



DRIVERS CODE OF CONDUCT

Mackas Sand Pty Limited

FINAL

February 2023



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Prepared by Umwelt (Australia) Pty Limited on behalf of Mackas Sand Pty Limited

Project Director: Luke Bettridge Project Manager: Chris Bonomini Report No. R59 Date: February 2023





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Rev	Reviewer		Approved for Issue	
No.	Name	Date	Name	Date
1	Brendan Rice (Umwelt)	April 2016	Peter Jamieson (Umwelt)	April 2016
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5	Chris Bonomni (Umwelt)	February 2023	Luke Bettridge (Umwelt)	February 2023



Table of Contents

1.0	Intro	duction		1
2.0	Proje	ect Appr	oval Requirements	3
	2.1	Consul	tation	4
3.0	Drive	ers Code	e of Conduct	5
	3.1	Provisi	on of this Code	5
	3.2	Operat	ing Hours	5
	3.3	Safety	Issues and Traffic Management	6
		3.3.1	General Traffic Intersection Arrangements	6
		3.3.2	Schools and Peak Traffic Periods	6
		3.3.3	Speed and Truck Movement Limits	6
		3.3.4	Truck Noise and Dust Mitigation	8
	3.4	Emerge	ency Contact Details	8
	3.5	Enviror	nmental Hazards/Fauna Protocol	9
	3.6	Traffic	Updates	10
4.0	Mon	itoring		11

Figures

Figure 1.1 Project Locality, Truck Haul Routes and Bus Stop Locations	2

Tables

Project Approval Conditions for the Drivers Code of Conduct	3
Mackas Sand Approved Operating Hours (Project Approval Mod 2)	5
Maximum Laden Truck Movements from Lot 218 Access Road	7
Emergency Contact Personnel at Mackas Sand	8
	Mackas Sand Approved Operating Hours (Project Approval Mod 2) Maximum Laden Truck Movements from Lot 218 Access Road

Appendices



Appendix 1Contractor SignoffAppendix 2Truck Movement Manual Monitoring Sheets



1.0 Introduction

Project Approval 08_0142 (PA08_0142) was granted on 20 September 2009 to Mackas Sand Pty Ltd (Mackas Sand) for the extraction of up to 2 million tonnes of sand annually from Lot 218 DP 1044608 and Lot 220 DP 1049608 in Salt Ash, Port Stephens (refer to Figure **1.1**). Sand extraction commenced in Lot 220 in November 2009, while extraction in Lot 218 commenced in February 2015.

The Major Project Approval was modified by the Planning Assessment Commission (PAC) on 30 September 2013 (MOD 1). This approval related to the establishment of an alternative access route to Lot 218 and incorporated additional conditions of approval in relation to impact assessment and operational criteria.

A second modification to the Project Approval (MOD 2,) was approved as determined by the PAC on 15 March 2016, related to an increase in truck movements from Lot 218 (the 'Williamtown site'), and has led to revised conditions of approval. These revised conditions included the requirement for Mackas Sand to develop and implement this Drivers Code of Conduct document.

This Drivers Code of Conduct applies to all project related vehicles, including trucks (both contractor and Mackas Sand operated trucks) that haul sand from both Lot 218 (Williamtown) and Lot 220 (Salt Ash) Mackas Sand extraction operations (refer to Figure **1.1**).



Monitoring Bore

Image Source: Nearmap (2023) Data source: NSW FSDF (2022)



2.0 Project Approval Requirements

This Drivers Code of Conduct has been developed in accordance with Condition 33A of Schedule 3 of the Project Approval (PA08_0142) Modification 2 determined on 15 March 2016. Further details of the Project Approval requirements and where these are addressed in the document are provided in **Table 2.1** below.

