

# ***Specific Safety Procedures***

## **1. EMERGENCY ACTION PLAN**

Our emergency action plan is designed to minimize potential injury or physical damage in the event of a catastrophic event. The following types of incidents will trigger this plan:

- **Fire**
- **Bomb Scare**
- **Intruder**

This plan will be reviewed at least [annually] or when responsibilities or hazards change.

## **PROCEDURES:**

### **(A) NOTIFICATION**

In case of an emergency, each site has developed an individual action plan. See appendix XXX for specific porcedures.

### **(B) CHAIN OF COMMAND**

The first Emergency Response Commander on the scene will be the building/site supervisor. The backup commander/coordinator is the next subordinate individual in the chain of command for the site. The Emergency Response Commander will assess the situation in consultation with appropriate staff both within and outside the site. Off-duty phone numbers are listed in Appendix XXX.

If warranted, the Commander will then notify the appropriate outside emergency responders. Police, fire, and emergency medical agencies and phone numbers are located in Appendis XXX.

While waiting for the arrival of specific responders, the Commander will assign duties not covered in the emergency action plan to available staff as needed. When the outside agency arrives, the Commander will turn the operation over to the head of that department while remaining as an advisor.

The Incident Command Center will be located at main office of the site unless otherwise noted.

Telephones, first-aid equipment, emergency manuals, facility diagrams, etc., will be located there.

Notification of the family of injured personnel will be handled by the School Nurse or District Health Officer.

The responsibility for handling the media will be assumed by Superintendent of Schools.

### **(C) OPERATION SHUTDOWN**

The custodian will be assigned the responsibility of shutting down machinery or processes as directed by the Emergency Response Commander in consultation with the Transportation, Grounds and Maintenance Supervisor.

### **(D) EVACUATION**

The Emergency Response Coordinator will make an announcement to evacuate over the public address system, emergency announcement system, or through alarm signals. Primary and secondary routes and exits are indicated on the attached maps and floor diagrams. See Appendix XXX.

Copies of these maps are posted prominently throughout each facility.

Evacuation procedures are as follows:

- When told to evacuate or when the alarm sounds, employees will shut off their equipment and walk to the exit designated for their department. The employees will then gather outside at a predetermined location away from the building and emergency vehicle traffic. See Appendix XXX.
- Building Administrators/departmental supervisors will make sure that all employees in their areas have left. They will help any employees that need assistance.
- The supervisors will then go to the assembly areas outside and conduct a head count to make sure that all employees under their jurisdiction are accounted for.

### **(E) EMERGENCY RESPONSE TRAINING AND DRILLS**

We will hold an annual emergency response drill involving all employees at the facility. School sites will hold additional evacuation drills to comply with state regulations. The **[Safety Manager]** will plan and coordinate this event. The drill allows the **[Safety Manager]** to assess the following:

- Whether the communication and alarm systems are working effectively;
- Whether all mechanical, hydraulic, and electrical systems are shut down appropriately;
- How quickly all personnel can be evacuated safely; *and*
- Any additional training needed for the emergency response team.

The **[Safety Manager]** will prepare an annual report detailing the drill and any weaknesses found and corrections or training needed.

The emergency response team (which is made up of the first-aid team, lockout/tagout team, fire protection monitor team, and the process safety team) will receive initial training and annual refresher courses on emergency response procedures, as coordinated and/or provided by the **[Safety Manager]**.

Training includes the following topics:

- The types of emergencies our company may experience
- Location and use of fire extinguishers
- Correct procedure for cleanup of chemical spills
- Shutdown of all machinery and processes
- Evacuation procedures

- Use of personal protective equipment (PPE)
- First aid during an emergency evacuation
- How to communicate during the emergency

## **CHECKLIST**

- ( ) A chain of command is clearly established to minimize confusion.
- ( ) A method of communication, such as an alarm system, is established to alert employees to evacuate or take other precautions.
- ( ) Emergency escape procedures and escape route assignments, including floor plans and maps, are established.
- ( ) Procedures are established to be followed by employees who remain to perform (or shut down) critical plant operations before they evacuate.
- ( ) Procedures are in place to account for all employees after emergency evacuation has been completed.
- ( ) Procedures are established for rescue and medical duties for those employees who are trained and assigned to perform them.
- ( ) The preferred means for reporting fires and other emergencies is indicated.
- ( ) Contacts for further information or explanation of duties under the plan are listed.
- ( ) A schedule is included for regular practice drills, updates, and training and reviews, with copies of the plan kept in convenient locations.

## **2. FIRST AID AND MEDICAL SERVICES**

*{EDITOR'S NOTE: If there are no nearby clinics or hospitals, OSHA requires that you have on-site people trained in first aid and the bloodborne pathogen requirements—see Section 19, titled "Infection Control."}*

## **PROCEDURES**

### **(A) FIRST-AID SERVICES:**

**[If you have a first-aid team, indicate how the members are chosen and how they are trained. If you do not have trained first aiders, indicate who provides first aid services.]**

### **(B) ACTION IN THE EVENT OF AN ACCIDENT**

**[Indicate how the first-aid team or other first-aid provider is to be summoned to the scene.]**

### **(C) FIRST-AID SUPPLIES:**

Supplies are readily located throughout our facility at the following locations and are marked by [     ].

**[List locations.]**

The supplies were approved by **[Medical Department, company physician]**. Inventorying, restocking, and inspecting of first-aid supplies is the responsibility of **[Medical Department, company nurse, Safety Department]**.

### **(D) DRENCHING FACILITIES**

The following quick drenching facilities are provided in case of accidental exposure to corrosive materials:

**[List eyewash stations or showers and locations.]**

The **[Maintenance Department]** is responsible for inspecting the drenching facilities **[every 6 months, annually]** and repairing them as needed.

Employees are trained on how to use the drenching facilities in case of exposure.

## **CHECKLIST**

- The first-aid team is properly trained on basic first-aid techniques.
- Employees are taught how to summon medical help and told where first-aid supplies are located.
- First-aid supplies are regularly checked and restocked.
- Quick drenching facilities are inspected regularly, and employees are taught how to use them.

## **3. FIRE PREVENTION**

Our fire prevention policy includes appropriate extinguishing equipment, exits, training, and recognition of fire hazards and control measures. The following form indicates the potential major fire hazards at our facility and the control procedures for these hazards:

**[XYZ COMPANY]**  
**CONTROL OF MAJOR WORKPLACE FIRE HAZARDS**

MAJOR FIRE HAZARD	LOCATION	COMPANY CONTROLS
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

**PROCEDURES**

**(A) PORTABLE FIRE EXTINGUISHERS AND HOSES**

Fire extinguishers and fire hoses are located throughout the facility. Their locations are marked by a placard placed on a nearby column or wall to indicate their location. The **[Maintenance Department]** maintains a list of the locations of all fire extinguishers, the type of extinguisher, and hoses.

**[List location and type of fire extinguishers and locations of hoses here.]**

The **[Maintenance Department]** is responsible for conducting a monthly check of all firefighting equipment and for maintenance of the equipment. A record of these inspection and maintenance activities will be kept in the **[Maintenance Department]**. Each extinguisher will have a tag indicating when the last recharge took place.

During the line supervisor's walkthroughs, he or she will report any nonpressurized or broken fire extinguishers to the maintenance department. Such extinguishers must be tagged and taken out of service.

The [**Safety Manager**] will be responsible for ensuring that the correct type and number of extinguishers are available in each location. During the annual inspection, or when any processes or equipment are changed, the [**Safety Manager**] will review the fire extinguisher capabilities to ensure that the facility is appropriately protected.

## **(B) FIXED EXTINGUISHING SYSTEMS**

*{EDITOR'S NOTE Indicate the types of extinguishing systems—sprinkler, foam, etc., and provide maps of these systems here.}*

The responsibility for the maintenance and testing of this system is held by [**outside contractor (give name) or Maintenance Dept.**].

This system will be tested according to the following schedule:

**[Insert schedule here.]**

## **(C) EXITS**

The [**Safety Manager**] will ensure that there are sufficient exits for our facility. *{Editor's note: check your local community's fire codes for requirements.}* The list of exits is contained in Section 1 above, "Emergency Action Plan."

The following procedures apply for exits:

- All routes to exits must remain clear and unobstructed.
- Exits may not be blocked.
- Exit doors must remain unlocked during working hours.
- All exits must be clearly marked as such (all other doors that could be mistaken for an exit should be marked as "Not an Exit," "Storage Closet," or "To Basement," etc.).

## **(D) FIRE EMERGENCIES—SEE EMERGENCY ACTION PLAN (1) ABOVE**

### **(E) HOT WORK**

Any time welding or cutting operations are to be carried out, a hot work permit system must be used by both employees or outside contractors. When a hot work request is received, the [**Welding Supervisor**] must personally inspect the proposed location of hot work and make sure that the work can be performed safely. Once this individual has determined that the area is safe, he or she signs a permit and gives a copy to the welder to post at the hot work location. The permit should list the precautions that must be taken. The hot work supervisor retains a copy as well.

A separate hot work permit should be issued for each location in which the work is to be performed. If the operation extends for longer than one shift, see the [**Welding Supervisor**]. A new permit may need to be issued.

During the operation, maintain a fire watch to observe for sparks in the hot work area as well as the floors above and below. Flameproof tarpaulins or shield screens should be used to cover nearby equipment and materials. During breaks in work, such as lunch or rest periods, fire patrols should inspect the area. After work is completed, patrols should maintain a watch for at least 30 minutes.

The following is the hot work permit form:

**FORM 11**

**[XYZ COMPANY]  
HOT WORK PERMIT**

Permit No.: \_\_\_\_\_

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

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

Time: \_\_\_\_\_

Issued to: \_\_\_\_\_

Shift: \_\_\_\_\_

<u>Precautions</u>	<u>Yes</u>	<u>No</u>	<u>Not Applicable</u>
Atmosphere tested	_____	_____	_____
Sparkproof tools issued	_____	_____	_____
Combustible material moved	_____	_____	_____
Flameproof caps or covers in use	_____	_____	_____
Welding area enclosed	_____	_____	_____
Shield screens in use	_____	_____	_____
Standby fire watchers names:	_____	_____	_____
Ventilation checked	_____	_____	_____
Purge line with inert gas	_____	_____	_____
All openings closed to prevent spread of sparks	_____	_____	_____
Fire equipment on-site	_____	_____	_____
Type of equipment	_____	_____	_____

Additional Precautions: Patrol for 30 minutes after completion of work.

(Fire Patrol's Signature) \_\_\_\_\_

(Welding Supervisor's Signature) \_\_\_\_\_

(Production Supervisor's Signature) \_\_\_\_\_

COPY 1 - Post at worksite. Return to **[Welding Supervisor]** at completion of shift.

