









# PROJECT RISK ASSESSMENT (PRA) – Waste Collection

M-F-01

**This Project Risk Assessment (PRA) must be implemented prior to the start of the project works**

<b>Client</b>	Mousellis and Sons			<b>Project Title</b>	Waste Collection Works	
				<b>Project Location</b>	Various Locations NT	
<b>Date Developed</b>	May 2022	<b>PRA Number</b>	01	<b>Version No</b>	V3	
<b>Project Scope of Works:</b>	Waste collection works concerning: <ul style="list-style-type: none"> <li>• Grease Trap Waste – Collection, Transportation</li> <li>• Sewage Sludge and residues including nightsoil and septic tank sludge – Collection and Transportation</li> <li>• Lead, Lead Compounds – Collection, Transportation</li> <li>• Contaminated Soils – Collection, Transportation, Storage</li> <li>• Asbestos Removal – Collection, Transportation Waste Mixtures or Waste Emulsions including; Oil and Water or Hydrocarbon Collection, Transportation</li> </ul>					
<b>Plant &amp; Equipment required:</b> <i>(NOTE: PPE for specific items will be identified within the specific SWMS).</i>	EPA identified approved; Loaders, Backhoes, Hydrovac Trucks, Excavators, End Tip Trucks					
<b>Version Updates</b>	Nil					
<b>Reviews</b>	Continually Review through the Daily Prestart Meeting & Formal Annual Review					
<b>Project Risk Assessment Developed By</b>	Nigel Foster, John Mousellis, Bill Mousellis					
<b>Persons Responsible for reviewing:</b>	Nigel Foster, John Mousellis, Bill Mousellis					
<b>Permits, Approvals, Licences Required:</b>	Dial Before You Dig, Excavation Permit Confined Space Entry Permit, Asbestos Removal Licence, EPA Licence					
<b>Competencies / Tickets Required:</b>	Relevant Plant / Equipment competencies, White Card, EPA Licences, Asbestos removal Class B competency, High Risk Licences,					
<b>Project Site Minimum Mandatory PPE Requirements</b>				<b>Senior Management Approval</b>		
				<b>Name</b>	John Mousellis	<b>Position</b>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			General Manager
<b>Other PPE as required for specific works</b>						
			<b>Date of issue</b>	May, 2022	<b>Signature</b>	

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### LEGISLATIVE REQUIREMENTS

**Consulted:**

**Regulations and Acts, Codes of Practice, Standards, Australian Standards, Industry best practice guides and other required items such as manuals.**

Legislation	Australian Standards	Australian Standards	Codes of Practice:	
Workplace Health and Safety Act (National Uniform Legislation) 1 May 2016	AS/NZS 4801 Occupational Health and Safety Management Systems	AS2294 Earthmoving Machinery - Protective Structures - General	How to Manage Work Health and Safety Risks	Managing the Work Environment and Facilities.
Work Health and Safety Regulations (National Uniform Legislation) 1 July 2017	OHSAS 18001 Occupational Health and Safety Standard	AS/NZS 3760 In Service Safety Inspection and Testing of Electrical Equipment	Managing Noise and Hearing Loss in the Workplace	Managing the Risk of Falls in the Workplace
Electrical Act and Regulations	ISO 14001 Environmental	AS 1269 Hearing Protection	Hazardous Manual Tasks	Prevention of Falls in General Construction
NT Building Legislation	AS/NZS 9001 Quality	AS-3745 Planning for Emergencies in Facilities	First Aid in the Workplace	Safe Work Australia COP - Excavation Work
NT Building Act	ISO 31000 Risk Management - Principles and Guidelines	AS 4602 High Visibility Safety Garments	Fatigue Management	Construction Work
Waste Management and Pollution Control Act	AS 1336 Eye Protection	NS for Occupational Noise	WHS Consultation, Co-Operation and Co-Ordination	Preparation of SDS for Hazardous Chemicals
Waste Management and Pollution Control Regulations	AS 2210 Safety Footwear	AS/NZS1716:2012 Respiratory protective device	Labelling of Workplace Hazardous Chemicals	How to Manage and Control Asbestos in the Workplace
Dangerous Goods Act NT 2011			Guide to managing risks of exposure to Carcinogens in the workplace	Managing the risk of hazardous chemicals in the workplace
<b>Other</b>			NCOP for the Control of Work-related Exposure to Hepatitis and HIV (Blood-borne) Viruses [NOHSC:2010 (2003)]	How to Safely Remove Asbestos
EPA			Safe Work Australia (2015) COP - Electrical risks at the workplace	
Manufacturer Operator's Manual Plant / Equipment			COP Formwork	NT Road Users Handbook

