



## **THE BASE GROUP, INC.**

5455 W 59TH AVE, UNIT T  
ARVADA, CO 80003

844.408.6643

# **Accident Prevention Program & Corporate Safety Manual**

2022

**This Accident Prevention Program & Corporate Safety Manual, and all contents herein, have been prepared exclusively for The Base Group, Inc. (“Base Group” or “Company”). This manual and the related forms, policies, and procedures shall serve to train and educate employees of Base Group on the applicable issues pertaining to workplace safety. The policies and procedures contained within this manual shall only be effective through strict supervision, timely training, and regular enforcement by Base Group management and supervisory personnel. These safety documents shall be supplemented through various tool box talks, onsite and in office training, and third-party training as needed.**

This Accident Prevention Program & Corporate Safety Manual has been provided by Base Group to Mr./Ms. \_\_\_\_\_ on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_. By affixing his or her signature below, the employee acknowledges, understands, and agrees that this manual belongs to the employee and shall serve as a reference guide at all times during his or her employment with Base Group. If this manual is lost or destroyed, the employee shall contact \_\_\_\_\_ at \_\_\_\_\_-\_\_\_\_\_-\_\_\_\_\_ immediately and a replacement manual will be provided. This manual, and each chapter herein, shall be brought with the employee to each training seminar provided by Base Group throughout the term of his or her employment.

I, \_\_\_\_\_, have received a copy of Base Group Accident Prevention Program & Corporate Safety Manual. I understand that this manual belongs to me and I shall keep a copy for my personal records and regular review.

Signature: \_\_\_\_\_

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

Supervisor Signature: \_\_\_\_\_

# Table of Contents

## Contents

CORPORATE SAFETY POLICIES & PROCEDURES .....	5
SAFETY MANAGER DESIGNATION .....	8
SAFETY COMMITTEE.....	11
UNANNOUNCED SITE SAFETY INSPECTION.....	14
CORPORATE DISCIPLINARY ACTION PROGRAM .....	15
ACCIDENT INVESTIGATION FORM.....	22
SAFETY HAZARD CITATION .....	24
CERTIFICATE OF RETRAINING .....	26
CERTIFICATE OF RETRAINING.....	27
CERTIFICATE OF RETRAINING .....	28
CERTIFICATE OF RETRAINING.....	29
ACCIDENT REPORTING & INVESTIGATION PLAN.....	30
ACCIDENT INVESTIGATION FORM.....	35
SAFETY TRAINING PROGRAM .....	37
NEW EMPLOYEE HIRE CHECK LIST.....	40
WEEKLY SAFETY MEETING & EMPLOYEE SIGN-IN SHEET .....	41
REGULATORY AGENCY INSPECTION MANAGEMENT POLICY .....	45
SUBSTANCE ABUSE PROGRAM .....	49
HAZARD COMMUNICATION PROGRAM.....	54
BLOODBORNE PATHOGENS PROGRAM.....	65
RESPIRATORY PROTECTION PROGRAM .....	71
AIR-PURIFYING RESPIRATOR INSPECTION .....	88
ASR / SCBA RESPIRATOR INSPECTION .....	89
SCBA SPARE BOTTLE INSPECTION.....	91
RESPIRATORY PROTECTION PROGRAM.....	92
RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE.....	93
LOCKOUT / TAGOUT PROGRAM .....	96
PERSONAL PROTECTIVE EQUIPMENT PROGRAM.....	106

FLAMMABLE AND COMBUSTIBLE LIQUIDS COMPLIANCE PROGRAM .....	120
COMPRESSED GAS COMPLIANCE PROGRAM.....	123
CONFINED SPACE ENTRY PROGRAM .....	128
FALL PROTECTION SAFETY PROGRAM .....	141
EMPLOYEE FALL PROTECTION COMPLIANCE AGREEMENT .....	152
EMPLOYEE LADDER SAFETY COMPLIANCE AGREEMENT.....	153
EMPLOYEE PNEUMATIC TOOL COMPLIANCE AGREEMENT .....	155
ELECTRICAL SAFETY PROGRAM .....	157
LADDER SAFETY PROGRAM.....	163
POWER TOOL OPERATIONS SAFETY PROGRAM.....	167
HAND TOOL OPERATIONS SAFETY PROGRAM.....	172
FLEET SAFETY AND MAINTENANCE PROGRAM.....	177
MATERIAL HANDLING, STORAGE, AND DISPOSAL PROGRAM.....	184
SANITATION PLAN .....	187
EXCAVATION SAFETY PROGRAM .....	190
EXCAVATION COMPLIANCE AGREEMENT.....	199
EMERGENCY ACTION PLAN.....	200
EXTREME TEMPERATURE SAFETY PLAN .....	205
SEVERE WINTER WEATHER SAFETY PLAN .....	209
EMERGENCY CONTACTS .....	215

**CORPORATE SAFETY POLICIES &  
PROCEDURES  
Chapter 1**

## **General Company Safety Philosophy Statement**

This General Company Safety Philosophy has been developed to reflect and communicate the proactive safety approach maintained at Base Group. This Company shall make every effort in order to enforce compliance with appropriate safety and security laws and regulations such as those established by:

- The Occupational Safety and Health Act (OSHA),
- The Environmental Protection Agency (EPA),
- The Department of Transportation (DOT),
- The US Army Corps of Engineers [EM-385] (USACE) and
- All other applicable federal, state, and local safety and health regulations.

Base Group will provide all possible training and education in order to facilitate employee compliance with the appropriate safety and security laws and regulations such as those established by OSHA, EPA, DOT, USACE and all other applicable federal, state, and local safety and health regulations. We believe that the safety of employees is of the utmost importance, along with quality, production, and cost-control. Maintenance of safe operating procedures at all times is of both monetary and human value, with the human value being far greater to the employer, the employee, and the community. The following principles support this philosophy:

- All injuries and accidents are preventable through establishment and compliance with safe work procedures.
- The prevention of bodily injury and safeguarding of health are the first considerations in all workplace actions and are the responsibility of every employee at every level.
- Written safety plans describing the safe work practices and procedures to be followed in all workplace actions are an essential element of the overall workplace safety program.
- All employees at every level are responsible for knowing and following the safety practices described in the written safety plans.
- Off the job, all employees should be similarly safe and demonstrate awareness of potential hazards.

## **Types of Written Safety Plans in Place**

Because Base Group cares about its employees and strives to provide a safe work place, we have implemented this written safety program. The individual written plans contained herein provide guidance and direction for the safety issues they cover. Those

plans are covered throughout this Accident Prevention Program & Corporate Safety Manual.

## **Employer/Employee Responsibilities**

This section lists the responsibilities of both employers and employees. These responsibilities are to be taken seriously and carried out at all times. Base Group's policy is to provide a place of employment which is free from recognized hazards which may cause illness, injury, or death to our employees. It is also this Company's policy to establish an effective and continuous safety program which incorporates educational and monitoring procedures designed to teach safety, correct deficiencies, and provide a safe and clean working environment. All Base Group supervisors, managers, directors, and officers are responsible for the enforcement of safety policies and practices. Additionally, non-supervisory employees who may not have been delegated enforcement authority are still responsible for recognizing and correcting dangerous or unsafe behavior from others within the company. Supervisory personnel must ensure that:

- Their staff members are trained in appropriate safety procedures, including chemical-specific training as required. Individual safety files are maintained at the home office for review in order to ensure thorough training for each employee in all pertinent hazards.
- They notify the Safety Manager and complete the necessary forms if an accident or work-related health problem occurs in the work area.
- Equipment and property within their area of responsibility is maintained in a safe and hazard-free condition

All employees of Base Group have a responsibility to themselves and to the company for their safety and the safety of co-workers. All employees are required to:

- Comply with all federal, state, and local rules and regulations relevant to their work.
- Observe all company rules and regulations related to the efficient and safe performance of their work.
- Integrate safety into each job function and live by this philosophy in the performance of all job duties.
- Report or correct unsafe equipment and practices.
- Report any accidents that occur while on the job.

## **Certain Circumstances Warrant Disciplinary Action**

If company personnel violate corporate safety rules, then the offending employee's actions will be addressed using Base Group Corporate Disciplinary Action Program. [This program is addressed in a later chapter of this manual.]

**SAFETY MANAGER DESIGNATION**  
**Chapter 2**



## **Safety Manager Designation**

The designation of a Safety Manager is one of the most critical parts of preparing ourselves for success when establishing and maintaining a corporate safety program. The designated Safety Manager is the glue that holds the many aspects of our program together. Our Company has designated:

- **Rich Purnell** as our Safety Manager.

As Safety Manager, this individual is tasked with duties which include, but are not limited to, the constant and diligent review, administration, and enforcement of the Company's safety and health program. Safety and health education is key to any safety program, and our Safety Manager shall lead by example. **The Safety Manager has completed an OSHA 30 Hour Training in Construction Standards (29 CFR 1926).**

The critical considerations used in making this decision were:

1. **Willingness** - The person chosen must indicate a genuine interest and desire to do this work.
2. **Knowledge** - The person chosen must possess a substantial formal education and appropriate credentials in the field of safety and/or extensive practical experience in the safety field are necessary for the effective management of a comprehensive safety program.
3. **Money** - A budget needs to be established for this program to, at a minimum, include the following.
  - a. Reference material - software, books, etc.
  - b. Designated person attending seminars
  - c. Safety committee meetings
  - d. Incentive Program
4. The total cost/savings benefit ratio is arrived at by estimating our fines, should OSHA inspect our business before we become prepared, and the plus or minus effect on your experience modifier.
5. **Accountability** - The person to fulfill these tasks must be accountable only to the company CEO or President in all matters of safety and health for these reasons:
  - a. This plainly demonstrates top management's commitment to the safety program.

- b. Keeps top management informed and provides for guidance at all stages of the program.
- c. Prevents creativity of the designated safety person from being thwarted or stifled by intermediate supervisors who are unaware of the tremendous negative impact OSHA fines and increased workers' compensation premiums can have on the company's bottom line.

**SAFETY COMMITTEE**  
**Chapter 3**

## **Safety Committee**

### **Purpose**

Accident prevention and control of hazards is the result of a well-designed and executed safety and health program. One of the keys to a successful program includes company safety committees composed of management and general labor personnel. Two of the most critical functions of a safety committee are to review the findings of safety audits and accident investigations. The basic purpose of audits and investigations is to determine measures that can be taken to prevent safety and compliance concerns and accidents in the future. Our Company is committed to accident prevention in the workplace.

### **Policy**

A Company safety committee has been established. When possible, new employees will be rotated onto the committee to provide new enthusiasm and perspectives on safety in the workplace. Safety committee members serve on a rotating basis and a list of current members can be obtained upon request. This list will be updated as members change. The safety committee has four primary responsibilities and they are as follows:

1. Assisting in the development and enforcement of company safety policies.
2. Investigating employee safety complaints.
3. Reviewing periodic safety audits of their assigned area(s).
4. Reviewing accident investigations.

The safety committee meets on a monthly basis to discuss current safety issues. The meeting and activities of the committee will be documented.

## **Safety Inspections & Audits**

There are several types of inspections that can be used to identify problems and hazards before conditions result in accidents or injuries. Audits also help to identify the effectiveness of safety program management and can be used as a guide to assure regulatory compliance and a safe workplace. These are some examples of the types of audits that should be conducted and that should be reviewed by the safety committee.

## Types of Inspections

- **Supervisor & Management Daily Walk-through:** this is an inspection that is made daily prior to startup and shift change to ensure the job site and equipment are in safe conditions for Employees. All noted unsafe areas are placed in a safe condition prior to Employees working in the area.
- **Regular Safety Inspection:** on a regular basis, members of the Safety Committee, supervisors and/or the Safety Manager shall audit worker safety at our job sites. A record of the findings of these inspections shall be made and copies shall be forwarded to each manager for appropriate action(s).
- **Equipment Inspections:** are conducted on a routine basis to ensure specific safety equipment is in good working order and will function when needed.
- **Program Audits:** are conducted to check the administration of specific safety and health programs. Program Audits shall be conducted annually.

## Accident Investigations

The Safety Committee will be responsible for reviewing Accident Investigation Forms and making recommendations to management for changes to prevent future similar incidents.

## Appendices

We have attached the following appendices to ensure better understanding of this plan:

- Site Audit Form

**UNANNOUNCED SITE SAFETY INSPECTION**

Job Description: \_\_\_\_\_ No. of Employees: \_\_\_\_\_

Site Address: \_\_\_\_\_

Supervisor Performing Audit: \_\_\_\_\_ Date: \_\_\_\_\_

Is Company Disciplinary Action Warranted:  YES  NO

<input type="checkbox"/> Site <input type="checkbox"/> Shop <input type="checkbox"/> Consult <input type="checkbox"/> Safety Meeting				<b>COMMENTS:</b>																																																																																																				
<p><b>Inspection: (Check one)</b></p> <table> <thead> <tr> <th></th> <th>S</th> <th>U</th> <th>NA</th> </tr> </thead> <tbody> <tr><td>Ladders and Scaffolds</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Fire Prevention</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Hot Work (kettle, torch, etc.)</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Hoists, Lifts, and Cranes</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Housekeeping</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Material Handling and Storage</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>PPE</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Water and Sanitation</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Safety and First Aid</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Motor Vehicles</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Hand, Power, and Pneumatic Tools</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Perimeter and Fall Protection</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Walking and Working Surfaces</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Machine Safety</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Electrical Hazards</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Emergency Preparedness</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Hazard Communications</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Safety Awareness</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Safety and Labor Information</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Lock Out/Tag Out</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Warning Placecards</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Previous Recommendations</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Cooperation:</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Other (See Comments)</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> </tbody> </table>		S	U	NA	Ladders and Scaffolds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fire Prevention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hot Work (kettle, torch, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hoists, Lifts, and Cranes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Housekeeping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Material Handling and Storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PPE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Water and Sanitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Safety and First Aid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Motor Vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hand, Power, and Pneumatic Tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Perimeter and Fall Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Walking and Working Surfaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Machine Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Electrical Hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Emergency Preparedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hazard Communications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Safety Awareness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Safety and Labor Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lock Out/Tag Out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Warning Placecards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Previous Recommendations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cooperation:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other (See Comments)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<b>RECOMMENDATIONS:</b>
	S	U	NA																																																																																																					
Ladders and Scaffolds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Fire Prevention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Hot Work (kettle, torch, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Hoists, Lifts, and Cranes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Housekeeping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Material Handling and Storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
PPE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Water and Sanitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Safety and First Aid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Motor Vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Hand, Power, and Pneumatic Tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Perimeter and Fall Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Walking and Working Surfaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Machine Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Electrical Hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Emergency Preparedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Hazard Communications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Safety Awareness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Safety and Labor Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Lock Out/Tag Out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Warning Placecards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Previous Recommendations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Cooperation:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
Other (See Comments)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																					
				<b>DISCIPLINE REQUIRED:</b>																																																																																																				

**CORPORATE DISCIPLINARY ACTION PROGRAM**  
**Chapter 4**

## **Role of Disciplinary Systems in the Workplace**

Base Group's disciplinary system does not exist primarily to punish employees. The purpose of this system is to control the work environment so that workers are protected, and accidents are prevented. A disciplinary system helps ensure workplace safety and health by letting our employees know what is expected of them. It also provides workers with the opportunity to correct their behavior before an accident happens. A disciplinary system is one of the many keys to successfully implementing Base Group's safety and health program. This system will ensure that Base Group safety rules are taken seriously by employees and are followed precisely. It lets employees know how our company expects them to operate in relation to the goals of our safety and health program. Our disciplinary system clearly exhibits the actions Base Group will take if employees choose not to meet our company's safety expectations and requirements. The employee's direct supervisor and all our management personnel are responsible for the enforcement of this disciplinary program. Although all employees do not possess disciplinary responsibilities, all individual employees within Base Group have the duty and authority to stop unsafe work practices when they occur.

### **Policy Statement**

All employees of Base Group need to know the company's position on safety and health. Additionally, employees must be aware of what the company expects of them. Employees need a clear understanding of the rules and consequences of breaking these established rules and procedures. This is true in all areas of work, but it is especially important for worker safety and health. As part of this policy statement, Base Group has a written statement setting forth the company's disciplinary policy. Company managers and supervisors will always be on the lookout for safety violations and will carefully and vigorously enforce our company's commitment to safety.

### **Employee Information and Training**

It is important for our employees to understand the company disciplinary system and have a reference to consult if they have any questions whatsoever. Therefore, in addition to issuing a written statement of Base Group disciplinary policy, the company has compiled the following list of what it considers major violations of company policy and less serious violations. This list specifies the disciplinary actions that will be taken for first, second, or repeated offenses.

#### **The list for immediate termination and grounds for immediate discharge may include:**

- Drinking alcohol, and/or drug abuse prior to or during working hours.
- Fighting, provoking or engaging in an act of violence against another person on Base Group property or on a job where Base Group personnel are present.
- Theft.



- Willful damage to property.
- Failure to wear Personal Protective Equipment after repeated instruction to do so, and willful disregard for safety rules (eye protection, hearing protection, fall protection, safety helmets, etc.).
- Not using safety harnesses and lanyards when there is a potential for falling.
- Dangerous and reckless operation of company forklifts and related equipment.
- Removing and/or making inoperative safety guards on tools and equipment.
- Tampering with machine safeguards or removing machine tags or locks.
- Removing barriers and/or guardrails and not replacing them.
- Failure to follow recognized industry practices.
- Failure to follow rules regarding the use of company equipment or materials.
- Major traffic violations while using a company vehicle.
- Engaging in dangerous horseplay.
- Failure to notify the company of a hazardous situation.
- Other major violations of company rules or policies.

**General Offenses requiring a warning and may lead to termination:**

- Minor traffic violations while using Base Group vehicles.
- Creating unsafe or unsanitary conditions or poor housekeeping habits.
- Threatening an act of violence against another person.
- Misrepresentation of facts.
- Unauthorized use of Base Group property.
- Excessive tardiness.
- Disrespect and/or insubordination to authority.
- Other violations of company policy and rules.

## **Training**

Training can often times reduce the need for disciplinary action. Base Group shall instruct employees in the importance of workplace safety and health, the need to develop proper safety habits, the company's operations, safe work practices, and the hazards they control, and the standards of behavior that the company expects. Base Group employees must understand the disciplinary system and the consequences of any deliberate, unacceptable behavior. Retraining shall be an essential element to Base Group disciplinary program. Our Company's supervisors, managers, and executives understand the three principal needs when non-compliant behavior is recognized.

Those principal needs are:

- Identify the non-compliant behavior.
- Correct the non-complaint behavior.
- Retrain to eliminate future non-compliant behavior.

Base Group has developed a series of “Certificates of Retraining” in order to combat non-compliant behavior. The offending employee shall undergo extensive retraining which may include one or more of the following: classroom education, supervised field exercises, or written examinations in conjunction with an assigned review of relevant safety regulations. Those “Certificates of Retraining” are attached as appendices hereto.

## **Supervision**

Supervision shall be defined and includes both training and corrective action. Ongoing monitoring of the company’s employees’ work and safety habits gives our company supervisors the opportunity to correct any problems before serious situations develop. In almost every case, effective supervision means correcting a problem before issuing any punishment. Where the relationship between employees and their supervisors is open and interactive, problems are discussed and solutions are mutually agreed upon. This type of relationship fosters a work environment where the need for disciplinary action is reduced. When such action is needed, the parties are more likely to perceive it as corrective rather than punitive.

## **Employee Involvement**

Employees are also encouraged to help informally in the enforcement of company safety rules and practices. The intent is not to transform employees into spies or informers, but to encourage all employees to be their “brother’s keeper” and to watch out for the safety and health of their colleagues. Many employers have successfully encouraged an atmosphere where employees readily speak up when they see an easily corrected problem, for example, a coworker who needs reminding to put on safety goggles. Additionally, Base Group employees deserve the opportunity to correct their own behavior problems. An effective disciplinary system is often considered a two-way process. Once a problem is spotted, this problem should be addressed with the employee, who should be given an opportunity to change the behavior or correct the problem.

## **Appropriate Control Measures**

Disciplinary actions need to be proportionate to the seriousness of the offense and the frequency of its occurrence. It is certainly inappropriate to fire an employee for occasional tardiness. It is equally inappropriate to issue only oral warnings to an employee who repeatedly removes a machine guard. Disciplinary procedures should not be instituted without sufficient explanation. The company will provide feedback to an employee regarding which behavior is unacceptable, why the corrective action is necessary, and how the employee can prevent future violations and disciplinary action. In addition, it is important for our company to take time to recognize an employee who improves or corrects his/her behavior.

## **Consistent Enforcement**

Workers must realize that safe work practices are a requirement of employment with Base Group and unsafe practices will not be tolerated. Therefore, it is necessary for Base Group to maintain a disciplinary system that is implemented fairly and consistently. If our company's disciplinary system is to work well and be accepted by our employees, then the system must apply equally to everyone. This includes subjecting managers and supervisors to similar rules and similar, or even more stringent, disciplinary procedures. For all violations, supervisors shall meet with the employee to discuss the infraction and inform the employee of the rule or procedure that was violated. The supervisor shall then describe the corrective action needed to remedy the situation.

## **Documentation**

Another key to ensuring fairness and consistency in a disciplinary system is keeping up-to-date and thorough records. It is in the best interest of both the company and our employees to maintain written rules and disciplinary procedures. It is equally important to document instances of both good and poor safety behavior. This includes discussions with the employee and recording the pertinent information in the employee's personnel file. Base Group has developed a "Safety Hazard Citation" form that will be used to document employee actions that represent violations of the safety policies and procedures. A copy of this form is included at the end of this Corporate Disciplinary Action Program.

This documentation shall serve a variety of purposes. It helps the company to track the development of a problem, corrective actions, and the impact of measures taken. It also provides information, so the company can keep employees informed of problems that need correction. When the company evaluates the managerial and supervisory skills of a supervisor, this documentation provides useful records of how they handled problems. Additionally, if warnings, retraining, and other corrective actions fail to achieve the desired effect, and the company decides to discharge an employee, then this documentation becomes even more critical. When a safety violation occurs, it will be recorded and a copy of the "Safety Hazard Citation" will become part of the employee's personnel record.

## **Progressive Discipline**

Company management will routinely audit job sites and will maintain and enforce this disciplinary action program. In general, the company shall maintain a 3 strikes policy for safety violators.

### **Strike One:**

Any employee found to be in violation of any of the safety requirements may receive a written citation, which will be kept by Company management. The unsafe conduct will be addressed and corrected to avoid repeated offenses. The employee will

be subjected to retraining to prevent future misconduct. This retraining may be in the form of written instruction, on-the-job lecture and discussion, or similar practical means to avert any future hazard and/or harm.

### **Strike Two:**

Any employee found to be in violation of a substantially similar requirement for a second time, may receive an additional written citation and is subject to potential suspension from work without pay. The Company may require retraining be completed before the offending employee may return to work. This retraining may be in the form of written instruction, on-the-job lecture and discussion, or similar practical means to avert any future hazard and/or harm. All citations will be kept by Company management.

### **Strike Three:**

Any employee found to be in violation of a substantially similar requirement for a third time, will be immediately removed from the job and the employee's term of employment may be promptly terminated. Termination may be mandatory unless mitigating circumstances exist. In addition, the crew's manager may be required to attend an extensive re-training program. This retraining may be in the form of written instruction, on-the-job lecture and discussion, or similar practical means to avert any future hazard and/or harm.

As stated above, some conditions may be of a serious enough nature as to require that the involved employees be removed from the jobsite or terminated immediately without the necessity of a first and second warning. The safety of the individual, the crew, and any affected 3rd parties shall always prevail. The applicable disciplinary action shall be kept within the sole discretion of Company management.

## **Anti-Discrimination and Workplace Safety**

Base Group is an equal opportunity employer, and any disciplinary action, dismissal, or task reassignment issued from management to any employee shall be administered solely on the basis of safety and health. Base Group safety policies and hiring practices are carried out without any regard to race, color, religion, sex, national origin, age, disability, or genetics. In addition to all federal requirements, we will comply with all applicable state and local laws which govern nondiscrimination in employment in every location which our company performs any work. This policy applies to all terms and conditions of employment, including, but not limited to, recruiting, hiring, placement, promotion, termination, layoff, recall, transfer, leaves of absence, compensation, and training. Base Group expressly prohibits any form of workplace harassment based on race, color, religion, gender, sexual orientation, gender identify or expression, national origin, age, genetic information, disability, or veteran status. Improper interference with the ability of Base Group employees to perform their job duties may result in discipline up to and including discharge.

Each and every Base Group employee in receipt of this manual acknowledges that the company will not issue any disciplinary citations or job reassignments unless authorized pursuant the terms of this manual and all applicable laws. All employees understand that any physical or mental impairment which makes the employee unqualified to perform the essential functions of his or her job will be handled in accordance with all local, state, and federal laws.

## **Appendices**

We have attached the following appendices to ensure better understanding of this plan:

- Accident Investigation Form
- Safety Hazard Citation
- Certificates of Retraining

# ACCIDENT INVESTIGATION FORM

Date of Injury: \_\_\_\_\_

Project Where Injury Occurred: \_\_\_\_\_

Project Address: \_\_\_\_\_

Injured Employee Name and Title: \_\_\_\_\_

Accident Investigation Form Prepared By: \_\_\_\_\_

Question	Response	Details
Employee Biographical Information: Please list the employee's position with the company and the amount of time he or she has served in that position.		
What are the details of the event? How was the employee injured? Was safety equipment properly utilized? Describe the nature of the injury.		
When exactly did the event occur which caused the injury? Month, Day, Year, and hour.		
What service was the injured employee performing prior to the injury?		
Despite the employee's prior training and regular safety education, what factors contributed to this accident?		

Describe the immediate actions taken to correct any current hazard and prevent future hazards:		
Individuals to be copied on this Accident Investigation Form:		
Safety Director's review and the actions taken:		

Supervisor Signature: \_\_\_\_\_

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

**Mandatory OSHA Reporting Guidelines for All Supervisors:**

- Supervisors must report all injuries to Base Group management
- Did this injury include a fatality? (Supervisors must report to Base Group management and a report must be delivered to OSHA within 8-hours)
- Did this injury include an overnight hospitalization? (Supervisors must report to Base Group management and a report must be delivered to OSHA within 24-hours)
- Did this injury include the loss of an eye or an amputation? (Supervisors must report to Base Group management and a report must be delivered to OSHA within 24-hours)

# SAFETY HAZARD CITATION

(Notice of Violation)

Employee Name: \_\_\_\_\_ Employee ID #: \_\_\_\_\_ Date: \_\_\_\_\_

### Type of Violation

(Place a "✓" in the appropriate box or boxes below)

<input type="checkbox"/> Unexcused Absences	<input type="checkbox"/> Disregarding Supervisor	<input type="checkbox"/> Insubordination
<input type="checkbox"/> Tardiness	<input type="checkbox"/> Willful Damage to Property	<input type="checkbox"/> Violation of Safety Rules
<input type="checkbox"/> Unsatisfactory Work	<input type="checkbox"/> Violation of Company Policies	<input type="checkbox"/> Violations of State, Federal, or Local Laws
<input type="checkbox"/> Other: _____		

### Previous Warnings, Citations, or Suspensions

(Place a "✓" in the appropriate box or boxes below)

Describe Type of Action (If employee suspended indicate duration)	Warning	Written Citation	Date	Issuing Supervisor

#### **Supervisor Statement of Events**

Date of Accident or Incident: \_\_\_\_\_  
 Project: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Supervisor: \_\_\_\_\_

#### **Employee Statement of Events**

\_\_\_\_\_ I AGREE with the Supervisor Statement  
 \_\_\_\_\_ I DISPUTE the Supervisor Statement and the reasons are as follows:

**Statement:**

**Statement:**

#### **Company Action Taken Following This Citation:**

WARNING AND RETRAINING     SUSPENSION AND RETRAINING     TERMINATION

#### **Action Should Incidents Occur Again:**




\_\_\_\_\_  
**Signature of Supervisor Initiating this Action**

\_\_\_\_\_  
**Date**

**Employee:** *"I \_\_\_\_\_ have read this Safety Hazard Citation and acknowledge that my employer has identified conduct which is in violation of established work rules and contrary to my previous safety education and training. I understand the statements and consequences contained within this Safety Hazard Citation."*

\_\_\_\_\_  
**Signature of Employee Subject to this Action**

\_\_\_\_\_  
**Date**

# **CERTIFICATE OF RETRAINING**

Today's Retraining Took Place on \_\_\_/\_\_\_/\_\_\_ at the Following Location:\_\_\_\_\_.

- |    |   |                          |
|----|---|--------------------------|
| 1. | Fall Protection – General                         | <input type="checkbox"/> |
| 2. | Ladder Safety                                     | <input type="checkbox"/> |
| 3. | Fall Protection – Personal Protective Equipment   | <input type="checkbox"/> |
| 4. | Fall Protection – Anchor Points and Lanyards      | <input type="checkbox"/> |
| 5. | Fall Protection – Alternative Measures            | <input type="checkbox"/> |
| 6. | Fall Protection – Sloped Roofing and Flat Roofing | <input type="checkbox"/> |
| 7. | Equipment Upkeep and Safety                       | <input type="checkbox"/> |

I, \_\_\_\_\_, have received and reviewed Base Group's policies and procedures pertaining to the referenced safety topics. I acknowledge that today's retraining is in addition to the numerous training sessions and safety meetings previously provided to me. I fully understand and agree to the rules and policies contained within Base Group's safety program. I will adhere to these rules, policies, and procedures throughout my continued employment with Base Group.

Signature: \_\_\_\_\_

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

Supervisor Signature: \_\_\_\_\_

# **CERTIFICATE OF RETRAINING**

Today's Retraining Took Place on \_\_\_/\_\_\_/\_\_\_ at the Following Location: \_\_\_\_\_.

- |    |  |                          |
|----|--|--------------------------|
| 1. | Hazard Communication – General                         | <input type="checkbox"/> |
| 2. | Chemical Orientation and Hazard Training – Foams       | <input type="checkbox"/> |
| 3. | Chemical Orientation and Hazard Training – Sealants    | <input type="checkbox"/> |
| 4. | Chemical Orientation and Hazard Training – Tile Dust   | <input type="checkbox"/> |
| 5. | Chemical Orientation and Hazard Training – Cement Dust | <input type="checkbox"/> |
| 6. | Chemical Orientation and Hazard Training – Adhesives   | <input type="checkbox"/> |
| 7. | Personal Protective Equipment Training                 | <input type="checkbox"/> |
| 8. | Silica Inhalation and Prevention                       | <input type="checkbox"/> |

I, \_\_\_\_\_, have received and reviewed Base Group's policies and procedures pertaining to the referenced safety topics. I acknowledge that today's retraining is in addition to the numerous training sessions and safety meetings previously provided to me. I fully understand and agree to the rules and policies contained within Base Group's safety program. I will adhere to these rules, policies, and procedures throughout my continued employment with Base Group.

Signature: \_\_\_\_\_

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

Supervisor Signature: \_\_\_\_\_

# **CERTIFICATE OF RETRAINING**

Today's Retraining Took Place on \_\_\_/\_\_\_/\_\_\_ at the Following Location: \_\_\_\_\_.

- |    |  |                          |
|----|--|--------------------------|
| 1. | Personal Protective Equipment for All Pneumatic Tools        | <input type="checkbox"/> |
| 2. | Nail Gun Safety – General                                    | <input type="checkbox"/> |
| 3. | Nail Gun Pre-Use Inspection Procedures                       | <input type="checkbox"/> |
| 4. | Guards and Safety Triggers – All Pneumatic Tools             | <input type="checkbox"/> |
| 5. | Loading and Unloading Nail Guns                              | <input type="checkbox"/> |
| 6. | Policies and Procedures for Carrying Nail Guns               | <input type="checkbox"/> |
| 7. | Proper Nail Location and Fastening Policies and Procedures   | <input type="checkbox"/> |
| 8. | Policies and Procedures for Clearing Jams and General Repair | <input type="checkbox"/> |

I, \_\_\_\_\_, have received and reviewed Base Group's policies and procedures pertaining to the referenced safety topics. I acknowledge that today's retraining is in addition to the numerous training sessions and safety meetings previously provided to me. I fully understand and agree to the rules and policies contained within Base Group's safety program. I will adhere to these rules, policies, and procedures throughout my continued employment with Base Group.

Signature: \_\_\_\_\_

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

Supervisor Signature: \_\_\_\_\_

# CERTIFICATE OF RETRAINING

Today's Retraining Took Place on \_\_\_/\_\_\_/\_\_\_ at the Following Location:\_\_\_\_\_.

1. Personal Protective Equipment for Hand and Power Tools
2. Hand and Power Tool Safety – General
3. Hand and Power Tool Inspection Procedures and Blade Selection
4. Guards and Safety Triggers – All Hand and Power Tools
5. Point of Operation – Hand and Power Tools
6. Policies and Procedures for Using Hand and Power Tools
7. Proper Exposure of Blades – Policies and Procedures
8. Policies and Procedures for Blade Changes/ Saw Maintenance

I, \_\_\_\_\_, have received and reviewed Base Group's policies and procedures pertaining to the referenced safety topics. I acknowledge that today's retraining is in addition to the numerous training sessions and safety meetings previously provided to me. I fully understand and agree to the rules and policies contained within Base Group safety program. I will adhere to these rules, policies, and procedures throughout my continued employment with Base Group.

Signature: \_\_\_\_\_

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

Supervisor Signature: \_\_\_\_\_

**ACCIDENT REPORTING & INVESTIGATION  
PLAN  
Chapter 5**

# **Accident Reporting and Investigation Plan**

## **Purpose**

Base Group's Accident Investigation Plan prescribes methods and practices for investigating accidents and related safety and health emergencies. No matter how conscientious the safety effort at a company, accidents do happen occasionally due to human or system error. Therefore, this written plan is intended to provide a means to deal with all workplace accidents in a standardized way.

