Job Hazard Analysis Plan

Applicability

Any project or activity, including travel, with potential for employees to be exposed to hazardous conditions or procedures should be reviewed through a Job Hazard Analysis (JHA).

JHAs must be certified for personal protective equipment (PPE). According to the federal Occupational Safety and Health Administration (OSHA) regulation for PPE (29 CFR 1910.132(d)), the employer "shall verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the date(s) of the hazard assessment; and, which identifies the document as a certification of hazard assessment."

A safety plan for FFVA Mutual Policyholders

A successful safety program helps company leadership minimize workers' compensation costs and increase profitability.

This Sample Written Program has been developed to assist FFVA Mutual policyholders in:

- Maintaining employee safety and controlling losses in the workplace
- Guiding senior management in establishing safety standards
- Developing an employer integrated safety program

Please customize this accident prevention program according to your workplace. Your written accident prevention program can only be effective if it is put into practice.

Your account's dedicated safety professional is available to assist in the review and implementation of your safety program, offer technical guidance, provide training to meet compliance issues, and assist in locating relevant reference materials.

If you have questions or would like assistance implementing your organization's safety program, contact 800-346-4825 or visit ffvamutual.com/safety for more information.

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Section 1 – Tips and Considerations

Common Hazards

Hazards that may be encountered by employees while working are:

- Compressed gas
- Confined spaces
- Contaminated air
- Dangerous animals
- Disease organisms
- Electricity
- Ergonomic hazards (awkward positions, reaching, repetitious motions, etc.)
- Explosives
- Extreme or inclement weather
- Eyestrain
- Fatigue
- Flying or falling objects
- Hazardous materials (toxic, flammable, etc.)
- High stress levels
- Holes or drop-offs
- Hostile people
- Lifting and/or carrying objects
- Loud noise
- Mechanized equipment
- Medical emergencies
- Moving objects
- Moving vehicles
- Overhead hazards
- Poisonous plants and/or animals
- Poor lighting
- Pressurized containers or conduits
- Sharp objects
- Suspended loads
- Uneven or slippery walking surfaces
- Unstable or steep terrain
- Use of hand tools
- Use of ladders or scaffolding
- Water bodies
- Working below the ground

Prioritize Projects or Activities

A JHA can be conducted on many jobs in your workplace. Priority should go to the following types of jobs:

- Jobs complex enough to require written instructions
- Jobs in which one simple human error could lead to a severe accident or injury
- Jobs that are new to your operation or that have undergone changes in processes and procedures
- Jobs with the highest injury or illness rates
- Jobs with the potential to cause severe or disabling injuries or illness, even if there is no history of previous accidents

Ensure the JHA Meets Federal or State Standards

When conducting your own job safety analysis, be sure to consult the OSHA or corresponding state standards for your industry. Compliance with these standards is mandatory, and by incorporating their requirements in your JHA, you can be sure that your health and safety program meets federal standards.

JHA Assistance

If your employees are involved in many different or complex processes, you may need professional help conducting your JHAs. Sources of free help include your insurance company and the local fire department. OSHA and corresponding state agencies offer free assistance through their regional and area offices and consultation services; these government services are available to small employers (with fewer than 250 employees at a fixed site and no more than 500 corporate-wide). You can also hire private safety and health consultants to conduct JHAs for you.

Hazard Control Measures

Information obtained from a JHA is useless unless hazard control measures recommended in the analysis are incorporated into the tasks. Managers should recognize that not all hazard controls are equal. Some are more effective than others at reducing the risk.

The order of precedence and effectiveness of hazard control is as follows:

1. Engineering controls
2. Administrative controls
3. PPE

Engineering controls include the following:

- Elimination/minimization of the hazard—designing the facility, equipment, or process to remove the hazard, or substituting processes, equipment, materials, or other factors to lessen the hazard
- Enclosure of the hazard using enclosed cabs, enclosures for noisy equipment, or other means
- Isolation of the hazard with interlocks, machine guards, blast shields, welding curtains, or other means
- Removal or redirection of the hazard, such as with local and exhaust ventilation

Administrative controls include the following:

- Alarms, signs, and warnings
- Buddy system
- Exposure time limitations (used most commonly to control temperature extremes and ergonomic hazards)

- Monitoring the use of highly hazardous materials
- Training
- Written operating procedures, work permits, and safe work practices

PPE—such as respirators, hearing protection, protective clothing, footwear, safety glasses, and hardhats—is acceptable as a control method in the following circumstances:

- During emergencies when engineering controls may not be feasible
- When engineering controls are not feasible or do not totally eliminate the hazard
- When safe work practices do not provide sufficient additional protection
- While engineering controls are being developed

Use of one hazard control method over another higher in the control precedence may be appropriate for providing interim protection until the hazard is abated permanently. In reality, if the hazard cannot be eliminated entirely, the adopted control measures will likely be a combination of all three items instituted simultaneously.