Guidance on interpretation of workplace exposure standards for airborne contaminants			COP Managing Risk of Mobile Plant in Workplace	
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					Likelihood				
Consequences					5: Almost Certain <i>Could occur in most circumstances</i>	4: Likely <i>May probably occur in most circumstances</i>	3: Possible <i>May occur at some time.</i>	2: Unlikely <i>Could occur at some time.</i>	1: Rare <i>May occur only in exceptional circumstances</i>
Quality	Health/ Safety	Environmental	NO						
Greater than \$5M in damage or cost	Fatality / Serious permanent disability	Disastrous Impact Long term impact, Major remediation	5	Catastrophic	<b>EXTREME</b> 25	<b>EXTREME</b> 24	<b>HIGH</b> 21	<b>HIGH</b> 20	<b>MEDIUM</b> 15
\$1M - \$5M in damage or cost	Minor permanent disability more than 5 days lost	Serious Impact, medium time frame effect, significant remediation	4	Major	<b>EXTREME</b> 23	<b>EXTREME</b> 22	<b>HIGH</b> 19	<b>MEDIUM</b> 14	<b>LOW</b> 8
\$100K - \$1M in damage or cost	Less than 5 days lost, Major system breach, reportable incident	Moderate impact, short term effect, moderate remediation	3	Moderate	<b>HIGH</b> 17	<b>HIGH</b> 18	<b>MEDIUM</b> 13	<b>MEDIUM</b> 12	<b>LOW</b> 7
\$10K - \$100K in damage or cost	Medical Treatment injury/ Restricted work duties	Minor Impact, reversible impact, minor remediation	2	Minor	<b>HIGH</b> 16	<b>MEDIUM</b> 11	<b>MEDIUM</b> 10	<b>LOW</b> 6	<b>LOW</b> 3
Less than \$10K in damage or cost	Minor Incident / First Aid	Negligible reversible impact, minor remediation	1	Insignificant	<b>MEDIUM</b> 9	<b>LOW</b> 5	<b>LOW</b> 4	<b>LOW</b> 2	<b>LOW</b> 1

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<b>EXTREME</b>	<b>22 - 25)</b> The activity <b>MUST NOT</b> proceed. <b>Stop Work</b> Immediately seek senior management assistance	<b>HIGH</b>	<b>(16-21)</b> The activity <b>CANNOT</b> proceed until additional supervision or use of permit systems has been actioned as required. The controls are to be reviewed by senior management prior to proceeding	<b>MED</b>	<b>(9-15)</b> The activity is to be reviewed by senior management prior to proceeding.	<b>LOW</b>	<b>(1-8)</b> Acceptable risk, activity may proceed with current controls in place.
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STEP	DESCRIPTION OF TASK	Potential Hazards	R / B Risk with No Controls	Control Measures: Actions to be taken Hierarchy of Controls: <i>E= Elimination/ Design Modification, S= Substitution, I= Isolation, Eng= Engineering, A= Administration, PPE= Personal Protective Equipment</i>	R / A Risk After Control Measures	Responsible Person/s
1	Working in an area where there is a possibility of contracting an Infection. (Meliodosis / Hepatitis)	Contamination	13	<p><b>Persons with a known medical condition or low immune system should seek medical advice prior to entering any work site where contamination is possible.</b></p> <ul style="list-style-type: none"> <li>• Ensure any existing cuts or breaks in skin are covered any new cuts or skin breaks are to be treated immediately,</li> <li>• Wear PPE including approved face masks, gloves and glasses, gumboots, (disposable overalls where necessary),</li> <li>• Avoid producing excess dust,</li> <li>• Avoid contact with muddy stagnant water,</li> <li>• Wash hands and face before eating,</li> <li>• Wash all footwear and equipment prior to leaving site,</li> <li>• Workers immunisations must be current.</li> </ul>	7	Supervisor / Workers
2	Pre-Mobilisation	Vehicles / Plant / Trucks not identified as approved for use EPA	22	<ul style="list-style-type: none"> <li>• Vehicle / Plant / Trucks to be EPA approved prior to undertaking the works</li> <li>• Visual inspected prior to travel all components including but not limited to truck required tools, first aid kit, fire extinguisher, spill kit</li> <li>• Registration current,</li> <li>• Prestart inspection conducted.</li> </ul>	8	Project Manager / Supervisor All workers
		Vehicles / Plant / Trucks not having the required equipment, tools, emergency equipment	21	<ul style="list-style-type: none"> <li>• First Aid Kit, Fire Extinguisher with current test date available onsite,</li> <li>• Spill Kits available and fully stocked,</li> <li>• PPE onsite in the event of any spill</li> <li>• Confined space rescue equipment, with current test / tag,</li> </ul>	15	Supervisor / All workers

