Developing Solutions Checklist

All of the measures listed below are very valuable when creating a Job Hazard Analysis. Use this checklist as you assess solutions to prevent and mitigate potential hazards.

Instructions: For each individual job step identified in column one of the Job Hazard Analysis Form, review each of the following considerations to determine if they may assist you in establishing safe work procedures.

Can the work be done in a better way to improve safety? When change is introduced with structure, planning, innovation, employee involvement and team effort, change can be profitable and exhilarating.

1. **Eliminate the Hazard**
   This is the most effective measure. These techniques may be used to eliminate the hazards:
   a. **Choose a different process**
      - Determine if the process can be performed in a completely different way that eliminates the hazard.
   b. **Modify an existing process**
      - Determine if every step must be done to contribute to the overall goal. Eliminating a step may also eliminate a hazard.
   c. **Substitute with less hazardous substance**
      - Use different substances, materials, chemicals, etc. that does not present the problem.
   d. **Improve the environment**
      - Improved ventilation can ensure that hazardous dusts and fumes are unable to affect the worker. Providing adequate lighting also eliminates hazards.
   e. **Modify or change equipment or tools**
      - Determine if changing of the tools, materials, or equipment will eliminate the hazard.

2. **Contain the Hazard**
   - If the hazard cannot be eliminated, using enclosures, machine guards, worker booths and other shield or barrier devices might prevent contact.

3. **Revise Work Procedures**
   - Determine if every step must be done to contribute to the overall goal. Eliminating a step may reduce a hazard, therefore creating a safer environment.
   - Rearrange sequence of steps, working area, or workflow for increased safety and efficiency.
   - Relocate the task so that it is performed elsewhere in process for greater safety and efficiency.

4. **Reduce the Exposure**
   These are the least effective measures. They should only be used if none of the solutions mentioned above are possible.
   - Modify equipment so that it requires less maintenance. Determine what will eliminate the cause of excessive maintenance.
   - Reduce the frequency that workers must handle hazardous material and equipment.
   - Provide appropriate personal protective equipment (PPE) to decrease hazard severity.
   - Provide emergency equipment, such as eyewash stations, and emergency showers.
   - Limit exposure by shortening shifts or through job rotation.