WMS 007 – Operation of Rollers

EAGLE ALLIANCE EARTHMOVING PTY LTD	ACN: 141 206 591 ABN: 41 149 364 727	**This WMS has been prepared and authorised by Eagle Alliance Earthmoving Pty Ltd**		
		Date:		Last Review Date: 4 April 2019
	P: 07 3843 1649 **F:** 07 3395 2083	**Name:**	Rui Lopes	Next Review Date: 4 April 2020
		Position:	Managing Director	
	A: U15, 8 Metroplex Avenue MURARRIE QLD 4172	**Signature:**		

WORK METHOD STATEMENT

Description of works / Activities undertaken:	**Operation of Rollers**					
Personnel involved in the development and review:	Rui Lopes (Managing Director) Alex Hood (WHS Manager) and Subcontractors					
Date of consultation:	4 April 2019					
Person responsible for implementation / monitoring / compliance:	Alex Hood (WHS Manager)					
Approx. Start Date:			**Approx. Finish Date:**	4 April 2020		
Includes the following high risk construction work:	☑	Movement of powered mobile plant	☑	Work adjacent to a road, railway, shipping lane, or other traffic corridor used by pedestrians	☑	Work in or near water or other liquid that involves the risk of drowning
	☑	Work in or near a shaft or trench with an excavated depth of 1.5m	☐	Demolition of a load bearing element or structure	☑	Principal contractor policy

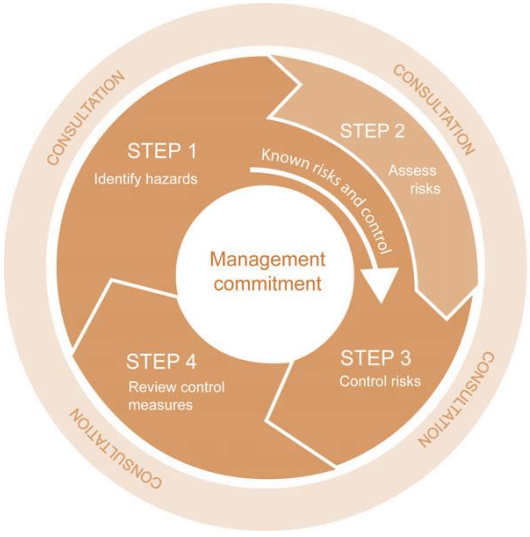
Work Method Statement submitted to the following Principal Contractor:

COMPANY:	
NAME:	
SITE ADDRESS:	

Work Method Statement reviewed by Principal Contractor:

NAME:			
POSITION:		**DATE:**	
SIGNATURE:			

Risk Management Process



a) The likelihood of an incident occurring as a result of the hazard will first be assessed.

Likelihood Ratings		
A	Almost Certain	The event is expected to occur in most circumstances
B	Likely	The event will probably occur in most circumstances
C	Possible	The event may occur at some time
D	Unlikely	The event could occur at some time
E	Rare	The event may only occur in exceptional circumstances

b) The consequences (if an incident did occur) will then be determined. To determine the possible consequences, a judgement on the severity of the potential outcome will be made.

Consequence Ratings		
1	Insignificant	Nil injuries
2	Minor	First aid treatment, on-site release immediately contained
3	Moderate	Medical treatment, on-site release contained with outside assistance
4	Major	Extensive injuries, loss of capability, off-site release with no detrimental affects
5	Catastrophic	Death, release off-site with detrimental effect

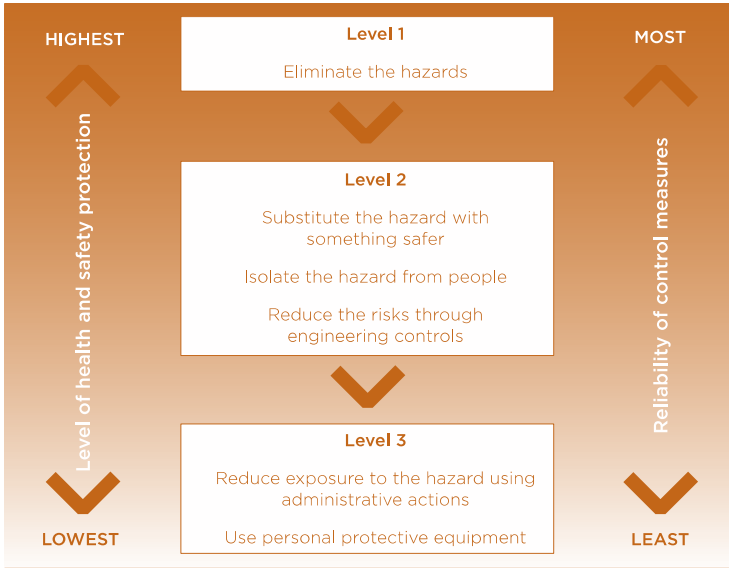
c) The likelihood and consequences estimates will then be combined to obtain a total risk score by using the following risk priority table.