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				<ul style="list-style-type: none"> <li>Gas Detector with current calibration,</li> <li>Required equipment for Vacuum Truck, Body Trucks and Mobile Plant.</li> </ul>		
		Spread of containments	<b>21</b>	<ul style="list-style-type: none"> <li>All Machines and work vehicles are used for the selected works, to prevent any cross contamination, and further are washed down prior to entry / exit of work site.</li> <li>All other vehicles have a designated parking area outside the work site, this area has been previously cleared by others.</li> </ul>	<b>15</b>	Supervisor / All workers
<b>3</b>	<b>Travelling</b>	Not Obeying NT road rules	<b>13</b>	<ul style="list-style-type: none"> <li>Vehicle driver to hold the appropriate current licence (e.g. Car – C Class licence),</li> <li>All road rules, signage to be adhered to,</li> <li>Beware of other road users, cyclists, and potential hazards including road works,</li> <li>Always driver to the road speed limits, and conditions.</li> </ul>	<b>7</b>	All workers
		Fatigue – Long Distance Travel	<b>19</b>	<ul style="list-style-type: none"> <li>Call is to be made to a colleague or company office between service spots,</li> <li>Rotate driving between personnel in vehicle,</li> <li>Pull up and rest where person feels tired,</li> <li>Stop every two hours or so to have a break and refresh.</li> </ul>	<b>8</b>	All workers
		Use of Mobile Phone	<b>19</b>	<ul style="list-style-type: none"> <li>Mobile Phones are NOT to be used whilst driving any vehicles,</li> <li>Pull over off road to talk on the phone.</li> </ul>	<b>8</b>	All workers
		Unsecure Loads	<b>21</b>	<ul style="list-style-type: none"> <li>Ensure that all loads / items on vehicles or trucks are secure, and not able to fall off and or spill,</li> <li>Checking of loads is to be conducted on travel trip.</li> </ul>	<b>15</b>	All workers
		Wet Conditions	<b>19</b>	<ul style="list-style-type: none"> <li>Drive to road conditions, slow down to ensure that breaking distance can be achieved,</li> <li>Do not drive when vision is impaired.</li> </ul>	<b>8</b>	All workers

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		Off Road – Gravel Roads	19	<ul style="list-style-type: none"> <li>Slow down drive to road conditions,</li> <li>Ensure that a visual distance is maintained when following another vehicle.</li> </ul>	8	All workers
		Accidents	21	<ul style="list-style-type: none"> <li>Pull vehicle of road,</li> <li>Assist person/ if able to do so,</li> <li>Contact emergency services.</li> </ul>	15	All workers
		Wildlife	19	<ul style="list-style-type: none"> <li>Beware of that wildlife animals are wondering on the road,</li> <li>Ensure that person visually looks ahead in travel path.</li> </ul>	8	All workers
		Night-time Driving	19	<ul style="list-style-type: none"> <li>Night-time driving is not recommended,</li> <li>Where a required ensure that lights, windows are clean and no vision is impaired.</li> </ul>	8	All workers
		Breakdowns	13	<ul style="list-style-type: none"> <li>Ensure that vehicle is off road, clear from oncoming traffic,</li> <li>Contact emergency services if applicable,</li> <li>Where changing tyre etc., follow manufacturers guidelines,</li> <li>Ensure vehicle is secure prior to any tyre changing.</li> </ul>	7	All workers
4	Project Management	Hazards / risks requirements not identified	13	<ul style="list-style-type: none"> <li>Project Risk Assessment developed for the locations,</li> <li>All personnel to sign onto the Project Risk Assessment,</li> <li>SWMS developed for all High-Risk Activities as per NT Regulations.</li> </ul>	7	Supervisor / QHSE Manager
		Work approvals / Licences / Authorisations not obtained	19	<ul style="list-style-type: none"> <li>Approvals, licences to be obtained for the project works prior to any works commencing,</li> <li>All approvals, licences and authorisations to be available onsite; located in the project folder.</li> </ul>	8	Supervisor / QHSE Manager
5	Emergency Preparedness	Inadequate Emergency Response	21	<ul style="list-style-type: none"> <li>Muster Point identified as onsite vehicle,</li> <li>First Aid Kit, Fire Extinguishers available onsite,</li> <li>Personnel trained onsite with current First Aid,</li> <li>Emergency Response Plan current and assessible onsite,</li> </ul>	15	Supervisor / QHSE Manager

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				<ul style="list-style-type: none"> <li>Confined Space rescue equipment available onsite.</li> </ul>		
		Onsite Emergencies	<b>21</b>	<ul style="list-style-type: none"> <li>Fire extinguisher serviced and tested available,</li> <li>Water hoses available onsite (if possible),</li> <li>Cigarette Butts will be disposed of in onsite bins,</li> <li>NO fires are to be lit onsite.</li> </ul>	<b>15</b>	Supervisor / Workers
<b>6</b>	<b>Health Monitoring</b>	Heat Exhaustion	<b>13</b>	<ul style="list-style-type: none"> <li>Take regular breaks, drink plenty of fluids,</li> <li>Where correct PPE – Boots / hat.</li> </ul>	<b>7</b>	Supervisor / Workers
		Noise	<b>13</b>	<ul style="list-style-type: none"> <li>Hours of work will not exceed the approved times allocated,</li> <li>Plant / Machinery not to be modified from original manufacturers requirements,</li> <li>Ear protection to be worn when operating, compressors or other loud equipment, as per manufacturer’s requirements.</li> </ul>	<b>7</b>	Supervisor / Workers
		Vibration – Personnel Injury	<b>13</b>	<ul style="list-style-type: none"> <li>Regular rest breaks when using equipment,</li> <li>Ensure correct use as per manufacturer’s requirements.</li> </ul>	<b>7</b>	Supervisor / Workers
<b>7</b>	<b>Hazardous Substances</b>	Personnel Injury	<b>13</b>	<ul style="list-style-type: none"> <li>SDS current within 5 years,</li> <li>SDS for all chemicals onsite will be available via a Hard copy folder</li> <li>PPE available for use,</li> <li>Handle, storage and use of hazardous substance as per the specific SDS.</li> </ul>	<b>7</b>	Supervisor / Workers
		Environmental Incident	<b>13</b>	<ul style="list-style-type: none"> <li>Disposal of substance as per SDS,</li> <li>All waste to be taken back to Mousellis Yard for disposal,</li> <li>No disposal of substance within waterways, drains, and or emptying on the ground.</li> </ul>	<b>7</b>	Supervisor / Workers
		Incorrect use of chemicals / poisons / hazardous substances	<b>19</b>	<ul style="list-style-type: none"> <li>All personnel know where to access SDS,</li> <li>All substances to be used as per the SDS / Manufacturers requirements,</li> </ul>	<b>8</b>	Supervisor / Workers

