Task Risk Control Sheet

Lifting and Thimbling Operations

RCS No: NR/L3/MTC/RCS0216/MP06
Issue: 2

- Personnel injury (1&3)
- Struck by Train (2)
- Derailment (4)
- Obstructing the line (5)
- Electrocution (9)
- Communication (12)
- Defective Equipment
- Striking obstructions
- Snagged load

Personnel Involved		
	E&P	✓
	S&T	✓
	Track	✓
	Off Track	✓
	Property	✓

Tools / Equipment - Loose Lifting Accessories, - Powered Lifting Accessories

Plant - RRV/RMMM CRANES KNUCKLE BOOM

SECTION A- All Risks For Tasks

Key Risks	Controls	Implemented By
Key Use & Control of OTP	• See Task Risk Control Sheet NR/L3/MTC/RCS0216/MP01 - Use and Control of OTP 1, 2, 3, 4, 5, 8, 9 and 12	
All Tasks	• A pre-site survey shall be performed before any crane operations are started, including a check of ground conditions for suitability for cranes and loads to be lifted • A site specific risk assessment, method statement and job lifting plan shall be produced for each lift by a competent person • Check correct selection of the crane for the task and that it will be able to lift the required loads, within a given radius or reach by consulting the duty charts provided • Safe Working Limit, Radius and Load and Rated Capacity Indicators shall be operable at all times and not turned off • All staff involved in the use of cranes, including operators, controllers, banksman, signallers, slingers shall be trained and competent in those duties • Suitable exclusion zones dependant on lift being undertaken shall be created and maintained • All cranes and associated equipment (including lifting tackle) shall be subjected to a statutory inspection and a programme of planned preventative maintenance • Operators and slingers shall perform pre-user checks prior to all lifts to check that all lifting equipment (including loose lifting accessories) is free from defects • Effective communication (signals or back to back radios) shall be in place between operators, controllers, signallers and slingers • The route of travel for travelling cranes shall be kept free from obstructions and the operator shall have a clear view of the route – movements shall be controlled by a controller or banksman • Suitable lighting shall be provided on all sites • Prior to work the operator shall check the condition of the ground so that it is suitable for the lift • Spreader plates and outriggers shall be deployed and level prior to making lifts • Contact any airfield if work is performed within 6km and operations will exceed 10 metres or above surrounding structures and trees	Crane controller / operator / slinger

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Key Risks	Controls	Implemented By
Overturning of RRV	• All lifting shall be performed in accordance with the lifting plan • RCI indicators shall not be turned off and duty charts shall be available • Outriggers shall be used where provided and practicable • Work shall not take place where wind speeds exceed 40 mph • Crane operations shall only be performed on level and firm ground whenever reasonably practicable	Crane Controller Operator
Loss of Load	• All lifts shall be performed within the safe working limit of the crane and its lifting tackle • RCI indicators shall be switched on and duty charts shall be available • Correct lifting techniques shall be used i.e. loads not snatched • Loads shall be carried slowly, movements controlled, as low as reasonably practicable. No-one shall be permitted to be underneath the load when being lifted • The centre of gravity and lifting points shall be indicated on the load and the load slung accordingly • Slinging shall only be performed by competent persons and using correct equipment that has been the subject of statutory inspections	Crane Controller
Struck by load / falling objects / crane movements	• Check and secure / remove all loose objects or materials from loads prior to lifting • Use handlines where necessary • Loads shall not pass over people	Crane controller
Electrocution	• See Risk Control Sheet NR/L3/MTC/RCS0216/GA20-Working adjacent to DC electrified rails Levels 1-5 • See Risk Control Sheet NR/L3/MTC/RCS0216/GA21-Working near electrified overhead line equipment	Team Leader
Personal injury	• The operator shall have a clear view of the route – movements shall be controlled • Suitable lighting shall be provided on all sites	Crane Controller Team Leader
Personal Injury – Lifting rail < 20m long	• Use “Pick & lift” or “Pick & Carry” technique only – check snag lines or controlled handling device are used to restrain the rail. • Exclusion zones of 3m lateral and 5m from the ends of the rail shall be created and maintained	Crane Controller Team Leader

SECTION B – Additional Risks for Tandem Lifting

Key Risks	Controls	Implemented By
Tandem Lifting	• Tandem lifting shall only be performed by crane operators who have been trained and competent in these duties • Effective means of communication shall be available, tested and working between all parties. Where radios are used, these shall use dedicated frequencies to relay instructions. • On or off tracking shall not take place when undertaking a tandem lift • Agree the lifting plans with the operators • Load shall remain “plumb” – load to be vertically below the hook at all times on both machines	Crane Controller / machine operator
Tandem Lifting - Derailment	• The normal safe working load of each machine (for the required duty and radius) shall be not less than the calculated share of the load plus 50% • Where one machine is to take more than half the weight of the load, both machines shall have a safe working load of not less than the heaviest load plus 50% (for the required duty and radius) • RCI shall be fully functioning on all machines used for tandem lifting • Where one machine is to operate in rail mode and the other in road mode, both machines RCI shall be operated in the lower rated mode. (which is usually rail mode)	Crane Controller

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