COPY 2 - **[Welding Supervisor]**

## **(F) FLAMMABLE LIQUIDS**

The following flammable liquids are located at our facility:

**[List names of flammable liquids and limits on how much can be stored at your workplace at one time.]**

The 55 gallon drums are isolated in the following locations:

**[List locations—these locations should have fire walls and be separate from the main building.]**

Small containers of flammable liquids (paint cans, solvents, thinners) are stored in fireproof cabinets in the following locations: **[List locations.]**

The containers are labeled, laboratory-approved, and have flame arresters.

Containers and equipment are grounded during dispensing operations, and adequate ventilation is provided. Flammable liquids are never used where there are ignition sources: electrical switches, open motors, static electricity, radiant heat, friction, cutting and welding operations.

Special spray paint booths will be used for regular spray painting operations. These booths will be isolated and located away from any possible ignition sources. Appropriate ventilation will be provided in these booths. Our employees will be trained on and use the following PPE while handling flammable liquids:

**[List PPE here for specific jobs.]**

They will also be trained on how to clean up minor spills or extinguish small fires.

## **CHECKLIST**

- ( ) Fire extinguishers are properly maintained, and there is clear access to them.
- ( ) There are enough fire extinguishers of the right types for potential fire hazards present.
- ( ) The fixed extinguishing system has been inspected and maintenance performed on schedule.
- ( ) All exits are clear and visible.
- ( ) Personnel are properly trained in fire emergencies.
- ( ) Hot work permits are issued for welding and cutting operations, and hot work procedures are followed.
- ( ) The amounts of on-site flammable liquids are limited and stored properly.
- ( ) Proper grounding and ventilation procedures are used when dispensing flammable liquids.
- ( ) Potential ignition sources are removed from flammable liquid storage and dispensing areas.
- ( ) Employees are properly trained in handling flammable liquids and use appropriate PPE.
- ( ) Spray painting booths are properly designed and maintained to remove ignition sources and provide adequate ventilation.



#### 4. GENERAL WORK ENVIRONMENT

All work areas must be kept clean and orderly to prevent slips, falls, and scrapes. Housekeeping is particularly important in minimizing fire hazards, such as oily rags, combustible dust, or unintentional mixing of explosive chemicals. All supervisors are responsible for ensuring that their departments are kept clean. Each employee is responsible for cleaning his or her particular work area by the end of each shift and as needed throughout the day to prevent accidents from occurring.

Area lighting meets state and local code requirements, and task lighting is provided for specific job assignments where it is required.

#### EXTERIOR WORKING CONDITIONS

Company property outside the building, including the parking lot, will be surveyed each spring and autumn by the **[Maintenance Manager and Safety Manager]** to establish that the exterior of the building is in good repair and that exterior storage areas, sidewalks, and roadways are in good condition and do not present safety hazards.

#### CHECKLIST

- All worksites are clean and orderly.
- Floors are kept dry and slip-resistant.
- Spilled materials and liquids are cleaned up immediately.
- Combustible scrap, debris and waste are stored safely and promptly removed from the worksite.
- Combustible dust is cleaned with a vacuum system that prevents particles from circulating in the air.
- Metallic or conductive dust is prevented from entering or accumulating on or around electrical enclosures or equipment.
- Covered metal waste cans are used for oily and paint-soaked waste.
- Paint spray booths and dip tanks are cleaned regularly.
- Toilets and washing facilities are adequate and sanitary.
- Emergency **[eyewashes/showers]** are located throughout the facility and are tested every 6 months by the **[Maintenance Department]**.
- All work areas are adequately illuminated.
- Pits and floor openings are covered or otherwise guarded.
- There are no loose bricks or other materials on the face of the building.
- Roadways are in good condition.
- Open areas do not present a fire hazard.

#### 5. HAZARD COMMUNICATION (“RIGHT-TO-KNOW”) PROGRAM

Our employees have the right to know what types of hazardous chemicals they are using or exposed to in their jobs and the health hazards associated with them. A “hazardous chemical” is defined as any chemical that is a physical hazard or a health hazard.



- (2) Maintenance of the MSDSs and hazardous chemical lists
- (3) Providing or ensuring appropriate labeling of chemicals
- (4) Providing employee training and proper PPE
- (5) Providing hazardous chemical information to contractors
- (6) Making employees aware of this written plan

## **PROCEDURES**

### **(A) MSDSs**

The **[Safety Manager]** in consultation with the **[Engineering Dept.]** will be responsible for maintaining and compiling all MSDSs for the company. The supervisor of each operational area will retain the MSDSs for the chemicals used in that area. The **[Safety Manager]** will be informed about new chemicals by the **[Purchasing Dept.]**, which will send a copy of any requisitions or purchase orders to the **[Safety Manager]**. **[Receiving]** will inform the **[Safety Manager]** when the chemicals arrive. The **[Safety Manager]** will check the adequacy of labeling and MSDSs provided by the supplier. The **[Safety Manager]** will then make copies of the MSDSs for the Safety Office file and will sign off on the receiving form. [Each MSDS will be entered into the MSDS database maintained by the facility. Employees may have access upon request.] The original MSDS should be sent to the departmental supervisor with the arrival of the chemicals. NO chemicals should be delivered to any department without the MSDS, labels, and the sign-off review by the **[Safety Manager]**.

Although there is no standardized form for MSDSs, the following list contains the information that should be covered on any MSDS you receive from a supplier.

1. Chemical product and company identification
2. Composition and information on ingredients
3. Hazards identification
4. First-aid measures
5. Firefighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure controls—personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations

14. Transport information
15. Regulatory information
16. Other information

As the [**Safety Manager**] receives the MSDSs, he or she will compile or add to the list of hazardous chemicals for the company.

Once the supervisor receives the chemical and attached MSDS, he or she will review the information and determine whether it is a new chemical. The MSDS will be filed in the supervisor's office. If it is a new chemical, or new information about a current chemical, the supervisor will inform affected employees and train them appropriately. All employees should be shown the MSDSs and know where they are filed.

Every year, the [**Safety Manager**] will review the MSDSs maintained in each department in consultation with the appropriate supervisor. Old MSDSs will be removed, and a check of missing or incomplete MSDSs will be made. Missing MSDSs should be requested from the supplier.

## **(B) LABELS**

No container of a hazardous chemical is to be used if a label is missing. Piping systems that contain hazardous chemicals must also be labeled. The labels should have been provided by the chemical supplier. Information on the labels should include:

- The name of the contents
- Hazard warnings
- The name and address of the manufacturer

If hazardous chemicals need to be moved from bulk containers to smaller containers, the line supervisor must make sure that a label or tag containing the same information is provided for the smaller containers. The supervisor is responsible for making these labels. *{EDITOR'S NOTE: Labels can be made using a computer or label maker, or handwritten tags or batch tickets can be used.}*

If a transfer to a smaller container is made only for the immediate use of the employee who made the transfer, no labeling is required on the smaller container.

## **(C) EMPLOYEE INFORMATION AND TRAINING**

All employees will attend an annual hazardous chemical overview training session conducted or sponsored by the [**Safety Manager**]. The following information will be provided:

- An overview of the requirements of the hazard communication standard and the company's program
- The location and availability of this written program and the MSDSs
- How to read the MSDSs and labels and understand the terminology
- How to lessen or prevent exposure to these substances through safe work practices, PPE, and engineering controls
- What to do in the event of a spill or accidental contact with the chemicals

The departmental supervisor will review with every affected employee the specific procedures and PPE to be used with each new chemical when it arrives in the department. The supervisor will also review the MSDS and label for each new chemical and show the employee where the information is filed.

#### **(D) OUTSIDE CONTRACTORS**

When outside contractors are working in areas in which hazardous chemicals are used by our company, the manager who hired the contractor must ensure that all MSDSs are provided to the contractor and staff. The task of training the contractor's employees on these hazardous chemicals is the responsibility of the contractor.

In turn, the manager who hired the contractor must insist that all information and MSDSs for hazardous chemicals used by the contractor in locations in which our employees could be affected are supplied. The manager or supervisor will then inform our employees.

#### **(E) WRITTEN PLAN**

This section of our safety program consists of the written plan for our Hazard Communication Program, which is available to employees, their designated representatives and, on request, to OSHA officials.

Copies may be obtained from the **[Safety Manager]**.

#### **(F) SPECIFIC TOXIC SUBSTANCES**

*{EDITOR'S NOTE: Certain toxic substances, such as lead, cadmium, or asbestos, require additional procedures and precautions, including exposure monitoring and medical surveillance. See OSHA Regulations—Subpart Z for specific requirements for each of these substances. The following is an outline that can be used to organize the information if your employees are using or are exposed to any of these toxic substances.}*

Name of Toxic Substance: \_\_\_\_\_

Exposure Limits: \_\_\_\_\_

Engineering Controls: \_\_\_\_\_

PPE required: \_\_\_\_\_

#### Exposure Monitoring

- Areas to be monitored:
- Method of monitoring:
- Frequency and responsibility for monitoring:

#### Medical Surveillance

- Employees to be monitored:
- Method of surveillance:
- Frequency and responsibility for monitoring:
- Notification procedures:
- Medical and administrative controls:

Recommended Work Practices: \_\_\_\_\_

Training Schedule: \_\_\_\_\_

Recordkeeping: \_\_\_\_\_

## CHECKLIST

- ( ) An up-to-date inventory of all hazardous chemicals is developed and maintained.
- ( ) MSDSs are organized, updated, and accessible to all exposed personnel in the work area.
- ( ) Training is provided to all employees who are using or are exposed to hazardous chemicals.
- ( ) Appropriate PPE is provided to all employees who use these chemicals.
- ( ) Complete labels are provided for all containers, vats, and pipes that hold hazardous chemicals.
- ( ) Contractors are informed of all hazardous chemicals located in the area in which their work is to be performed.

Applicable Regulation: OSHA Sec. 1910.1200 for general industry and Sec. 1926.1200 for construction.

## 6. ERGONOMICS

Our ergonomics program seeks to improve each worker's interaction with tools, equipment, the environment, and work tasks so that repetitive stress injuries will be minimized.

## PROCEDURES

### (A) WORKSITE ANALYSIS

The **[Safety Manager]** will conduct an annual review of all injury data from the OSHA logs and workers' compensation forms. Any patterns of repetitive-stress-type injuries, such as backaches, hand, finger, or arm strains, or employee complaints about strains or soreness in the limbs should be noted. The **[Safety Manager]** should then observe and analyze those jobs that were identified in the review as being at risk for contributing to repetitive stress injuries.

### (B) ENGINEERING CONTROLS

The **[Safety Manager]** in consultation with the **[Engineering Department]** and the **[Purchasing Department]** should try to determine whether any parts of the affected jobs can be automated. The purchase of certain types of equipment that may assist in the work tasks, such as spring-loaded lift tables, should be considered and evaluated.

The workstation layout is another consideration. Workstations should be adjustable in order to fit different-sized individuals. Tool design should be evaluated for ergonomic effects as well.

### (C) ADMINISTRATIVE CONTROLS

Supervisors should be trained by the **[Safety Manager]** to teach all employees proper work procedures, such as correct lifting techniques, that minimize stress to the body. Physical exercises before the start of the shift should be encouraged or led by the line supervisors.

