

Risk Assessment Form

Task/Activity: VIS Field Staff – Overview (Not a comprehensive assessment of every risk – refer to specified RA's as referenced below for more detail)

Location/Dept: Vehicle Inspection Service	Date Assessed: July 2020 (amends in red text)	Issue Number: 005
Assessed by: Martin Candish, Neil Milburn, Tony Gibbs, Alison Norris, Mick Parcell, Darryl Seeley	Review Date: July 2021	Reference Number: RAD 001

Persons to Complete Task:

- VIS Engineers, once deemed competent by Engineering Standards & Technical Management Team

Activity/Task	Hazard/Risk	Persons at Risk	Controls in place	Severity (1-5)	Likelihood (1-5)	Risk Rating
1. Working on Customer or 3 rd Party premises	a) Unknown environment and locations differ – VIS Engineer may fail to dynamically risk assess area effectively resulting in injury, fatality and/or damage.	Engineers Senior Engineers Engineering Managers Anyone else in the vicinity	i. As per <i>VIS Dynamic Risk Assessment Guidelines</i> – GD001, Engineer selects safe inspection site and continually assesses environment for any changes which may affect safety. ii. Engineers instructed to stop work immediately if unsafe conditions arise and report concerns to Manager immediately. iii. Relevant PPE worn at all appropriate times, ensuring site-specific requirements are also observed where necessary. iv. Customer 'Site Safety' requirements are outlined in the Contract Terms & Conditions and made available to Engineer prior to visit. v. Any concerns relating to the Engineers' working environment identified on arrival are escalated as per the QEM using QMF1 and also reported via company incident reporting process. vi. Also refer to RAS 033 – <i>Visiting Customer Sites Risk Assessment</i> for additional details.	5	1	5

	b) Failure to adhere to site safety/work procedures – resulting in injury, fatality and/or damage.		<ul style="list-style-type: none"> i. Work and site requirements are discussed with the site contact before work commences as per the VIS Site Safety Letter. ii. Where required, site induction training is attended before work commences. iii. Engineers are briefed during initial induction regarding full adherence to all site specific & employers safety procedures. 	5	1	5
2. Workplace transport & vehicle movements on site	a) Other moving vehicles including M.H.E and plant equipment colliding with inspection vehicle, causing entrapment, collision with a moving object, crush injuries	<p>Engineers</p> <p>Senior Engineers</p> <p>Engineering Managers</p>	<ul style="list-style-type: none"> i. As per <i>VIS Dynamic Risk Assessment Guidelines</i> – GD001, Engineer selects safe inspection site and continually assesses environment for any vehicle movements, including MHE and plant equipment. Also refer to: RAS 013 – Vehicle movements on Member/Customer Premises Risk Assessment ii. Engineers work within a demarcated area (cones), identified as safe with site contact prior to commencing inspection – refer to QEM4 and GD005 – Setting a Safe Working Environment. iii. Engineers are instructed to immediately exit the underside of a vehicle during inspection if neighbouring vehicles / equipment are moving in the direct vicinity of the inspection area. 	5	1	5
	b) Engineers driving customer vehicles on site – risk of injury, damage resulting from collision with other vehicles, stationary objects, pedestrians.	Pedestrians	<ul style="list-style-type: none"> i. Only suitably qualified staff should drive member vehicles as per RAS 013 – Vehicle movements on Member/Customer Premises Risk Assessment ii. Supervisory Field Visits undertaken and recorded to assess adherence to working procedures, to include follow up actions as per Quality Operations Manual (QOM) iii. Road Going Mobile Crane (RGMC): Owing to machine complexity, equipment variances, weight, dimensions and VIS Engineer unfamiliarity, operation of machine is strictly restricted to the crane operator. 	2	2	4

