## Power House Plastering, Inc. Accident Investigation Program

**Check Your Understanding.** Conducting effective accident investigations is very important if organizations want to reduce workplace injuries and illnesses. No one wants accidents to happen; but if an accident does occur, it is important to learn from it and make changes so a similar accident does not occur in the future. Through a formal accident investigation procedure, organizations can determine the root cause(s) of the accident or near miss and take actions to prevent recurrence. If left unchecked, today's near miss can become tomorrow's accident or major disaster.

A formal accident investigation program is an essential part of a comprehensive safety program. Having systematic documentation and investigation procedures available before an accident occurs allows the process to be performed quickly and efficiently when it is needed.

For additional information, refer to this <u>Accident Investigation document</u> from EMC Insurance Companies or review OSHA's <u>Incident Investigation website</u>.

#### Purpose

The purpose of the Power House Plastering, Inc. Accident Investigation Program is to investigate all accidents and near misses, to identify the root cause(s) and develop corrective actions that can be taken to prevent future occurrences. Assigning blame to employees is **not** the purpose of this program.

#### Scope

Power House Plastering, Inc. strives to provide all employees and on-site contractors with a safe and healthy workplace. This program is integrated into our company's written safety and health program and is a collaborative effort that includes all employees. The Program Administrator is responsible for the program's implementation, management and recordkeeping requirements.

A list of definitions is located in **Appendix A**.

#### **Program Responsibilities**

**Management.** The management of Power House Plastering, Inc. is committed to the accident investigation process. Management supports the efforts of the Program Administrator by pledging financial and leadership support for the investigation of accidents and near miss events. Management supports an effective accident reporting system and responds promptly to all reports. Management regularly communicates with employees about the program.

**Program Administrator.** The Accident Investigation Program Administrator reports directly to upper management and is responsible for this policy and program. All evaluations, investigations, training and recommended solutions are coordinated under the direction of the Program Administrator in collaboration with management. The Program Administrator monitors the results of the program and determines additional areas of focus that are needed. The Program Administrator also:

- Ensures supervisors and employees are properly trained to conduct accident investigations
- Ensures a system is in place for employees to report accidents and near misses
- Ensures accurate records are maintained and provides documentation upon request
- Follows up on all corrective actions suggested during the accident investigation process

- Ensures approved corrective actions are implemented in a timely manner
- Conducts an annual review of the program

Managers and Supervisors. Managers and supervisors of Power House Plastering, Inc. are:

- Accountable for the health and safety of all employees within their departments through their active support of the accident investigation program
- Required to attend accident investigation training to familiarize themselves with the elements of the program
- Responsible for ensuring that employees under their supervision have received the appropriate training on accident and near miss reporting
- Responsible for initiating the accident investigation process within 24 hours of an incident
- Responsible for implementing approved corrective actions and ensuring they are completed appropriately through active follow-up

**Employees.** Every Power House Plastering, Inc. employee is responsible for conducting himself/herself in accordance with this policy and program. All employees will:

- Attend accident and near miss reporting training
- Report all accidents and near misses as soon as possible to their supervisor, but no longer than two hours after the time of the incident

*Check Your Understanding.* Immediate accident reporting to a supervisor should be required of all employees. Supervisors should contact the facility manager, safety director or program administrator within the same shift. The accident investigation should be started as soon as possible after the incident occurs, once appropriate first aid and medical treatment has been rendered. At a minimum, the employee's supervisor, the Program Administrator and the affected employee should all be involved in the accident investigation. Others may become involved in the gathering and processing of information on contributing factors and determining corrective actions.

#### Reporting

All employees are required to report any accident or near miss to their immediate supervisor within two hours of the incident. The Accident Investigation Report Form (see **Appendix D**) is to be used by the supervisor to document the details of an accident or near miss and any proposed corrective action(s) for future prevention. Supervisors/Managers are to begin the accident investigation process within 24 hours of the initial incident. A copy of the initial report is to be forwarded to the Program Administrator within 48 hours of an accident or near miss.

#### **Event Reconstruction**

**Check Your Understanding.** In order to discover the root cause(s) of an accident or near-miss, you must reconstruct the chain of events and decisions that occurred prior to the incident. Hindsight is 20/20, so be open-minded because it's easy to jump to conclusions. Be sure to focus on the events that **did** happen instead of those that were supposed to happen.