Risk Priority Table			Consequences				
			Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
Likelihood	A	Almost Certain	H 11	H 16	E 20	E 23	E 25
	B	Likely	M 7	H 12	H 17	E 21	E 24
	C	Possible	L 4	M 8	H 13	E 18	E 22
	D	Unlikely	L 2	L 5	M 9	H 14	E 19
	E	Rare	L 1	L 3	M 6	H 10	H 15

d) The following legend will be used to determine the response.

Legend		
Score		Action
E	18 – 25	**Extreme Risk**. Requires immediate attention
H	10 – 17	**High Risk**. Senior management attention required urgently
M	6 – 9	**Moderate Risk**. Follow management instructions and procedures
L	1 - 5	**Low Risk**. Record and review if processes change. Monitor

e) Control measures will be implemented using the following hierarchy of controls.



STEP	TASK / ACTIVITY	HAZARD/S	RISK CLASS (BEFORE CONTROLS)			CONTROLS AND SAFE WORK PROCEDURES	RISK CLASS (AFTER CONTROLS)			RESPONSIBLE PERSON
			L	C	R		L	C	R	
1.	Arrival on site	Incorrect plant / operator scheduled	C	3	H 13	1. At time of booking / scheduling sufficient information gathered as to determine particular needs of the site and works to be performed. 2. Type of plant selected to suit these particular needs addressing issues such as site terrain and conditions, existing services, rated capacity and characteristics.	E	3	M 6	Project Manager Operations Manager Operator
		Non-compliance of plant	C	3	H 13	1. Evidence of Design Registration available and evidence of current Plant Registration with OHS authority clearly marked. 2. Operator's manual kept and applicable load charts in cabin at all times. 3. Manufacturer's data plates in clear view. 4. Check plant service history and maintenance log books for any recent faults and currency. 5. Plant pre-start checklist must be completed prior to movement of plant. Both pre-operational and post-operational checks are to be conducted in order to complete the pre-start checklist.	E	3	M 6	Operations Manager Operator
2.	Delivery / float / unloading of plant - Moving powered mobile plant Refer WMS 013	Collision	C	4	E 18	1. Clear and safe access way provided for float / trucks to unloading area. 2. Principal Contractor Traffic Safety Management Plan to be adhered to. 3. Essential Worker used to assist truck drivers to reverse. Essential Worker to always remain in driver's vision and / or use radio communication. 4. Remove all persons from area before unloading plant. 5. Persons are not to position themselves between a truck and equipment / materials / structures. 6. Safety instructions of driver to be followed at all times. 7. Inspection of ramps / equipment prior to unloading. 8. Safe unloading speed to be maintained.	E	3	M 6	Project Manager Operator

STEP	TASK / ACTIVITY	HAZARD/S	RISK CLASS (BEFORE CONTROLS)			CONTROLS AND SAFE WORK PROCEDURES	RISK CLASS (AFTER CONTROLS)			RESPONSIBLE PERSON
			L	C	R		L	C	R	
2. Cont.	Delivery / float / unloading of plant - Moving powered mobile plant Refer WMS 013	Plant rollover	C	4	E 18	1. Detach trailer if applicable before unloading plant off truck. 2. Ensure safety pin securing ramps to truck is in place. 3. Inspection of ramps / equipment prior to unloading. 4. Safe unloading speed to be maintained. 5. If ramps cannot be seen by the operator at any time whilst unloading an Essential Worker must be used to guide the operator in the machine down the ramps. 6. The Essential Worker is to be in full view of the operator at all times and clear of the plant operating radius.	E	3	M 6	Operator
3.	Access around site	Slips, trips and falls	C	3	H 13	1. General access ways to be clear of hazards. 2. Materials / equipment not to be stored in access ways.	E	3	M 6	Operator
4.	Pre-site discussion and planning with principal contractor	Unaware of site policies	C	3	H 13	1. A pre-work discussion will be held and site specific induction attended with the principal contractor to determine: (i) Location of existing services including electricity and underground services; (ii) Areas allocated for storage of materials and equipment; (iii) Intended location for spoil and waste; (iv) Anticipated scheduling and impact of other trades on site at the time of the works; (v) Other issues to plan and allow for the safe performance of works. (vi) Identify persons in charge of works, first aiders and phone numbers / UHF radio channel. (vii) Site emergency procedures including method of communication and evacuation muster points. 2. This pre-work discussion must be recorded.	E	3	M 6	Project Management Operator