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				<ul style="list-style-type: none"> <li>Products not to be used for other purposes then what is the product is identified to be used for.</li> </ul>		
8	Use of Subcontractors	Subcontractor not suitable for site scope of works	13	<ul style="list-style-type: none"> <li>Internal Subcontractor Pre-qualification completed,</li> <li>SWMS / Plan review completed by Mousellis Management,</li> <li>Subcontractor internally risk assessed against Mousellis Risk Matrix to determinate to level of risk controls to be implemented for the subcontractor.</li> </ul>	7	Supervisor / QHSE Manager
		Subcontractor Equipment not maintained meeting project requirements	13	<ul style="list-style-type: none"> <li>Identifiable ROPS / FOPS cabin and other requirements for equipment / machinery is easily identifiable and in good working order,</li> <li>Maintenance records available through subcontractor when requested,</li> <li>Electrical Equipment Tested / tagged,</li> <li>Devices calibrated for e.g. Gas detectors,</li> <li>Pre-Start Inspection checklists available on machinery for daily inspection – where not available the use of Mousellis inspection will be selected / implemented to suit the identified machine.</li> </ul>	7	Supervisor / QHSE Manager
9	Impacts on Project, Other Parties / Clients / Other Entities Impacted	Site activities impacting nearby stakeholders	13	<ul style="list-style-type: none"> <li>Prior notification (verbal) to stakeholders of the works that may impact the stakeholder,</li> <li>Implementation of exclusion zones, barricades, traffic management – where required.</li> </ul>	7	Project Manager/ Supervisor / QHSE Manager
10	General Mobile Plant and Equipment	Overhead / Underground Services	19	<ul style="list-style-type: none"> <li>Dial Before You Dig (Dial Before You Dig 1100) obtained,</li> <li>Internal excavation permit completed,</li> <li>Distance to overhead power lines checked prior to set up of any machine,</li> <li>Spotter may be required to be used.</li> </ul>	8	Supervisor / Workers / Operators



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		Lifting Equipment / Devices	<b>19</b>	<ul style="list-style-type: none"> <li>Lifting chains, slings to be visually inspected prior to use,</li> <li>Equipment used to lift any item to have the identified SWL, NO items lifted are to exceed the SWL rating of the device / machine.</li> </ul>	<b>8</b>	Supervisor / Workers / Operators
		Un qualified operator	<b>13</b>	<ul style="list-style-type: none"> <li>Competent plant operator for the machine,</li> <li>Internal task observation conducted,</li> <li>SWMS current and signed onto, for each machine,</li> <li>Subcontractor SWMS to be reviewed by Mousellis Management Prior to use.</li> </ul>	<b>7</b>	Supervisor / Operator
		No ROPS / FOPS	<b>13</b>	<ul style="list-style-type: none"> <li>ROPS / FOPS cabin identified on machine,</li> <li>Plant pre – start inspection conducted daily.</li> </ul>	<b>7</b>	Supervisor / Operators
		Unmaintained equipment	<b>13</b>	<ul style="list-style-type: none"> <li>Plant daily inspection conducted,</li> <li>Service history available,</li> <li>Service records within plant log or displayed on service sticker.</li> </ul>	<b>7</b>	Supervisor / Operators
		Damage to other equipment / buildings	<b>13</b>	<ul style="list-style-type: none"> <li>Operation of machine not less than extended boom, blade maximum extended distance,</li> <li>Spotter used where required,</li> <li>Site personnel notified of where machines are working on site through the daily briefing.</li> </ul>	<b>7</b>	Supervisor / workers
		Traffic / Machine / worker interaction	<b>21</b>	<ul style="list-style-type: none"> <li>PRA signed on / completed by all on site,</li> <li>Ensure all workers on site are aware of works in progress,</li> <li>Competent operators,</li> <li>HI-VIS clothing must be worn by all on site,</li> <li>Prestart checks conducted on all plant,</li> <li>Implement Site traffic management where required,</li> <li>Two-way radio operational and used when required,</li> <li>Clearly define unloading area where necessary,</li> <li>place bollards and flags or barricade area,</li> </ul>	<b>15</b>	Supervisor / Workers