The **[Safety Manager]** may recommend to line supervisors to rotate personnel in and out of at-risk jobs throughout the work shift to minimize exposure to repetitive stress. All line supervisors must set up a schedule of established rest breaks for employees in at-risk jobs.

Appropriate PPE, such as knee pads or antifatigue shoe soles, must be provided as recommended by the **[Safety Manager]**.

Line supervisors should encourage employees to report ergonomic suggestions and problems. Ergonomic Hazards should be reported using **Musculoskeletal Disorders (MSD) Hazard Report Form 13**. [\[see link on menu\]](#)

### (D) MEDICAL MANAGEMENT

All employees should report early signs of repetitive stress injuries using the **First Report of Musculoskeletal Disorder Symptoms Form 14** [\[see link on menu\]](#) to their supervisors so that early medical intervention can occur before the condition worsens.

If an employee is absent because of a repetitive stress injury (or any other type of injury), the supervisor should contact the employee and offer assistance and a plan to bring the employee back to work as soon as possible. The supervisor in consultation with **[Medical, Human Resources]** will determine what kind of modified work the employee can accomplish while recovering from the injury. The injured employee should be offered modified work and on-the-job rehabilitation to maximize the recovery.

## CHECKLIST

- ( ) An annual review of repetitive-stress-type injuries is conducted by the [**Safety Manager**].
- ( ) Employees are encouraged to offer suggestions for ergonomic improvements.
- ( ) Jobs are automated or improved through equipment changes, workstation design, and tool design.
- ( ) Proper work procedures are used to minimize repetitive stress.
- ( ) Job rotations and regular rest breaks are used as needed.
- ( ) Job pace is moderate.
- ( ) Appropriate PPE that will lessen repetitive stress is provided.
- ( ) Employees report early signs of repetitive stress injuries to their supervisors.
- ( ) Injured employees are brought back to work as quickly as possible and offered a work recovery plan.

## 7. LOCKOUT/TAGOUT PROGRAM

Whenever maintenance or servicing of machinery or equipment is carried out, all energy isolating devices will be locked out to prevent any unexpected start-up, energization, or release of stored energy that could cause injury. Only authorized and trained employees are permitted to perform the lockout in accordance with these procedures. However, all other employees are trained never to remove a lockout device/tag or attempt to start up a machine or piece of equipment that has been locked or tagged out. We will use lockout devices as the preferred means of protecting employees.

*{EDITOR'S NOTE: Tags should be used ONLY if it is impossible to use a lockout device. However, some other means of protection, such as disconnecting the power source, must be used together with the tag. If you are planning on using tags, you must indicate the types of alternative protective measures.}*

## RESPONSIBILITY

The [**Maintenance Supervisor**] is responsible for:

- Ensuring that appropriate lockout procedures are carried out during maintenance or servicing of machinery and equipment
- Maintaining and updating lockout procedures
- Assigning and training authorized personnel to carry out the lockout procedures

## PROCEDURES

Specific lockout procedures for each machine are located [**at the machine, in the department supervisor's office**].

*{EDITOR'S NOTE—You can insert them here or keep them in some other location, such as the maintenance office. Each piece of equipment must have its own lockout procedures. Include diagrams and schematics. Use the form below as a guide.}*



**FORM 15**

**[XYZ COMPANY]  
LOCKOUT/TAGOUT PROCEDURES**

FOR MACHINE # \_\_\_\_\_

1. Description and Location of Machine:

2. Maintenance Schedule:

3. List of Authorized Employees:

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

4. List of Affected Employees: *{EDITOR'S NOTE: Employees who operate the machines but do not repair or maintain them.}*

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

5. Type and Magnitude of Energy:

6. Location of Normal Shutoff Controls:

7. Energy Isolating Devices:

8. Type of Stored Energy & Method to Dissipate or Restrain:

9. Method to Verify Isolation:

**LOCKOUT**

The following sequence of lockout will occur:

1. The authorized employee(s) will notify all affected employees that servicing or maintenance is required on the equipment and that the machine must be shut down and locked out.

2. The authorized employee will review the lockout procedures for the particular machine and will follow each step carefully.
3. If the machine or equipment is operating, the authorized employee will shut it down by the normal stopping procedure.
4. The energy isolating device(s) will then be deactivated.
5. The energy isolating device(s) will be locked out with individual locks that identify the authorized person using the lock.
6. Stored or residual energy will be dissipated or restrained.
7. Test the equipment: Ensure that no personnel are exposed, then verify the isolation by operating the normal start-up control or by testing to make certain the machine will not operate. Turn machine off again.
8. Conduct maintenance or servicing activities.

## **RESTORING EQUIPMENT TO SERVICE**

Once servicing is complete, follow these steps:

1. Check all around the machine to make sure that all maintenance items and tools have been removed and that the equipment components are operationally intact.
2. Check the work area to make sure all employees are removed from the area and cannot enter during this phase.
3. Verify that the controls are in neutral.
4. Remove the lockout devices and reenergize the machine.
5. Notify the affected employees that the servicing is completed and the machine is ready for use.

## **TRAINING**

All affected employees must be trained annually by their supervisors to understand the basic concepts behind lockout/tagout procedures—particularly the importance of not circumventing the system or attempting to service equipment for which they are not authorized.

Authorized employees must receive refresher training annually from the [**Maintenance Supervisor**] on the lockout and maintenance procedures for each specific piece of equipment for which they are responsible. Also, as new or modified equipment are acquired, authorized personnel must be thoroughly trained on the new procedures.

## **CHECKLIST**

- ( ) Written lockout procedures are maintained for each piece of equipment.
- ( ) Authorized and affected employees are appropriately trained on their respective responsibilities.

- ( ) When servicing is about to occur, the authorized employees will inform and remove all affected employees and block off the area.
- ( ) After lockout, authorized personnel will test the piece of equipment by attempting to start up the machine using the normal start-up methods.
- ( ) All authorized personnel are responsible for their own locks. No one is permitted to put their lock through another person's lock.
- ( ) Affected personnel never attempt to service or unjam the equipment themselves, but are taught to contact their supervisors who will call the maintenance department.
- ( ) All lockout procedures and training lists are kept up to date by the **[Maintenance Department]**.
- ( ) All outside contractors who need to perform work on our equipment must follow our lockout procedures, which will be coordinated by the **[Maintenance Supervisor]**.

## **8. CONFINED SPACE PROGRAM**

Any time work needs to be done in a confined space (i.e., a space that hinders the activities of the workers who must enter into, work in, or exit from, them and is not designed for continuous occupancy) that has safety or health hazards, an entry permit must be issued by the entry supervisor **[indicate who that person(s) is]** before any work begins. The job of the entry supervisor is to determine if acceptable entry conditions are present, to authorize entry, to oversee entry operations, and to terminate entry.

A permit-required confined space is one that has one or more of these characteristics:

- Contains or has the potential to contain a hazardous atmosphere
- Contains a material that has the potential for engulfing an entrant
- Has an internal configuration that might cause an entrant to be trapped or asphyxiated
- Contains any other serious safety or health hazards

These identified spaces must have danger signs posted on them that read:

**“DANGER—PERMIT-REQUIRED  
CONFINED SPACE  
DO NOT ENTER”**

## **PERMIT-REQUIRED CONFINED SPACES AND PROCEDURES**

The following pages contain information about all permit-required confined spaces at our worksite.

*{EDITOR'S NOTE: Prepare separate sheets for each type of confined space.}*

**FORM 16**

**[XYZ COMPANY]**

**PERMIT-REQUIRED CONFINED SPACE # \_\_\_\_\_**

Location and Type: \_\_\_\_\_

Potential Hazards: \_\_\_\_\_

Before any work begins, the following procedures must be completed. A permit verifies completion of each item and is posted at the jobsite throughout the duration of the work.

Pre-entry Procedures—

Control hazards by: \_\_\_\_\_

Atmospheric testing procedures: \_\_\_\_\_

Space ventilation: \_\_\_\_\_

Conditions are acceptable for entry when: \_\_\_\_\_

Entry Procedures—

PPE: \_\_\_\_\_

Emergency Preparation:

- One employee will stand by outside the space to give assistance in case of an emergency. He or she will wear the following PPE:
- One additional worker will be within sight or call of the standby person. Communication between the standby person and the person entering the space shall be maintained by:
- Barriers will be placed to protect entrants from external hazards:

Enter by: \_\_\_\_\_

Monitoring method and schedule: \_\_\_\_\_

When rescue procedures must begin: \_\_\_\_\_

Rescue Procedures: \_\_\_\_\_

Exiting Procedures: \_\_\_\_\_

**PERMITS:**

Pre-entry procedures must be carried out according to the confined space sheets and checked off on the following confined space entry permit by the entry supervisor. The permit is then signed and posted at the confined space during the operation. When the work is completed, the entrants must remove the permit and return it to the entry supervisor, who will cancel it and retain it in the files for 1 year. The entry supervisor together with the **[Safety Manager]** will review all canceled permits for the year to determine whether any changes need to be made to existing procedures.

**[XYZ COMPANY]**  
**CONFINED SPACE ENTRY PERMIT**

*{EDITOR'S NOTE: This form is the sample provided by OSHA.  
Modify the form to fit your particular needs.}*

Date and Time Issued:

Date and Time Expires:

Job Supervisor:

Jobsite/Space I.D.:

Equipment to be worked on:

Work to be performed:

Stand-by personnel:

1. Atmospheric Checks: Time \_\_\_\_\_  
Oxygen \_\_\_\_\_%  
Explosive \_\_\_\_\_% L.F.L.  
Toxic \_\_\_\_\_PPM

2. Tester's signature: \_\_\_\_\_

3. Source isolation (No Entry):      N/A    Yes    No  
Pumps or lines blinded,  
disconnected, or blocked            ( )    ( )    ( )

4. Ventilation Modification:  
    Mechanical                            ( )    ( )    ( )  
    Natural Ventilation only            ( )    ( )    ( )

5. Atmospheric check after isolation and ventilation:  
    Time                                  \_\_\_\_\_  
    Oxygen                                \_\_\_\_\_%            > 19.5%  
    Explosive                              \_\_\_\_\_% L.F.L.            < 10%  
    Toxic                                    \_\_\_\_\_PPM            10 PPM H2S

Tester's signature: \_\_\_\_\_

6. Communication procedures:
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

7. Rescue procedures:
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



## CONTRACTORS:

Contractors must be informed of permit spaces and entry requirements, any identified hazards, and precautions and procedures to be followed when they are in or near permit spaces.

## CHECKLIST

- ( ) Identify and evaluate permit space hazards before allowing employee entry.
- ( ) Test conditions before entry operations and monitor the space during entry.
- ( ) Perform testing for atmospheric hazards in the following order: (1) oxygen, (2) combustible gases or vapors, (3) toxic gases or vapors
- ( ) Implement necessary measures to prevent unauthorized entry.
- ( ) Eliminate or control the hazards within the space.
- ( ) Verify acceptable entry conditions.
- ( ) Identify employee job duties.
- ( ) Provide appropriate PPE.
- ( ) Provide all other equipment necessary for safe entry.
- ( ) Ensure that at least one attendant is stationed outside the space during the operation.
- ( ) Implement appropriate procedures for summoning rescue and emergency services.
- ( ) Use entry permit procedures for each operation.
- ( ) Review canceled entry permits annually and revise the program accordingly.

