

1.1 PURPOSE

- 1.1.1 The purpose of this procedure is to ensure that all TERRY R PITT CONSTRUCTION job activities are thoroughly reviewed and analyzed and that steps are taken to control the hazards and that the hazard potential is reduced so that a safe working environment is provided for workers and contractors.

1.2 GENERAL

- 1.2.1 A Job Safety Analysis (JSA) will be used for all jobs. The JSA is a process where the hazards associated with each step of a job are identified and control measures are put in place to lower the risk to personnel, property, and the environment.
- 1.2.2 A JSA is developed and implemented for each identified operation and task and is required by TERRY R PITT CONSTRUCTION's safety and environmental policies and practices.

- 1.2.3 Potential injury categories which should be addressed when developing a JSA:

- 1.2.3.1 Falling objects
- 1.2.3.2 Being caught in machinery
- 1.2.3.3 Repetitive motions
- 1.2.3.4 Struck by objects
- 1.2.3.5 Asphyxiation
- 1.2.3.6 Electric shock or electrocution
- 1.2.3.7 Noise
- 1.2.3.8 Hot surfaces
- 1.2.3.9 Slips, trips, and falls on same level
- 1.2.3.10 Slips, trips, and falls from different level
- 1.2.3.11 Caught in, on, or between objects
- 1.2.3.12 Equipment failure
- 1.2.3.13 Fire and explosion
- 1.2.3.14 Exposure (toxic, corrosive, harmful, irritant substance)
- 1.2.3.15 Drowning



- 1.2.3.16 Ionizing radiation
 - 1.2.3.17 Property damage
 - 1.2.3.18 Environmental
 - 1.2.3.19 Overexertion
 - 1.2.3.20 Awkward positions and static postures
- 1.2.4 This is a list of potential risks. A JSA will be used in the initial preparation or for validation of a procedure. Preparation of a JSA will also lead to a procedure being updated or changed to enhance safety and the protection of the environment.
- 1.2.5 JSAs must be maintained at the jobsite and readily accessible to workers.

1.3 JSA PROCESS

- 1.3.1 Determine what JSA is needed for the job.
- 1.3.2 Determine if a JSA is already available or has been completed in a prior activity.
- 1.3.3 Supervisor and crew jointly develop the JSA.
- 1.3.4 Determine the approach that will be used to complete the JSA.
- 1.3.5 Direct observation of task - This can be used for frequent and repeated tasks. Generally, this is the preferred method because observation stimulates ideas, encourages interaction, and promotes learning. This is also useful for review of previous JSAs.
- 1.3.6 Group discussion by those familiar with the job - This is useful for planning large jobs that have already been performed. The supervisor leads the team and draws on their collective experience. It is essential that direct observation be used to review the JSA while the task is performed.
- 1.3.7 Task recall and check - Supervisor and crew prepare a preliminary version of the JSA on the basis of recall from previous experience rather than by direct observation. They will then check this preliminary version by discussion with others or direct observation.
- 1.3.8 Assemble group that will perform the assessment.
- 1.3.9 Break the job down into the primary steps or operations that need to be completed. Twelve to fourteen steps are usually sufficient.

1.4 IDENTIFY POTENTIAL HAZARDS

- 1.4.1 Evaluate the specific steps and tasks for potential hazards.
- 1.4.2 Evaluate the surrounding area and work environment for hazards resulting from conditions.
- 1.4.3 Review the hazard checklist to prompt identification of other possible hazards.
- 1.4.4 Identify and list possible job hazards.

1.5 DEVELOP RECOMMENDATIONS TO REDUCE OR ELIMINATE HAZARDS

- 1.5.1 Develop recommendations for hazard management including risk reduction or elimination.
- 1.5.2 Review other JSA results for suggestions, ideas, or direction.

1.5.3 Determine priorities for hazard reduction or elimination in order of preference:

- 1.5.3.1 Removal of the hazard by eliminating the process will also eliminate the risks associated with the hazard.
- 1.5.3.2 If the process cannot be eliminated, consider substituting the substance or hazardous process with one known to be less harmful to health or safety.

1.5.4 Develop engineering controls

- 1.5.4.1 Engineering controls means changing processes, equipment, or tools.
- 1.5.4.2 Reduce source of noise or vibration through various known engineering controls.
- 1.5.4.3 Use machine guards and machine operation controls.
- 1.5.4.4 Isolate or enclose the hazard.
- 1.5.4.5 Use ventilation to remove fumes and dust.
- 1.5.4.6 Use mechanical aids to minimize manual handling injuries.

1.5.5 Develop administrative controls

- 1.5.5.1 Administrative controls involve introducing and maintaining work practices that reduce risk by limiting the exposure of a worker to the hazard.

- 1.5.5.2 Reduce time of exposure.
- 1.5.5.3 Limit the number of workers exposed.
- 1.5.5.4 Modify procedures.
- 1.5.6 Consider additional personal protective equipment
 - 1.5.6.1 PPE should be used only when other measures have not been able to protect the worker against the hazard or risk of exposure to the hazard.
 - 1.5.6.2 Where PPE is used, the supervisor will ensure that it fits correctly, training is provided, and that the equipment is maintained and serviced regularly.

1.6 RECORD THE JSA INFORMATION

- 1.6.1 Assign a person(s) responsible for each job step.
- 1.6.2 Place name or initials in appropriate column on JSA form.
- 1.6.3 Record the information using the JSA form.
- 1.6.4 Include on the JSA the signatures/names of those who participated in the development of the JSA.
- 1.6.5 Verify JSA is adequate for job to be performed.
- 1.6.6 Approve the JSA with signatures on the JSA form. JSAs must be approved by a supervisor or person in charge (PIC) prior to work starting.

1.7 VERIFY UNDERSTANDING

- 1.7.1 Verify that all workers understand the following:
 - 1.7.1.1 Job steps involved
 - 1.7.1.2 Hazards associated with the job
 - 1.7.1.3 Controls in place to reduce or eliminate the hazard
 - 1.7.1.4 Their roles and responsibilities

1.7.2 Use of a pre-job meeting to communicate and verify the information with the workers.

1.8 COMPLETED JSA

1.8.1 Perform the work in a safe manner, consistent with general safety practices and regulations.

1.8.2 Protect workers from potential hazards and injury.

1.8.3 Create or update a work procedure.

1.8.4 Ensure existing or new workers are familiar with the content and are able to apply it to the job (ex. present at pre-tour, pre-job meetings, or other appropriate sessions).

1.8.5 Attach to a work permit for reference during the job, if appropriate.

1.8.6 Review with workers the next time the job is performed.

1.9 REVIEW AND REVISE THE JSA

1.9.1 Review the JSA after completion of the job.

1.9.2 Revise the JSA to reflect changes to procedures or factors that may not have been considered in the original JSA.

1.9.3 File completed JSA in location where individuals and the work group can access them.

1.10 RECORDKEEPING

1.10.1 JSA forms are collected, filed, and readily accessible.

1.10.2 TERRY R PITT CONSTRUCTION will maintain copies of worker training records for a minimum of three years.

1.11 TRAINING

1.11.1 All new workers will be trained on existing JSA procedures.

1.11.2 New workers or workers who are asked to perform new jobs/tasks will be trained to use the procedures developed in the JSA.

1.11.3 Safety training is supplemented with job-specific training.

1.11.4 Supervisors will perform and document worker training on completed/existing JSAs at least annually.

1.11.5 Jobs that are performed infrequently require additional effort to minimize accident potential. Pre-job instruction will serve as a refresher so that workers will remember and avoid any hazards.