at an end connection.
5. Reduction of rope diameter below nominal diameter due to loss of core support, internal or external corrosion, or wear of outside wires.

### 17.11 Rigging Practices

1. Ensure that slings are hitched in a manner providing control of the load,
2. Ensure that sharp edges in contact with slings are padded with material of sufficient strength to protect the sling,
3. Ensure that slings are shortened or adjusted only by methods approved by the sling manufacturer or a qualified person,
4. Ensure that, during lifting with or without a load, personnel are alert for possible snagging,
5. Ensure that, in a basket hitch, the load is balanced to prevent slippage,
6. When using a basket hitch, ensure that the legs of the sling contain or support the load from the sides, above the center of gravity, so that the load remains under control,
7. Ensure that, in a choker hitch, the choke point is only on the sling body, never on a fitting,
8. Ensure that, in a choker hitch, an angle of choke less than 120 degrees is not used without reducing the rated load,
9. Ensure that slings are not constricted, bunched, or pinched by the load, hook, or any fitting,
10. Ensure that the load applied to the hook is centered in the base (bowl) of the hook to prevent point loading on the hook, unless the hook is designed for point loading,
11. Ensure that an object in the eye of a sling is not wider than one half the length of the eye,
12. Ensure that the sling is allowed to rotate when hand-tucked slings are used in a single leg vertical lift application. Minimize sling rotation,
13. Do not shorten or lengthen a sling by knotting or twisting,
14. Do not rest loads on the sling,
15. Do not pull a sling from under a load when the load is resting on the sling,
16. Do not drag slings on the floor or over abrasive surfaces,
17. Do not use slings made with wire rope clips as a choker hitch, and
18. Do not allow shock loading.



## **Rigging Procedure Policy**

### **17.12 Sling Storage**

All slings shall be stored in accordance with the manufacturer's specifications.

**At a minimum, all slings shall:**

1. When not in use be stored in a secure, weather tight enclosure or storage bin;
2. Be stored in such a manner to prevent crushing, deformation, or abrasion;
3. Be stored in locations where they cannot be damaged or create a trip hazard for workers.

## ELECTRICAL SAFETY POLICY



## ELECTRICAL HAZARDS

### Scope and Application

Use of electricity on the jobsite poses serious hazards, with employees potentially being exposed to such dangers as electric shock, electrocution, fires and explosions. Recognizing the importance and widespread use of the National Electrical Code (NEC) in promoting electrical safety, OSHA has incorporated those parts of the NEC that relate to employee safety on construction sites directly into its' Standards.

### The OSHA regulations are divided into four parts:

- 1) Installation safety requirements (rules concerning electric equipment and installations used to provide electric power and light on jobsites).
- 2) Safety related work practices (hazards arising from use of electricity at jobsites and hazards arising from accidental contact, direct or indirect by employees, with all energized lines above or below ground passing through or near the jobsite)
- 3) Safety related maintenance and environmental considerations.
- 4) Safety requirements for special equipment.