## 9. PERSONAL PROTECTIVE EQUIPMENT

We shall provide necessary PPE to our employees according to our hazard assessment certification as indicated below. Protective equipment includes eye and face protection, respiratory protection, head protection, foot protection, hand protection, and electrical protective equipment. We shall also ensure that the equipment is of a safe design, is used properly, is maintained in good condition, and employees are properly trained in its use.

## RESPONSIBILITIES AND PROCEDURES

### (A) SUPERVISORS:

- Provide appropriate PPE to employees after consulting with the [**Safety Manager**] and reviewing the hazard assessment certification (see Section B below).
- Make sure the equipment is safe to use and in good condition.
- Provide annual training to employees on the proper use of the equipment and as the equipment changes. Training topics must include when the PPE is necessary; what type of PPE is necessary; how to put on, take off, adjust and wear the PPE; the limitations of the PPE; and the proper care, maintenance, useful life, and disposal of the PPE.
- Strictly enforce the proper use of the equipment.
- Perform annual fit-testing of equipment with the assistance of the [**Safety Manager**].
- Maintain the following records of employee training: {*EDITOR'S NOTE: Use a separate sheet for each employee.*}

**FORM 18**

**[XYZ COMPANY]**  
**PERSONAL PROTECTIVE EQUIPMENT**  
**EMPLOYEE TRAINING RECORD**

Employee name: \_\_\_\_\_

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

Equipment type/number:

Date issued:

Training Date	Employee Signature	Supervisor Signature
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Equipment returned:

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

Reason: \_\_\_\_\_

Equipment type/number: \_\_\_\_\_

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

Training Date	Employee Signature	Supervisor Signature
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Equipment returned:

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

Reason: \_\_\_\_\_

**(B) EMPLOYEES:**

- Use PPE as required by company procedures and by their supervisors.
- Follow directions for cleaning and maintaining the equipment.
- Communicate any problems with proper fit to their supervisors.
- Immediately inform their supervisors of any defects or worn parts on the equipment.
- Never perform a job without the proper PPE.



**(C) [SAFETY MANAGER]:**

- Prepare and update the following Certification of Hazard Assessment. This assessment will be made after conducting an extensive inspection of work areas, consulting with department heads, and researching available resources, including OSHA's regulations and ANSI standards, as well as other professional groups and consultants.

The **[Safety Manager]** will sign the certification and use it as a basis for determining the appropriate PPE for each job type.

The Certification will be reviewed by the **[Safety Manager]** and updated annually and as any new jobs or processes are created.

The **[Human Resources Department]** is responsible for notifying the **[Safety Manager]** whenever there are any changes in job responsibilities or new jobs are created.

- Provide recommendations to all department heads on the appropriate types of PPE needed for each job category based on the hazard assessment certification (see above).
- Assist each department with training functions (as indicated above).
- Assist each department with annual fit testing procedures.
- Perform annual audit of PPE use throughout the company.

**FORM 19**

**[XYZ COMPANY]**

**CERTIFICATION OF HAZARD ASSESSMENT**

Job category: \_\_\_\_\_  
(example: welder)

Work area: \_\_\_\_\_  
(example: main building)

Hazard source: \_\_\_\_\_  
(example: impact-machining)

Hazard: \_\_\_\_\_  
(example: flying fragments)

Protective equipment: \_\_\_\_\_  
(example: goggles)

Certified by: \_\_\_\_\_

Title: \_\_\_\_\_

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

## RESPIRATORY PROTECTION

### [XYZ COMPANY]

#### RESPIRATORY PROTECTION PROGRAM WRITTEN PLAN

XYZ Company has determined that employees in [department(s)] are exposed to respiratory hazards during [routine operations]. These hazards include [dust, particulate, and vapors, and in some cases represent immediately dangerous to life or health (IDLH) conditions]. Our respiratory protection program ensures that our employees are protected from these hazards.

Engineering controls, such as ventilation and substitution of less toxic materials, are our first line of defense. However, where these methods have not controlled identified hazards or are not feasible, respirators must be used. Respirators are also needed to protect employees' health during emergencies.

Some employees have also requested respirators to be worn during certain operations that do not require respiratory protection. The company will review these requests on a case-by-case basis and will allow respirators for voluntary use if respiratory protection will not jeopardize the health or safety of the employee.

#### **Application**

This program applies to all employees who are required to wear respirators during normal work operations and to those employees who may be required to wear a respirator in an emergency. Any employee who uses a respirator voluntarily is subject to the medical evaluation, cleaning, maintenance, and storage elements of this program.

#### **Program Administration**

The [Safety Manager] is responsible for administering the respiratory protection program. The program administrator for XYZ Company is [insert name]. The administrator's duties include:

- Identifying work areas, processes or tasks, and evaluating hazards that require respiratory protection
- Selection of respirators
- Monitoring respirator use
- Conducting [or arranging] training
- Ensuring proper storage and maintenance of respirators
- Conducting [or arranging] fit testing
- Administering the medical surveillance program
- Maintaining records
- Program evaluation
- Updating the written program as needed

## **Supervisors**

It is the responsibility of supervisors to implement the respiratory protection program in their particular areas. Supervisors must also ensure that:

- Employees receive appropriate training, fit testing, and annual medical evaluation.
- Appropriate respirators are available.
- That they are aware of tasks requiring respiratory protection.
- Proper use of respirators is enforced.
- Respirators are properly cleaned, maintained, and stored.
- Respirators fit well.
- Work areas are continually monitored to identify respiratory hazards.

Supervisors must also coordinate with the program administrator on any concerns regarding the program.

## **Employees**

Employees must:

- Wear respirators when and where required and in the manner in which they were trained.
- Care, maintain, and store respirators properly.
- Inform their supervisor if a respirator no longer fits properly and request a new one.
- Inform their supervisor or the program administrator of any concerns they have regarding the program or of any respiratory hazards that are not properly addressed.

## **Program Elements**

### **Selection Procedures**

The [**Safety Manager**] will select respirators to be used on-site based on the results of a hazard assessment performed for each operation, process, or work area in which airborne contaminants may be present or during an emergency. The hazard assessment will include:

- Identification and development of a list of hazardous substances used in the workplace.
- Review of work processes to determine where potential exposure to hazardous substances may occur. Methods used in this review will include surveying the workplace, reviewing process records, and input from employees and supervisors.
- Exposure monitoring by outside contractor [**ABC Monitoring Services**].

### **Updating the Hazard Assessment**

The [**Safety Manager**] will revise and update the hazard assessment when necessary [any time a work process is added or changed that may potentially affect exposure].

### **NIOSH Certification**

All respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) and used according to this certification. All filters, cartridges, and canisters must be labeled with the appropriate NIOSH approved label. The label must not be removed or defaced while it is in use.

## **Voluntary Respirator Use**

XYZ Company will provide respirators at no charge to employees who request them for voluntary use for **[the following processes]**. Employees choosing to wear a half-facepiece air-purifying respirator (APR) must comply with the procedures for medical evaluation, respirator use, and cleaning, maintenance, and storage. Requests by all other workers will be authorized on a case-by-case basis, depending on specific workplace conditions and the results of medical evaluations. The **[Safety Manager]** will provide these employees with a copy of Appendix D of OSHA's respiratory protection standard, which details the requirements of voluntary use.

## **Medical Evaluation**

Employees must pass a medical exam before being permitted to wear a respirator. Any employee refusing the medical evaluation will not be allowed to work in an area requiring respirator use. Medical exams and any required follow-up are provided by **[ABC Medical Clinic]**.

Employees will be given a copy of the medical questionnaire to fill out. The company will assist any employee who has trouble reading the form.

Employees will have the opportunity to speak with the physician about their medical evaluation if they so request.

## **Fit Testing**

Fit testing is required for employees wearing **[half-facepiece APRs]** and for workers who wear a **[tight-fitting SAR]**. Employees who voluntarily wear half-facepiece APRs may also be fit tested upon request.

Employees will be fit tested:

- Prior to being allowed to wear any respirator with a tight-fitting facepiece
- Annually
- When there are changes in the employee's physical condition that affect fit

Employees will be fit tested with the make, model, and size of respirator that they will actually wear. Employees will be provided with several models and sizes of respirators so that they may find an optimal fit.

## **General Use Procedures**

- Employees will use their respirators under conditions specified by this program and in accordance with the training they receive. The respirator shall not be used in a manner for which it is not certified by NIOSH or by the manufacturer.
- All employees shall conduct user seal checks each time they wear their respirator.

## **Emergency Procedures**

The following area has been identified as having foreseeable emergencies **[spray booth cleaning area]**. When the alarm sounds, employees in the affected department must immediately don their escape respirator, shut down their equipment, and exit the work area. All other employees must immediately evacuate the building.

## **Respirator Malfunction**

The employer should notify his or her supervisor of any malfunction of his or her respirator and go to the designated safe area to maintain the respirator. The supervisor will ensure that the employee receives the parts needed to repair the respirator or provide the employee with a new respirator.

Workers wearing SARs will work with a buddy. Buddies must assist workers who experience a SAR malfunction by donning an emergency escape respirator and leading the worker to a safe location.

## **Air Quality**

Only Grade D breathing air will be used in cylinders for SARs. A minimum supply of one fully charged replacement cylinder will be maintained by the **[Safety Manager]**.

## **Cleaning, Maintenance, Change Schedules, and Storage**

Respirators are to be cleaned as often as necessary and disinfected at the designated respirator cleaning station located in **[the employee locker room]**.

Atmosphere supplying and emergency use respirators are to be cleaned and disinfected after each use.

Respirators are to be properly maintained at all times. Maintenance involves a thorough visual inspection for cleanliness and defects. Worn or deteriorated parts will be replaced prior to use. No components will be replaced or repairs made beyond those recommended by the manufacturer. Repairs to regulators or alarms of atmosphere supplying respirators will be done by the manufacturer.

Cartridges shall be changed on a schedule recommended by the manufacturer.

Respirators will be stored in accordance with the manufacturer's recommendations.

Defective respirators will be immediately taken out of service.

## **Training**

The **[Safety Manager]** will provide training to respirator users and their supervisors prior to using a respirator in the workplace. The training will cover the following:

- **[XYZ Company's]** Respiratory Protection Program
- OSHA Respiratory Protection Standard
- Respiratory hazards at **[XYZ Company]** and their health effects
- Proper selection and use of respirators
- Limitations of respirators
- Respirator donning and user seal [fit] checks
- Fit testing
- Emergency use procedures
- Maintenance and storage
- Medical signs and symptoms limiting the effective use of respirators

Employees will be retrained annually or as needed. Training will be documented by the **[Safety Manager]**, and the documentation will include the type, model, and size of the respirator.