Table 2.1 Project Approval Conditions for the Drivers Code of Conduct				
Project	Addressed in Section			
Schedu	le 3 – Environmental Performance Conditions			
Impact	Assessment Criteria			
33A.	Prior to 14 April 2016, the Proponent shall prepare a Drivers' Code of Conduct applicable to drivers of all project-related vehicles, including trucks that haul sand from Mackas Sand's operations on Lots 218 and 220. This Code of Conduct must:	2.1		
	(a) be prepared in consultation with Council and RMS and be submitted to the Secretary for approval			
	(b) describe the measures that would be implemented to ensure that drivers of all project-related vehicles, including sand haulage trucks:	3.1		
	comply with this Drivers' Code of Conduct;	3.1		
	 are made aware of potential safety issues both on site and on the public road haulage routes; 	3.3		
	 are informed of when heavy traffic volumes are likely to be encountered on Nelson Bay Road, including the 6 am to 9 am peak and the summer holiday period; 	3.3		
	 are informed of usual school bus travel times on Nelson Bay Road and Cabbage Tree Road as well as the location of all bus stops on these roads; 	3.3		
	• are made aware of potential interactions with general traffic on Nelson Bay Road whilst merging from the acceleration lane of the access road intersection;	3.3		
	are provided with contact details in case of emergencies or accidents;	3.4		
	• are provided with details of potential environmental hazards, such as potential for fauna to cross the access road, particularly at dawn and dusk;	3.5		
	• are provided with a detailed protocol that sets out what drivers are required to do to arrange for the care of any injured fauna and that they must immediately report all fauna strikes on the site to Mackas Sand's management;	3.5		
	provided with updates on local road conditions;	3.6		
	minimise truck noise impacts at residences; and	3.3		

 Table 2.1
 Project Approval Conditions for the Drivers Code of Conduct



Project	Approval Condition	Addressed in Section
	 minimise travel to the site prior to 5 am on weekdays; 	3.3
	(c) include a monitoring program of the measures in (b).	4.0
	The Proponent shall implement the approved Drivers' Code of Conduct as approved from time to time by the Secretary.	

2.1 Consultation

The requirements for thie original version of this document were discussed with members of the Roads and Maritime Services (RMS) and Port Stephens Council (PSC) and emailed feedback was received during April 2016. However, no consultation with RMS or PSC as been undertaken for this revision.



3.0 Drivers Code of Conduct

3.1 Provision of this Code

This code will be provided to all haul truck drivers transporting sand from Mackas Sand operations. All external contracting truck operators must read and sign **Appendix 1** document, stating that they have read and agreed to comply with this Drivers Code of Conduct. Contractors will return the signed document to Mackas Sand prior to commencing works onsite. Mackas Sand haul truck drivers will be provided a copy of this code through site training programs and will also be required to sign the **Appendix 1** document, stating that they have read and agreed to comply with this Drivers Code of Conduct.

Failure to comply with this code may result in a non-compliance of Mackas Sand operations and infringement notices and/or penalties from the relevant regulatory authorities. As stated in **Appendix 1**, customers (company and individual drivers) are to be aware that customers not adhering to the conditions above will be given one warning. Further breaches will result in refusal of entry to the mine site and account closure.

In the event that this Drivers Code of Conduct is updated to reflect changes in requirements for driver conduct, all haul truck drivers will be provided with the revised code. All drivers will be required to complete the **Appendix 1** document acknowledging that they have read and agreed to comply with the revised code.

3.2 Operating Hours

The current approved hours of operations are provided within Table 3.1 below.

Activity	Day	Time
Quarrying Operations (other than Transportation)	Any day	Any time
Quarrying Operations on Lot	Monday to Friday	7.00 am to 6.00 pm
220 (other than transportation), when operating less than 250 metres from residence R27	Weekends and Public Holidays	None
Turner outstion of cond*	Monday to Saturday	5.00 am to 10.00 pm
Transportation of sand*	Sundays and Public Holidays	8.00 am to 12.00 pm

Table 3.1 Mackas Sand Approved Operating Hours (Project Approval Mod 2)

* Mackas Sand have agreements with nearby residents and can conduct transportation at hours stated in **Table 3.1**, as detailed by Condition 9B of Schedule 3 of the Project Approval.