STEP	TASK / ACTIVITY	HAZARD/S	RISK CLASS (BEFORE CONTROLS)			CONTROLS AND SAFE WORK PROCEDURES	RISK CLASS (AFTER CONTROLS)			RESPONSIBLE PERSON
			L	C	R		L	C	R	
5.	Pre-work inspection / assessment – Moving powered mobile plant	Plant Failure	C	3	H 13	1. Pre-operational inspection performed and recorded in accordance with manufacturer's recommendations to ensure plant is free from defects or faults. Inspection to include the following: • Correct tyre pressure; • Park / foot brakes; • Steering; • Warning devices – horn, flashing lights, reversing beeper, brake lights; • Hydraulics and other fluid levels; • Roll over protective structures; • Locking pins; • Seat belts, other safeguards as per manufacturer's recommendations.	E	3	M 6	Operator
		Existing services and hazards	C	3	H 13	1. Prior to commencing work, a pre-work inspection to be performed. 2. Items assessed to include location of electrical hazards, site terrain, availability and condition of PPE and first aid equipment and adequacy of this WMS.	E	3	M 6	Operator
6.	Access in / out of plant	Slips / trips / falls	C	3	H 13	1. Provision of adequate non-slip ladders, footholds, steps and grab rails so as to safely access cabins. 2. Three points of contact maintained at all times. 3. Face ladders / footholds to ascend and descend. 4. Correct use of these safeguards by operators. 5. Visually check ground condition before accessing or egressing to or from plant. 6. Safety boots must be clean of any substance or debris i.e. mud, grease, oil.	E	3	M 6	Operator

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			L	C	R		L	C	R	
7.	Operation of roller – moving powered mobile plant	Overturn	C	4	E 18	1. Machines to be only operated by certified persons. 2. Machines operated and maintained in accordance to manufacturer's instructions. 3. Seat belt must be worn and operator to remain seated at all times. 4. Ensure plant is fitted with ROPS/FOPS complying with AS 2294. 5. Machine must be fitted with a reverse alarm. 6. Avoid driving at an angle across slopes – always drive straight up and down a slope. 7. Never change gears on a slope. 8. If machine is equipped with hydrostatic drive, always drive in working mode and not in transport mode on slopes. 9. Check the strength and adequacy of the ground – consider rises and falls, existing or recently backfilled trenches. Be aware that damp and bad ground conditions will affect the capacity for supporting the machine. 10. Always work parallel to the edge of the fill. The edge of the fill should be built up to encourage the roller back onto the fill if the roller is stationary with the vibration left on. 11. If operating close to unstable edges, ensure that at least two thirds of the drum is firmly on material that has already been compacted.	E	3	M 6	Operator

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			L	C	R		L	C	R	
7. Cont.	Operation of roller – moving powered mobile plant Cont.	Overturn	C	3	H 13	12. Be aware of overhead obstacles such as tree limbs and low hanging cables. 13. Maintain a suitable exclusion zone around the plant. 14. Risk assessment must be done to establish a suitable exclusion zone when working at heights/above other workers and/or on slopes. 15. Always maintain constant contact- visual and/or verbal with Essential Workers. 16. A safe travel speed maintained at all times. 17. Machine/s not to be left unattended. Disengage controls, apply the park brake, switch off engine and remove key when not in use	E	3	M 6	Operator
		Falling objects and materials	C	4	E 18	1. Do not carry others on plant and plant only to be driven from operator's seat. 2. Area clearly marked and barricaded where necessary to make safe from other traffic.	E	3	M 6	Operator
		Existing underground services	C	4	E 18	1. Underground services to be identified with principal contractor prior to works commencing.	E	3	M 6	Operator
8.	Repetitious tasks / Static posture	Musculoskeletal injuries	C	3	H 13	1. Workers stretched and warmed up prior to activities. 2. Sufficient rest breaks taken. 3. Use of job rotation where possible at regular intervals. 4. Ergonomic and anti-vibration equipment / tools / seating to be utilised.	E	3	M 6	Operator