Review and Incorporate State Regulatory Requirements

This plan is based on federal requirements and/or best practices. Some states have laws and regulations that are stricter than federal requirements and may impact how you customize this plan. Click on the link below to view state requirements on this topic. After reviewing the specific information for your state(s), you can edit the plan accordingly.

Section 2 – Job Hazard Analysis Plan Sample

Job Hazard Analysis Plan

Plan last updated: **[date]**

Authority and Scope
Authority: This Job Hazard Analysis (JHA) Plan is authorized by **[name]**.
[If JHA is focused on personal protective equipment:]
Regulation: 29 CFR 1910.132(d) **[replace with the state regulation if applicable]** requires that **[name]** assess the workplace to determine if the hazards that require the use of personal protective equipment (PPE), such as head, eye, face, hand, or foot protection, are present or are likely to be present. If hazards or the likelihood of hazards are found, **[name]** will select appropriate PPE and require that affected employees use properly fitted PPE suitable for protection from these hazards. In addition, **[name]** will certify, in writing, that a workplace hazard assessment for PPE has been performed that identifies the workplace evaluated, the person certifying the evaluation, and the dates of the evaluation.

Scope: This JHA applies to all **[company name]** personnel who may encounter health and safety hazards while performing their assigned work duties.

Policy Statement
[Name] is committed to providing for the occupational safety and health of personnel, preventing accidental loss of material resources (e.g., property damage), and avoiding interruptions to essential services resulting from accident and other incidents. An effective occupational safety and health program must include procedures to evaluate job hazards and to eliminate or control the related risks to employees or property. Although identification of possible property damage losses is important, the primary objective of a JHA is to identify the risk of injury associated with systems or equipment, a task or series of tasks, and to recommend solutions to reduce the risk to a standard or acceptable level.

A JHA facilitates the discovery and evaluation of hazards that exist in the workplace and the selection of control measures to reduce or eliminate the hazard. Once the hazards have been identified, an evaluation by technically qualified safety personnel will determine the priority for the establishment of appropriate control measures. Based on the potential severity and risk of injury or property damage, hazards will be promptly eliminated or controlled.

Plan Administration

Function	Name/Department	Contact Information
Plan Administrator	**[name]**	Work phone: Cell phone:
Job Hazard Analyst		Work phone: Cell phone:
Supervisor		Work phone: Cell phone:

Plan Administrator. The plan administrator will ensure that JHAs are conducted for all workplace activities, tasks, and projects in a timely manner, and will be responsible for maintaining certifications and other documentation related to JHAs.

Job Hazard Analyst. The responsibility for conducting JHAs rests with technically qualified safety personnel. Such personnel may be managers, supervisors, or consultants/contractors.

Supervisor. Supervisors and other applicable personnel will participate in JHAs.

Completed JHAs will be reviewed by **[name(s) and/or job title(s)]**.

Plan Review and Update

JHAs will be reviewed **[frequency]** and updated as needed to reflect changes in the work and/or worksite conditions, and when injury or illness incidents warrant a review. All employees affected by any changes in engineering controls or work procedures after a JHA review will be trained in the new job methods, procedures, or protective measures adopted.

Definitions

Activity—a named process, procedure, function, or task, or grouping of tasks, that occur(s) over time and has recognizable results.

Hazard—potential for harm to people or property.

Job hazard analysis (JHA)—a technique that focuses on the relationship between the worker, the worker's activities or job task(s), the tools, and the work environment to identify hazards before accidents, injuries, or illnesses occur.

JHA Plan Overview

Activities Subject to JHA

A JHA will be conducted for each work project and activity. Part of the purpose of the JHA process is to determine whether hazards exist, through careful and regular examination of the location(s) and procedures involved in the project. The assumption that some work does not have potential for hazards to exist has led to unnecessary and costly injuries, such as cumulative trauma disorders, back injuries, and electrical shock. If there is a project or activity that truly has no potential for employees to be exposed to hazards, the JHA would demonstrate that.

