

5.0 JOB SAFETY ANALYSIS

5.1 General Information

The objective of the Job Safety Analysis (JSA) is to prevent accidents by improving employee skills and awareness through an organized process. That process involves breaking down a particular job into a series of simple steps. In each of these steps, hazards are identified and documented. After these hazards are identified, then solutions and recommendations for the prevention of accidents can also be documented in the analysis. Finally, the results of this analysis are shared with affected employees and their supervisors.

Job Safety Analysis differs from accident investigation. Although some analysis is required during the accident investigation, this is performed after an accident has already occurred. A JSA can be performed on any occupation and can be done to prevent accidents *before* they occur. The purpose of the JSA is *not* to change job descriptions or move a particular individual to another position. Rather, the JSA is used to educate people on the hazards associated with their duties and therefore prevent accidents from occurrence.

5.2 Identifying the Need for JSA

Use the following guidelines for identifying the need for a JSA.

- A JSA **must be performed** on any job in which an accident has caused the death of an employee.
- A JSA could be performed for any jobs:
 - ✓ That has produced a disabling injury within the past three years
 - ✓ That demonstrates a trend of major accidents
 - ✓ In which prior accident or hazard prevention procedures have not eliminated the occurrence of accidents
 - ✓ Which have recently changed in a manner that could jeopardize employee safety

5.3 Procedures for Performing the JSA

The Environmental Health & Safety Director and Assistant Environmental Health and Safety Director) are responsible for administering all Job Safety Analysis. These persons shall solicit the help of University employees, DSC's, department heads, and supervisors in performing this analysis. The JSA must include completion of a **JSA-9-00 form** as part of its required documentation (see section 5.5). Use the following steps when performing a JSA:

1. Select the Job
2. Observe the Job and Record
3. Identify Hazards

4. Recommend and Implement Solutions
5. Follow-up on Solutions

Step 1: Select the Job

- Identify a need for the JSA using the guidelines set forth in section 5.3.
- Recognize the type of JSA to be performed as described in section 5.2.
- Solicit the help of individuals who are experienced and capable. Select employees who are passionate about their job and have an active interest in their personal safety.
- Notify the employee and his or her supervisor and schedule the JSA.
- If necessary, meet with the employee (and supervisor if necessary) to discuss the JSA process.
- Instruct the employee (and supervisor if necessary) on the purpose of the JSA. This will facilitate discussion that pertains to hazards and safety.

Step 2: Observe the Job and Record

- The person performing the JSA may need to physically observe the employee performing his or her normal job duties. Pay close attention to:
 - ✓ The working environment
 - ✓ Ergonomics in the workplace
 - ✓ Equipment or tools that are used to perform tasks
 - ✓ The employee's overall attitude
 - ✓ Communication with other employees
- Using this observation, along with information from interviews, identify and record a sequence of steps that encompass the job. This should contain no more than 12 steps.
- If a specific job requires more than 12 steps, that job should be broken down into different tasks, and those tasks analyzed separately.

Step 3: Identify Hazards

Once the job has been observed and the sequence of steps are recorded, then answer the following questions to identify any hazardous conditions as part of the JSA:

- Is there a potential for a slip, trip, or fall?
- Can the employee be caught in, by, or between an object?
- Is there a danger of being struck by an object?
- Can the employee hurt himself or herself by pulling, lifting, pushing, or through some other physical movement?
- Is the equipment or tools that the employee uses to perform this job in safe working condition? (See section 9.23)
- Is the proper personal protective equipment available? (See sections 9.21)
- Are the proper safeguards, shields, and warning labels installed on any applicable equipment?
- Does the employee know how to safely operate this equipment (training)?
- Are there any environmental conditions that could cause accidents (toxic gases, vapors, dust, mist, fumes, radiation)?

Document these hazards on the JSA-9-00 form appropriately (See section 5.4).

Step 4: Recommend and Implement Solutions

After hazards and dangers associated with a particular job are identified, then appropriate solutions can be recommended and implemented.

- Look at different ways of performing tasks, and then choose the safest method.
- Change the environment that the job is performed in (Ex: Increase the lighting in a work area).
- Supplement the job description with safety-oriented procedures (Ex: Include PPE equipment which has been checked before doing the specific task).
- Reduce the frequency of job tasks. Statistics show that accidents are more prevalent in tasks that are repetitive.
- In some cases, it may be necessary to test recommendations before they are implemented.

Step 5: Follow-up on Solutions

- Before the JSA process is complete, the employee's supervisor should be consulted and notified of these necessary changes.
- After this consultation, the supervisor should be given a copy of the completed JSA-9-00 form (See section 5.5).
- If applicable, other employees whose job is to perform similar tasks should be notified of these changes.
- If these employees do not understand those changes, then proper training shall be provided to them.
- The EH & S office shall maintain these documents for a minimum of one year.

5.4 Record Keeping for Job Safety Analysis: JSA-9-00 Form

Documentation is an important part of performing Job Safety Analysis. Records must be uniform and consistent so that many people can understand and use this information. Completion of the JSA-9-00 form is necessary for all Job Safety Analysis. This documentation should be kept on file in the EH & S office for a minimum of one year.