

# **RISK ASSESSMENT REGISTER**

## **HEMP**

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The main objective of HEMP is to identify and analyze all HSE hazards and their effects associated with company operations and to manage them properly to either eliminate or reduce the risk to ALARP.

A Hierarchy of Control method shall be utilized in the Control & Recovery stages of the HEMP.

The Hierarchy of Control shall seek to:

- **ELIMINATE** hazards if possible
- **SUBSTITUTE** the hazard with a less risky one if available
- **REDUCE** the risk to 'As low as is reasonably practicable' (ALARP)
- Control by **PROCEDURES & RULES** if engineering controls are not practicable.
- PPE shall only be used in conjunction with other hazard control method.

#### IDENTIFY

- Are people, environment, assets or company reputation exposed to potential harm?

#### ACCESS

- What are the causes and consequences?
- How likely is loss of control?
- What is the risk and is it ALARP?

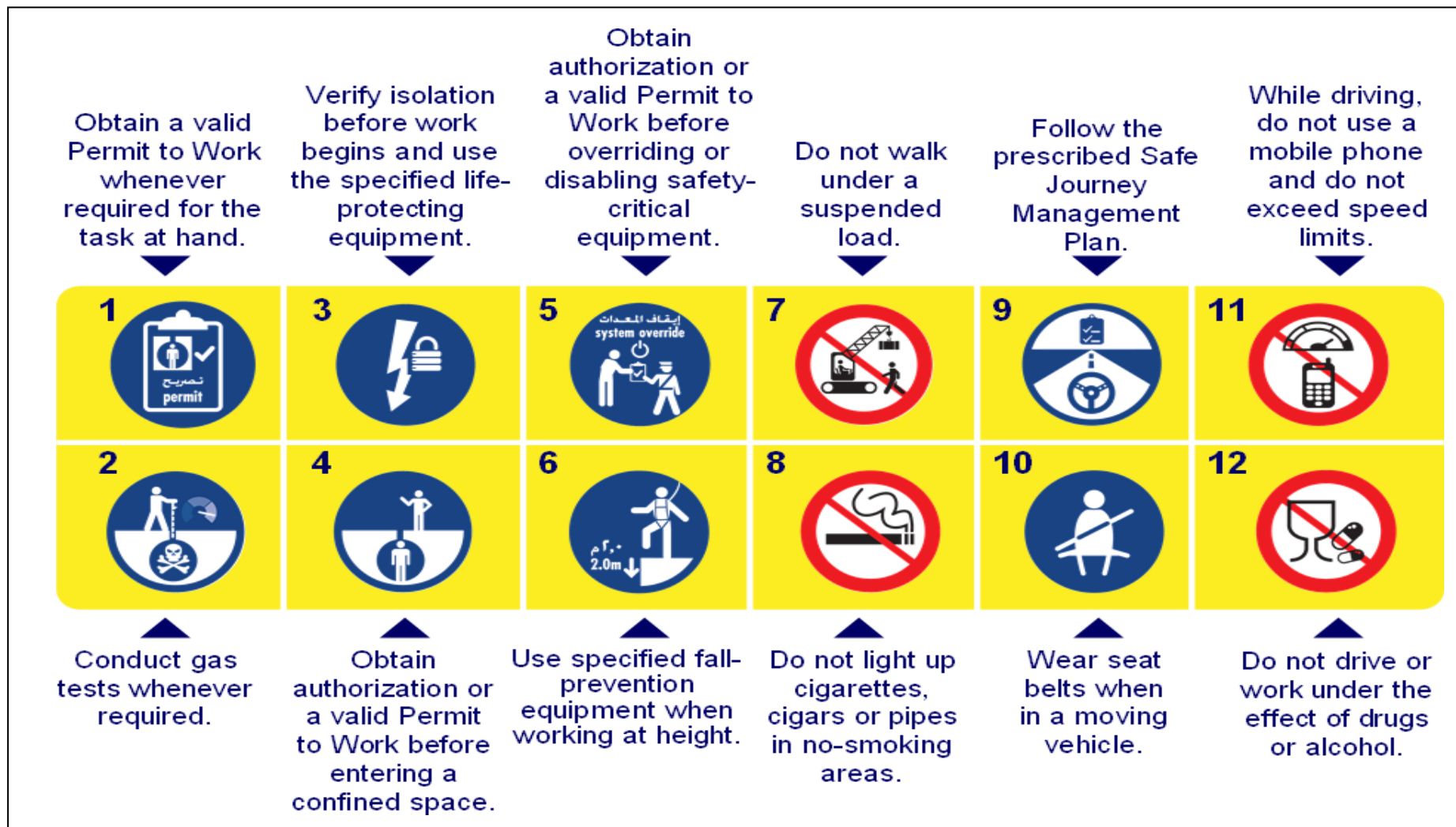
#### CONTROL


- Can the causes be eliminated?
- What controls are needed?
- How effective are the controls?

