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JOB SAFETY ANALYSIS

The Job Safety Analysis (JSA) process, as an accident prevention tool, has been advocated and used in the workplace at least since the early 1960s. Over the years, major safety publications have contained and advocated the use of this tool, including various issues of the National Safety Council's *Accident Prevention Manual for Business and Industry* and its companion *Supervisor's Safety Manual*. The JSA technique has also been summarized and published in pamphlet form by the U.S. Department of Labor – OSHA.

A Job Safety Analysis is a simple three-step written procedure that can be used to identify potential workplace hazards for the purpose of developing ways to prevent accidents and the resulting injuries that occur to employees. The JSA process utilizes a form having three columns: the first commonly labeled "Sequence of Basic Job Steps," the second, "Potential Hazards," and the third, "Recommended Action or Procedure."

When initiating a JSA program, it is suggested that JSAs first be prepared for the jobs that have the highest accident rates and close calls, and for those jobs having the highest potential risk, regardless of their historical occurrence. In a timely fashion, JSAs should be prepared for **all** jobs in the workplace.

For each specific job assigned to workers at a particular worksite, the first step in preparing a JSA is to determine each individual step performed during the particular job being evaluated. A brief description of each step is then listed in the first column of the JSA form.

The second step in the process of preparing a JSA is, for each listed job step,

identify and list in the second column of the JSA form all hazards known to exist or that might foreseeably have the potential to develop or occur while performing that particular job step.

After each hazard or potential hazard has been identified and listed on the JSA form, the third and final step is to determine, for each listed hazard, whether the job or the equipment involved in performing the job can be re-designed or a safety device utilized to eliminate or minimize the hazard, or whether specific procedures will be required to control the hazard. After re-design and establishment of the use of reasonably available safety devices, safe work methods or procedures necessary to assure the use of proper safeguards and procedures pertaining to any remaining hazards are listed in the third column of the JSA form.

During each step of the JSA procedure, it is vital to have employee participation. The employees and supervisors who have spent the most time with the equipment or job under study should be the ones cooperating to prepare the JSA. JSAs will then contain the combined wisdom of all persons having knowledge or experience in regard to the job being examined. Completed JSAs set the standard for safe job performance and are used to train new employees as well as provide a resource to be used for maintenance of training for more experienced employees.

A proper Job Safety Analysis is not a mere gathering of workers at the beginning of a shift or job to discuss and list general safety hazards and the general precautions that should be followed. Rather, a proper Job Safety Analysis as described above, is conducted under the leadership of top management, formally

prepared in written form by mid-management and supervisors, in cooperation with workers, and is detailed for each individual job assignment in regard to specific job steps, specific potential dangers, and specific precautions that must be taken. Pre-planning (typically a significant time before the actual job is to be performed) is required as many discovered precautions require the development of specific safe work methods, the possible installation of safety devices, and the acquisition of required safety equipment.

Special note: While JSAs are first prepared for frequently performed jobs, and especially for jobs containing a recognized high risk of mishap or accident severity, it is also important to prepare JSAs for relatively non-routine jobs – jobs that are relatively uncommon, unique, or out of the ordinary – that workers may be suddenly confronted and comparatively unfamiliar with.

When such jobs appear, an internal alarm should sound, and the first reaction, dictated by pre-instruction on the part of management, should be to hesitate to rush in, but rather, to hesitate before proceeding, and take a few moments to calmly consider the potential hazards, and how such hazards will be handled (safeguarded) to safely accomplish the given task.

If such a suddenly arising task is relatively complex (involving more than a couple of job steps), a formal JSA should be prepared. If the task is not complex, it may be possible for all involved to meet and discuss the task, using the JSA format (job steps, potential hazards, and required safeguards) to achieve consensus, and then proceed cautiously, while allowing any member of the job performance team to declare a “stop” in the procedure to consider or reconsider the safest option.

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