Activity Selection

Personnel authorized by **[name]** to perform JHAs (i.e., JHA Analysts) will select the job(s), tasks, operations, or processes to be analyzed by reviewing:

- Injury and illness data
- Near-miss reports
- New or modified work tasks, activities, or projects
- Employee safety process comments, surveys, and reports
- Regulatory requirements

Initial JHAs will be scheduled by priority starting with those that have the highest injury and illness rates as recorded in OSHA Form 300, Injury and Illness Log. Where accident or near-miss data are lacking, a review of the nature of the job and the equipment and/or materials being used will be conducted to help determine which jobs will receive a JHA. Employee participation in the JHA selection and implementation process will be encouraged and solicited. The analysis of methods to control hazards will incorporate regulatory requirements for each type of activity.

Employees' input in the JHA process will be collected and reviewed. See Attachment **[number]**, *Hazard Assessment Process—Employee Survey*.

All job hazard Analysts will consider the potential for all types of physical, chemical, and atmospheric exposures, and the likelihood of accidents in their operations when determining the priorities.

JHA Uses

The primary use of a JHA is to identify and resolve safety issues before beginning a work activity or project. JHAs will also support other functions related to workplace safety and health, including:

- Cost projections
- Employee orientation
- Training needs determination
- Performance evaluation
- Accident investigation

JHA Process

A JHA is conducted in two basic steps:

1. Identify each potential hazard that might exist because of the characteristics of the worksite, the procedures, and/or tasks that are involved in that project.
2. Determine what action(s) must be taken to prevent exposure of employees to each hazard.

During each of these steps, the person(s) conducting the analysis will gather information from such resources as:

- Personal experience
- Jobsite observations
- Input from employees who will be working in the area or on the project affected by the JHA
- People who have done similar work on other projects
- Occupational safety and health specialists
- Material safety data sheets (MSDSs)
- Equipment manuals
- Equipment manufacturers' technical representatives
- Health and safety handbooks
- Existing health and safety plans and handbooks

NOTE: See Attachment **[number]**, OSHA Publication 3071, *Job Hazard Analysis*, for useful examples of the level of detail needed in a JHA. The publication also contains descriptions of common workplace hazards.

JHA Procedures

Following are the specific JHA procedures, listed in the order that they will be performed. See Attachment **[number]**, *Example Job Hazard Analysis Form*, for guidance in conducting a simple JHA.

1. **List specific activities.** Make a list of specific activities that will be performed by employees at a particular location (work area or jobsite), for the use of machines and equipment, or for a specific process or project. Where projects are very broad and involve diverse activities, conduct a JHA for each activity.
    a. When a project or activity involves the same tasks and the same conditions over a wide range of work areas, a single job hazard analysis will suffice. For a simple activity, use Attachment **[number]**, *Job Hazard Analysis Worksheet (simple)*.
    b. For an activity with complicated tasks that require multiple steps, use Attachment **[number]**, *Job Hazard Analysis Worksheet (detailed)*.
    c. When an activity involves unique site characteristics or unusual equipment at a particular site, conduct a JHA that focuses on the site. For evaluating tasks with multiple potential hazards (physical, chemical, biological) at a specific site, use Attachment **[number]**, *Site-Specific Job Hazard Analysis* worksheet.
    d. For activities that involve specific chemicals, use Attachment **[number]**, *Chemical Job Hazard Analysis Worksheet.*
    e. For activities that involve respirators, use Attachment **[number]**, *Respiratory Hazard Assessment Certificate*.

f. For activities that may require other PPE, use Attachment **[number]**, *Personal Protective Equipment Hazard Assessment Certificate.*

NOTE: The worksheets or certificates may be modified to the needs of the organization, provided the minimum information shown on the form is retained. Review the worksheet or certificate to ensure it is thorough, accurate, and that the task or activity is broken down into a sufficient number of steps.

2. **List each potential hazard.** Examine the hazards or potential hazards associated with each task or activity. Continue to use the worksheet or certificate used to list the specific tasks.
    a. Examine the location where the activities are or will be performed to determine if there are any apparent hazards, such as poor lighting, live electrical contacts, improperly stored materials or waste, adjacent operations that may affect the safe operation of the job under review, etc.
    b. Interview appropriate personnel who are familiar with the job and/or equipment. The intent of the interviews is to determine the orderly sequence of job tasks and any perceived hazards.
    c. Observe, where possible, employees performing the actual job tasks. Thoroughly document the findings on the JHA worksheet. Refer to OSHA Publication 3071 for examples.
    d. Review available literature associated with the particular activity for additional hazards, including MSDSs, equipment manuals, safety checklists, and existing health and safety plans and manuals.

