



Job Hazard Analysis

Authorisation					
Site Supervisor / Nominee:		Signature:		Date:	
JHA Team Leader:		Signature:		Date:	
HAZARD / ENERGY	GUIDELINES FOR ASSESSING IF A HAZARD IS PRESENT		RECOMMENDED CONTROL MEASURE - THE BETTER CONTROL IS THE FIRST CONTROL MEASURE LISTED IN EACH SECTION BELOW.		
NOISE Acoustic Mechanical Vibrations Energy	Would you have to shout to be heard less than a metre away from the person to whom you're speaking? YES <input type="checkbox"/> NO <input type="checkbox"/>		<ul style="list-style-type: none"> - Switch off the source of the noise where possible. - Move work to a quieter area. - Erecting a sound-absorbing barrier between employee and source. - Work in rotating teams to reduce the employees' exposure time. - Specify the particular type of hearing protection required (plugs, muffs or both). 		
HEAT Thermal Energy	Is there a risk of burns / scalds, cold burns, heat exhaustion, sunburn? YES <input type="checkbox"/> NO <input type="checkbox"/>		<ul style="list-style-type: none"> - Install a barrier between heat source and employee. - Work in rotating teams to minimise long exposure to heat or cold. - Supply personal cooling devices. - Ensure adequate cool drinking water is available. - Wear additional clothing, gloves, boots. 		
LIGHTING	Is the lighting good enough to see where you are and what you are doing clearly? YES <input type="checkbox"/> NO <input type="checkbox"/>		<ul style="list-style-type: none"> - Install additional and / or improve the permanent lighting (low voltage in confined spaces). - Move the current lighting to achieve best effect (out of shadows). - Move the job being undertaken to well-lit area. - Install temporary lighting. 		
AIRBORNE SUBSTANCES Chemical Energy	Are there any airborne contaminants released or generated when performing this task? YES <input type="checkbox"/> NO <input type="checkbox"/> If so, what sort are they? (e.g. welding fumes, dusts, etc.)		<ul style="list-style-type: none"> - Reduce the dust or fume by wetting down. - Enclose the source of the dust. - Install permanent or temporary extraction ventilation to remove dust into drum for disposal. - Clean up all spills immediately, and vacuum if dry. - Provide and instruct in use and maintenance of respiratory protection. 		
CHEMICALS Chemical Energy	Does the task involve the handling or the use of chemicals? YES <input type="checkbox"/> NO <input type="checkbox"/> If yes, please list the types of chemicals (e.g. sodium chlorate, diesel, etc.)		<ul style="list-style-type: none"> - Source a less hazardous chemical. - Install a temporary or permanent barrier between employee and chemical. - Reduce the volume of chemical stored or used. - Minimise the time the employee is exposed to the chemical. - Specify the need for specific Permits and / or gas testing (e.g. confined spaces). - Refer to Safety Data Sheet (SDS), and always specify the use of the appropriate personal protective equipment (PPE). 		



Job Hazard Analysis

<p>GASES Chemical Energy</p>	<p>Are there any gasses released or generated when performing this task? YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>If so, what sort are they? (e.g. smells, SO₂, etc.)</p>	<ul style="list-style-type: none"> - Dilute the gas by doing the job in open air or well-ventilated place. - Contain the gas by installing a permanent or temporary enclosure around the source. - Remove the gas by extraction ventilation or vacuum. - Instruct employees in the use and maintenance of appropriate personal protective equipment (PPE).
<p>PLANT, MACHINES AND EQUIPMENT Kinetic or Potential Energy</p>	<p>Are plant, conveyors and / or machine moving parts exposed which can be guarded? YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Are additional emergency stop mechanisms required to prevent risk of injury? YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Are there any potential electrical, mechanical or pneumatic hazards? YES <input type="checkbox"/> NO <input type="checkbox"/></p>	<ul style="list-style-type: none"> - Specify the correct machine or piece of equipment to do the job. - Identify all the protective guards, grating, mesh which must be in place. - Ensure the correct signs are in place (e.g. this machine starts automatically). - Specify the signs and / or barricades required (e.g. bunting, no entry, authorised personnel only, restricted access, etc.). - Specify the type Permit required. - Specify the isolation required; electrical, high voltage, mechanical and pneumatic (air) or other energy sources.
<p>Hand Tools Biomechanical Energy</p>	<p>Will the task require the use of hand tools? YES <input type="checkbox"/> NO <input type="checkbox"/></p>	<ul style="list-style-type: none"> - Specify the testing requirements for all electric hand tools and extension leads. - Specify any specific tools not to be used for the job. - Specify any personal protective equipment (PPE) related to using tools.



