Subject: Job Safety Analysis Procedure

I. GENERAL

Job Safety Analysis (JSA) is a procedure to be used in reviewing work methods and identifying hazards that may result in incidents and accidents.

Job safety analysis shall be performed on all jobs that have resulted in an incident/accident trend, death, or a change in a job procedure/equipment. If the JSA is dictated as a result of an incident or accident, the department head will be notified by the Loss Prevention Coordinator that the JSA must be written and discussed with affected employees within ten calendar days. If the JSA is dictated by a change in a job procedure and/or new equipment, Department Heads, and/or supervisors shall notify the Loss Prevention Coordinator of the new JSA and provide documentation of training for affected employees within ten calendar days of the change.

II. RESPONSIBILITIES

1. Department Heads
   a. Identify tasks for which a JSA is required.
   b. Develop/revise JSAs in accordance with the process outlined in this policy.
   c. Maintain an index naming the task, date the JSA was completed/revised, and record of training associated with each JSA.
   d. Provide the Loss Prevention Coordinator a list of all current JSAs.
   e. Insure JSAs are readily available where affected employees work.
   f. Conduct initial and recurrent training as needed on active JSAs.

2. Loss Prevention Coordinator:
   a. Maintain a current list of all campus JSAs.
   b. Work with Department Heads to insure JSAs are completed in accordance with this policy.
   c. Verify that JSA training is properly conducted at the department level.
   d. Direct and resource JSA development as necessary and assist as needed in completion of JSAs.
III. JOB SAFETY ANALYSIS PROCESS

1. Select the Job
In selecting jobs to be analyzed and in establishing the order of analysis, the following factors should be considered. They are listed in order of importance.

A. Occurrence of Injuries: Jobs that have produced an incident or accident trend, or death, during the past three years shall be analyzed.

B. Frequency of Accidents: Jobs that repeatedly produce accidents (trends) are candidates for a job safety analysis. The greater the number of accident associated with the job, the greater its priority for a job safety analysis. Subsequent injuries indicate that preventive action taken prior to their occurrence was not successful.

C. Potential Severity: Some jobs may not have a history of accidents but may have the potential for severe injury or property damage. The greater the potential severity, the greater its priority for a job safety analysis.

D. New Jobs or a Change in a Job: New operations created by changes in equipment or processes obviously have no history of accidents, but their accident potential should be fully appreciated. A job safety analysis shall be made on every new job with potential hazards. Analysis should not be delayed until an accident or incident occurs.

E. Death: Any accident that caused the death of an employee shall have a job safety analysis made as part of the investigation.

2. Perform the Analysis
The supervisor/foreman or the agency loss prevention representative responsible for the task shall perform the job safety analysis using the Job Safety Analysis Worksheet (JSA-1-00). The supervisor or safety officer shall conduct the job safety analysis with the help of employees who regularly perform the task.

The job being analyzed shall be broken down into a sequence of steps that describe the process in detail. Avoid two common errors:

A. Making the breakdown too detailed so that an unnecessarily large number of steps result; or
B. Making the job breakdown so general that the basic steps are not distinguishable.

As a rule, the job safety analysis should contain less than 12 steps. If more steps are needed, the job should be broken into separate tasks.

Job safety analysis involves the following steps:

1. Selecting a qualified person to perform the analysis.
2. Briefing the employee demonstrating the task on the purpose of the analysis.
3. Observing the performance of the job, and breaking it into basic steps.
4. Recording and describing each step in the breakdown.
5. Reviewing the breakdown and description with the person who performed the task.

The Job Safety Analysis provides a learning opportunity for the supervisors and employee. Select an experienced, capable, and cooperative person who is willing to share ideas. They should be familiar with the purpose and method of a job safety analysis. Sometimes it is difficult for someone who is intimately familiar with a job to describe it in detail; therefore, reviewing a completed job safety analysis before conducting one may help illustrate the terminology and procedure to be followed.

Review the breakdown and analysis with the person who performed the job to ensure agreement of the sequence and description of the steps. Variations of routine procedure should be analyzed also.

