TRAFFIC MANAGEMENT PLAN
NARACOOPA MINERAL SANDS (PTY) LTD

September 2020

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DEFINITIONS AND ABBRIVIATIONS

TERM	DEFINITION
Agreement	The Part 5 Agreement between Council, NMS and the Department of State Growth (then the Department of Infrastructure, Energy and Resources, DIER).
TMP	Traffic Management Plan
NMS	Naracoopa Mineral Sands Pty Ltd
EPN	Environment Protection Notice
Site	Part 2 of Mining Lease 1673 P/M, known as 7 Short Street, Naracoopa
Staff	Refer to both paid and unpaid persons undertaking work for or on behalf of Naracoopa Mineral Sands (Pty) Ltd.

INTRODUCTION

The mining activity is permitted under its EPN to process up to 2,000,000 tonnes of raw sand and operates under an approval granted in 2000. This can yield around 175,000 tonnes of product for export.

In 2011 Naracoopa Mineral Sands Pty Ltd started heavy mineral sand processing in Mining Lease 1673 P/M which is split into two parts, the Northern Area (Part 1) and the Southern Area (Part 2). The main products are **Zircon** ($ZrSiO_4$) and **Rutile** (TiO_2) with **Ilmenite** ($FeTiO_3$) as the by-product.

The Site relevant to this Traffic Management Plan is Part 2 of Mining Lease 1673 P/M, known as 7 Short Street, Naracoopa, which borders the southern end of Sea Elephant Road to the west, Sea Elephant Bay to the east and Fraser River to the south. It is from the Site that trucks transport sand material to Grassy Harbour (Port of Grassy) for international export via Melbourne.

A Part 5 Agreement between Council, NMS, and the Department of State Growth (then the Department of Infrastructure, Energy and Resources, DIER). Many aspects of the Agreement have been satisfied since it was signed and lodged on the Land Title, such as the upgrading of roads, sealing of roads and the installation of signage and road guard rails. The Agreement describes payment arrangements for a levy to assist Council with the maintenance of roads used by the mining activity to cart material to port.

The TMP is a condition of planning approval.

PURPOSE

This Traffic Management Plan (TMP) describes the use of the haulage route between Grassy Harbor (Port of Grassy) and the Site and how NMS manages the traffic it generates. Risks include those to pedestrians, other road users on the haulage route. Particular attention was given to the Naracoopa residential area because it has the highest population density along the haulage route.

The TMP should be reviewed annually or as required to accommodate changes in mining operations.

STATUTORY REQUIREMENTS

Planning Approvals

The sand mine activity, and associated truck haulage of sand material for export, operates under the following planning approvals –

- DA 06/00A (Council issued planning permit); and
- Environment Protection Notice No. 7678/3.

Road Rules and Management

The rules that govern driving on Tasmania's roads are described in the *Road Rules 2009*. All road users that have a license to operate a vehicle on a road must abide by the Road Rules.

The roads on King Island are managed by the Local Council under the *Local Government (Highways) Act 1982* with Grassy Road specifically managed by the Department of State Growth.

Roles and Responsibilities

The roles and responsibilities of persons/entities managing traffic are provided in Table 1.

