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Job Hazards Analysis & Pre-Start Briefings Procedure



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Job Hazards Analysis & Pre-Start Briefings Procedure

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Job Hazards Analysis & Pre-Start Briefings Procedure

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Job Hazards Analysis & Pre-Start Briefings Procedure

Table of Contents

1.0	PURPOSE	5
2.0	SCOPE	5
3.0	DEFINITIONS	5
4.0	REFERENCES	5
5.0	RESPONSIBILITIES	6
5.1	Facility/Contract Manager	6
5.2	Supervisor	6
5.3	HSE Representative	6
5.4	Personnel	6
6.0	GENERAL	6
6.1	General Hazard Analysis.....	6
6.2	Job Hazard Analysis.....	7
6.3	Planning Team	7
6.4	Safety Hierarchy.....	7
6.4.1	Hierarchy of Control	7
6.4.2	Hierarchy of Potential Impact	7
6.5	Categories of Work.....	8
6.5.1	Routine Work.....	8
6.5.2	Craft Specific	8
6.5.3	Job Hazard Analysis.....	8
6.6	Hazards and Controls Considerations	9
6.7	Performing a JHA	10
6.8	Pre-Start Briefings	10
7.0	ATTACHMENTS	10
	Attachment 1 - EOM-KSS-TP-000030 - Job Hazard Analysis Template	11
	Attachment 2 - Job Hazard Analysis Example	12



Job Hazards Analysis & Pre-Start Briefings Procedure

1.0 PURPOSE

A safety program is a necessary element in creating a healthy safety culture and environment. This procedure defines the standard work processes for the performance of both Job Hazard Analyses and the Pre-start Briefings within Entities, Facilities, and other contracted areas conducting operations and maintenance activities.

2.0 SCOPE

The scope of this procedure is to provide means to the user to create a custom procedure outlining and detailing the requirements and responsibilities for facilities and contracts in the performance of Job Hazard Analyses and Pre-start Briefings. This procedure should be used as a close guideline in creation of a custom program. This procedure applies throughout the Kingdom of Saudi Arabia to Operations and Maintenance functions and activities on, in, and around government owned facilities and projects.

3.0 DEFINITIONS

Definitions	Description
HSE	Health, Safety and Environment
JHA	Job Hazard Analysis
PPE	Personal Protective Equipment
What if	In the analysis of hazards, "What if" is a consideration for what is possible, but not likely.

4.0 REFERENCES

- EOM-KS0-PL-000001 - Orientation and Training Plan
- EOM-KSS-PR-000001 - General Safe Working Requirement Procedure
- EOM-KSS-PR-000002 - Housekeeping Procedure
- EOM-KSS-PR-000003 - Personal Protective Equipment Procedure
- EOM-KSS-PR-000004 - Fire Prevention and Protection Procedure
- EOM-KSS-PR-000005 - Fall Protection Procedure
- EOM-KSS-PR-000006 - Barricades and Signs Procedure
- EOM-KSS-PR-000007 - Confined Space Entry Procedure
- EOM-KSS-PR-000008 - Elevated Work Platform Procedure
- EOM-KSS-PR-000009 - Compressed Gas Cylinder Procedure
- EOM-KSS-PR-000010 - Night Work Procedure
- EOM-KSS-PR-000011 - Portable Ladders Inspection and Control Procedure
- EOM-KSS-PR-000013 - Work Over or Near Water Procedure
- EOM-KSS-PR-000014 - Emergency Preparedness Procedure
- EOM-KSS-PR-000015 - Suspended Personnel Platform Procedure
- EOM-KSS-PR-000016 - Hazardous Work Permit Procedure
- EOM-KSS-PR-000017 - Powered Industrial Trucks Procedure
- EOM-KSS-PR-000018 - Crane and Lifting Operation Procedure
- EOM-KSS-PR-000019 - Welding Operation Procedure
- EOM-KSS-PR-000020 - Electrical Safety Procedure
- EOM-KSS-PR-000021 - Vehicle Safety Management System (VSMS) Procedure
- EOM-KSS-PR-000022 - Hazard Communication Procedure
- EOM-KSS-PR-000023 - Utility Clearance Procedure
- EOM-KSS-PR-000024 - Manual Material Handling Procedure
- EOM-KSS-PR-000025 - Floor and Wall Openings Procedure
- EOM-KSS-PR-000026 - Roofing Work Procedure
- EOM-KSS-PR-000027 - Safety Watches Procedure
- EOM-KSS-PR-000028 - Lockout/Tag out Procedure
- EOM-KSS-PR-000029 - Excavation and Trenching Procedure
- EOM-KSS-PR-000030 - Scaffolding Control Management Procedure
- EOM-KSS-PR-000031 - Road Works Procedure