## **Administrative Duties**

The Safety Manager is responsible for developing and maintaining this written Accident Investigation Plan. The Safety Manager shall be responsible for all facets of the plan and have full authority to make necessary decisions to ensure the success of this plan. The Safety Manager is also qualified, by appropriate training and experience that is commensurate with the complexity of the plan, to administer or oversee this Accident Investigation Plan and conduct investigations. This written Accident Investigation Plan is kept in the Safety Manager's office and is also available to all Base Group personnel for review and retraining.

## **Accident Investigation Procedures**

Thorough accident investigations will help Base Group to determine why accidents occur, where they happen, and any trends that might be developing. Such identification is critical to preventing and controlling hazards and avoiding potential accidents. For all accident investigations, the Safety Manager, Employee Supervisor, and Employee directly involved will perform the following duties:

1. Conduct the accident investigation at the scene of the injury as soon after the injury as safely possible.
2. Ask the employee involved in the accident and any witnesses, in separate interviews, to tell him/her in their own words exactly what happened.
3. After the employee or witness has given his/her description of the event, ask appropriate questions that focus on causes.
4. Remind the employee that the investigation was to determine the cause and possible corrective action that can eliminate the cause(s) of the accident.

5. Fully document the findings of the investigation using the company's Accident Investigation Form. A copy of this form is included at the end of this chapter.

## **Injury, Illness, and Medical Issues**

We also follow these procedures when any accident occurs:

1. If a workplace accident results in a work-related fatality, a work-related inpatient hospitalization of one or more employees, a work-related amputation, or a work-related loss of an eye, then Base Group management shall immediately contact the Safety Manager, who shall report the incident, within eight hours, by phone or in person to the nearest OSHA office. The Safety Manager may elect to report any inpatient hospitalization, amputation, or eye loss within 24 hours after learning about it, as is allowed under current Federal Regulations. The Safety Manager may contact the OSHA 24-hour hotline at 1-800-321-OSHA (6742).
2. If an injured person is taken to a doctor, a copy of the doctor's statement shall be attached to the Accident Report Form if such documents are made available.
3. If the injury or illness is "recordable" according to OSHA regulation, 29 CFR 1904, then the Safety Manager shall enter each recordable injury or illness on the OSHA 300 Log, OSHA 301 Incident Report, and a separate, confidential list of privacy-concern cases, if any, within 7 calendar days of receiving information that a recordable injury or illness has occurred.
4. All injured employees shall undergo retraining as necessary to prevent future accidents.
5. Weekly compensation for workplace injuries or illnesses requiring time off work may be distributed as required by all applicable laws.
6. Any time an employee is away from work because of an accident on the job, it should be recorded on the time sheet under Accident on Duty.

## **Recordkeeping**

The Base Group HR &/or office manager is responsible for maintaining the following records and documentation:

- Accident Investigation Forms.
- OSHA 300 Form, Log of Work-Related Injuries and Illnesses (if legally required). All injuries and illnesses on any job where Base Group employees are present shall be recorded on this form within seven calendar days of receiving information that a recordable injury or illness has occurred.



- OSHA 301 Form, Injury and Illness Incident Report (if legally required). All injuries and illnesses on any job where Base Group employees are present shall be recorded on this form within seven calendar days of receiving information that a recordable injury or illness has occurred.
- OSHA 300-A Form, Summary of Work-Related Injuries and Illnesses (if legally required). This form is completed by the end of the year, posted no later than February 1 of the year following the year covered by the form, and kept posted in place until April 30.
- Training records.
- Other forms including equivalent injury and illness recording forms.
- The Safety Manger shall audit these records on a quarterly basis.

## **Employee Involvement and Training**

This plan is an internal document guiding the action and behaviors of all Base Group employees. As such, all employees shall be given this Accident Reporting and Investigation Plan upon hiring. Furthermore, the Safety Manager shall thoroughly explain to all employees why the Accident Investigation Plan was prepared and how employees may be affected by it. Employees are educated on how to report an injury or illness. Our company does not discriminate against employees for any of the following:

- Accident Investigation Forms;
- Reporting a work-related fatality, injury, or illness;
- Filing a safety and health complaint;
- Asking for access to occupational injury and illness records; or
- Exercising any rights afforded by the Occupational Safety and Health Act.

## **Program Evaluation**

The Accident Investigation Plan is evaluated and updated by the Safety Manager annually to determine whether the plan is being followed and if further training may be necessary.

## **Appendices**

We have attached the following appendices to ensure better understanding of this Portion of the plan:

- Accident Investigation Form.

# ACCIDENT INVESTIGATION FORM

Date of Injury: \_\_\_\_\_

Project Where Injury Occurred: \_\_\_\_\_

Project Address: \_\_\_\_\_

Injured Employee Name and Title: \_\_\_\_\_

Accident Investigation Form Prepared By: \_\_\_\_\_

Question	Response	Details
Employee Biographical Information: Please list the employee's position with the company and the amount of time he or she has served in that position.		
What are the details of the event? How was the employee injured? Was safety equipment properly utilized? Describe the nature of the injury.		
When exactly did the event occur which caused the injury? Month, Day, Year, and hour.		
What service was the injured employee performing prior to the injury?		
Despite the employee's prior training and regular safety education, what factors contributed to this accident?		

Describe the immediate actions taken to correct any current hazard and prevent future hazards:		
Individuals to be copied on this Accident Investigation Form:		
Safety Director's review and the actions taken:		

Supervisor Signature: \_\_\_\_\_

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

**Mandatory OSHA Reporting Guidelines for All Supervisors:**

- Supervisors must report all injuries to Base Group Management
- Did this injury include a fatality? (Supervisors must report to Base Group management and a report must be delivered to OSHA within 8-hours)
- Did this injury include an overnight hospitalization? (Supervisors must report to Base Group management and a report must be delivered to OSHA within 24-hours)
- Did this injury include the loss of an eye or an amputation? (Supervisors must report to Base Group management and a report must be delivered to OSHA within 24-hours)

**SAFETY TRAINING PROGRAM**  
**Chapter 6**

## **Safety Training Program**

Base Group is committed to instructing all employees in safe and healthy work practices. The company will provide training to each employee with regard to the general and specific safety procedures which relate to any hazard the employee may be exposed to. The following apply at all times to Base Group's Safety Training Program

1. Training can take many forms and is synonymous with education and can be attained in a number of ways.
2. **Company Safety Rules** – All new employees shall be required to attend a New Employee Orientation during the first thirty days of employment. During the period of employment prior to such training, the employee shall work under the direct supervision of a competent person. Employees are required to read the rules and understand them. The issuance of these rules shall be logged, and signed receipts shall be kept on file. Each new employee, as he or she arrives on the job, should be approached in the same manner. The Safety Manager shall develop the New Employee Orientation program and shall train key company personnel to conduct regular on-going sessions.
3. **Periodic Safety Talks** – The Company shall conduct safety talks with our employees regularly. The talks may consist merely of restating the company safety rules or warning of dangerous conditions which exist on a particular jobsite. A specific subject may be covered, such as fall protection, ladder safety, or electrical safety. All sessions shall be documented on Safety Meeting & Employee Sign-In Sheets provided at the end of this chapter.
4. **Worker Safety Training** – The Company shall develop and implement a training program to address the worker safety issues identified in our work places. These training sessions shall be conducted to satisfy all regulatory requirements and shall be presented to all employees in a manner and language that they can fully understand. Training sessions shall be conducted during normal working hours.
5. **Changed Conditions** – When conditions on a jobsite change or when new hazardous materials are brought into the workplace, employees should be made aware of the new or added potentially dangerous situations that might occur. Employees shall be retrained or refreshed on how to properly navigate these new conditions.
6. **Safety Equipment** – Employees shall not simply be issued protective equipment. They shall be instructed by a competent person as to its proper and safe use.
7. **Consistency/Redundancy** –The Company shall consistently and routinely entertain the concept of safety training. Once is never enough. Safety will be

revisited from the beginning orientation meeting with new employees all the way on through follow-up weekly/monthly safety talks. The central theme discussed will always focus on the prevention of unsafe acts.

8. **Management Follow-Up** – Management must routinely and repeatedly advise all employees on the dangers of unsafe practices. Base Group supervisors must be instructed on how to properly monitor employees and prevent unsafe acts. Employees should be reprimanded when found committing unsafe acts. (See disciplinary program)
9. **Documentation** – All actions taken by management as it relates to safety training and education should be documented properly. Documentation of good faith efforts in meeting the training requirements can be invaluable in defending a lawsuit that results from an injury due to an unsafe act by an employee. Also, documentation substantiates our commitment to and compliance with the OSHA training requirements.
10. **Individual and Group Instruction** – Safety training can be aimed at a group such as at a weekly or monthly safety talks. Training and instruction can also be catered toward an individual. Whichever the case may be, it shall be documented using the Weekly Safety Meeting & Employee Sign-In Sheets contained within this chapter.

## **In Closing**

Safety training must be ongoing. Training shall be given to all employees and members of management. Documentation of instruction and other forms of safety awareness techniques must be made. Base Group maintains a consistent company policy in which all employees never assume everyone knows the safest way of performing his or her task.

## **Appendices**

We have attached the following appendices to ensure better understanding of this plan:

- New Employee Hire Check List
- Weekly Safety Meeting & Employee Sign-In Sheet.

**NEW EMPLOYEE HIRE CHECK LIST**

- |     |   |                          |
|-----|---|--------------------------|
| 1.  | Application                                   | <input type="checkbox"/> |
| 2.  | Employee Handbook and Safety Manual Issued    | <input type="checkbox"/> |
| 3.  | Employee Signature for Manual                 | <input type="checkbox"/> |
| 4.  | W-4 Completed and Signed                      | <input type="checkbox"/> |
| 5.  | I-9 Completed and Signed                      | <input type="checkbox"/> |
| 6.  | Copy of ID and/or registration card           | <input type="checkbox"/> |
| 7.  | Copy of Social Security Card                  | <input type="checkbox"/> |
| 8.  | New Employee Training Video(s)                | <input type="checkbox"/> |
| 9.  | Safety Compliance Quiz 90% or Above           | <input type="checkbox"/> |
| 10. | Copy of Disciplinary Action Program Signed    | <input type="checkbox"/> |
| 11. | Ladder Compliance Agreement Signed            | <input type="checkbox"/> |
| 12. | Fall Protection Compliance Agreement Signed   | <input type="checkbox"/> |
| 13. | Equipment Issued and Sign-Out Executed        | <input type="checkbox"/> |
| 14. | OSHA Fall Training Compliance Packet Received | <input type="checkbox"/> |
| 15. | Hazard Communication and SDS Acknowledgement  | <input type="checkbox"/> |

I, \_\_\_\_\_, have received and reviewed Base Group's policies contained within the Employee Manual and Safety and Health Program. I fully understand and agree to these rules. I will adhere to these rules, policies, and procedures throughout my employment with Base Group. I have attended and fully understand the policies and procedures outlined in Base Group's New Employee Orientation Program.

I, \_\_\_\_\_, have received a copy of Base Group's Accident Prevention Program & Corporate Safety Manual. I understand that this manual belongs to me and I shall keep a copy for my personal records and regular review.

Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Supervisor Signature: \_\_\_\_\_



## WEEKLY SAFETY MEETING & EMPLOYEE SIGN-IN SHEET

PROJECT: \_\_\_\_\_

SUPERVISOR: \_\_\_\_\_

DATE: \_\_\_\_\_

### TOPICS ADDRESSED AND TRAINING COVERED IN TODAY'S MEETING:

- Fall Protection** - This discussion included the proper use and upkeep of Personal Protective Equipment ("PPE") such as harnesses, lanyards, safety lines, rope grabs, D-rings, and anchors. This review also covered alternative means of fall protection such as the applicable use of safety nets, guardrails, flag lines, guard lines, and safety monitors. This retraining was not limited to sloped roofs but included the provisions for flat roof systems and the dangers associated with holes or roof openings. Today's onsite refresher training was in addition to the numerous training and education seminars all employees of Base Group previously received on this topic.
  
- Hazard Communications** - Today's retraining on hazard communications included a discussion on the dangers and harms associated with the chemicals and materials employees may be exposed to on a jobsite such as this. This meeting reviewed how all employees are to safely handle and utilize potentially dangerous substances. All employees were reminded and are fully aware that Base Group maintains all appropriate OSHA documentation for the use and application of any potentially hazardous materials which may be present on a jobsite. Employees were advised they may view these documents at any time. The meeting also involved refresher training on how to interpret and understand all warning labels, Material Safety Data Sheets, and Safety Data Sheets. Some chemicals and material hazards reviewed today included, but were not limited to, the hazards associated with: Silica, adhesives, paints, pigments, binders, extenders, additives, sprays, cleaning solvents, mortar, foams, sealants, and any inhalation danger associated with cutting tile or mixing mortar. Today's onsite refresher training was in addition to the numerous training and education seminars all employees of Base Group previously received on this topic.
  
- Ladder Safety** - This review included all hazards and risks associated with the unsafe use of ladders. Employees were reminded to maintain 3 points of contact with the ladder at all times while climbing up or down. Employees also reviewed requirements such as: all ladders must extend three feet beyond any landing, no ladders should be climbed with materials or tools in hand, no metal ladders are to be erected near power sources, ladders are never to be utilized in the horizontal position as walk boards, and ladders are never to be placed in active walkways.

Employees were also reminded that any ladder which is found to be defective or compromised in any way is to be immediately removed from use. Today's onsite refresher training was in addition to the numerous training and education seminars all employees of Base Group previously received on this topic.

**Personal Protective Equipment** - Today's retraining on Personal Protective Equipment included a discussion on the appropriate use and application of equipment such as hardhats, gloves, safety glasses, dust masks, ear plugs, and many others. Employees were reminded that hard hats are required any time an employee is within the zone of danger where falling debris may be present. Employees also reviewed the requirements for hearing protection and eye protection when operating power tools and pneumatic equipment. This meeting included the correct use of dust masks or other respiratory protection to prevent Silica inhalation. Today's onsite refresher training was in addition to the numerous training and education seminars all employees of Base Group previously received on this topic.

**Vehicle, Fleet, Forklift, and Crane Safety** - All employees were retrained on the appropriate use and operation of cranes, forklifts, vehicles, and related equipment. This retraining included pre-inspection requirements before any equipment is used. All employees were reminded not to operate any equipment without proper training specific to that equipment. Employees were reminded no passengers are allowed on forklifts and cranes. Additionally, employees were retrained on all aspects of passenger safety for company vehicles. This included an extensive dialogue on seatbelt requirements. Employees were retrained on all aspects of cranes and lifts as well. This training stressed the following: cranes may only be operated by certified operators, all signal operators must be trained and qualified, cranes are never to be used in winds over 22 miles per hour, no employees are to stand under any suspended load, and all cranes must be properly supported on stable ground and appropriate weight-to-extension ratios must be maintained. Today's onsite refresher training was in addition to the numerous training and education seminars all employees of Base Group previously received on this topic.

**Other Potential Hazards** - Today's retraining covered many miscellaneous hazards employees may be exposed to on projects such as this. Employees were cautioned to recognize the hazards associated with possible cuts or lacerations from the installation of sheet metal, flashing, gutters, or any other sharp material. Employees also focused on dangers from electrical hazards, confined spaces, welding, cutting, and compressed gases. This discussion examined methods of fire prevention and the proper first aid and reporting procedures in the event of an accident. Today's onsite refresher training was in addition to the numerous training

and education seminars all employees of Base Group previously received on this topic.

The following Base Group employees have received retraining on the referenced topics on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ at the \_\_\_\_\_ project. The employees fully understand and agree to the rules, regulations, and guidelines discussed in today's retraining.

The employees fully understand that they are to abide by and follow these procedures throughout the remainder of this project, and on every further project that Base Group undertakes.

The employees recognize that this retraining was in addition to and supplements the previous training they received on the referenced topics. Each employee attests they have received and reviewed a copy of Base Group's Corporate Safety Manual. This manual belongs to the employee and shall be kept for the employee's personal records and review.

**PRINTED NAME**

**SIGNATURE**

**DATE**

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**PRINTED NAME**

**SIGNATURE**

**DATE**

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**REGULATORY AGENCY INSPECTION  
MANAGEMENT POLICY  
Chapter 7**

## **Regulatory Agency Inspection Management Policy**

It is the policy of our company that when any employee becomes aware of an actual, pending, or likely inspection or interaction with any regulatory agency (OSHA, EPA, DOT, USACE, etc.); that employee is to take the following steps:

1. The employee shall IMMEDIATELY contact their direct Manager/Supervisor and advise them of the situation. Information of this nature should be IMMEDIATELY pushed as far up the management chain as possible.
2. Any employee, when confronted by a regulatory agency representative, is to advise the representative (in a respectful and professional manner) that it is the policy of this company to contact the Safety Manager (or other Senior Manager, if the Safety Manager is not immediately available) prior to any further inspection/interaction taking place. As a general rule, most regulatory agencies are accustomed to companies desiring that specific Managers deal with regulatory issues and will generally understand and comply with your desire to contact appropriate company management. Make certain that the regulatory agency representative understands that this is company POLICY. [It is unlikely that you will be pressured to break company policy. Regardless of their answer to you, maintain a respectful and professional manner.]
3. IMMEDIATELY contact the Company Safety Manager (or other appropriate Manager) and advise her or him of the circumstances surrounding the inspection/interaction.
4. The Safety Manager will advise you on how to proceed and will assist you in making this inspection/interaction as positive as possible. Most regulatory agency inspections follow a fairly standard format. The inspection format listed below is based on a typical OSHA inspection. Most regulatory agencies will have a similar (though not exact) approach to conducting inspections. This example is provided for general guidance only.

## **Initial Contact / Opening Conference**

1. The inspector should explain the purpose & reason for his or her visit. (E.g., triggered by complaint, a fatality, catastrophe) Companies have certain rights when dealing with regulatory agencies and inspections. Some of those rights are:
  - a. to obtain a copy of complaint (if made by an employee).
  - b. to obtain knowledge of subject matter of complaint.
  - c. company has “no” right to employee’s identity.

2. A company representative should ascertain precisely the scope of the inspection & ask for a copy of the applicable standard(s) that will apply to the inspection.
3. The inspector should be made aware of the company's participation in an OSHA (or other agency) compliance program (if applicable).
4. The inspector should explain the reasons for scrutinizing specific areas because these elements define the focus of the inspection.

## **The Physical Inspection / Job Site Review**

1. A company representative should remain with the inspector at all times.
2. The inspector may communicate with non-management employees if they choose, and non-management employees have the absolute right to speak with agency representatives in private if they so choose. Base Group may not punish, re-assign, or deduct the pay of any employee who participates in the inspection process. All employees have the absolute right to participate in the agency inspection without fear of retribution.
3. The inspector should limit the number of employee consultations to a reasonable number & should not unduly interfere with their work.
4. If the inspector takes any photos or samples the company representative should do the same for later comparison, if necessary.
5. If inspector points out an alleged violation that can be corrected immediately, that correction should be made, but no fault should be admitted.
6. If the inspector is unduly hostile, abusive or intrusive beyond the initial defined scope of the inspection the employer may have legal options that can be addressed at a later date. Regardless of the inspector's attitude / demeanor, our employee is to remain respectful and professional.

## **Examination of Records**

1. Records to be inspected include records of injuries, illnesses, fatalities, & exposures to any toxic or hazardous substances.
2. OSHA 300 logs.
3. Regulatory Health & Safety Posters.
4. Training records.

5. Accident Prevention & Safety Manual.
6. Hazardous communication (HAZCOM) program & safety data sheets (SDSs).
7. Other miscellaneous documents depending on the scope of the inspection.

### **The Closing Conference**

1. The Company Manager should ask the inspector to explain the alleged problems and the corrective action required. (This provides an opportunity to ask questions about this corrective action (abatement) and anticipated citations and penalties.) Do not admit any fault to any of the alleged issues the inspector presents.
2. The inspector is highly unlikely to disclose specific penalties.
3. Inspector should explain the alleged deficiencies and the company's right to appeal any adverse findings and penalties.

### **What Happens After the Inspection**

1. The inspector will file a report with their management, who then determines whether to issue citations and assess penalties.
2. The company decides whether or not to exercise its right to appeal.
3. The company corrects all alleged deficiencies to avoid further penalty(s).



**SUBSTANCE ABUSE PROGRAM**  
**Chapter 8**

# **Substance Abuse Program**

## **Purpose**

Our company is dedicated to the protection of its employees from situations arising from substance abuse. To ensure that its workforce is productive, its facility is safe, and the success of its business is not hindered by substance abuse, we have established a Substance Abuse Program. At the same time, the program will promote morale and reduce absenteeism, accident potential, and health and workers' compensation insurance.

## **Administrative Duties**

Our Human Resource &/or Office Manager is our company's Substance Abuse Program Administrator and is responsible for developing and maintaining the written substance Abuse Program. This person is responsible for all facets of the program and has full authority to make necessary decisions to ensure the success of this program. The Human Resource Director is also qualified via appropriate training and experience that is commensurate with the complexity of the program to administer or oversee it and conduct the required evaluations of program effectiveness.

## **Company Policy**

Our company is concerned about and focused on:

- Workplace safety,
- Worker health,
- Product quality,
- Productivity,
- Public liability, and
- Regulatory compliance

We are committed to a drug- and alcohol-free workplace. Our company's substance abuse policy statement is as follows: *The possession, sale, or use of illegal drugs is inconsistent with the company's objective of operating in a safe and efficient manner. Accordingly, no officer, employee, agent, contractor, or visitor shall use or have in his or her possession, illegal drugs during working hours or on company property at any time. Additionally, no officer, employee, agent, or contractor shall report to work while under the influence of alcohol or illegal drugs.*

Anyone violating this policy will be subject to the following:

The services of any employee who engages in such conduct will be subject to discipline up to and including termination. The only exception available involves an

individual who must take prescribed drugs under the direction of a physician. The unlawful involvement with drugs or narcotics off company property will constitute grounds for severe disciplinary action, up to and including termination of employment. Our company will give each employee a copy of this substance abuse policy statement. If any employee has a substance abuse problem, it is that employee's responsibility to seek and complete treatment. We encourage all employees to contact the resource listed here:

Participation in our employee assistance program (EAP) is confidential, and will not jeopardize employment or advancement, but participation will not protect employees from disciplinary action for continued unacceptable job performance or policy violations.

## **Drug and Alcohol Testing**

We retain the right to test our employees for alcohol and drugs according to the following guidelines:

- Pre-employment.
- Following any work-related injury that requires medical attention.
- Following any accident that results in property damage.
- Reasonable suspicion.

If a test reveals a positive result, then we shall follow the recommendations of a duly licensed Substance Abuse Professional (SAP). See the Drug and Alcohol Testing section later in this written program for more details.

## **Company-Sponsored Activities**

The Company prohibits the use of alcohol during company-sponsored activities.

## **Supervisor Training**

Supervisors are the key to the success of our policy. As the people in direct contact with employees, supervisors can detect performance problems that may indicate substance abuse. Supervisors are responsible for:

1. Observing and documenting unsatisfactory work performance or behavior;
2. Talking to employees about work problems and what needs to be done about them (i.e., contacting the Employee Assistance Program or local resources); and
3. Other responsibilities.

In order to carry out their responsibilities properly, supervisors must understand the substance abuse policy, be able to explain the policy to employees, and know when

to take action. Our supervisors are *not* responsible for diagnosing substance abuse problems and treating substance abuse problems. Our supervisors are trained to observe employees' job performance noting the following items:

1. Physical signs: Unusual clumsiness and frequent illness;
2. Mood: Unusually lighthearted one day and depressed the next;
3. Absenteeism: More than usual;
4. Actions: Violent reactions when things go wrong or when upset;
5. Accidents: Increased number of accidents; and
6. Relationships: Easily irritated by others; would prefer being left alone rather than interacting with other employees.

Other training topics we cover with our supervisors include the following:

- Information on specific drugs,
- Methods of detecting drug and alcohol use,
- Insurance coverage for substance abuse treatment,
- Prevention and education strategies, and
- Background on drug testing issues and how the drug testing program relates to the EAP.

The company training program uses classroom instruction that uses lectures, discussions, videotapes, and/or conference formats. The Human Resources Department is responsible for providing supervisor training. The Human Resource Director and/or Safety Manager is responsible for conducting the training.

## **Employee Education and Awareness**

Our employees must understand and remain aware of our ongoing commitment to a drug-free workplace. All new and current employees must successfully complete our Employee Education and Awareness Program. The Human Resource Department will identify when each employee will receive retraining. The Human Resources Department and/or Safety Manager is responsible for conducting this training. The company training program may use classroom instruction, lecture, discussion, videotape, and/or conferences. Through training, our company ensures that employees are knowledgeable in the following:

1. Dangers of drug abuse,
2. Our drug-free workplace policy,
3. The availability of any drug counseling programs,
4. The possible penalties for drug abuse violations occurring in the workplace,
5. Your company's EAP and its services,
6. How drugs and alcohol actually affect the company and the employee including productivity,
7. Product quality,
8. Absenteeism,

9. Health care costs and/or accident rates,
10. Testing procedures,
11. Health effects of alcohol and drugs,
12. How drugs affect the community,
13. Illegal drugs (what they look like, how they are used, their effects),
14. The symptoms of overdose and withdrawal),
15. How the use of alcohol and drugs can influence their children's behavior,
16. How to help others avoid involvement in substance abuse, and
17. How to recognize the signs of substance abuse.

## **Employee Assistance**

Employees often face problems that can affect their job performance. These problems come from many sources: substance abuse, family difficulties, financial troubles, or emotional upsets. To help employees deal with their problems, we have located a center which can address these issues and offer treatment. This facility is located at the following address (*If no address is listed, please contact the Office Manager*):

---

---

---

---

## **Drug and Alcohol Testing**

Our drug and alcohol testing program is also part of our Substance Abuse Program. We have set up a drug testing program for the following reasons:

1. The nature of work that our employees must engage in requires competency and skill which can be compromised and result in injury if drug abuse is present.

## **Recordkeeping**

The Human Resource Department is responsible for maintaining all records and documentation related to employee training and testing.

**HAZARD COMMUNICATION PROGRAM**  
**Chapter 9**

## **Hazard Communication Program**

This Hazard Communication Program has been developed in accordance with the Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1910.1200. This program provides detailed safety guidelines and instructions for the receipt, use, and storage of chemicals which our employees may come into contact with throughout their employment with Base Group.

### **Administrative Duties**

The Safety Manager has overall responsibility for coordinating safety and health programs for Base Group. The Safety Manager has overall responsibility for this Hazard Communication Program. The Safety Manager will review and update the program as necessary. Copies of the written program may be obtained from the Safety Manager's office and through this Accident Prevention Program and Corporate Safety Manual.

### **General Program Information**

**This written Hazard Communication Plan (HAZCOM)** has been developed based on OSHA's Hazard Communication Standard and consists of the following elements:

- Identification of Hazardous Materials
- Product Warning Labels
- Safety Data Sheets (SDS)
- Written Hazard Communication Program
- Effective Employee Training

Some chemicals are explosive, corrosive, flammable, or toxic. Other chemicals are relatively safe to use and store but may become dangerous when they interact with other substances. To avoid injury and/or property damage, persons who handle chemicals in any area must understand the hazardous properties of the chemicals. Before using a specific chemical, safe handling methods and health hazards must always be reviewed. Supervisors are responsible for ensuring that the equipment needed to work safely with chemicals is accessible and maintained for all employees on all shifts.

### **Employee Training**

Initial Orientation Training - All new employees shall receive safety orientation training covering the elements of the HAZCOM and Right to Know Program. This training will consist of general training covering:

1. Location and availability of the written Hazard Communication Program
2. Location and availability of the List of Chemicals used in the workplace

3. Methods and observation used to detect the presence or release of a hazardous chemical in the workplace.
4. The specific physical and health hazard of all chemicals in the workplace
5. Specific control measures for protection from physical or health hazards
6. Explanation of the chemical labeling system
7. Location and use of SDS

Job Specific Training - Employees will receive on the job training from their supervisor. This training will cover the proper use, inspection and storage of the necessary personal protective equipment and chemical safety training for the specific chemicals they will be using or will be working around.

Annual Refresher Training - Annual Hazard Communication refresher training will be conducted as part of the company's continuing safety training program. Immediate On the-Spot Training is also provided when a situation arises which requires immediate correction. This type of training will be conducted by the Safety Manager or supervisors for any employee that requests additional information or exhibits a lack of understanding of the safety requirements.

## **Non-Routine Tasks**

Non-routine tasks are defined as working on, near, or with unlabeled piping, unlabeled containers of an unknown substance, confined space entry where a hazardous substance may be present and/or a one-time task using a hazardous substance differently than intended (example: using a solvent to remove stains from tile floors).

### Steps for Non-Routine Tasks

Step 1: Hazard Determination

Step 2: Determine Precautions

Step 3: Specific Training & Documentation

Step 4: Perform Task

All non-routine tasks will be evaluated by the Area Supervisor and Safety Manager before the task commences, to determine which hazards are present. This determination may require quantitative/qualitative analysis (air sampling, substance identification/analysis, etc., as applicable). Once the hazard determination is made, the Department Supervisor and Safety Department will determine the necessary precautions needed to either remove the hazard, change to a non-hazard, or protect from the hazard (use of personal protective equipment) to safeguard the Employees present. In addition, the Department Supervisor or Safety Department will provide specific safety training for Employees present or affected and will document the training.



## **Off-Site Use or Transportation of Chemicals**

An SDS will be provided to employees for each chemical and each occurrence of use or transport away from the company facilities. All State and Federal DOT Regulations will be followed including use of certified containers, labeling &, securing of containers and employee training.

## **General Chemical Safety**

All employees must assume that all chemicals are hazardous. The number of hazardous chemicals and the number of reactions between them is so large that prior knowledge of all potential hazards cannot be assumed. Use chemicals in as small quantities as possible to minimize exposure and reduce possible harmful effects.

## **General Safety Rules**

- Read and understand the Safety Data Sheets.
- Keep the work area clean and orderly.
- Use the necessary safety equipment.
- Carefully label every container with the identity of its contents and appropriate hazard warnings.
- Store incompatible chemicals in separate areas.
- Substitute less toxic materials whenever possible.
- Limit the volume of volatile or flammable material to the minimum needed for short operation periods.
- Provide means of containing the material if equipment or containers should break or spill their contents.

## **Task Evaluation**

Each task that requires the use of chemicals should be evaluated to determine the potential hazards associated with the work. This hazard evaluation must include the chemical or combination of chemicals that will be used in the work, as well as other materials that will be used near the work. If a malfunction during the operation has the potential to cause serious injury or property damage, a Safe Operational Procedure (SOP) should be prepared and followed. Operations must be planned to minimize the generation of hazardous wastes.

## **Chemical Storage**

The separation of chemicals (solids or liquids) during storage is necessary to reduce the possibility of unwanted chemical reactions caused by accidental mixing.

Explosives should be stored separately outdoors. Use either distance or barriers (e.g., trays) to isolate chemicals into the following groups:

- Flammable Liquids: store in approved flammable storage lockers.
- Acids: treat as flammable liquids
- Bases: do not store bases with acids or any other material
- Other liquids: ensure other liquids are not incompatible with any other chemical in the same storage location.
- Lips, strips, or bars are to be installed across the width of storage shelves to restrain the chemicals in case of earthquake.

Chemicals will not be stored in the same refrigerator used for food storage. Refrigerators used for storing chemicals must be appropriately identified by a label on the door.

### **Container Labels**

It is extremely important that all containers of chemicals are properly labeled. This includes every type of container from a 5000-gallon storage tank to a spray bottle of degreaser. The following requirements apply:

- All containers will have the appropriate label, tag or marking prominently displayed that indicates the identity, safety and health hazards.
- Portable containers which contain a small amount of chemical need not be labeled if they are used immediately that shift but must be under the strict control of the employee using the product.
- All warning labels, tags, etc., must be maintained in a legible condition and not be defaced. Facility weekly supervisor inspections will check for compliance of this rule.
- Incoming chemicals are to be checked for proper labeling.

### **Emergencies and Spills**

In case of an emergency, implement the proper Emergency Action & Response Plan.

1. Evacuate people from the area.
2. Isolate the area.
3. If the material is flammable, turn off ignition and heat sources.
4. Only personnel specifically trained in emergency response are permitted to participate in chemical emergency procedures beyond those required to evacuate the area.
5. Call for Emergency Response Team assistance if required.

## **Housekeeping**

Maintain the smallest possible inventory of chemicals to meet immediate needs. Periodically review stock of chemicals on hand. Ensure that storage areas, or equipment containing large quantities of chemicals, are secure from accidental spills. Rinse emptied bottles that contain acids or inflammable solvents before disposal. Recycle unused laboratory chemicals wherever possible.

**DO NOT** Place hazardous chemicals in salvage or garbage receptacles.

**DO NOT** Pour chemicals onto the ground.

**DO NOT** Dispose of chemicals through the storm drain system.

**DO NOT** Dispose of highly toxic, malodorous chemicals down sinks or sewer drains.

## **Contractors**

All outside contractors working within Base Group's facilities are required to follow the requirements of this program. The company will provide contractors with information concerning:

- Location of SDS
- Precautions to be taken to protect contractor employees
- Potential exposure to hazardous substances
- Chemicals used in or stored in areas where they will be working
- Location and availability of Safety Data Sheets
- Recommended Personal Protective Equipment
- Labeling system for chemicals

## **Definitions**

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

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

**Compressed gas:** any compound that exhibits: A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70 deg. F A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130 deg. F. regardless

of the pressure at 70 deg. F. A liquid having a vapor pressure exceeding 40 psi at 100 deg. F.

**Container:** any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

**Employee:** 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:** 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:** 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:** an employee is subjected in the course of employment to a chemical that is a physical or health hazard and includes potential (e.g. accidental or possible) exposure. Subjected in terms of health hazards includes any route of entry (e.g. inhalation, ingestion, skin contact or absorption.)

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

- “Aerosol, flammable” means an aerosol that 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;
- “Gas, flammable” means 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; or 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;
- “Liquid, flammable” means any liquid having a flash point below 100 deg. F., except any mixture having components with flash points of 100 deg. F. or higher, the total of which make up 99 percent or more of the total volume of the mixture.
- “Solid, flammable” means a solid, other than a blasting agent or explosive as defined in 1910.109(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 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.

