



CONSTRUCTION OF FIRE-BREAKS AT THE IMOR AGG CITADEL FENCE

Description of work: **MOBILIZATION**

SITE INSPECTION.

CLEARING AND SURFACE PREPARAION AREA DEMARCATION NAND WALL FORMATION MIXING AND CASTING OF CONCRTETE.

HOUSE KEEPING. DEMOBILSATION.

Title

Planned start date: 20 Sep 2019

Planned end date: 03 Oct 2019

Working hours: 07:00 19:00

Site: IMO RIVER FACILITIES

Work locations: UTILITY AREA

Equipment description: **BUNDWALL AREA**

Minimum number of persons:

Work order number:

Tools to be used: WHEEL BARROW, SHOVEL, HEAD PAN, COOPER HAMMER, TROWEL, TAPES, ETC.

COVERALL, HARD HAT, EYE GOGGLE, EAR MUFF, HAND GLOVES, SAFETY BOOTS/RAIN Vehicles/Equipment to be used

BOOTS.

ICC Requirement None

Lead Discipline: Operations

Influence of nearby activities:

Permit types from questionnaire Cold Work

Туре	Name:	Date:	Dep./Company:
Re-issue permit by Permit Issuer	SALISU HASSAN	30 Sep 2019 08:18	Shell
Suspend by Issuer	SALISU HASSAN	28 Sep 2019 18:52	Shell





Suspend by Permit Holder

Accept revalidation by Permit Holder

Re-issue permit by Permit Issuer

ABIODUN OGINNI ABIODUN OGINNI SALISU HASSAN 28 Sep 2019 18:41 28 Sep 2019 08:47 28 Sep 2019 08:41 Shell Shell

Suspended



RA/JHA IMO RIVER FACILITIES-01-142989

Attached to: Permit IMO RIVER FACILITIES-01-142458

Title: CONSTRUCTION OF FIRE-BREAKS AT THE IMOR AGG CITADEL FENCE

Team: ABIODUN OGINNI, Eniola Aboaba, NWOKE FLORENCE

Approval:

19 Sep 2019 20:17	ABIODUN OGINNI
19 Sep 2019 19:39	Eniola Aboaba
21 Aug 2019 08:32	Matthew Oghenebrume
18 Sep 2019 19:55	NWOKE FLORENCE
19 Sep 2019 20:18	SUNNY UKENYE

Task steps	steps Hazards Control measures			Action party	
MOBILISATION TO SITE.	Hand Tools - ALL (MOTION)	Wear appropriate hand protection suitable for task	S	Permit Holder	
	Slippery Surfaces (MOTION)	Follow right route to site	S	Permit Holder	
		Remove any Slip hazards in the area, clean up any spills, wear anti-slip safety shoes	S	Permit Holder	
SITE INSPECTION	Communication (PEOPLE)	During permit issuance and toolbox talk/Last Minute Risk Assessment discuss and agree the methods of communication within the work party, with Operations (if necessary) and with Emergency Responders (if necessary)	S	Permit Holder	
	Emergency Response (PEOPLE)	A job specific emergency response plan must be available. The plan must be reviewed and understood by the work party. The plan should include: Notifications, Roles and Responsibilities, Initial Actions, Equipment and General Tactics	S	Permit Holder	
		Ensure adequate induction is done prior to start of job	Р	Permit Holder	
	Exposure to Wildlife bites, stings (PEOPLE)	AVOID STRONG PERFUMES	S	Permit Holder	
		Survey work area before start to ensure it is clear of wildlife	S	Permit Holder	
		Use insect repellent	S	Permit Holder	
	Noise (PEOPLE)	Keep the exposure of personnel to noise below 85dB(A) for an eight-hour Noise Dose	S	Permit Holder	
		Peak noise levels in the work place must be below 140dB(C) This value applies irrespective of the duration of the exposure or the use of hearing protection	S	Permit Holder	
		Use double hearing protection [ear plugs and Ear defenders] to keep noise exposure below 85dB(A)	S	Permit Holder	