# ELECTRICAL SAFETY POLICY

- **Electric Power:** Electricity flowing in well-designed channels like insulated copper wires is harmless but let it flow through the human body and dire results may follow. Low voltage (120 volts or less) does not eliminate danger of **severe** shock. The nature of contact, duration of exposure and resistance of body are all factors determining severity of shock. Muscular spasm like a hand that can't let go, often prolongs exposure. Damage to tissue depends on length of exposure to the current. If the body is well grounded like that of a person standing on damp ground or in wet concrete there is extreme vulnerability. Higher voltages (600 volts and higher) present additional and potentially undetectable hazards that lower voltages do not. They have the ability to penetrate materials that are otherwise perceived to be insulating materials and at levels in the order of 5,000 volts and higher can actually arc across open space just as lightning does.
- **Ground Fault Circuit Interrupters:** All 120 volts single-phase 15 and 20 ampere receptacle outlets which are not a part of the permanent wiring of the structure and which are in use by employee shall have approved GFCI's. A program of testing and documentation of testing for the GFCI system should be implemented. Upon initial completion or extension of the temporary power system, a qualified person should test each power receptacle for proper polarity and GFCI operation using a simple, commercially available tester. The results of this commissioning should be documented in some convenient format. Afterward, routine monthly or semi-monthly (depending on the nature of the project) tests should be conducted during normal safety walkthroughs. All of Bamco, Inc. projects are to be 100% GFCI compliant. An assured grounding program may be used in addition to the GFCI Program.
- **Electric Tools :** All portable electric tools such as saws, hammers and drills must bear the label of a nationally Certified Testing Agency such as Underwriters Laboratories, CSA, ETL, or the like. This helps insure that the equipment presents no hazards to the user based on its inherent design. This includes proper grounding of exposed metal parts and adequate design of insulated parts. It is vital that dead metal parts (those not designed to carry current) be grounded. Parts are grounded only when connected to the earth by wire or cable. If, by chance, that part becomes electrified, current will flow to the ground, not through the hand that touched it. Single phase motors should have three wire cable: two for current to motor and one (insulation GREEN) connected from motor casing in a suitable ground. Three pronged locking connectors should be used on extension cords which carry

## ELECTRICAL SAFETY POLICY

a third or ground wire. Three phases current requires fourth wire for grounding. This ground is connected to outlet of temporary wiring system which itself must be grounded to water pipe or copper rod driven into the earth. Certain small electric tools may only provide a two pronged connector as supplied from the factory. These are categorized as "double insulated". However, double insulated tools should be identified by the manufacturers rating label attached to the tool not simply because only two prongs are present. The design of these items is such that no portion of the tool enclosure is metallic so a failure of internal insulation cannot energize the case and expose the user to danger. Since the safety of an electric power tool is based on its design and Lab approval, these tools must be maintained in their original condition. This includes damage to the case or housings of a tool, condition of the power cord, etc. One vital item is that the third (grounding) pin on a power plug must remain in place. If a tool is damaged severely or has the grounding pin removed from its plug positive action such as physical removal of the power plug must be taken to insure that unsafe tool cannot be used.

- **Electric Equipment:** Heavy stationary electric equipment, such as hoist motors and starters, are usually self-contained and housed in the engineer's shanty; hence hazard is confined and limited. As in case of tools, dead metal parts like housings, boxes and hoist frames must be grounded
- **Extension Cords:** Tough weatherproof insulation is necessary to withstand heavy abuse. Only round, heavy duty (type S, ST, SO, STD) are acceptable. Wheelbarrows and buggies, bricks and nails, sharp edges and kinks, oil and grease, all give extension cords a hard time and severely limit useful life. Cords also must be maintained in their original designed configuration. Any cord which is damaged or has a grounding pin removed should be positively removed from service by cutting off the male plug. Cord which have been spliced or repaired should be removed from project site. Short circuits from bared or cut wires may cause shock or fire. The gauge of wire of the cord should be sized for the designated use, but in no case less than 16 gauges. For an overall length over 100 feet one size larger should be used. All extension cord must be plugged into permanent power sources or jobsite temporary power that has proper over current and ground fault protection. Whenever an extension cord is plugged into an existing building outlet for construction work, a GCFI is required between the extension cord and the tool. All extension cords and temporary wiring shall be maintained at least 6'6" above the ground or floor. Where this is impossible these items must be protected from damage. Inspect often where damage occurs, repair or dispose.

## ELECTRICAL SAFETY POLICY

- **Temporary Wiring**

Temporary lighting must never be put on the same circuit as temporary receptacles. A problem in the receptacles circuit could cause lights to go off creating a safety hazard. Provide a separate lighting circuit for stairways and exit areas. Then other lighting may be extinguished overnight while critical lights for fire department access, etc. remain on.