It is noted that no laden heavy vehicle movements on the site are permitted outside of the transportation times stated in Table 3.1.



3.3 Safety Issues and Traffic Management

3.3.1 General Traffic Intersection Arrangements

Drivers should be aware of traffic interactions when entering and leaving both Lot 218 and Lot 220 as trucks must merge into traffic on Nelson Bay Road. Drivers must adhere to the following requirements when entering and leaving Lot 218 and Lot 220.

Quarry	Site access arrangements
Entering Lot 218	Lot 218 is a 'left in, left out only' intersection, meaning that all vehicles entering Lot 218 must be approaching Lot 218 from the north on Nelson Bay Road.
	Vehicles approaching Lot 218 from the south on Nelson Bay Road will have to travel further north past the Lot 218 intersection before completing a U-turn at the Pauls Corner roundabout located at the intersection of Nelson Bay Road and Richardson Road so that they can approach Lot 218 from the north on Nelson Bay Road and enabling a turn left into Lot 218.
Leaving Lot 218	Drivers leaving Lot 218 must only turn left onto Nelsons Bay Road utilising the acceleration lane to minimise disruption to traffic southbound traffic flow and potential interactions with southbound traffic while merging.
Entering Lot 220	Drivers entering Lot 220 will access the site via the Salt Ash roundabout located at the intersection of Nelson Bay Road and Oakvale Drive. Drivers exiting Lot 220 will turn left onto Nelson Bay Road at the roundabout.
Leaving Lot 220	Drivers exiting Lot 220 will turn left onto Nelson Bay Road at the roundabout.

3.3.2 Schools and Peak Traffic Periods

The period between 6am and 9am weekdays, and during summer holidays (Mid December to Late January) are considered peak traffic periods in the region and will likely impact vehicle transit timeframes. Therefore, these periods should be factored into truck movement schedules. School bus peak times are between 7:30am - 9:00am and 2:30pm - 4:30pm weekdays. Numerous public bus routes also operate along Nelson Bay Road and Cabbage Tree Road on an approximately hourly basis throughout the day. Drivers should also be particularly cautious between approximately 7:30am - 9:00am and 2:30pm - 4:30pm as school buses stop for children along these routes.

Public and school bus stops are located on Nelson Bay Road at regular intervals between Lot 220 and the intersection with Cabbage Tree Road. Salt Ash Primary School is located in the vicinity of the roundabout at the intersection of Nelson Bay Road and Richardson Road. Children also travel on foot near this intersection during school start and finish times. Bus stop locations Nelson Bay Road and Cabbage Tree Road are shown on Figure **1.1**.

3.3.3 Speed and Truck Movement Limits

All vehicles must comply with all posted speed limits and instructions on-site and off-site, including the speed limits defined below:

- Speed limit Macka's Sand access road (Lot 220) 20km/hr
- Speed limit Alternate access road (Lot 218) 40km/hr



- Speed limit within In-Pit Area at Lots 218 and 220 10km/hr
- Speed limit Oakvale Drive 50km/hr
- Speed limit Nelson Bay Road 80km/hr.

A safety camera and a weighbridge system have been installed to monitor and manage truck movements from Lot 218, as required by the Project Approval (further information regarding haul truck monitoring is provided in **Section 4.0**). Table 3.2 lists maximum laden truck movements per hour. Travel to site prior to 5 am on weekdays is to be minimised.

Day	Time Period	Maximum Laden Truck Movements (Per Hour)
Monday – Friday (except for Public Holidays)	5 am – 6 am	14
Monday – Friday (except for Public Holidays)	6 am – 9 am	8
Monday – Friday (except for Public Holidays)	9 am – 10 pm	24
Saturdays (except for Public Holidays)	5 am – 6 am	5
Saturdays (except for Public Holidays)	6 am – 7 am	9
Saturdays (except for Public Holidays)	7 am – 10 pm	24
Sundays and Public Holidays	8 am – 12 pm	10 (Combined Lot 218 and Lot 220)