**Flash point:** the minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite.

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

**Hazard warning:** any words, pictures, symbols, or combination appearing on a label or other appropriate form of warning which convey the specific physical and health hazard(s), including target organ effects, of the chemical(s) in the container(s). (See the definitions for “physical hazard” and “health hazard” to determine the hazards which must be covered.)

**Health hazard:** a chemical for which there is evidence 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, neurotoxins, and other agents which act on the hematopoietic system and agents which damage the lungs, skin, eyes, or mucous membranes.

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

**Immediate use:** the hazardous chemical will 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.

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

**Material safety data sheet (SDS):** written or printed material concerning a hazardous chemical which is prepared in accordance with OSHA Standard 1910.1200 requirements.

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

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

**Physical hazard:** a chemical that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.

**Pyrophoric:** a chemical that will ignite spontaneously in air at a temperature of 130 deg. F. or below.

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

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

**Use:** to package, handle, react, emit, extract, generate as a byproduct, or transfer.

**Water-reactive:** a chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

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

**Workplace:** an establishment, job site, or project, at one geographical location containing one or more work areas.

## **SDS Information**

Safety Data Sheets are provided by the chemical manufacturer to provide additional information concerning safe use of the product. Each SDS provides the following:

- Common Name and Chemical Name of the material
- Name, address and phone number of the manufacturer
- Emergency phone numbers for immediate hazard information
- Date the SDS was last updated
- Listing of hazardous ingredients
- Chemical hazards of the material
- Information for identification of chemical and physical properties

Contact your supervisor to obtain an SDS on any hazardous chemical in our workplace.

## **Information Chemical Users must know**

Fire and/or Explosion Information

- Material Flash Point, auto-ignition temperature and upper/lower flammability limits
- Proper fire extinguishing agents to be used

- Firefighting techniques
- Any unusual fire or explosive hazards

#### Chemical Reaction Information

- Stability of Chemical
- Conditions and other materials which can cause reactions with the chemical
- Dangerous substances that can be produced when the chemical reacts
- Control Measures
- Engineering Controls required for safe product use
- Personal protective equipment required for use of product
- Safe storage requirements and guidelines
- Safe handling procedures

#### Health Hazards

- Permissible Exposure Limit (PEL) and Threshold Limit Value (TLV)
- Acute or Chronic symptoms of exposure
- Main routes of entry into the body
- Medical conditions that can be made worse by exposure
- Cancer causing properties if any
- Emergency and First Aid treatments

#### Spill & Leak Procedures

- Clean up techniques
- Personal Protective Equipment to be used during cleanup
- Disposal of waste & cleanup material

## **Employee Use of SDS**

For SDS use to be effective, employees must:

- Know the location of the SDS
- Understand the major points for each chemical
- Check SDS when more information is needed or questions arise
- Be able to quickly locate the emergency information on the SDS
- Follow the safety practices provided on the SDS

## **Responsibilities**

#### Management

- Ensure compliance with this program

- Conduct immediate corrective action for deficiencies found in the program
- Maintain an effective Hazard Communication training program
- Make this plan available to employees or their designated representative
- Ensure all received containers are properly labeled and that labels are not removed or defaced
- Ensure all shipped containers are properly labeled
- Ensure shipping department employees are properly trained in spill response
- Ensure received Safety Data Sheets (SDS) are properly distributed
- Maintain a list of hazardous chemicals using the identity that is referenced on the SDS
- Monitor the effectiveness of the program
- Conduct annual audit of the program
- Monitor employee training to ensure effectiveness
- Keep management informed of necessary changes
- Ensure SDS are available as required
- Monitor facility for proper use, storage and labeling of chemicals
- Ensure SDS are available for emergency medical personnel when treating exposed employees
- Provide information, as requested, concerning health effects and exposure symptoms listed on SDS

#### Supervisors

- Comply with all specific requirements of the program
- Provide specific chemical safety training for assigned employees
- Ensure chemicals are properly used stored & labeled
- Ensure only the minimum amount necessary is kept at work stations
- Ensure up to date SDS are readily accessible to all employees on all shifts

#### Employees

- Comply with chemical safety requirements of this program
- Report any problems with storage or use of chemicals
- Immediately report spills of suspected spills of chemicals
- Use only those chemicals for which they have been trained
- Use chemicals only for specific assigned tasks in the proper manner

#### Contractors

- Comply will all aspects of this program
- Coordinate information with the Safety Manager
- Ensure Contractor employees are properly trained
- Notify the Safety Manager before bringing any chemicals into company property or facilities
- Monitor and ensure proper storage and use of chemicals by Contractor employees



**BLOODBORNE PATHOGENS PROGRAM**  
**Chapter 10**

# **Bloodborne Pathogens Program**

## **Policy Statement**

Base Group shall maintain a consistent policy in order to provide a safe and healthy workplace for all our employees. This policy and procedure will provide a method to safe guard our employees from being occupationally exposed to blood and other potentially infectious materials (OPIM), during first-aid and emergency situations. It is also the intent of this policy to comply with federal OSHA requirements listed in 29 CFR 1910.1030.

## **Scope**

This policy applies to individuals, who in an emergency situation, face potential exposure to blood and other infectious materials when responding to injuries resulting from workplace incidents. This policy applies to personnel who are directly responsible for the cleanup of an incident site after an accident.

## **Responsible Persons**

There are three groups of responsible persons who are central to the effective implementation of Base Group's Bloodborne Pathogen Program. These are the following:

- The Safety Manager
- Department Supervisors and Foreman
- Our employees

### **Safety Manager**

The Safety Manager will be responsible for the overall management and support of our facility's Bloodborne Pathogens Program. Activities delegated to this position typically include, but are not limited to:

- Primary responsibility for implementing the Exposure Control Program for the entire company.
- Working with management and other employees to develop and administer any additional bloodborne pathogens related policies and practices needed to support the effective implementation of this plan.
- Looking for ways to improve the Exposure Control Program, as well as to revise and update the plan when necessary.
- Collecting and maintaining suitable reference materials.
- Acting as facility liaison during OSHA inspections.
- Conducting periodic audits to maintain an up-to-date Exposure Control Program.

- Maintaining an up-to-date list of facility personnel requiring training, in conjunction with facility management.
- Developing suitable education and training.

### Department Supervisors and Foreman

Department Supervisors and foreman are responsible for exposure control in their receptive areas. They work directly with the Safety Manager and our employees to ensure the proper exposure control measures are followed.

### Employees

As with all of our company's safety programs, our employees have the most important role in our Bloodborne Pathogens Compliance Program. The ultimate execution of the program rests in their hands. In this role they may be required to know and perform the following:

- Know what tasks, if any, they perform having occupational exposure.
- Attend the Bloodborne Pathogens Training Sessions.
- Plan and conduct all operations in accordance with our work practice controls.
- Develop good personal hygiene habits.

## **Availability of the Exposure Control Plan to Employees**

To help employees with their efforts, our company's Exposure Control Plan is available at any time for review. Employees are advised of this availability during their education and training sessions. Copies of the Exposure Control Plan are kept in the Safety Manager's office.

## **Plan Review and Update**

To keep our Exposure Control up-to-date, the plan may need to be reviewed and updated under the following circumstances:

- Whenever new or modified tasks and procedures are implemented which could affect occupational exposure of our employees.
- Whenever our employees' jobs are revised such that new instances of occupational exposure may occur.
- Whenever we establish new functional positions within our operations that may involve exposure to bloodborne pathogens.

## **Exposure Determination**

OSHA requires employers to conduct an exposure determination concerning which employees may incur occupational exposure to potentially infectious materials. The exposure determination is made without regard to the use of personal protective devices. The employee is considered exposed even if they wear personal protective equipment. At Base Group the following job classifications have been determined to have the possibility of an occupational exposure to bloodborne pathogens:

Any of our personnel could be exposed to bloodborne pathogens or OPIM as a result of an injury in our facilities or in the field. Such an exposure could result from rendering first aid to another injured party or in the cleanup of the incident scene.

## **Methods of Compliance**

We understand that there are a number of areas that must be addressed in order to effectively eliminate or minimize exposure to bloodborne pathogens in our company operations. These areas consist of:

- The use of Universal Precautions.
- Establishing appropriate Engineering Controls.
- Implementing appropriate Work Practice Controls.
- Using necessary Personal Protective Equipment.
- Implementing appropriate Housekeeping Procedures.

## **Universal Precautions**

Universal precautions will be observed at our company in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source individual.

- Gloves will be worn when touching blood or other body fluids, mucus membranes, non-intact skin, or handling items or surfaces soiled with blood or other body fluids.
- If it is anticipated droplets of blood or any body fluid may become in contact with the mucus membranes of the employee's eye, nose or mouth, he/she will wear protective equipment. {i.e. goggles or face shield}
- Hands or other skin surfaces will be washed immediately if contaminated with blood or other body fluids. Hands will also be washed immediately upon glove removal.
- Any items such as razors, knife blades, broken glass or equipment will be disposed of in a puncture and leak proof container, labeled for disposal of such items.

- To minimize exposure to body fluids during CPR, non-reflexive breathers or other disposable aids will be used.
- If clothing is contaminated it is to be removed as soon as possible.
- Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in the first aid room.

## **Engineering Controls**

Engineering controls help to eliminate or minimize employee exposure to bloodborne pathogens. At our facility, the following engineering controls will be utilized:

- Use of sharps container for disposable sharps.
- Use of containers and appropriate disposal bags for potentially infectious waste.
- Hand-washing facilities which are readily accessible to the employees who incur exposure to blood and other potentially infectious materials. Hand-washing facilities are located in the first aid room and restrooms.

In the field, the application of engineering controls, such as those listed above, are highly impractical due to the mobile nature of the operation. Universal precautions, when a potential exposure exists, shall take the place of engineering controls.

## **Personal Protective Equipment**

Personal protective equipment is our employees' "last line of defenses" against bloodborne pathogens. Our company provides, at no cost to employees, all the personal protective equipment they will need to protect themselves against exposure. This equipment includes, but is not limited to those listed below:

- Gloves
- Safety Goggles
- Face shields
- Bio-Hazard Disposal Bags

The Safety Manager, working with the department foreman, is responsible for ensuring that all department and work areas have appropriate personal protective equipment available to employees. Employees' personal protective equipment is selected based on the anticipated exposure to blood or other potentially infectious materials. Every effort will be made to maintain this equipment in a clean and secure location both in our facility and in our mobile units.

## **Housekeeping**

Maintaining our facility in a clean and sanitary condition is an important part of our Exposure Control Plan for Bloodborne Pathogens. Any potentially infectious materials will be cleaned as quickly as possible to prevent additional exposure. Personnel assigned to clean such potentially infectious material shall use universal precautions while engaged in cleaning and shall dispose of such materials in an appropriate manner.

- Employees will use paper towels to remove the visible materials and then decontaminate using 10:1 water and bleach solution that is one cup bleach to ten cups water.
- Cleaning products such as paper towels and gloves will be placed in plastic bags and removed by a hazardous waste disposal company. The bags will be red in color and marked with biohazard label.

**RESPIRATORY PROTECTION PROGRAM**  
**Chapter 11**

## **Respiratory Protection Program**

This Respiratory Protection Program specifies the standard operating procedures which will protect all employees from respiratory hazards, according to the requirements of 29 CFR 1926.103 and 29 CFR 1910.134. Respirators are to be used only where engineering control of respirator hazards is not feasible, while engineering controls are being installed, or in emergencies.

### **Administrative Duties**

Our Respiratory Protection Program Administrator is the company's Safety Manager. This person is solely responsible for all facets of the program and has full authority to make necessary decisions to ensure success of this program. His/Her authority includes hiring personnel and purchasing equipment necessary to implement and operate the program. The Program Administrator will develop written instructions covering each of the basic elements in this program, and is the sole person authorized to amend these instructions. The Program Administrator is also qualified, by appropriate training and experience that is commensurate with the complexity of the program, to administer and oversee our Respiratory Protection Program and conduct the required evaluations of program effectiveness. Employees may review a copy of our Respiratory Protection Program.

### **Respirator Selection**

Respirators are selected on the basis of the respiratory hazards that workers face. All selections are made by the Program Administrator. The Program Administrator has developed the following written standards and operating procedures governing the selection of respirators:

When selecting any respirator in general:

- Select and provide respirators based on respiratory hazard(s) to which a worker is exposed and workplace and user factors that affect respirator performance and reliability.
- Select a NIOSH-certified respirator.
- Identify and evaluate the respiratory hazard(s) in the workplace, including a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Consider the atmosphere to be immediately dangerous to life or health ("IDLH") if you cannot identify or reasonably estimate employee exposure.



- Select respirators from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.
- When selecting respirators for IDLH atmospheres:
  - Provide Respirators with a full face piece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes, or a combination full face piece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply.
  - Provide respirators NIOSH-certified for escape from the atmosphere in which they will be used when they are used only for escape from IDLH atmospheres.
  - Consider all oxygen-deficient atmospheres to be IDLH.
  - Exception: If we can demonstrate that, under all foreseeable conditions, the oxygen concentration can be maintained within the ranges specified in Table II of 29 CFR 1910.134 (i.e., for the altitudes set out in the table), then any atmosphere supplying respirator may be used.
- When selecting respirators for atmospheres that are not IDLH:
  - Provide a respirator that is adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements, under routine and reasonably foreseeable emergency situations.
  - Select respirators appropriate for the chemical state and physical form of the contaminant.
- For protection against gases and vapors, provide:
  - An atmosphere-supplying respirator, or
  - An air-purifying respirator, provided that:
    - The respirator is equipped with an end-of-service life indicator (ESLI) certified by NIOSH for the contaminant; or
    - If there is no ESLI appropriate for conditions in our workplace, implement a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life. Describe in the respirator program the information and data relied upon and the basis for the canister and cartridge change schedule and the basis for reliance on the data.
- For protection against particulates, provide:
  - An atmosphere-supplying respirator; or
  - An air-purifying respirator equipped with a filter certified by NIOSH under 30 CFR part 11 as a high efficiency particulate air (HEPA) filter, or an air-

purifying respirator equipped with a filter certified for particulates by NIOSH under 42 CFR 84, or

- For contaminants consisting primarily of particles with mass median aerodynamic diameters (MMAD) of at least 2 micrometers, an air-purifying respirator equipped with any filter certified for particulates by NIOSH. Detailed procedures will be included as appendices to this respirator program. Outside consultation, manufacturer's assistance, and other recognized authorities will be consulted if there is any doubt regarding proper selection.

### Respirator Types and Uses

The following types of respirators are in use in this facility for the following uses (*If no types are listed, please contact the Safety Manager for current information*):

---

---

---

**Only NIOSH-certified respirators are selected and used.** Where practicable, the respirators will be assigned to individual workers for their exclusive use.

## **Medical Evaluations**

A medical evaluation to determine whether an employee is able to use a given respirator is an important element of an effective Respiratory Protection Program and is necessary to prevent injuries, illnesses, and even, in rare cases, death from the physiological burden imposed by respirator use. Our company will not assign employees to tasks requiring the use of respirators nor fit tested unless it has been determined that they are physically able to perform the work and use the respirator. Our company will retain the services of a Physician or other Licensed Health Care Professional (PLHCP) to perform medical evaluations using the medical questionnaire (or similar) found in the appendices at the end of this document. All medical questionnaires and examinations are confidential and handled during the employee's normal working hours or at a time and place convenient to the employee. The medical questionnaire is administered so that the employee understands its content. All employees are provided an opportunity to discuss the questionnaire and examination results with their physician or other licensed health care professional (PLHCP). Prior to any initial examination or questionnaire, we shall supply the PLHCP with the following information so that he/she can make the best recommendation concerning an employee's ability to use a respirator:

- Type and weight of the respirator to be used by the employee;
- Duration and frequency of respirator use (including use for rescue and escape);
- Expected physical work effort;
- Additional protective clothing and equipment to be worn;
- Temperature and humidity extremes that may be encountered.

Once the PLHCP determines whether the employee has the ability to use or not use a respirator, he/she sends a written recommendation containing only the following information:

- Limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator;
- The need, if any, for follow-up medical evaluations; and
- A statement that the PLHCP has provided the employee with a copy of the PLHCP's written recommendation.

Follow-up medical examination:

A follow-up medical examination will be provided if a positive response is given to any question among questions 1 through 8 in Section 2, Part A of Appendix C of 29 CFR 1910.134 or if an employee's initial medical examination demonstrates the need for a follow-up medical examination. Our follow-up medical examination includes tests, consultations, or diagnostic procedures that the PLHCP deems necessary to make a final determination. If the respirator is a negative pressure respirator and the PLHCP finds a medical condition that may place the employee's health at increased risk if the respirator is used, our company will provide a powered air purifying respirator (PAPR) if the PLHCP's medical evaluation finds that the employee can use such a respirator. If a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then we are no longer required to provide a PAPR.

Additional medical examinations:

Our company provides additional medical evaluations if:

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

## Testing Procedures

It is axiomatic that respirators must fit properly to provide protection. If a tight seal is not maintained between the face piece and the employee's face, contaminated air will be drawn into the face piece and be breathed by the employee. Fit testing seeks to protect the employee against breathing contaminated ambient air and is one of the core provisions of our respirator program. In general, fit testing may be either qualitative or quantitative. Qualitative fit testing (QLFT) involves the introduction of a gas, vapor, or aerosol test agent into an area around the head of the respirator user. If that user can detect the presence of the test agent through subjective means, such as odor, taste, or irritation, the respirator fit is inadequate. In a quantitative respirator fit test (QNFT), the adequacy of respirator fit is assessed by measuring the amount of leakage into the respirator, either by generating a test aerosol as a test atmosphere, using ambient aerosol as a test agent, or using controlled negative pressure to measure the volumetric leak rate. Appropriate instrumentation is required to quantify respirator fit in QNFT. Our Company makes sure those employees are fit tested at the following times with the same make, model, style, and size of respirator that will be used:

- Before any of our employees are required to use any respirator with a negative or positive pressure tight-fitting face piece;
- Whenever a different respirator face piece (size, style, model, or make) is used;
- At least annually;
- Whenever the employee reports, or our company, PLHCP, supervisor, or Program Administrator makes visual observations of changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight; and
- When the employee, subsequently after passing a QLFT or QNFT, notifies the company, Program Administrator, supervisor, or PLHCP that the fit of the respirator is unacceptable. The relevant employee will be retested with a different respirator face piece.

Employees must pass one of the following fit test types that follow the protocols and procedures contained in 29 CFR 1910.134 Appendix A:

- QLFT (Only used to fit test negative pressure air-purifying respirators that must achieve a fit factor of 100 or less. May be used to test tight-fitting atmosphere-supplying respirators and tight-fitting powered air-purifying respirators if tested in the negative pressure mode); or
- QNFT (May be used to fit test a tight-fitting half face piece respirator that must achieve a fit factor of 100 or greater OR a tight-fitting full-face piece respirator that must achieve a fit factor of 500 or greater OR tight-fitting atmosphere-supplying respirators and tight-fitting powered air-purifying respirators if tested in the negative pressure mode).

Our workplace-specific fit testing procedures include the following:

### Fit Testing Procedures-General Requirements

The company will conduct fit testing using the following procedures:

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

- d. Respirator of proper size to span distance from nose to chin;
  - e. Tendency of respirator to slip;
  - f. Self-observation in mirror to evaluate fit and respirator position.
  - g. The test subject shall conduct a user seal check, either the negative and positive pressure seal checks described in Appendix B-1 of this section or those recommended by the respirator manufacturer which provide equivalent protection to the procedures in Appendix B-1. Before conducting the negative and positive pressure checks, the subject shall be told to seat the mask on the face by moving the head from side-to-side and up and down slowly while taking in a few slow deep breaths. Another face piece shall be selected and retested if the test subject fails the user seal check tests.
8. The test shall not be conducted if there is any hair growth between the skin and the face piece sealing surface, such as stubble beard growth, beard, mustache or sideburns which cross the respirator sealing surface. Any type of apparel which interferes with a satisfactory fit shall be altered or removed.
9. If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician or other licensed health care professional, as appropriate, to determine whether the test subject can wear a respirator while performing her or his duties.
10. If the employee finds the fit of the respirator unacceptable, the test subject shall be given the opportunity to select a different respirator and to be retested.
11. Exercise regimen. Prior to the commencement of the fit test, the test subject shall be given a description of the fit test and the test subject's responsibilities during the test procedure. The description of the process shall include a description of the test exercises that the subject will be performing. The respirator to be tested shall be worn for at least 5 minutes before the start of the fit test.
12. The fit test shall be performed while the test subject is wearing any applicable safety equipment that may be worn during actual respirator use which could interfere with respirator fit.
13. Test Exercises.
- a. The following test exercises are to be performed for all fit testing methods prescribed in this appendix, except for the CNP method. A separate fit testing exercise regimen is contained in the CNP protocol. The test subject shall perform exercises, in the test environment, in the following manner:
    - i. Normal breathing. In a normal standing position, without talking, the subject shall breathe normally.

- ii. Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.
  - iii. Turning head side to side. Standing in place, the subject shall slowly turn his/her head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.
  - iv. Moving head up and down. Standing in place, the subject shall slowly move his/her head up and down. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling).
  - v. Talking. The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor.
  - vi. Grimace. The test subject shall grimace by smiling or frowning. (This applies only to QNFT testing; it is not performed for QLFT.)
  - vii. Bending over. The test subject shall bend at the waist as if he/she were to touch his/her toes. Jogging in place shall be substituted for this exercise in those test environments such as shroud type QNFT or QLFT units that do not permit bending over at the waist.
  - viii. Normal breathing. Same as exercise (1).
- b. Each test exercise shall be performed for one minute except for the grimace exercise which shall be performed for 15 seconds. The test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried. The respirator shall not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.

## **Proper Use Procedures**

Once the respirator has been properly selected and fitted, its protection efficiency must be maintained by proper use in accordance with 29 CFR 1910.134(g). Our company ensures with written procedures that respirators are used properly in the workplace. Our proper respirator use procedures are:

### **Face piece Seal Protection**

Do not permit respirators with tight-fitting face pieces to be worn by employees who have:

- Facial hair that comes between the sealing surface of the face piece and the face or that interferes with valve function; or
- Any condition that interferes with the face-to-face piece seal or valve function.
- If an employee wears corrective glasses or goggles or other personal protective equipment, ensure that such equipment is worn in a manner that does not interfere with the seal of the face piece to the face of the user.



For all tight-fitting respirators, ensure that employees perform a user seal check each time they put on the respirator using the procedures in 29 CFR 1910.134 Appendix B-1 (User Seal Check Procedures) or procedures recommended by the respirator manufacturer that you can demonstrate are as effective as those in Appendix B-1.

### Continuing Respirator Effectiveness

- Appropriate surveillance must be maintained of work area conditions and degree of employee exposure or stress. When there is a change in work area conditions or degree of employee exposure or stress that may affect respirator effectiveness, reevaluate the continued effectiveness of the respirator.
- Ensure that employees leave the respirator use area:
  - To wash their faces and respirator face pieces as necessary to prevent eye or skin irritation associated with respirator use; or If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the face piece; or
  - To replace the respirator or the filter, cartridge, or canister elements.
- If the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the face piece, replace or repair the respirator before allowing the employee to return to the work area.
- Procedures for IDLH Atmospheres Ensure that:
  - One employee or, when needed, more than one employee is located outside the IDLH atmosphere;
  - Visual, voice, or signal line communication is maintained between the employee(s) in the IDLH atmosphere and the employee(s) located outside the IDLH atmosphere;
  - The employee(s) located outside the IDLH atmosphere are trained and equipped to provide effective emergency rescue;
  - The employer or designee is notified before the employee(s) located outside the IDLH atmosphere enter the IDLH atmosphere to provide emergency rescue;
  - The employer or designee authorized to do so by the company, once notified, provides necessary assistance appropriate to the situation;
  - Employee(s) located outside the IDLH atmospheres are equipped with:
    - Pressure demand or other positive pressure SCBAs, or a pressure demand or other positive pressure supplied-air respirator with auxiliary SCBA; and either:
    - Appropriate retrieval equipment for removing the employee(s) who enter(s) these hazardous atmospheres where retrieval equipment would contribute to the rescue of the employee(s) and would not increase the overall risk resulting from entry; or



- Equivalent means for rescue where retrieval equipment is not required under the bullet item above this one.
  - Procedures for Interior Structural Firefighting: In addition to the requirements set forth in the row above for Procedures for IDLH Atmospheres, in interior structural fires, ensure that:
    - At least two employees enter the IDLH atmosphere and remain in visual or voice contact with one another at all times;
    - At least two employees are located outside the IDLH atmosphere; and all employees engaged in interior structural firefighting use SCBAs.
- Notes:
    - One of the two individuals located outside the IDLH atmosphere may be assigned to an additional role, such as incident commander in charge of the emergency or safety officer, so long as this individual is able to perform assistance or rescue activities without jeopardizing the safety or health of any firefighter working at the incident.
    - Nothing in this More Info section is meant to preclude firefighters from performing emergency rescue activities before an entire team has assembled.

In order to ensure continuing protection from respiratory protective devices, it is necessary to establish and implement proper maintenance and care procedures and schedules. A lax attitude toward maintenance and care will negate successful selection and fit because the devices will not deliver the assumed protection unless they are kept in good working order.

### Cleaning & disinfecting

Our company provides each respirator user with a respirator that is clean, sanitary, and in good working order. We ensure that respirators are cleaned and disinfected as required: The following procedure is recommended for cleaning and disinfecting respirators:

1. Remove and discard all used filters, cartridges, or canisters.
2. Wash face piece and breathing tube in a cleaner-disinfectant solution. A hand brush may be used to remove dirt. Solvents which can affect rubber and other parts shall not be used.
3. Rinse completely in clean, warm water.
4. Air dry in a clean area in such a way as to prevent distortion.
5. Clean other respirator parts as recommended by the manufacturer.
6. Inspect valves, head straps, and other parts to ensure proper working condition.
7. Reassemble respirator and replace any defective parts.
8. Place in a clean, dry plastic bag or other suitable container for storage after each cleaning and disinfection.

The respirators are cleaned and disinfected at the following intervals:  
As often as necessary to be maintained in a sanitary condition

### Storage

Storage of respirators must be done properly to ensure that the equipment is protected and not subject to environmental conditions that may cause deterioration. We ensure that respirators are stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they are packed or stored in designated locations adjacent or near to areas in which they are used. Obviously, these storage areas will be in an atmosphere and environment free of respiratory hazards. Each respirator will be kept in a location that will prevent deformation of the face piece and exhalation valve. In addition, emergency respirators are kept accessible to the work area; stored in compartments that are clearly marked as containing emergency respirators; and stored in accordance with any applicable manufacturer instructions.

### Inspection

In order to assure the continued reliability of respirator equipment, it must be inspected on a regular basis. The frequency of inspection is related to the frequency of use. Before being carried into the workplace for use our respirators must be inspected in the following areas:

- For respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the face piece, head straps, valves, connecting tube, and cartridges, canisters or filters; and
- Of elastomeric parts for pliability and signs of deterioration.

For self-contained breathing apparatus, in addition to the above, monthly, we maintain air and oxygen cylinders in a fully charged state and recharge when the pressure falls to 90% of the manufacturer's recommended pressure level and determine that the regulator and warning devices function properly. Also, for respirators maintained for emergency use, we certify the respirator by documenting the date the inspection was performed, the name (or signature) of the person who made the inspection, the findings, required remedial action, and a serial number or other means of identifying the inspected respirator. This information shall be maintained until replaced following a subsequent certification.

### Repairs

Respirators that fail an inspection or are otherwise found to be defective are removed from service, and are discarded or repaired or adjusted in accordance with the following procedures: Repairs or adjustments to respirators are to be made only by

persons appropriately trained to perform such operations and only with the respirator manufacturer's NIOSH-approved parts designed for the respirator;

1. Repairs must be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed; and
2. Reducing and admission valves, regulators, and alarms must be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

### Discarding of respirators

Respirators that fail an inspection or are otherwise not fit for use and cannot be repaired must be discarded to ensure they are not used. They are disposed of according to state and federal waste disposal regulations.

## **Air Quality Procedures**

When atmosphere-supplying respirators are being used to protect employees, it is essential to ensure that the air being breathed is of sufficiently high quality. Our company's procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators include coverage of the following OSHA requirements:

### Compressed Air, Compressed Oxygen, Liquid Air, and Liquid Oxygen Used for Respirators:

- Compressed and liquid oxygen must meet the United States Pharmacopoeia requirements for medical or breathing oxygen.
- Compressed breathing air must meet at least the requirements for Grade D breathing air described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989, to include:
  - Oxygen content (v/v) of 19.5-23.5%;
  - Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less;
  - Carbon monoxide (CO) content of 10 parts per million (ppm) or less;
  - Carbon dioxide content of 1,000 ppm or less; and
  - Lack of a noticeable odor.
  - Ensure that compressed oxygen is not used in atmosphere-supplying respirators that have previously used compressed air.
  - Ensure that oxygen concentrations greater than 23.5% are used only in equipment designed for oxygen service or distribution.

### Cylinders Used to Supply Breathing Air to Respirators:

- Cylinders must be tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR 173 and 178).
- Cylinders of purchased breathing air must have a certificate of analysis from the supplier that the breathing air meets the requirements for Grade D breathing air.
- The moisture content in the cylinder must not exceed a dew point of -5 deg. F (-45.6 deg. C) at 1 atmosphere pressure.

### Compressors:

- Ensure that compressors used to supply breathing air to respirators are constructed and situated so as to:
- Prevent entry of contaminated air into the air-supply system;
- Minimize moisture content so that the dew point at 1 atmosphere pressure is 10 degrees F (5.56 deg. C) below the ambient temperature;
- Have suitable in-line air-purifying sorbent beds and filters to further ensure breathing air quality. Sorbent beds and filters must be maintained and replaced or refurbished periodically following the manufacturer's instructions; and
- Have a tag containing the most recent change date and the signature of the person authorized by our company to perform the change. The tag must be maintained at the compressor.
- For compressors that are not oil-lubricated, ensure that carbon monoxide levels in the breathing air do not exceed 10 ppm.
- For oil-lubricated compressors, use a high-temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply must be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 10 ppm.

### Breathing Air Couplings:

- Ensure that breathing air couplings are incompatible with outlets for non-respirable worksite air or other gas systems. No asphyxiating substance must be introduced into breathing air lines.

### Breathing Gas Containers:

- Use breathing gas containers marked in accordance with the NIOSH respirator certification standard, 42 CFR 84.

### Filters, Cartridges, and Canisters:

- Ensure that all filters, cartridges and canisters used in the workplace are labeled and color-coded with the NIOSH approval label and that the label is not removed and remains legible.

## Training

The most thorough respiratory protection program will not be effective if employees do not wear respirators, or do not wear them properly. The only way to ensure that our employees are aware of the purpose of wearing respirators, and how they are to be worn is to train them. Simply put, employee training is an important part of the respiratory protection program and is essential for correct respirator use. Our training program is two-fold; it covers both the:

1. Respiratory hazards to which our employees are potentially exposed during routine and emergency situations, and
2. Proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance.

Both training parts are provided prior to requiring an employee to use a respirator in our workplace. However, if an employee has received training within 12 months addressing the seven basic elements of respiratory protection (see “Seven basic elements” below) and our company and the employee can demonstrate that he/she has knowledge of those elements, then that employee is not required to repeat such training initially. Yet, we do require all applicable employees to be retrained annually and when the following situations occur:

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

### Seven basic elements:

Our employees are trained sufficiently to be able to demonstrate knowledge of at least these seven elements:

1. Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
2. What the limitations and capabilities of the respirator are.
3. How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions.
4. How to inspect, put on, remove, use, and check the seals of the respirator.
5. What the procedures are for maintenance and storage of the respirator.
6. How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
7. The general requirements of 29 CFR 1910.134. OSHA believes it is necessary to ensure that employees know, in general, the employer’s obligations under the standard with respect to employee protection. You need not focus on the details

of the regulation's provisions, but could inform employees that your company is obligated to:

- a. Develop a written program;
- b. Properly select respirators;
- c. Evaluate respirator use;
- d. Correct deficiencies in respirator use;
- e. Conduct medical evaluations;
- f. Provide for the maintenance, storage, and cleaning of respirators; and
- g. Retain and provide access to specific records.

The basic advisory information on respirators, as presented below is provided by our Program Administrator in any written or oral format, to employees who wear respirators when such use is not required by the regulations or by our company:

*Information for employees using respirators when not required under the standard pursuant to Section 29 CFR 1910.134 Appendix D:*

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard. You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

## **Program Evaluation**

It is inherent in respirator use that problems with protection, irritation, breathing resistance, comfort, and other respirator-related factors occasionally arise in most

respirator protection programs. Although it is not possible to eliminate all problems associated with respirator use, we try to eliminate as many problems as possible to improve respiratory protection and encourage employee acceptance and safe use of respirators. By having our program administrator thoroughly evaluate and, as necessary, revise our Respiratory Protection Program, we can eliminate problems effectively. Program evaluation, performed annually by our program administrator, involves the following:

- Conducting evaluations of the workplace as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective.
- Regularly consulting employees required to use respirators to assess their views on program effectiveness and to identify any problems. Any problems that are identified during this assessment must be corrected.
- Factors to assess include, but are not limited to:
  - Respirator fit (including the ability to use the respirator without interfering with effective workplace performance)
  - Appropriate respirator selection for the hazards to which the employee is exposed
  - Proper respirator use under the workplace conditions the employee encounters
  - Proper respirator maintenance

## **Appendices**

- Air-Purifying Respirator Inspection Sheet
- ASR / SCBA Respirator Inspection Sheet
- SCBA Spare Bottle Inspection Sheet
- Respirator Fit Testing Certificate
- Respirator Medical Evaluation Questionnaire

# **AIR-PURIFYING RESPIRATOR INSPECTION**

*Inspect After Each Use*

Employee Mask: \_\_\_\_\_ Date \_\_\_\_\_

Inspector Name: \_\_\_\_\_ Make / Model #: \_\_\_\_\_

Inspection Item	Comments
Satisfactory Functional Test of Respirator	
Face piece: Clean, not distorted, no tears, no cracks	
Head Harness: Clean, no tears, no cracks no missing pieces. No loss of elasticity. No wear from buckle.	
Lens: Clean & Clear, no cracks, sealed to mask	
Exhalation Valve: Clean, good seal, no tears, tight fitting	
Inhalation Valve: Clean, good seal, no tears, tight fitting	
Canister/Filter: Clean, no defects, tight fitting	
Respirator Stored Properly	
Respirator Cleaned	

**Inspector's Signature:** \_\_\_\_\_

If any defects are found DO NOT USE RESPIRATOR.