- **Temporary Lighting**

Illumination levels are important for both safety and proper working conditions. Generally, the minimum illumination level in foot candles is 5. Please refer to the OSHA Code of Federal Regulations for more detailed information.

- **Lock Out- Tag Out Policy**

Bamco, Inc. will adhere to the Lock Out Tag Out Policies established on our client's projects. This includes compliance with the electrical subcontractor's program. In the event that a machinery lock out tag out program is required we will provide a site specific plan in accordance with OSHA CFR 1910.147.

# APPENDIX

## BAMCO INC. COMPANY FORMS

**SCAFFOLD ACCEPTANCE TAG**

ACCEPTED / NOT ACCEPTED	
Complete Platform	Sound, Level Flooring
Guardrails	Barricaded
Toeboards	Framing Complete
Access Ladder	
Comments:	
Signature:	
Date:	

# BAMCO inc.

## Architectural Wall Systems

2 <sup>nd</sup> Notice <input type="checkbox"/>	<b>Safety Violation Notice</b>		3 <sup>rd</sup> Notice <input type="checkbox"/>
Verbal Notice Given <b>Y or N</b>	2 <sup>nd</sup> Notice	Management Representative Notes:	
3 <sup>rd</sup> Notice Date:	Notice Date:		
	Occurrence Date:		
Employee Name/ Title:			
Project Location:			
Violation Description:			
<b>Disciplinary Action Taken:</b>			
Action Plan:			
<ol style="list-style-type: none"> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> </ol>			
Discipline (Required)	Re-Training	Tool Box Talk Development	Next Review Date

Employee Comments:

Employee Signature:

Manager Signature:



# **BAMCO inc.**

## **Architectural Wall Systems**

### Accident/Near Miss Investigation Report

Accident

Near-Miss

Report Date:	Incident Date:	Incident Time:	Name of Person Reporting Incident
Project Name		Project Location:	
Injuries: ( ) Yes ( ) No	Property Damage ( ) Yes ( ) No	Type of injury/Damage:	
Names of person(s)/worker(s) involved in incident:			
Formal claim submitted? ( ) Yes ( ) No			
To whom:			
<u>Incident details:</u>			

<u>Determining Factors:</u>			
<u>Unsafe Act</u>	<u>Unsafe Condition</u>	<u>Avoidable</u>	<u>Other</u>
Cause of loss Determination:			
Corrective Action taken:			
Disciplinary Action taken:			
Witness Names:			
1.			
2.			
3.			
4.			
Witness statement: (Attach)			

# **BAMCO inc.**

## **Architectural Wall Systems**

**SUGGESTION FOR CHANGE FORM**

To: Bamco, Inc.

ATTN: Ron Palazzo

Procedure Name \_\_\_\_\_

Procedure Number \_\_\_\_\_

SUGGESTED CHANGE:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REASON FOR CHANGE:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NAME \_\_\_\_\_ DATE \_\_\_\_\_

WORK LOCATION \_\_\_\_\_

CONTACT NUMBER \_\_\_\_\_

# BAMCO inc.

## Architectural Wall Systems

2<sup>nd</sup> Notice

### Safety Violation Notice

3<sup>rd</sup> Notice

<b>Verbal Notice Given Y or N</b>	<b>2nd Notice</b>	<b>Management Representative Notes:</b>	
3 <sup>rd</sup> Notice Date:	Notice Date:		
	Occurrence Date:		
Employee Name/ Title:			
Project Location:			
Violation Description:			
<b>Disciplinary Action Taken:</b>			
<b>Action Plan:</b>			
1.			
2.			
3.			
<b>Discipline (Required)</b>	<b>Re-Training</b>	<b>Tool Box Talk Development</b>	<b>Next Review Date</b>

Employee Comments:

Employee Signature: Manager Signature:

---

VEHICLE SAFETY INSPECTION CHECKLIST

Truck # \_\_\_\_\_

YES NO

1. HEAD LAMPS FUNCTIONING
2. DIRECTIONAL SIGNALS OK (FRONT)
3. DIRECTIONAL SIGNALS OK (REAR)
4. PARKING BREAK WORKING
5. BREAK LIGHTS WORKING
6. TIRES INFLATED WITH ADEQUATE TREAD
7. WINDSHIELD CLEAN
8. WIPERS FUNCTIONAL
9. FIRE EXTINGUISHER CHARGED AND AVAILABLE
10. SEAT BELTS AND HARNESS OPERATIONAL
11. INSPECTION STICKER CURRENT
12. MIRRORS FUNCTIONAL & CLEAN
13. BACK UP ALARMS ARE FUNCTIONING
14. HARD HAT, SAFETY GLASSES, REFLECTIVE VEST

\_\_\_\_\_  
(Employee Name)

\_\_\_\_\_  
Date

Vehicle inspections are required before each use.

Documented inspections must be performed weekly.

**This form must be returned to the Shipping Manager.**

**JHA Instructions**

The JHA shall identify the location of the work project or activity, the name of employee(s) involved in the process, the date(s) of acknowledgment, and the name of the appropriate line officer approving the JHA. The line officer acknowledges that employees have read and understand the contents, have received the required training, and are qualified to perform the work project or activity.

Blocks 1, 2, 3, 4, 5, and 6: Self-explanatory.

Block 7: Identify all tasks and procedures associated with the work project or activity that have potential to cause injury or illness to personnel and damage to property or material. Include emergency evacuation procedures (EEP).

Block 8: Identify all known or suspect hazards associated with each respective task/procedure listed in block 7. For example:

- a. Research past accidents/incidents.
- b. Research the Health and Safety Code, SDK Safety Manual, or other appropriate literature.
- c. Discuss the work project/activity with participants.
- d. Observe the work project/activity.
- e. A combination of the above.

Block 9: Identify appropriate actions to reduce or eliminate the hazards identified in block 8. Abatement measures are listed below.

- a. Engineering Controls:  
For example, ergonomically designed tools, equipment, and furniture.
- b. Substitution. For example, switching to high flash point, non-toxic solvents.
- c. Administrative Controls. For example, limiting exposure by reducing the work schedule; establishing appropriate procedures and practices.
- d. PPE (least desirable method of abatement). For example, using hearing protection when working with or close to portable machines (chain saws, rock drills, and portable water pumps).
- e. A combination of the above.

Block 10: The JHA must be reviewed and approved by a line officer.

Blocks 11 and 12: Self-explanatory.

**Emergency Evacuation Instructions**

Work supervisors and crew members are responsible for developing and discussing field emergency evacuation procedures (EEP) and alternatives in the event a person(s) becomes seriously ill or injured at the worksite.

Be prepared to provide the following information:

- a. Nature of the accident or injury (avoid using victim's name).
- b. Type of assistance needed, if any (ground, air, or water evacuation).
- c. Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks.
- d. Radio frequencies.
- e. Contact person.
- f. Local hazards to ground vehicles or aviation.
- g. Weather conditions (wind speed & direction, visibility, temperature).
- h. Topography.
- i. Number of individuals to be transported.
- j. Estimated weight of individuals for air/water evacuation.

The items listed above serve only as guidelines for the development of emergency evacuation procedures.

JHA and Emergency Evacuation Procedures Acknowledgment  
We, the undersigned work leader and crew members, acknowledge participation in the development of this JHA (as applicable) and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of each of these documents:

SIGNATURE	DATE	SIGNATURE	DATE

<b>Bamco, Inc</b> 30 Baekeland Avenue Middlesex NJ 08846 (732) 302-0889 <b>JOB HAZARD ANALYSIS (JHA)</b> For:		<b>1. WORK PROJECT/ACTIVITY:</b>	<b>2. LOCATION:</b>	<b>3. UNITS:</b>
<b>4. NAME OF ANALYST</b>		<b>5. JOB TITLE</b>		<b>6. DATE PREPARED :</b>
<b>7. TASKS/PROCEDURES</b>		<b>8. HAZARDS</b>		<b>9. ABATEMENT ACTIONS</b> Engineering* Administrative Controls * PPE
<b>1. Work area set-up, Housekeeping</b>	Pedestrians entering area Slips/Trips/falls	<ul style="list-style-type: none"> <li>Place signage to indicate hazards and PPE required while in the work area.</li> <li>Cordon off area being worked on to prevent unauthorized personnel from entering the work area.</li> <li>Review this JHA prior to starting work.</li> <li>Employees to wear ANSI approved impact resistant boots, work shirt, long pants, and safety glasses with side shields at all times.</li> <li>Ensure all personnel have been through proper site orientation.</li> <li>Assure housekeeping is performed on a daily basis and as frequently as required to eliminate any excess debris in walkways and work areas.</li> </ul>		
<b>2. Stage work area</b>	Access/Egress	<ul style="list-style-type: none"> <li>All exits and egresses will be kept clear.</li> <li>Ensure room being worked in as well as adjacent rooms and/or rooms below/above are marked off to limit / eliminate personnel from being in these areas while any potentially hazardous activities (drilling, cutting, etc.) are being conducted.</li> <li>Ensure work area is clean to eliminate hazard to workers falling over equipment or debris.</li> <li>Additional PPE may be required as per signage posted on room by owner</li> </ul>		
<b>3. Survey of area/verification of scope of work</b>	Slips / Trips / Falls / Falling Objects	1		

<p><b>4. Working from Ladders &amp; Elevated Platforms</b> Scissor Lifts Aerial lifts</p>	<p><b>Fall Hazard</b></p>	<ul style="list-style-type: none"> <li>• Cordon off area with "Yellow" "Do Not Enter" tape or orange safety cones as needed to prevent unauthorized pedestrian traffic</li> <li>• A-Frame ladder to be fully open and locking device engaged.</li> <li>• A-Frame ladders. Set on level, firm surface.</li> <li>• <b>Do Not</b> climb higher than the listed safe working Height. Maintain center of gravity between the side rails.</li> <li>• Elevated platforms will have completed handrail/guardrail system installed and chain will be secured while platform is occupied.</li> <li>• Personal fall arrest system consisting of full body harness, lanyard, and attachment point shall be utilized for all work with unprotected edges with a fall potential of 6ft or greater.</li> <li>• All workers entering lift shall have proof of training available for inspection.</li> <li>• Lift shall be inspected at the start of each day and periodically during the day. If any discrepancies are found during the inspection the lift tagged out of service and removed from the site.</li> <li>• Only electric lifts shall be utilized. <b>No</b> gas powered equipment authorized.</li> </ul>
<p><b>5. Hand &amp; Power Tools</b> Chop saws circular saws Jig Saws Wet saws Table saws Powder Actuated tools</p>	<p><b>Cuts/Lacerations</b> Slips/trips Electrocution</p>	<ul style="list-style-type: none"> <li>• Review as is drawings and conduct a scan of the surface to be penetrated to identify any possible hidden hazards.</li> <li>• Fill penetration with fire stop at the conclusion of the work.</li> <li>• Ensure all employees wear appropriate PPE (ie: safety glasses, dust masks and hard hats.</li> <li>• Inspect all tools and equipment before each use. Inspect electrical cords to ensure they are in good condition and are kept out of walkway areas to avoid trip hazards.</li> <li>• Ensure all tools are GFCI protected as required.</li> <li>• Powder actuated tools should not be left loaded or unattended.</li> <li>• All workers using powder actuated tools shall be properly trained in their use.</li> </ul>
<p><b>6. Lifting Materials</b></p>	<p><b>Cuts/Lacerations</b> Strains/Sprains</p>	<ul style="list-style-type: none"> <li>• Ensure work area is clean to eliminate hazard of workers falling over equipment or debris.</li> <li>• Keep excess debris away from work area to eliminate potential of objects from falling.</li> <li>• Utilize safe lifting material/handling procedures when moving large equipment.</li> <li>• Ensure the buddy system is utilized when lifting heavy equipment.</li> <li>• For heavy loads use mechanical means (i.e. forklift, hand truck, etc..) whenever possible.</li> </ul>