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		Use hearing protection that fits, and reduces exposure of personnel below 85dB(A) for an eight-hour Noise Dose	S	Permit Holder
	Weather (PEOPLE)	Do not work under adverse weather condition	S	Permit Holder
		Observe intermittent rest	S	Permit Holder
		Wear wet and/or cold weather gear, helmet lanyards or chin straps	S	Permit Holder
CLEARING AND SURFACE PREPARATION	Hand Tools - ALL (MOTION)	Use suitable and correct hand tool	S	Permit Holder
		Wear appropriate hand protection suitable for task	S	Permit Holder
	Pinch Points and Caught Between (MOTION)	Identify possible pinch point hazards in the work area Never put yourself or any part of your body in a pinch point area unless it is safe to do so (LOTO in place)	S	Permit Holder
		Use impact resistant gloves	S	Permit Holder
	Sharp, abrasive objects (MOTION)	Use cut resistant gloves (cut level 4 or more)	S	Permit Holder
		Wear arm protectors	S	Permit Holder
	Slips & Trips (MOTION)	Remove any trip hazards in the area, clean up any spills, wear anti-slip safety shoes	S	Permit Holder
	Exposure to Wildlife bites, stings (PEOPLE)	Survey work area before start to ensure it is clear of wildlife	S	Permit Holder
		Use insect repellent	S	Permit Holder
	Noise (PEOPLE)	Keep the exposure of personnel to noise below 85dB(A) for an eight-hour Noise Dose	S	Permit Holder
		Peak noise levels in the work place must be below 140dB(C) This value applies irrespective of the duration of the exposure or the use of hearing protection	S	Permit Holder
		Use double hearing protection [ear plugs and Ear defenders] to keep noise exposure below 85dB(A)	S	Permit Holder
		Use hearing protection that fits, and reduces exposure of personnel below 85dB(A) for an eight-hour Noise Dose	S	Permit Holder
	Weather (PEOPLE)	Do not work under adverse weather condition	S	Permit Holder
		Observe intermittent rest	S	Permit Holder
		Wear wet and/or cold weather gear, helmet lanyards or chin straps	S	Permit Holder



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AREA DEMARCATION AND WALL FORMATION	Hand Tools - ALL (MOTION)	Wear appropriate hand protection suitable for task	S	Permit Holder
	Sharp, abrasive objects (MOTION)	Use cut resistant gloves (cut level 4 or more)	S	Permit Holder
		Wear arm protectors	S	Permit Holder
	Slips & Trips (MOTION)	maintain good housekeeping at site	S	Permit Holder
		Remove any trip hazards in the area, clean up any spills, wear anti-slip safety shoes	S	Permit Holder
	Fatigue (PEOPLE)	Buddy system to be used when personnel contiue to work past 12 hours in a single shift	S	Permit Holder
		Comply with the Site/facility/asset requirements regarding maximum work hours and required rest days	S	Permit Holder
		Prior to start of work request work party to self report if they are suffering from fatigue	S	Permit Holder
	Fitness to Work (PEOPLE)	For the following roles confirm that the employees have completed and passed a fitness to work evaluation: Crane operators, professional drivers, remote location workers, users of respiratory protection, emergency responders, aircraft refuelers, and catering personnel	S	Permit Holder
	Weather (PEOPLE)	Observe intermittent rest	S	Permit Holder
		Set weather limitations (lighting, rain, wind speed) and stop work when limit is exceeded	S	Permit Holder
	Manual material handling (Additional Hazards)	Do not carry excessive load	S	Permit Holder
		Maintain good posture while carrying loads	S	Permit Holder
		Wear effective hand gloves	S	Permit Holder
MIXING OF CONCRETE AND CASTING	Sharp, abrasive objects (MOTION)	proper handling of tools	S	Permit Holder
		Use cut resistant gloves (cut level 4 or more)	S	Permit Holder
	Communication (PEOPLE)	During permit issuance and toolbox talk/Last Minute Risk Assessment discuss and agree the methods of communication within the work party, with Operations (if necessary) and with Emergency Responders (if necessary)	S	Permit Holder
	Fatigue (PEOPLE)	Buddy system to be used when personnel contiue to work past 12 hours in a single shift	S	Permit Holder
		Comply with the Site/facility/asset requirements regarding maximum work hours and required rest days	S	Permit Holder