Job Hazards Analysis & Pre-Start Briefings Procedure

- EOM-KSS-PR-000032 - Powder Actuated Tools Procedure-
- EOM-KSH-PR-000004 - Respiratory Protective Equipment Procedure
- EOM-KSH-PR-000007 - Control of Hazardous Materials Procedure
- EOM-KSH-PR-000008 - Heat and Cold Stress Management Procedure
- EOM-KSH-PR-000009 - Asbestos Management Procedure

5.0 RESPONSIBILITIES

5.1 Facility/Contract Manager

- Overall responsibility for this procedure and for supporting this process and ensuring personnel actively participate.
- Provides the personnel, facilities, and other resources with the training, information and awareness required to enable employees to effectively comply with this procedure.
- Communicates with facility/contract HSE concerns and requirements for general safe work practices.

5.2 Supervisor

- Provides the training material and resource to implement the requirements of this procedure.
- Communicates with personnel and provides leadership regarding HSE requirements.

5.3 HSE Representative

- Auditing this procedure.
- HSE Rep. shall be a mandated member of planning Team for critical activities.
- Confirming this procedure complies with any mandatory, statutory requirements and regulations applicable to the Facility.
- Provides HSE advice to management, where required, on implementing the requirements of this procedure.

5.4 Personnel

- Knowing and understanding the role they perform under this procedure.
- Requesting additional information and further clarification before starting any work if personnel receive assignments they do not understand.

6.0 GENERAL

When identifying hazards of the scope of work and the work environment, include potential undesirable events for the protection of workers, the public and the environment. For a hazard identification process, always consider the credible-case scenario using a, "What if" mentality. The "What if" process is used during the performance of hazard analyses and safety talks to consider possible scenarios where results or accidents are possible. See Figure 1 for more details.

6.1 General Hazard Analysis

A General Hazard Analysis is the document identification, analysis, and specification of controls for those hazards routinely encountered in a wide variety of work activities and work environments. General hazards and controls are limited to those mitigated by Facility's/Contract's General Safe Work Requirement Procedure (EOM-KSS-PR-000001 - A&FM General Safe Work Requirement Procedure). Upon hire, personnel are trained per EOM-KS0-PL-000001 - A&FM HSSE Orientation and Training Plan to the general hazards and controls utilized within the facility or on the contract they are working. Once trained, workers are expected to be able to identify general safety hazards and apply the necessary controls to protect themselves. Individuals have the responsibility to remain aware of their surroundings, and of changing conditions throughout performance of their work. Examples of general hazards



Job Hazards Analysis & Pre-Start Briefings Procedure

awareness and controls include barricades and signage, and the wearing of eye protection and hearing protection.

6.2 Job Hazard Analysis

The aim of a Job Hazard Analysis (JHA) is to prevent accidents. The method is the systematic risk assessing examination of activity-level work activities to aid in the identification and assessment of hazards, and to evaluate, select, and implement controls for those hazards. It involves breaking the work activity into basic steps and analyzing each step for potential hazards. Aside from a Job Safety Analysis, the JHA is the most basic tool for analyzing hazards. The JHA process however includes an element of an evaluation of risk at each step.