#### RECOVER

- Can the potential consequences or effects be mitigated?
- What recovery measures are needed?
- Are recovery capabilities suitable and sufficient?

## LIFE SAVING RULES



		RISK ASSESSMENT										VERSION NO.: 1	
<b>Task/ Activity</b>		DRIVING – FATIGUE								<b>Who might be harmed:</b>		Drivers, Passengers, 3 <sup>rd</sup> Party Drivers	
<b>Assessment Team:</b>		Ahmed Housni, Sergey Mushtakov, Dmitry Yanishev, Maksim Mironov											
<b>KEY:</b>										<b>P People</b>			
										<b>A Assets</b>		<b>Date:</b> Jun-2012 <b>Review:</b>	
										<b>E Environment</b>			
										<b>R Reputation</b>		<b>Signed:</b>	
<b>LOW RISK (L)</b>													
<b>MEDIUM RISK (M)</b>													
<b>HIGH RISK (H) (INTOLERABLE)</b>													
S. #	Identified Hazards (Potential to cause harm)	Hazards Effects (If the hazard is released)	Severity	Likelihood	Risk Rating	Control Measures (PPE/ Procedures etc.)	Severity	Likelihood	Residual Risk	Recovery Measures			
1	<b>Fatigue:</b> Tiredness, Sleepiness, including falling asleep against your will, ("micro sleeps") Irritability, Depression, Loss of appetite, Digestive Problems, Increased susceptibility to illness	Road Transport Accident, Reduced decision-making ability, Reduced communication skills, Reduced attention and vigilance, reduced ability to handle stress on the job, reduced reaction time - both in speed and thought (a few studies have shown this effect as similar to being legally drunk), Loss of memory or the ability to recall details, Failure to respond to changes in surroundings or information provided, Unable to stay awake (e.g., falling asleep while operating machinery or driving a vehicle), Increased tendency for risk-taking, Increased forgetfulness, Increased errors in judgment,	4	E	H	Follow Journey Management Procedure (take breaks according to the journey plan).  <b>Fatigue Training:</b> Establish Regular eating times, Monitor caffeine intake, Maintain regular sleeping patterns,	3	C	M	1 <sup>st</sup> Aid, Press Panic Button, Call Emergency Response Number, Medical Treatment, Report to ROP			
<b>OVERALL RISK RANKING OF ACTIVITY</b>					H				M				

	RISK ASSESSMENT	VERSION NO.: 1

Task/ Activity		DRIVING DURING RAMADAN & EID CELEBRATIONS					Who might be harmed:			Drivers, passengers, 3 <sup>rd</sup> Party Drivers				
Assessment Team:		Ahmed Housni, Sergey Mushtakov, Dmitry Yanishev, Maksim Mironov												
KEY:						P	People							
	LOW RISK (L)					A	Assets			Date:	Jun-2012	Review:		
	MEDIUM RISK (M)					E	Environment			Signed:				
	HIGH RISK (H) (INTOLERABLE)					R	Reputation							
S. #	Identified Hazards (Potential to cause harm)	Hazards Effects (If the hazard is released)	Severity	Likelihood	Risk Rating	Control Measures (PPE/ Procedures etc.)			Severity	Likelihood	Residual Risk	Recovery Measures		
1	Lack of driver competence	Reckless driving, RTA	4	D	H	P A R	Pre-employment check for ROP license, DD permit & driving experience, Driver to drive only the vehicles he has documented competence to drive like relevant ROP license, DD courses and experience. Ramadan driver briefing.			3	C	M	Press panic button/ Call emergency response number/ Medical Treatment/ report to ROP.	
2	Lack of a proper Journey Management Plan	Fatigue, Loss of Attention, RTA, Personnel injury/ Fatality, asset damage	4	D	H	P A R	Follow Safe Journey Management Procedure. Journey Management, Follow rest period (Ramadan Briefing).			3	C	M	Press panic button/ Call emergency response number/ Medical Treatment/ report to ROP.	
3	Poor road condition	Vehicle failure, may lead to rollover	4	B	M	P A R	Speed limiter, defensive driving, rolls over cage, seat belts, report poor road condition to client.			3	B	L	Press panic button/ Call emergency response number/ Medical Treatment/ report to ROP.	
4	Driving Alone	Man Lost, Fatigue	4	E	H	P	Follow Road Safety Procedure & Safe Journey management Procedure (Increased Supervision)			3	C	M	Man Lost Procedure, Report to ROP.	
5	Night Driving	Poor visibility, collision	3	C	M	P A R	Follow Road Safety Procedure, Stop Driving (STOP), Follow Safe Journey Management Procedure, Follow night driving policy.			2	B	L	Press panic button/ Call emergency response number/ report to ROP.	