The wording for each step should begin with an action word such as "remove," "open," or "lift."

3. **Identify Hazards**
Hazards associated with each step are identified. To ensure a thorough analysis, answer the following questions about each step of the operation:

- Is there a danger of striking against, being struck by, or otherwise making injurious contact with an object?
- Can the employee be caught in, by, or between the objects?
- Is there a potential for a slip or trip? Can someone fall on the same level or to another?
- Can employees strain themselves by pushing, pulling, lifting, bending, or twisting?
- Is the environment hazardous to one's health (toxic gas, vapor, mist, fumes, dust, heat, or radiation)?

Using the Job Safety Analysis Form (JSA-1-00), document hazards associated with each step. Check with the employee who performed the job and others experienced in performing the job for additional ideas. A reliable list may be developed through observation and discussion.

4. **Develop Solutions**
The final step in job safety analysis is to develop a safe, efficient job procedure to prevent accidents. The principal solutions for minimizing hazards that are identified in the analysis are as follows:

A. Find a new way to do the job. To find an entirely new way to perform a task, determine the goal of the operation and analyze the various ways of reaching this goal. Select the safest method. Consider work saving tools and equipment.
B. Change the physical conditions that create the hazard. If a new way to perform the job cannot be developed, change the physical conditions (such as tools, materials, equipment, layout, location) to eliminate or control the hazard.

C. Change the work procedure to eliminate the hazard. Investigate changes in the job procedure that would enable employees to perform the task without being exposed to the hazard.

D. Reduce the frequency of its performance. Often a repair or service job has to be repeated frequently because of another condition that needs correction. This is particularly true in maintenance and material handling. To reduce the frequency of a repetitive job, eliminate the condition or practice that result in excessive repairs or service. If the condition cannot be eliminated, attempt to minimize the effect of the condition.

Reducing the number of times a job is performed contributes to safer operations only because the frequency of exposure to the hazard is reduced. It is, of course, preferable to eliminate hazards and prevent exposure by changing physical conditions or revising the job procedure or both.

In developing solutions, general precautions such as "be alert," "use caution," or "be careful" are useless. Solutions shall precisely state what to do and how to do it. For example, "make certain the wrench does not slip or cause loss of balance" does not tell how to prevent the wrench from slipping. A good recommendation explains both "what" and "how." For example, "set wrench jaws securely on the bolt. Test its grip by exerting slight pressure on it. Brace yourself against something immovable, or take a solid stance with feet wide apart, before exerting slow steady pressure." This recommendation reduces the possibility of a loss of balance if the wrench slips.

If a job or process is changed dramatically, it should be discussed with all personnel involved to determine the possible consequences of the changes. Such discussions check the accuracy of the job safety analysis and involve personnel in an effort to reduce job hazards.

5. **Conduct a Follow-up Analysis**
   No less than once per month, each supervisor/foreman should observe employees as they perform at least one job for which a job safety analysis has been developed. The purpose of these observations is to determine whether or not the employees are doing the jobs in accordance with the safety procedures developed. The supervisor should review the job safety analysis before doing the follow-up review to reinforce the proper procedures that are to be followed.

6. **Use of the Job Safety Analysis**
   The job safety analysis provides a learning opportunity for the supervisor and employee. The supervisor should explain the analysis to the employees and, if necessary, provide additional training.
New employees or employees asked to perform new tasks must be trained to use the safe and efficient procedures developed in the job safety analysis. New employees should be taught the correct method to perform a task before dangerous habits develop, to recognize the hazards associated with each job step, and to use the necessary precautions to avoid injury or accidents.

Jobs that are performed infrequently require additional effort to minimize accident potential. Pre-job instruction addressing the points listed on the job safety analysis, will serve as a refresher to employees who may have forgotten some of the hazards in performing the task and the proper procedure to be used to avoid these hazards.

Finally, the job safety analysis is an incident/accident investigation tool. When incidents/accidents occur involving a job for which a job safety analysis has been performed, the analysis should be reviewed to determine if proper procedures were followed or if the procedures should be revised.

APPROVED

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