3. Manual Handling	a) Manual Handling injuries resulting from lifting, carrying and positioning inspection equipment' e.g. strains, sprains, musculoskeletal disorders (MSD), abrasions, struck by items, trapped fingers/hands/limbs	Engineers Senior Engineers	<ul style="list-style-type: none"> i. Refer to <i>Manual Handling Risk Assessment RAS 031</i>. ii. Engineers are trained in correct manual handling procedures and provided with trolleys to help move heavier equipment. iii. Suitable workwear and gloves are worn to protect hands/fingers/limbs from injury. iv. Safety footwear worn to protect feet. v. Supervisory Field Visits undertaken and recorded to assess adherence to correct work procedure as per QOM. 	3	2	6
	b) Loading / unloading Engineers vehicle with inspection equipment, resulting in strains, sprains, musculoskeletal disorders (MSD), abrasions, struck by items, trapped fingers/hands/limbs	Engineering Managers	<ul style="list-style-type: none"> i. Refer to <i>Manual Handling Risk Assessment RAS 031</i>. ii. Suitable workwear gloves worn to protect hands/fingers from injury. iii. Safety footwear worn to protect feet. iv. Engineers vehicles selected owing to ergonomic suitability for loading/unloading equipment. v. Supervisory Field Visits undertaken and recorded to assess adherence to correct work procedure as per QOM 	3	2	6
4. Using Work Equipment to carry out Inspection activities	a) Engineer failing to use authorised tools and equipment or conduct a thorough pre-use visual inspection to identify faults or damage which may compromise safe use – resulting in injury including sprains, strains, MSD's, abrasions or fractures. Damaged equipment involving ramps/chocks/ axle stands could result in unexpected vehicle movement resulting in greater damage and/or injury.	Engineers Senior Engineers Engineering Managers	<ul style="list-style-type: none"> i. Induction and periodic refresher training ii. Only authorised, equipment to be used – calibration and inspection are carried out where appropriate to meet statutory requirements. iii. Pre-use checks are carried out on all tools and equipment as per Work Equipment Guidelines – GD002 iv. Engineer to confirm vehicle axle/tyre weights do not exceed SWL of equipment v. Engineers instructed not to use tools or equipment if defects are found which are likely to compromise safety. 	5	1	5

	b) Manual Handling injuries resulting from lifting, carrying, positioning inspection equipment e.g. strains, sprains, musculoskeletal disorders (MSD), abrasions, struck by items, trapped fingers/hands		<ul style="list-style-type: none"> i. Refer to <i>Manual Handling Risk Assessment RAS 031</i>. ii. Suitable workwear gloves worn to protect hands/fingers from injury. iii. Safety footwear worn to protect feet. iv. Supervisory Field Visits undertaken and recorded to assess adherence to correct work procedure as per QOM 	3	2	6
	c) Incorrect use or faulty/damaged third-party equipment used during inspection may result in damage or injury		<ul style="list-style-type: none"> i. Engineers are trained to use the types of equipment issued ii. Engineers only use equipment that meets QMF8 prerequisites; and confirm equipment has been maintained, inspected and meets statutory requirements prior to starting work. iii. RGMC: Owing to larger wheel dimensions, it may be necessary to use an extended 'heel' bar to help assess kingpin bush / bearing wear. VIS Engineer must seek initial authorisation to use customer's property and visually inspect equipment prior to use. 	4	1	4
5. Raising vehicles and carrying out underside inspections during Inspection activities	a) Preparing vehicles for underside inspection – mounting / dismounting ramps resulting in struck by/against injuries to other people in direct vicinity	Engineers Senior Engineers	<ul style="list-style-type: none"> i. Visual check conducted to ensure all personnel are in a place of safety outside the designated inspection area. ii. Follow correct procedure for driving on/reversing off ramps as per QEMIP1 As per RAS 040 – <i>Raising Vehicles and Securing Axles & Wheels in Preparation for Underside Inspection Risk Assessment</i>. iii. Engineers follow key safe procedure throughout inspection. iv. Parking brake is engaged. v. Follow QEM procedures to correctly position chocks. 	5	1	5
	b) Secure positioning of wheel chocks – potential for crushing/struck by injuries if vehicle unexpectedly moves owing to incorrect alignment of vehicle and/ or chock.	Engineering Managers Pedestrians, other people working in the vicinity In-cab Assistant				

	<p>c) Unauthorised persons accessing vehicle cab leading to unexpected vehicle movement.</p>					
	<p>d) RGMC Preparing vehicles for underside inspection – raising on stabiliser legs resulting in struck by/against & crush injuries to other people in direct vicinity</p>		<ul style="list-style-type: none"> i. Engineers follow 'key safe' procedure throughout inspection. ii. Parking brake is engaged. iii. Engineers follow QEM procedures to correctly position chocks. iv. Engineer ensures immediate area adjacent to stabiliser leg remains clear v. Only crane operator to deploy vehicle on-board equipment vi. Primary support is achieved by on-board stabiliser legs which are also used to elevate the vehicle. Secondary protection is achieved by integral pilot operated 'check valves' which 'fail safe' and only operate via intentional switching by the crane operator. vii. Each stabiliser ram is further protected by an integral 'burst protection' valve to prevent uncontrolled machine descent in the event of hydraulic pipe or hose failure. viii. Front and rear suspension ride height is controlled by a central electronic solenoid valve serving hydraulic suspension units located at each wheel station. The ram within each unit is fully extended to create a 'mechanical stop' to eliminate the potential for the front or rear axles to move unexpectedly during the inspection process. (Please refer to RAS 041 and 043 for details). 	5	1	5