Turn in the respirator to your Supervisor immediately for repair or replacement.



# ASR / SCBA RESPIRATOR INSPECTION

*Inspect Monthly & After Each Use*

Employee Mask: \_\_\_\_\_ Date \_\_\_\_\_

Inspected Name: \_\_\_\_\_ Unit # \_\_\_\_\_

Inspection Item	Comments
Functional check of ASR / SCBA	
Alarm Works Properly	
Regulator Functions Properly	
Face piece: Clean, not distorted, no tears, no cracks	
Elastic Parts: Pliable no deterioration	
Head Harness: Clean, no tears, no cracks no missing pieces. No loss of elasticity. No wear from buckle.	
Lens: Clean & Clear, no cracks, sealed to mask	
Exhalation Valve: Clean, good seal, no tears, tight	
Inhalation Valve: Clean, good seal, no tears, tight	
Cylinder: No dents or gouges, fits tightly in band	
Cylinder Hydro Test Date	
Gage: Cylinder >90% full, check gage face, indicator	
Harness: Clean, no wear, fully Extended	

Demand Valve O-ring: clean, no tears, seated properly	
ASR / SCBA Cleaned and reassembled after inspection & drying	
ASR / SCBA Stored Properly	

**Inspector's Signature:** \_\_\_\_\_

If any defects are found DO NOT USE RESPIRATOR.

Turn in the respirator to your Supervisor immediately for repair or replacement.

# SCBA SPARE BOTTLE INSPECTION

*Inspect Monthly & After Each Use*

Location: \_\_\_\_\_

Date \_\_\_\_\_

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

Inspection Item	Bottle Number	Comments
Cylinder: No dents or gouges, fits tightly in band		
Cylinder Hydro Test Date		
Gage: Cylinder full, check gage face, indicator		

**Inspector's Signature:** \_\_\_\_\_

If any defects are found DO NOT USE BOTTLE.

Turn in the Bottle to your Supervisor immediately for repair or replacement.

# RESPIRATORY PROTECTION PROGRAM

## Fit Testing Certificate

Name: \_\_\_\_\_ Employee No. \_\_\_\_\_

Department: \_\_\_\_\_

	<b>List All Respirators Properly Fitted For</b>			
Manufacturer				
Model				
Type (APR or ASR)				
Test Date				
Type of Test (QLFT or QNFT)				
Protection Factor				
Testing Agent				
Comments				
Employee Signature				

# RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE

Company \_\_\_\_\_

Employee \_\_\_\_\_ Department \_\_\_\_\_

Date of Form \_\_\_\_\_ Date of Last Respirator Physical \_\_\_\_\_

**Employee: Can you read (circle one): Yes - No**

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

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

1. Today's Date:	2. Your Name:	3. Your Age:	4. Sex:	5. Height:
6. Weight:	7. Job Title:	8. Phone:		

9. Has your employer told you how to contact the health care professional who will review this questionnaire? \_\_\_\_\_

10. Check the type of respirator you will use:

a. \_\_\_\_\_ N, R, or P disposable respirator (filter mask, non-cartridge type only).

b. \_\_\_\_\_ Other type (i.e. half or full face piece type, powered-air purifying, supplied air, self contained breathing apparatus).

11. Have you worn a respirator before? \_\_\_\_\_

12. If "yes", what type? \_\_\_\_\_

	Yes/ No
13. Do you <i>currently</i> smoke tobacco, or have you smoked tobacco in the last month?	
14. Have you <i>ever had</i> any of the following conditions?	
15. Seizures (fits):	
16. Diabetes (sugar disease):	

17. Allergic reaction that interfere with your breathing:	
18. Claustrophobia (fear of closed-in places):	
19. Trouble smelling odors:	
20. Have you <i>ever had</i> any of the following pulmonary or lung problems?	
21. Asbestosis:	
22. Asthma:	
23. Chronic bronchitis:	
24. Emphysema:	
25. Pneumonia:	
26. Tuberculosis:	
27. Silicosis:	
28. Pneumothorax (collapsed lung):	
29. Lung cancer:	
30. Broken ribs:	
31. Any chest injuries or surgeries:	
32. Any other lung problem that you've been told about:	
33. Do you <i>currently</i> have any of the following symptoms of pulmonary or lung illness?	
34. Shortness of breath:	
35. Have to stop for breath when walking at your own pace on level ground:	
36. Shortness of breath when washing or dressing yourself:	
37. Shortness of breath that interferes with your job:	
38. Coughing that produces phlegm (thick sputum):	
39. Coughing that wakes you early in the morning:	
40. Coughing that occurs mostly when you are lying down:	
41. Coughing up blood in the last month:	
42. Wheezing:	
43. Wheezing that interferes with your job:	
44. Chest pain when you breathe deeply:	
45. Any other symptoms that you think may be related to lung problems:	
46. Have you ever had cardio vascular heart problems?	
47. Do you currently take medications for heart, blood pressure, or seizures?	

Employee Signature \_\_\_\_\_

Reviewed By \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Physician Review Required \_\_\_\_\_yes \_\_\_\_\_no

Physician Name \_\_\_\_\_ Date\_\_\_\_\_

Approved use of following respirators & conditions:

Physician's Notes:

**LOCKOUT / TAGOUT PROGRAM**  
**Chapter 12**



## **Lockout / Tagout Program**

### **Control of Hazardous Energy Program**

#### **Purpose**

The following procedure is provided for use in both lockout and tagout programs. This procedure may be used when there are limited numbers or types of machines or there is a single power source. For more complex systems, a more comprehensive procedure will need to be developed, documented, and utilized. Lockout is the preferred method of isolating machines or equipment from energy sources. This procedure establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources, and locked out before employees perform any servicing or maintenance where the unexpected energization or start-up of the machine or equipment or release of stored energy could cause injury such as minor to serious shock, burns (chemical or thermal), cuts, or abrasions.

#### **Administrative Duties**

Base Group's Safety Manager has overall responsibility for coordinating safety and health programs in this company. He or she is the person having overall responsibility for the Lockout/Tagout Program. The company Safety Manager will review and update the program, as necessary. Copies of the written program may be obtained at the Company's office. All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized employees are required to perform the lockout in accordance with this procedure. Servicing is to be done only by trained and authorized employees. Each new or transferred affected employee and other employees whose work operations are in the area shall be instructed in the purpose and use of the lockout or tagout procedures. All employees, upon observing a machine or piece of equipment which is locked out to perform servicing or maintenance, shall not attempt to start, energize, or use the machine or equipment. Contractors are required to utilize this company's procedure except when the contractor can demonstrate that their current lockout procedure affords the same, or greater level of safety as this procedure.

#### **Basic Rules for Using Lockout or Tagout System Procedure**

All equipment shall be locked out or tagged out to protect against accidental or inadvertent operations when such operations could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy-isolating device when it is locked or tagged out. This standard does not apply to work on cord and plug connected to electrical

equipment for which exposure to the hazards of unexpected energization or start up the equipment is controlled by the unplugging of the equipment from the energy source and by the plug being under the exclusive control of the employee performing the servicing or maintenance. In the event a piece of equipment is to be isolated for a period of time exceeding one normal shift and the isolating means is not capable of being locked out, a reasonable effort will be made to affix a device to the isolating means to make capable of being locked out. Lockout-Tagout protects workers from these energy sources:

- moving machinery (kinetic)
- stored energy (potential)
- electrical
- chemical
- thermal
- hydraulic
- gravitational
- pneumatic

## **Definitions**

### **Authorized (Qualified) Employees**

Authorized employees are the only employees certified to lock and tagout equipment or machinery. Whether an employee is considered to be qualified will depend upon various circumstances in the workplace. It is likely for an individual to be considered “qualified” with regard to certain equipment in the workplace, but “unqualified” as to other equipment. An employee who is undergoing on-the-job training and who, in the course of such training, has demonstrated an ability to perform duties safely at his or her level of training and who is under the direct supervision of a qualified person, is considered to be “qualified” for the performance of those duties.

### **Affected Employees**

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

### **Other Employees**

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

## **Machinery and Equipment**

Lockout is the preferred method of isolating machines or equipment from energy sources. Tagout is to be performed instead of lockout only when there is no way to lockout a machine.

### **Routine Maintenance & Machine Adjustments**

Lockout/tagout procedures are not required if equipment must be operating for proper adjustment. This rare exception may be used only by trained and authorized Employees when specific procedures have been developed to safely avoid hazards with proper training. All consideration shall be made to prevent the need for an employee to break the plane of a normally guarded area of the equipment by use of tools and other devices.

### **Locks, Hasps, and Tags**

All Qualified Maintenance Personnel will be assigned a lock with one key, hasp and tag. All locks will be keyed differently, except when a specific individual issues a series of locks for complex lockout-tagout tasks. In some cases, more than one lock, hasp and tag are needed to completely de-energize equipment and machinery. Additional locks may be checked out from the Department or Maintenance Supervisor on a shift-by-shift basis. All locks and hasps shall be uniquely identifiable to a specific employee.

### **Preparation for Lock and Tag Out Procedures**

A Lockout/Tagout survey has been conducted to locate and identify all energy sources to verify which switches or valves supply energy to machinery and equipment. Dual or redundant controls have been removed. A Tagout Schedule has been developed for each piece of equipment and machinery. This schedule describes the energy sources, location of disconnects, type of disconnect, special hazards and special safety procedures. The schedule will be reviewed each time to ensure employees properly lock and tag out equipment and machinery. If a Tagout Schedule does not exist for a particular piece of equipment, machinery and process, one must be developed prior to conducting a Lockout - Tagout. As repairs and/or renovations of existing electrical systems are made, standardized controls will be used.

### **Sequence of Lockout System Procedure**

1. Lockout locks cannot be used for any purpose other than lockout, and must meet the following provisions:

- a. Standardized throughout the plant by color, shape or size.
  - b. Durable enough to withstand heat, cold, humidity or corrosiveness.
  - c. Strong enough so that it cannot be removed without heavy force or tools such as bolt cutters.
  - d. Identified by the name of the employee who installs and removes it.
2. The authorized employee (one who performs maintenance or servicing) shall identify the type and magnitude of the energy that the machine or equipment utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy.
  3. The authorized employee is to notify all affected employees that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.
  4. If the machine or equipment is operating, shut it down by the normal stopping procedure (depress stop button, open switch, close valve, etc.).
  5. De-activate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s).
  6. Stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.
  7. Lockout the energy isolating devices with a lock(s).
  8. Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, and then verify the isolation of the equipment by operating the push button or other normal operating control(s), or by testing to make certain the equipment will not operate.
  9. **CAUTION: RETURN OPERATING CONTROL(S) TO NEUTRAL OR "OFF" POSITION AFTER VERIFYING THE ISOLATION OF THE EQUIPMENT.**
  10. The machine or equipment is now locked out. Maintenance or servicing may be performed.

### **Sequence of Tagout System Procedure**

1. The authorized employee shall use the tagout procedure **ONLY WHEN THE MACHINE OR EQUIPMENT IS NOT CAPABLE OF BEING LOCKED OUT.**

2. The tagout device shall be standardized throughout the plant, and shall meet the following provisions:
  - a. Easy to read and understand, even if used in dirty, corrosive, or damp areas.
  - b. Can't be released with less than 50 pounds of pressure.
  - c. Can be attached by hand.
  - d. Is self-locking.
  - e. Shows the identity of the authorized employee.
  - f. Can't be reused.
  - g. The tagout device shall be attached at the same location that the lockout device would have been attached.
  
3. Authorized employees shall utilize additional means as necessary to provide the equivalent safety available from the use of a lockout device. Additional safety measures that reduce the likelihood of inadvertent energization may include:
  - a. The removal of an isolating circuit element;
  - b. Blocking of a controlling switch;
  - c. Opening of an extra disconnecting device; or
  - d. The removal of a valve handle.

### **Restoring Machines/Equipment to Normal Production Operations**

When the servicing is completed and the equipment is ready to return to normal operating condition, the following steps shall be taken:

1. Check the work area to ensure that all employees are a safe distance from the equipment.
2. Check the machine or equipment and the immediate area around the machine or equipment to ensure that nonessential items (such as tools) have been removed, and that the machine or equipment components are operationally intact.
3. Reinstall any machine guards.
4. Verify that the controls are in neutral.
5. Remove the lockout and/or tagout devices and reenergize the machine or equipment.
6. Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready for use.

**NOTE:** The removal of some forms of blocking may require re-energization of the machine before safe removal. When maintenance or service is done, only the same authorized employee who installed the lock may remove it. When the authorized employee is not available to remove the lock, a “Lockout Removal” form must be completed by the employee removing the lock (see attachment Procedure for Lockout & Tagout Removal).

## **Temporary Removal**

Occasionally, lockout/tagout devices must be temporarily removed in order to test the equipment or machine. When this occurs, the following steps should be taken.

1. Clear away any tools from the danger area.
2. Remove any employees from the danger area.
3. Remove the lockout/tagout device(s).
4. Carefully re-energize and proceed with testing.
5. De-energize and reapply lockout/tagout device(s) following the sequence of lockout/tagout procedures listed above.
6. Document the name and title of the individual(s) who performs and verifies this process.

## **Procedure Involving More Than One Person**

In the preceding steps, if more than one individual is required to lockout or tagout equipment, each shall place his or her own personal lockout or tagout device on the energy isolating device(s). When an energy-isolating device cannot accept multiple locks or tags, a multiple lockout or tagout device (hasp) may be used. If lockout is used, a single lock may be used to lockout the machine or equipment with the key being placed in a lockout box or cabinet which allows the multiple locks to secure it. Each employee will then use his or her own lock to secure the box or cabinet. As a person no longer needs to maintain his or her lockout protection, that person will remove his or her lock from the box or cabinet. If a single authorized employee is given the primary responsibility for a set number of employees working under the protection of a group lockout or tagout device then the following safety measures must be adhered to:

1. Authorized employee must ascertain the exposure status of individual group members.
2. Each employee shall attach a personal lockout/tagout device to the group’s device while he/she is working. The device shall be removed when finished.

## **Stored Energy**

Following the application of the lockout or tagout devices to the energy isolating devices, all potential or residual energy will be relieved, disconnected, restrained, and otherwise rendered safe. Where the re-accumulation of stored energy to a hazardous energy level is possible, verification of isolation will be continued until the maintenance or servicing is complete. Release stored energy (capacitors, springs, elevated members, rotating fly wheels, and hydraulic/air/gas/steam systems) must be relieved or restrained by grounding, repositioning, blocking and/or bleeding the system.

## **Extended Lockout/Tagout**

Should the shift change before the machinery or equipment can be restored to service, the lock and tag out must remain. If the task is reassigned to the next shift, those Employees must lock and tag out before the previous shift may remove their lock and tag.

## **Procedure for Electrical Plug-Type Equipment**

This procedure covers all Electrical Plug-Type Equipment such as Battery Chargers, some Product Pumps, Office Equipment, Powered Hand Tools, Powered Bench Tools, Lathes, Fans, etc. When working on, repairing, or adjusting the above equipment, the following procedures must be utilized to prevent accidental or sudden startup:

1. Unplug Electrical Equipment from wall socket or in-line socket.
2. Attach "Do Not Operate" Tag and Plug Box & Lock on end of power cord. An exception is granted to not lock & tag the plug if the cord & plug remain in the exclusive control of the Employee working on, adjusting or inspecting the equipment.
3. Test Equipment to assure power source has been removed by depressing the "Start" or "On" Switch.
4. Perform required operations.
5. Replace all guards removed.
6. Remove Lock & Plug Box and Tag.
7. Inspect power cord and socket before plugging equipment into power source. Any defects must be repaired before placing the equipment back in service.

**NOTE:** Occasionally used equipment may be unplugged from power source when not in use.

## **Management's Removal of Lock and Tag Out**

Only the employee that locks and tags out machinery, equipment or processes may remove his/her lock and tag. However, should the employee leave the facility before removing his/her lock and tag, the Maintenance Manager may remove the lock and tag. The Maintenance Manager must be assured that all tools have been removed, all guards have been replaced and all employees are free from any hazard before the lock and tag are removed and the machinery, equipment or process are returned to service. Notification of the employee who placed the lock is required prior to lock removal. This process must be properly documented.

## **Training**

### **Authorized Employees Training**

All Maintenance Employees, Department Supervisors and Janitorial employees will be trained to use the Lockout/Tagout Procedures. The training will be conducted by the Maintenance Supervisor or Safety Coordinator at time of initial hire. Retraining shall be held at least annually. The training will consist of the following:

1. Review of General Procedures
2. Review of Specific Procedures for machinery, equipment and processes
3. Location and use of Specific Procedures
4. Procedures when questions arise

### **Affected Employee Training**

1. Only trained and authorized Employees will repair, replace or adjust machinery, equipment or processes.
2. Affected Employees may not remove Locks, locking devices or tags from machinery, equipment or circuits.
3. Purpose and use of the lockout procedures.

### **Other Employee Training**

1. Only trained and authorized Employees will repair, replace or adjust machinery or Equipment.
2. Other Employees may not remove Locks, locking devices or tags from machinery, equipment or circuits



## **Documentation**

1. Procedural steps for lockout/tagout for all machines shall be documented.
2. Documentation of employee training shall be kept on file in each employee's training file.
3. An inspection shall be performed, certified and documented annually, under the direction of the Safety Manager, to assure compliance with the written program. This will be kept in the Safety Manager's office. The purpose is to ensure that the written procedures and the requirements of the standard are being followed, and that employees understand their responsibilities under the procedures.

## **Affected Employees for Lockout/Tagout**

Because people may be moved from one work area to another, it would not be appropriate or practical to generate a list of people identified with a particular area. Therefore, the person who initiates, or terminates, a lockout or tagout procedure will notify those persons in the affected area.

**PERSONAL PROTECTIVE EQUIPMENT  
PROGRAM  
Chapter 13**

## **Personal Protective Equipment Program Purpose**

Base Group provides all employees with the required PPE in order to safely address the needed tasks and known hazards. This chapter covers the requirements for Personal Protective Equipment with the exception of PPE used for hearing conservation and respiratory protection or PPE required for hazardous material response to spills or releases, which if applicable are covered under separate programs. The Safety Manager is the program coordinator, acting as the representative of the company, who has overall responsibility for the program. The Safety Manager will designate appropriate supervisors to assist in training employees and monitoring their use of PPE. This written plan is kept in the Safety Manager's office. Management will review and update the program as necessary. Copies of this program may be obtained from the Company's office. We believe it is our obligation to provide a hazard free environment to all our employees. Any employee encountering hazardous conditions must be protected against the potential hazards. The purpose of protective clothing and equipment (PPE) is to shield or isolate individuals from chemical, physical, biological, or other hazards that may be present in the workplace. Establishing an overall written PPE program detailing how employees must use PPE makes it easier to ensure that they use PPE properly in the workplace and document our PPE efforts in the event of an OSHA inspection. Our PPE program covers:

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

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

## **General Policy**

Engineering controls shall be the primary methods used to eliminate or minimize hazard exposure in the workplace. When such controls are not practical or applicable, personal protective equipment shall be employed to reduce or eliminate personnel exposure to hazards. Personal protective equipment (PPE) will be provided, used, and maintained when it has been determined that its use is required and that such use will lessen the likelihood of occupational injuries and/ or illnesses.

## **Responsibilities**

The Safety Manager will be responsible for assessing the hazards and exposures that may require the use of PPE, determining the type of equipment to be provided, and purchasing the equipment. Input from managers, supervisors, and employees will be obtained and considered in selecting appropriate equipment. Managers/supervisors will be responsible for training employees in the use and proper care of PPE, ensuring that all employees are assigned appropriate PPE, and ensuring that PPE is worn by employees when and where it is required. Employees are responsible for following all provisions of this program and related procedures. They are expected to wear PPE when and where it is required.

## **Hazard Assessment**

The company will perform an assessment of the workplace to determine if hazards are present, or likely to be present, which necessitate the use of personal protective equipment (PPE). This assessment will consist of a survey of the workplace to identify sources of hazards to workers. Consideration will be given to hazards such as impact, penetration, laceration, compression (dropping heavy objects on foot, roll-over, etc.), chemical exposures, harmful dust, heat, light (optical) radiation, electrical hazards, noise, etc. Where such hazards are present, or likely to be present, the Company will:

- Select, and have each affected employee use, the proper PPE
- Communicate selection decisions to each affected employee
- Select PPE that properly fits each affected employee.
- Train employees in the use and care of PPE as described elsewhere in this program

The company will verify that the workplace hazard assessment is performed prior to the start of each project. The site foreman will be responsible for conducting this assessment and shall contact the Safety Manager if questions arise or if they are not sure how to proceed. Whenever there is a change in process or in the workplace that might introduce or change an exposure or hazard, the Company will perform an assessment to determine if there needs to be additional PPE or a change in the PPE provided. The company will review and update the workplace hazard assessment on an annual basis. During the walk-through survey the site foreman (Safety Manager if appropriate) should observe:

- a) potential fall hazards;
- b) sources of motion; i.e., machinery or processes where any movement of tools, machine elements or particles could exist, or movement of personnel that could result in collision with stationary objects;

- c) sources of high temperatures that could result in burns, eye injury or ignition of protective equipment, etc.;
- d) types of chemical exposures;
- e) sources of harmful dust;
- f) sources of light radiation, i.e., welding, brazing, cutting, furnaces, heat treating, high intensity lights, etc.;
- g) sources of falling objects or potential for dropping objects;
- h) sources of sharp objects which might pierce the feet or cut the hands;
- i) sources of rolling or pinching objects which could crush the feet;
- j) layout of workplace and location of co-workers; and
- k) any electrical hazards. In addition, injury/accident data should be reviewed to help identify problem areas.

### Organize Data

Following the walk-through survey, it is necessary to organize the data and information for use in the assessment of hazards. The objective is to prepare for an analysis of the hazards in the environment to enable proper selection of protective equipment.

### Analyze Data

Having gathered and organized data on a workplace, an estimate of the potential for injuries should be made. Each of the basic hazards should be reviewed and a determination made as to the type, level of risk, and seriousness of potential injury from each of the hazards found in the area. The possibility of exposure to several hazards simultaneously should be considered.

## **Controlling Hazards**

PPE devices alone should not be relied on to provide protection against hazards, but should be used in conjunction with guards, engineering controls, and sound manufacturing practices.

## **Assessment and Selection**

It is necessary to consider certain general guidelines for assessing the foot, head, eye and face, and hand hazard situations that exist in an occupational or educational

operation or process, and to match the protective devices to the particular hazard. It should be the responsibility of the Safety Manager to exercise common sense and appropriate expertise to accomplish these tasks. Personal protective equipment will meet the following standards:

- Eye & Face Protection devices - ANSI Z87.1-1989 “American National Standard Practice for Occupational and Educational Eye and Face Protection”
- Head Protection devices - ANSI Z89.1-1986 “American National Standard for Personal Protection - Protective Headwear for Industrial Workers”
- Foot Protection devices - ANSI Z41-1991 “American National Standard for Personal Protection - Protective Footwear”
- Hand Protection - No national standard available - Selection will be based on task performed, conditions present, duration of use, and the hazards and potential hazards identified.
- Electrical Protective equipment - No national standard - Equipment will be tested electrically before first use and every 6 months thereafter or upon indication that insulating value is suspect.

### Selection Guidelines

The general procedure for selection of protective equipment is to:

- a) Become familiar with the potential hazards and the type of protective equipment that is available, and what it can do; i.e., splash protection, impact protection, etc.;
- b) compare the hazards associated with the environment; i.e., impact velocities, masses, projectile shape, radiation intensities, with the capabilities of the available protective equipment;
- c) select the protective equipment which ensures a level of protection greater than the minimum required to protect employees from the hazards; and
- d) fit the user with the protective device and give instructions on care and use of the PPE. It is very important that end users be made aware of all warning labels for and limitations of their PPE.

### Fitting the Device

Careful consideration must be given to comfort and fit. PPE that fits poorly will not afford the necessary protection. Continued wearing of the device is more likely if it fits the wearer comfortably. Protective devices are generally available in a variety of sizes. Care should be taken to ensure that the right size is selected.

### Devices with Adjustable Features

Adjustments should be made on an individual basis for a comfortable fit that will maintain the protective device in the proper position. Particular care should be taken in fitting devices for eye protection against dust and chemical splash to ensure that the devices are sealed to the face. In addition, proper fitting of helmets is important to ensure

that it will not fall off during work operations. In some cases a chin strap may be necessary to keep the helmet on an employee's head. (Chin straps should break at a reasonably low force, however, so as to prevent a strangulation hazard). Where manufacturer's instructions are available, they should be followed carefully.

## **Reassessment of Hazards**

It is the responsibility of the Safety Manager to reassess the workplace hazard situation as necessary, by identifying and evaluating new equipment and processes, reviewing accident records, and reevaluating the suitability of previously selected PPE.

## **Defective & Damaged Equipment**

Defective or damaged personal protective equipment shall not be used. Such equipment shall be discarded immediately.

## **Selection of Personal Protective Equipment (PPE)**

Personal protective equipment (PPE) will be selected on the basis of the hazards to which the workers are exposed or potentially exposed. All selections will be made by with input from managers, supervisors, and workers.

## **Training**

Each employee who is required to use PPE will be trained in the following:

- Why PPE is necessary
- When PPE is necessary
- What PPE is necessary and any alternative choices of equipment
- How to properly don, doff, adjust, and wear PPE
- The proper care, maintenance, storage, useful life, and disposal of PPE

The training will include an opportunity for employees to handle the PPE and demonstrate that they understand the training and have the ability to use the PPE properly. Training will be provided by the manager or supervisor of the affected employees. Training will be documented in writing with the documentation including the names of each employee trained, the date(s) of the training, and the subject matter covered. Employees must demonstrate an understanding of the training and the ability to use the PPE properly before they are allowed to perform work requiring the use of the equipment. Employees are prohibited from performing work without donning appropriate PPE to protect them from the hazards they will encounter in the course of that work. If the Safety Manager has reason to believe an employee does not have the understanding or skill required, the employer must retrain the employee immediately. Since an employee's supervisor is in the best position to observe any problems with PPE use by individual

employees, the Safety Manager will seek this person's input when making this determination. Circumstances where retraining may be required include changes in the workplace or changes in the types of PPE to be used, which would render previous training obsolete. Also, inadequacies in an affected employee's knowledge or use of the assigned PPE, which indicates that the employee has not retained the necessary understanding or skills, would require retraining. The company will certify that the employee has received and understands the PPE training. Because failure to comply with company policy concerning PPE can result in OSHA citations and fines as well as employee injury, an employee who does not comply with this program will be disciplined for noncompliance according to the company's Disciplinary Action Program.

## **Cleaning and Maintenance**

It is important that all PPE be kept clean and properly maintained by the employee to whom it is assigned. Cleaning is particularly important for eye and face protection where dirty or fogged lenses could impair vision. PPE is to be inspected, cleaned, and maintained by employees at regular intervals as part of their normal job duties so that the PPE provides the requisite protection. Supervisors are responsible for ensuring compliance with cleaning responsibilities by employees. If PPE is for general use, the Safety Manager has responsibility for cleaning and maintenance. If a piece of PPE is in need of repair or replacement it is the responsibility of the employee to bring it to the immediate attention of his or her supervisor or the Safety Manager. It is against work rules to use PPE that is in disrepair or not able to perform its intended function. Contaminated PPE that cannot be decontaminated is disposed of in a manner that protects employees from exposure to hazards.

## **Personal Protective Equipment**

Engineering controls shall be the primary methods used to eliminate or minimize hazard exposure in the workplace. When such controls are not practical or applicable, personal protective equipment shall be employed to reduce or eliminate personnel exposure to hazards. Personal protective equipment (PPE) will be provided, used, and maintained when it has been determined that its use is required and that such use will lessen the likelihood of occupational injuries and/or illnesses. The Safety Manager will recommend and/or provide necessary protective equipment where there is a reasonable probability that the use of the equipment will prevent or reduce the severity of injuries or illness.

### **Equipment Specifications and Requirements**

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



## **Eye and Face Protection**

The majority of occupational eye injuries can be prevented by the use of suitable/approved safety spectacles, goggles, or shields. Approved eye and face protection shall be worn when there is a reasonable possibility of personal injury. Supervisors, with assistance from the Safety Manager, determine jobs and work areas that require eye protection and the type of eye and face protection that will be used.

Typical hazards that can cause eye and face injury are:

- Splashes of toxic or corrosive chemicals, hot liquids, and molten metals;
- Flying objects, such as chips of wood, metal, and stone dust;
- Fumes, gases, and mists of toxic or corrosive chemicals; and
- Aerosols of biological substances.

Prevention of eye accidents requires that all persons who may be in eye hazard areas wear protective eyewear. This includes employees, visitors, researchers, contractors, or others passing through an identified eye hazardous area. To provide protection for these personnel, activities shall procure a sufficient quantity of heavy duty goggles and/or plastic eye protectors which afford the maximum amount of protection possible. If these personnel wear personal glasses, they shall be provided with a suitable eye protector to wear over them.

### **Specifications**

Eye and face protectors procured, issued to, and used by Company personnel must conform to the following design and standards:

- a) Provide adequate protection against the particular hazards for which they are designed.
- b) Fit properly and offer the least possible resistance to movement and cause minimal discomfort while in use.
- c) Be durable.
- d) Be easily cleaned or disinfected for or by the wearer.
- e) Be clearly marked to identify the manufacturer.
- f) Persons who require corrective lenses for normal vision, and who are required to wear eye protection, must wear goggles or spectacles of one of the following types:
  - a. Spectacles with protective lenses which provide optical correction.
  - b. Goggles that can be worn over spectacles without disturbing the adjustment of the spectacles.
  - c. Goggles that incorporate corrective lenses mounted behind the protective lenses.

### **Description and Use of Eye/Face Protectors**

- Safety Spectacles. Protective eye glasses are made with safety frames, tempered glass or plastic lenses, temples and side shields which provide eye protection from moderate impact and particles encountered in job tasks such as carpentry, woodworking, grinding, scaling, etc.
- Single Lens Goggles. Vinyl framed goggles of soft pliable body design provide adequate eye protection from many hazards. These goggles are available with clear or tinted lenses, perforated, port vented, or non-vented frames.
- Single lens goggles provide similar protection to spectacles and may be worn in combination with spectacles or corrective lenses to insure protection along with proper vision.
- Welders/Chippers Goggles. These goggles are available in rigid and soft frames to accommodate single or two eye piece lenses.
- Welders goggles provide protection from sparking, scaling or splashing metals and harmful light rays. Lenses are impact resistant and are available in graduated shades of filtration.
- Chippers/grinders goggles provide eye protection from flying particles. The dual protective eye cups house impact resistant clear lenses with individual cover plates.
- Face Shields. These normally consist of an adjustable headgear and face shield of tinted/transparent acetate or polycarbonate materials, or wire screen. Face shields are available in various sizes, tensile strength, impact/ heat resistance and light ray filtering capacity. Face shields will be used in operations when the entire face needs protection and should be worn to protect eyes and face against flying particles, metal sparks, and chemical/ biological splash, such as kettle and lugger operations.
- Welding Shields. These shield assemblies consist of vulcanized fiber or glass fiber body, a ratchet/button type adjustable headgear or cap attachment and a filter and cover plate holder. These shields will be provided to protect workers' eyes and face from infrared or radiant light burns, flying sparks, metal spatter and slag chips encountered during welding, brazing, soldering, resistance welding, bare or shielded electric arc welding and oxyacetylene welding and cutting operations.

The company maintains a supply of various eye and face protective devices. Personnel requiring prescription safety glasses must contact the Safety Manager.

### Hearing Protection

Hearing protection devices are the first line of defense against noise in environments where engineering controls have not reduced employee exposure to safe levels. Hearing protective devices can prevent significant hearing loss, but only if they are used properly. The most popular hearing protection devices are earplugs which are inserted into the ear canal to provide a seal against the canal walls. Earmuffs enclose the entire external ears inside rigid cups. The inside of the muff cup is lined with acoustic foam and the perimeter of the cup is fitted with a cushion that seals against the head around the ear by the force of the headband. Preformed earplugs and earmuffs should be washed periodically and stored in a clean area, and foam inserts should be discarded

after each use. It is important for you to wash hands before handling pre-formed earplugs and foam inserts to prevent contaminants from being placed in the ear which may increase your risk of developing infections. Also, check hearing protective devices for signs of wear or deterioration. Replace devices periodically. The company maintains a supply of a variety of disposable foam ear inserts and earmuffs.

## **Respiratory Protection**

Respiratory hazards may occur through exposure to harmful dusts, fogs, fumes, mists, gases, smoke, sprays, and vapors. The best means of protecting personnel is through the use of engineering controls, e.g., local exhaust ventilation. Only when engineering controls are not practical or applicable shall respiratory protective equipment be employed to reduce personnel exposure. The Safety Manager is responsible for the Respiratory Protection Program at the Company. Workers requiring the use of respirators must first obtain medical approval from the Company physician to wear a respirator before a respirator can be issued. The Safety Manager conducts respirator training and fit tests and is responsible for determining the proper type of respiratory protection required for the particular hazard. Adherence to the following guidelines will help ensure the proper and safe use of respiratory equipment:

- Wear only the respirator you have been instructed to use. For example, do not wear a self-containing breathing apparatus if you have been assigned and fitted for a half-mask respirator
- Wear the correct respirator for the particular hazard. For example, some situations, such as chemical spills or other emergencies, may require a higher level of protection than your respirator can handle. Also, the proper cartridge must be matched to the hazard (a cartridge designed for dusts and mists will not provide protection from vapors)
- Check the respirator for a good fit before each use. Positive and negative fit checks should be conducted.
- Check the respirator for deterioration before and after use. Do not use a defective respirator.
- Recognize indications that cartridges and canisters are at their end of service. If in doubt, change cartridges/ canisters before using respirator.
- Practice moving and working while wearing the respirator so that you can get used to it.
- Clean the respirator after each use, thoroughly dry it and place the cleaned respirator in a sealable plastic bag.
- Store respirators carefully in a protected location away from excessive heat, light, and chemicals.