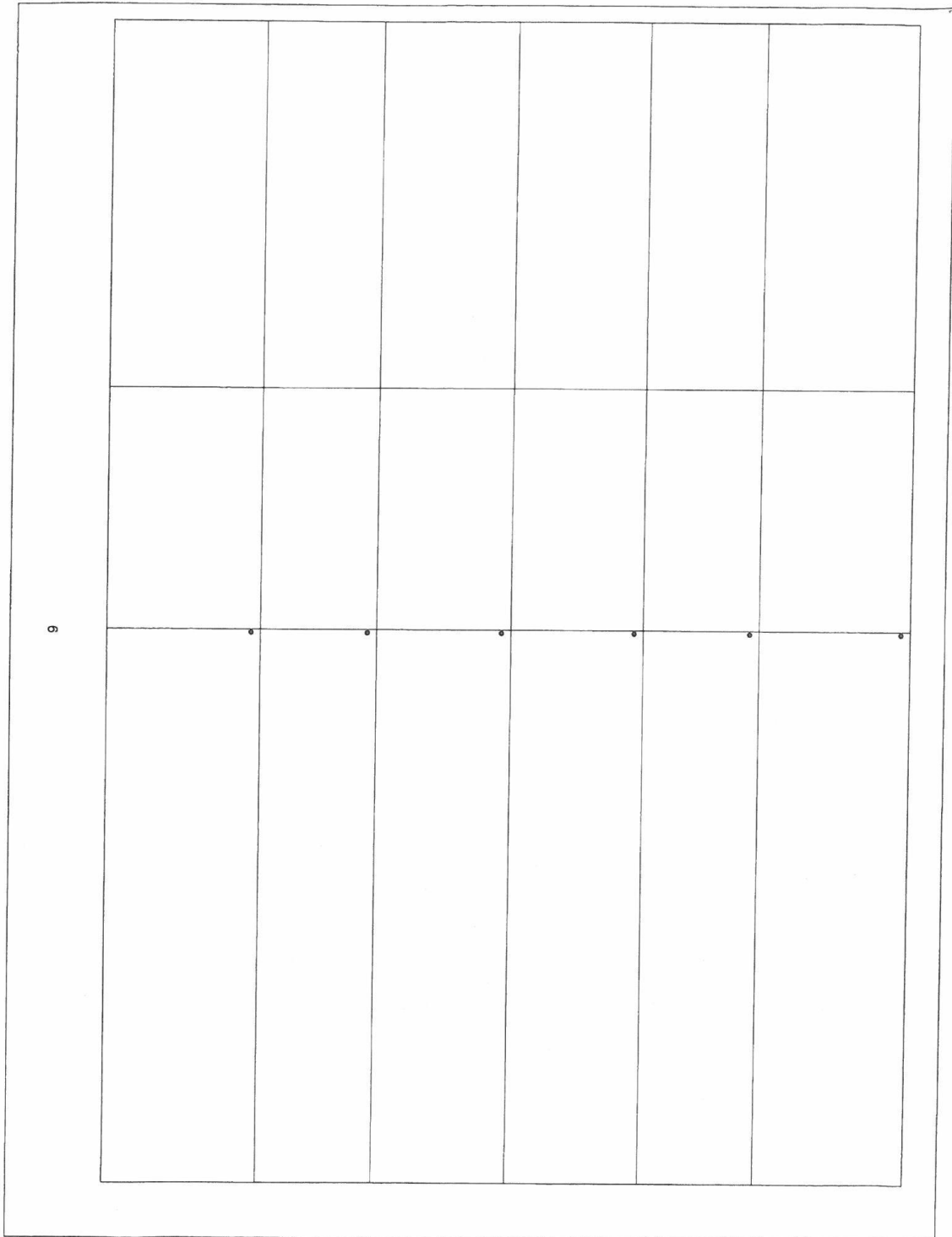


		<ul style="list-style-type: none"> <li>• Wear work gloves while handling materials.</li> <li>• Ensure proper lifting techniques are used as needed: bent knees, no awkward position used during lifting.</li> <li>• Use body support belts when available.</li> </ul>
<p><b>7. General Safety</b></p>	<p>Various</p>	<ul style="list-style-type: none"> <li>• Assure a copy of the SDK Associates Safety Manual is on-site.</li> <li>• SDK Associates appointed site safety representative will conduct all daily safety inspections per 911 for all emergencies. Foreman will discuss evacuation route and muster point with crew prior to each shift.</li> <li>• All accidents, incidents, and near misses shall be reported to the superintendent immediately.</li> <li>• Ensure housekeeping is performed on a daily basis and as frequently as required to eliminate any excess debris in walkways and work areas</li> </ul>
<p><b>8. Cutting Median seams/Glass and Aluminum</b></p>	<p>Laceration/Cuts Eyes injuries Pedestrians entering work area</p>	<ul style="list-style-type: none"> <li>• Ensure MSDS sheets are readily available on site.</li> <li>• Ensure all employees are wearing appropriate PPE such as dust masks, safety glasses and respirators if required.</li> <li>• Review as is drawings and conduct a scan of the surface to be penetrated to identify any possible hidden hazards.</li> <li>• Ensure housekeeping is performed on a daily basis and as frequently as required to eliminate any excess debris in walkways and work areas</li> <li>• Barricade area being worked on to prevent unauthorized personnel from entering the work area.</li> <li>• Inspect all tools and equipment before each use. Inspect electrical cords to ensure they are in good condition and kept out of walkway areas to avoid trip hazards.</li> <li>• Ensure all tools are GFCI protected as required.</li> </ul>
<p><b>9. Road Work (Flagging)</b></p>	<p>Pedestrians/Vehicular traffic</p>	<ul style="list-style-type: none"> <li>• Ensure all flagmen are properly trained.</li> <li>• All workers on a public roadway must be equipped with brightly colored clothing, proper flagging garments and equipment.</li> <li>• Utilize signs, signals and barricades whenever possible.</li> <li>• Barricade area of work to prevent unauthorized personnel from entering the work area. (traffic/pedestrians)</li> </ul>