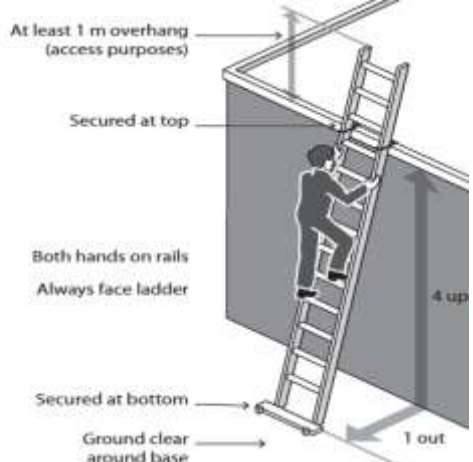
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				<ul style="list-style-type: none"> <li>Unloading area to remain clear of other operational plant and equipment,</li> <li>Reverse alarm and rotating beacon must be working on all operational machinery.</li> </ul>		
		Dust - Worker visibility	<b>19</b>	<ul style="list-style-type: none"> <li>Be aware of wind conditions and dust travel</li> <li>Use water truck, hose used to keep dust to a minimum</li> </ul>	<b>8</b>	Supervisor / Workers
<b>11</b>	<b>Portable Ladders</b>	Incorrect Installation of ladders	<b>19</b>	<p><b><i>Initial consideration of scaffolds, EWP's, and any other applicable working at heights equipment is to be considered prior to the use of ladders onsite.</i></b></p> <p>Ladders are used onsite for only access / egress, which are not to be worked from, where minor works may only be achievable by the use of a ladder a further risk assessment is to be conducted considering scaffolds, EWPs etc.</p> <ul style="list-style-type: none"> <li>Inspections of overhead power lines and other hazards prior to set up,</li> <li>Visual inspection of ladder,</li> <li>Ladder stable and secured to landing prior to entry; Ladder to be at least 1 Metre extended past landing,</li> <li>Working at heights SWMS signed on.</li> </ul> <p><b>Correct Ladder Set Up Below</b></p>	<b>8</b>	Supervisor / Workers

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12	Pre-Site Mobilisation	Site not secure	19	<ul style="list-style-type: none"> <li>Follow all current traffic requirements for the site, where required implement controls,</li> <li>Temporary fencing to be installed around any open excavations / hazards onsite,</li> <li>Trenches to be covered,</li> <li>Site to be secure at the end of each shift.</li> </ul>	8	Supervisor / Workers
		Incorrect vehicle / mobile Plant or Truck used	21	<ul style="list-style-type: none"> <li>EPA identified vehicles / mobile plant or truck is to be used as per identified,</li> <li>Inspection of item prior to use to ensure that there is no faults, or potential issues that may cause contaminating of areas.</li> </ul>	15	Supervisor / Workers
13	Site Mobilisation	Site set up in an unapproved area	13	<ul style="list-style-type: none"> <li>Access approval obtained by landowner, client prior to site set up,</li> <li>Set up of laydown areas as per approval,</li> <li>Clearly defined access and egress.</li> </ul>	7	Project Manager / Supervisor

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		Site activities impacting nearby stakeholders	<b>13</b>	<ul style="list-style-type: none"> <li>• Prior notification (verbal) to stakeholders of the works that may impact the stakeholder,</li> <li>• Implementation of exclusion zones, barricades, temp fencing or traffic management – where required, to prevent any unauthorised access to areas</li> </ul>	<b>7</b>	Project Manager / Supervisor
		Damage to flora / fauna	<b>13</b>	<ul style="list-style-type: none"> <li>• Ensure that machinery / vehicles and containers are not damaging any flora / fauna,</li> <li>• Where significant flora has been identified, marking out or placing surveys tape on item may be required,</li> <li>• Update PRA to identify any significant areas.</li> </ul>	<b>7</b>	Project Manager / Supervisor
		Manual Handling	<b>13</b>	<ul style="list-style-type: none"> <li>• Use Mechanical means where possible,</li> <li>• Get assistance for loads that are heavy or assessed to be over 20kg or have awkward dimensions,</li> <li>• Clear rubble to avoid difficult terrain. Get some help for longer distance carries,</li> <li>• Use suitable gloves for the situation,</li> <li>• Check the load condition,</li> <li>• Face yourself in the direction of travel,</li> <li>• Get as close to the load so your back can stay straight. Place one-foot forward and one-foot back. Have load in the palm of your hand and not the fingertips,</li> <li>• Bend your knees and keep your back straight and your chin in. If adopting a two-person lift, have one person control the lift by saying, "Prepare to lift", then "lift",</li> <li>• Try not to twist and lift.</li> </ul>	<b>7</b>	Project Supervisor / All Workers
		Heat Stress	<b>13</b>	<ul style="list-style-type: none"> <li>• Take regular breaks, drink plenty of fluids,</li> <li>• Where correct PPE – Boots / Hat,</li> </ul>	<b>7</b>	Supervisor / All Workers