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			L	C	R		L	C	R	
9.	Working near an exposed energised electrical installation	Electrocution	D	5	E 19	1. Existing services will be identified with the principal contractor prior to commencement. 2. An exclusion zone of 8 metres around overhead powerlines (up to 132kV) maintained which allows for sway and sag unless: (i.) Documentation from the power supply authority confirms the lines have been de-energised; or (ii.) A suitably qualified safety observer is available when the plant could enter the exclusion zone and a documented safe system of work developed.	E	3	M 6	Operator
10.	Inspection, Repairs and Maintenance	Plant Failure	D	4	H 14	1. Planned inspections and preventative maintenance programs for plant in accordance with manufacturer's recommendations. 2. Inspections and maintenance to take place on level ground and plant turned off. Chock wheels if working under the plant. 3. Isolate the plant using a tag (out of service) system. 4. Do not attempt to maintain moving parts; two or more persons should work jointly. Avoid entanglement of jewellery and clothing in moving parts. 5. Records kept of all repair / replacement action required and taken in the form of a log book. 6. Instruction manuals giving sufficient information for operation, repairs and maintenance to be available at site of operation. 7. Up to date log books and inspection reports also available for inspection at site of operation. 8. Under no circumstances can inspections nor maintenance take place whilst plant is in operational mode.	E	3	M 6	Operator

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			L	C	R		L	C	R	
11.	Emergency preparedness	Exacerbated injury and damage	C	4	E 18	1. All workers to be familiar with and adhere to site emergency procedures and emergency procedure of Eagle Alliance Earthmoving. 2. In the event of an emergency Eagle Alliance Earthmoving Supervisor and Site Supervisor to be notified immediately. 3. 1 person to calm injured worker and maintain continuous verbal communication. 4. Emergency services contacted immediately – Dial 000 5. 1 person to await emergency services at front of site 6. 1 person to maintain continuous communication with injured worker.	E	3	M 6	Operator Project Management
12.	Work adjacent to a roadway or traffic corridor	Collision (Vehicle and mobile plant traffic)	C	5	E 22	1. All workers to be trained / inducted into Principal Contractors Traffic Management Plan. 2. Safety instructions and directions of Traffic Control personnel to be followed. 3. Site rules and Site Traffic Management Plan to be adhered to at all times. 4. Traffic management devices including barriers, signage and bollards not to be interfered with, relocated or subjected to damage. 5. Defective / ineffective traffic control devices brought to the attention of the principal contractor. 6. Workers familiar with the basic application of the Manual for Uniform Traffic Devices Part 3 and adherence to this Part.	E	3	M 6	Principal Contractor Operator

STEP	TASK / ACTIVITY	HAZARD/S	RISK CLASS (BEFORE CONTROLS)			CONTROLS AND SAFE WORK PROCEDURES	RISK CLASS (AFTER CONTROLS)			RESPONSIBLE PERSON
			L	C	R		L	C	R	
13.	Work over and adjacent to water	Drowning	C	5	E 22	1. Workers selected to be physically capable of working in conditions and environment. 2. Workers trained in inherent risks and conditions. 3. Barriers erected as necessary to create exclusion zones and safe distance from embankments. Exclusion zones not to be breached. 4. Suitable length of rope and float device to be readily available on site. 5. Rope to be sufficient length to reach and retrieve worker in the event of failure. 6. All workers to be trained in and familiar with emergency contact details and site emergency procedures, which are to be readily available.	E	3	M 6	Supervisor Operator All workers
14.	Loading of plant – Moving powered mobile plant	Collision	C	4	E 18	1. Clear and safe access way provided for float / trucks to loading area. 2. Principal Contractor Traffic Safety Management Plan to be adhered to. 3. Essential Worker used to assist truck drivers to reverse. Essential Worker to always remain in driver's vision and / or use radio communication. 4. Remove all persons from area before loading plant. 5. Persons are not to position themselves between a truck and equipment / materials / structures. 6. Safety instructions of driver to be followed at all times.	E	3	M 6	Project Manager Operator
		Plant rollover	C	4	E 18	1. Detach trailer if applicable before loading plant onto truck. 2. Ensure safety pin securing ramps to truck is in place. 3. Inspection of ramps / equipment prior to loading. 4. Safe loading speed to be maintained.	E	3	M 6	Operator