6	Fatigue	Boredom, distance of journey, hours of driving, lack of quality sleep, lack of rest periods, lack of energy, lack of alertness levels, heat, fasting, prayer times, nighttime activities.	4	E	H	P A R	Follow Safe Journey Management Procedure. Proper management planning and increased supervision. Increased rotation of drivers. Enforce 6 hour maximum rule from SP 2000 for drivers. Hold Ramadan awareness session before, during and before last 10 days of holy month. Advocate importance of getting 7-8 hours of sleep and frequent short breaks during work hours Encourage well balanced and lead a healthy lifestyle once they break the fast. Use iVMS to check compliance with 6 hour rule and Journey Management requirements. Fatigue Training.	3	C	M	Fire extinguisher, First aid, evacuate, call emergency response number, Medical treatment, report to ROP.
7	Road Works, Diversion	Driver mistakes leading to injury/ Damage.	4	B	M	P A R	Defensive driving course, diversion signs, blinking lights at night.	2	B	L	Press panic button/ call emergency response numbers/ report to ROP.
8	3 <sup>rd</sup> Party vehicles, animals and other road users.	Collision with vehicles leading to personnel injury/ Fatality/ asset damage, stinging attack, irritation, venomous bite, sting leading to illness or death.	4	E	H	P A	PPE, Inspections, extra vigilance especially during Ramadan, no outside sleeping, check shoes before wearing, physical inspection by supervisor before handling stacked material, good housekeeping, defensive driver training, awareness.	3	C	M	Press panic button/ Call emergency response numbers if required/ report to ROP/ Remove source of danger from the vicinity if possible/ First aid, medical treatment, ensure that you keep clear of the danger during emergency response.
9	Poor vehicle maintenance, tire failure, defective seatbelt.	Failure of vehicle may lead to injury or death to vehicle occupant or third party.	4	E	H	P A R	Follow Road Safety Procedure. Driver daily vehicle check, proper maintenance of vehicles and track record for maintenance, defective vehicles to be off roaded.	3	C	M	Remove defective vehicle from service
10	Driver Behavior	Not following road traffic rules and not driving defensively may cause accident; prayer timings.	4	E	H	P A R	iVMS, Speed limiter, Defensive driving course, driver forum/ meeting, roll over cage, seat belts, disciplinary action.	3	C	M	Disciplinary Proceedings.

11	Driver medically unfit	Driver may suffer illness while driving like heart attack, poor eyesight leading to fatality.	4	B	M	P A	2 yearly medical fitness check, eye test, clinic facility at camp.	3	B	L	Press panic button/ Call emergency response numbers.
12	Poor weather, dust, fog, rain, sandstorm etc.	Poor visibility, rollover, collision	4	C	H	P A	Follow Road Safety Procedure & Driving in Dust procedure, Stop Driving, follow dust code, switch on headlights & rear high intensity lights, journey management, defensive driving course, roll over cage, seat belts.	3	C	M	Press panic button/ Call emergency response number/ report to ROP.
13	Personnel sleeping under or behind parked vehicles	Major crush injuries/ Fatality	4	C	M	P A	Inspect under and behind vehicle before starting/ reversing vehicle, reversing alarm, banksmen.	2	A	L	Press panic button/ Call emergency response number/ report to ROP.
14	Using GSM while driving	Road Accident	4	D	H	P A R	Turn off GSM, Disciplinary Action	3	C	M	Press panic button/ Call emergency response number/ report to ROP.
<b>OVERALL RISK RANKING OF ACTIVITY</b>					H					M	



	RISK ASSESSMENT	VERSION NO.: 1

Task/ Activity		FIRE RISK ASSESSMENT					Who might be harmed:		Office Employees/ Visitors/ Other employees		
Assessment Team:		Ahmed Housni, Sergey Mushtakov, Dmitry Yanishev, Maksim Mironov									
KEY:					P	People					
	LOW RISK (L)			A	Assets		Date:	June 2012	Review:		
	MEDIUM RISK (M)			E	Environment		Signed:				
	HIGH RISK (H) (INTOLERABLE)			R	Reputation						
S. #	Identified Hazards (Potential to cause harm)	Hazards Effects (If the hazard is released)	Severity	Likelihood	Risk Rating	Control Measures (PPE/ Procedures etc.)	Severity	Likelihood	Residual Risk	Recovery Measures	
1	Fire (General)	Building could be burnt down; workers and visitors could be trapped in burning building. Workers could suffer severe or fatal burns.	5	B	M	Smoking prohibited in all work areas. Fire alarms tested. Extinguishers provided and inspected. Fire exits. Fire Wardens. Fire Drills – HSEF 002. Internal Fire Training – Orientation.	3	B	L	Raise the Fire Alarm. Exit building immediately and report to the Fire Assembly Point. Call emergency response numbers/ First Aid/ report incident to QHSE Manager.	
2	Overheating Machinery (Breakout Machine, Grinding Machine)	Poorly maintained equipment can cause friction/ overheating and cause a fire causing severe or fatal burns to workers.	5	B	M	Routine maintenance of workshop equipment.	3	C	M	Raise the Fire Alarm. Exit building immediately and report to the Fire Assembly Point. Call emergency response numbers/ First Aid/ report incident to QHSE Manager.	
3	Lithium Batteries	Explosion leading to fire causing severe or fatal burns to workers.	5	B	M	Workers provided with correct PPE when working with Lithium Batteries. Lithium batteries are to be elevated from ground (to avoid water contact). Lithium battery training to all MWD workers. Lithium Fire Extinguishers provided.	3	C	M	Try to contain with Lithium Fire Extinguisher (only if fire is small). Raise the Fire Alarm. Exit building immediately and report to the Fire Assembly Point. Call emergency response numbers/ First Aid/ report incident to QHSE Manager.	
OVERALL RISK RANKING OF ACTIVITY					M				M		