## PROJECT RISK ASSESSMENT (PRA) – Waste Collection

**M-F-01**

STEP	DESCRIPTION OF TASK	Potential Hazards	R / B <i>Risk with No Controls</i>	Control Measures: Actions to be taken Hierarchy of Controls: <i>E= Elimination/ Design Modification, S= Substitution, I= Isolation, Eng= Engineering, A= Administration, PPE= Personal Protective Equipment</i>	R / A Risk <i>After Control Measures</i>	Responsible Person/s
				<ul style="list-style-type: none"> <li>When working in wet conditions, short pants, short sleeve shirt is allowed due to the moisture / heaviness of wet clothes when wearing normal PPE.</li> </ul>		
14	Employees / Onsite Personnel	Unaware of site hazards-control requirements	13	<ul style="list-style-type: none"> <li>PRA signed on, (Induction),</li> <li>Acknowledgement and Training in the site this document (PRA) and or appropriate SWMS for the task conducted,</li> <li>Hold relevant licences prior to driving any vehicle / Competencies / Tickets – Equipment,</li> <li>Stop/Start meeting on a daily basis.</li> </ul>	7	Project Manager / Supervisor / Workers
15	Visitors	Unaware of site hazards-control requirements	13	<ul style="list-style-type: none"> <li>Visitor verbal induction completed,</li> <li>Visitors to remain accompanied by an Moussellis and Sons representative at all times.</li> </ul>	7	Project Manager / Supervisor
16	Plant, Vehicle, Personnel Interaction onsite	Personnel Injury	19	<ul style="list-style-type: none"> <li>Parking of machinery vehicles to be away from existing road users,</li> <li>Personnel to use existing walkways,</li> <li>Plant / Trucks and Vehicles to obey all NT road rules, always trying to turn in the same direction as the traffic flow,</li> <li>Avoid walking on road where possible,</li> <li>Cross road at traffic lights or crossings in a safe manner,</li> <li>Look both ways before crossing.</li> </ul>	8	Supervisor / All Personnel
17	Use of Mobile Plant / Trucks	Non-Approved Mobile Plant / Truck	21	<ul style="list-style-type: none"> <li>Plant / Truck to be approved for use by EPA,</li> <li>Items to have the required EPA documents available</li> </ul>	15	Project Manager / Truck / Plant Operators
		Overhead / Underground Services	19	<ul style="list-style-type: none"> <li>Dial Before You Dig (Dial Before You Dig 1100) obtained,</li> <li>Excavation permit completed,</li> <li>Ensure that machine or collection vehicle/truck is set up away from excavation to prevent any collapse of excavation or roll over</li> <li>Spotter may be required to be used.</li> </ul>	8	Supervisor / Truck / Plant Operators

## PROJECT RISK ASSESSMENT (PRA) – Waste Collection

**M-F-01**

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		Noncompetent Operator	<b>19</b>	<ul style="list-style-type: none"> <li>Operators to hold the appropriate licence, or competency prior to undertaking the tasks works,</li> <li>SWMS current / approved by Moucellis and Sons prior to use onsite appropriate for the task undertaken,</li> <li>This Project risk assessment signed on</li> </ul>	<b>8</b>	Supervisor / Truck / Plant Operators
<b>18</b>	<b>Entering Location / Chambers</b>	Incorrect Access	<b>13</b>	<ul style="list-style-type: none"> <li>Access via the defined access ways,</li> <li>Work from allocated platforms, walkway, and other identified areas within pits,</li> <li>Ensure 3 points of contact at all times,</li> <li>Small pits - Removal of Lid as per Power and Water process,</li> <li>Ensure a safe distance is maintained from access hole to pit.</li> </ul>	<b>7</b>	Supervisor/ All Confined Space operators
		Inadequate Emergency Response	<b>19</b>	<ul style="list-style-type: none"> <li>Follow site requirements as per defined at each location,</li> <li>Ensure that visual inspection is conducted prior to working to communicate to all personnel working of location of equipment – muster points,</li> <li>Confined space rescue equipment to be visually inspected with the current test / tag date,</li> <li>Confined space rescue equipment to be installed as per manufacturers requirements,</li> <li>Rescue anchor points (Davit arm etc.) as installed onsite to be used where applicable,</li> <li>Where NO site anchor points are established and personnel are working in confined space, use of tri-pod or other device will be required to be used in accordance with the device manufacturers installation requirements to ensure that confined space rescue can be achieved,</li> <li>Gas detectors to be with the current calibration period.</li> </ul>	<b>8</b>	Supervisor/ All Confined Space operators

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		Manual Handling	<b>13</b>	<ul style="list-style-type: none"> <li>Follow safe manual handling procedures,</li> <li>Avoid twisting,</li> <li>Bend knees,</li> <li>Rotating task where necessary to prevent muscle strain,</li> <li>Use team lifts or mechanical means of lifting when required.</li> </ul>	<b>7</b>	Supervisor/ All Confined Space operators
<b>19</b>	<b>Confined Space Works</b>	Unauthorised access	<b>19</b>	<ul style="list-style-type: none"> <li>Confined Space Permit used,</li> <li>Device within calibration period of validation,</li> <li>Correct PPE to be worn as per permit requirements,</li> <li>Rescue equipment onsite, inspected prior to use.</li> </ul>	<b>8</b>	Supervisor/ All Confined Space operators
		Personnel not trained	<b>19</b>	<ul style="list-style-type: none"> <li><b>SWMS -17 Confined Space</b> current and Signed on, by all personnel conducting confined space works,</li> <li>Personnel to be externally trained in the confined space entry course,</li> <li>Competent person to conduct gas detection device.</li> </ul>	<b>8</b>	Supervisor/ All Confined Space operators
		Inadequate Emergency Response	<b>19</b>	<ul style="list-style-type: none"> <li>Emergency response equipment to be onsite e.g. tripods, harnesses,</li> <li>Visual inspection of items prior to entry into confined space,</li> <li>Spotter available to assist in the confined space rescue.</li> </ul>	<b>8</b>	Supervisor/ All Confined Space operators
<b>20</b>	<b>Grease Trap Waste – Collection, Transportation</b>	Personnel Harm – Hygiene, Odour	<b>21</b>	<ul style="list-style-type: none"> <li>Masks to be worn that will prevent any breathing in of substance,</li> <li>PPE to be worn</li> <li>Clothing to be washed separately to normal clothes</li> <li>Area to have ventilation, and or breathing device where ventilation is limited</li> <li>No person to work alone</li> </ul>	<b>15</b>	Supervisor / Workers
		Fire / Explosion	<b>21</b>	<ul style="list-style-type: none"> <li>Gas detector within calibration date to conduct initial test for any gasses,</li> <li>Fire Extinguisher onsite</li> <li>Personnel to not work alone</li> </ul>	<b>15</b>	Supervisor / Workers