STEP	TASK / ACTIVITY	HAZARD/S	RISK CLASS (BEFORE CONTROLS)			CONTROLS AND SAFE WORK PROCEDURES	RISK CLASS (AFTER CONTROLS)			RESPONSIBLE PERSON
			L	C	R		L	C	R	
15.	Leave Site	Slips / Trips	C	3	H 13	1. Areas left in a clean and tidy state.	E	3	M 6	Operator
		Site management unaware	C	3	H 13	1. Sign out procedures of principal contractor followed. 2. Lock and secure site if required.	E	3	M 6	Project Manager Operator
		Struck by moving objects	C	3	H 13	1. Traffic management procedures of principal contractor followed.	E	3	M 6	Project Manager Operator
		Environmental harm	C	3	H 13	1. Environmental wash station / gravel driveways utilised. 2. Ensure that all wheels are free of dirt / mud to prevent transfer to roads and other sites and to prevent the spread of Fire Ants.	E	3	M 6	Project Manager Operator

Additional Hazards / Special Precautions / Control Measures

(to be completed where review may determine necessary)

STEP	TASK / ACTIVITY	HAZARD/S	RISK CLASS (BEFORE CONTROLS)			CONTROLS AND SAFE WORK PROCEDURES	RISK CLASS (AFTER CONTROLS)			RESPONSIBLE PERSON
			L	C	R		L	C	R	

Risk Priority Table			Consequences				
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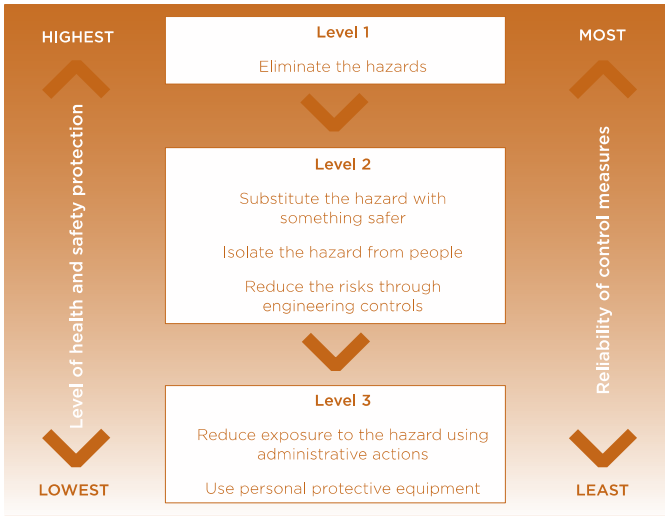
Likelihood	A	Almost Certain	H 11	H 16	E 20	E 23	E 25
	B	Likely	M 7	H 12	H 17	E 21	E 24
	C	Possible	L 4	M 8	H 13	E 18	E 22
	D	Unlikely	L 2	L 5	M 9	H 14	E 19
	E	Rare	L 1	L 3	M 6	H 10	H 15