	RISK ASSESSMENT	
		VERSION NO.: 1

<b>Task/ Activity</b>		Working in a Hydrogen Sulphide (H <sub>2</sub> S) area					<b>Who might be harmed:</b>			Field Employees/ Visitors/ Office Based Employees visiting rig site.				
<b>Assessment Team:</b>		Ahmed Housni, Sergey Mushtakov, Dmitry Yanishev, Maksim Mironov												
<b>KEY:</b>					P	People								
LOW RISK (L)					A	Assets			Date:		07/05/12	Review:		
MEDIUM RISK (M)					E	Environment			Signed:					
HIGH RISK (H) (INTOLERABLE)					R	Reputation								
S. #	Identified Hazards (Potential to cause harm)	Hazards Effects (If the hazard is released)	Severity	Likelihood	Risk Rating	Control Measures (PPE/ Procedures etc.)			Severity	Likelihood	Residual Risk	Recovery Measures		
1	Lack of training - Entering an H <sub>2</sub> S area (Field Employees)	Unconsciousness/ Fatalities	4	C	M	P	Follow HSE Training and Competence Procedure.  Two training courses shall be provided:  <i>H<sub>2</sub>S Awareness and Escape</i>  The course shall be required for all staff that regularly enter H <sub>2</sub> S designated areas. The course addresses hazards associated with H <sub>2</sub> S, occupational exposure limits, detection and alarm systems and appropriate action to be taken should a personal or facility alarm sound.  <i>Self-Contained Breathing Apparatus Training (SCBA)</i>  Provides personnel with knowledge and skills to be			2	C	L	Activate the H <sub>2</sub> S alarm/ Proceed to the designated Point.  Report incident to QHSE Manager.	


						competent in the use of Breathing Apparatuses <sup>1</sup> (BA) and in search and rescue techniques.					
2	Lack of training - Entering an H <sub>2</sub> S area (Visitors)	Unconsciousness/ Fatalities	4	C	M	P	Visitors, who are not in possession of a valid H <sub>2</sub> S Entry Permit, may be authorized to enter a low risk sour H <sub>2</sub> S area provided that: The entry has been authorized by the Production Coordinator The visitor is accompanied by a member of the operations staff who has been trained in the use of breathing apparatus and escape equipment The visitors ID is retained in the control room on the board <b>And</b> The visitor has signed the station log	2	C	L	Activate the H <sub>2</sub> S alarm/ Proceed to the designated Point.  Report incident to QHSE Manager.
3	Lack of training - Departure from an H <sub>2</sub> S area (Field Employees & Visitors)	Unnecessary extensive rescue operations may be initiated if there is an emergency.	4	C	M	P	On completion of any work or access or visit to an H <sub>2</sub> S designated location the station operator and the person(s) leaving shall ensure: <ul style="list-style-type: none"><li>• The station log has been signed correctly.</li><li>• H<sub>2</sub>S Entry Permit or ID has been removed from the control board.</li><li>• Access authorization form has been cancelled (if required).</li></ul>	2	C	L	Call emergency response numbers/ First Aid/ report incident to QHSE Manager.
OVERALL RISK RANKING OF ACTIVITY					M					L	

	RISK ASSESSMENT				
		VERSION NO.: 1			

Task/ Activity		Working in Summer Months June-Aug (Heat Stress/ Stroke)					Who might be harmed:		All employees			
Assessment Team:		Ahmed Housni, Sergey Mushtakov, Dmitry Yanishev, Maksim Mironov										
KEY:					P	People						
	LOW RISK (L)				A	Assets		Date:		May-2012	Review:	
	MEDIUM RISK (M)				E	Environment		Signed:				
	HIGH RISK (H) (INTOLERABLE)				R	Reputation						
S. #	Identified Hazards (Potential to cause harm)	Hazards Effects (If the hazard is released)	Severity	Likelihood	Risk Rating	Control Measures (PPE/ Procedures etc.)		Severity	Likelihood	Residual Risk	Recovery Measures	
1	Working Hours between 12-3	Dehydration Fatigue; sunburn; heat stress	3	E	H	P	Where possible change crew shifts from 12-12, Job rotation, Frequent breaks, minimum 10 minutes every 2 hours, Deferring heavy work to nighttime/ cooler hours; Sharing heavy work; Efficient deployment of available staff.	3	B	L	Adequate number of trained first aiders; Call emergency response numbers; Ensure cook packs are in the first aid kits; Cool refuge; After sun lotion (for mild sunburn); Seek medical treatment.	
2	Lack of water - Dehydration	Headaches Nausea Fainting Unconsciousness Cramps Dry Skin Urine colour change	3	E	H	P	Drink water regularly eg: 2 - 4 glasses of cool (not cold) fluids each hour; Avoid caffeinated & alcoholic drinks & high sugar content (fizzy/soda) drinks; Availability of water in different temperatures; Electrolyte drinks available; Awareness training.	2	B	L		
3	Fatigue	Loss of concentration Tiredness	2	C	L	P	Maintain adequate sleeping patterns.	2	B	L		
4	Working in the sun - UV Exposure	Sunburn	2	E	L	P	Use sunscreen; Wide brim hardhats; Long sleeve coveralls, buttoned up, light colour; Shaded areas.	2	B	L		