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		Contamination of areas	<b>19</b>	<ul style="list-style-type: none"> <li>Item of plant / truck / vehicle to be checked prior to any extraction to ensure that all connections are secure and no chance of leak,</li> <li>Area of extraction to be excluded, barricaded from any unauthorised person/s accessing areas,</li> <li>Load to be secure, connections closed prior to any transportation</li> </ul>	<b>8</b>	
<b>21</b>	<b>Lead compounds – Collection, Transportation</b>	Lead Poisoning	<b>21</b>	<ul style="list-style-type: none"> <li>Personnel to wear masks, and gloves, with appropriate footwear to prevent any lead poisoning,</li> <li>Well ventilated areas, or breath mask used in non-ventilated areas</li> <li>No person to work alone</li> </ul>	<b>15</b>	Supervisor / Workers
		Lead Dust – Contamination of other areas	<b>21</b>	<ul style="list-style-type: none"> <li>Item of plant / truck / vehicle to be checked prior to any extraction to ensure that all connections are secure and no chance of leak,</li> <li>Area of extraction to be excluded, barricaded from any unauthorised person/s accessing areas,</li> <li>Load to be secure, connections closed prior to any transportation</li> </ul>	<b>15</b>	Supervisor / Workers
<b>22</b>	<b>Contaminated Soils– Collection, Transportation, Storage</b>	Unidentified contaminate	<b>19</b>	<ul style="list-style-type: none"> <li>Visual inspection, and investigation where possible to identify the contaminate,</li> <li>Approved PPE worn as per identified contaminate</li> <li>No person to work alone</li> </ul>	<b>8</b>	Supervisor / Workers
		Spills	<b>21</b>	<ul style="list-style-type: none"> <li>Item of plant / truck / vehicle to be checked prior to any extraction to ensure that all connections are secure and no chance of leak,</li> <li>Area of extraction to be excluded, barricaded from any unauthorised person/s accessing areas,</li> <li>Load to be secure, connections closed prior to any transportation</li> </ul>	<b>15</b>	Supervisor / Workers
<b>23</b>	<b>Asbestos Removal - Collection, Transportation</b>	Asbestos Contamination of Site	<b>21</b>	<ul style="list-style-type: none"> <li>Asbestos management plan / SWMS in place,</li> <li>All personnel to hold the current asbestos removal licence</li> <li>Exclusion zone implemented to prevent any authorised access</li> <li>No person to work alone</li> </ul>	<b>15</b>	Supervisor / Workers



## PROJECT RISK ASSESSMENT (PRA) – Waste Collection

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		Incorrect methods used	<b>21</b>	<ul style="list-style-type: none"> <li>Asbestos to be identified by a qualified asbestos removal person</li> <li>Asbestos removal plan current / approved for use</li> <li>Relevant documentation / permits completed</li> </ul>	<b>15</b>	
<b>24</b>	<b>Waste Mixtures or Waste Emulsions, of Oil and Water or Hydrocarbon and Water – Collection, Transportation</b>	Personnel Injury	<b>19</b>	<ul style="list-style-type: none"> <li>Personnel to wear masks, and gloves,</li> <li>Well ventilated areas, or breath mask used in non-ventilated areas</li> <li>No person to work alone</li> </ul>	<b>8</b>	Supervisor / Workers
		Contamination	<b>21</b>	<ul style="list-style-type: none"> <li>Item of plant / truck / vehicle to be checked prior to any extraction to ensure that all connections are secure and no chance of leak,</li> <li>Area of extraction to be excluded, barricaded from any unauthorised person/s accessing areas,</li> <li>Load to be secure, connections closed prior to any transportation</li> </ul>	<b>15</b>	Supervisor / Workers
<b>25</b>	<b>Sewage Sludge - Collection, Transportation</b>	Spills	<b>21</b>	<ul style="list-style-type: none"> <li>Item of plant / truck / vehicle to be checked prior to any extraction to ensure that all connections are secure and no chance of leak,</li> <li>Area of extraction to be excluded, barricaded from any unauthorised person/s accessing areas,</li> <li>Load to be secure, connections closed prior to any transportation</li> </ul>	<b>15</b>	Supervisor / Workers
		Personnel Injury	<b>19</b>	<ul style="list-style-type: none"> <li>Personnel to wear masks, and gloves,</li> <li>Well ventilated areas, or breath mask used in non-ventilated areas</li> <li>No person to work alone</li> </ul>	<b>8</b>	Supervisor / Workers
<b>26</b>	<b>Use of Hand Tools</b>	Incorrect Selection of Tool	<b>13</b>	<ul style="list-style-type: none"> <li>Tool to be selected to meet the requirement for the task e.g. ¾ spanner,</li> <li>Tools to be visually inspected prior to use,</li> <li>PPE required to be worn as per manufacturer’s requirements.</li> </ul>	<b>7</b>	Supervisor / Workers