**Interviews.** Within 24 hours, the manager or supervisor of the employee who was involved in the accident or near miss will begin interviewing employees who were involved or in close proximity to the incident, or who are familiar with the

related process or work practices. All individuals will be interviewed separately. A minimum of two people must be interviewed for any accident or near miss reported.

**Event Timeline.** An event timeline will be developed for each reported accident or near miss. This timeline will start with the accident or near miss and be developed **in reverse** using information obtained from the interviews. Each task, event and employee decision that took place are to be added to the timeline. Also, the timeline will include all physical and emotional conditions known at the time of each action, event or decision along with the employee's knowledge, motivation, goals and focus at the time of any action, event or decision.

*Check Your Understanding.* Of all operation failures, approximately 10 percent are equipment failures and 90 percent are due to human error. Of those human errors, 30 percent are a result of mental lapses that cannot be remedied and 70 percent are due to a problem or conflict within the system/process. Therefore, unless an incident can be solely attributed to equipment failure, the investigation should focus on the **process** and what changes could be made to limit the impact of human error.

**Identifying Root Cause(s).** After the timeline has been established, the investigator(s) will identify the root cause(s) that contributed to the accident or near miss.

*Check Your Understanding.* It is extremely rare for just one contributing factor or root cause to be solely responsible for an accident or near miss. Accidents are caused by a series of many actions, decisions and conditions that existed in a particular arrangement. Develop your reconstruction of events based on statements taken during employee interviews. More than one employee will likely need to be interviewed to get the entire story. It should be understood that individual perspectives will vary, so each employee's "facts" may be slightly different as well. To determine the contributing factors of the accident or near miss, you need as complete a story as possible.

*Check Your Understanding.* Many tools are available for identifying the root causes of workplace incidents. Your organization may use fault tree analysis, barrier analysis or accident mapping. Perhaps the simplest method is known as the "5 whys." In this question-asking technique, the investigator asks the same question repeatedly – usually "What caused or allowed this condition/practice to occur?" or simply "Why?" – until the root cause(s) are found. The example below illustrates how the 5 whys might be applied to an incident.

Incident: While repairing a press, Bob suffered an injury to his finger when it started unexpectedly.

- 1. *Why* was Bob's finger injured? The ram on the press he was repairing unexpectedly came down.
- 2. **Why** did the ram on the press come down? Another employee started up the machine without realizing Bob was in the danger zone. Bob had shut down the machine, but not performed an energy lockout so there was still power to the ram.
- 3. **Why** didn't Bob perform an energy lockout? The machine wasn't locked out because there is no company lockout/tagout program. Bob has never been trained on hazardous energy control because management thought it was too expensive.

**Root causes:** Lack of lockout/tagout program, lack of employee training on hazardous energy control and poor safety leadership as demonstrated by unwillingness to spend money on employee safety training.

**Recommending Specific Solution(s).** After the root causes are identified, corrective actions will be identified to reduce or eliminate those hazardous conditions. The manager/supervisor and employees will develop and propose specific

improvements that are operationally feasible. Those possible improvements will be submitted to the Program Administrator for validation, final approval and guidance for an implementation strategy.

When selecting and recommending these corrective actions, possible solutions will be prioritized using the following hierarchy. In this hierarchy of hazard control, the most desirable solutions come from the first level, with the following levels offering increasingly less desirable options.

- 1. Elimination eliminating the hazard from the workplace
- 2. Substitution replacing a hazardous substance or activity with a less hazardous one
- 3. Engineering controls providing guards, ventilation or other equipment to control the hazard
- 4. Administrative controls developing policies and procedures for safe work practices
- 5. Personal protective equipment using respirators, earplugs, safety glasses, etc.

Recommended corrective actions will come from the highest possible level of the hierarchy of hazard control.

**Monitoring Changes.** Once implemented, corrective actions will be monitored by the manager/supervisor for effectiveness, to verify that net risk is not increased and to determine that the root cause of the incident has been eliminated or reduced. The manager/supervisor will conduct follow-up interviews with employees who were part of the accident investigation to determine if the implemented corrective actions require any adjustments to provide maximum safety to the employees.