	<p>e) Positioning axle stands as secondary supports – unforeseen movement of vehicle leading to struck by/against, crush injuries.</p>		<ul style="list-style-type: none"> i. Vehicles are made safe; Engineer follows 'key safe' procedure throughout inspection; parking brake is engaged. ii. Follow QEMIP1 procedures to correctly position axle stands. iii. Air suspension movement is controlled by lowering or axle stand support iv. Pre-use inspection of ramps, chocks and axle stands as per Work Equipment Guidelines – GD002 v. Follow correct procedures as per Risk Assessment RAS 040 – <i>Raising Vehicles and Securing Axles & Wheels in Preparation for Underside Inspection.</i> vi. RGMC: Axle stands are not required to provide secondary support owing to primary support being achieved by on-board stabiliser legs which are protected by integral pilot operated 'check valves' which 'fail safe' and only operate via intentional switching by the trained operator. vii. Each stabiliser ram is further protected by a 'burst protection' valve to prevent uncontrolled machine descent in the event of hydraulic pipe or hose failure. viii. Front and rear suspension ride height is controlled by a central electronic solenoid valve serving hydraulic suspension units located at each wheel station. The ram within each unit is fully extended to create a 'mechanical stop' to eliminate the potential for the front or rear axles to move unexpectedly during the inspection process. (Please refer to RAS 040, 041 and 043 for details). 	5	1	5
--	--	--	---	---	---	---

	<p>f) Underside inspection of vehicles – struck by/against lowering lifting axle leading to bumps and crush injuries; struck by/colliding with fixed/stationary object i.e. low components and work equipment</p>		<ul style="list-style-type: none"> i. Refer to RAS 041 – <i>Underside Inspection of HGV Vehicles – Raised on Ramps and Mobile Cranes</i> ii. Pre-use inspection of axle stands as per Work Equipment Guidelines – GD002 iii. Protective gloves, bump cap and eye protection worn iv. If fitted, lifting axles should either be positioned with the wheel/tyre on the ground or, the axle raised to its highest position and supported by axle stands. v. RGMC: Each suspension ram must be fully extended thereby creating a mechanical stop. This status must be confirmed by the crane operator prior to the VIS Engineer commencing the inspection (Please refer to RAS 041 for details). 	5	1	5
	<p>g) Underside inspection of vehicles – struck by/colliding with fixed/stationary object i.e. low components and work equipment; burn injuries from hot components; struck by falling objects, debris and fluids resulting in cuts, abrasions, burns, skin irritation and eye contamination</p>		<ul style="list-style-type: none"> i. Refer to RAS 041 – <i>Underside Inspection of HGV Vehicles – Raised on Ramps and Road Going Mobile Cranes</i> ii. Tools positioned to prevent obstruction when manoeuvring crawler board iii. Vehicles allowed to cool before inspection iv. Visual checks to identify protrusions, harmful objects and leaks etc. v. Protective workwear, gloves, bump cap and eyewear worn. 	2	2	4
	<p>h) Inspecting steering and suspension components whilst under vehicle using in-cab assistant – unplanned vehicle movement leading to struck by/against, abrasions, bruising, fractures, crush injuries</p>		<ul style="list-style-type: none"> i. Refer to RAS 041 – <i>Underside Inspection of HGV Vehicles – Raised on Ramps and Road Going Mobile Cranes</i> ii. ‘In-cab assistant’ receives briefing from Engineer and presented with written guidelines – GD003. Assistant is deemed competent to assist subject to confirming their full understanding of actions expected. iii. RGMC - The above control measure also applies however, is enhanced as the ‘in-cab 	5	1	5

