"Job Safety Analysis"
(Provided by Safety Consultation and Training Section-Nevada Division of Industrial Relations)

Job safety analysis is an analytical tool that can be used to assess the safety or efficiency of a job or process. It constitutes a systematic review of a sequence of steps that comprise a specific job/process, the potential hazards associated with each individual step listed, and the countermeasures to be applied that will eliminate or abate the specific hazards identified.

Use: The job safety analysis is a "living document" and has a wide variety of uses for an employer. For example, it may be used to:
➢ Find new and better ways to do a task or procedure.
➢ Change the physical conditions in a facility to reduce safety hazards.
➢ As a tool to train employees on the standard procedures a company wants followed while accomplishing specific jobs.
➢ Identify specific equipment, tools, and personal protective equipment required for a job.
➢ Serve as a checklist for otherwise qualified employees who are accomplishing infrequently performed or non-routine tasks.

Some of the major assumptions behind the job safety analysis concept are as follows:
➢ All aspects of a job such as safety, quality, and production are so interrelated that it is very difficult to separate them.
➢ Optimum overall job performance requires the efficient use of employees, equipment, tools, supplies, and work environment, which are also interrelated.

To conduct a job safety analysis, management needs to select the right people for the project such as supervisors or qualified technicians.

Job Selection: Be selective of jobs or processes to be analyzed. Develop and prioritize candidates based on:
➢ Accident frequency: How often accidents occur on specific jobs.
➢ Accident severity: How severe are the injuries from accidents occurring on specific jobs.
➢ Judgment and experience of potential hazards.
➢ New jobs, non-routine jobs, or job changes.
➢ Routine jobs.

Basic Steps: The Job Safety Analysis involves at least these four basic steps:
➢ Select a job to be analyzed.
➢ Separate the job into its basic steps, (orderly sequence).
➢ Identify hazards with each step.
➢ Control each hazard by developing a recommended Safe Job Procedure.

Questions to ask: Observe the job and assess each basic step to determine if it is the most efficient way to do the job. A few questions to consider include:
➢ What is the purpose?
➢ Why is it necessary?
➢ When should the step be done?
➢ Who should do the job?
➢ How should it be done?

Identify the hazards with each step. Look specifically for safety and health concerns before, during and after each step. Include productivity, quality and safety in the evaluation.

Hazards: Typical hazards include, but are not limited to:
- Struck by or against
- Contacted by or with
- Caught on, in or between
- Fall from height or same level
- Over exertion
- Dusts, fumes, mists
- Environmental

Control: Develop the engineering, administrative, or training countermeasures that will control or abate the potential hazards identified for each step. Ask if there are changes to equipment, work area, tools or procedures that would make the job safer. The controls identified can be quite diverse and may include but not be limited to:
- Changing job procedures
- Personal protective equipment
- Lockout/tagout programs
- Improved lighting
- Plant layout
- Machine guarding
- Environmental controls
- Automation
- Less hazardous chemicals
- New processes
- Reduce the frequency a specific action must be taken
- Maximum weight of material handled
- Reducing frequency of lifts

After the preceding evaluations have been completed, use the following format when preparing the written job safety analysis form.

Form Heading: The form itself should have a heading that at a minimum provides the following information:
- The specific job to which the analysis applies.
- Date of the job safety analysis
- Title of the employee performing the job.
- Title of the department where job is accomplished.
- Production requiring the job to be accomplished.
- Individual conducting the analysis.

Form Components: The main body of the analysis form consists of three or four columns with the following information:

- Sequence of Basic Job Steps: lists each job step and number in sequence.
- Potential Hazards or Accidents: using the same numbered sequence, enter the hazards that apply to each specific job step listed.
- Recommended Safe Job Procedure: using the same numerical sequence as in the two previous columns, list the appropriate countermeasure to each job step hazard identified above, including personal protective equipment.
- Personal protective equipment may be a fourth column to highlight what is a required or initial direction prior to starting the job.

The main point of the Job Safety Analysis is to prevent accidents by anticipating and eliminating or controlling hazards!