10. Street Off loading (to an elevated area)	Pedestrian/Vehicular traffic Falls Electrocution	<ul style="list-style-type: none"> <li>• Ensure all workers in aerial lifts are equipped with fall protection equipment.</li> <li>• Barricade work area beneath any overhead load with yellow "Do Not Enter" tape or orange safety cones as needed to prevent unauthorized pedestrian traffic</li> <li>• Ensure a safe working distance from overhead power lines.</li> <li>• Any employees located on a public road will be equipped with brightly colored clothing or safety vest.</li> </ul>
11. Custom Mill Work operations	Eye injuries Cuts/lacerations Trips/Slips	<ul style="list-style-type: none"> <li>• Ensure workers are wearing appropriate PPE such as safety glasses, dust masks and gloves as required</li> <li>• Ensure all workers are properly trained in the use of all power tools</li> <li>• All tools will be properly guarded</li> <li>• Assure housekeeping is performed on a daily basis and as frequently as required to eliminate any excess debris in walkways and work areas.</li> </ul>
12. Unloading panels to on-site location	Rigging-pinch points-lacerations	<ul style="list-style-type: none"> <li>• Nylon slings, chokes and hooks will be inspected by a qualified person prior to each use. Any deficiencies, the equipment will be tagged out of service</li> <li>• All materials will be staged and stored on dunnage to reduce pinch point hazards. Hand protection will be worn at all times.</li> </ul>
13. Installation of metal walls	Falls- overhead hazards-crane operations-	<ul style="list-style-type: none"> <li>• All workers exposed to falls of 6ft. or greater will be protected by PFAS or guardrails. When working from lifts PFAS will be used at all times.</li> <li>• All areas beneath work operations will be cordoned off with tape, signs, cones etc.....</li> <li>• Crane operation preventative measures listed below.</li> </ul>
14. Cutting panels	Flying material- electrical hazards- sharp edges	<ul style="list-style-type: none"> <li>• All employees will be wearing appropriate PPE for the task being performed. Eye protection, hand protection and hearing protection will be worn when materials are airborne.</li> <li>• All electrical tools will be inspected before each use. Any defective tools or cords will be tagged and taken out of service immediately</li> </ul>
15 Disposal of existing materials	Lacerations- Fall hazards-overhead hazards	<ul style="list-style-type: none"> <li>• All employees will be wearing appropriate hand protection.</li> <li>• All workers exposed to falls of 6ft or greater will be protected by PFAS or guardrails. When working from lifts PFAS will be used at all times.</li> <li>• Roof perimeter areas not designated for material disposal will have a warning line system with stanchions no more than 6ft intervals with</li> </ul>

