



Control of Work : NR/KC District-01-018498

State : Closed

Mechanical - Medium

INSTALL INJECTOR NOZZLES AND START UP NUN R BLACK START AIR COMPRESSOR

Description of work: INSTALL INJECTORS AND START UP ATLAS COPCO BLACK START MOBILE AIR

COMPRESSOR.

INSTALL INJECTOR NOZZLES CONNECT THE AIR FILTERS

CONNECT THE FUEL DELIVERY LINES

CONNECT BATTERY

CONNECT ALL THE ACCESSORIES TIGHTEN ALL LOOSE CONNECTIONS

Details

Title

Planned start date: 06 Feb 2018

Planned end date: 08 Feb 2018

Working hours: 08:30 17:30

Site: NR/KC District

Work locations: EXPORT PUMP AND GENERATOR MAIN AREA

Equipment description: ATLAS COPCO BLACK START AIR COMPRESSOR

Minimum number of persons: 3

Work order number: NA

Tools to be used: STANDARD MECHANICAL TOOL BOX

MULTI METER

ELECTRICAL TOOLBOX

Vehicles/Equipment to be used NA

ICC Requirement None

Lead Discipline: Mechanical

Influence of nearby activities:

Permit types from questionnaire Cold Work

Mechanical

Signature History

Туре	Name:	Date:	Dep./Company:
Close by Permit Issuer	OHUAKA IKECHUKWU	08 Feb 2018 18:06	Shell
Complete by Permit Issuer	OHUAKA IKECHUKWU	08 Feb 2018 18:05	Shell

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Complete by Permit Holder

Accept revalidation by Permit Holder

Re-issue permit by Permit Issuer

KULUME, CHUKWUMA KULUME, CHUKWUMA OHUAKA IKECHUKWU 08 Feb 2018 17:20 08 Feb 2018 08:16 08 Feb 2018 08:15 Shell Shell

Closed



Attached to:

RA/JHA NR/KC District-01-018500

Permit NR/KC District-01-018498



Title: INSTALL INJECTOR NOZZLES AND START UP NUN R BLACK START AIR COMPRESSOR

Team: DURUAKU VINCENT, OGOBIRI SAMSON, OHUAKA IKECHUKWU

Approval:

05 Feb 2018 16:28	DURUAKU VINCENT
06 Feb 2018 09:25	OGOBIRI SAMSON
08 Feb 2018 18:06	OHUAKA IKECHUKWU
06 Feb 2018 09:26	OHUAKA IKECHUKWU
06 Feb 2018 09:25	OHUAKA IKECHUKWU

Task steps	Hazards	Control measures		Action party	
INSTALL INJECTOR	Exposure to Wildlife bites, stings (PEOPLE)	Exercise caution and proper situational awareness	S	Permit Holder	
		First aid kit with epipen available at worksite	Р	Permit Holder	
		Use insect repellent	S	Permit Holder	
		Use of hand gloves, coverall and safety shoes	S	Permit Holder	
	Fatigue (PEOPLE)	Buddy systemto 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	
CONNECT ALL THE ACCESSORIES (AIR LINE, FUEL LINES ETC)	Hand Tools - ALL (MOTION)	Exercise caution	S	Permit Holder	
		Proper tool selection and usage	S	Permit Holder	
		Use of competent personnel	S	Permit Holder	
		Wear appropriate hand protection suitable for task	Р	Permit Holder	
	Sharp, abrasive objects (MOTION)	Exercise caution	S	Permit Holder	
		Wear arm protectors	S	Permit Holder	
	Slips & Trips (MOTION)	Proper situational awareness and exercise caution	S	Permit Holder	
		Remove any trip hazards in the area, clean up any spills, wear anti-slip safety shoes	S	Permit Holder	



RA/JHA

NR/KC District-01-018500

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CONNECT BATTERY AND FUNCTION TEST COMPRESSOR	Arc Flash (ELECTRICAL)	Exercise caution and work accompanied		
		USE OF COMPETENT PERSONNEL	S	
		Wear Arc rated clothing to be rated equal to or higher than the calculated arc flash energy on the equipment label	Р	
		Jewellery, especially rings on fingers and metal watchstraps, or other conductive materials Shall not be worn Empty pockets of all metal objects	S	Permit Holder
		No Electrical Enclosure, containing live connections, to be left open and unattended	S	Permit Holder
		Only insulated tools Shall be used	S	Permit Holder
		Rubber gloves rated for the electrical voltage present to be available and used when required	S	Permit Holder
		Work Shall be undertaken by a minimum of two persons	S	Permit Holder
	Hand Tools - ALL (MOTION)	proper tool selection and usage	Р	Permit Holder
Pinch Points and Caught Between (MOTION)		Use of competent personnel	S	Permit Holder
		Wear appropriate hand protection suitable for task	S	Permit Holder
	Pinch Points and Caught Between (MOTION)	Do not operate equipment or machinery without the required machine guards	S	Permit Holder
	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
	Rotating Equipment (MOTION)	Check safety guards are fitted to rotating shafts and discs	S	Permit Holder
Sharp, abrasive objects (M		Exercise caution and proper situational awareness	S	Permit Holder
		Machine to be in view when started	S	Permit Holder
	Sharp, abrasive objects (MOTION)	Exercise cuation	S	Permit Holder
		Use cut resistant gloves (cut level 4 or more)	S	Permit Holder
		Wear arm protectors	S	Permit Holder
CARRY OUT HOUSEKEEPING	Slips & Trips (MOTION)	Exercise caution	S	Permit Holder
		Remove any trip hazards in the area, clean up any spills, wear anti-slip safety shoes	S	Permit Holder