			<p>assistant' role is assumed by the crane operator</p> <p>iv. Axle stands are in place as per QEMIP1 and RAS 040</p> <p>v. RGMC: Axle stands are not required as the vehicle is supported on stabiliser legs with the axle / suspension locked in position.</p>			
	<p>i) Raising vehicles using bottle jacks/trolley jacks – misplacement and/or instability of the jack resulting in vehicle falling causing damage, entrapment or crushing</p>		<p>i. Refer to QEMIP1 – <i>Operational Checks and Jacking</i>, for correct work procedures.</p> <p>ii. Refer to RAS040 <i>Raising Vehicles and Securing Axles & Wheels in Preparation for Underside Inspection</i>.</p> <p>iii. Refer to RAS 043 – Raising Commercial HGV Vehicles using a Bottle Jack or RAS 042 – Raising Commercial HGV Vehicles using a Trolley Jack.</p> <p>iv. Engineers are instructed to refer to <i>VIS Guidelines to Jacking Points</i> – GD003 and use manufacturers approved jacking points and/or suitable alternative as per procedures.</p> <p>v. Supervisory Field Visits undertaken and recorded to assess adherence to working procedures, to include follow up actions as per Quality Operations Manual (QOM)</p> <p>vi. and statutory equipment requirements as per PUWER 1998 and LOLER 1998</p>	5	1	5
	<p>j) Raising/lowering vehicle wheels for individual wheel station inspection – jack slipping due to incorrect placemen t/ misalignment with jacking point or mechanical/hydraulic failure causing jack collapse resulting in damage, collision, struck by moving object, abrasions, entrapment, crushing;</p>		<p>i. Refer to section g) above for jack placement requirements</p> <p>ii. Only authorised, well maintained, calibrated and maintained equipment is used</p> <p>iii. All raising/lowering is carried out from outside the vehicle footprint, using extended jack handle</p> <p>iv. Only one-wheel station is jacked at a time with all other wheels either on ramps or ground surface, with a minimum 4 chocks in place to secure vehicle.</p> <p>v. Refer to RAS 043/042</p> <p>vi. Vehicle underside inspections not carried out until vehicle correctly raised on Bottle or</p>	5	1	5

			<p>Trolley jack and axle stands have been appropriately positioned</p> <p>vii. RGMC: Bottle jacks not to be used, machines are equipped with integral stabiliser legs which are used to elevate the chassis and axle assemblies simultaneously; negating the requirement to jack individual wheel stations.</p> <p>viii. RGMC: During the elevation process it's imperative that the hydraulic suspension is fully raised and 'locked'. This ensures each suspension ram extends through its maximum stroke consequently eliminating the potential for axles / wheels to descend unexpectedly.</p> <p>ix. RGMC: The trained operator must undertake this procedure and confirm satisfactory completion before the Engineer can commence any inspection.</p> <p>x. Supervisory Field Visits undertaken and recorded to assess adherence to correct work procedure as per QOM</p>			
6. Working with oils, grease and chemicals whilst carrying out Inspection activities	a) Exposure during inspection activities could result in skin irritations or skin cancer	<p>Engineers</p> <p>Senior Engineers</p> <p>Engineering Managers</p>	<p>i. Appropriate PPE, including disposable Nitrile gloves, always worn during inspection for protection.</p> <p>ii. Engineers carry change of clothing, which is employed if, clothes worn during inspection, become damaged or impregnated with chemicals.</p> <p>iii. Engineers carry handwipes and are trained to wash exposed areas of skin thoroughly to reduce the risk of infection and irritation.</p>	3	1	3
	b) Spillages could cause slips, trips or falls, resulting in injury and/or lead to environmental crisis	Anyone else working in the vicinity	<p>i. Refer to <i>Slips, Trips and Falls Risk Assessment</i> – RAS 032</p> <p>ii. Engineers report spillage immediately to site to ensure prompt containment and clean up.</p>	2	2	4

7. Slips, trips & falls	a) Failure to ensure the work area is kept tidy; inclement weather conditions/ unsuitable work surfaces could cause slips, trips, falls, resulting in bruising, abrasions, fractures	Engineers Senior Engineers Engineering Managers Pedestrians, other people working in the vicinity	i. Refer to <i>Slips, Trips and Falls Risk Assessment</i> – RAS 032 ii. As per the <i>VIS Dynamic Risk Assessment Guidelines</i> – GD001 Engineers select a suitable work site and monitor environmental conditions iii. Engineers instructed to ensure equipment is positioned safely to avoid creating hazards iv. Safety footwear with good grip is worn	2	2	4
8. Working at height on member premises	a) Working at height using ladders – unsafe use and failure to check equipment may lead to falls resulting in bruising, abrasions, cuts, fractures, fatality	Engineers Senior Engineers Engineering Managers Pedestrians, other people working in the vicinity In-Cab Assistant	i. All ladders are checked and used as per training. ii. Refer to RAS 016 – <i>Working at Height on Member Premises Risk Assessment</i>	5	1	5
	b) Inspecting Mobile Elevated Work Platforms (MEWP) / Access platforms – incorrect use or equipment type, and/or faulty equipment may lead to falls resulting in cuts, bruises, sprains, fractures and life changing injury or fatality		i. Refer to RAS 016 – Working at Height on Member Premises Risk Assessment ii. Refer to QEMIP for correct work procedures and choice of equipment iii. Secondary safety protection must always be used e.g. safety harness when working on MEWP's.	4	1	4
	c) Access/egress cabs – slips and falls due to incorrect technique, inclement weather, resulting in cuts, bruises, sprains, fractures, life changing injury or fatality.		i. Refer to RAS 016 – <i>Working at Height on Member Premises Risk Assessment</i> ii. Refer to QEMIP for correct work procedures iii. Safety footwear with good grip is worn	4	2	8
	d) Falls from vehicle and trailer bodies due to incorrect access/exit and inspection methods resulting in cuts, bruises, sprains, fractures and life changing injury, fractures,		i. Refer to RAS 016 – Working at Height on Member Premises Risk Assessment ii. Refer to QEMIP for correct work procedures iii. Safety footwear with good grip is worn iv. RGMC: Owing to equipment configuration, Working at Height may be necessary to assess engine oil and coolant levels. This risk has been mitigated by the VIS Engineer	4	2	8