Table 3.2 Maximum Laden Truck Movements from Lot 218
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If the allocated number of trucks have already passed through the weighbridge at Lot 218 for the hour specified, then the traffic light on the weighbridge will not turn green for the next truck to leave the site until the hour has passed. For example, if the limit of 9 trucks has been reached for the hour of 6am - 7am on Saturday at 6:45am, then the next truck will not be allowed to leave the site until 7am. Note that the truck movement monitoring system will not function when trucks are entering and leaving site by only one weighbridge, e.g. if trucks are entering and leaving site by only the outgoing weighbridge due to a fault with the incoming weighbridge.

In the event that the truck movement monitoring system becomes inoperable or where only the incoming or outgoing weighbridge is in operation, manual monitoring of truck movements will be required. **Appendix 2** contains three truck monitoring sheets for:

- Monday to Friday (excluding Public Holidays)
- Saturday (excluding Public Holidays)
- Sunday and Public Holidays



Further to the restrictions relating to laden truck movements presented in Table 3.2, truck movements on Lavis Lane and Oakvale Road during the night time period and on Sundays and public holidays are restricted to a maximum of 10 per hour.

3.3.4 Truck Noise and Dust Mitigation

Operating in a sensitive area, drivers must operate in a safe and considerate manner. Engine brakes must not be applied whilst on Mackas Sand sites. Engine/compression brakes must also not be used on any other roads within built up areas, in accordance with the NSW road regulations. In addition, all vehicles must strictly follow all posted speed limits, traffic signs, traffic lights and instructions from Police or RMS officers.

Prior to leaving site all vehicles must have covered loads and should remove any materials that have accumulated on the vehicle and have the potential to be tracked onto public roads or result in the generation of dust while the vehicle is travelling on public roads.

3.4 Emergency Contact Details

In the event of an emergency or accident at the site, drivers s should notify on-shift Mackas personnel on UHF channel 18 or if unable to make contact by UHF radio, call the emergency contacts listed in to Table 3.3. In the event that Mackas personnel cannot be contacted and/or the level of emergency requires assistance from emergency services (i.e. NSW Police, NSW Ambulance or Fire and Rescue NSW), drivers should immediately call 000 and provide the following information:

- 1. Your name
- 2. The type of incident e.g. bushfire, medical emergency, vehicle/truck collision
- 3. The company name, address, and nearest cross street
 - o Mackas Sand and Soil
 - Address:
 - Lot 218 2354 Nelson Bay Road, Williamtown, NSW 2318
 - Lot 220 2684 Nelson Bay Road, Salt Ash, NSW 2318
 - Nearest cross street
 - Lot 218 Sansom Road
 - Lot 220 Oakvale Drive
- 4. Any other information you believe is relevant to the emergency situation (e.g., direction of fire relative to the site, fuel leaking from vehicle etc.)

Mackas management must be notified of any emergency, accident or near miss on site as soon as reasonably feasible in order to investigate and manage the incident.

Mackas Sand management will document all incidents and near misses to ensure continuous improvement of safety standards relating to the operation.

Table 3.3 Emergency Contact Personnel at Mackas Sand



Priority	Name	Position	Company	Contact Phone No.
Primary Contact	Robert Mackenzie	Quarry Manager	Mackas Sand Pty Ltd	(w) 02 4982 6227 (m) 0408 490 911
Secondary Contact	Jack MacKenzie	Workshop Manager	Mackas Sand Pty Ltd	(w) 02 4982 6227 (m) 0400 490 911

3.5 Environmental Hazards/Fauna Protocol

A Risk Assessment was undertaken for the MOD 2 Environmental Assessment (Umwelt, 2016) for the site which considered the risk associated with potential fauna strike to be low. There have been no fauna strikes since operations commenced at Lot 218. The majority of the haul road length has been well cleared through past farming practices and no additional restrictions to fauna movements have been implemented by Mackas Sand and therefore fauna range and lifecycle impacts are considered to be low. There is elevated potential for fauna strikes at the southern end of the alternate access road. As such, to minimise risk of fauna strikes, Mackas Sand propose to install warning signage at the southern end of the alternate access road at Lot 218.