Table 1: Roles and responsibilities

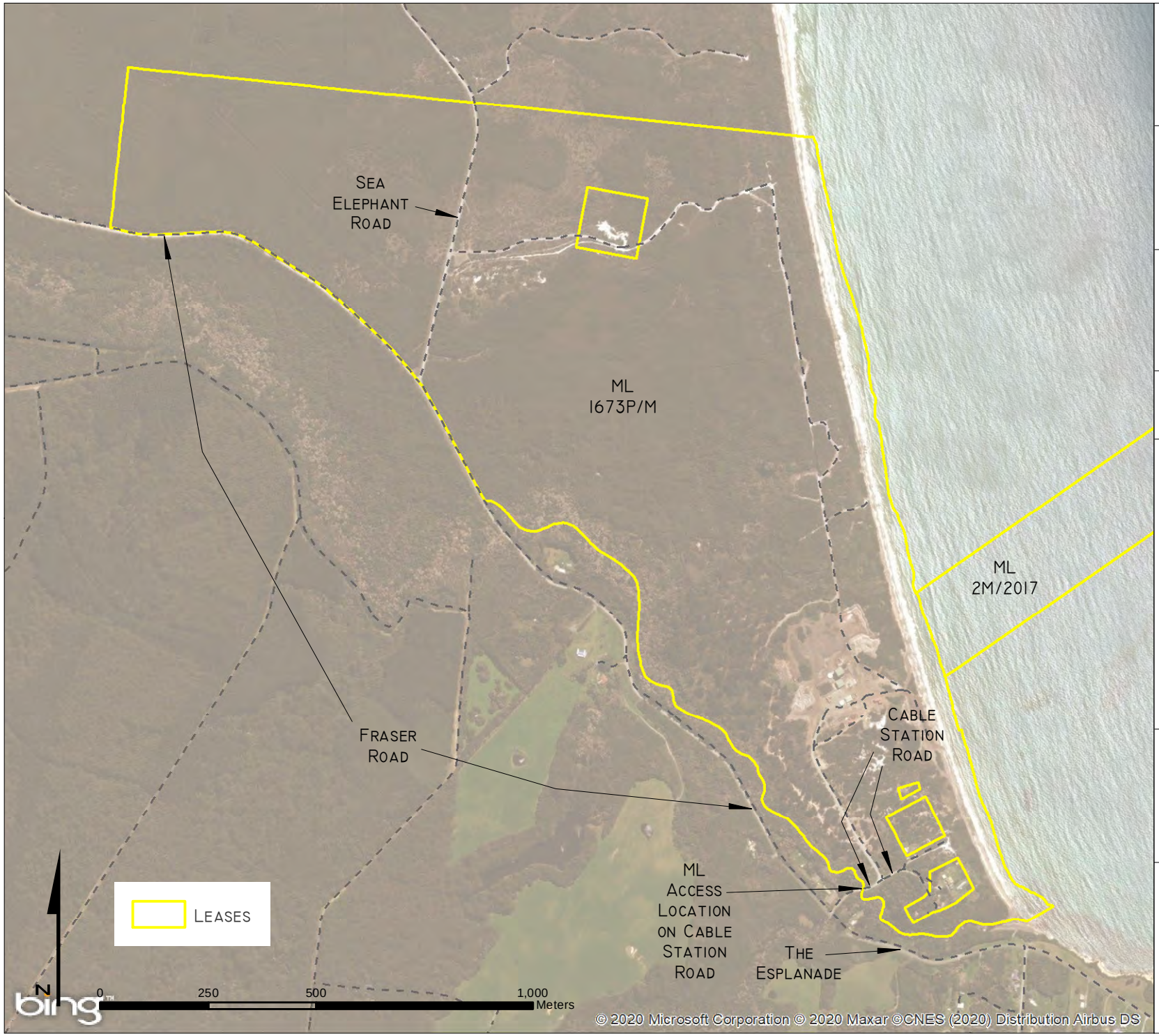
Directors	• Support implementation of the TMP • Provide resources to implement traffic management across the processing plant as it relates to health and safety.
Mine Manager	• Provide clear direction to all levels of management on traffic management. • Liaise with Council about road maintenance requirements or issues. • Allocate responsibility and resources for traffic management and delegation of authority to staff. • Ensure Traffic Manager is aware of responsibilities in relation to traffic management at NMS Site and haulage routes. • Report safety risks to Directors.
Traffic Manager	• Ensure Mine Manager is aware of their responsibilities in relation to traffic management. • Ensure staff, workers, contractors, and visitors are inducted of the company policies, procedures, and any safe work procedures in relation to traffic management. • Conduct risk assessments and control risks on relevant activities related to traffic management. • Ensure TMP is kept up to date and is reflective of activities being undertaken by the NMS and existing environment at the workplace. • Report traffic management issues to Mine Manager.
Staff, workers, and contractors	• Follow company policies, procedures, and any safe work procedures especially in relation to traffic management. • Cooperate and actively contribute to the health and safety of themselves and others within the workplace that may be affected by their acts or omissions. • Comply with the requirements of the TMP

Stakeholder Consultation

NMS aims to keep the local community informed of traffic management arrangements in a pro-active and responsive manner. The objective of the communication program is to advise stakeholders of key aspects of the mine's traffic management.