The Planning Team may use walkdowns, tabletop discussions (i.e., meetings), and/or observations to analyze the activity through each step to address hazards. Using executor who will perform the activity, or have experience with the task, will allow for a more analysis.

JHAs should not cover nor specify controls for general hazards, as these are addressed through the general worker safety orientation. The practice of including general hazards and controls in the JHA dilutes the significance of specific activity hazards. However, all hazard controls should be considered if one control may exacerbate another control (e.g., lining the floor with plastic sheeting increases the likelihood of slips, trips, and falls).

6.3 Planning Team

Work planning is required to ensure that all hazards have been identified and analyzed for adequate controls. This is generally performed by a Planning Team. As a minimum, a Planning Team should be comprised of a Supervisor, worker, and a representative of the HSE department. The worker represented on the Planning Team should be a craftsman of the trade to be performed (i.e., if the job to be performed is to be completed by an electrician, then an electrician should be represented on the planning team). A Planning Team may be larger for more complex activities, but should be at the discretion of the Supervisor. For instance, the Planning Team may involve multiple craft disciplines, specialty technicians, factory representatives, auditors, Entity personnel, etc.

6.4 Safety Hierarchy

To effectively assess, analyze, and mitigate hazards, a hierarchy of safety elements is established. These hierarchies are meant to guide the Planning Teams' thought processes during the Job Hazard Analysis process.

6.4.1 Hierarchy of Control

- Elimination of the Hazard(s) is always the first prescribed means.
- Engineering Controls are the next preferred method of controlling the hazard(s).
- Administrative Controls to mitigate a hazard, such as use of permits or controlled exposure limits.
- Personal Protective Equipment (PPE).

6.4.2 Hierarchy of Potential Impact

- Personnel performing the activity (including workers around and adjacent to the activity)
- Equipment involved in the work
- Public or adjacent workers
- Environmental



6.5 Categories of Work

6.5.1 Routine Work

Work in facilities/contracts that is non-complex, low-hazard, and/or routinely performed. Examples of work that falls under this category is janitorial of offices and restroom facilities and administrative/office work. As controls for routine hazards are specified in the general safety orientation, work falling into this category does not require the performance of a JHA.

6.5.2 Craft Specific

Work in facilities/contracts that is routinely performed by craft specific skills. This includes work such as, electricians performing electrical work, HVAC technicians performing work on HVAC units/systems, etc. Work falling into this category does not require the performance of a JHA, as skilled craftsman are trained and experienced within their individual trades to control common hazards.

6.5.3 Job Hazard Analysis

This is work in facilities/contracts which is complex, high-hazard, and/or non-routine (e.g., quarterly, semi-annual, annually). This may include cleaning of high-rise windows, non-routine work in HV switchgear, working with asbestos or highly-toxic hazardous chemicals, etc.

NOTE: The governing Entity and/or Facility/Contract Management must request a Job Hazard Analysis be performed for any work.