4

16 Working on scaffolds	Falls- protection of other trades using the scaffolds	<ul style="list-style-type: none"> <li>high visibility material</li> <li>Area will be cordoned off to protect other trades.</li> <li>A safe zone will be established. Access beyond the safe zone will be restricted by danger tape.</li> <li>All scaffolds will be properly inspected and tagging system will be utilized.</li> <li>Scaffolds will be erected by a qualified person/s.</li> <li>All scaffold specifications will meet or exceed the OSHA 1926 Subpart L</li> </ul>
17 Demolition; saw cutting (electric/gas saws)	Lacerations, punctures or bruises from pinch points between equipment and objects in motion; inhalation of gas/dust fumes.	<ul style="list-style-type: none"> <li>Guards must be maintained and kept in place on all equipment as appropriate. Never operate equipment with guards removed.</li> <li>Employees will wear appropriate PPE.</li> <li>Heavy equipment will be equipped with operational backup alarms.</li> <li>Operators shall have had the proper training to operate equipment.</li> </ul>
18 Welding, cutting and brazing of metals.	Inhalation of fumes; contact with hot material; cuts from sharp metal edges; damage to retina of the eye from ultraviolet light	<ul style="list-style-type: none"> <li>Shaded eye protection, face and head protection, and appropriate respiratory protection will be worn during welding, cutting or brazing.</li> <li>Gloves will be used during handling of sharp objects.</li> <li>Level C PPE will be required to be worn if welding in the excavation located in area 3.</li> </ul>
19 Use of cranes, derricks, backhoes and other elevated equipment near overhead power lines, wires and structures.	Potential contact with overhead wires with possibility of fire and electrocution.	<ul style="list-style-type: none"> <li>Spotters will be present during all uses of heavy equipment to warn the driver of hazardous conditions or the proximity of other equipment or individuals.</li> <li>Cables, chains and loads will be inspected before lifting by a competent person.</li> <li>No personnel are permitted underneath the radius of crane arms during operation.</li> <li>When working near overhead power lines. The boom and cables of equipment should be kept at least twenty (20) feet away from all electric wires, regardless of their voltage.</li> <li>Any overhead wire should be considered an energized line until either the person who owns the line, or the electric utility authorities indicate that it is not energized, and it is tagged and marked as such.</li> <li>Winches, cables, slings and equipment will be inspected by the operator prior to each day of use.</li> </ul>
20 Lifting and winching operations	Cuts or amputations from pinch or nip points; snapping cables or slings while moving equipment	



10. LINE OFFICER SIGNATURE:	11. TITLE:	12. DATE:

7