### **Program Evaluation**

The **[Safety Manager]** will conduct periodic evaluations of the workplace to ensure that the provisions of the respiratory protection program are being implemented. Evaluations will include regular consultations with employees who use respirators and their supervisors, site inspections, air monitoring, and a records review.

Problems identified will be noted in an inspection log and addressed by the **[Safety Manager]**. Findings will be reported to management. The report will address plans to correct deficiencies in the program and target dates for implementation.

### **Documentation and Recordkeeping**

A written copy of this program and the OSHA standard is kept in the **[Safety Manager's]** office and is available to all employees.

Training, fit test, and medical records are also maintained in the **[Safety Manager's]** office. Medical questionnaires and physician's findings are confidential and will remain at **[ABC Medical Clinic]**. The company will retain only the physician's written recommendation regarding each employee's ability to wear a respirator.



## RESPIRATOR PROCEDURES

The [**Safety Manager**] shall prepare and maintain the following record for each type of respirator used in the workplace: *{EDITOR'S NOTE: Use a separate sheet for each type of respirator. Insert respirator sheets here or indicate where they will be located.}*

**FORM 21**

**[XYZ COMPANY]**  
**RESPIRATOR PROCEDURES FORM**

Respirator type: \_\_\_\_\_

Used for the following jobs:

Standard procedures for use:

Procedures for use in dangerous atmospheres:

Maintenance procedures:

Fit-check procedures:

Form prepared by: \_\_\_\_\_

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



**[XYZ COMPANY]**  
**MEDICAL CLEARANCE FOR RESPIRATOR USE**

Employee name: \_\_\_\_\_

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

Respirator type: \_\_\_\_\_ Number: \_\_\_\_\_

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

**MEDICAL CLEARANCE**

Signature	Title	Date
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**FIT TESTING**

Signature	Title	Date
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**CHECKLIST**

- ( ) The Hazard Assessment Certification has been prepared, signed, and reviewed regularly by the **[Safety Manager]**.
- ( ) Supervisors set an example by consistently using the equipment themselves.
- ( ) **[Human Resources]** notifies the **[Safety Manager]** of the creation of new jobs or responsibilities so that the Hazard Assessment Certification can be updated in a timely manner.
- ( ) Fit testing is performed when PPE is issued and annually thereafter.
- ( ) Employees are regularly trained on using, wearing and maintaining the equipment.
- ( ) All training is documented and employees sign off after the training sessions.

- ( ) Employees are encouraged to return damaged, worn-out or defective equipment for replacement.
- ( ) Supervisors strictly enforce the use of PPE by following the safety disciplinary policy when procedures are disregarded.
- ( ) As part of the annual safety and health audit, the [Safety Manager] will conduct a review of all aspects of this PPE policy and update or correct it as needed.

## **10. MACHINE GUARDING/MACHINERY**

All machines and machine guarding must conform to the standards set forth by OSHA, ANSI, and industry groups. Any machine part, function, or process that may cause injury must be safeguarded. Guarding should protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips, and sparks.

## **PROCEDURES**

### **(A) GENERAL REQUIREMENTS FOR GUARDS**

- Machine guards must prevent any part of an operator's or mechanic's body from coming in contact with moving parts and must prevent chips or pieces of material from flying off of the machine.
- Guards should be affixed to the machine whenever possible.
- Guards should not be an impediment that would encourage employees to bypass the system.
- Employees should be able to perform minor maintenance tasks, such as lubricating, without removing the guards.
- Overhead belts, pulleys, or fans 7 feet or less above ground must be guarded.
- Pressure sensing device initiation (PSDI) must be certified and validated according to OSHA regulations.

### **(B) GENERAL REQUIREMENTS FOR MACHINES**

- All electrical machinery must be properly grounded.
- Machinery should be bolted to the floor, if possible, to prevent movement.
- Power controls and operating controls should be located within easy reach of the operator.
- Foot pedals, levers, and other start-up controls must be protected to prevent unintentional start-up of the machine.

### **(C) RESPONSIBILITIES**

- New Equipment—Before any new equipment is purchased, the [Safety Manager] and representatives from the [Engineering Dept., the Maintenance Dept., and the Purchasing Dept.] will review all specifications to ensure that the guards are suitable and do not interfere with the work and that there are no unguarded moving parts. They will also determine whether the equipment meets all regulatory requirements. When they are satisfied, they will sign off on the [purchase order].

- Existing Equipment—The [**Maintenance Dept.**] will keep all specifications and designs for each machine in their files. If a machine needs to be modified or retrofitted with new guards, the manufacturer should be contacted for guidance on correct procedures. If the changes are to be made in-house, the [**Safety Manager**] and the [**Engineering Dept.**] must make sure the changes meet regulatory requirements before approving the work.
- Supervisors must ensure that their employees never remove or bypass any machine guards.
- If a machine guard is damaged, bypassed, or missing, the supervisor must shut down the machine until the problem is corrected.
- Supervisors should ensure that all employees wear proper PPE while operating the machines.
- Supervisors must provide initial training to employees on the machine operations and additional training when there are any changes or as needed.
- Employees should never bypass or remove machine guards.
- Employees are not permitted to wear loose clothing or jewelry while operating the machines. Long hair must be covered or contained in manufacturing areas.

{*EDITOR'S NOTE: List prohibited clothing or jewelry here.*}

- Hair covering or protection must be worn in all manufacturing areas.
- Employees should immediately notify their supervisors if they notice any unguarded moving parts or dangerous points of operation. Work must stop and the machine shut down until the condition is corrected.

## CHECKLIST

- ( ) All machinery and guards are thoroughly reviewed to determine compliance with regulations.
- ( ) No new machinery is purchased without a safety review.
- ( ) Any hazardous, unguarded moving parts are immediately brought to the attention of the [**Safety Manager**], and the machine is shut down.
- ( ) Supervisors strictly enforce the proper use of guards and do not permit employees to bypass these systems.
- ( ) Guards are designed with safety and ease of use features.
- ( ) Employees are trained on the proper operation of the equipment and how to handle minor servicing tasks, such as oiling or clearing a jam, without endangering themselves and others.
- ( ) Machines and guards are examined during the [**monthly**] safety audit.
- ( ) Supervisors strictly enforce the dress code and wearing of proper PPE during machine operations.

## 11. HEARING CONSERVATION

Our hearing conservation program is designed to protect workers with significant occupational noise exposures from suffering material hearing impairment by engineering and administrative controls and PPE.

## **PROCEDURES**

### **(A) NOISE MONITORING**

The **[Safety Manager]** will monitor noise exposure levels in work areas that appear to have noise problems in order to identify employees who are exposed to noise at or above 85 decibels (dB) averaged over 8 working hours (TWA). The instruments used to monitor employee exposure must be carefully checked and calibrated by the **[Safety Manager]** or an outside supplier before each survey. The survey will be conducted **[indicate time period—annually, every 2 years, etc.]** and as any significant changes in machinery, processes, or facilities occur.

The **[Safety Manager]** will ensure that affected employees are permitted to observe the monitoring procedures and are notified of the results. Records of the noise monitoring surveys will be maintained by the **[Safety Manager]** for 2 years.

### **(B) ENGINEERING AND ADMINISTRATIVE CONTROLS**

If the monitoring surveys identify work areas with exposure levels of 100 dB TWA, the **[Safety Manager]** must consult with the **[Engineering Department]** and the Safety Committee to determine what engineering or environmental changes can be made to the machines or facility to reduce the noise levels. The **[Safety Manager]** should also consult with the Safety Committee to determine appropriate administrative controls, such as rotating employees in and out of high-noise-level areas.

### **(C) PPE**

Employees who work in areas identified by the noise survey as having levels of 85dB TWA or higher must be equipped with appropriate hearing protectors. The **[Safety Manager]** will make a determination of the type of hearing protectors that will afford the best protection based on the PPE Certification of Hazard Assessment (see Section (8)).

Employees will be offered a choice of several styles and types of hearing protectors that provide the best protection for our type of noise exposure.

### **(D) AUDIOMETRIC TESTING**

The **[Safety Manager]** will **[conduct or coordinate]** the audiometric testing of all employees who are exposed to noise levels at 85dB TWA or over within 6 months of an employee's first exposure (baseline audiogram) and annually thereafter.

The records must be kept by **[Safety Manager]** for the duration of employment plus 30 years.

If the audiogram indicates that there is a standard threshold shift (hearing loss has occurred) compared with the baseline, the **[Safety Manager]** must inform the employee of the results, reevaluate the hearing protection, retrain the employee, if necessary, in the correct wearing of hearing protection, and refer the employee for a clinical audiological evaluation. Any standard threshold shift of 10 dB or more when it also results in an overall hearing level of 25 decibels should be recorded on the OSHA Form 300 under "Hearing Loss."

The following form shall be used for documenting audiometric testing:

**[XYZ COMPANY]**  
**AUDIOMETRIC TESTING RECORD**

Employee name: \_\_\_\_\_

Job classification: \_\_\_\_\_

**BASELINE**

Noise exposure assessment date: \_\_\_\_\_

Audiometer calibration date: \_\_\_\_\_

Background sound level in test room: \_\_\_\_\_

Audiogram result: \_\_\_\_\_

Date of audiogram: \_\_\_\_\_

Examiner signature: \_\_\_\_\_

**ANNUAL**

Noise exposure assessment date: \_\_\_\_\_

Audiometer calibration date: \_\_\_\_\_

Background sound level in test room: \_\_\_\_\_

Audiogram result: \_\_\_\_\_

Date of audiogram: \_\_\_\_\_

Examiner signature: \_\_\_\_\_

**ANNUAL**

Noise exposure assessment date: \_\_\_\_\_

Audiometer calibration date: \_\_\_\_\_

Background sound level in test room: \_\_\_\_\_

Audiogram result: \_\_\_\_\_

Date of audiogram: \_\_\_\_\_

Examiner signature: \_\_\_\_\_

**ANNUAL**

Noise exposure assessment date: \_\_\_\_\_

Audiometer calibration date: \_\_\_\_\_

Background sound level in test room: \_\_\_\_\_

Audiogram result: \_\_\_\_\_

Date of audiogram: \_\_\_\_\_

Examiner signature: \_\_\_\_\_

Original: **[Safety Manager]** Copy: Employee

## **(E) EMPLOYEE TRAINING**

All supervisors must conduct annual training sessions for affected employees on the elements of the hearing conservation program and document these sessions. The following topics must be covered:

- The effects of noise on hearing,
- The purpose of hearing protectors and how to use and maintain them, *and*
- The purpose of audiometric testing and an explanation of test procedures.