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		Faulty Equipment	13	<ul style="list-style-type: none"> <li>Faulty items to be removed from site (tagged out), taken back to Moussellis Yard for repair.</li> </ul>	7	Supervisor / Workers
27	Use of Electrical Tools	Faulty Equipment	19	<ul style="list-style-type: none"> <li>All electrical tools to have the current test/tag sticker on items,</li> <li>Tools to be visually inspected prior to use,</li> <li>Faulty items to be removed from site (tagged out), taken back to Moussellis Yard for repair.</li> </ul>	8	Supervisor / Workers
28	Carting Material from site	Un road worthy vehicle	13	<ul style="list-style-type: none"> <li>Appropriate licenced person to drive Prime Mover (e.g. HR-MC) dependant on trailers and body of truck,</li> <li>Registration current,</li> <li>Permits obtained prior to use.</li> </ul>	7	Supervisor / Workers
		Traffic	19	<ul style="list-style-type: none"> <li>Obey NT road rules,</li> <li>Drive to conditions of roads.</li> </ul>	8	Supervisor / Workers
		Load not secure	13	<ul style="list-style-type: none"> <li>Ensure that the item is inspected prior to travelling and that no waste / materials can unexpectedly leak from the vehicle</li> <li>Spill kit and emergency numbers available</li> </ul>	7	Supervisor / Workers
		Unloading in non-approved areas or site		<ul style="list-style-type: none"> <li>Unloading to only occur at the approved EPA location identified,</li> <li>Internally at Moussellis and sons depots ensure that the location bunding etc is still sufficient, and the load will fit in area without overflowing</li> </ul>		Supervisor / Workers
29	Waste Management	Environmental	13	<ul style="list-style-type: none"> <li>Remove all waste from site,</li> <li>Dispose of at appropriate waster transfer station,</li> <li>Reinstate site to original condition.</li> </ul>	7	Supervisor / All personnel
		Waste and by products	13	<ul style="list-style-type: none"> <li>Obey site rules, processes, approval obtained prior to entry,</li> <li>Regular site inspections,</li> </ul>	7	Supervisor / All personnel

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				<ul style="list-style-type: none"> <li>Provision of appropriate waste containers.</li> </ul>		
		General Construction Waste	<b>13</b>	<ul style="list-style-type: none"> <li>Where required, waste generated from maintenance activities will be sorted and amounts estimated and recorded,</li> <li>All construction waste materials generated on site not able to be recycled will be removed from site immediately and disposed of at appropriate waste disposal facility,</li> <li>The site will be left in a clean and tidy state on completion of the maintenance works.</li> </ul>	<b>7</b>	Supervisor / All personnel
<b>30</b>	<b>Site Demobilisation</b>	Security	<b>13</b>	<ul style="list-style-type: none"> <li>Site to be secure as when arrived after all works, vehicles have exited the site compound.</li> </ul>	<b>7</b>	Supervisor
		Unclear site / Waste	<b>13</b>	<ul style="list-style-type: none"> <li>All waste to be removed from site and disposed of at local waste facilities,</li> <li>Supervisor to conduct a visual inspection of site prior to leaving premises.</li> </ul>	<b>7</b>	Supervisor / All personnel
		Tools / Equipment	<b>13</b>	<ul style="list-style-type: none"> <li>All tools are to be collected onsite, cleaned and placed back in truck or vehicle prior to leaving site,</li> <li>Visual inspection of site prior to leaving site.</li> </ul>	<b>7</b>	Supervisor / All personnel

**Emergency Rescue Procedure Associated with the Activity**

Should a worker require rescuing for any reason (i.e. equipment failure, injury / illness of the operator) the following procedures may need to be implemented:

- Contact the Emergency Rescue Services on 000 or Mobile on 112 / See Site Emergency Contact List
- If it is safe to do so, ensure that the casualties injuries are not made worse, support the load or isolate the danger from the casualty
- Do not attempt to move the casualty until trained help arrives, unless there is a certainty that the persons life will be placed in further endangerment

NOTE: At no time is a worker to place themselves at risk whilst attempting to undertake any of the above procedures.



# PROJECT RISK ASSESSMENT (PRA) – Waste Collection

**M-F-01**

No	Reviewer Name	Location	Stop / Start Card Completed	Any Job Step/s changes or Issues Identified in controls	Remedial Action Taken	Signature