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	Fitness to Work (PEOPLE)	For the following roles confirm that the employees have completed and passed a fitness to work evaluation: Crane operators, professional drivers, remote location workers, users of respiratory protection, emergency responders, aircraft refuelers, and catering personnel	S	Permit Holder
	Weather (PEOPLE)	Set weather limitations (lighting, rain, wind speed) and stop work when limit is exceeded	S	Permit Holder
	Chemical (TOXICS)	Chemical protective clothing, impervious gloves (appropriate for the chemical used), goggles, face shield for corrosives	S	Permit Holder
		Obey cement SHOC instruction	S	Permit Holder
		Provide eye wash or availability of running fresh water near site	Р	Permit Holder
	Manual material handling (Additional Hazards)	Do not carry excessive load	S	Permit Holder
		Maintain good body posture while carrying load	S	Permit Holder
		Wear effective hand gloves	S	Permit Holder
DEMOBILIZATION	Communication (PEOPLE)	During permit issuance and toolbox talk/Last Minute Risk Assessment discuss and agree the methods of communication within the work party, with Operations (if necessary) and with Emergency Responders (if necessary)	S	Permit Holder
HOUSE KEEPING.	Sharp, abrasive objects (MOTION)	Use cut resistant gloves (cut level 4 or more)	S	Permit Holder
	Slips & Trips (MOTION)	Remove any trip hazards in the area, clean up any spills, wear anti-slip safety shoes	S	Permit Holder
	Communication (PEOPLE)	During permit issuance and toolbox talk/Last Minute Risk Assessment discuss and agree the methods of communication within the work party, with Operations (if necessary) and with Emergency Responders (if necessary)	S	Permit Holder
	Noise (PEOPLE)	Keep the exposure of personnel to noise below 85dB(A) for an eight-hour Noise Dose	S	Permit Holder
		Peak noise levels in the work place must be below 140dB(C) This value applies irrespective of the duration of the exposure or the use of hearing protection	S	Permit Holder
		Use double hearing protection [ear plugs and Ear defenders] to keep noise exposure below 85dB(A)	S	Permit Holder
		Use hearing protection that fits, and reduces exposure of personnel below 85dB(A) for an eight-hour Noise Dose	S	Permit Holder

IF ONE OF THE QUESTIONS ON THE TRIC HAS BEEN ANSWERED WITH NO

- Stop working, do not start work
- Warn your supervisor, Permit Issuer/Permit Verifier and/or Operator

UNLESS DISCUSSED IN ADVANCE

All operational personnel have participated in the JHA and are familiar with its content; Name Initials Name Initials If the equipment is being opened for the first time and/or a permit is granted for the first time, Operations will check the workplace. Name and initials of Operations representative The Senior Operations Technician /Shift Supervisor does not need to attend the toolbox talk, but will familiarize himself with the contents of the completed TRIC Name and initials of SOT/SD supervisor What is the (biggest) risk at this site? What are the controlling measures?

Pictograms for key hazards



Hand Tools - ALL



Caught Between





Slips & Trips



Emergency Response



Fitness to Work



Exposure to Wildlife bites,



Noise







Fatigue



Weather

AST MINUTE RISK ANALYSIS (LMRA) IS EVERYTHING UNDER CONTROL? Discuss the risks with everyone at the workplace

- · Before you begin on a task or
- In event of changing circumstances

EMERGENCY NUMBERS

- 1st contact:2nd contact:
- · Mobile telephone:



Name of holder **ABIODUN OGINNI**

Company Shell

Permit number IMO RIVER FACILITIES-01-142458

28 Sep 2019

What kind of work are you going to do?