Job Hazards Analysis & Pre-Start Briefings Procedure

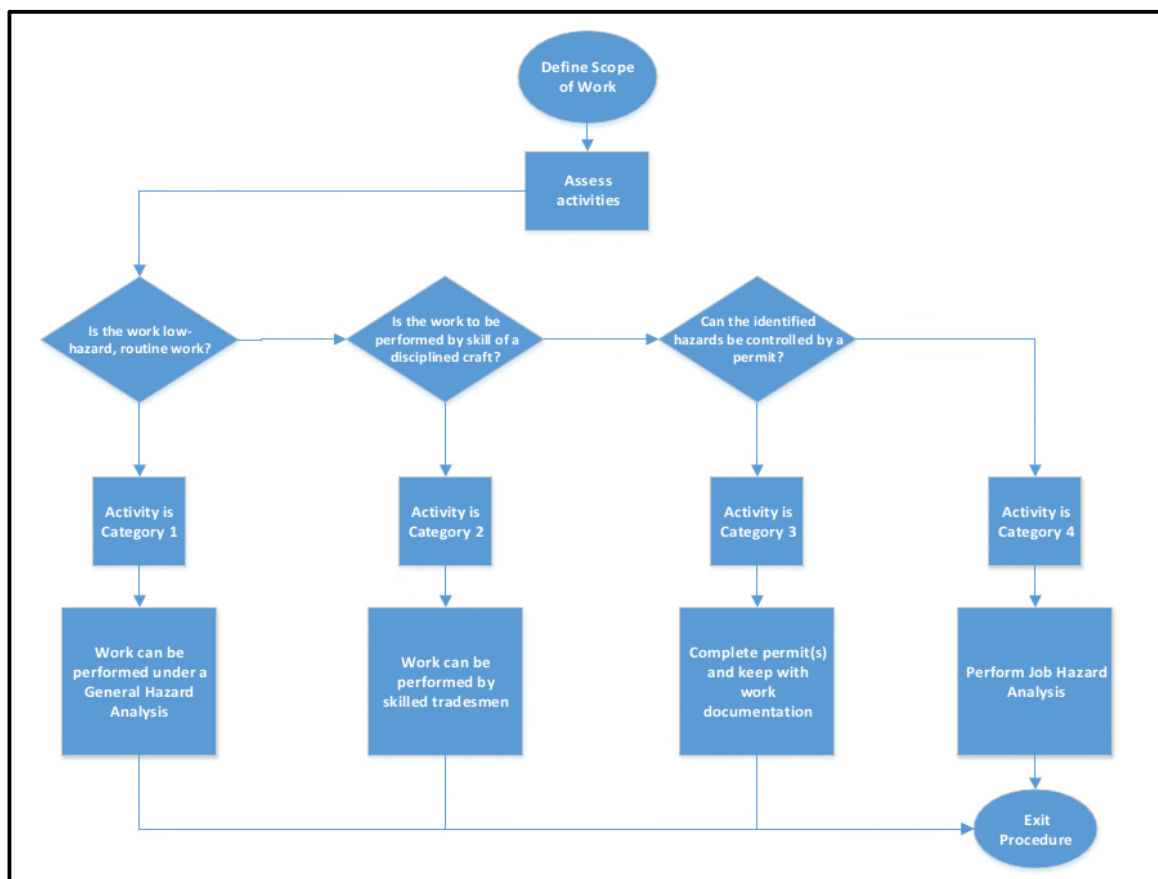


Figure 1: JHA Decision Flow Chart

6.6 Hazards and Controls Considerations

When performing a JHA, and evaluating tasks and activities, the following hazards and controls is a collection of some elements of the work which shall be followed:

- Orientation and Training Plan
- General Safe Working Requirement Procedure
- Housekeeping Procedure
- Personal Protective Equipment Procedure
- Fire Prevention and Protection Procedure
- Fall Protection Procedure
- Barricades and Signs Procedure
- Confined Space Entry Procedure
- Elevated Work Platform Procedure
- Compressed Gas Cylinder Procedure
- Night Work Procedure
- Portable Ladders Inspection and Control Procedure
- Work Over or Near Water Procedure
- Emergency Preparedness Procedure
- Suspended Personnel Platform Procedure
- Hazardous Work Permit Procedure
- Powered Industrial Trucks Procedure
- Crane and Lifting Operation Procedure
- Welding Operation Procedure
- Electrical Safety Procedure
- Vehicle Safety Management System (VSMS) Procedure
- Hazard Communication Procedure



Job Hazards Analysis & Pre-Start Briefings Procedure

- Utility Clearance Procedure
- Manual Material Handling Procedure
- Floor and Wall Openings Procedure
- Roofing Work Procedure
- Safety Watches Procedure
- Lockout/Tag out Procedure
- Excavation and Trenching Procedure
- Scaffolding Control Management Procedure
- Road Works Procedure
- Powder Actuated Tools Procedure-
- Respiratory Protective Equipment Procedure
- Control of Hazardous Materials Procedure
- Heat and Cold Stress Management Procedure
- Asbestos Management Procedure