### **Employee and Supervisor Training**

New and previously untrained employees will receive training about this program and how it will be applied when investigating near misses and accidents. Employees and supervisors will receive refresher training at least every five years. Upon hire or promotion into their position, managers and supervisors will be trained on Power House Plastering, Inc. investigation philosophy and the methods that should be used to conduct an accident investigation according to this program.

The minimum training for all employees will include the following elements:

- An explanation of the Accident Investigation Program and their role in it
- An emphasis on the importance and method of prompt reporting of accidents and near misses
- Review of the accident investigation form, with emphasis on determining contributing factors and corrective actions

#### **Periodic Program Review**

At least annually, the Program Administrator will conduct a program review to assess the progress and success of the program. The review will consider the following:

- Evaluation of all training programs and records
- The need for retraining managers, supervisors and employees
- The length of time between accidents, investigations and implementation of corrective actions
- The program's success based upon comparison to previous years, using the following criteria:
  - Frequency of accidents and near misses
  - Frequency of workers' compensation claims
  - Insurance carrier's loss analysis
  - Employee feedback through direct interviews, walk-through observations, written surveys and questionnaires and reevaluations

The annual review report will be submitted to senior management using the form in **Appendix B**.

#### **Record Retention**

Power House Plastering, Inc. will maintain the information from accident investigations and training records for three years. All accident investigation records will be kept by the Program Administrator.

*Check Your Understanding.* There are currently no requirements for accident investigation report retention. Your company must determine the time period for record retention for your program.

For comparison, other types of records (such as medical records and workers' compensation information) are typically retained in the employee's personnel file. This information is kept for 30 years past the employee separation date.

### **Revision History**

Revision 1 - 12/11/2023

### **Appendix A – Definitions**

Accident – An undesired event that results in personal injury or property damage.

Administrative (or Work Practice) Controls – Procedures that are used to reduce the duration, frequency or severity of exposure to a hazard. These may include work methods training, job rotation and gradual introduction to work.

**Engineering Controls** – A method of eliminating or reducing the quantity or severity of job risk factors by redesibning equipment, processes, tools and workstations.

**Near Miss** – An incident where no property was damaged and no personal injury sustained, but where damage and/or injury easily could have occurred given a slight shift in time or position.

**Personal Protective Equipment (PPE)** – Gloves, kneepads and other equipment worn by employees that may help reduce hazards until other controls can be implemented, or to supplement existing controls.

**Root Cause** – A condition that contributes to an incident or near miss. They are not always obvious, and may include items like lack of training, poor safety leadership, lack of rule enforcement or poor safety procedures.

# Appendix B – Annual Evaluation Report

Date of Evaluation:	Evaluated By (list all present):			
Written Program Reviewed: Yes No				
Do completed accident investigation records indicate a need for additional manager, supervisor or employee training on the accident investigation program? Yes No				
Is there any record of excessive time between:				
1. An accident and completion of the accident investigation?				
Yes No				
2. Determining corrective actions and implementation of those controls?				
Yes No				
3. The beginning and completion of implementation of controls?				
Yes No				
If yes, what corrective action is needed?				
The following content was added/modified/removed from the w	ritten program:			
Comments:				

## Appendix C – Accident Investigation and Reporting Training Record

The following individuals received training on the Power House Plastering, Inc. Accident Investigation Program.

Print Name	Sign Name

Print Instructor's Name	
Instructor's Signature	
Instructor's Title	
Date of Training	

Accident/Incident Information	
Name(s) of Injured Employee(s):	Date of Accident/Injury/Illness:
Work Area of Injured Employee(s):	Date Investigation Began:
Describe Nature of Accident, Injury or Illness:	
Part(s) of Body Affected:	
Describe Medical Treatment Administered:	
Witness Information	
Witness #1 Name:	Phone:
Witness's Description of Accident/Incident:	
Witness's Signature:	
Witness #2 Name:	Phone:
Witness's Description of Accident/Incident:	
witness's Signature:	

Investigation Results		
List contributing factors/root causes:		
Was a mandatory safe work practice violated?	Yes	No
Was the unsafe condition, practice or protective equipment problem corrected immediately? If no, what has been done to ensure correction?	Yes	No
Do additional mandatory safe work practices need to be implemented?	Yes	No
If yes, please describe safe work practice:		
List corrective actions taken and date implemented:		
Signature of Investigator:	Date:	
Signature of Person Responsible for Corrective Actions:	Date:	