## **Head Protection**

Hats and caps have been designed and manufactured to provide workers protection from impact, heat, electrical and fire hazards. These protectors consist of the

shell and the suspension combined as a protective system. Safety hats and caps will be of nonconductive, fire and water resistant materials. Bump caps or skull guards are constructed of lightweight materials and are designed to provide minimal protection against hazards when working in congested areas. Head protection will be furnished to, and used by, all employees and contractors engaged in construction and other miscellaneous work in head-hazard areas. Head protection will also be required to be worn by engineers, inspectors, and visitors at construction sites. Bump caps/skull guards will be issued to and worn for protection against scalp lacerations from contact with sharp objects. They will not be worn as substitutes for safety caps/hats because they do not afford protection from high impact forces or penetration by falling objects.

## **Hand Protection**

Skin contact is a potential source of exposure to toxic materials; it is important that the proper steps be taken to prevent such contact. Gloves should be selected on the basis of the material being handled, the particular hazard involved, and their suitability for the operation being conducted. One type of glove will not work in all situations. Most accidents involving hands and arms can be classified under four main hazard categories: chemicals, abrasions, cutting, and heat. There are gloves available that can protect workers from any of these individual hazards or any combination thereof. The first consideration in the selection of gloves for use against chemicals is to determine, if possible, the exact nature of the substances to be encountered. Read instructions and warnings on chemical container labels and SDS before working with any chemical. Recommended glove types are often listed in the section for personal protective equipment. All glove materials are eventually permeated by chemicals. However, they can be used safely for limited time periods if specific use and glove characteristics (i.e., thickness and permeation rate and time) are known. The Safety Manager can assist in determining the specific type of glove material that should be worn for a particular chemical. Gloves should be replaced periodically, depending on frequency of use and permeability to the substance(s) handled. Gloves overtly contaminated should be rinsed and then carefully removed after use. Gloves should also be worn whenever it is necessary to handle rough or sharp edged objects, and very hot or very cold materials. The type of glove materials to be used (in these situations) often includes leather, welder's gloves, aluminum-backed gloves, and other types of insulated glove materials. Careful attention must be given to protecting your hands when working with tools and machinery. Power tools and machinery must have guards installed or incorporated into their design that prevent the hands from contacting the point of operation, power train, or other moving parts. To protect the hands from injury due to contact with moving parts, it is important to:

- Ensure that guards are always in place and used.
- Always lock out machines or tools and disconnect the power before making repairs.
- Treat a machine without a guard as inoperative; and
- Do not wear gloves around moving machinery, such as drill presses, mills, lathes, and grinders.

The Safety Manager can help the supervisor identify appropriate glove selections for their operations. The company maintains a selection of gloves for various tasks.

## **Safety Shoes**

Safety shoes shall be worn in the shops, warehouses, and job sites. Recommendations for safety footwear shall be approved by the local manager. All safety footwear shall comply with American National Standards Institute (ANSI) Standard ANSI Z41-1991, "American National Standard for Personal Protection - Protective Footwear. Protective footwear purchased before July 5, 1994, shall comply with ANSI Standard Z41.1-1967.

### **Responsibilities**

**Supervisor** - Reviews employees work situation and recommends safety footwear as appropriate in accordance with established policy. Ensures that all employees under his supervision use and maintain safety footwear.

**Employee** - Wears approved safety shoes in all areas requiring safety footwear as determined by the supervisor and the Safety

**Safety Manager** - Consults with supervisors concerning safety shoe requirements.

Supervisors must review employee's work situation in consultation with the Safety Manager to decide the need for safety footwear and appropriate types.

## **Hearing Personal Protective Equipment**

Hearing protective devices (ear plugs, muffs, etc.) shall be the permanent solution only when engineering or administrative controls are considered to be infeasible or cost prohibitive. Hearing protective devices are defined as any device that can be worn to reduce the level of sound entering the ear. Hearing protective devices shall be worn by all personnel when they must enter or work in an area where the operations generate noise levels of:

- Greater than 85 dBA sound levels, or
- 115 dB peak sound pressure level or greater

Types of Hearing Protective Devices Hearing protective devices include the following:

A device designed to provide an air-tight seal with the ear canal. There are three types of insert earplugs – premolded, formable, and custom earplugs.

Premolded earplugs are pliable devices of fixed proportions. Two standard styles, single flange and triple flange, come in various sizes, and will fit most people. Personnel responsible for fitting and dispensing earplugs will train users on proper insertion, wear, and care. While premolded earplugs are reusable, they may deteriorate and should be replaced periodically.

Formable earplugs come in just one size. Some are made of material which, after being compressed and inserted, expands to form a seal in the ear canal. When properly inserted, they provide noise attenuation values that are similar to those from correctly fitted premolded earplugs. Individual units may procure approved formable earplugs. Supervisors must instruct users in the proper use of these earplugs as part of the annual education program. Each earplug must be held in place while it expands enough to remain firmly seated. A set of earplugs with a cord attached is available. These earplugs may be washed and therefore are reusable, but will have to be replaced after two or three weeks or when they no longer form an airtight seal when properly inserted.

Custom Molded Earplugs: A small percentage of the population cannot be fitted with standard premolded or formable earplugs. Custom earplugs can be made to fit the exact size and shape of the individual's ear canal. Individuals needing custom earplugs will be referred to an audiologist.

Earmuffs are devices worn around the ear to reduce the level of noise that reaches the ear. Their effectiveness depends on an air tight seal between the cushion and the head.

### *Selection of Hearing Protective Devices*

Employees will be given the opportunity to select hearing protective devices from a variety of suitable ones provided by the Safety Manager. In all cases the chosen hearing protectors shall have a Noise Reduction Ratio (NRR) high enough to reduce the noise at the ear drum to 85 dBA or lower.

### *Issuance of Hearing Protective Devices*

The Safety Manager will issue and fit the initial hearing protective devices (foam inserts, disposables). Instruction on the proper use and care of earplugs and earmuffs will be provided whenever HPDs (hearing protective devices) are dispensed. Personnel requiring earmuffs in addition to earplugs will be informed of this requirement and educated on the importance of using proper hearing protection. The company will dispense ear muffs when necessary and will maintain a supply of disposable earplugs.

### *Use of Hearing Protective Devices*

Always use and maintain HPDs as originally intended and in accordance with instructions provided. Earmuff performance may be degraded by anything that compromises the cushion-to-circumaural flesh seal. This includes other pieces of personal protective equipment such as eyewear, masks, faceshields, and helmets.

### Maintenance of Hearing Protective Devices

Reusable earplugs, such as the triple flange or formable devices should be washed in lukewarm water using hand soap, rinsed in clean water, and dried thoroughly before use. Wet or damp earplugs should not be placed in their containers. Cleaning should be done as needed. Earmuff cushions should be kept clean. The plastic or foam cushions may be cleaned in the same way as earplugs, but the inside of the muff should not get wet. When not in use, ear muffs should be placed in open air to allow moisture that may have been absorbed into the cups to evaporate.

### Hearing Protection Performance Information

The maximum of sound attenuation one gets when wearing hearing protection devices is limited by human body and bone conduction mechanisms. Even though a particular device may provide outstanding values of noise attenuation the actual noise reductions may be less because of the noise surrounding the head and body bypasses the hearing protector and is transmitted through tissue and bone pathways to the inner ear. The term “double hearing protection” is misleading. The attenuation provided from any combination earplug and earmuff is not equal to the sum of their individual attenuation values.

**FLAMMABLE AND COMBUSTIBLE LIQUIDS  
COMPLIANCE PROGRAM  
Chapter 14**



## **Flammable and Combustible Liquids Compliance Program Purpose**

This Flammable & Combustible Liquids Compliance Program has been written to protect employees who handle, store, and use or work around flammable and combustible liquids subject to the OSHA Flammable & Combustible Liquids Standard, 29 CFR 1910.106. We intend for the information here to facilitate proper design, installation, storage, usage, and handling measures necessary to prevent fire and explosion.

### **Administrative Duties**

The Safety Manager is our company's Flammable & Combustible Liquids Compliance Program Administrator, and is responsible for developing and maintaining the written Flammable & Combustible Liquids Compliance Program. He is responsible for all facets of the program and has full authority to make necessary decisions to ensure the program's success. The program is kept at the following location: Safety Manager's Office.

### **Definitions**

Flammable Liquid - a liquid with a flashpoint below 1000F

Combustible Liquids - a liquid having a flash point at or above 1000 F.

### **Operations Involving Flammable or Combustible Liquids**

Our company operations may involve flammable or combustible liquids on certain projects. Such liquids are stored as follows:

1. Small quantities of gasoline at job sites for fueling portable gasoline equipment.
2. Small quantities of diesel fuel for fueling portable equipment.

### **Storage & Usage of Flammable Liquids**

- Flammable and combustible liquids require careful handling at all times. The proper storage of flammable liquids within a work area is very important in order to protect personnel from fire and other safety and health hazards.
- Storage of Flammable liquids shall be in NFPA approved flammable storage lockers.
- Bulk drums of flammable liquids must be grounded and bonded to containers during dispensing
- Portable containers of gasoline or diesel are not to exceed 5 gallons
- Safety cans (used for dispensing flammable or combustible liquids) shall be metal, self closing and self venting and be equipped with a flame arrester. Shall be NFPA approved.

- Appropriate fire extinguishers are to be mounted within 75 feet of outside areas containing flammable liquids, and within 10 feet of any inside storage area for such materials.
- Storage rooms for flammable and combustible liquids must have explosion proof light fixtures
- Bulk storage of gasoline or diesel is kept in above ground tanks. Tank areas are diked to contain accidental spills. Tanks shall be labeled IAW NFPA guidelines. All tank areas shall be designated no smoking - no hot work – no open flame areas.
- No flames – hot-work or smoking is to be permitted in flammable or combustible liquid storage areas.
- Flammable liquid transfer areas are to be separated from other operations by distance or by construction having proper fire resistance.
- When not in use flammable liquids shall be kept in covered containers.
- Flammable liquids may be used only where there are no open flames or other sources of ignition within the possible path of vapor travel.
- Spills shall be cleaned up promptly.
- Not more than 120 gallons of flammable and combustible liquids may be stored in a storage cabinet. Of this total, not more than 60 gallons may be flammable liquids. Not more than three such cabinets (120 gallons each) may be located in a single fire area.

### **Training**

Under no circumstances may an employee use, handle, or store flammable or combustible liquids until he/she has successfully completed this company's training program under the Flammable & Combustible Liquids Compliance Program. This includes all new employees, regardless of claimed previous experience. The Safety Manager will identify new trainees and those existing employees who need retraining. When an employee has an accident or near miss or some unsafe operating procedure is identified, we retrain that employee. In some cases, it may be necessary to take disciplinary action up to and including termination depending on the severity of the act.

### **Program Evaluation**

It is inherent that problems may occasionally arise in this Flammable & Combustible Liquids Compliance Program. Although we may not be able to eliminate all problems, we try to eliminate as many problems as possible to improve employee protection and encourage employee safe practices. By having our program administrator thoroughly evaluate and, as necessary, revise our program, we can effectively eliminate problems.

**COMPRESSED GAS COMPLIANCE PROGRAM**  
**Chapter 15**

## **Compressed Gas Compliance Program Purpose**

It is the policy of Base Group to permit only trained and authorized employees to handle, store, use, and inspect compressed gases and related equipment. This policy is applicable to daily users and those who only occasionally have cause to use the equipment. This written Compressed Gas Plan describes methods and practices for care and use of compressed gases that can be read and understood by all managers, supervisors, and employees. This written plan is intended to be used to:

- Create an awareness of the hazards among our workforce,
- Standardize procedures for use and care of the equipment,
- Provide a consistent format for training employees on the proper procedures to be used,
- Minimize the possibility of injury or harm to our employees, and
- Demonstrate our compliance with OSHA's compressed gas requirements.

## **Administrative Duties**

Our company's Safety Manager is responsible for developing and maintaining this written Compressed Gas Plan. This person is solely responsible for all facets of the plan and has full authority to make necessary decisions to ensure the success of this plan. He is also qualified, by appropriate training and experience that is commensurate with the complexity of the plan, to administer or oversee our compressed gas safety program and conduct the required evaluations. This written Compressed Gas Plan is kept in the Safety Manager's Office.

## **List of Compressed Gases and Equipment**

The compressed gases used at Base Group may include various gases associated with the construction industry such as, but not limited to, any compressed gases, paints, sealants, solvents, pigments, binders, extenders, additives, sprays, cleaning solutions, foams, compressed air for the use in pneumatic tools, or the contents of any compression chamber associated with any hydraulic engines or equipment.

## **Handling Procedures**

Compressed gases are considered to be handled when employees perform any of the following activities:

- Identify contents;
- Fill, transfer, change gas service, maintain and move containers; and
- Connect containers and withdraw content.
- Identify a gas and its dangers before using it. Look for this information on labels, SDS, and cylinder markings. If you don't know what's in a cylinder, don't use it.

- Examine cylinders as soon as you receive them. If you detect signs of damage or leakage, move them to a safe, isolated area and return them to the supplier as soon as possible.
- Use only regulators, pressure relief devices, valves, hoses, and other auxiliary equipment that is designed for the specific container and compressed gas/cryogenic liquid to be used.
- Do not interchange equipment between different types of gases.
- Make sure valves, hoses, connectors, and regulators are in good condition. Don't use cylinders without them.
- Use pressure relief devices and safety devices to help maintain cylinder or system pressure at the desired levels. (Exceeding the desired pressure could damage the cylinder or system.)
- Never open valves until regulators are drained of gas and pressure-adjusting devices are released. When opening cylinders, point outlets away from people and sources of ignition, such as sparks or flames.
- Open valves slowly. On valves without hand wheels, use only supplier-recommended wrenches. On valves with hand wheels, never use wrenches.
- Do not tamper with connections and do not force connections together.
- Do not hammer valves open or closed.
- Do not drop, bang, slide, clank, or roll cylinders.
- Don't let cylinders fall or have things fall on them.
- Don't lift a cylinder by its cap unless using hand trucks so designed.
- Use carts or other material handling equipment to move cylinders. Use ropes and chains to move a cylinder only if the cylinder has special lugs to accommodate this. Some cylinders may require special hand trucks.
- Keep cylinders secured and upright. (But never secure cylinders to conduit carrying electrical wiring.)
- When transporting compressed gas cylinders, be sure the vehicle is adequately equipped to haul compressed gases safely. Stop the engine while loading or unloading flammable compressed gases.

## **Storage Procedures**

The following activities are involved in safely storing compressed gases:

- Post areas where gases are present,
- Group gases,
- Separate combustibles,
- Avoid corrosives or areas where container damage can occur,
- Position containers properly, and
- Use indoor and outdoor storage appropriately.
- Store cylinders upright.
- When a cylinder is in storage, keep the steel protective cap screwed on. This step reduces the chance that a blow to the valve will allow gas to escape.
- Group cylinders by types of gas.

- Store full and empty cylinders apart.
- Store gases so that old stock is removed and used first.
- To keep cylinders from falling over, secure them with chains or cables.
- Store compressed gas containers in dry, well-ventilated areas away from exits and stairways. If outside, store containers off the ground and out of extremely hot or cold environments.
- Do not store compressed gas containers in high pedestrian and vehicle traffic areas. (Containers are more likely to be damaged there.)
- Store oxygen cylinders at least 20 feet from flammables or combustibles or separate them by a 5-foot, fire-resistant barrier.
- Keep oil and grease away from oxygen cylinders, valves, and hoses.
- If your hands, gloves, or clothing are oily, do not handle oxygen cylinders.
- Make sure fire extinguishers near the storage area are appropriate for gases stored there.
- Post signs stating the name(s) of gas present and NO SMOKING where gases are stored.

## **Usage Procedures**

Safe use of compressed gases involves the following activities:

- Properly handle leaking containers,
- Prevent abuse,
- Identify contents,
- Properly use container and valve caps and plugs, and
- Return empty containers.
- Remove any leaking containers to a well-ventilated area and post a warning of the hazard.
- Shut a leaking valve and tighten the valve gland or nut. Then try opening the valve; if it still leaks, close it and tag the container unserviceable.
- Make sure labels are legible before using containers; otherwise, return the containers to the supplier.
- Do not misuse containers (i.e., using them for support); only use them as they were intended.
- Keep containers away from fire, sparks, and electricity.
- Don't smoke or allow others to smoke in the vicinity of flammable compressed gas containers.
- Do not subject containers to extreme heat or cold.
- Contact the manufacturer/supplier with questions about safe handling.
- Always keep removable caps and valve outlet caps/plugs on containers except when connecting to dispensing equipment.
- Do not use oxygen and compressed air interchangeably. They are not the same.
- When empty, close and return cylinders. Empty cylinders must be marked "Empty".
- Be sure valves are closed when not using the container and before returning containers.

## **Training Program**

The Safety Manager is responsible for training personnel who will handle, store, or use a compressed gas. Under no circumstances will an employee handle, store, or use a compressed gas until he/she has successfully completed this company's compressed gas training program. This includes all new workers who will handle, store, and use compressed gases, regardless of claimed previous experience.

General training elements include the following:

1. Compressed gases and equipment at the company.
2. Hazards of compressed gases and equipment at the company.
3. Personal protective equipment.
4. Inspection procedures.
5. Handling procedures.
6. Storage procedures.
7. Usage procedures.
8. Gas-specific safety procedures.
9. Compressed gas emergency procedures.

**CONFINED SPACE ENTRY PROGRAM**  
**Chapter 16**



# **Confined Space Entry Program**

## **Purpose**

Base Group shall institute a Confined Space Entry Program for two primary reasons. Our company must comply with the OSHA Confined Spaces Standard found under 29 CFR 1926.21 and the general industry standards contained within 29 CFR 1910.146. Additionally, this program will assist Base Group in achieving the overall goal of a safer work place.

Several benefits are anticipated with the implementation of the Confined Space Entry Program.

1. Prevention of illnesses and injuries related to entry and/or work in permit-required confined spaces.
2. Overall improvement of the company's Safety Program.
3. Improvement of employer-employee relations by establishing regular lines of communication.
4. Avoidance of citations, violations, and related problems from the Federal and state regulations.

The purpose of this program is to ensure the protection of all employees of our company. Employees must be protected and educated on the hazards associated with confined space entry. This document contains requirements for practices and procedures to protect employees from those hazards of entry into and work within permit required confined spaces. It shall be the policy of Base Group to reduce the need for confined space entry. It shall also be company policy to eliminate whenever possible, all confined space hazards in order to reclassify permit-required confined spaces to non-permit required confined spaces. When confined space entry is necessary, all provisions of this document are to be followed.

## **Administrative Duties**

Base Group Safety Manager has overall responsibility for coordinating safety and health programs in this company. He or she is the person having overall responsibility for the Confined Space Entry Program. The company Safety Manager will review and update the program, as necessary. Copies of the written program may be obtained in the Safety Manager's office. All employees are required to comply with the restrictions and limitations imposed upon them while performing work in confined spaces. Only properly trained and authorized employees are permitted to perform work in such areas. Each new or transferred affected employee and other employees whose work operations are in a

confined area shall be instructed in the purpose and use of this Confined Space Entry Program. A copy of this written confined space entry program is available, upon request, to employees, their designated representatives, directors or designees of the Federal Occupational Health and Safety Administration (OSHA). A copy of this written confined space entry program will be kept with the Safety Manager and within each employee's manual.

## **Basic Rules for This Confined Space Entry Program**

Employees and contractors of Base Group shall not enter a confined space until the following requirements are met:

1. Hazards are identified and evaluated; and
2. Workers entering the space are trained on confined space hazards and entry procedures; and
3. Workers entering the space are identified and made aware of possible hazards that may be encountered on that particular job; and
4. Appropriate danger signs have been posted; and
5. Proper personal protective equipment has been selected and issued to affected employees.

If a confined space is not entered because one of the conditions mentioned above has not been met, the confined space will be restricted to employees and others by erecting barriers, installing locks, and/or posting warning signs until requirements have been met.

Base Group has the responsibility to establish a written, comprehensive program which includes provisions for working in confined spaces. These provisions entail preventing unauthorized entries, identifying and evaluating hazards, establishing procedures for safe permit space entry, issuing and maintaining proper equipment, using outside attendants, establishing rescue and emergency procedures, identifying duties and job classifications of employees entering and/or working in confined spaces, establishing a system for issuing entry permits, developing post-entry procedures, and conducting post-illness/injury reviews. The written plan may be reviewed each year in order to ensure compliance with any change in federal or state safety regulations.

## **Definitions of Confined Spaces**

A confined space means a space that: 1) is large enough and so configured that an employee can bodily enter and perform assigned work; 2) has limited or restricted means for entry or exit; and 3) is not designed for continuous human occupancy. Examples of confined spaces include but are not limited to storage tanks, process vessels, bins, silos, boilers, ventilation or exhaust ducts, sewers, pipe chassis, underground utility vaults, tunnels, and pipelines.

A permit-required confined space means a confined space that either 1) contains or has the potential to contain a hazardous atmosphere, 2) contains a material that has the potential for engulfing an entrant, 3) has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section, or 4) contains any other serious safety or health hazard.

## **Responsibilities**

Base Group's Safety Manager shall be responsible for the development, documentation, and administration of this Confined Space Entry Program. In fulfilling these responsibilities, the Safety Manager shall carry out the following tasks:

- Develop the Written Confined Space Entry Program and revise the program as necessary.
- Maintain records of employee training.
- Provide guidance for the proper selection and use of appropriate air monitoring equipment, respiratory protection, and personal protective equipment to meet the requirements of this program.
- Periodically audit work operations and documentation using canceled permits to evaluate the overall effectiveness of the Confined Space Entry Program and ensure that employees participating in entry operations are protected from permit space hazards.
- Assist each Manager/Supervisor in identifying confined spaces encountered by his/her employees.
- Provide guidance for the proper selection and use of appropriate safety and rescue equipment to meet the requirements of the Confined Space Entry Program.

## **Supervisors**

Supervisors shall identify and report all job areas and locations that are or may be confined spaces. A list of confined spaces that are identified shall be submitted to the Safety Manager. In addition to this, designated supervisors shall carry out the following tasks:

- Classify confined spaces as "permit required," "Alternate Procedure" or "non-permit required."
- Identify personnel who will enter confined spaces.
- Identify the personnel under their supervision required to wear respirators.
- Advise personnel on routine measurement of respiratory hazards in confined spaces.
- Provide detailed instruction and training on confined space hazards and entry procedures to those who may enter confined spaces.

- Provide instruction to personnel on the proper use of equipment required for confined space entry.
- Maintain equipment that is used to enter confined spaces.
- Conduct work site inspections to review unit compliance with confined space entry procedures.
- Maintain records of equipment maintenance and employee training.
- Inform employees who may enter the permit confined space by posting danger signs or by training.
- Issuance and cancellation of entry permits.
- Establishment of a lockout program for their department.
- Identify and evaluate the hazards of permit spaces before employees enter them.
- Conduct a pre-entry briefing to inform entrants of possible hazards that may be encountered.
- Identify the people who will enter the confined spaces.
- Take the necessary measures to prevent entrance into prohibited permit spaces.

## **Employees Who May Enter Confined Spaces**

Employees who may enter confined spaces shall comply with the confined space entry procedures contained herein and with those procedures stipulated by their supervisor. To comply, employees shall carry out the following tasks:

- 1) Store, clean, maintain and guard against damage, equipment used for confined space entry.
- 1) Report any deficiencies or malfunction of equipment to a supervisor.
- 1) Understand emergency procedures in case of an accident in a confined space.
- 1) Under no circumstance enter a confined space that is suspect of having a non-respirable atmosphere, even to rescue a fellow employee.

## **Permit-Required Confined Spaces**

Supervisors will identify and classify every confined space as either a Permit-Required Confined Space or, when the confined space does not present a real potential hazard, a Non-Permit Confined Space. When Permit-Required Confined Spaces are identified, department heads and supervisors will also be responsible for the following:

- Preventing Unauthorized Entry
- Identifying Permit Space Hazards
- Developing Safe Entry Practices
- Maintaining and Using Equipment Properly
- Testing for Acceptable Entry Conditions
- Providing Permit Space Attendants
- Providing Emergency Retrieval Systems

## **Program Elements for Permit-Required Confined Spaces**

### **Preventing Unauthorized Entry**

In order to prevent unauthorized entry into permit-required confined spaces, Supervisors must utilize at least two of the following mechanisms:

- Providing information to visitors
- Posting warning signs
- Erecting barriers
- Installing locks or covers at entry points

Each supervisor will document the implementation of these mechanisms and ensure that they remain in place.

### **Identifying Permit Space Hazards**

Each supervisor shall identify and evaluate the hazards of permit spaces before employees enter them.

The following hazards shall be identified prior to entry into a confined space:

- Atmospheric hazards
- Asphyxiating atmospheres
- Flammable atmospheres
- Toxic atmospheres
- Burn hazards
- Heat stress hazards
- Mechanical hazards
- Engulfment hazards
- Physical hazards (falls, debris, slipping hazards)
- Electrocution
- Danger of unexpected movement of machinery
- Noise hazards

### **Developing Safe Entry Practices**

Supervisors and managers shall implement procedures and practices necessary for safe permit space entry operations. These include, but are not limited to:

- Acceptable entry conditions
- Isolating the permit space
- Purging, inserting, flushing or ventilating the permit space as necessary to eliminate or control atmospheric hazards.

- Pre-entry Briefing. The lead worker will conduct a meeting of all employees who will enter the confined space. Employees will be informed of the hazards and safety conditions of the particular job

### Controlling Hazards

Hazards shall be controlled by the following mechanisms:

- Lockout of energy sources
- Cleaning and purging
- Personal protective equipment

## **Equipment Use and Maintenance**

Equipment, including testing, ventilating, lighting, monitoring, communication and personal protective equipment, necessary for the safe entry into a Permit Space shall be provided, maintained and properly used by each Department.

## **Testing for Acceptable Entry Conditions**

Permit space evaluation will include all testing conducted before an entry as well as all testing and monitoring activities to ensure that acceptable entry conditions are maintained throughout the entry.

## **Providing Permit Space Attendants**

Each supervisor will provide at least one attendant outside a permit space to be entered for the duration of the entry operations.

## **Training and Duties of Entry Personnel**

There are three specific members of a confined space entry team:

- 1) Authorized Entrants
- 2) Attendants
- 3) Entry Supervisor or "Lead Worker"

The company shall provide training so that all employees whose work is regulated by this section acquire the understanding, knowledge, and skills necessary for the safe performance of the duties assigned. Training shall be provided to each affected employee:

- Before the employee is first assigned duties.
- Before there is a change in assigned duties.

- Whenever there is a change in permit space operations that presents a hazard about which an employee has not previously been trained.
- Whenever the department has reason to believe either that there are deviations from the permit space entry procedures or that there are inadequacies in the employee's knowledge or use of these procedures.

The training shall establish employee proficiency in the duties outlined in in this manual and shall establish new or revised procedures, as necessary, for compliance with applicable standards, codes and regulations. The company shall certify that the training required by the previously mentioned paragraphs has been accomplished. The certification shall contain each employee's name, the signatures or initials of the trainers, and the dates of training. The certification shall be available for inspection by employees and their authorized representatives. Only trained attendants, authorized entrants, and personnel authorizing or in charge of entry shall work in and around Permit Spaces.

## **Rescue and Emergency Services**

Where ever possible, the use of non-entry rescue systems or methods shall be used. Where non-entry rescue is not possible, the company will coordinate rescue and emergency services. These service providers will be made aware of the hazards they may confront when called on to perform rescues. They shall be responsible to equip, train, and conduct such a rescue appropriately. Designated personnel within the company will provide the service providers with access to all permit spaces from which rescue may be necessary so that they can develop appropriate rescue plans and practice rescue operations. To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a permit space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant.

*Non-Entry Rescue Retrieval Systems shall meet the following requirements:*

- Each authorized entrant shall use a chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level, or above the entrant's head. Wristlets may be used in lieu of the chest or full body harness if the employer can demonstrate that the use of a chest or full body harness is infeasible or creates a greater hazard and that the use of wristlets is the safest and most effective alternative.
- The other end of the retrieval line shall be attached to a mechanical device or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device shall be available to retrieve personnel from vertical type permit spaces more than 5 feet deep.

- If an injured entrant is exposed to a substance for which a Material Safety Data Sheet (SDS) or other similar written information is required to be kept at the worksite, that SDS or written information shall be made available to the medical facility treating the exposed entrant.

## **Written Permit System**

A permit system shall be utilized for entry into Permit Spaces. Each canceled entry permit shall be retained in order to facilitate the review of the permit-required confined space program. Any problems encountered during an entry operation shall be noted on the pertinent permit so that appropriate revisions to the permit space program can be made. All outside contractors performing work in confined space entry permit areas shall be informed of any fire, explosion, health or other safety hazards of that confined space. This information shall be based on current or past history of the confined space and the nature of the contractor's work procedure in making such disclosure. Base Group shall inform contractors of all safety rules and emergency plans which may be applicable to the contractor's employees. Contractors and their employees must not be allowed to enter a confined space until the provisions of this program have been satisfied. When both company and contractor personnel are working in or near permit spaces, their entry operations must be coordinated to avoid endangering any personnel.

## **Concluding Entry**

Field Supervisors will determine when the entry operations have been completed. The permit space will be closed and the permit canceled. The supervisor or manager will write "Permit Canceled" with the date, time, and signature at the bottom of the Confined Space Permit. Entry into the permit space will only be allowed after following all aspects of this program.

## **Ventilation of Confined Spaces**

Ventilation is one of the most effective means of controlling hazardous atmospheres in confined spaces. In this procedure, clean air replaces contaminated air by natural or forced (mechanical) ventilation.

### **Factors in Ventilating Confined Spaces**

When ventilating a confined space, the following factors must be taken into consideration:

- **Volume of air:** This determines the capacity of the blower or ejector.
- **Type of atmosphere:** This will determine the type of blower or ejector used and the length of time needed to ventilate until it is safe for people to enter the space.
- **Access to space:** This determines how to get the ventilating air into and out of the space.



- **Power requirements and availability:** This will influence the power source and fan motor size. A portable generator may be required as a source of power.
- **Cost, efficiency, and maintenance:** This may have an effect on the type of device that is selected and what is necessary to keep it working properly.
- **Shape of space:** This will affect the type of directional device needed and the amount of air pressure required to provide sufficient ventilation.
- **Source of clean air:** This is necessary to ensure adequate ventilation.
- **Length of time ventilation is needed:** This is determined by the type of contaminant and the work that is to be done in the space.
- **Type of work to be done:** This determines whether local exhaust ventilation or general ventilation is required.

### Ventilation Guide

- 1) Select fan with a capacity to quickly replace the air in the space. Limitations are pasted on the fan housing.
- 2) Use reliable, grounded electrical power.
- 3) Eliminate any hazardous atmosphere. Exhaust toxic and flammable air; supply fresh air when oxygen-deficient.
- 4) Provide constant circulation of fresh air while space is occupied.
  - Natural ventilation is allowable only on "non-permit" entry.
  - Direct high-velocity supply ventilation to mix the air throughout the space.
  - Capture contaminants during hot work or cleaning with solvents by using additional local (or point) exhaust.
  - Pure oxygen is not "fresh air". Never use bottled oxygen for ventilation.
- 5) Arrange ductwork to ensure safety:
  - Locate supply fan intake away from flammable or toxic air.
  - Position exhaust fan outlet to avoid recirculation of bad air or endangering others outside the space.
  - Position exhaust duct inlet next to the source of contaminants.
  - Keep ducts short and straight.
  - Make sure air circulates through entire space and does not short-circuit.
- 6) Monitor the air to ensure ventilation is keeping the air safe to breathe.

## **Basic Confined Space Entry Rescue Equipment**

Equipment shall include, but not be limited to:

- Safety Cones
- Safety Vest

- Barricades (as required)
- Men Working Signs (as required)
- Safety Flags
- Manhole Hook (or pick)
- Combustible Gas/Oxygen/CO2/Toxic Gas Detector
- Utility Ropes
- Full Body Harness
- Retrieval Line
- Mechanical Retrieval Device
- Tri-pod or Other Anchoring Point
- Forced Air Ventilation Blower & Hose
- Fire Extinguisher
- First Aid Kit
- Safety Ladder
- Manhole Access Bracket
- Self Contained Air Units
- Hard Hats
- Safety Glasses
- Safety Shoes
- Rescue Telephone Number

## **Employee Duties**

### *Duties of Authorized Entrants:*

- 1) Know the hazards that may be faced during entry.
- 2) Recognize the signs and symptoms of hazard exposure.
- 3) Understand the consequences of hazardous exposure.
- 4) Use equipment properly.
- 5) Communicate with the attendant.
- 6) Alert the attendant of hazards.
- 7) Exit the permit space quickly when required.

### *Duties of the Attendant*

- 1) Know entry hazards.
- 2) Know behavioral effects of exposure.
- 3) Maintain accurate entrant identification.

- 4) Remain outside the permit space.
- 5) Communicate with entrants.
- 6) Monitor entry activities.
- 7) Summon rescue and emergency services.
- 8) Prevent unauthorized entry.
- 9) Perform non-entry rescue.
- 10) Perform no conflicting duties.