3. **List corrective controls.** Once the hazards are identified, select the corrective controls that will be implemented to ensure employee safety and health, and list them on the appropriate worksheet or certificate. Corrective controls will be considered in the following order of precedence:
    a. Elimination—removing the hazard or hazardous work practice from the workplace. This is the most effective control measure.
    b. Substitution—substituting or replacing a hazard or hazardous work practice with a less hazardous one. For example, substitution of a less hazardous or toxic solvent for a highly flammable or carcinogenic solvent.
    c. Engineering control—if the hazard cannot be eliminated or substituted, an engineering control is the next preferred measure. This may include modifications to tools or equipment, such as providing guards to machinery or equipment, or providing local exhaust or general ventilation to control emissions of toxic or hazardous gases, vapors, or particulates.
    d. Isolation—isolating or separating the hazard or hazardous work practice from people not involved in the work or the general work areas. This can be done by marking off hazardous areas or by installing screens or barriers.
    e. Administrative control—introducing work practices that reduce the exposure to workers. Some examples include limiting the amount of time a person is exposed to a particular hazard, demarcating exclusion areas and establishing physical access controls to prevent workers from entering hazardous areas, and ensuring proper training of employees.
    f. Personal protective equipment—consider the use of PPE when other control measures are not feasible or as an interim control until one of the other described controls can be implemented.

4. **Certify the JHA.** Ensure that the JHA is reviewed and signed by an authorized job hazard analyst and shared with and signed by all of the employees who will be doing the work.

5. **Review and modify JHA as necessary.** Repeat the JHA process, as necessary, by evaluating new equipment or work processes, reviewing accident records, and periodically reevaluating the suitability of previously selected PPE and/or engineering controls.

Implementation of Corrective Actions

Once the JHA has been conducted for each project or activity, corrective actions recommended in the JHA that are approved by management will be implemented. Supervisors will inform employees of the hazards and corrective actions, and conduct employee training before the commencement of related tasks.

JHA Training

Before any designated job hazard analyst, manager, supervisor, or other employee conducts or participates in a JHA, he or she will receive training in the JHA process. JHAs will be conducted by technically qualified safety personnel who have the experience and training to identify hazards in the workplace.

Documentation and Recordkeeping

All JHAs will be documented on the *Job Hazard Analysis Worksheet* or related assessment forms. See Attachment **[number]** for a copy of the worksheet.

JHA worksheets and certificates will be maintained by **[name]** at **[location]** for **[duration]**.

Contractors

A JHA conducted for **[name]** employees does not necessarily address the work of a contractor or the contractor's employees; however, the JHA for a project or activity that involves **[company name]** employees working in an area affected by contract activities will address any hazards that such activities present for the **[company name]** employees.

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Section 3 – Guarding vs. Safeguarding

For the purposes of this program, guarding is defined as the use of a device that prevents physical access to the exposure area of the machine, as described in Section 4. Examples include expanded mesh, adjustable tubular barriers, Plexiglas or other barriers.

For the purposes of this program, safeguarding is defined as the use of an electronic or other device that does not prevent physical access to the exposure area, but when properly used by the operator will keep the operator from accessing the exposure area of the machine as described in Section IV. Examples include two-hand controls, electronic presence sensors, pull-back devices and restraint devices.

Where guarding can be implemented, this is the preferred method to use over safeguarding.

Section 4 – Program

This program focuses on general requirements. Where needed, machine-specific requirements will be developed and implemented.

Machinery used in this facility will be safe guarded so employees are not exposed to:

- Flying Chips
- In-Running Nip Points
- Points of Operation
- Rotating Parts
- Sparks

Guards and Safe Guards will be secured to the machinery wherever possible. Where the safe guard cannot be secured to the machine, or where having the safe guard not secured to the machine enhances operator performance, the safe guard will be secured elsewhere as long as Employee safety is not compromised.

Guards and Safe Guards that must be removed for maintenance or machine setup will be attached to an interlocking device that will prevent the machine from operating when the safe guard is removed.

Machinery that requires a bypass of the interlocking device in order to facilitate service setup will be identified in **Appendix A** of this program. Only qualified employees who have been trained on properly and safely performing the service and setup operations will be permitted to perform this function.