5	Pre-existing medical conditions/ Fitness to work	Increased risk of heat related illness.	4	E	H	P	Pre-employment medical; Periodical medical screening fit for task; Monitoring and supervision i.e.: medics/supervisors; Maintain physical fitness through health promotions.	3	B	L	
6	Touching Hot objects	Burns Blisters	2	C	L	P	Wearing gloves; Long sleeves (PPE); Awareness.	1	C	L	
7	Heat Stress	Muscle Cramps; Heat Exhaustion; Heat Stroke.	3	E	H	P	Protect against dehydration (see above). Minimize direct sun exposure. Buddy system. Acclimatization – Train supervisors to recognize and implement reduced physical demands and/ or shift time for new or newly arrived workers. Sunglasses. Wide brim hardhats. Poster campaign. Awareness training. Specify safe exposure limits for workplace temperature and humidity. Ensure vehicles have air conditioning working (where installed).	3	B	L	Adequate number of trained first aiders; Call emergency response numbers; Ensure cook packs are in the first aid kits; Cool refuge; After sun lotion (for mild sunburn); Seek medical treatment.
8	Heat Stress During Ramadan	Muscle Cramps; Heat Exhaustion; Heat Stroke.	3	E	H	P	All of the above risk mitigations apply except those referring to fluid intake. Ensure that crews are fully empowered to stop the work when they feel they need to. Supervisors to ensure formal agreements in place for work stoppages for breaking fast.	3	B	L	
OVERALL RISK RANKING OF ACTIVITY					H					L	




	<b>RISK ASSESSMENT</b>	<b>VERSION NO.: 1</b>
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<b>Task/ Activity</b>		<b>OFFICE ACTIVITIES</b>					<b>Who might be harmed:</b>		<b>Employees, Visitors.</b>			
<b>Assessment Team:</b>		<b>Ahmed Housni, Sergey Mushtakov, Tamara Shubenok, Dmitry Yanishev</b>										
<b>KEY:</b>												
S. #	Identified Hazards (Potential to cause harm)	Hazards Effects (If the hazard is released)	Severity	Likelihood	Risk Rating	Control Measures (PPE/ Procedures etc.)	Severity	Likelihood	Residual Risk	Recovery Measures		
1	Slips and Trips	Employees and visitors may be injured if they trip over objects or slip on spillages.	2	C	L P	General good housekeeping. All areas well lit, including stairs. No trailing leads or cables. Staff work areas clear, e.g. no boxes left in walkways, deliveries stored immediately. Offices cleaned every day.	2	B	L	First Aid/ report incident to QHSE Manager.		
2	Manual Handling of paper, office equipment etc.	Employees risk injuries or back pain from handling heavy bulk objects, eg deliveries of paper.	2	C	L P	High shelves for light objects only.	2	B	L	First Aid/ report incident to QHSE Manager.		
3	Display Screen Equipment	Employees risk posture problems and pain, discomfort or injuries, eg to their hands/ arms, from overuse or improper use or from poorly designed workstations or work environments. Headaches or sore eyes can also occur eg if lighting is poor.	2	C	L P	DSE assessment of workstation at induction. Reassessment to be carried out at any change to work feature. Workstation and equipment set to ensure good posture and to avoid glare and reflections on the screen. Work planned include regular breaks or change of activity. Light and temperature suitably controlled. Laptop users trained to carry out own DSE assessment for use away from office. When used at office, laptop should be used with docking station, screen, keyboard and mouse	2	B	L	First Aid/ report incident to QHSE Manager.		