#### Duties of the Entry Supervisor

- 1) Know the potential hazards during entry and work.
- 2) Determine if acceptable entry conditions are present at a permit space where entry is planned.
- 3) Terminate entry as required by the standard.
- 4) Verify that rescue services are readily available and the means for summoning them are operable.
- 5) Remove unauthorized individuals who enter or try to enter the permit space during entry and work.
- 6) Determine that entry and work operations remain consistent with entry permit terms and that acceptable entry conditions are maintained.

### **Confined Space Entry Procedures**

- 1) Determine if entry into confined space is necessary to perform work.
- 2) The following minimum required equipment should be on hand:
  - a) Ventilation,
  - b) Barrier and warning signs,
  - c) Gas monitor capable of measuring concentrations of oxygen, flammable gases, hydrogen sulfide and carbon monoxide.
- 3) Eliminate any unsafe conditions before the access door or cover is opened.
- 4) Immediately guard the entry by some barrier and signs to prevent people or objects from accidentally entering the confined space.
- 5) Conduct hazard assessment

#### Test the real or potential atmospheric hazards

- Oxygen content less than 19.5% or greater than 23.5%
- Flammable gases and vapors greater than 10% of the LEL (Lower Explosive Limit)
- Hydrogen Sulfide concentrations greater than 10 ppm (Parts per million)
- Carbon Monoxide concentrations greater than 35 ppm
- Other toxic gases or vapors greater than PEL (Permissible Exposure Limit)

If any hazardous atmosphere exists, do the following

- If possible, determine and eliminate the source of the atmospheric hazards (for example: carbon monoxide from nearby truck or gas-powered generator).
- When the atmosphere contains toxins or flammables, ventilate the space by drawing air out until the air has been changed over several times.
- When oxygen deficient, ventilate by pushing air into the space until the air has been changed over several times.
- Verify the hazardous atmosphere has been eliminated by testing the air.

Follow pre-entry precautions:

- Notify affected departments of service interruption.
- Lock-out/tag-out all sources of energy (e.g. steam, electric, mechanical) posing a risk to workers.
- Install blank in affected pipes where valves are not secure or seated.
- Clean and/or purge any chemical storage vessel.
- Wear appropriate personal protective and respiratory protection.
- Have lights and or ladder available.
- If coordination is needed with contractors, see Contractor Checklist.
- Have appropriate SDS.
- Determine how often air monitoring will be conducted.

Additional precautions necessary for Permit-Required Spaces:

- Determine start and end times for authorized entry.
- Assign roles and responsibilities as entrant(s), attendant(s), lead worker(s).
- Set up non-entry rescue equipment (tri-pod, harness).
- Identify rescue service.
- Determine communication method between entrant/attendant.
- Conduct pre-entry briefing: review hazards, procedures, and precautions.
- Sign and post the Permit/Certification at the site.
- Continually ventilate the space by pushing air so that a positive pressure changes the air over several times every hour. Direct the clean air toward the worker.
- Test the air periodically while personnel are in the confined space to ensure the ventilation is preventing any accumulation of a hazardous atmosphere.
- Under the following conditions, personnel must exit the confined space, re-evaluate hazards, and modify entry procedures.

**FALL PROTECTION SAFETY PROGRAM**  
**Chapter 17**

## **Fall Protection Safety Program**

OSHA currently regulates fall protection for construction under Part 1926, Subpart M. The standards for regulating fall protection systems and procedures are intended to prevent employees from falling off, onto or through working levels and to protect employees from falling objects. Fall protection requirements under the OSHA Construction regulations require considerable planning and preparation. Written fall protection procedures establish guidelines to be followed whenever an employee works above dangerous equipment on ramps or runways, or at heights with fall protection at the job site. The regulations:

- Are designed to provide a safe working environment, and.
- Govern use of fall protection procedures and equipment.

Written procedures for fall protection establish uniform requirements for fall protection training, operation, and practices. The effectiveness of the written fall protection procedures depends on the active support and involvement of all employees who perform the jobs requiring it. This plan is intended to document procedures that ensure all work requiring fall protection is carried out safely.

### **Purpose**

Our company is dedicated to the protection of its employees from on-the-job injuries. All employees have the responsibility to work safely on the job. The purpose of this plan is to:

- Supplement our standard safety policy by providing safety standards specifically designed to cover fall protection on this job.
- Ensure that each employee is trained and made aware of the safety provisions which are to be implemented by this plan prior to the start of erection.
- This program informs interested persons, including all employees that this company is complying with OSHA's Fall Protection requirements, (29 CFR 1926.500 to.503).

This program applies to all employees who might be exposed to fall hazards, except when designated employees are inspecting, investigating, or assessing workplace conditions before the actual start of construction work or after all construction work has been completed. All fall protection systems selected for each application will be installed before an employee is allowed to go to work in an area that necessitates the protection. The Safety Manager is the program coordinator/manager and is responsible for its

implementation. Copies of the written program may be obtained from the Safety Manager's Office. Certain employees are authorized to inspect, investigate, or assess workplace conditions before construction work begins or after all construction work has been completed. These employees are exempt from the fall protection rule during the performance of these duties. They are the Safety Manager, Site Supervisors, and other properly trained employees who may safely inspect a project prior to or following construction work. These authorized employees determine if all walking/working surfaces on which our employees work have the strength and structural integrity to support the employees. Our employees will not be allowed to work on these surfaces until they have the requisite strength and structural integrity. All employees, or their designated representatives, can obtain further information about this written program, and/or the fall protection standard from The Safety Manager.

## **Our Duty to Provide Fall Protection**

To prevent falls, our company has a duty to anticipate the need to work at heights and to plan our work activities accordingly. Careful planning and preparation lay the necessary groundwork for an accident-free jobsite.

## **Worksite Assessment and Fall Protection System Selection**

Because some sites may require fall protection while others may not, this is the written General Plan applying to all applicable worksites. This fall protection plan is intended to anticipate the particular fall hazards to which our employees may be exposed. Specifically, in accordance with this Plan, it is Base Group policy to perform the following tasks:

- Inspect the area to determine what hazards exist or may arise during the work.
- Identify the hazards and select the appropriate measures and equipment.
- Give specific and appropriate instructions to workers to prevent exposure to unsafe conditions.
- Ensure employees follow procedures given and understand training provided.
- Apprise ourselves of the steps our specialty subcontractors have taken to meet their fall protection requirements.
- Assess each fall situation a given jobsite. Our criteria for selecting a given fall protection system follow those established at 29 CFR 1926.502, fall protection systems criteria and practices.
- Train each employee exposed to these situations as outlined later in this plan.

## **Unprotected Sides and Edges**

Our employees must be protected when they are exposed to falls from unprotected sides and edges of walking/working surfaces (horizontal and vertical surfaces) which are 6 feet or more above lower levels. We know that OSHA has determined that there is no

“safe” distance from an unprotected side or edge that would render fall protection unnecessary. We have chosen the following fall protection for unprotected sides and edges at our worksites:

- Guardrails
- Warning Line system with Safety Monitor
- Personal fall arrest

We maintain the fall protection system(s) chosen until all work has been completed or until the permanent elements of the structure which will eliminate the exposure to falling hazards are in place.

## **Leading Edge Work**

Leading edges are defined as the edge of a floor, roof, or formwork that changes location as additional floor, roof, or formwork sections are placed, formed, or constructed. If work stops on a leading edge it will be considered to be an “unprotected side or edge” and will be covered by the section of this plan on unprotected sides and edges. We presume that it is feasible and will not create a greater hazard to implement at least one of the conventional fall protection systems for our leading edge work. Employees who are not constructing the leading edge, but who are on walking/ working surfaces where leading edges are under construction, are also protected from a fall by guardrails or personal fall arrest.

## **Hoist Areas**

In all situations where equipment and material hoisting operations take place, we protect our employees from fall hazards. When we are involved in hoisting operations we will use the following fall protection systems at these specific locations:

- Guardrails or personal fall arrest systems

When operations require the materials to be lifted by crane to a landing zone (and do not require an employee to lean through the access opening or out over the edge to receive or guide materials), we can select either personal fall arrest equipment or a guardrail system. When guardrails (or chains or gates) are removed to facilitate hoisting operations and one of our employees must lean through the access opening or out over the edge to receive or guide materials they will be protected by a personal fall arrest system.

## **Holes**

Our company protects employees from:

- Tripping in or stepping into or through holes (including skylights).



- Objects falling through holes (including skylights).

We use the following fall protection system to protect our employees working on walking/working surfaces with holes where they can fall 6 feet or more to a lower surface:

- Covers
- Guardrails
- personal fall arrest systems

Employees may be exposed to projects where the danger of tripping or stepping into or through a hole (including skylights) or an object falling through a hole which could strike a worker. In these instances, we use covers to prevent accidents. We understand that OSHA does not intend that a guardrail be erected around holes while employees are working at the hole, passing materials, and so on. Therefore, if the cover is removed while work is in progress, guardrails are not required because they would interfere with the performance of work. When the work has been completed, we will be required to either replace the cover or erect guardrails around the hole.

## **Wall Openings**

Employees who are exposed to the hazard of falling out or through wall openings (including those with chutes attached) where the outside bottom edge of the wall opening is 6 feet or more above lower levels and the inside bottom edge of the wall opening is less than 39 inches above the walking/working surface must be protected from falling. We protect our employees from falls out or through wall openings by the following methods:

- guardrails
- safety nets, or
- personal fall arrest systems

## **Walking/Working Surfaces Not Otherwise Addressed**

We realize there will be situations that are not covered by our written safety plan, for which we have the duty to provide fall protection. All employees exposed to falls of 6 feet or more to lower levels must be protected by a guardrail system, safety net system, or personal fall arrest system except where specified otherwise in Part 1926. We have audited all of our worksites for fall protection hazards that are not covered elsewhere in this plan. We have taken the following measures to address these hazards:

- guardrails
- personal fall arrest system, or
- safety net

## **Protection From Falling Objects**

When employees are exposed to falling objects, we ensure they wear hard hats and also implement one of the following measures:

- Erect toe boards, screens, or guardrail systems to prevent objects from falling from higher levels.
- Erect a canopy structure and keep potential fall objects far enough from the edge of the higher level so that those objects would not go over the edge if they were accidentally moved.
- Barricade the area to which objects could fall, prohibit employees from entering the barricaded area, and keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were accidentally moved.
- Cover or guard holes 6 feet or more above a lower level.

## **Controlled Access Zones**

A Controlled access zone is a work area designated and clearly marked in which certain types of work (such as overhand bricklaying) may take place without the use of conventional fall protection systems, guardrail, personal arrest or safety net to protect the employees working in the zone. Controlled access zones are used to keep out workers other than those authorized to enter work areas from which guardrails have been removed. Where there are no guardrails, masons are the only workers allowed in controlled access zones. Controlled access zones, when created to limit entrance to areas where leading edge work and other operations are taking place, must be defined by a control line or by any other means that restrict access. Control lines shall consist of ropes, wires, tapes or equivalent materials, and supporting stanchions, and each must be:

- Flagged or otherwise clearly marked at not more than 6-foot (1.8 meters) intervals with high-visibility material.
- Rigged and supported in such a way that the lowest point (including sag) is not less than 39 inches (1 meter) from the walking/working surface and the highest point is not more than 45 inches (1.3 meters)-nor more than 50 inches (1.3 meters) when overhand bricklaying operations are being performed from the walking/working surface.
- Strong enough to sustain stress of not less than 200 pounds (0.88 kilonewtons). Control lines shall extend along the entire length of the unprotected or leading edge and shall be approximately parallel to the unprotected or leading edge.

- Control lines also must be connected on each side to a guardrail system or wall. When control lines are used, they shall be erected not less than 6 feet (1.8 meters) nor more than 25 feet (7.6 meters) from the unprotected or leading edge, except when precast concrete members are being erected. In the latter case, the control line is to be erected not less than 6 feet (1.8 meters) nor more than 60 feet (18 meters) or half the length of the member being erected, whichever is less, from the leading edge.

## **Safety Monitoring Systems**

When no other alternative fall protection has been implemented, the company shall implement a safety monitoring system. We will appoint the site Fall Protection Competent Person to monitor the safety of workers and the Company shall ensure that the safety monitor:

- Is competent in the recognition of fall hazards.
- Is capable of warning workers of fall hazard dangers and in detecting unsafe work practices.
- Is operating on the same walking/working surfaces of the workers and can see them.
- Is close enough to work operations to communicate orally with workers and has no other duties to distract from the monitoring function.
- Not have other assignments that would take monitors attention from the monitoring function.

Mechanical equipment shall not be used or stored in areas where safety monitoring systems are being used to monitor employees engaged in construction work on low-sloped roofs. All workers in a controlled access zone shall be instructed to promptly comply with fall hazard warnings issued by safety monitors.

## **Selection & Use Guidelines for Fall Protection Equipment**

Providing fall protection requires an assessment of each fall situation at a given jobsite. Our criteria for selecting a given fall protection system follow those established at 29 CFR 1926.502, fall protection systems criteria and practices. Each employee exposed to these situations must be trained as outlined later in this plan. When purchasing equipment and raw materials for use in fall protection systems applicable ANSI & ASTM requirements will be met.

## **General Worksite Policy**

1. If any one of the conditions described in the Workplace Assessment is not met for the area or piece of equipment posing a potential fall hazard, then do not perform that work until the condition is met. If you cannot remedy the condition immediately,

notify a supervisor of the problem and utilize a different piece of equipment or work in a different area, according to the situation.

2. If the situation calls for use of fall protection devices such as harnesses or lanyards because the fall hazard cannot be reduced to a safe level, then the employee must don such protective equipment before beginning the work and use it as intended throughout the duration of the work.
3. Only employees trained in such work are expected to perform it.
4. All places of employment, job sites shall be kept clean and orderly and in a sanitary condition.
5. All walking/working surfaces must be kept in a clean and, so far as possible, dry condition. Where wet processes are used, drainage shall be maintained and false floors, platforms, mats, or other dry standing places should be provided where practicable.

## **Training Program**

Under no circumstances shall employees work in areas where they might be exposed to fall hazards, do work requiring fall protection devices, or use fall protection devices until they have successfully completed this company's fall protection training program. The training program includes classroom instruction and operational training on recognition and avoidance of unsafe conditions and the regulations applicable to their work environment for each specific fall hazard the employee may encounter. The training program is conducted by the Safety Manager, a "competent person" qualified in each aspect of the program, and must cover the following areas:

- The nature of fall hazards in the work area.
- Selection and use of personal fall arrest systems, including application proper anchoring and tie-off techniques, estimation of free fall distance (including determination of deceleration distance and total fall distance to prevent striking a lower level), methods of use, and inspection and storage of the system.
- The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used.
- The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used.
- The role of each employee in the safety monitoring system when this is used.
- The limitations on the use of mechanical equipment during the performance of work on low-sloped roofs.
- The correct procedures for the handling and storage of equipment and materials and the erection of overhead protection.
- The role of employees in fall protection plans.

- The standards contained in Subpart M of the construction regulations.

The Safety Manager will identify all current and new employees who require training and schedule the classroom instruction for those employees. Training on the above components will occur both in the classroom and on the job site, as appropriate. Classroom training will cover written policy/procedures on fall protection and include a training video on the subject. Job site instruction will include demonstration of and practice in wearing fall protection equipment and any instruction necessary for a specific job. The Safety Manager and/or Site Supervisor has the responsibility of determining when an employee who has already been trained, does not have the understanding and skill required by the training program (1926.503(a)). A written certificate of training is required which must include:

- The name or other identity of the employee trained.
- The date(s) of training.
- The signature of the competent person who conducted the training or the signature of the employer.

Retraining is required when an employee cannot demonstrate the ability to recognize the hazards of falling and the procedures to be followed to minimize fall hazards. Furthermore, Base Group has developed a series of training documents which serve as “Compliance Agreements” binding employees to the safety rules and regulations they were taught at the onset of their employment with Base Group. These “Compliance Agreements” shall serve as each employee’s promise to the Company that they will adhere to any and all safety guidelines. Such agreements do not and will not serve as a substitute for regular retraining, routine job inspections by management, and a comprehensive disciplinary program, but will act as a constant reminder of the employee’s continued obligation to work safe at all times while employed by Base Group. These “Compliance Agreements” are attached as appendices hereto.

## **Enforcement**

Constant awareness of and respect for fall hazards, and compliance with all safety rules are considered conditions of employment. The jobsite superintendent, as well as individuals in the Safety Department, reserve the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines of this program.

## **Incident Investigation**

All accidents that result in injury to workers, regardless of their nature, are investigated and reported. It is an integral part of any safety program that documentation take place as soon as possible so that the cause and means of prevention can be identified to prevent a reoccurrence. In the event that an employee falls or there is some other related, serious incident (e.g., a near miss) occurs, this plan will be reviewed to

determine if additional practices, procedures, or training need to be implemented to prevent similar types of falls or incidents from occurring.

## **Changes to Plan**

Any changes to the plan will be approved by the Safety Manager. This plan is reviewed by a qualified person as the job progresses to determine if additional practices, procedures or training needs to be implemented by the competent person to improve or provide additional fall protection. Workers are notified and trained, if necessary, in the new procedures. A copy of this plan and all approved changes is maintained at the jobsite.

## **Scaffolding Safety Fall Protection**

### **General Procedures**

The following general procedures apply to all scaffold operations for Base Group. Taking into account the OSHA rules we must apply and the engineering/ manufacturing requirements of our scaffolds, the following rules apply:

- Scaffolds shall be designed by a qualified person and shall be constructed and loaded in accordance with that design.
- Each scaffold and scaffold component we use will support, without failure its own weight and at least four times the maximum intended load applied or transmitted to it.
- In general, each platform on all working levels of scaffolds shall be fully planked or decked between the front uprights and the guardrail supports.
- Each platform unit (e.g., scaffold plank, fabricated plank, fabricated deck, or fabricated platform) shall be installed so that the space between adjacent units and the space between the platform and the uprights is no more than 1 inch wide, except where the employer can demonstrate that a wider space is necessary (for example, to fit around uprights when side brackets are used to extend the width of the platform).
- In general, the front edge of all platforms shall not be more than 14 inches from the face of the work, unless guardrail systems are erected along the front edge and/or personal fall arrest systems are used to protect employees from falling.
- The maximum distance from the face for outrigger scaffolds shall be 3 inches.
- Each end of a platform, unless cleated or otherwise restrained by hooks or equivalent means, shall extend over the centerline of its support at least 6 inches.
- Each end of a platform 10 feet or less in length shall not extend over its support more than 12 inches unless the platform is designed and installed so that the cantilevered portion of the platform is able to support employees and/or materials without tipping, or has guardrails which block employee access to the cantilevered end.
- Each platform greater than 10 feet in length shall not extend over its support more than 18 inches, unless it is designed and installed so that the cantilevered portion

of the platform is able to support employees without tipping, or has guardrails which block employee access to the cantilevered end.

- On scaffolds where platforms are overlapped to create a long platform, the overlap shall occur only over supports, and shall not be less than 12 inches (30 cm) unless the platforms are nailed together or otherwise restrained to prevent movement.
- Scaffold components manufactured by different manufacturers shall not be intermixed unless the components fit together without force and the scaffold's structural integrity is maintained by the user. Scaffold components manufactured by different manufacturers shall not be modified in order to accommodate incompatible components.
- Supported scaffolds with a height to base width (including outrigger supports, if used) ratio of more than four to one (4:1) shall be restrained from tipping by guying, tying, bracing, or equivalent means.
  - Guys, ties, and braces shall be installed according to the scaffold manufacturer's recommendations.
  - Supported scaffold poles, legs, posts, frames, and uprights shall bear on base plates and mud sills or other adequate firm foundation.
- Supported scaffold poles, legs, posts, frames, and uprights shall be plumb and braced to prevent swaying and displacement.
- Footings shall be level, sound, rigid, and capable of supporting the loaded scaffold without settling or displacement.
- Unstable objects shall not be used to support scaffolds or platform units.
- Unstable objects shall not be used as working platforms.
- Front-end loaders and similar pieces of equipment shall not be used to support scaffold platforms unless they have been specifically designed by the manufacturer for such use.
- Forklifts shall not be used to support scaffold platforms unless the platform (man-basket) was specifically designed for that purpose, the entire platform is attached to the fork and the forklift is not moved horizontally while the platform is occupied.

## **Appendices**

We have attached the following appendices to ensure better understanding of this plan:

- Employee Fall Protection Compliance Agreement
- Employee Ladder Compliance Agreement
- Employee Pneumatic Tool Compliance Agreement

## **EMPLOYEE FALL PROTECTION COMPLIANCE AGREEMENT**

- 1) \_\_\_\_\_ I am aware that OSHA standards require all employees working over a height of six feet or more above a lower level to utilize fall protection equipment.
- 2) \_\_\_\_\_ Base Group has trained me on the dangers associated with a fall, and I am aware that a fall can cause serious injury or death.
- 3) \_\_\_\_\_ I understand that all falls are 100% preventable if I use the proper training and equipment in order to avoid this hazard.
- 4) \_\_\_\_\_ I have been trained by Base Group on how to avoid and protect against fall hazards by utilizing the proper Personal Protective Equipment (“PPE”) such as, but not limited to, a harness, lanyard, rope grab, d-ring, snaphook, anchor system, and rope.
- 5) \_\_\_\_\_ I have received training from Base Group with regard to the proper way to connect snaphooks from my lanyard to the d-rings on my harness.
- 6) \_\_\_\_\_ I understand that my rope, lanyard, and any rope grabs must be rigged in such a way as to limit my free fall distance to less than six feet or to a distance less than the distance to the lower level.
- 7) \_\_\_\_\_ Base Group has provided me with a training program which allows me to recognize the hazards associated with a fall.
- 8) \_\_\_\_\_ Base Group has trained me in the procedures to be followed in order to minimize the hazards associated with a fall.
- 9) \_\_\_\_\_ I understand that if I am discovered by my employer without proper fall protection measures in place, I may be subjected to any or all of the following: a safety hazard citation, mandatory safety retraining, jobsite suspension, jobsite removal, and/or termination of my employment.
- 10) \_\_\_\_\_ If my supervisor or employer elects to utilize PPE fall protection on a project, I agree to properly wear the PPE and I will ensure that my harness, lanyard, rope grab, d-ring, snaphook, anchor system, and rope are all properly connected to a secure point within or about the structure.

I, \_\_\_\_\_, have received fall protection training from my employer and/or supervisor at Base Group. I understand the policies and procedures as they pertain to the requirements for fall protection on any and all jobs for which Base Group provides construction services. I fully understand and agree to the rules referenced above, and I shall continue to abide by these rules, policies, and procedures throughout my employment.

Employee Signature: \_\_\_\_\_ Supervisor Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_ Print Name: \_\_\_\_\_  
Date: \_\_\_\_\_ Date: \_\_\_\_\_



## **EMPLOYEE LADDER SAFETY COMPLIANCE AGREEMENT**

- 1) \_\_\_\_\_ I am aware that OSHA standards require all employees to use ladders that can sustain at least four times the maximum intended load.
- 2) \_\_\_\_\_ I have been trained by Base Group on how to properly visually inspect all ladders for defects prior to use on a jobsite.
- 3) \_\_\_\_\_ I have been trained to inspect ladders for defects such as missing rungs, missing bolts, damaged cleats, loose screws, and/or any other loose components.
- 4) \_\_\_\_\_ I understand that I am to immediately discard or mark defective equipment, and I am aware that defective ladders are not to be brought on Base Group jobsites.
- 5) \_\_\_\_\_ Base Group has trained me on the dangers associated with a fall from a ladder, and I am aware that such a fall can cause serious injury or death.
- 6) \_\_\_\_\_ I understand that all falls from ladders are 100% preventable if I use the proper training and equipment in order to avoid this hazard.
- 7) \_\_\_\_\_ I have been trained by Base Group on how to avoid dangerous situations involving ladders. This includes, but is not limited to, keeping the bottom of the ladder clear of debris and tools, and setting the ladder at the proper angle of one-quarter of the ladder's working length away from the wall.
- 8) \_\_\_\_\_ I am aware and have received training which requires that I extend the top of my ladder three feet above any landing on an elevated surface. I am aware that this is an OSHA standard and required at all times on all jobsites.
- 9) \_\_\_\_\_ Base Group requires me to secure my ladder to any elevated surface.
- 10) \_\_\_\_\_ I have received training from Base Group with regard to the risk of electric shock when using metal ladders near active power sources.
- 11) \_\_\_\_\_ I have been trained to maintain three points of contact to my ladder and to never carry tools in hand when ascending or descending the ladder. I am aware that this is an OSHA standard and required at all times on all jobsites.
- 12) \_\_\_\_\_ Base Group has provided me with a training program which allows me to recognize the hazards associated with a fall from a ladder.
- 13) \_\_\_\_\_ I am aware that I am to never place a ladder on soft or unstable ground, never exceed a ladder's recommended load, never use a ladder as a horizontal platform, and never lean out to work beyond a ladder's rails.
- 14) \_\_\_\_\_ Base Group has trained me on the procedures to be followed in order to minimize and eliminate the hazards associated with a fall from a ladder.
- 15) \_\_\_\_\_ I understand that if I am discovered by my employer while using a ladder which does not extend three feet beyond the landing of an elevated surface, or if I am in violation of any of the above referenced rules and regulations, I may be subjected to any or all of the following: a safety hazard citation, mandatory safety retraining, jobsite suspension, jobsite removal, and/or termination of my employment.

I, \_\_\_\_\_, have received ladder safety training from my employer and/or supervisor at Base Group. I understand the policies and procedures as they pertain to the requirements for proper ladder use on any and all jobs for which Base Group provides construction services. I fully understand and agree to the rules referenced above, and I shall continue to abide by these rules, policies, and procedures throughout my employment with Base Group.

Employee Signature: \_\_\_\_\_ Supervisor Signature: \_\_\_\_\_

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

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

## **EMPLOYEE PNEUMATIC TOOL COMPLIANCE AGREEMENT**

- 1) \_\_\_\_\_ I am aware that OSHA standards require the wearing of appropriate personal protective equipment in all operations where there is an exposure to hazardous conditions.
- 2) \_\_\_\_\_ Base Group has provided me with eye and face protection in order to reduce the risk of injury caused by flying debris and other airborne objects.
- 3) \_\_\_\_\_ Base Group requires the use of eye and face protection when using tools which can produce flying debris. These tools include, but are not limited to, reciprocating saws, circular saws, other tools which cut or pulverize material, pneumatic staplers, and all pneumatic nailers.
- 4) \_\_\_\_\_ Base Group has trained me on the OSHA requirements for eye and face protection whenever machines, tools, or operations present potential eye or face injury.
- 5) \_\_\_\_\_ I understand that all eye and face injuries are 100% preventable if I utilize the proper training and equipment in order to avoid this hazard.
- 6) \_\_\_\_\_ I have been trained on the primary hazards associated with pneumatic tools. These hazards include, but are not limited to, unintentional discharges while carrying the nail gun, nail ricochets, multiple nail fires, and blowouts when nails are fired into soft or inappropriate surfaces.
- 7) \_\_\_\_\_ I have received training from Base Group with regard to the proper way to clear jams and blockages in all nail guns. I am aware of the Base Group policy which requires that all nail guns be disconnected from air sources before servicing the tool.
- 8) \_\_\_\_\_ I understand that if I am working in close proximity to another employee who is utilizing a pneumatic tool, I am at risk due to flying debris and other airborne objects.
- 9) \_\_\_\_\_ Base Group forbids any employee from transporting a nail gun with the trigger depressed, and I have been trained on the proper finger position when the nail gun is not engaged in active nailing.
- 10) \_\_\_\_\_ Base Group requires that all guards and protective features remain intact on all company tools. Employees will not operate tools with alterations to the manufacturer's safety features.
- 11) \_\_\_\_\_ I understand that if I am discovered by my employer without proper PPE while operating a nail gun, I may be subjected to any or all of the following: a safety hazard citation, mandatory safety retraining, jobsite suspension, jobsite removal, and/or termination of my employment.

I, \_\_\_\_\_, have received nail gun safety training from my employer and/or supervisor at Base Group. I understand the policies and procedures as they pertain to the

requirements for using nail guns on any and all jobs for which Base Group provides construction services. I fully understand and agree to the rules referenced above, and I shall continue to abide by these rules, policies, and procedures throughout my employment.

Employee Signature: \_\_\_\_\_ Supervisor Signature: \_\_\_\_\_

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

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

**ELECTRICAL SAFETY PROGRAM**  
**Chapter 18**

# **Electrical Safety Program**

## **Purpose**

The Electrical Safety program is designed to prevent electrically related injuries and property damage. This program also provides for proper training of maintenance employees to ensure they have the requisite knowledge and understanding of electrical work practices and procedures. Only employees qualified in this program may conduct adjustment, repair or replacement of electrical components or equipment. Electricity has long been recognized as a serious workplace hazard, exposing employees to such dangers as electric shock, electrocution, fires and explosions. References: NFPA 70E, Electrical Safety Requirements for Employee Workplaces, National Electrical Code (NEC) and OSHA Standard (Electrical Safety) 29 CFR 1910.331 to 1910.339 and Sub-Part K of the Construction Standards 29 CFR 1926.400-.449 Our Company may be engaged or exposed to live electrical circuits throughout our course of work. Low hanging power lines, exposed fixtures, or energized conduit are frequent hazards employees must avoid. Our employees also face exposure through due to proximity to maintenance operations performed by other trades during our work. As such, our operations may frequently bring employees into proximity with energized conductors or other electrical appliances. It shall be the intention and responsibility of all of our personnel to identify electrical hazards on the jobsite and to immediately remove themselves and others from proximity to the hazard. Supervision is to be notified and appropriate protective measures shall be implemented before work resumes.

## **Administrative Duties**

The Safety Manager is competent and responsible for the implementation and maintenance of this program. He or she is qualified, by appropriate training and experience that is commensurate with the complexity of the plan, to administer and oversee our electrical safety plan and conduct the required evaluations of plan effectiveness.

## **Electrical Equipment**

### **Examination**

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

- Suitability for installation and use in conformity with the provisions of this subpart.
- Suitability of equipment for an identified purpose may be evidenced by listing or labeling for that identified purpose.

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

## **Equipment Inspection**

This written plan is intended to establish and implement specific procedures for an electrical equipment inspection program covering:

- All cord sets,
- Receptacles which are not a part of the building or structure, and used by employees.
- Exposed electrical hazards which are a part of the building or structure.
- All other related and potential hazards.

### **Electrical Equipment Inspection**

Each cord set, attachment cap, plug and receptacle of cord sets, and any equipment connected by cord and plug, except cord sets and receptacles which are fixed and not exposed to damage, are visually inspected by Supervisor before each day's use for external defects, such as deformed or missing pins or insulation damage, and indications of possible internal damage. Equipment found damaged or defective is not to be used until repaired, and is to be removed from service immediately by the person finding it and handed over to Supervisor. Our company does not provide or permit employees to use any equipment which has not met the requirements of this program.

## **Powered Equipment Safety Rules**

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

- PEE shall be handled in such a manner as to not cause damage. Power cords may not be stapled or otherwise hung in a way that may cause damage to the outer jacket or insulation.
- PEE shall be visually inspected for damage, wear, cracked or spilt outer jackets or insulation, etc., before use or before each shift. Any defects; such as cracked or split outer jackets or insulation must be repaired, replaced or placed out of service.
- Always check the compatibility of cord sets and receptacles for proper use.

- Ground type cord sets must be used. (3 pin).
- Attachment plugs and receptacle may not be altered or connected in a way that would prevent the proper continuity of the equipment grounding conductor. Adapters may not be used if they interrupt the continuity of the grounding conductor.
- Only portable electrical equipment that is double insulated or designed for use in un-plug, etc.) power source.
- All temporary electrical circuits must be protected by use of a GFCI.

## **Electrical Lockout Tagout Requirements**

*See the Lockout Tagout Program for complete requirements.*

### **Training**

Training is provided to ensure that employees are familiar with the requirements of this plan. This training is provided to employees at the time of hire and annually thereafter. The Safety Manager is responsible for conducting training. The training program addresses the required written elements for electrical safety for:

- The electrical equipment inspection.
- Lockout and tagging procedures.
- Training for employees is general electrical safety precautions to provide an awareness and understanding of electrical hazards.
- Qualified employees who constitute Qualified Electrical Workers shall be trained and knowledgeable of all special precautionary techniques, personal protective equipment, including arc-flash, insulating and shielding materials, and insulated tools and test equipment.

#### **Qualified Electrical Worker Safety Rules**

An employee who has completed all applicable coursework training and is undergoing on-the-job training is a “Qualified Electrical Worker in Training”. A Qualified Electrical Worker in Training who has performed duties safely at his or her level of training and who is under the direct supervision of a qualified person shall be considered a “Qualified Electrical Worker”. Only a Qualified Electrical Worker is allowed to work within the limited approach boundary of exposed energized electrical conductors and circuit parts operating at 50 volts or more. Qualified electrical workers shall not be assigned to work alone, except for replacing fuses, operating switches, or other operations that do not require the employee to contact energized high voltage conductors or energized parts of equipment, clearing trouble, or emergencies involving hazard to life or property. Whether a person is considered to be a “qualified” person will depend upon various circumstances in the workplace. It is possible and, in fact, likely for an individual to be considered “qualified” with regard to certain equipment in the workplace, but “unqualified” as to other equipment. Tasks that are performed less often than once per year shall require retraining



before the performance of the work practices involved. Retraining must be provided for all Qualified Electrical Workers and additional training shall be provided anytime an employee is not complying with the safety-related work practices. Additionally, training must be provided anytime new technology, new equipment, or changes in procedures necessitate any changes in the normal work practices.

Workers who work with or near energized, or potentially energized electrical circuitry of fifty (50) volts to ground or greater, shall be trained in energized electrical safe work practices and procedures and retrained annually.

### Qualified Electrical Worker Training

Employees must receive training in avoiding the electrical hazards associated with working on or near exposed energized parts prior to performing energized electrical work. Such training will be provided when the employee is initially assigned to the job and refresher training will be provided every year, or anytime an employee is not complying with the safety-related work practices. Additional training must be provided anytime new technology; new equipment or when conditions change that necessitates a change in the normal work practices.