	life changing injury or fatality.		seeking clarification from the crane operator who will have previously undertaken these checks as part of a daily operator's routine.			
9. Driving for Work	a) Driver behaviour, fatigue, stress, distraction, incorrect use of mobile phone, poor weather conditions could result in damage, personal injury or fatality in the event of a road accident	Engineers Senior Engineers Engineering Managers Other road users	i. Engineers adhere to both legislative requirements and FTA Policy regarding driving. ii. Refer to <i>Driving Risk Assessment</i> RAS 045 iii. Workload, travel and mileage are monitored by Line managers	5	2	10
10. Lone Working	a) Engineers working alone in the field; driving, working on member premises, homeworking, working out of hours, staying away from home – could result in damage, illness, personal injury	Engineers Senior Engineers Engineering Managers	i. Engineers adhere to legislative and FTA/VIS Policy whilst working ii. Refer to <i>Lone Working Policy and Risk Assessment RAS 008</i> iii. Refer to VIS Quality Management System documents and risk assessments – Engineers are trained and informed on correct working procedures. iv. VIS Emergency/Out of Hours system in place	3	2	6
11. Electricity	a) Incorrect use, faulty/damaged equipment – resulting in electric shock, smoke/fire damage	Engineers Senior Engineers	i. Equipment used by Engineers is low risk – laptops, mobile phones and is checked and tested as per FTA's Electrical Policy.	5	1	5
	b) Inspecting electric/hybrid vehicles incorrectly – resulting in electric shock, explosion, fire.	Engineering Managers	i. Engineers are trained and competent. ii. Correct procedures are followed to isolate the electrical system before inspection commences.	4	1	4
12. Violence at work	a) Customer facing Engineers may receive verbal or physical threats/abuse whilst working in the field	Engineers Senior Engineers Engineering Managers	i. Refer to FTA's Violence at Work Policy and procedures ii. Engineers are trained and advised to avoid confrontation and report incidents as soon as they occur. iii. VIS Engineers are encouraged to foster mutual respect with all parties in order to achieve a positive working relationship	2	2	4

			<p>helping to prevent ill - feeling, hostility and / or violence and optimise safety.</p> <p>iv. RGMC – Owing to equipment complexity, crane operator participation is required to initially prepare the vehicle for inspection and to assist the VIS Engineer throughout the inspection process. It is therefore important that the above measure, coupled with continued effective liaison, communication and cooperation is maintained for the duration of the inspection process.</p> <p>v. VIS Engineers receive RGMC familiarisation training prior to undertaking inspections of this type to provide a greater level of knowledge and understanding of the equipment and its operation to enable them to work on a more equal footing with the crane operator.</p>			
--	--	--	--	--	--	--

Number of Risk Assessment Gradings	High - 0	Medium - 7	Low - 22				
Risk Rating Indicator Key							
Severity (Consequence)	RISK RATING PRIORITY INICATOR MATRIX						
1. Negligible (delay only)	LIKELIHOOD	5	5	10	15	20	25
2. Slight (minor injury/damage/interruption)		4	4	8	12	16	20
3. Moderate (lost time injury, illness, damage, lost business)		3	3	6	9	12	15
4. High (major injury/damage, lost time business interruption, disablement)		2	2	4	6	8	10
5. Very High (fatality/business closure)		1	1	2	3	4	5
			1	2	3	4	5
Likelihood	SEVERITY (CONSEQUENCE)						
1. Improbable/very unlikely							
2. Unlikely							
3. Even chance/may happen							
4. Likely							
5. Almost certain/imminent							