4	Working at Height	Falls from any height can cause bruises/ fractures.	3	C	M	P	Step ladder to be used for any office activity which requires working at height eg high shelves.	2	B	L	Call emergency response numbers/ First Aid/ report incident to QHSE Manager.
5	Electrical	Shocks/ Burns/ Fires from using faulty electrical equipment.	3	C	M	P A	Employees to report any defective plugs, discolored sockets or damaged cable/ equipment.	2	B	L	Call emergency response numbers/ First Aid/ Report incident to QHSE Manager.
6	Fire	Smoke inhalation/ Burns/ Fatalities.	4	C	M	P A	Ensure appropriate in-date fire extinguishers are provided in all areas of the office. Conduct regular drills so employees are familiar with the escape routes. Train fire wardens to evacuate employees. Regularly test fire detection equipment to ensure working order. Fire awareness training for all employees during Induction.	2	B	L	Call emergency response numbers/ First Aid/ Report incident to QHSE Manager.
OVERALL RISK RANKING OF ACTIVITY					M					L	


	RISK ASSESSMENT		VERSION NO.: 1	

Task/ Activity		WASTE					Who might be harmed:			Environment, Employees, Community.		
Assessment Team:		Ahmed Housni, Sergey Mushtakov, Tamara Shubenok, Dmitry Yanishev										
KEY:					P	People						
	LOW RISK (L)				A	Assets		Date:		June-2012	Review:	
	MEDIUM RISK (M)				E	Environment		Signed:				
	HIGH RISK (H) (INTOLERABLE)				R	Reputation						
S. #	Identified Hazards (Potential to cause harm)	Hazards Effects (If the hazard is released)	Severity	Likelihood	Risk Rating	Control Measures (PPE/ Procedures etc.)		Severity	Likelihood	Residual Risk	Recovery Measures	
1	Lithium Battery - Resource Consumption	Fire, Explosion, Emission to atmosphere.	3	C	M	E P	Training on proper use and maintenance of lithium batteries. Lithium Batteries shall be discharged, taped, segregated, labelled and transferred to a licenced waste management facility and stored on rigid wooden pallets. Lith-x Fire extinguisher to be made available in workshop and all units. PPE	2	B	L	Call emergency response numbers/ First Aid/ report incident to QHSE Manager.	
2	Use of Lubricants/ Creation of Lubricant Waste (Container)	Land contamination	3	C	M	E P	Refer to COSHH assessment for chemical management. Clean empty drums/ lubricant containers are to be placed in the general waste skip.	1	B	L	Call emergency response numbers/ First Aid/ report incident to QHSE Manager, refer to COSHH sheet for clean up procedures.	
3	Use and Creation of Paper Waste	Land contamination	2	C	L	E	Paper reduction awareness posters. Recycling of paper.	1	B	L	N/A	
4	Use of Electricity	Use of Energy	2	C	L	E	Turn off all appliances while not in use, cleaner turn off all lights, AC units at the end of the day.	1	B	L	N/A	

5	Use and disposal of cleaning agents (Domestic)	Skin, Eye irritation, Burns, Water contamination, Land contamination.	2	C	L	E P	Purchase (where practicable) environmentally friendly cleaning agents. PPE. Clean empty cleaning agent containers are to be placed in the general waste skip.	1	B	L	Call emergency response numbers/ First Aid/ report incident to QHSE Manager.
6	Use and disposal of Toner/ Print Cartridges.	Land contamination.	2	C	L	E	All Toner/ Print cartridges are to be segregated and placed in the Toner/ Print cartridges bin which shall be clearly highlighted and segregated from other waste.	1	B	L	N/A
7	Disposal of bottled drinking water.	Land contamination.	2	C	L	E	Purchase only Tanuf water as they have a dedicated recycling facility for all tanuf plastic bottles. All plastic bottles are to be placed in the bin provided next to the DD office on the ground floor.	1	B	L	N/A
8	Creation & Disposal of Oily Waste	Water contamination	3	D	M	E	All oily waste is to be disposed of only in the wash-bay in the yard which stores all oily waste into a separate holding tank.	2	C	L	N/A
9	Creation & Disposal of Oily Rags/ Gloves	Land Contamination	2	C	L	E	All oily rags & gloves are to be placed in the General Waste Skip which shall be clearly highlight and segregated from other waste.	1	B	L	N/A
10	Creation & Disposal of Scrap Metal	Land Contamination	2	C	L	E	All scrap metal as a result of maintaining equipment shall be placed in the scrap metal bin which shall be clearly highlighted and segregated from other waste.	1	B	L	N/A
11	Creation & Disposal of Sewage	Water contamination, Waste Handling	2	C	L	E	All sewage shall be dispersed to a separate holding tank, an approved supplier by MECA shall collect and dispose of the waste accordingly.	1	B	L	N/A
12	Creation of HGV & LGV Exhaust	Emission to air	2	C	L	E	Trips to the field (equipment and personnel) shall be made when required, if possible, merging trips with DD, Turbine and other departments to reduce number of kilometers produced shall be considered.	1	B	L	N/A


13	Disposal of Dry Cell Batteries	Land Contamination	1	C	L	E	All dry cell batteries (non recyclable) shall be placed in the general waste skip. Purchase of recyclable batteries shall be considered first prior to purchasing non-recyclable batteries.	1	B	L	N/A
14	Disposal of Paint Containers	Land Contamination	2	C	L	E	All paint containers shall be cleaned in the wash bay and disposed of in the general waste skip.	1	B	L	N/A
15	Non Hazardous Office/ Workshop/ Kitchen Waste	Land Contamination	2	C	L	E	All non hazardous office workshop & kitchen waste shall be placed in the general waste skip (non hazardous skip).	1	B	L	N/A
<b>OVERALL RISK RANKING OF ACTIVITY</b>					L					L	