RA/JHA

NR/KC District-01-018500

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	Fatigue (PEOPLE)	Buddy systemto be used when personnel contiue to work past 12 hours in a single shift		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	

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 pe its content;	rsonnel have partic	cipated in the JHA a	ind are familiar with
Name	Initials	Name	Initials
		the first time and/o	
Name and initials o	of Operations represe	entative	
		hift Supervisor doe iarize himself with t	
Name and initials o	of SOT/SD superviso	r	
What is the (bigge	est) risk at this site	?	
What are the sant	rolling measures?		
vviiat are the CONT	ronning inteasures?		

Pictograms for key hazards



Hand Tools - ALL



Sharp, abrasive objects



Stored Electric Charge





Slips & Trips



Exposure to Wildlife bites, stings



Rotating Equipment



Arc Flash



Fatigue

LAST 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 KULUME, CHUKWUMA

Company Shell

Permit number NR/KC District-01-018498

08 Feb 2018

What kind of work are you going to do?

INSTALL INJECTORS AND START UP ATLAS COPCO BLACK START MOBILE AIR COMPRESSOR.
INSTALL INJECTOR NOZZLES

	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
Do you know what to do in case of an alarm?			
Do you know which direction the wind is coming from?			
Are the escape routes and muster points accessible?			
Do you know what to do in case of an accident?			
	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? Do you know what to do in case of an alarm? Do you know which direction the wind is coming from?	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? Do you know what to do in case of an alarm? Do you know which direction the wind is coming from?	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 Do you know what to do in case of an alarm? Do you know which direction the wind is coming from?

Indicate which Life Saving Rules are applicable.

when required



work permit

when required



Work with a valid Conduct gas tests







Verify isolation before work begins and use the specified life protecting equipment

Obtain authorisation before entering a confined space











Protect yourself Do not walk under against a fall when a suspended load working at height

Do not smoke outside designated smoking areas



or disabling

saftety critical equipment





exceed speed







driving

While driving, do Wear your seat not use your belt phone and do not

Follow prescribed Journey Management Plan



LEARNING FROM INCIDENTS NEWSFLASH

UAU-NF-201313-962379 UA Unconventionals APPALACHIA – Bradford Operations | April 2013

Only for distribution to Shell employees, Shell contractors, Shell operated joint ventures and, with the consent of the Shell Shareholder Representative, to non-Shell operated joint ventures. Refer to the <u>LFI Legal Guidance*</u> if you wish to send this Alert to other parties.

FUEL LINE TO COMPRESSOR BREAKS OFF.

Target audience for this newsflash

This Alert is intended for all personnel that work with Compression, Operations or Maintenance.

What happened

The 1" steel fuel line that supplies gas from the discharge line to the compressor broke off at a threaded connection on the compressor skid.

Why it happened

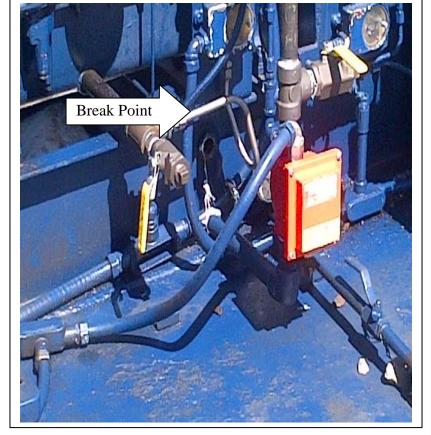
The investigation of this incident is currently ongoing. Additional information will be available when completed.

Suggested toolbox/safety meeting questions

- Have you considered a drill of this type in your ERP.
- How do you ensure that equipment is maintained on your site? Should this include items not covered by a PM schedule

Further information

For more incident details or more information go to FIM 962379.



*LFI Legal Guidance- http://sww.shell.com/hse/incident/index.html

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