## **CHECKLIST**

- ( ) Noise surveys are conducted initially and as needed.
- ( ) Engineering and administrative controls are being utilized in high-noise areas.
- ( ) Employees are informed of noise-level monitoring procedures and results.
- ( ) Employees are trained on how to use and maintain their hearing protectors and on the basic concepts of the hearing protection program.
- ( ) Affected employees receive baseline audiograms and audiograms each year thereafter and are informed of the results.
- ( ) Appropriate hearing protectors are provided and are regularly reevaluated by the **[Safety Manager]**, the Safety Committee, and the employees.
- ( ) Employees are provided a choice of several types of appropriate hearing protectors.
- ( ) Supervisors strictly enforce the use of hearing protectors and set a good example by consistently using the protectors themselves.
- ( ) Noise monitoring equipment is properly calibrated.
- ( ) Records of noise monitoring and audiograms are maintained for the required time periods.
- ( ) Audiograms are conducted in rooms with limited background noise. *{Editor's note: See OSHA Reg 1910.95 Appendix D for background noise limits.}*  
Significant hearing loss is properly recorded on OSHA recordkeeping forms.

## **12. PROCESS SAFETY**

*{EDITOR'S NOTE: This section applies only to companies that use processes that involve chemicals with threshold values at or above those specified in Appendix A of the Process Safety Standard (Sec. 1910.119) or flammable liquids or gas of 10,000 pounds or more and other exceptions—check the regulation.}*

To prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals that may result in toxic, fire, or explosion hazards, we will adhere to specified process safety procedures as outlined below.

## **PROCEDURES**

### **(A) EMPLOYEE PARTICIPATION**

The Safety Manager shall organize a process safety team to perform the analyses as indicated below.

Composition of the Team and Criteria for Membership:

[list here]

*{EDITOR'S NOTE: At least one member must be an employee who has knowledge of the process being evaluated, and one member must be an expert in the process.}*

## **(B) COMPILATION OF PROCESS SAFETY INFORMATION**

*{EDITOR'S NOTE: Perform a separate compilation for each process.}*

### **Chemicals**

The following hazardous chemicals are involved in the process:

**[List chemicals and include the following information: toxicity, PELs, physical data, reactivity data, corrosivity data, thermal and chemical stability data, hazardous effects of inadvertent mixing of different materials—Use MSDSs if they contain all of this information.]**

### **Technology**

*{Insert the following information.}*

Flow Diagram:

Process chemistry:

Maximum intended inventory:

Safe upper and lower limits:

Consequences of deviations:

### **Equipment**

*{Insert the following information.}*

Materials of construction:

Piping and instrument diagrams (PID's):

Electrical classification:

Relief system design and design basis:

Ventilation system design:

Design codes and standards used:

Material and energy balances for processes built after May 26, 1992:

Safety systems:

Documentation: *{Indicate that equipment complies with recognized and generally accepted good engineering practices and have knowledgeable person sign off.}*

## **(C) INITIAL PROCESS HAZARD ANALYSIS**

The Process Safety Team as defined above is responsible for performing an initial process hazard analysis and for subsequent revisions and updates. The analysis shall identify, evaluate, and control all hazards involved in the process.

*{EDITOR'S NOTE: Insert analysis here using one of the following methodologies: What-If, Checklist, Hazard and Operability Study, Failure Mode and Effects Analysis (FMEA), Fault-Tree Analysis, or another appropriate methodology.}*

*{Insert the following information in the analysis:}*

Hazards:

Previous Incidents with Potential for Catastrophic Consequences:

Engineering and Administrative Controls:

Consequences of Failure of Controls:

Facility Siting:

Human Factors:

Possible Safety and Health Effects of Failure of Controls on Employees:

#### **(D) FINDINGS AND RECOMMENDATIONS**

The Process Safety Team's recommendations and the final resolution of items identified by the Initial Hazard Analysis are presented below:

**[Documented action on these items should be retained for the life of the process and inserted here.]**

The Process Safety Team will conduct an update to the process hazard analysis every 5 years and will sign off indicating validation of the analysis. **[Insert revalidations of analyses and resolutions of items here.]**

#### **(E) OPERATING PROCEDURES**

The following are the operating procedures for each process. Copies of these procedures are readily accessible to all employees working with these processes. These manuals are located **[indicate location of process manuals]**.

**[Insert operating procedures for each process here or indicate where they are located. Include the following information:]**

Initial Start-up

Normal Operations

Temporary Operations

Emergency Shutdown (include conditions and shutdown responsibility)

Emergency Operations

Normal Shutdown

Start-up After Shutdown

Operating Limits

Safety and Health Considerations



Quality Control of Materials

Special or Unique Hazards

**(F) TRAINING**

Employees who will be operating a process are trained in all aspects of the process before beginning the job tasks. Safety and health hazards, emergency operations, including shutdown, and safe work practices are covered. Refresher training shall be provided every 3 years or as needed. The following training records document these training sessions:

**FORM 24**

**[XYZ COMPANY]  
PROCESS SAFETY TRAINING RECORD**

Process name/number: \_\_\_\_\_

Process location: \_\_\_\_\_

Training topic(s):

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

Employee	Date	Signature	Method to Verify Training
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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

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

## **(G) CONTRACTORS PERFORMING WORK ON PROCESSES**

Whenever contractors are hired to perform any kind of work on a process, they must submit information about their safety program and performance to the **[Engineering Dept. and Safety Manager]** as part of the bid process. Their safety program must include extensive training of contract employees on the safe procedures of the process, and they must document the training. The **[Engineering Department]** will determine if the information and documentation meets acceptable standards and will retain the information and evaluation in their files. Before any work begins, the **[Engineering Department]** will determine from the contractor whether the contract work presents any unique hazards.

The **[Safety Manager]** in consultation with the **[Engineering Department]** shall ensure that contract employers are informed of all potential fire, explosion, or toxic release hazards related to the process. The following are safe work practices that will be used to control the entrance, presence, and exit of contract employees in process areas:

**[List safe work practices for contract employees.]**

The **[Safety Manager]**, the head of the **[Engineering Dept.]**, and the departmental supervisor shall meet weekly to review the safety performance of the contractor and ensure that recommendations are carried out.

The site supervisor shall maintain a separate log of contract employee injuries and illnesses that relate to the process work.

## **(H) NEW OR MODIFIED FACILITIES**

Whenever new or modified facilities require a significant change in process procedures, a pre-start-up safety review shall be conducted by the Process Safety Team. The review shall ensure that safety, operating, maintenance, and emergency procedures are in place and are adequate. Additional training of each affected employee will be provided and documented.

## **(I) INSPECTION AND TESTING OF EQUIPMENT**

All pressure vessels, storage tanks, piping systems, relief and vent systems, emergency shutdown systems, controls, and pumps are inspected according to the following schedule:

**[Include maintenance schedules and documentation of tests and inspections. Indicate correction of all deficiencies.]**

## **(J) HOT WORK PERMITS**

Hot work permits will be issued for any hot work operations conducted on or near a process. See Section 3, Fire Prevention Part (E), Hot Work, for hot work procedures and forms.

## **(K) MANAGEMENT OF CHANGE**

Any time changes in processes are considered, the **[Engineering Department]** will prepare an analysis of the change that includes the:

- Technical basis of the proposed changes,
- The impact of the change on safety and health,

- Modifications to operating procedures,
- Time period for the change, *and*
- Authorization for the change by [            ]. This analysis will be reviewed by the Process Safety Team and the [**Safety Manager**]. Once the review is complete, the [**Engineering Department**] will ensure that the supervisors, employees, and contract personnel affected by the changes are informed of the changes or new procedures. All affected parties will sign off on the analysis of the changes.

**[Indicate who will sign off on the analysis here.]**

## **(L) INCIDENT INVESTIGATION, EMERGENCY PLANNING, AND COMPLIANCE AUDITS**

The same procedures governing all other parts of the safety program will apply here (see Sections IV-A Hazard Assessment, IV-B Incident Reporting & Investigation, and V-2 Emergency Action Plan) except that the Process Safety Team will be involved in each area.

**[Insert Emergency Planning procedures here and include specifically how the Process Safety Team will assist in these steps.]**

## **CHECKLIST**

- ( ) A Process Safety Team is formed with employee members and appropriate expertise for the process under consideration.
- ( ) A compilation of initial information concerning the process is documented.
- ( ) An initial Process Hazard Analysis is prepared by the Process Safety Team, and possible failure modes are evaluated.
- ( ) Recommended actions from the hazard analysis have been taken.
- ( ) The Process Safety Team reevaluates the analysis every 5 years.
- ( ) Operating procedures for each process are maintained by the [**Engineering Department**], and copies are readily available to affected employees.
- ( ) Employees are properly trained on all safety and operating procedures for each process. Refresher training is provided every 3 years or as processes change.
- ( ) Contractors submit safety program information and performance as part of the bid process.
- ( ) Contractors are notified of potential process hazards.
- ( ) The contractor's safety performance is regularly reviewed, and recommendations are carried out.
- ( ) The site supervisor maintains a log of contract employee injuries and illnesses.
- ( ) A pre-start-up safety review is prepared before new or modified facilities are used.
- ( ) A regular inspection and testing schedule is followed for all process equipment.
- ( ) Hot work permits are issued for hot work operations conducted by a process.
- ( ) The [**Engineering Department**] performs an analysis for any changes to the process that are being considered. The analysis is reviewed by the Process Safety Team and [**Safety Manager**].
- ( ) Process changes are communicated widely to affected employees who are trained on the new procedures.

- ( ) Incident investigation, emergency response, and compliance audits are conducted according to safety program procedures with involvement of the Process Safety Team.

### **13. ELECTRICAL SAFETY PROGRAM**

Our electrical safety procedures were developed to protect not only electricians who maintain and develop our electrical systems, but other employees who need to use electrical equipment in their jobs. Our policy is to ensure that electrical systems meet the highest level of compliance with applicable electrical codes, including the National Electrical Code, the National Fire Protection Association Standards, ANSI standards, and OSHA regulations.

## **RESPONSIBILITIES**

### **(A) ELECTRICIANS**

The [**Manager of the Maintenance Department**] must ensure that all electrical work is performed by qualified electricians or by employees under the direction of a qualified electrician. The [**Maintenance Department**] must keep records of qualified electricians and ensure that they attend regular training sessions [**indicate time periods—annual, biannual, etc.**].

The electricians must make preliminary inspections and conduct appropriate tests to determine what conditions exist before starting work on electrical equipment or lines. When electrical equipment or lines are to be serviced, maintained, or adjusted, an electrician must ensure that the electrical system is properly locked out according to company lockout procedures.

Electricians must use appropriate protective equipment that does not conduct electricity as defined by the Certification of Hazard Assessment (see Section V—9 Personal Protective Equipment (c)).

The [**Manager of the Maintenance Department**] will schedule an annual inspection of all electrical systems in the company and will assign qualified electricians to conduct this inspection and prepare a report of findings. A schedule of repairs will be prepared and followed. Any dangerous electrical problems must be communicated to [**upper management**], and associated equipment should be shut down until the problems can be corrected.

### **(B) SUPERVISORS AND EMPLOYEES**

Before employees begin their job tasks, they must always make a preliminary inspection of all electrical equipment and tools that they will be using to look for obvious electrical hazards, such as exposed wiring or cords that are frayed or deteriorated. Supervisors must instruct employees to report these hazards immediately. Employees should never use equipment with worn electrical parts.