Lifting		Consequence (Severity rating)	Probability (Frequency letter)	Risk Rating (Letter & Number)	Control Measures (PPE / Procedure)	Residual Risk (after controls in place)	Recovery measures
Identify Hazard (Potential to do harm)	Hazard Effect (If hazard is released)						
Failure of Lifting equipment	Crushing, Impact Injuries, damaged equipment	4	D	4D(P) High risk	 Pre-use checks – Correct color code. Lifting Inspection, testing and Certification Procedure. Maintenance Schedule.	1(P)  Low Risk	Call emergency response numbers/ First Aid/ report incident to QHSE Manager.
Out of date lifting equipment	Falling objects Struck By/ Crushed By	4	D	4D(P) High risk			
Employees working/ walking under suspended loads	Struck by/ crushed by load/ falling objects	4	D	4D(P) High risk			
Weight, size, shape and center gravity of load.	Swaying loads Overturning of forklift Struck by load Crushed by load Falling objects	4	D	4D(P) High risk			


Manual Handling		Consequence (Severity rating)	Probability (Frequency letter)	Risk Rating (Letter & Number)	Control Measures (PPE / Procedure)	Residual Risk (after controls in place)	Recovery measures
Identify Hazard (Potential to do harm)	Hazard Effect (If hazard is released)						
Lifting of Mud Motor & Setting the bend during Pre-run and while picking up BHA. Dropped Objects.	Broken bones, nipping injuries.	3	B	C3(P)  Medium risk	 <p>Follow Lifting Equipment Inspection, Testing and Certification Procedure.</p> <p>Use Fork lift for all heavy lifting.</p> <p>Banksman/ Slingers.</p> <p>Toolbox talks.</p> <p>PPE.</p> <p>Isolate/Avoid need, use mechanical aids, hoists, Instruction, supervision, PPE</p>	1(P)  Low Risk	<p>Call emergency response numbers/ First Aid/ report incident to QHSE Manager.</p> <p>Give Immediate First Aid.</p> <p>Obtain assistance from any Near Clinic.</p> <p>For a serious incident, alert Supervisor for emergency procedures.</p> <p>Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting</p>
Load being lifted is too big in size, cannot see, trips and falls	Causing injury.	3	B	C4(P)  High risk			
Hand or feet crushed as was trying to put the load down.	Causing injury.	3	B	C3(P)  Medium risk			
Underestimating the weight being attempted to lift, drops and crushes finger or toes.	Upper limb disorders, back injuries, fingers crushed, dropped loads stacks, cuts from sharp edges, trips & falls.	3	B	C3(P)  Medium risk			




NORM Naturally Occurring Radioactive Material		Consequence (Severity rating)	Probability (Frequency letter)	Risk Rating (Letter & Number)	Control Measures (PPE / Procedure)	Residual Risk (after controls in place)	Recovery measures
Identify Hazard (Potential to do harm)	Hazard Effect (If hazard is released)						
NORM	Exposure to gamma radiation may present a long term health risk	3	B	B3(P)	Make sure that proper Personal protective Equipment is worn by all worker who are working in NORM area	1(P)  Low Risk	Call trained base first-aiders & offer first aid.  Disposable full body white one piece suit rubber gloves rubber boots eye protection and respirator oral/nasal mask 3M type
Driving		Consequence (Severity rating)	Probability (Frequency letter)	Risk Rating (Letter & Number)	Control Measures (PPE / Procedure)	Residual Risk (after controls in place)	Recovery measures
Identify Hazard (Potential to do harm)	Hazard Effect (If hazard is released)						

Driver Fatigue	Fatal/MTC	4	D	D4(P) High risk	<p>Follow Training and Competence Procedure. Pre-employment check for ROP license, DD permit &amp; driving experience, Driver to drive only the vehicles he has documented competence to drive like relevant ROP license, DD courses and experience. Ramadan driver briefing</p> <p>IVMS, Speed limiter, Defensive driving course, driver forum/ meeting, roll over cage, seat belts, disciplinary action.</p> <p>Follow Road Safety Procedure.</p> <p>Driver daily vehicle check, proper maintenance of vehicles and track record for maintenance, defective vehicles to be off roaded.</p>	1(P)  Low Risk	<p>Press panic button/ Call emergency response numbers if required/ report to ROP/ Remove source of danger from the vicinity if possible/ First aid, medical treatment, ensure that you keep clear of the danger during emergency response</p> <p>Press panic button/ Call emergency response number/ report to ROP</p>
Lack of driver competence	Reckless driving, RTA	4	D	D4(P) Medium risk			
Poor vehicle maintenance, tyre failure, defective seatbelt.	Failure of vehicle may lead to injury or death to vehicle occupant or third party.	4	D	D4(P) Medium risk			
Poor visibility due to dust, rain, fog	Poor visibility, rollover, collision	4	D	D4(P) Medium risk			
<b>Work Environment</b>		<b>Consequence (Severity rating)</b>	<b>Probability (Frequency letter)</b>	<b>Risk Rating (Letter &amp; Number)</b>	<p><b>Control Measures (PPE / Procedure)</b></p> 	<b>Residual Risk (after controls in place)</b>	<b>Recovery measures</b>
<b>Identify Hazard (Potential to do harm)</b>	<b>Hazard Effect (If hazard is released)</b>						
Dust	Dust entering eyes, ears, mouth, nose, lungs						