Job Hazard Analysis

**HAZARDOUS MANUAL
TASKS
Biomechanical Energy**

Will you perform any of the following actions repeatedly?

Bend down

YES NO

Reach above your head

YES NO

Reach forward

YES NO

Twist (at waist line)

YES NO

Maintain an awkward posture

YES NO

Are actions repeated frequently?

YES NO

Do you manually move loads over long distances?

YES NO

Does the task involve pushing, pulling or carrying loads?

YES NO

- Fix the item as part of a modular change-out rather than in situ.
- Build or erect scaffolding to gain better access.
- Specify need for scissor lift, cherry picker (or personnel cage) to gain better access.
- Ensure that all employees are trained in correct lifting techniques.
- Ensure that there are adequate numbers of employees to do the job.
- Work in rotating teams to share the need to frequently lift or carry loads.
- Limit the number of times the load has to be moved by changing the drop-off or original storage / destination point.
- Use a mechanical lifting device where possible (e.g. crane, forklift, trolley).
- Reduce the size or weight of the load to be carried or lifted (e.g. smaller bags, boxes, drums, containers).



Job Hazard Analysis

<p>SAFE WORKING AT HEIGHTS</p> <p>Kinetic or Potential Energy</p>	<p>Could an injury occur as a result of a person falling?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Is a person required to work where there is a risk of falling from one level to another?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Is a Fall Injury Protection System the principle means of protection?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Does a person need to exit from an elevated work platform (EWP) in the raised position?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Creating an open hole with edge protection, floor or walkway?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Scaffolding is to be erected or dismantled?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Is work to occur on or near the edge of a fragile surface?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Could an injury occur as a result of an object falling?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>	<ul style="list-style-type: none"> - Use the safe work at height permit. - Have a safe working area by means of work platforms or scaffolds complete with floors, guardrails, kickboards, and a safe method of access and egress. - Use fall injury prevention systems to prevent falls and falling objects. - Wear protective helmets with chinstraps. - Use tool lanyards or tool belts. - Fit close fitting floor boards and kick-rails and netting. - Practice good housekeeping, signage, and drop-zone barricading to prevent injuries from falling objects.
<p>CONCURRENT OPERATIONS</p>	<p>Are other jobs / tasks in progress which could pose an interaction risk to employees carrying out this task?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Are there other jobs / tasks in progress which could be put at risk by carrying out this task?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Is there a risk from accidental falling objects, spillage or other interactions, accidental or otherwise, between this task and any other concurrent tasks being carried out?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>	<ul style="list-style-type: none"> - Re-schedule work. - Provide controls, such as area / vessel isolations, or drop-zone barricading and signage, to prevent injuries from falling objects, spillage or other interactions.
<p>CRANE / LIFTING OPERATIONS</p>	<p>Does the task / job require personnel, materials or equipment to be lifted such that a suspended load risk is created?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>	<ul style="list-style-type: none"> - Specify and provide the necessary isolations, signs and barricades as required.



Job Hazard Analysis

Risk Matrix

		Consequence				
		1 Minor	2 Moderate	3 Serious	4 Major	5 Catastrophic
Likelihood	A Almost Certain	10	16	20	23	25
	B Likely	7	12	17	21	24
	C Possible	4	8	13	19	22
	D Unlikely	2	5	9	14	18
	E Rare	1	3	6	11	15

Risk result	Rating	Definition	Level of involvement
Note when a potential consequence is classified as catastrophic, immediate and on-going intervention is required from the CEO to ensure control measures are adequate.			
19 - 25	Critical	Imperative to eliminate or reduce risk to a lower level by the introduction of controls. Formal risk assessment required.	CEO needs to review.
18 - 11	High	Corrective action required. Normally permits required to perform work. Safe Work Procedure or Job Hazard Analysis mandatory.	Quarry Manager review required.
10 - 6	Moderate	Corrective action required. Safe Work Procedure or Job Hazard Analysis required.	Supervisor review required.
5 - 1	Low	Corrective action where practical. Take 5 risk assessment required.	Manage by routine procedures at operational level.

Rating	Descriptor	Description	Suggested Frequency
A	Almost certain	The event is expected to occur	Recurring event during the lifetime of a project / operation e.g. more than once per month
B	Likely	The event will probably occur	Event that may occur frequently during the lifetime of a project / operation e.g. at least once per year
C	Possible	The event should occur	Event that may occur during the lifetime of a project / operation e.g. once in 3 years
D	Unlikely	The event could occur	Event that is unlikely to occur during the lifetime of a project / operation e.g. once in 10 years
E	Rare	The event may occur only in exceptional circumstances	Event that is very unlikely to occur during the lifetime of a project / operation e.g. once in 15 years