Wildlife interactions are a significant potential hazard both onsite and along public roads in the area. Drivers should take particular care during dawn and dusk periods when increased fauna activity raises the potential for fauna strike. During lowlight and foggy conditions, drivers should reduce speeds and utilise headlights/fog lights as appropriate for the conditions.

In the event of a fauna strike on Lot 218/Lot 220 or access roads for the Mackas Sand sites, drivers are required to:

- firstly, ensure their personal safety
- notify the Mackas Sand of the incident (refer to Table 3.3) and if the strike has resulted in injury to wildlife, Mackas Sand management will take responsibility for engaging a local wildlife group or veterinary clinic to assist where possible groups include WIRES (1300 094 737) and the Hunter Native Animal Trust (NAT) fund (0418 628 483), and
- due to their unpredictable nature, drivers are not to handle injured wildlife unless suitably trained and qualified.

As required under approval conditions, Mackas Sand must record all fauna strikes on the site, the date and time of occurrence, the species involved and management measures implemented as a result. Incidents of road kill of threatened species will be reported in the Annual Review and the need for further prevention measures will be assessed.

Mackas Sand proposes to implement the following additional measures to minimise the impacts to the local fauna species that may be susceptible to vehicle strike along the road:

- wildlife warning signs will be erected in known areas of high fauna activity or adjacent woodland vegetation to alert truck drivers (i.e. at the southern end of the alternate access road for Lot 218)
- the risk of road kill will be communicated during site inductions.



In addition, drivers must dispose of rubbish in appropriate bins and not litter either onsite or in public areas.

3.6 Traffic Updates

Mackas Sand will, in a timely manner, notify all contractors of any significant changes to traffic conditions or traffic incidents within the local area that are likely to impact transit. Methods of communication will include emails, UHF radio (channel 18) while on-site and in person at the weighbridge.



4.0 Monitoring

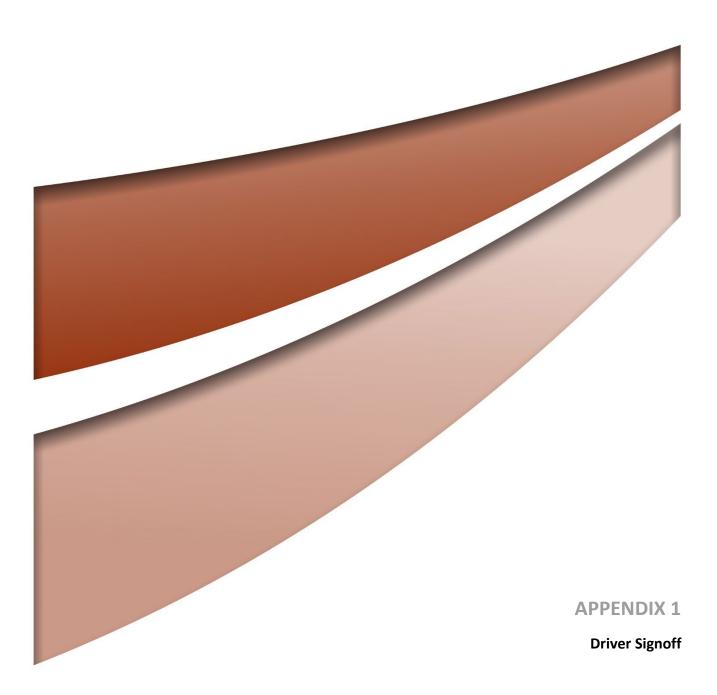
In order to proactively manage compliance and performance, Mackas Sand will maintain the following monitoring program:

- Safety cameras installed on entry/exit gate of Lot 218 will monitor and record vehicle movements and behaviour at the site entry. Recordings made at this location will be made available to DPE upon request. The weighbridge installed at the exit of Lot 218 will supplement the safety cameras by providing further details of vehicle movement times and their weights, to and from operations. These measures ensure vehicle movements are appropriately monitored in accordance with Condition 33E of Schedule 3 of the Project Approval.
- Mackas Sand maintains a Complaints Register for any complaints received by members of the nearby community and will review and attempt to resolve any complaints made. A summary of complaints received by Mackas Sand and actions to resolve these complaints will be undertaken as part of the Annual Review.
- Through regular Community Consultative Committee (CCC) meetings held with members of the surrounding community, Mackas Sand is notified of issues and provided with general feedback relating to all aspects of operations. In addition, ongoing environmental performance information is supplied to CCC members.
- Regular noise monitoring is undertaken by Mackas Sand to confirm that operations remain compliant with Project Approval conditions. All results are reported to regulatory authorities during annual reporting. All vehicles must manage noise in accordance with **Section 3.3.4** in order to maintain compliance.
- Visual inspections of truck movements will also be undertaken periodically by Mackas Sand to understand general levels of compliance with this Drivers Code of Conduct.
- Mackas Sand will maintain a register of persons that have read and agreed (by signature) to the Drivers Code of Conduct.
- Truck movement data from the weighbridge will be reviewed on a monthly basis to check the performance of the system and ensure compliance is maintained. Results will be discussed within the Annual Review for the operation. Any non-compliance with the approved truck movement limits will be investigated and DPE will be advised.

As discussed in **Section 3.1**, all drivers must ensure compliance with conditions prescribed within the Code of Conduct. Failure to do so may result in warnings, subsequent refusal of entry to the operations and potential account closure if issues are not resolved adequately.

Mackas Sand will liaise with contracting companies on a routine basis regarding changes in operations or instances of non-compliance involving vehicle movements. This is also seen as an opportunity to discuss any additional issues or improvements that could be made by operations or the contractor.









ENTRY CONDITIONS & OPERATIONAL HOURS

Operational hours are as follows; (subject to change without notice)

In consideration of our neighbours and for safety of road users the following shall apply:

All drivers attending Macka's Sites must:

- Operate in a safe and considerate manner
- ✓ Follow all sign posted speed limits and instructions:
 - Speed limit Macka's Sand access road (Lot 220) 20km/hr
 - Speed limit Alternate access road (Lot 218) 40km/hr
 - \circ Speed limit within In-Pit Area at Lots 218 and 220 10km/hr
 - Speed limit Oakvale Drive 50km/hr
 - Speed limit Nelson Bay Road 80km/hr
- ✓ Not use Engine brakes whilst on Macka's Sand sites or on any other roads within built up areas, in accordance with the NSW road regulations. This includes the roads as stated above.
- ✓ Give way to all earth moving equipment.
- ✓ Anyone seen discarding rubbish on site, will be banned from the sites
- ✓ All drivers need to check weights, adjust loads and cover their loads before final weighing at the weighbridge. ALL TRUCKS need to leave the site ASAP after weighing is completed. This is a legal requirement.
- ✓ Be aware that Macka's Sand will continue to **monitor all trucks** that enter and exit the site.
- ✓ Be aware that drivers not adhering to the conditions above will be given one warning. Further breaches will result in refusal of entry to the mine site and account closure.
- ✓ Report any animal injuries on site to site manager
- ✓ Have read and understood the Mackas Sand 'Drivers Code of Conduct'