	leading to injury and illness.			Medium risk	Protect against dehydration (see above).	Low Risk	Call trained base first-aiders & offer first aid.
Heat Stress	Muscle Cramps; Heat Exhaustion; Heat Stroke.	3	E	E3(P)  Medium risk	Minimise direct sun exposure. Buddy system.  Acclimatisation – Train supervisors to recognise and implement reduced physical demands and/ or shift time for new or newly arrived workers.  Sunglasses.		
Touching Hot objects	Burns Blisters	2	C	C3(P)  Medium risk	Wide brim hardhats.  Poster campaign.  Awareness training.		
Well control issues kicks/Blow outs	Presence of H2S Fire event Hot fluids Extreme pressure Struck by moving objects	5	C	5C(P)  HIGH RISK	Specify safe exposure limits for workplace temperature and humidity.  Ensure vehicles have air conditioning working (where installed).  Wearing gloves; Long sleeves (PPE); Awareness.  Follow HSE Training and Competence Procedure and H2S risk Assessment  Fire risk assessment  Use of PPE and safety barriers.  Stay clear from high risk areas		Report the incident to HSE  Call emergency response numbers/ First Aid/ report incident to QHSE Manager

Hand Tools		Consequence (Severity rating)	Probability (Frequency letter)	Risk Rating (Letter & Number)	Control Measures (PPE / Procedure)	Residual Risk (after controls in place)	Recovery measures
Identify Hazard (Potential to do harm)	Hazard Effect (If hazard is released)						
Using wrong hand tools for job	If the tool slip my lead to fall and cause injury	3	C	C3(P)  Medium risk	 <p>Checked the hand tools before start using</p> <p>Remove the damage hand tool from the service Immediately</p> <p>Wearing proper PPE while using the hand tools</p> <p>Using daily checklist for the hand tools</p>	1(P)  Low Risk	call the First Aider & offer first aid
Using Homemade tools	Tool might get damage and lead to injury for user and employees around the area	3	C	C3(P)  Medium risk			Report the incident to the HSE call the Emergency number
Using hand tools without proper PPE	Might lead to eyes head and hands injury	3	C	C3(P)  Medium risk			Issue later learning to all

Storage of tools / tools parts in the workshop / yard		Consequence (Severity rating)	Probability (Frequency letter)	Risk Rating (Letter & Number)	Control Measures (PPE / Procedure)	Residual Risk (after controls in place)	Recovery measures
Identify Hazard (Potential to do harm)	Hazard Effect (If hazard is released)						
Tool rack is in use without stoppers	Tool might roll over and fall off causing injury to employee engaged in material handling.	3	C	C3(P)  Medium risk	 <ul style="list-style-type: none"> <li>Inspect the tool &amp; spare part racks (at least once in a month) to confirm their integrity.</li> <li>Ensure that all racks (on which tools are stored in horizontal position) have been provided with stoppers.</li> <li>Check the welding of the stoppers for cracks &amp; wear.</li> <li>All racks (on which the tools are stored in vertical position) are to be provided with chains to keep the tools under secured condition. Ensure that all tools are secured all the time.</li> <li>Pin stands have been provided for keeping the small tools in vertical position, particularly in painting section. Check the welding of pins (rods) to the base plate &amp; general integrity.</li> <li>Sufficient space to be kept in-between the racks for safe &amp; easy access to forklift.</li> <li>Long &amp; heavy tools (stabilizers, bumper subs etc.) shall be stacked in horizontal manner with at least 6" to 8" extended beyond both the tool rack supports.</li> <li>All tools stored vertically on the racks should be properly secured by safety chains.</li> <li>Please refer to HSE Manual (Housekeeping) and (Storage of tools) for additional guidelines.</li> </ul>	1(P)  Low Risk	<p>Call trained base first-aiders &amp; offer first aid.</p> <p>Call Nizwa Hospital (25449155) in case of serious injury</p> <p>Report the incident to the HSE manager</p>
Tool rack in use with damaged condition (welding cracks etc.)	Rack shall not be able to withstand the load and tool may fall down causing injury to employee engaged in material handling	3	C	C3(P)  Medium risk			
Tool stored vertically without securing them by chain	During handling tools may roll off /fall off causing injury to the employee engaged in material handling	3	C	C3(P)  Medium risk			