MOBILIZATION SITE INSPECTION. CLEARING AND SURFACE PREPARAION

	Yes	No	N.A.
Has the applicant discussed the work permit with the holder?			
Is your work so safe that no risk is posed to others?			
Is other people's work so safe that no risk is posed to yourself?			
Have work arrangements been made with other permit holders for the same task?			
What will you do if something goes wrong?		Yes	No
What will you do if something goes wrong? Do you know what to do in case of an alarm?		Yes	No
		Yes	No
Do you know what to do in case of an alarm?		Yes	No
Do you know what to do in case of an alarm? Do you know which direction the wind is coming from?		Yes	No

Indicate which Life Saving Rules are applicable.

when required



work permit







before work



Obtain authorisation





before entering a confined space









Do not walk under against a fall when a suspended load

Do not smoke outside designated smoking areas











No alcohol or drugs while working or driving

While driving, do not use your phone and do not exceed speed

Wear your seat belt

Follow prescribed Journey Management Plan





LEARNING FROM INCIDENTS AWARENESS ALERT



Hand Injury While Using Hand Tool

HSE - 252 - L

Shell Oceania Distribution

Fountain 333104

10 Mar 09

What happened

On 17 February 2009, a contracted worker at the Shell Lyttelton Site 1 project injured two fingers on his left hand. At the time of the incident, the worker, along with another worker, was digging two holes

under a tank bund wall using shovel and crowbar. The two workers in close proximity doing the task (see photo for restricted workspace). The worker had rested the crow bar against a wall and while they were digging, the bar slid down the wall. He reached out to grab the bar but only caught it by his left hand and only by his little and index fingers, causing instant swelling of this hand and wrist. (Note: the crowbar is a 1.8m long steel bar). The job was ceased while medical treatment was sought for the injured worker who was immediately taken to a medical centre for treatment where a doctor advised him that he should be taken to a hospital. At the hospital, the worker was told he would require surgery the next day and was sent home on advice of doctor to return the following day. At the hospital the following



Area where incident occurred

day the worker was eventually advised there was no need for surgery or further medical treatment other than two days rest.

Lessons learned

- (Incident Management) Although the contractor issued an incident alert soon after the incident, there
 was no evidence of a new risk assessment being conducted prior to recommencing and completing
 the task.
- (Unsafe placement of equipment or objects) The worker placed a heavy hand tool (crowbar) against
 a wall close to the area in which he was working.
- (Hazard Identification and Control) Previous review of the task had not identified any specific risks with the task and the temporary storage of the crowbar during the work.
- (Unsafe storage of objects, proper housekeeping while working) The crow bar that had been placed against the wall was not secure and slid from its temporary resting position.
- (Unsafe behaviour) The worker attempted to stop its fall and the impact with his left hand, occurred
 with some force due to its weight. There would have been no harm to people or assets had the
 crowbar slid down to the ground.
- (Hazard Identification and Control) A "Walk and Talk" was carried out by the worker, his co-worker
 and the supervisor prior to starting the task, this did not identify any specific risks associated with the
 task and it was decided to proceed under the current site Work permit without any further risk
 mitigation strategy.



Goal Zero: Zero injuries, Zero fatalities

- (Hazard Identification and Control) The Walk & Talk was not formally documented. Failure to
 identify two workers in close proximity using heavy hand tools was a risk. The establishment of
 separate workspaces was not effective due to the proximity to each other. This allowed the hazards
 from each workspace to potentially impact the other.
- (Hazard Identification and Control) Whilst it was not identified as being required, a Work Method Statement is not available for this specific task, general work instructions are included in the contractor safety manual for use of manual tools.

What to do

- 1. All Line Managers and Supervisors where a similar activity described on this LFI happens or could happen should assess risks identified and take into account learning and recommendations described herein.
- 2. Take note and discuss the actions described below for applicability within your operations and identify gaps. Action items should be identified to close gaps and entered into FIM as a potential incident to ensure close out.
- 3. Introduce requirement for a Risk Assessment for all non-routine activity not identified on current Work Permits for the site.

not identified on current Work Permits for the site. 4. Ensure that behavioural-based work observation checks or processes are in place and consistently delivered by supervisors, especially when new or contracted workers are on site.