Supervisors must make sure that;

- All portable electrical tools and equipment are grounded and double insulated,
- Extension cords have a grounding conductor and are used only for temporary situations,
- Multiple plug adapters are prohibited,

- Electrical tools should not be used in wet conditions,
- Metal ladders are prohibited in areas in which they could come in contact with energized conductors, *and*
- All electrical openings are enclosed with appropriate covers, plugs, or plates.

## PROCEDURES

### (A) ELECTRICAL EQUIPMENT

Live parts of electric equipment operating at 50 volts or more must be guarded against accidental contact by location in a room that is off-limits to nonqualified people or through permanent guards or elevation of 8 feet or more above ground. Entrances to guarded locations must be conspicuously marked with warning signs forbidding entry of unauthorized personnel.

### (B) CONSTRUCTION ACTIVITIES

At all construction sites, ground-fault circuit interrupters (GFCI's) must be installed on each temporary circuit at locations where construction, demolition, modifications, alterations, or excavations are being performed {*EDITOR'S NOTE: If it is not possible to use GFCI's, you must follow an "assured equipment grounding conductor program" — see OSHA Regs Sec. 1926.404(b)(1)(iii) for details.*}. The site supervisor must ensure that GFCI's are used for all electrical equipment.

Before any digging, drilling, or similar work is performed, the site supervisor will determine the location of electrical power lines and cables and will ensure that electricity is de-energized during the construction work.

### (C) WORK ON OR NEAR POWER LINES

{*EDITOR'S NOTE: Applies to construction or other work*}

The supervisor must make sure that all affected lines are de-energized by a qualified electrician. The electrician must lock out the line. Employees working near electrical lines should use insulated protective equipment and must keep a safe distance from any energized lines.

## CHECKLIST

- ( ) Only qualified electricians or those employees under their direction are permitted to perform electrical work.
- ( ) The [**Maintenance Department**] is responsible for determining the electricians' qualifications and tracking training of electricians.
- ( ) Electricians correct problems brought to their attention and conduct regular inspections to ensure that electrical standards are being met.
- ( ) Electrical equipment and systems are locked out by qualified electricians before maintenance work begins.
- ( ) Employees check equipment before starting their job tasks and report any electrical problems to their supervisors.
- ( ) Supervisors make sure that no equipment or portable tools are used with worn electrical parts.
- ( ) Portable electrical tools and equipment are grounded and double insulated.

- ( ) Extension cords are grounded and are used only for temporary situations.
- ( ) All energized electrical circuits and equipment are guarded against accidental contact.
- ( ) Ground-fault circuit interrupters are installed on all temporary circuits in areas in which construction activities are being performed.
- ( ) Location of power lines are determined and locked out before any work begins on or near them.
- ( ) Appropriate nonconductive protective equipment is provided to employees who work with electricity or electrical equipment.

#### **14. MATERIAL HANDLING AND STORAGE**

Supervisors in the **[list departments]** will ensure that safe material-handling techniques are used by their employees. They will use the following checklist during their regular inspections:

#### **CHECKLIST**

- ( ) Aisles and doorways provide safe clearance for equipment.
- ( ) Aisles are permanently marked and kept clear.
- ( ) All mechanized equipment is inspected daily and prior to use by the operator.
- ( ) Dock boards **[or bridge plates]** are used when loading or unloading operations take place between vehicles and docks.
- ( ) Rear wheels of tractor trucks and trailers are chocked to prevent movement during loading and unloading operations.
- ( ) Dock plates and loading ramps are secured and in good condition to withstand loads.
- ( ) Hand trucks are maintained in good working condition.
- ( ) Chutes are equipped with sideboards to prevent material from falling off.
- ( ) Chutes and roller sections are firmly secured and contain working brakes at the delivery end.
- ( ) Pallets are inspected before being loaded or moved.
- ( ) Material is stored in secure **[bundles, containers, bags, etc.]** that are stacked, interlocked, and limited in height to guard against sliding or collapse.
- ( ) Storage areas are kept neat and clean to prevent hazards from tripping, fire, explosion, or pests.
- ( ) Open pits, tanks, vats, or ditches are covered or standard guardrails are used to protect employees from falling in.
- ( ) Electric hoists and cranes conform to all industry standards.
- ( ) Electric hoists and cranes will be used only to transport the rated load size.
- ( ) Chains and rope slings are examined before each use by the operator to determine any defects.
- ( ) All employees inform their supervisors of defects in hoisting equipment, and the supervisors tag the equipment and remove it from use.
- ( ) Before any lifting is done, the operator makes sure no one is standing under the load.
- ( ) Only trained employees are permitted to operate the hoisting equipment.

## 15. INDUSTRIAL TRUCK OPERATIONS

Forklift trucks **[indicate other type here]** can be hazardous, not only to the operator but also to employees working near the truck. For these reasons, strict operating and traffic rules will apply to all forklift **[others]** operations and will be enforced by all supervisors. Only authorized personnel will be allowed to operate the trucks.

### PROCEDURES AND RESPONSIBILITIES

#### (A) THE **[MAINTENANCE DEPARTMENT]**

- Ensure that pedestrian walkways are clearly defined by painted lines throughout the facility and marked as walkways.
- Conduct regular maintenance on the vehicles **[indicate time period]** and keep maintenance records for each vehicle.

#### **[List maintenance activities and schedule of each here.]**

- Ensure that all trucks meet national standards and bear a label indicating approval by a testing laboratory.
- Request manufacturer's approval before any modifications are made to the trucks.
- Safely conduct battery charging in locations designated for that purpose **[indicate locations here]**. Appropriate PPE will be worn.
- Make sure that smoking is prohibited in battery charging areas and that any spark-producing activities are closely restricted.

#### (B) SUPERVISORS

- Strictly enforce all industrial truck operation procedures.
- Ensure that all authorized personnel are trained in the operation of the trucks as indicated in section (E).
- Train all other employees on the applicable pedestrian safety rules.
- Make sure that overhead guards are used to protect against falling objects.
- Remove any defective trucks from service.

#### (C) OPERATORS

- Shall not allow unauthorized personnel to ride on the trucks.
- Use a safe speed of not more than [ **mph**] at the worksite.
- Slow down and sound the horn at intersections and where vision is obstructed.
- Ride in reverse if the load obstructs forward view.
- When leaving a truck unattended, lower forks to ground level, neutralize controls, shut power off, and set brakes. Wheels should be chocked if parked on an incline.
- Maintain a safe distance from the edge of ramps or platforms.
- Use a load backrest extension to prevent load from falling backward.
- Only stable or safely arranged loads should be handled.
- Lift only loads that are within the rated capacity of the truck.
- Never engage in stunt driving or horseplay.

#### **(D) PEDESTRIANS**

- Never ride on trucks.
- Never stand or walk under the elevated portion of the truck, even when empty.
- Stay within pedestrian walkways.
- Be aware and listen for truck horns, especially at intersections. Cross intersections carefully.

#### **(E) TRAINING**

Training will be provided by the [safety manager or ABC Forklift Services. The Forklift Driver Evaluation Form 25 in Appendix A may be used. After training is successfully completed, the operator will be given the Lift Truck Operator Certification Card Form 26 in Appendix A.].

*{Editor's Note: Trainers must have the knowledge, training, and experience to train operators and evaluate their competence.}*

All operators must successfully complete training according to OSHA requirements before being allowed to operate a powered industrial truck.

Training will consist of a combination of formal instruction and demonstrations performed by the trainer, practical exercises performed by the trainee, and evaluation of the operator's performance.

Training will include the following topics:

- Operating instructions, warnings, and precautions for the types of truck the operator will be authorized to operate
- Differences between the truck and the automobile
- Truck controls and instrumentation, where they are located, what they do, and how they work
- Engine or motor operation
- Steering and maneuvering
- Visibility (including restrictions due to loading)
- Fork and attachment adaptation, operation, and use limitations
- Vehicle capacity
- Vehicle stability
- Vehicle inspection and maintenance
- Refueling and/or charging and recharging of batteries
- Operating limitations
- Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicle that the employee is being trained to operate
- Surface conditions where the vehicle will be operated
- Composition of loads to be carried and load stability
- Load manipulation, stacking, and unstacking
- Pedestrian traffic in areas in which the vehicle will be operated
- Narrow aisles and other restricted places where the vehicle will be operated
- Hazardous (classified) locations where the vehicle will be operated



- Ramps and other sloped surfaces that could affect the vehicle's stability
- Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust
- Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation

### **Refresher Training and Evaluation**

**Each forklift operator's performance will be evaluated once every 3 years. Refresher training**

- The operator has been observed to operate the vehicle in an unsafe manner.
- The operator has been involved in an accident or near-miss incident.
- The operator has received an evaluation that reveals that the truck is not being operated safely.
- The operator is assigned to drive a different type of truck.
- A condition in the workplace changes in a manner that could affect safe operation of the truck.

### **Certification**

Once training is completed, the [**Safety Manager**] will certify that the operator has been trained and evaluated. The certification will include the name of the operator, the date of the training, the date of the evaluation, and the identity of the person performing the training or evaluation.

## **16. HAND AND POWER PORTABLE TOOLS**

It is the responsibility of the supervisors to make sure that employees are provided with the proper work tools for their jobs. Each time a tool is issued, the supervisor should verify that the employee knows how to properly use the tool. If the supervisors notice any tools that are damaged or defective, they must replace or arrange to repair the tools.

Employees should follow all safe work practices and always use the correct tool for the job. They should also turn in any damaged or defective tools to their supervisor. Employees must wear the proper PPE when using the tools as instructed by their supervisors. Employees may not bring their home tools to work and are not permitted to borrow tools from work to take home.

### **CHECKLIST**

- ( ) Tools that develop mushroomed heads from use are reconditioned or replaced.
- ( ) Broken or fractured handles on hammers, axes, and similar equipment are replaced promptly.
- ( ) Worn or bent wrenches are replaced regularly.
- ( ) Appropriate handles are used on files and similar equipment.
- ( ) Tool handles are wedged tightly in the head of the tools.
- ( ) Tool cutting edges are kept sharp so that the tool will move smoothly.
- ( ) Tools are stored in dry and secure locations where they won't be tampered with.  
[Indicate locations—tool crib, department cabinets, lockers, etc.]
- ( ) Eye and face protection are always used when there is a danger of flying objects.
- ( ) Grinders, saws, and other powered equipment are provided with appropriate safety guards.

- ( ) Power tools are used only with attachments recommended by the manufacturer.
- ( ) Portable circular saws are equipped with guards above and below the base.
- ( ) All portable power tools are grounded and double-insulated.
- ( ) Ground fault circuit interrupters are provided on temporary circuits on construction sites.
- ( ) Pneumatic and hydraulic hoses on power-operated tools are checked regularly for deterioration and damage.

## **17. WALKING/WORKING SURFACES**

Supervisors shall make sure that all walkways, floor and wall openings, stairs, elevated surfaces, and exits are maintained in a safe condition. Employees are responsible for keeping these areas clean and uncluttered and for reporting any hazardous conditions. The **[Maintenance Department]** is responsible for correcting any hazardous conditions brought to their attention. Supervisors should use the following checklist during their regular walkthroughs.