The following items are to be included in the training of Qualified Electrical Workers:

- Demonstrate a working knowledge of the National Electrical Code.
- The Lockout/Tagout Training Program including safe work practices required to safely de-energize electrical equipment.
- Universal electrical safety procedures.
- Skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment.
- Perform on-the-job training with a qualified electrical worker.
- Skills and techniques necessary to determine the nominal voltage of exposed live parts.
- The approach distances specified in Appendix A and the corresponding voltages to which the qualified electrical worker will be exposed.
- Selection and use of proper work practices, personal protective equipment, tools, insulating and shielding materials and equipment for working on or near energized parts.
- Basic Cardio Pulmonary Resuscitation (CPR)

- Automatic External Defibrillator (AED)
- Contacting emergency personnel and basic first aid

### Basic Electrical Safety Rules

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

## **Program Evaluation**

The Electrical Safety Plan is evaluated and updated annually by the Safety Manager to ensure the continued effectiveness of the program.

**LADDER SAFETY PROGRAM**  
**Chapter 19**

# **Ladder Safety Program**

## **Purpose**

Base Group understands that ladders present unique opportunities for unsafe acts and unsafe conditions. Employees who use ladders must be trained in proper selection, inspection, use and storage. Improper use of ladders has caused a large percentage of accidents in the workplace. Use caution on ladders. OSHA reference: (29 CFR 1910.25, 1910.26, and 1910.27).

## **Policy Statement**

It shall be the position of Base Group that only ladders capable of withstanding the appropriate load and distance are to be used on our jobsites. This policy applies to direct employees as well as sub-contractors employed by us in the performance of contractual obligations. This position is in accordance with the intent of OSHA Standard 1926.1053. Ladders, regardless of type, are to be used only as intended by the ladder manufacturer, and shall never be modified in any way. Ladders shall be inspected prior to each use, to ensure that they are in serviceable condition. Extension ladders are never to be separated into their individual sections. Straight ladders (non-self supporting) are to be secured, at or near the top each time they are erected. A-Frame (self supporting) ladders are never to be used as a straight ladder (non-self supporting).

## **Hazards**

Falls from ladders can result in broken bones, crippling injuries and death. Ladder safety is taken very seriously by our company. Ladder hazards include:

- Ladders with missing or broken parts.
- Using a ladder with too low a weight rating
- Using a ladder that is too short for purpose.
- Using metal ladders near electrical wires.
- Using ladders as a working platform
- Objects falling from ladders

## **Inspections**

- Inspect ladders before each use.
- All rungs and steps are free of oil, grease, dirt, etc.
- All fittings are tight.
- Spreaders or other locking devices are in place.
- Non-skid safety feet are in place.
- No structural defects, all support braces intact.

- Do not use broken ladders. Most ladders cannot be repaired to manufacturer specifications. Throw away all broken ladders.

## **Storage**

Store ladders on sturdy hooks in areas where they cannot be damaged. Store to prevent warping or sagging. Do not hang anything on ladders that are in a stored condition.

## **Ratings & Limits**

### **Ladder weight ratings**

- I-A 300 pounds (heavy duty)
- I 250 pounds (heavy duty)
- II 225 pounds (medium duty)
- III 200 pounds (light duty)

### **Limits on ladder Height.**

- A stepladder should be no more than 20 feet high.
- A one-section ladder should be no more than 30 feet.
- An extension ladder can go to 60 feet, but the sections must overlap.

## **Ladder Setup**

The following procedure must be followed to prevent ladder accidents:

1. Place ladder on a clean slip free level surface.
2. Extend the ladder to have a minimum of 3 feet above the top landing or work area.
3. Secure the top and bottom of the ladder.
4. Place all extension ladders using a 4 to 1 height to base ratio. This means that the base of the ladder is a minimum of one foot from the wall or vertical surface for each 4 feet of height to the upper landing.
5. Never allow more than one person on a ladder.
6. Use carriers and tool belts to carry objects up a ladder.
7. Do not lean out from the ladder in any direction.
8. If you have a fear of heights - don't climb a ladder.
9. Do not allow other employees to work under a ladder in use.

10. Maintain 3 points of contact with the ladder at all times.

## **Maintenance**

- Keep ladders clean.
- Never replace broken parts unless provided by the original manufacturer.
- Do not attempt to repair broken side rails.
- Keep all threaded fasteners properly adjusted.
- Replace worn steps with parts from manufacturer.

**POWER TOOL OPERATIONS SAFETY  
PROGRAM  
Chapter 20**

# **Power Tool Operations Safety Program**

## **Safe Operating Procedures**

Base Group is committed to ensuring the safety of all employees who may be required to operate power tools. This Power Tool Operations & Maintenance Equipment Program was developed to establish guidelines and safe operating procedures for all our employees.

## **Administration**

The Safety Manager is responsible for the implementation and maintenance of this program. A copy of the Power Tool Operations & Maintenance Program is located in the Safety Manager's office.

## **Supporting Materials**

Materials to be cut, drilled, sliced, bent, scored or in any other way affected by a hand or power tool SHALL be firmly supported on an appropriate and stable work surface. Materials SHALL NOT be supported by any portion of your body, or anyone else's body, when being manipulated or affected by hand or power tools.

## **Power Tools**

- Three Types: Electrical, Pneumatic, and Hydraulic.
- Operate power tools only if you are trained and completely familiar with the tool.
- Inspect all power tools and cords before using them. The tools should be clean and in good condition. Do not use a tool that has a damaged cord or hose.
- Make sure the work area is well lit.
- Do not operate power tools if you cannot see the working surface clearly.
- Ensure that the power source is the proper voltage and current for the tool.
- Make sure the tool is turned "OFF" before connecting it to a power source.
- When using a power tool, give the tool your full and undivided attention.
- Do not distract or disturb another worker who is operating a power tool.
- Always disconnect a power source before cleaning or making adjustments to the tool.
- Ensure that the power source for a hydraulic or pneumatic tool is the correct pressure for the tool.
- Check electrical cords frequently and use only approved extension cords.
- Ensure that cords and hoses are positioned so they do not become tripping hazards.
- Do not use electric tools in areas where water is present.



## **Pneumatic Tools**

- Read all manuals included with this product carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
- Only trained personnel shall be allowed to use the tools.
- Keep visitors away and NEVER allow children in the work area during operation.
- Wear the appropriate personal protective equipment when operating the unit.
- Before each use, inspect compressed air system and electrical components for signs of damage, deterioration, weakness or leakage.
- Repair or replace defective items before operating.
- Never weld or drill holes in the air tank.
- Release air slowly when draining moisture or depressurizing compressors or hoses in the system.
- Keep fingers away from any running motor, fast moving and hot parts will cause injury and /or burns.
- Never use air compressor for the purpose of supplying breathing air.
- Never operate or repair in or near a flammable gas or vapor.
- Never stand on or use the unit as handhold.
- Disconnect power and release all pressure from the system before attempting to install, service, relocate or perform any maintenance on any tool.
- Do not use extension cords with this product. Use additional air hoses instead to avoid power loss and permanent motor damage.
- Do not exceed pressure limits for any component in the system.

## **Cutting Tools**

- Always keep the blade guard and driving knife (splitter) in place and in working order. Keep tools and cords in good repair and clean for better and safe performance.
- Keep work area clean and well lit. Don't use power tools in damp or wet locations.
- Wear the appropriate personal protective equipment. Do not wear loose clothing or jewelry.
- Disconnect tools, when not in use, before servicing, or when changing attachments, blades, bits, or cutters.
- Never yank cord to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- Avoid accidental starting; be sure switch is off when plugging in.
- Keep hands away from cutting area. Never touch blade or other moving parts during use.
- Never use in explosive atmosphere.
- Never leave tool running unattended.
- Avoid cutting nails.
- Never start a tool when its rotating parts are in contact with the work piece.
- Always secure work firmly
- Never stand or have any part of your body in line with the cutting blades or bits

- Do not reach over any moving parts.
- Never attempt to free a stalled blade or bit without first turning the tool off and disconnecting the tool from the power source.

## **Drill Press**

- Only authorized personnel shall operate specific pieces of equipment or power tools.
- Know your equipment - read and understand the owner's manual and labels affixed to the tools. Learn its applications and limitations.
- All electrical or mechanical repairs should be attempted only by trained repair people.
- Keep children away from all operating equipment.
- Do not let visitors come in contact with tools or extension cords. All visitors shall be kept out of the immediate work area.
- Use the drill press in a well-lit area and on a level, clean and smooth surface to reduce the risk of trips and fall around running equipment.
- Do not use power tools in damp or wet locations.
- Do not use the tool in the presence of flammable fluids or gases.

### **Equipment Awareness**

- Don't overreach while using tools and equipment. Keep proper footing and balance at all times. Adjust the work area height as needed.
- Never place your fingers in a position where they could contact the drill bit or other cutting tool parts.
- Use the appropriate personal protective equipment - do not wear loose clothing or jewelry and restrain long hair which can be caught in moving parts.
- Disconnect tools from power source when not in use and before servicing, when changing wheels, etc.
- Keep all machine guards in place, in proper adjustment and alignment.
- Ensure the switch is in the "off" position before plugging in the tool.
- Before connecting the tool to a power source, be sure the voltage supplied is the same as that specified for the tool.
- Check the tool for damage or needed repairs prior to use.
- Do not leave a tool until it comes to a complete stop. Do not lay it down to stop it.
- Keep the tool dry, clean and free from oil and grease.

### **Safe Work Surface**

- Always support the work piece so it doesn't shift or bind on the tool.
- Always position backup material underneath the work piece.
- Do not do any work "free hand", always fasten your stock to the table.
- Never move the head or table support while the tool is running.
- Before starting operation, jog the motor switch to make sure the drill bit or other cutting tools do not wobble or cause vibration.

- Use the bit and speed recommended for the job and work piece material. Remember, the longer the bit, the slower the drill speed.
- Never climb on the work table.
- To avoid injury from thrown work or tool contact, do not perform layout, assemble or setup work on the table while the cutting tool is rotating.
- When drilling wood or metal, raise the drill bit frequently to clean chips from the hole.
- Prior to start, center-punch the area to be drilled.

## **Grinder**

- Always wear approved eye respiratory, and hand protection when working with or near grinders. The most common injury is from flying particles in the eye. Kick back causes the severest grinder injuries.
- Visually inspect wheels for damage before mounting and using them. Chipped or cracked wheels must be discarded - if used they will shatter and cause injury.
- Do not stand directly in line with a newly-mounted wheel when beginning start-up.
- Before grinding, always test run a newly-mounted wheel at full speed for the following:
  - Thirty (30) seconds for reinforced discs.
  - Sixty (60) seconds for stand-mounted grinders.
- Make sure the r.p.m. of the machine does not exceed the rate wheel speed. The governor mechanism should be checked to make sure it is functioning properly.
- Rests used on grinders shall not be more than (one-eighth) inch from the face, fastened securely and must not be adjusted while the wheel is in motion.
- All spindles, adapters, flanges, and other parts should be inspected periodically and maintained to size and in good conditions.
- Proper lubrication of the motor and bearing is essential on all tools which employees use.
- Use proper safety guards on grinders. Special guards are available for all grinders when working in confined areas. Make sure the guards are properly secured.
- Grind only on the face of a straight wheel. Use disk wheels or angle grinders for side grinding. Light side grinding is permitted with a cup or saucer wheel.
- Make sure the wheel has stopped before putting the grinder down as it can travel, thus injuring a person or damaging equipment. Lay the machine down with the disk up.
- Avoid dropping or bumping the wheel. Do not allow anything to strike a wheel which is not in use. Handle and store wheels carefully, following manufacturer's specifications.

## **Training**

The Safety Manager is responsible for ensuring that all employees required to operate power tools have the necessary training to perform their job safely.

**HAND TOOL OPERATIONS SAFETY PROGRAM**  
**Chapter 21**

## **Hand Tool Operations Safety Program**

Base Group is committed to ensuring the safety of all employees who work with hand tools. Small hand tools can inflict great injury, as can power tools. By outlining the following safe operating procedures, we learn to prevent injury and safeguard ourselves and our co-workers. This Hand Tool Safety Program was developed to establish guidelines and Safe Operating Procedures for our employees.

### **Administration**

The Safety manager is responsible to the implementation and maintenance of this program. A copy of the Hand Tool Safety Program is located in the Safety Manager's office.

### **Supporting Materials**

Materials to be cut, drilled, sliced, bent, scored or in any other way affected by a hand or power tool SHALL be firmly supported on an appropriate and stable work surface. Materials SHALL NOT be supported by any portion of your body, or anyone else's body, when being manipulated or affected by hand or power tools.

### **Hammers**

#### **General Safety - Safe Operation**

- Wear eye protection. Whenever possible, use soft-faced hammers (plastic, wood, or rawhide) when striking hardened surfaces,
- Check the condition of the handle. Keep handles tightly wedged in hammerheads to prevent injury.
- Replace cracked or splintered handles.
- Select the right size for the job. A light hammer bounces off the work. One that's too heavy is hard to control.
- Grip the handle close to the end to increase leverage for harder, less tiresome blows.
- Prevent injuries to others by swinging in a direction that won't let your hammer strike someone if it slips from your hand.
- Keep the handle dry and free of grease and oil.
- Keep the hammer face parallel with your work. Force is then distributed over the entire hammer face, reducing the tendency of the edges of the hammerhead to chip, or slip off the object being struck.

## **Chisels and Punches**

### **General Safety - Safe Operation**

- Always wear eye protection when using any tool.
- Grind off mushroom heads. The sharp edges can tear your skin or chips could break off the mushroomed head and fly into your eyes.
- Keep a smooth bevel ground on the heads of all punches and chisels.
- Don't use chisels and punches for prying.
- Hold the tool steadily but loosely. The best place to hold it is just below the head. If you miss and strike your hand, your hand will not be caught between the hammer and the work piece.
- Select the proper sized tool for the job. Heavy pounding on tools too small for the job increases the risk of injury from tool breakage.

## **Knives**

### **General Safety - Safe Operation**

- Keep blades sharp. The greater the force you have to apply, the less control you have over the cutting action of the knife. The safest knife usually has the sharpest edge.
- Cut away from the body. Your hands and fingers should always be behind the cutting edge the blade.
- Never pry with a knife; blades are hardened and can break with a snap.
- Store knives safely. Keep knives in their own box or scabbard when not in use.

## **Screwdrivers**

### **General Safety - Safe Operation**

- Use screwdrivers only for driving screws.
- Sharpen screwdrivers properly, file or grind worn or damaged tips to fit the slot of the screw. A sharp, square-edged tip won't slip as easily as a dull one, and less pressure will be required to hold the tip in the slot.
- Don't hold parts in your hand; put the work on a bench or in a vise to avoid the possibility of piercing your hand with the screwdriver tip.
- Use screwdrivers with insulated handles for electrical work.

## **Hand Saws**

### **General Safety - Safe Operation**

- Keep handsaws sharp and free of rust to prevent them from binding or jumping.
- Always make saw cuts directly across the material with a slow, careful, downward stroke.
- Never force the saw through the cut as this may cause the saw to buckle or fly out of the groove causing an injury.

## **Safe Welding, Cutting, and Brazing Practices**

### **General Safety – Safe Operation**

- This policy applies to all employees who may perform welding, cutting, or brazing as part of their job function. This welding, cutting, and brazing program is designed to protect life and property from fire, atmospheric contaminants, and other associated hazards that may occur during these operations.
- The object to be welded should be moved to a safe place, when possible.
- If the object cannot be readily moved, all movable fire hazards in the vicinity shall be moved to a safe location.
- If the object cannot be readily moved and all fire hazards cannot be removed, guards shall be used to confine the heat, sparks, and slag, and to protect any and all immovable fire hazards. (i.e. curtains)
- A fire watch is required whenever there is a possibility of a fire developing. The fire watchers will have fire extinguishing equipment immediately available and shall be trained in its use. They will also be familiar with the methods used to sound an alarm.
- Do not weld, cut or braze in:
  - Sprinklered buildings while the sprinkler system is impaired
  - Atmospheres where flammable gases, vapors, liquids, or dusts are present
  - Storage areas where there are large quantities of exposed, readily ignitable materials.
- Training:
  - The department head must assure that those performing welding, cutting and brazing operations and their supervisors are properly trained and competent concerning their assigned duties
- Welding or Cutting Containers:
  - No welding, cutting or other hot work shall be performed on used drums, barrels, tanks or other containers until they have been cleaned so thoroughly as to make absolutely certain that there are no flammable materials present or any substances such as greases, tars, acids, or other materials which when subjected to heat, might produce flammable or toxic vapors. Any pipe lines or connections to the drum or vessel shall be disconnected or blank/blind techniques shall be used.

- Helmets or hand shields shall be used during all arc welding/cutting operations, excluding submerged arc welding. All helpers & attendants shall be provided with proper eye protection. Goggles or other suitable eye protection shall be used during all gas welding or oxygen cutting operations. Spectacles with side shields and suitable filter lenses are required during gas welding operations on light work, torch brazing, and for inspections. Operators and attendants of resistance welding or brazing shall use transparent face shields or goggles, depending on the particular job.
- Protective clothing shall be worn in accordance with 1910.132. The degree of protective clothing will vary with size, nature, and location of work to be performed.

## **Training**

The Safety Manager is responsible for ensuring that all employees who use hand tools have the necessary training to perform their job safely.



**FLEET SAFETY AND MAINTENANCE PROGRAM**  
**Chapter 22**

# **Fleet Safety and Maintenance Program**

## **Introduction**

The purpose of these fleet safety guidelines is to aid management in their efforts to increase vehicle operator safety, and the control of vehicle accidents. Additionally, this fleet safety program shall comply and adhere to all requirements outlined under both federal and state laws.

## **Management Direction and Leadership**

- Management considers accident control essential both for humanitarian and economic reasons.
- The accident control plan will apply to all departments and all operations.
- The cooperation of all employees is expected and required.
- The statement of policy should be communicated to all employees, and particularly to all supervisor personnel.

## **Driver Selection**

- Base Group shall define the specifications or requirements of the job to be filled.
- The driver's ability to meet these requirements should be determined using various sources and techniques:
  - An application form filled out in the driver applicants' own handwriting shall be required.
  - A personal interview.
  - References to verify information from the application and interview along with past performance.
  - Phone or written checks with previous employers.
  - A current and valid driver's license, compatible with the type(s) of vehicle(s) to be driven.
  - Base Group shall check the applicant's MVR (Motor Vehicle Records) at the State Motor Vehicle Authority.
  - This is a requirement for fleets regulated by the Department of Transportation (D.O.T.).
  - It is important that the doctor or clinic know the physical requirements of the driving position to properly evaluate the candidate(s).
- For non-regulated fleets that are subject to the Americans with Disabilities Act (ADA), a physical exam cannot be given at the pre-offer stage, but can be given at the post-offer stage as long as it is required for all candidates. Again, the doctor or

clinic must know the physical requirements and essential job functions to properly evaluate the candidate.

- Driving tests
  - All employees who drive as a part of their duties shall be given a road test, in traffic, in the type vehicle they are expected to drive.
  - Road test results may be documented if needed for further application and determination of skill.
  - The information collected may be assembled and a permanent personal record shall be established. (Driver qualification files are required in federally regulated fleets.)

### **Driver Training**

- A minimum training program shall include:
  - Orientation on company rules and procedures.
  - Basic on-the-job training, including “student trips.”
  - Continued in-service training based on periodic performance evaluations.

### **Driver Supervision**

- A supervisor’s attitude toward safe driving greatly affects the attitude and driving performance of those responsible to him.
- Supervisors shall be held accountable for safety performance in their areas of responsibility.
- Supervisors shall supervise in terms of proper and safe job performance.
- Lines of communications between management and drivers shall be kept open.
- Where needed, we shall provide specialized training for supervisors including safety conference and fleet supervisor or management courses.

### **Accident Investigation and Records**

- Every accident shall be reported, investigated and reviewed.

- A procedure for tabulating and analyzing accident data has been established, and is located in this safety program.
- A master file of accidents and related data shall be maintained by the committee appointed to handle accident reports and to coordinate investigations.
- The primary purpose of investigating an accident is to find out the cause and initiate action to eliminate or control it. Another purpose is to obtain information to be used in determining whether the accident is preventable or non-preventable.
- An Accident Review Committee shall be appointed to determine accident preventability, including:
  - Review of accidents and determining preventability.
  - Recommending control measures.

## **Maintenance**

Mechanical failures, while accounting for a small percentage of vehicle accidents, are often quite serious in nature.

- A procedure shall be established for determining the specifications for new equipment, based on its intended use.
- An effective preventive maintenance plan shall be established.
- Guidance may be obtained from the equipment manufacturer.
- Records shall be kept for each piece of equipment.
- This is an often overlooked legal requirement in the case of federally regulated fleets.
- An effective preventive maintenance has proven to yield the following;
  - Reduction in accidents.
  - Less down time.
  - Reduced maintenance.
  - Improved driver morale.
  - Better sales and public relations.

## **Motor Vehicles**

Motor vehicles as covered by this part are those vehicles that operate within an off-highway jobsite, not open to public traffic. The requirements of this section do not apply to equipment for which rules are prescribed in 1926.602.

- General requirements.

- All vehicles shall have a service brake system, an emergency brake system, and a parking brake system. These systems may use common components, and shall be maintained in operable condition.
- Whenever visibility conditions warrant additional light, all vehicles shall have headlights and two taillights in operable condition.
- All vehicles, or combination of vehicles, shall have brake lights in operable condition regardless of light conditions.
- All vehicles shall be equipped with an adequate audible warning device at the operator's station and in an operable condition.
- No employer shall use any motor vehicle equipment having an obstructed view to the rear unless:
  - The vehicle has a reverse signal alarm audible above the surrounding noise level or:
  - The vehicle is backed up only when an observer signals that it is safe to do so.
- All vehicles with cabs shall be equipped with windshields and powered wipers. Cracked and broken glass shall be replaced. Vehicles operating on areas or under conditions that cause fogging or frosting of the windshields shall be equipped with operable defogging or defrosting devices.
- All haulage vehicles, whose pay load is loaded by means of cranes, power shovels, loaders, or similar equipment, shall have a cab shield and/or canopy adequate to protect the operator from shifting or falling materials.
- Tools and material shall be secured to prevent movement when transported in the same compartment with employees and adequate for the number of employees to be carried.
- Seat belts and anchorages meeting the requirements of 49 CFR Part 571 (Department of Transportation, Federal Motor Vehicle Safety Standards) shall be installed in all motor vehicles.
- Trucks with dump bodies shall be equipped with positive means of support, permanently attached, and capable of being locked in position to prevent accidental lowering of the body while maintenance or inspection work is being done.
- Operating levers controlling hoisting or dumping devices on haulage bodies shall be equipped with a latch or other device which will prevent accidental starting or tripping of the mechanism.
- Trip handles for tailgates of dump trucks shall be so arranged that, in dumping, the operator will be in the clear.
- All rubber-tired motor vehicle equipment shall be equipped with fenders.

### **Additional Guidelines**

These guidelines do not relieve you of your responsibility for fleet safety, or limit you from establishing additional guidelines or limit regulatory or other safety rules and requirements.

## **Fleet Guidelines**

- Do not take chances. To arrive safely is more important than to arrive on time.
- Drivers should be mentally and physically rested and alert prior to each trip.
- Use of alcoholic beverages while driving, or driving while under the influence of alcohol or restricted drugs is strictly prohibited.
- Drivers must have a valid driver's license for the type of vehicle to be operated, and keep the license(s) with them at all times while driving.
- Traffic laws must be obeyed.
- Speed shall never be faster than a rate consistent with existing speed laws and road, traffic and weather conditions. Posted speed limits must be obeyed.
- Never attempt to exercise the right-of-way; always let the other driver go first.
- Keep to the right except when overtaking slow-moving vehicles or when getting into a position to make left turn.
- Never follow another vehicle so closely that you will not be able to make a safe stop under any conditions.
- Turn signals must be used to show where you are heading: while going into traffic and before every turn or lane change.
- Remember, signaling intentions neither gives the driver the right of way, nor guarantees a safe lane change.
- Slow down and watch for children in school zones.
- Vehicles are to be driven by authorized drivers only.
- Do not give rides to any person not employed by this company
- Seat belts shall be worn by all drivers and passengers.
- Check your vehicle daily before each trip, and check the vehicle visually each time before driving. Check lights, tires, brakes, and steering particularly. An unsafe vehicle should not be operated until repairs are made.
- Drivers shall report all accidents immediately, as required by law and this employer's rules.
- Drivers must report all arrests and traffic convictions to their company.

## **Fleet Guidelines and Passenger Safety**

- There should be no riders in company vehicles other than company personnel. Management must approve all exceptions.
- Vehicles used to transport employees should have adequate seats firmly secured inside the vehicle and seat belts must be worn by all occupants at all times.
- Riders will never ride in truck beds or stand up in a moving vehicle.
- Riders will not be allowed to sit on the outside of a truck bed or on the tailgate while a vehicle is in motion.
- The assigned operator of a vehicle is responsible for its safe operation including the security and conduct of all passengers, the maintenance needs of the vehicle, and the safe storage of tools and equipment.

Repeated traffic convictions or failure to report traffic accidents or convictions may result in disciplinary action. Other safe driving rules prescribed by State or Local Laws or by the applicable D.O.T. Motor Carrier Safety Regulations must be adhered to.

## **Fleet Guidelines for Aerial Lifts**

Anytime aerial lifts, including: (1) extensible boom platforms, (2) aerial ladders, (3) articulating boom platforms, (4) vertical towers, or (5) a combination of any such devices, are used to elevate employees to job-sites above ground, the following safety rules will apply:

- No aerial lift this company owns or uses will be 'field modified' for uses other than those intended by the manufacturer.

### *Extensible and articulating boom platforms*

- We will test lift controls each day prior to use to determine if they are in safe working condition.
- Only authorized employees can operate an aerial lift.
- A full body belt harness must be worn and a lanyard attached to the boom or basket when working from an aerial lift.

**MATERIAL HANDLING, STORAGE, AND  
DISPOSAL PROGRAM  
Chapter 23**



# **Material Handling, Storage, and Disposal Program**

## **Material Handling**

Base Group shall train all employees in the proper techniques and methods associated with the lifting and transporting of materials. These techniques and methods will be a requirement all employees must abide by in order to avoid injury and illness. Material handling devices shall be available if needed for an activity. Whenever heavy or bulky material has to be moved, the material handling needs shall be evaluated in terms of weight, size, distance, and path of movement. Whenever our employees need to move or handle materials the following hierarchy shall be followed in selecting a means for material handling:

1. Elimination of material handling needs by engineering.
2. Movement by mechanical device (e.g. lift truck, overhead crane, or conveyor).
3. Movement by manual means with handling aid (e.g., dollie or cart), or
4. Movement using safe lifting techniques.

Training shall be conducted as necessary. (Back Safety and Lifting Techniques Training) Materials will not be moved over or suspended above personnel. Where the movement of materials may be hazardous to persons, tag lines shall be used to control the loads being handled by hoisting equipment. These devices shall be non-conductive when used near energized lines. All load lines and loads shall be kept a minimum of 10 feet from energized lines.

## **Material Storage**

Material in bags, containers, bundles or stored in tiers, shall be stacked, blocked and interlocked, and limited in height so that it is stable, and secure against sliding or collapse. Material shall be stored as low as practical and in no case higher than 20 feet (6M), unless otherwise directed in this section. Storage of flammable and combustible materials is covered in section 17 of this document. Material stored in buildings under construction shall not be placed within 6 feet (1.8M) of any hoistway or floor opening, nor within 10 feet (3M) of an exterior wall that does not extend above the material stored. Material stored on roof decks shall not be placed within 6 feet (1.8M) of the roof edge. Base Group shall ensure that all access areas are kept clear at all times. Landing areas (top and bottom) for ladders shall be kept clear at all times. Materials shall not be placed on scaffold platforms or runways in excess of needs. Non-compatible materials shall be segregated in storage as is appropriate.

## **House Keeping**

Work areas and means of access shall be maintained safe and orderly. Base Group shall provide sufficient personnel to ensure compliance with all housekeeping requirements. All work areas shall be inspected daily for adequate housekeeping and findings shall be recorded on daily inspection sheets. Loose or light materials shall not be left on roofs or floors that are not closed in, unless it is safely secured. This employer shall ensure that tools, materials, hoses, extension cords, or debris shall not cause tripping hazards. Protruding nails in scrap boards, planks and timbers, whether belonging to this employer or not, shall be removed, hammered in or bent over flush with the wood.

## **Material Disposal**

Base Group shall ensure that all waste material and rubbish shall be placed in suitable containers or, if appropriate, in piles. Waste materials and rubbish shall not be thrown down from a height of more than 6 feet (1.8M) unless the following are complied with; Materials and rubbish are dropped through an enclosed chute constructed of wood or suitable material. Chutes for debris shall be enclosed, except for openings equipped with closures at or about floor level for introduction of debris. The openings shall not exceed 48 inches (121.9 cm) in height measured along the wall of the chute. Openings shall be kept closed when not in use. When debris cannot be handled by chute, the drop area for the debris shall be enclosed by barricades with a minimum height of 42 inches (106.6 cm). Barricades shall be placed to keep all personnel away from the debris drop area. Signage warning of the hazard of falling material shall be posted at all debris landing areas and at each level exposed to falling debris. Separate covered, self-closing, nonflammable/non-reactive containers shall be provided for the collection of garbage, oily, flammable, and dangerous waste. The containers shall be labeled with a description of the contents. The contents shall be disposed daily. Hazardous material waste (i.e., vehicle and equipment oil and lubricants, containers and drums for solvents, adhesives, etc.) shall be collected, stored, and disposed in accordance with Federal, State, and local regulatory.

# **SANITATION PLAN**

## **Chapter 24**

# Sanitation Plan

## 1. General Requirements

- a. Base Group shall establish and maintain basic sanitation provisions for all employees in all places of employment as specified in the following paragraphs.

## 2. Drinking Water

- a. An adequate supply of drinking water shall be provided in all places of employment.
- b. Drinking water provided shall meet all applicable Federal, State, and Local requirements, and shall include, but not be limited to the following;
  - i. Only approved potable drinking water systems shall be used for the distribution of drinking water.
  - ii. Drinking water shall be dispensed by means that prevent contamination between the consumer and the source.
  - iii. Portable drinking water dispensers shall be designed constructed and serviced to ensure sanitary conditions; shall be capable of being closed; and shall have a tap.
  - iv. Containers shall be marked as “**DRINKING WATER**” and shall not be used for other purposes.
  - v. Water shall not be dipped from containers.
  - vi. Employees shall use cups when drinking from portable water coolers/containers.
  - vii. Use of a common cup (a cup shared by more than one worker) is prohibited.
  - viii. Unused disposable cups shall be kept in sanitary containers and a waste receptacle shall be provided for used cups.

## 3. Toilets

- a. When sanitary sewers are not available, one of the following facilities, unless prohibited by local codes, shall be provided;
  - i. Chemical Toilets
  - ii. Recirculating toilets
  - iii. Combustion toilets
  - iv. Or other toilets approved by State/Local governments.
  - v. Each toilet facility shall be equipped with a toilet seat and toilet seat cover.
- b. Each toilet facility, except those specifically designed and designated for females, shall be equipped with a metal, plastic, or porcelain urinal trough.

- c. All shall be provided with an adequate supply of toilet paper and a holder for each seat.
- d. Toilet facilities shall be so constructed that the occupants shall be protected against weather and falling objects.
- e. All cracks shall be sealed and the door shall be tight-fitting, equipped with a self-closing device, and shall be capable of being latched.
- f. Adequate ventilation shall be provided and all windows and vents screened.
- g. Seat boxes shall be vented to the outside (minimum 4 inches) with vent intake located below the seat.
- h. Toilet facilities shall be constructed so that the interior is lighted.

#### **4. TOILETS AT CONSTRUCTION JOB SITES**

**Note: The requirements of this section are not intended for mobile crews having transportation readily available to nearby toilet facilities.**

- a. Toilets shall be provided
- b. Where toilet rooms may be occupied by no more than one person at a time, can be locked from the inside, and contain at least one toilet seat, separate toilet rooms for each sex need not be provided.

**EXCAVATION SAFETY PROGRAM**  
**Chapter 25**

## **Excavation Safety Program**

OSHA currently regulates excavations for construction under Part 1926, Subpart P. The standards for regulating excavation systems and procedures are intended to prevent cave-ins or other excavation hazards. Excavations requirements under the OSHA Construction regulations require precise trenching and excavation systems which guarantee employee safety. Written excavation procedures establish guidelines to be followed whenever an employee works in or around excavations at the job site. The regulations:

- Are designed to provide a safe working environment, and.
- Govern use of trenching and excavation equipment and procedures.

Written procedures for excavation safety establish uniform requirements for training, operation, and practices. The effectiveness of the written excavation procedures depends on the active support and involvement of all employees who perform the jobs requiring it. This plan is intended to document procedures that ensure all work requiring fall protection is carried out safely.

### **Purpose**

Our company is dedicated to the protection of its employees from on-the-job injuries. All employees have the responsibility to work safely on the job. The purpose of this plan is to:

- Supplement our standard safety policy by providing safety standards specifically designed to cover excavation safety on this job.
- Ensure that each employee is trained and made aware of the safety provisions which are to be implemented by this plan prior to the start of erection.
- This program informs interested persons, including all employees that this company is complying with OSHA's Excavation requirements, (29 CFR 1926.650 to .652).

This program applies to all employees who might be exposed to excavation hazards. All excavation protection systems selected for each application will be installed before an employee is allowed to go to work in an area that necessitates the protection. The Safety Manager is the program coordinator/manager and is responsible for its implementation. Copies of the written program may be obtained from the Safety Manager's Office. Certain employees are authorized to inspect, investigate, or assess workplace conditions before construction work begins or after all construction work has been completed. These employees are exempt from the fall protection rule during the

performance of these duties. They are the Safety Manager, Site Supervisors, and other properly trained employees who may safely inspect a project prior to or following construction work. These authorized employees determine if all excavations have the strength and structural integrity within which employees may safely perform work. Our employees will not be allowed to work in these areas until the protection systems have the requisite strength and structural integrity. All employees, or their designated representatives, can obtain further information about this written program, and/or the excavation standards from The Safety Manager.