5. Discuss the HSSE Focus topic for the use and storage of hand tools and take special consideration for the use of hand tools while working in close proximity of others.

More information

- Shell Oceania Distribution HSSE Focus Topic on the Use of Hand Tools
- For information regarding this incident: <u>joromi.g.guantero@shell.com</u> (HSSE Manager, Shell New Zealand Distribution)

Reference to Standards/procedures:

- Application of HEMP
- Fountain Incident Management



Goal Zero: Zero injuries, Zero fatalities



SHELL PETROLEUM DEVELOPMENT COMPANY

SAFE HANDLING OF CHEMICALS (SHOC) CARD

Chemical Name	Cement-Standard-Class A	SHOC No.	073
Supplier	Halliburton	Activity	Well Services
Appearance	Odourless, solid	Exposure Category	
Colour	Grey	Main Application	Cementing

CO	MPOSITION			
No	Component	CAS no	Weight (%)	R & S Phrases
1	Portland Cement	65997-15-1	60-100	
2	Crystalline silica quartz	14808-60-7	1-5	

Product Classification		
R – Phrases	R 36,38, 49, 34(Irritating to eyes and skin; may cause cancer by inhalation; causes burns)	
S – Phrases	S22, 25,22,37,38,39(Avoid contact with skin and eyes; Do not breathe dust; wear suitable gloves; Wear respiratory equipment; wear eyes/face protection)	

Primary risks:

Irritation to skin and eyes; may cause skin burns. Potential carcinogen; may cause delayed (chronic) lungs injury.

Activity (Delete where not applicable)	Precautions/ Preventive Measures	Type of hazards/ Exposure	Recovery measures
Transportation Stock Management Use re-use & recycle Disposal	Not applicable	Fire/ Explosion	Not applicable
Transportation Stock Management Use re-use & recycle Disposal Waste Management	Avoid inhalation, use appropriate respirator, fume cupboard.	Inhalation	Remove affected person to fresh air. Provide artificial respiration if not breathing. If breathing is difficult give oxygen. Contact physician.
Transportation Stock Management Use re-use & recycle Disposal Waste Management	Appropriate clothing (use appropriate personal protective equipment). Avoid skin contact.	Skin Contact	Take off all contaminated clothing immediately and wash before re-use. Wash skin immediately with plenty of water. Obtain medical advice if there are persistent symptoms
Transportation Stock Management Use re-use & recycle Disposal Waste Management	Safety spectacles	Eye Contact	Flush eyes with copious amounts of water, separating the eyelids with fingers in so doing. Contamination should be treated immediately Contact physician/optometrist
Transportation Stock Management Use re-use & recycle Disposal Waste Management	Wash hands thoroughly after use	Ingestion	Wash mouth with water. IF VICTIM IS UNCONSCIOUS DO NOT INDUCE VOMITING. Contact the physician if symptoms persist.

Packaging & Hand	Packaging & Handling 50kg multiwalled paper bag; 1500kg polyethylene sacks		
Storage	Store in cool, dry, well ventilated location away from water		
Incompatibility	Hydrofluoric acid		
Cleaning up Slippa	Cleaning up Slippages/ Release:		
Specific risk	Respirable quartz is a potential carcinogen		
PPE required	Appropriate protective equipment (Suitable clothing, gloves, respirators, safety boot, goggles)		
Cleaning up	Scoop into sealed container.		
Disposal Option	Dispose off in accordance with company waste manege		

Physical and Chemical properties @ 20 °C			
Boiling Point (⁰ C)	N/A	Melting Point (⁰ C)	N/A
Vapour pressure:	N/A	Density (g/cm ³)	N/A
Solubility in water	0.5 (Slight)	Flash Point: (°C)	N/A
pH value	12-4	Auto-ignition temperature (⁰ C)	N/A
Explosion limit (v/v %)	N/A	Exposure Limit (kg/m³)	N/A