### **CHECKLIST**

- ( ) Aisles and passageways are kept clear.
- ( ) Employees immediately clean up spilled materials.
- ( ) Potentially wet or slippery surfaces are covered with nonslip materials.
- ( ) Changes in floor elevations are identified.
- ( ) Bridges are provided over conveyor belts.
- ( ) All floor openings and pits are guarded by a cover, guardrail or equivalent, on all sides except the entrance to a stairway or ladder.
- ( ) All stairways with four or more risers have standard stair rails or handrails.
- ( ) All stairways are at least 22 inches wide.
- ( ) Stairs have at least a 7-foot overhead clearance.
- ( ) The angle of all stairs is no more than 50 degrees and no less than 30 degrees.
- ( ) Steps on stairs are slip-resistant and in good condition.
- ( ) Stair handrails are capable of withstanding a load of 200 pounds applied in any direction.
- ( ) Elevated surfaces more than 4 feet above the floor are provided with standard guardrails.
- ( ) Material on elevated surfaces is secured against falling below.
- ( ) Employees working on powered platforms and manlifts are protected by personal fall arrest systems according to OSHA regulations.

## **18. LADDERS AND SCAFFOLDING**

The construction of all scaffolds and ladders must meet OSHA requirements. The **[Safety Manager]** will coordinate with **[Purchasing]** to ensure that design requirements are met when purchasing this equipment. Supervisors must train employees on safe work procedures when using ladders and scaffolding and strictly enforce these work practices. Any damage to equipment must be reported immediately to the supervisor, who will take the equipment out of service and tag it for repair. Outdoor work on scaffolds must be halted during high winds or in wet, slippery conditions.

Employees should be trained to check the condition of the ladders or scaffolds before each use. They should also be taught to access scaffolds through ladders and never climb on the outside of a scaffold. Proper use of ladders must be emphasized, including the practice of never standing on the top two steps of the ladder. Ladders should be marked with such a warning.

## CHECKLIST

### LADDERS

- Ladders are maintained in good condition.
- Nonslip safety feet are provided on each ladder.
- Ladder rungs and steps are free of grease and oil.
- No ladders are placed in front of doors opening toward the ladder unless the door is blocked or guarded.
- Ladders are never placed on unstable bases to gain additional height.
- Workers always face the ladder when ascending or descending.
- Workers never use the top two steps to stand on.
- Workers adjust extensions from the ground, never while standing on the ladder.
- Portable metal ladders are marked: "CAUTION: Do not use around electrical equipment."

### SCAFFOLDS

- Scaffolds are capable of supporting four times the maximum intended load.
- Scaffolds are never loaded in excess of the working load for which they are designed.
- Any damaged or weakened scaffold is immediately taken out of service.
- Unstable objects, such as boxes or bricks, are never used to support the scaffold or planks.
- Employees access the scaffold by an access ladder or other safe means.
- Scaffold planks extend over the end supports between 6 to 18 inches.
- Poles, legs, and uprights are securely braced.
- Materials being hoisted onto the scaffold have a tag line.
- Overhead protection is provided when there are overhead hazards.
- Work is suspended during high winds or slippery conditions.
- Wire or fiber rope used for scaffold suspension is capable of supporting at least six times the intended load.
- Scaffolds are bolted to permanent structures.

## 19. INFECTION CONTROL

{ *EDITOR'S NOTE: This program covers healthcare workers, certain lab workers, emergency responders, morticians, first-aid personnel, law enforcement officers, staff members at correctional institutions, and laundry workers.* }

The following infection control plan is designed to protect our employees who risk on-the-job contact with blood and bodily fluids — **[List applicable jobs]**.









- This facility identifies the need for changes in engineering controls and work practices through (Examples: Review of OSHA records, employee interviews, committee activities, etc.).
- We evaluate new procedures and new products regularly by (describe the process, literature reviewed, supplier info, products considered).
- Both frontline workers and management officials are involved in this process in the following manner: (Describe employee involvement.)
- The [**Safety Manager**] is responsible for ensuring that these recommendations are implemented.

### **(C) POSTEXPOSURE PROCEDURES**

When employees believe that they have experienced an exposure incident, they must immediately inform their supervisor. The supervisor will determine whether an exposure incident has occurred according to the following criteria:

**[List criteria for determining an exposure incident.]**

If an exposure incident has occurred, the [**Supervisor**] will request prompt testing of the source individual's blood for evidence of HIV and HBV. At the same time, the employee will be sent to a [**healthcare professional**] for an evaluation, along with the following records:

- Copy of the OSHA bloodborne pathogen rule (Section 1910.1030)
- Employee's medical records, including vaccination information
- The results of the source individual's blood tests, if available
- The following exposure incident report:



**FORM 31**

**[XYZ COMPANY]**  
**INFECTIOUS DISEASE EXPOSURE**  
**INCIDENT REPORT**

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

Date of Incident: \_\_\_\_\_

Description of Incident:

Job Duties Related to the Incident:

Route of Exposure:

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

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

The **[healthcare professional]** will take a baseline blood sample from the employee with the employee's consent. If the employee requests a delay of testing, the blood should be preserved for at least 90 days. The **[healthcare professional]** will advise the employee of the test results of the source individual's blood sample.

Following postexposure evaluation, the **[healthcare professional]** will provide to the supervisor a written opinion that contains a statement indicating that the employee has been informed of the results of the evaluation and told of the need, if any, for further evaluation or treatment. The supervisor will provide a copy of the written opinion to the employee within 15 days.

The opinion should be retained in the employee's medical record along with the employee's Social Security number, vaccination record, the incident report, and results of medical testing and follow-up procedures. The medical record will be maintained by the **[Medical Department]** and kept confidential and separate from other personnel records.

All evaluations and follow-up will be made available to the employee at no cost and at a reasonable time and place.

## **(D) TRAINING**

Supervisors will train all new employees on the procedures in this plan and the OSHA regulations and as job tasks change. All current employees will receive annual refresher training by their supervisors.

The training program will do the following:

- Explain the OSHA regulations and provide a copy to each employee.
- Explain the epidemiology and symptoms of bloodborne diseases.
- Explain the modes of transmission of bloodborne pathogens.
- Explain the contents of this plan and provide a copy of the various job duties and requirements.
- Describe the methods of controlling transmission of HBV and HIV.
- Explain how to recognize occupational exposure.
- Explain the use and limitations of engineering controls, work practices, and PPE.
- Inform workers about the free hepatitis B vaccination.
- Explain the emergency procedures for and reporting of exposure incidents.
- Inform workers of the postexposure evaluation and follow-up available from healthcare professionals.
- Describe how to select, use, remove, handle, decontaminate, and dispose of PPE.
- Explain the basis of PPE selection.
- Explain the use of labels, signs, and color-coding.

The following record of training sessions shall be retained by the supervisor:



**(E) RECORDKEEPING**

The employee medical records as described in (c) above must be kept for the duration of employment plus 30 years. No medical record or part of a medical record shall be disclosed to anyone without the direct, written consent of the employee or as required by law.

The training records as described above in (d) are to be kept by the [Supervisor] for 3 years.

Both records are available to the employees upon request.

**OSHA Recordkeeping**

An exposure incident is evaluated to determine if the case meets OSHA’s Recordkeeping Requirements (29 CFR 1904). This determination and the recording activities are done by [name of responsible person or department].

**Sharps Injury Log**

In addition to the 1904 Recordkeeping Requirements, all percutaneous injuries from contaminated sharps are also recorded in a Sharps Injury Log. All incidences must include at least:

- Date of injury
- Type and brand of the device involved (syringe, suture needle)
- Department or work area where the incident occurred
- Explanation of how the incident occurred

This log is reviewed as part of the annual program evaluation and maintained for at least 5 years following the end of the calendar year covered. If a copy is requested by anyone, it must have any personal identifiers removed from the report.

**FORM 30**

**[XYZ COMPANY]  
SHARPS INJURY LOG**

DEPARTMENT \_\_\_\_\_

Date of Injury	Employees Name	Type of Sharp	Brand of Sharp	Incident Location	Short Description
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

## CHECKLIST

- ( ) Hepatitis B vaccinations are offered to all affected personnel.
- ( ) Employees who refuse vaccinations sign a declination statement.
- ( ) An exposure control plan is prepared for each job assignment and is reviewed and updated regularly.
- ( ) Universal precautions are used when handling blood and bodily fluids.
- ( ) New procedures and new products are evaluated regularly, literature reviewed, and supplier information and products considered).
- ( ) Both frontline workers and management officials are involved in the review and evaluation process.
- ( ) Appropriate PPE and other types of equipment that minimize exposure to blood and bodily fluids are provided and maintained.
- ( ) Contaminated areas are regularly cleaned and disinfected.
- ( ) Employees are initially and annually trained on all aspects of the bloodborne pathogen program.
- ( ) Training records are retained for 3 years.
- ( ) Supervisors and employees are trained to recognize an exposure incident, and employees are sent to a healthcare provider for an evaluation.
- ( ) Blood samples are requested from the exposed employee and the source individual.
- ( ) All appropriate medical records are retained by **[indicate person or department]** for the duration of employment plus 30 years. The records are confidential and are kept separate from all other personnel records.
- ( ) All postexposure evaluations and follow-up are provided free of charge to the employee at a reasonable time and place.
- ( ) A sharps injury log is maintained.

## 20. OCCUPATIONAL HEALTH

Since occupational illnesses are sometimes difficult to diagnose, all supervisors must be trained by the **[Safety Manager]** to recognize certain symptoms of these diseases. These occupational illnesses include skin disorders such as dermatitis, dust diseases of the lung, respiratory conditions due to toxic agents, poisoning, physical disorders such as heatstroke, repeated trauma disorders, and other types of occupational illnesses **[list types specific to your workplace and remove others]**.

When a supervisor recognizes a possible occupational health problem in an employee, the employee should be referred to **[healthcare provider, Medical Dept., plant nurse]**. At the same time, the supervisor should investigate the cause of the illness by checking PPE to make sure it fits properly and is clean and in good condition. The supervisor should also check to make sure that ventilation is adequate: Check exhaust vents and hoods and make sure filters have been cleaned or changed. Another area to investigate is personal hygiene: washing before eating, changing clothes before leaving work, laundering work clothes separately from other clothes, etc.

The supervisor will follow all reporting procedures as required by Section IV (B). The **[Safety Manager]** will review the health-related incident reports carefully to determine if additional evaluations may be needed, such as those conducted by industrial hygienists, indoor air quality engineers, physical or occupational therapists, ergonomists, or other health professionals.

## CHECKLIST

- ( ) Supervisors are trained on how to recognize basic symptoms of occupational diseases.
- ( ) Supervisors prepare an incident report for all health-related incidents.
- ( ) The [**Safety Manager**] regularly reviews health-related reports and determines if additional investigation or health evaluations are required.

|