

Risk Assessment

RA-09 Lifting Activity By Using Crane

Contract No. and Project No.: QF/PD/13/M-009-MOF, QFE009	RA Number: QFE 09-EVS- PL-ST- 09	Element of Work: Lifting Activity By Using Crane	Risk Assessment Author: J.James Victor	Date: 08 June 2013
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Severity	Likelihood	Evaluation of Risk		
NO INJURY	1 RARE	1	12 - 25	High
MINOR	2 UNLIKELY	2	Action required urgently to control the risk, further resources may be required, work must stop immediately	
MODERATE	3 OFTEN	3		
MAJOR	4 LIKELY	4	5 - 10	Medium
FATALITY	5 EXPECTED	5	Action required to control the risk, interim measures may be necessary in the short term, able to proceed with work under supervision	
			1 - 4	Low
This represents a low risk, although control measures must be maintained				

Job / What are the hazards?	Who might be harmed? Employees Contractors Public Others Environment	How?	Initial risk?			What controls are required?	Residual Risk?			Action by
			Likelihood	Severity	Risk Rating		Likelihood	Severity	Risk Rating	
Mobile crane with Tools and Tackles / Equipment Failure, Hit with the equipment	Employees, Contractors	Due to inadequate awareness, work with inexperienced persons	4	4	16	<ul style="list-style-type: none"> Through inspection shall be conducted of all construction equipment by competent person/ equipment section according to project requirement prior to mobilize at Site. Crane must be certified by third party and endorsed by QP Crane operators are having valid State Of Qatar License for particular type of equipment Crane operator, rigger, signal man must have valid third party certification Ensure mobile cranes are keeping the manufacturer operator manual, manufacturer load chart and manufacturer precautionary recommendations must follow at all times. All lifting gears and tools must have valid certificate. All lifting Tools and Tackles are having periodic quarterly inspection with present color code. Check and ensure the stable condition of the ground. Maintain 2 feet clearance between the pinch point of the crane and adjacent structure. Use spreader plate under outrigger. 	1	2	2	SE / SO

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						<ul style="list-style-type: none"> Have a Tool Box Talk with all concerned employees and discuss the hazard and danger with the specific operation. People / workers need to be trained in the risk involved and safety precautions that need to be taken. Visual inspection of all lifting equipment to be carried out by operator / site supervisor prior to start the activity. Carry out crane pre-start checks. 				
Manual handling / Back bone Injury / severe body pain	Employees	Wrong manual handling procedure	4	4	16	<ul style="list-style-type: none"> Minimize the manual handling and use mechanical equipments like forklifts ,mobile crane & tower crane. Restrict less than 20 kg / person. Explain the potential hazards before start the wok. Ensure the way is free from tripping hazard. Ensure the way is free from wet, uneven floor. Check the weight and shape of the load prior to lift. Safe manual handling techniques to be followed. Do not give load to the back bone to lift. Always give load to the leg when lift the material. Enuser all are attended proper training regarding manual handling. Close supervision. Use PPE's such as coverall, helmet, safety shoe, goggles and gloves. 	1	1	1	SE / SO
Shifting and lifting activity / Personnel injury and property damage.	Employees, Contractors, Others	Falling materials, traffic incident	5	5	25	<ul style="list-style-type: none"> Ensure all involving persons are trained to conduct the job. The equipments fork lift, trailer & Trucks must be certified and endorsed by QP Always operate with manufacturer limits and check in front and behind before proceeding. Strictly follow the speed limit as set by NAKILAT. Operator should never leave from forklift while engine is running. Check overhead equipment before moving load. 	1	2	2	SE / SO

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						<ul style="list-style-type: none"> Operator, rigger, banks man must have valid certification. Ensure all moving vehicles are fixed flickering light Ensure the materials are properly stacked and tied while moving 				
Steel erection lifting by crane / Personnel Injury, Property Damage, Fatality.	Employees, Contractors,	Personnel falling from height, Structure collapse, Equipment failure.	4	5	20	<ul style="list-style-type: none"> Manufacturer recommendation shall be strictly followed while using the crane. Crane shall be thoroughly checked prior to start the erection activity. Skilled and competent erectors are involved the activity. Ensure the valid crane certification and present color code, rated load capacity and its work condition. Ensure the ground bearing capacity before park the crane. Operator is having valid State of Qatar driver's license and QP approved third party competency certificate. Competent Rigging Supervisor is performed and controlled the lifting/erecting activities at all times. Assign skilled and competent riggers for all kind of lifting operations. Critical lifting permits to be obtained for lifting above 40 tones and other conditions of NAKILAT permit to work system. Lifting plan to be attached with critical lifting permit signed by the site engineer. Proper communication to be maintained between the rigger and crane operator. Check wind speed, manufacturer wind speed limitations and wind impact on the load with regard its shape. Ensure tag lines are free of knots and controlled by competent rigger while load travelling. Operatives working at height should attend "Working at Height" training. A double lanyard with shock observer full body harness must be worn and be attached to suitable anchor point when working at height. All work should be carried out from a certified access platform (scaffold) wherever possible. Ensure working platforms are safe by visually checking and tagging it by a competent person before use and ensure they will support the weight of workers using them 	2	1	2	SE / SO

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						including material and equipment. <ul style="list-style-type: none"> Do not reach out beyond or work outside hand railing. Walking along beams is prohibited, except 100% tie off to lifelines. The area below the erection area must be barricaded and place suitable sign boards Prevent the unauthorized entry in to the lifting zone and proper coordination with other contractors in same project. Use bolt bag to carry bolts, hand tools to prevent falling Ensure no other working group working under / close to the erection location. Ensure all bolts are fixed and tightened before release / unhook the crane. Ensure the stability of the structure before release / unhook the crane form the structure. Close supervision required. 				