Applicable Legislation, Standards and Competencies

Engineering Details / Approvals	Plant and design registration for plant where required.
Maintenance Checks	Plant and equipment – visual inspection and pre-start checklist prior to use. Ongoing service and maintenance in accordance with manufacturer's instructions and recommendations. Machines – visual inspection and pre-start checklist prior to use. Ongoing service and maintenance in accordance with manufacturer's instructions and recommendations. Electrical equipment – current test and tag at 3 monthly intervals.
Relevant Legislation, Applicable Codes of Practice	Work Health and Safety Act 2011 Work Health and Safety Regulation 2011 Hazardous Manual Tasks Code of Practice 2011 Managing Noise and Preventing Hearing Loss Code of Practice 2011 Managing the Risk of Falls at Workplaces Code of Practice 2011 Work Health and Safety Consultation, Co-operation and Co-ordination Code of Practice 2011 Excavation Work Code of Practice 2015 Demolition Code of Practice 2013 Welding Code of Practice 2013 Managing Risks of Plant in the Workplace Code of Practice 2013 Managing Risks of Hazardous Chemicals in the Workplace Code of Practice 2013 Safe Design of Structures Code of Practice 2013 First Aid in the workplace Code of Practice 2014 Model Code of Practice: Construction Work 2018 Electrical Safety Act 2002 Electrical Safety Regulation 2013 Electrical Safety Code of Practice 2010 - Works Electrical Safety Code of Practice 2010 – Working near overhead and underground electric lines Electrical Safety Code of Practice 2013 – Managing Electrical Risks in the Workplace 2013 Environmental Protection Act 1994 Environmental Protection Regulation 2008 Environmental Protection (Waste) Policy and Regulation 2000 Environmental Protection (Water) Policy 2009 Environmental Protection (Noise) Policy 2008 Environmental Protection (Air) Policy 2008 State Penalties Enforcement Act 1999 Heavy Vehicle National Law (Queensland) 2018 Heavy Vehicle (General) National Regulation 2018 Heavy Vehicle (Fatigue Management) National Regulation 2018 Heavy Vehicle (Mass, Dimension and Loading) National Regulation 2018 Heavy Vehicle (Registration) National Regulation 2018 Heavy Vehicle (Vehicle Standards) National Regulation 2018 Workers Compensation and Rehabilitation Act 2003 Manual of Uniform Traffic Control Devices Part 3 2016
Training / Competencies / Certificates to perform work	General Construction Induction Training Site Specific Induction Work Activity Induction Training Equipment owner manuals Work Method Statements and Safe Work Procedures Training RTO Certified VOC's Competencies / Authorities to Work required: ☐ LE Excavator ☐ LB Front End Loader / Back Hoe ☐ LS Skid Steer ☐ LZ Dozer ☐ DG Dogger ☐ LG Grader ☐ LP Scraper ☑ LR Roller ☐ EW Essential Worker ☑ VOC Internal VOC (induction inclusive)
Monitoring / Evaluation	Measurement and evaluation will be an ongoing process performed principally by: • Continuous monitoring by supervisor; • on site monitoring by Director, Operations Manager and Supervisor/s; • formal site safety inspections against pre-determined criteria as per Eagle Alliance Earthmoving Pty Ltd WHS Management System Manual; • formal incident investigations; and • consultation with employees and subcontractors. Should circumstances change during the activity work will cease and the WMS will be amended as necessary. Re-training of workers in the new WMS will occur.
Consultation & Communication	Eagle Alliance Earthmoving Pty Ltd actively consult with workers and subcontractors in the following forms: • site visits by Supervisors; • tool box talks used to induct employees and subcontractors; • staff meetings; • correspondence to subcontractors; • WMS can be added to by any person(s) involved provided consultation has been made between Eagle Alliance Earthmoving and other parties concerned. All parties to sign WMS; • other forums as determined.

Applicable Plant / Equipment and PPE

Plant / Equipment Used:		Personal Protective Equipment Used:	
Rollers	☑	Safety Boots AS/NZS 2210.3:2009	☑
Torch	☑	High visibility clothing AS/NZS 4501.1:2008 and AS/NZS 4501.2:2006	☑
Fire Extinguisher	☑	SPF 50+ sunscreen AS/NZS 2604:2012	☑
First Aid Kit	☑	Safety Helmet AS/NZS 1801:1997 (tick if required)	☑
Spill Kit	☑	Gloves AS/NZS 2161:2008 (tick if required)	☑
Safety Triangles / Hats	☑	Eye protection AS/NZS 1337:1992 (tick if required)	☑
	☐	Ear protection AS/NZS 1269:(set)2005 (tick if required)	☑
	☐	Respiratory protection AS/NZS 1716:2012 (tick if required)	☑

Consultation, Training and Competency Register

Declaration by Employees and Subcontractors

We, the undersigned, acknowledge that:

- this WMS has been developed in consultation with us; and
- we have been trained in the contents of this WMS and are fully conversant with the safety procedures and precautions; and
- we will work in accordance with the procedures listed in the WMS.
- any change to this WMS must be consulted with a management representative before action takes place.

Name	Signature	Date	Name	Signature	Date