## **Our Duty to Provide Excavation Protection**

To prevent falls, our company has a duty to anticipate the need to work below ground and to plan our work activities accordingly. Careful planning and preparation lay the necessary groundwork for an accident-free jobsite.

## **Worksite Assessment and Excavation System Selection**

Because some sites may require excavation protection while others may not, this is the written General Plan applying to all applicable worksites. This excavation protection plan is intended to anticipate the particular hazards to which our employees may be exposed. Specifically, we:

- Inspect the area to determine what hazards exist or may arise during the work.
- Identify the hazards and select the appropriate measures and equipment.
- Give specific and appropriate instructions to workers to prevent exposure to unsafe conditions.
- Ensure employees follow procedures given and understand training provided.
- Apprise ourselves of the steps our specialty subcontractors have taken to meet their fall protection requirements.
- Providing excavation protection requires an assessment of each fall situation a given jobsite. Our criteria for selecting a given fall protection system follow those established at 29 CFR 1926.651, specific excavation requirements, and 29 CFR 1926.625, requirements for protective systems.
- Each employee exposed to these situations must be trained as outlined later in this plan.

## **General Excavation Requirements**

The safety rules under this subtitle apply to excavations deeper than five (5) feet. Under these rules, it is the policy of this company, where excavations meet the requirements of this subtitle, **employees are forbidden from working in trenches deeper than five (5) feet without cave-in protection.** You may not, under any circumstances, work in such unprotected conditions.



To protect employees from these kind of hazards posed by trenches, the Safety Manager must assess the soil classification requisite to trench protective systems in accordance with the OSHA Excavation standard, Subpart P. The working conditions require daily instructions and ongoing daily inspections of the excavation, adjacent areas, and protective systems, especially after every rainfall or other hazard-producing occurrence. All wells, pits, or shafts must be barricaded. In addition, protective systems may include, but are not limited to:

- Sloping, including an assessment of maximum allowable slopes for soil or rock deposits in accordance with Table B-1, Appendix A of 29 CFR 1926, Subpart P;
- Benching;
- Trench boxes or shields, extended to the bottom of the trench and no less than 18 inches above the vertical part of the trench face, except under certain conditions; or
- Any combination of the above.

Benching or sloping must be designed by a registered engineer when excavations are greater than 20-feet. When portable trench boxes are stacked, provide attaching means to prevent them from separating. During the construction of a protective system, employees who are not directed to participating in the construction of a safety system are not permitted to enter a trench or excavation.

Qualified personnel will design and install piling, sheeting, shoring, shields, and support systems. The shoring system must withstand all loads imposed on it. Any timber or other material used must be in good, serviceable condition and free of defects. When members of support systems are in true horizontal position, they must be spaced vertically and secured to prevent sliding, falling, or kickouts.

Upon completion, all excavations must be backfilled. When backfilling, the trench support systems must be simultaneously removed. Qualified personnel will progress from the bottom of the trench when removing support system members and release all jacks slowly.

To reiterate, unless participating in the construction of protective systems, employees are forbidden from working in trenches or excavations or otherwise outside of trench shields or shoring protection in unprotected trenches, as required by 29 CFR 1926.650, .651, and .652.

## **Confined-Space Entry Procedures**

When entering confined spaces, employees must follow special procedures designed both to conform to applicable law and protect employees from hazards posed. The Safety Manager will inform employees of the existence of, location, and hazards posed by confined spaces. You will either receive instructions relating to them or notice signs indicating as much.

Employees may only enter such spaces when instructed. Additionally, all employees must conform to safety training associated with confined spaces. Certain personal protective equipment will be provided in the event an employee is to work in a confined space. For example, removable type steel casings and individual individually manned lifelines and harnesses will protect employees in bell-bottom pier holes.

Sometimes, confined spaces will pose hazardous atmospheric conditions. In these situations, additional safety measures are required to protect employees. All confined spaces must be tested using equipment designed to detect chemicals which may be present at levels well below defined exposure limits. This is done to:

- determine what chemical hazards are or may become present in the space's atmosphere; and
- identify what steps must be followed and what conditions must be met to ensure atmospheric conditions are safe for a worker to enter the space.

Testing results and decisions concerning the steps to follow in these circumstances must be followed before entry and evaluated or reviewed by qualified personnel, such as a certified industrial hygienist, registered safety engineer, or other certified safety professional. The qualified professional will consider all serious hazards in the evaluation or review, and the Safety Manager will inform employees accordingly, including whether the confined space is a permit space.

### **“Wet” Excavation Precautions**

When working in excavations with accumulated water, all employees must take special precautions to prevent exposure to hazards. The Safety Manager will dictate which are required for each situation. Safety measures taken may include, but are not limited to:

- Special support or shield systems;
- Water removal;
- Mandatory safety harnesses and lifelines; and/or
- Water-removal equipment, monitored by a competent person.

In the event personal protective equipment is required to work in wet excavations, employees must utilize and wear it while working in the excavation.

### **Falling Hazards**

Employees are responsible for managing spoil, equipment, and other materials which may pose a hazard of falling or rolling into an excavation by either: storing such hazards at least two (2) feet away from the edge of an excavation; or using effective

retaining devices. The Safety Manager of the site will direct employees as to which preventative measure is required.

Falling hazards are also posed by the trench itself. To protect employees, all are required to use walkways or bridges to cross over excavations. When the excavation is over 4 feet in depth, these crossings require standard guard rails. In addition, all tunnel shafts and bore pits must be protected by guard railing or solid sheeting no less than 42 inches above ground level.

## **Superimposed Loads**

Superimposed loads, such as mobile equipment operating close to excavation edges, require extra sheet piling, shoring, or bracing. The use of mobile equipment near excavations also require substantial barricades or stop logs. The Safety Manager will assess the conditions of the site and determine which measure is required.

## **Procedures in Excavations near Foundations**

Additional underpinning, shoring, or bracing may be required when adjoining utility lines and foundations, walks and footings are endangered. After foundation walls are constructed, the following precautions must be taken to prevent injury from cave-ins in the areas between the excavation wall and the foundation wall, as maintained by the Safety Manager specific to the site:

- the depth of the foundation/basement trench must not exceed 7.5 feet deep unless other cave-in protection is provided;
- the horizontal width of the foundation trench at least 2 feet wide;
- no earth vibration is permitted while workers are in the trench;
- the foundation trench work will be planned to minimize the number of employees in the trench and the length of time they spend there;
- conduct regular inspections noting the changes in the stability of the earth, such as water, cracks, vibrations, and spoils pile; and
- work must be stopped if there is any potential for cave-in may not start again until it is fixed.

## **General Worksite Policy**

6. If any one of the conditions described in the Workplace Assessment is not met for the area or piece of equipment posing a potential excavation hazard, then do not perform that work until the condition is met. If you cannot remedy the condition immediately, notify a supervisor of the problem and utilize a different piece of equipment or work in a different area, according to the situation.

7. If the situation calls for use of personal protection devices because the hazard cannot be reduced to a safe level, then the employee must don such protective equipment before beginning the work and use it as intended throughout the duration of the work.
8. Only employees trained in such work are expected to perform it.
9. All places of employment, job sites shall be kept clean and orderly and in a sanitary condition.
10. All work areas must be kept in a clean and so far as possible, dry condition. Where wet processes are used, drainage shall be maintained and false floors, platforms, mats, or other dry standing places should be provided where practicable. The storage of trash or other debris in excavations is strictly prohibited.

## **Training Program**

Under no circumstances shall employees work in areas where they might be exposed to excavation hazards, do work requiring protection devices, or use protection devices until they have successfully completed this company's excavation training program. The training program includes classroom instruction and operational training on recognition and avoidance of unsafe conditions and the regulations applicable to their work environment for each specific fall hazard the employee may encounter. The training program is conducted by the Safety Manager, a "competent person" qualified in each aspect of the program, and must cover the following areas:

- the nature of excavation hazards in the work area;
- selection and use of personal protective equipment, methods of use, and inspection and storage of the system;
- the correct procedures for erecting, maintaining, disassembling, and inspecting the cave-in protection systems to be used;
- the role of each employee in the safety monitoring system when one is used.
- the limitations on the use of excavation during the performance of work;
- the correct procedures for the handling and storage of equipment and materials and the erection of overhead protection;
- the role of employees in excavation protection plans;
- adequate procedures and protections with regard to wet excavations or excavations with hazardous atmospheric conditions;
- the standards contained in Subpart P of the construction regulations.

The Safety Manager will identify all current and new employees who require training and schedule the classroom instruction for those employees. Training on the above components will occur both in the classroom and on the job site, as appropriate. Classroom training will cover written policy/procedures on excavation protection and include a training video on the subject. Job site instruction will include demonstration of and practice in wearing protection equipment and when to work in a trench or excavation

with a depth of 5-feet or greater and any instruction necessary for a specific job. The Safety Manager and/or Site Supervisor has the responsibility of determining when an employee who has already been trained, does not have the understanding and skill required by the training program. A written certificate of training is required which must include:

- the name or other identity of the employee trained.
- the date(s) of training.
- the signature of the competent person who conducted the training or the signature of the employer.

Retraining is required when an employee cannot demonstrate the ability to recognize the hazards of excavation and the procedures to be followed to minimize fall hazards. Furthermore, BRANCHING OUT, has developed a training document which serve as a “Compliance Agreement” binding employees to the safety rules and regulations they were taught at the onset of their employment with BRANCHING OUT. This “Compliance Agreement” shall serve as each employee’s promise to the Company that they will adhere to any and all safety guidelines. Such agreements do not and will not serve as a substitute for regular retraining, routine job inspections by management, and a comprehensive disciplinary program, but will act as a constant reminder of the employee’s continued obligation to work safe at all times while employed by BRANCHING OUT. This “Compliance Agreements” is attached as an appendix hereto.

## **Enforcement**

Constant awareness of and respect for fall hazards, and compliance with all safety rules are considered conditions of employment. The jobsite superintendent, as well as individuals in the Safety Department, reserve the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines of this program.

## **Incident Investigation**

All accidents that result in injury to workers, regardless of their nature, are investigated and reported. It is an integral part of any safety program that documentation take place as soon as possible so that the cause and means of prevention can be identified to prevent a reoccurrence. In the event that an employee falls or there is some other related, serious incident (e.g., a near miss) occurs, this plan will be reviewed to determine if additional practices, procedures, or training need to be implemented to prevent similar types of falls or incidents from occurring.

## **Changes to Plan**

Any changes to the plan will be approved by the Safety Manager. This plan is reviewed by a qualified person as the job progresses to determine if additional practices, procedures or training needs to be implemented by the competent person to improve or provide additional fall protection. Workers are notified and trained, if necessary, in the new procedures. A copy of this plan and all approved changes is maintained at the jobsite.

## **Appendix**

We have attached the following appendix to ensure better understanding of this plan:

- Employee Excavation Compliance Agreement

## EXCAVATION COMPLIANCE AGREEMENT

- 11)\_\_\_\_\_ I am aware that OSHA standards forbid me from working in any excavation over a height of five feet without adequate sloping, shoring, or other protection systems.
- 12)\_\_\_\_\_ BRANCHING OUT, has trained me on the dangers associated with a cave-in, and I am aware that a cave-in can cause serious injury or death.
- 13)\_\_\_\_\_ I understand that all cave-ins are 100% preventable if I use the proper training and equipment in order to avoid this hazard.
- 14)\_\_\_\_\_ I have been informed concerning the dangers of working in confined spaces, and understand entering such spaces is forbidden to me or any person without express permission from the company. I understand there is particular personal protective equipment I must use when working in confined spaces, and testing is required to assess the hazardous conditions.
- 15)\_\_\_\_\_ When I am working in a “wet” excavation, I will follow appropriate procedures and utilize protective systems or equipment as instructed for my safety and the safety of my coworkers.
- 16)\_\_\_\_\_ I know all work near, around, above, or over an excavation requires particular protective systems or adherence to procedures outlined in the Excavation Safety Program of BRANCHING OUT, including those outlined in the sections on Superimposed Loads, Falling Hazards, and Confined-Space Entry Procedures.
- 17)\_\_\_\_\_ I will not perform work in an excavation five (5) feet or deeper without approval from the Safety Manager or adequate protection systems outlined to me on site.

I, \_\_\_\_\_, have received excavation training from my employer and/or supervisor at BRANCHING OUT. I understand the policies and procedures as they pertain to the requirements for excavations on any and all jobs for which BRANCHING OUT, provides construction services. I fully understand and agree to the rules referenced above, and I shall continue to abide by these rules, policies, and procedures throughout my employment.

Employee Signature: \_\_\_\_\_ Supervisor Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_ Print Name: \_\_\_\_\_  
Date: \_\_\_\_\_ Date: \_\_\_\_\_

**EMERGENCY ACTION PLAN**  
**Chapter 26**



# **Emergency Action Plan**

## **Purpose**

Base Group is dedicated to the protection of its employees from emergencies such as tornadoes and fires. When emergencies do occur, our Emergency Action Plan (EAP) is initiated. This EAP is in place to ensure employee safety from emergencies during regular hours and after hours. It provides a written document detailing and organizing the actions and procedures to be followed by employees in case of a workplace emergency. OSHA's Emergency Action Plan requirements require us to have a written emergency action plan (EAP). This EAP addresses emergencies that our company expects may reasonably occur at any of our jobsites or fixed facilities. The EAP communicates to employees, policies and procedures to follow in emergencies. This written plan is available, upon request, to employees, their designated representatives, and any OSHA officials who ask to see it.

## **Administrative Duties**

Our Safety Manager is the EAP administrator, who has overall responsibility for the plan. This responsibility includes the following:

1. Developing and maintaining a written Emergency Action Plan for regular and after hours work conditions;
2. Ensuring that security measures to protect employees are taken by appropriate management;
3. Integrating the Emergency Action Plan with any existing general emergency plan covering the building or work area occupied;
4. Distributing procedures for reporting emergencies,
5. Ensuring that jobsite Foremen/Supervisors brief employees on the location of safe exits, and evacuation routes;
6. Ensure that designated employees are trained in emergency response such as the use of fire extinguishers and the application of first aid;
7. Maintaining records and property as necessary; and
8. Counsel appropriate management to ensure that our facility meets all local fire codes, building codes, and regulations.

The Safety Manager is responsible for reviewing and updating the plan as necessary. Copies of this plan may be obtained from Base Group business office. The Safety Manager has full authority to decide to implement the EAP if he or she believes an emergency might threaten human health. The following potential emergencies might reasonably be expected at our facility or work areas and thus call for the implementation of this EAP:

- Fire emergency
- Toxic gas releases
- Flammable gas releases
- Hazardous liquid spills
- Oil spills
- Release of radiation
- Weather related emergency
- Terror threat/Civil disturbance.
- First-aid emergencies

The Safety Manager can be contacted regarding further information about duties under this written Emergency Action Plan. Key management personnel “emergency contact” numbers are kept on office bulletin boards, with the job file on remote sites, and in company vehicles for immediate use in the event of an emergency. These numbers of key management personnel have been distributed to all supervisors to be retained in their homes for use in communicating an emergency occurring during non-work hours: If, after reading this plan, you find that improvements can be made, please contact the plan administrator. We encourage all suggestions because we are committed to the success of our Emergency Action Plan. We strive for clear understanding, safe behavior, and involvement in the program from every level of the company.

## **Notification of Emergency Action Condition**

Different emergencies call for different re-actions, and different instructions to indicate what actions employees should take. Our Company has established an employee notification system to keep personnel apprised of pending or actual emergency conditions, and post emergency response instructions. A list of employee phone numbers (home, cell and/or radio) will be maintained and will serve as the primary means of contacting our personnel in the event of an emergency. For a local or immediate Fire, Police or Medical emergency personnel are to immediately contact 911, and are to subsequently notify their immediate supervisor and the designated Safety Manager. 911 is reasonably believed, by our management, to be a functioning and reliable emergency services number in all of the areas where we conduct our operations. If we learn that 911 is not a reliable means of contact, in a given area, we will notify the appropriate personnel of this condition and alternate methods of gaining emergency assistance.

## **Emergency Reporting and Weather Monitoring Procedures**

### *In the Event of an Emergency Requiring Evacuation*

When employees detect an emergency that requires an evacuation, such as a fire or hazardous release, they should IMMEDIATELY notify all crew/building occupants and exit the building to the designated safe area for a headcount. The fire department will be notified via telephone.

### *In the Event of a Weather Related Emergency*

Company management as well as field management is to stay aware of weather conditions that have the potential to affect our operations. Most weather systems that are capable of negatively affecting our operations develop over time and can be planned for, however some systems such as tornados and thunderstorms may develop very quickly and may require immediate action to protect personnel. Lightening is of particular concern and should be taken very seriously. When lightening is detected, operations MUST be secured and personnel moved into a protected (interior) area. All warning and watches issued by local weather authorities or local governments are to be heeded immediately and supervisory personnel are to ensure that the protection of personnel takes priority over all other concerns. When operations are stopped due to severe weather, the foreman/supervisor is to advise his/her immediate supervisor. This action should take place throughout the management structure.

## **Evacuation Procedures**

Some emergencies require evacuation or escape procedures, while some require employees to stay indoors, or in a safe area. Our emergency escape procedures are designed to respond to many potential emergencies, depending on the degree of seriousness. Nothing in these procedures precludes the plan administrator's authority in determining whether employees should remain inside or evacuate. At this company, the following types of emergency evacuations exist:

- total and immediate evacuation
- partial evacuation

Our emergency escape procedures and assignments are designed to respond to many potential emergencies that require them, including: fire, tornado, bomb threat, and chemical release. Employees need to know what to do if they are alerted to a specific emergency. After an evacuation order is given, employees should take the following steps:

1. Cease work immediately and proceed to the nearest available exit.
2. Go to your designated safe area for a headcount and further instructions.

### *Procedures to Account for Employees*

Jobsite supervisors and facility managers should communicate to their personnel the location of a "Rally Point" at the beginning of each new job or a designated location at fixed facilities, prior to any emergency. Personnel shall assist each other in safe and orderly evacuation in the event of an emergency. Once the evacuation is complete, the senior person on site shall conduct a head count to ensure that all personnel are accounted for. All personnel should be made aware of employees with disabilities who may need extra assistance, such as using the buddy system, and of hazardous areas to

be avoided during emergencies. Before leaving, employees should check rooms and other enclosed spaces in the workplace for employees who may be trapped or otherwise unable to evacuate the area. Supervisors must be aware of the locations of all of their employees throughout the work day, and be aware of who is absent or otherwise away from the premises. Accounting for employees will aid local responding fire/rescue departments in determining whether rescue efforts are necessary. Once an evacuation has taken place, senior management and the Safety Manager is to be immediately notified of the conditions. No employees are to return to their work area until advised by senior company management or by the Safety Manager that it is safe to do so.

### Operations at 3rd party (Client) facilities

As a part of the job planning process, supervisors shall discuss and understand client facility procedures and alarms for emergency situations. Prior to the start of work, all personnel who are to work in or around a client facility where there are specific alarms and safety or evacuation procedures shall be knowledgeable about such alarms and procedures. This information should be communicated on a daily basis during pre-job briefings.

### Terrorist Threats

We live in a world where terrorist threats are more and more common. **ALL TERRORIST THREATS ARE TO BE TAKEN SERIOUSLY.** Any person who becomes aware of a terrorist threat of any kind, whether threatening a single person or a larger group of people or a facility, SHALL IMMEDIATELY notify company senior management and the Safety Manager. Following the “Chain of Command” shall not be an issue during such notification. You are to notify the most senior person you can locate or call IMMEDIATELY.

## Training

Our supervisory personnel are to review with each of our employees at the following times, those parts of the Emergency Action Plan that employees must know to protect themselves in the event of an emergency:

- During employee orientation,
- Whenever an employee’s responsibilities or designated actions under the plan change, and
- Whenever the plan is changed,
- When a new jobsite location is established.
- The information in this plan is not intended for casual reading, but is intended to get the appropriate message across.

**EXTREME TEMPERATURE SAFETY PLAN**  
**Chapter 27**

## **Extreme Temperature Safety Program**

Many workers spend part, if not most, of their working day in a hot environment. They often face hot conditions which pose special hazards to safety and health. Our company is committed to ensuring the safety of all employees subject to extreme temperatures while at work. This Extreme Temperature Safety Program was developed to establish guidelines and safe operating procedures for our employees.

### **Administration**

The Safety Manager is responsible to the implementation and maintenance of this program. A copy of the Extreme Temperature Safety Program is located in the Safety Manager's office.

### **Safe Operating Procedures**

#### **Purpose**

To ensure all employees understand the basic elements that are required to work safely in extreme weather conditions or temperatures.

#### **Goals**

To prevent work-related injuries or deaths that may result from exposure to hot weather or weather related conditions.

#### **Factors**

The environmental factors that affect the amount of stress a worker faces.

- |                |                 |
|----------------|-----------------|
| 1) Temperature | 3) Radiant Heat |
| 2) Humidity    | 4) Air Velocity |

Individual Factors:

- |            |                                |
|------------|--------------------------------|
| 1) Age     | 5) Acclimatization to the heat |
| 2) Weight  | 4) Medical Condition           |
| 3) Fitness |                                |

The body reacts to high external temperatures by circulating blood to the skin which increases skin temperature and allows the body to give off its excess heat through the skin. If the muscles are being used for physical labor, less blood is available to flow to the skin and release the heat.

### Heat Disorders

1. Heat Stroke – Heat stroke occurs when the body fails to use its internal mechanisms to regulate its core temperature. During a heat stroke, individuals can experience a total stop in sweat production, mental confusion, and loss of consciousness, convulsions, or coma. Individuals suffering from heat stroke can have a body temperature of 106 degrees F or higher and hot dry skin which may be red, mottled, or bluish. Treatment for heat stroke includes moving the injured employee to a cool shaded area and using fans to cool the body. Prompt first aid can prevent permanent injury to the brain and vital organs.
2. Heat Exhaustion – Heat exhaustion results from loss of fluid. Heat exhaustion can result in extreme weakness or fatigue, giddiness, nausea, or headache. Individuals also suffer from a body temperature which is higher than normal. Treatment for heat exhaustion includes resting in cool place and drinking water or an electrolyte solution (such as Gatorade).
3. Heat Cramps – Heat cramps are painful spasms of the muscles, caused when workers drink large quantities of water but fail to replace the bodies' salt loss. Heat cramps affect tired muscles and may occur during or after working hours. Treatment includes consuming lost water and seeking medical treatment.
4. Fainting – Fainting may be a problem for those not accustomed to a hot environment and who stand still in the heat. Fainting treatment includes lying down for a short time and moving around while working, rather than standing still.

### Work Practices

1. Provide and drink plenty of water - 1 quart per worker per hour.
2. Train workers to recognize and treat heat stress disorders.
3. Employers should consider an individual worker's physical condition and fitness for working in the hot environments. Some personnel may be at greater risk.
4. Alternate work and rest periods - in a cool area.
5. Schedule heavy work during the cooler parts of the day
6. Supervisors should be trained in detection of early signs of heat stress and should permit workers to interrupt their work if they are extremely uncomfortable.
7. Appropriate use of personal protective equipment.

### Acclimatization

Allowing time for the employee to become used to heat through short exposures followed by longer periods of work in the hot environment. New employees and workers returning from an absence of two weeks or more should have a 5-day period of

acclimatization. This period should begin with 50% of the normal workload and time exposure the first day and gradually build up to 100 percent on the 5th day.

## **Employee Training**

The Safety Manager ensures that all employees are properly trained to work safely in extreme temperatures. This training includes:

1. Recognize symptoms and signs of the various types of heat stress.
2. Know procedures for reporting all illnesses or possible illnesses.
3. Preventing Heat Stress
4. Be aware of the need for fluid replacement and salt loss.
5. Take into consideration the individual workers physical condition and health when determining their fitness for working in those types of environments.
6. Special Considerations
7. Sweating in a hot environment is effective only if the humidity level is low enough to permit evaporation and the fluids and salts lost are adequately replaced.



**SEVERE WINTER WEATHER SAFETY PLAN**  
**Chapter 28**

## **Severe Winter Weather Safety Program**

In severe winter weather conditions, proper preparation is essential. Severe winter weather conditions pose special hazards to safety and health. Our company is committed to ensuring the safety of all employees subject to severe winter weather conditions while at work. The Severe Winter Weather Safety Program was developed to establish guidelines and safe operating procedures for our employees.

### **Administration**

The Safety Manager is responsible to the implementation and maintenance of this program. A copy of the Severe Winter Weather Safety Program is located in the Safety Manager's office.

### **Safe Operating Procedures**

#### **Purpose**

To ensure all employees understand the basic elements that are required to work safely in severe winter weather conditions and temperatures.

#### **Goals**

To prevent work-related injuries or deaths that may result from exposure to severe winter weather conditions.

#### **Factors**

The environmental factors that affect the amount of cold stress a worker faces.

- |                              |                               |
|------------------------------|-------------------------------|
| 1) Near Freezing Temperature | 3) Wetness                    |
| 2) Increased Wind Speed      | 4) Decreased Body Temperature |

Individual Factors:

- |           |                      |
|-----------|----------------------|
| 1) Age    | 3) Fitness           |
| 2) Weight | 4) Medical Condition |

Cold stress occurs by driving down the skin temperature, and eventually the internal body temperature. When the body is unable to warm itself, serious cold-related illnesses and injuries may occur, and permanent tissue damage and death may result.

### Types of Cold Stress









1. Immersion / Trench Foot – Trench foot is a non-freezing injury of the feet caused by prolonged exposure to wet and freezing conditions. It can occur in temperatures as high as 60°F if feet are constantly wet. Injury occurs because wet feet lose heat 25-times faster than dry feet. Symptoms include: reddening skin, tingling, pain, swelling, leg cramps, numbness, and blisters. Once trench foot or the symptoms have been identified, immediately seek medical assistance. Then, remove wet boots and wet socks, dry the feet and avoid working on them. Until medical attention is received, keep feet elevated and avoid walking.
2. Frostbite – Frostbite is caused by the freezing of the skin and tissues. Frostbite can cause permanent damage to the body, and in severe cases can lead to amputation. The risk of frostbite is increased in people with reduced blood circulation and among people who are not dressed properly for extremely cold temperatures. Symptoms include: reddened skin develops gray/white patches in the fingers, toes, nose, or ear lobes; tingling, aching, a loss of feeling, firm/hard, and blisters may occur in the affected areas. Once identified, immediately seek medical attention and then protect the frostbitten area. **DO NOT rub the affected area, apply snow or water to the affected area, break the blisters, or try to re-warm the affected area.**
3. Hypothermia – Hypothermia occurs when the normal body temperature (98.6°F) drops to less than 95°F. Exposure to cold temperatures causes the body to lose heat faster than it can be produced. Prolonged exposure to cold will eventually use up the body's stored energy. The result is hypothermia, or abnormally low body temperature. Hypothermia is most likely at very cold temperatures, but it can occur even at cool temperatures (above 40°F) if a person becomes chilled from rain, sweat, or immersion in cold water. Symptoms include: uncontrollable shivering, loss of coordination, confusion, slurred speech, slow heart rate or breathing, unconsciousness, and possibly death. When a person's body temperature lowers, the brain is affected making the victim unable to think clearly or move well. Once identified, seek immediate medical attention, move the worker to a warm, dry area, and remove wet clothing and replace with dry clothing. Wrap the entire body in layers of blankets and a vapor barrier except for the face. If medical attention is more than 30 minutes away, give warm sweetened drinks to the victim if they are alert. **Never try to give a drink to an unconscious person.** Place warm bottles or hot packs in armpits, sides of chest, and groin. Call 911 for additional rewarming instructions.

### Work Practices

1. Monitor workers' physical condition.
2. Schedule frequent short breaks in warm dry areas, to allow the body to warm up.
3. Schedule work during the warmest part of the day.
4. Use the buddy system (work in pairs).

5. Provide warm, sweet beverages. Avoid drinks with alcohol.
6. Provide engineering controls such as radiant heaters.
7. Follow the applicable OSHA guidelines for acclimation:

**Work/Warm-up Schedule for a 4-Hour Shift**

Air Temperature--Sunny Sky		No Noticeable Wind		5 mph Wind		10 mph Wind		15 mph Wind		20 mph Wind	
°C (approximate)	°F (approximate)	Maximum Work Period	Number of Breaks	Maximum Work Period	Number of Breaks	Maximum Work Period	Number of Breaks	Maximum Work Period	Number of Breaks	Maximum Work Period	Number of Breaks
-26 to -28	-15 to -19	(Normal Breaks ) 1		(Normal Breaks ) 1		75 min	2	55 min	3	40 min	4
-29 to -31	-20 to -24	(Normal Breaks ) 1		75 min	2	55 min	3	40 min	4	30 min	5
-32 to -34	-25 to -29	75 min	2	55 min	3	40 min	4	30 min	5	Non-emergency work should cease 	
-35 to -37	-30 to -34	55 min	3	40 min	4	30 min	5	Non-emergency work should cease 			
-38 to -39	-35 to -39	40 min	4	30 min	5	Non-emergency work should cease 					
-40 to -42	-40 to -44	30 min	5	Non-emergency work should cease 							
-43 & below	-45 & below	Non-emergency work should cease									

Schedule applies to any 4-hour work period with moderate to heavy work activity; with warm-up periods of ten (10) minutes in a warm location and with an extended break (e.g. lunch) at the end of the 4-hour work period in a warm location.

## Employee Training

The Safety Manager ensures that all employees are properly trained to work safely in severe winter weather conditions. This training includes:

1. Recognizing the environmental and workplace conditions that can lead to cold stress.
2. Identifying the symptoms of cold stress
3. Preventing cold stress
4. Helping those who are affected
5. Selecting proper clothing for cold, wet, and windy conditions.

## Hazards/Precautions

### Winter Driving

The Safety Manager ensures that all employees are properly trained to inspect the following vehicle systems to determine if they are working properly in severe winter weather conditions:

- **Brakes:** Brakes should provide even and balanced braking. Also check that brake fluid is at the proper level.

- **Cooling System:** Ensure a proper mixture of 50/50 antifreeze and water is in the cooling system at the proper level
- **Electrical System:** Check the ignition system and make sure that the battery is fully charged and that the connections are clean. Check that the alternator belt is in good condition with proper tension.
- **Engine:** Inspect all engine systems.
- **Exhaust System:** Check exhaust for leaks and that all clamps and hangers are snug.
- **Tires:** Check for proper tread depth and no signs of damage or uneven wear. Check for proper tire inflation.
- **Oil:** Check that oil is at the proper level.
- **Visibility Systems:** Inspect all exterior lights, defrosters (windshields and rear window), and wipers. Install winter windshield wipers.

An emergency kit with the following items is recommended in vehicles:

- Cellphone or two-way radio
- Windshield ice scraper
- Snow brush
- Flashlight with extra batteries
- Shovel
- Tow chain
- Traction aids (bag of sand or cat litter)
- Emergency flares
- Jumper cables
- Snacks
- Water
- Road maps
- Blankets, change of clothes

### Clearing Snow from Roofs and Working at Heights

Safety Manager must evaluate snow removal tasks for hazards and plan how to do the work safely. Workers should be aware of the potential for unexpected hazards due to the weather conditions, for example, layers of ice can form as the environmental temperature drops, making surfaces even more slippery. A surface that is weighed down by snow must be inspected by a competent person to determine if it is structurally safe for workers to access it, because it may be at risk of collapsing. Snow covered rooftops can hide hazards such as skylights that workers can fall through. Electrical hazards may also exist from overhead power lines or snow removal equipment.

Safety Manager protects workers from these hazardous work conditions, for example, by using snow removal methods that do not involve workers going on roofs, when and where possible. Proper personal protective equipment and the right type of equipment must be used **anytime** the worker is on the job.

## Winter Terms

**Blizzard Warning:** Issued for sustained or gusty winds of 35 mph or more and falling or blowing snow creating visibilities at or below ¼ mile; these conditions should persist for at least 3 hours.

**Wind Chill Advisory:** Issued when wind chill temperatures are expected to be a significant inconvenience to life with prolonged exposure, and, if caution is not exercised, could lead to hazardous exposure.

**Wind Chill Warning:** Issued when wind chill temperatures are expected to be hazardous to life within several minutes of exposure.

**Winter Storm Warning:** Issued when hazardous winter weather in the form of heavy snow, blizzard conditions, heavy freezing rain, or heavy sleet is imminent or occurring. Winter Storm Warnings are usually issued 12 to 24 hours before the event is expected to begin.

**Winter Storm Watch:** Alerts the public to the possibility of a blizzard, heavy snow, heavy freezing rain, or heavy sleet. Winter Storm watches are usually issued 12 to 48 hours before the beginning of a Winter Storm.

**Winter Weather Advisories:** Issued for accumulations of snow, freezing rain, freezing drizzle, and sleet which will cause significant inconveniences and, if caution is not exercised, could lead to life threatening situations.

## Final Thought

The purpose of this plan is the protection of human life. Clearly the protection of the health and the wellbeing of our employees will always take priority over all other matters. Considerations such as production schedules and company or project profitability are to have no bearing on the implementation and execution of this plan. Base Group Emergency Action Plan and the entirety of this Accident Prevention Program and Corporate Safety Manual shall always operate on the fundamental tenant that we will never trade workplace safety and employee wellbeing for timely completion of projects. All employees are aware, and will be trained, that speed costs lives. Any employee caught rushing or speeding through a project without regard for personal wellbeing or the wellbeing of the crew members around him or her will be disciplined accordingly.

Employees may contact the Safety Manager if they need assistance with this plan or if they feel that someone is placing improper importance on priorities other than life and health issues.

**EMERGENCY CONTACTS**  
**Chapter 29**

# Emergency Contacts

<b>Title:</b>	<b>Name:</b>	<b>Number:</b>
Safety Manager:	<u>Rich Purnell</u>	<u>720-280-2001</u>
_____:	_____	_____
_____:	_____	_____
_____:	_____	_____
Human Resources:	_____	_____
Office Manager:	_____	_____