6.7 Performing JHA

When conducting the JHA, the Planning Team should document the process when evaluating a task's hazards and controls. The following represents some of the information which may be reviewed or considered while completing a JHA:

- Review known maintenance history, Lessons Learned and/or other feedback;
- Evaluate any known environmental factors (e.g., clean room, radiological, chemical, biological) and any physical processes (e.g., mechanical, electrical interferences);
- Review and evaluate manufacturer/vendor provided operating instructions for hazards, warnings, operating limitations or controls;
- Review drawings, notes, video, and photographs;
- Discuss with employees who are familiar with the asset/work/activity;
- Discuss the potential consequences of skipping or improperly performing each step;
- Consider human performance perspective, training, and competency of craft, to assist in identifying error-likely situations, and
- Define specific controls to mitigate or eliminate each identified hazard.

NOTE: A good practice is to walkdown the specific area and discuss the tasks with the Planning Team in an open forum. The Planning Team should discuss each activity step, and in real-time envision the process and expected results. See **Attachment 1 - EOM-KSS-TP-0000X1 - Job Hazard Analysis Template** and **Attachment 1 - EOM-KSS-TP-0000X2 - Job Hazard Analysis Example**.

6.8 Pre-Start Briefings

A Pre-start, or Pre-job, Briefing is a safety talk with the workers at the activity location just prior to starting the activity. Hazard identification at this step should address the hazards associated with any hazards which may have arose since the Job Hazard Analysis was performed, such as other work in the immediate area being performed, or environmental changes (e.g., weather, access).

This process is intended to allow workers, leads, and supervisors to do a last review of any permits or documents required for the activity, and ensure the conditions of the planned task has not changed. This process may be formal or informal (i.e., documented or undocumented) depending on the activity to be performed, complexity of the tasks, size of the work crew, etc.

7.0 ATTACHMENTS

1. EOM-KSS-TP-000030- Job Hazard Analysis Template
2. Job Hazard Analysis Example



Job Hazards Analysis & Pre-Start Briefings Procedure

Attachment 1 - EOM-KSS-TP-000030- Job Hazard Analysis Template

Job Hazard Analysis					
Facility/Contract #/ID:				Date JHA Performed:	
Task/Activity/Job Title:				Asset/Work Document #:	
Approval:	Facility/contractor Supervisor	name	Executor	name	Craft Attendance: in
		Sign		Sign	
Task Step:		Potential Hazard:		Control Measure(s):	
NOTES/OTHER:					



Job Hazards Analysis & Pre-Start Briefings Procedure

Attachment 2 - Job Hazard Analysis Example

Job Hazard Analysis						
Facility/Contract #/ID:		KAFD – Building 177a		Date JHA Performed:		February 1, 2020
Task/Activity/Job Title:		Roof HVAC Repair		Asset/Work Document #:		KFD177aYork22tn
Approvals:	HSE Rep	name	Supervisor	name	Craft in Attendance:	
		Sign		Sign		
Task Step:		Hazard:		Control(s):		
Mobilize tools and materials to roof		Covered by GHA		N/A		
Removing HVAC access panel on leading edge side of unit Replace control circuit board fuse and rheostat and test Replacing HVAC access panel on leading edge side of unit		Fall from roof Dropped tools/materials		Fall protection system Fall harnesses and lanyards Approved anchor points or tie-off point Ensure tools are tethered with lanyards		
Check unit refrigerant charge, and charge if low gauge indication - Unit uses R-134a - Gauge and fill nipple is NOT on leading edge side of unit		Covered by GHA		N/A		
Demobilize tools and materials from roof		Covered by GHA		N/A		
NOTES/OTHER:						
During removal and installation of HVAC panel, supervisor should consider pedestrian/vehicle traffic below.						