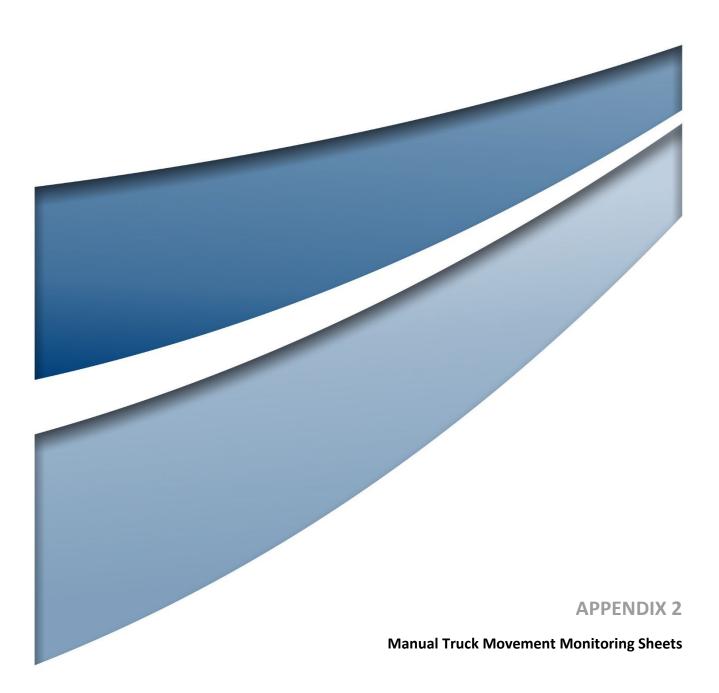
Further information can be obtained by contacting Robert Mackenzie on 0408 490 911

Salt Ash and Williamtown Sites	Opening Hours	
MONDAY - THURSDAY	5am – 10pm	
FRIDAY	5am – 5pm	
SATURDAY	5:30am – 12pm	
SUNDAY and PUBLIC HOLIDAYS Only open if prior bookings are made	8am – 12pm	

I/We the undersigned have read and agree to abide by the Drivers Code of Conduct including the conditions above.

Date:	Company Name:			
Managers Name:	Signature:			
Drivers Name:	Signature:			
Thank you in anticipation of your continued co-operation.				





Period		Maximum Outgoing Laden Trucks	Outgoing Laden Truck Count
5:00 am -	6:00 am	14	
6:00 am -	7:00 am	8	
7:00 am -	8:00 am	8	
8:00 am -	9:00 am	8	
9:00 am -	10:00 am	24	
10:00 am -	11:00 am	24	
11:00 am -	12:00 pm	24	
12:00 pm -	1:00 pm	24	
1:00 pm -	2:00 pm	24	
2:00 pm -	3:00 pm	24	
3:00 pm -	4:00 pm	24	
4:00 pm -	5:00 pm	24	
5:00 pm -	6:00 pm	24	
6:00 pm -	7:00 pm	24	
7:00 pm -	8:00 pm	24	
8:00 pm -	9:00 pm	24	
9:00 pm -	10:00 pm	24	

Table A2.1 Truck Movement Monitoring, Monday to Friday (excluding Public Holidays)

Period			Maximum Outgoing Laden Trucks	Outgoing Laden Truck Count
5:00 am	-	6:00 am	5	
6:00 am	-	7:00 am	9	
7:00 am	-	8:00 am	24	
8:00 am	-	9:00 am	24	
9:00 am	-	10:00 am	24	
10:00 am	-	11:00 am	24	
11:00 am	-	12:00 pm	24	
12:00 pm	-	1:00 pm	24	
1:00 pm	-	2:00 pm	24	
2:00 pm	-	3:00 pm	24	
3:00 pm	-	4:00 pm	24	
4:00 pm	-	5:00 pm	24	
5:00 pm	-	6:00 pm	24	
6:00 pm	-	7:00 pm	24	
7:00 pm	-	8:00 pm	24	
8:00 pm	-	9:00 pm	24	
9:00 pm	-	10:00 pm	24	

Table A2.2 Truck Movement Monitoring, Saturday (excluding Public Holidays)

Period		Maximum Outgoing Laden Trucks	Outgoing Laden Truck Count
8:00 am	- 9:00 am	10	
9:00 am	- 10:00 an	10	
10:00 am	- 11:00 an	10	
11:00 am	- 12:00 pn	10	

Table A2.3 Truck Movement Monitoring, Sunday and Public Holidays



Umwelt (Australia) Pty Limited

T| 1300 793 267 E| <u>info@umwelt.com.au</u>