Interlocking devices will be tested periodically, the frequency of which depends on the application of the interlocking device. Where the interlocking device is attached to an opening gate or other device that allows employees access to the machine as part of the routine tasks, the interlock will be tested at the beginning of each shift.

Where the interlocking device is attached to a fixed Guard not intended to be removed except for service and maintenance, the interlocking device will be tested whenever the fixed Guard is removed for service or maintenance, and will be tested only by the employee qualified to perform the service or maintenance.

Hands-in-die feeding is the least preferred method for machine operating. Where employees must place parts into the machines using their hands, they will use a hand-held tool to place the part. These tools can include magnetic tools, suction tools or tongs. We will as much as possible, eliminate hands-in-die feeding.

Section 5 – Guarding

Guarding is the preferred method to protect employees from the hazards outlined in Section IV. Guarding is not electronic and when properly installed is not subject to periodic testing to ensure it is functioning properly.

Where used, Guarding will be installed to prevent access to the exposure area of the machine. It must be installed so employees cannot reach over, under, through or around the Guard at any time during operation of the machine.

Except for Plexiglas and other clear guarding devices, Guarding will be painted a bright color to alert the operator of the presence of the guard. Where employees must look through Guarding into the point of operation, it will be painted a flat black to eliminate the contrast the can cause eye strain. The frame around this flat black area will remain brightly colored.

Guarding is required to be attached to the machine via an interlocking device as described in Section 4.

Section 6 – Safeguarding

Safeguarding does not keep the employees hands out of the machine, but when properly installed and adjusted, prevents their hands from being in the machine during the functioning of the machine. Safeguarding is used only where Guarding cannot be used or where Guarding prohibits production on the machine.

Safe Guards will be properly installed in accordance with manufacturer's instructions. Installation of Safe Guards must prohibit accidental operation of the machine if the Safe Guard has been tripped or activated, and must have a reset function before the machine can operate.

Safe Guards will be properly setup and adjusted. Except as indicated in this section for restraint and pullback devices, Safe Guards will be tested at the beginning of each shift for proper function.

If at any time the Employee becomes aware of an issue with the Safeguard that prohibits safe operation of the machine, he will report the issue to his Supervisor.

Restraint devices, when properly adjusted, restrict employees' ability to access the exposure area. Where restraint devices are used, they will be inspected before each shift, and any defective parts repaired or replaced.

Where restraint devices are used, they will be adjusted by the machine operator before the beginning of the shift and/or before initial machine operation. The proper adjustment of the restraint device will be checked during the employee's shift whenever the employee leaves the machine for any reason and before operating the machine. The proper adjustment will be documented by the employee on the log located on the machine. (See Appendix B)

Pullback devices, when properly adjusted, do not restrict employees' ability to access the exposure area. They instead pull the employees' hands from the exposure area during the cycling of the machine.

Where pullback devices are used, they will be inspected before each shift, and any defective parts repaired or replaced.

Where pullback devices are used, they will be adjusted by the machine operator before the beginning of the shift and/or before initial machine operation. The proper adjustment of the pullback device will be checked during the employee's shift whenever the employee leaves the machine for any reason. The proper adjustment of the pullback device will be checked upon return to the machine and before operating the machine. The proper adjustment will be documented by the employee on the log located on the machine. **(Appendix B)**

Section 7 – Revolving Drums, Barrels or Containers

Where possible, revolving drums, barrels or other revolving containers will be Guarded using fixed guarding.

Where the Employee must access the revolving container, a gate equipped with an interlocking device to prevent activation of the machine while accessing the container will be used.

Section 8 – Fans, Flywheels and other Rotating Components

Where exposure to fan blades, flywheels and other rotating or moving components located with seven (7) feet of a walking surface exist, Guards will be installed to prevent accidental contact.

Forms

Appendix A

Appendix B

Appendix C

Appendix A

List of Machinery that Requires Safe Guard Interlock Bypass for Service and Setup

DEPARTMENT	MACHINE	COMMENTS

Appendix B

Restraint / Pullback Device Daily Adjustment Log

LOG DATE:

EMPLOYEE	DEPT	MACHINE	TIME ADJUSTMENT CHECKED	COMMENTS

Appendix C

Pre-shift Test of Electronic Safe Guard Devices Log

LOG DATE:

EMPLOYEE / SHIFT	DEPT	MACHINE	SAFE GUARD DEVICE	COMMENTS