NMS's communication about its transport related activities may include the following:

- Public notices and announcements (eg Facebook, notices in the King Island Courier),
- Meetings and correspondence with relevant regulatory authorities, and/or



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Development Application

Figure 1: ML 1673P/M Access Location

TASMAP:	LGA:
NA	KING ISLAND

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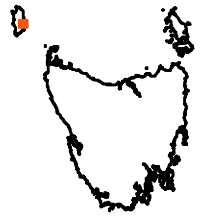

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- Discussions with adjoining landowners/neighbours who may be affected by transport operations.

The following avenues provide additional availability of information to community members:

- Community telephone line:

Location	
NMS feedback line (8.00am to 5.00pm Monday to Friday)	0455 296 989
NMS office (9.00am to 5.00pm Monday to Friday)	03 6461 1407

- Dedicated email address:

  naracoopamineralsands@gmail.com

NORMAL OPERATIONAL ACTIVITIES

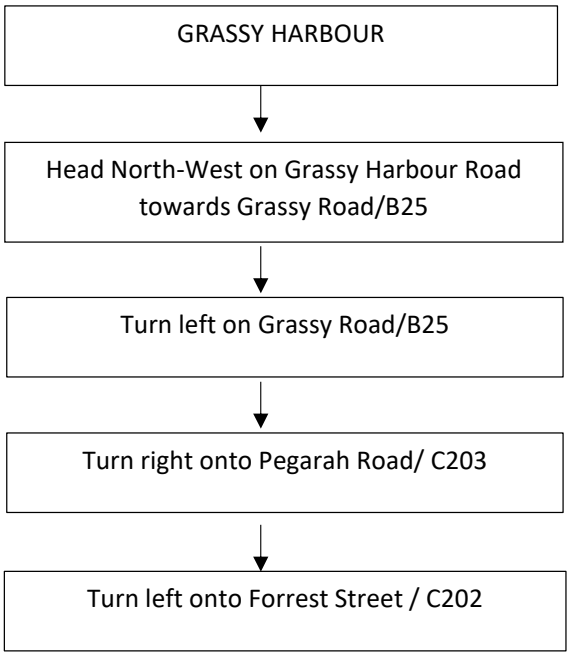
Trucks carting heavy mineral sand product (in shipping containers), and minor volumes of ilmenite (mainly in shipping containers), would operate under 'normal' operational activities.

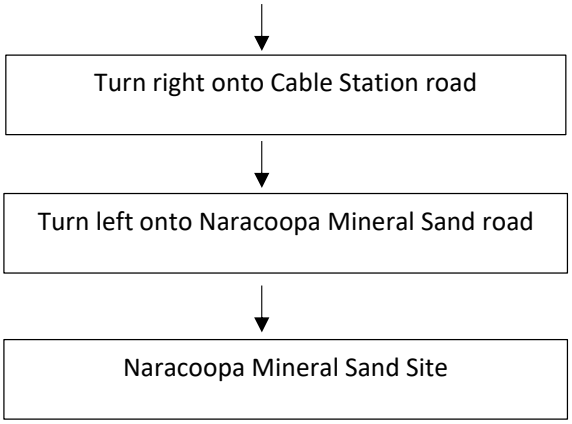
Operational Hours

Trucks will operate on the road network between 7.00 am (0700 hrs) and 6.00 pm (1800 hrs) on weekdays.

Haulage Routes and Speed Limits

The haulage route from Grassy Harbour to the Site is as follows (see Figure 2) –





For some areas maximum posted road speed limits will be reduced as prescribed in Table 4.

During the induction process, all truck drivers will be advised of the haulage route (Figure 1) and speed limitations.

Table 2: Speed Limits

Route	**Road posted speed limit**	**Speed limit defined by TMP**
Site to Forrest Street (C202)	20 km/h	20 km/h
Forrest Street(C202) to Pegarah Road (C203) / Naracoopa Residential Area	60 km/h	40 km/h
Pegarah Road to Grassy Harbour	Posted speed limit per road rules	Posted speed limit per road rules

CAMPAIGN (BULK EXPORT) OPERATIONAL ACTIVITIES

For the export of bulk material (eg ilmenite) when sufficient stockpiles exist at the mine, there would be campaigns to transport material in a short but intense period of activity.

Operational Hours

Trucks will operate on the road network between 7.00 am (0700 hrs) and 6.00 pm (1800 hrs) Monday to Saturday.

Haulage Routes and Speed Limits

Monday to Friday

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FIGURE 2: NORMAL CART ROUTE AND ROAD SPEEDS

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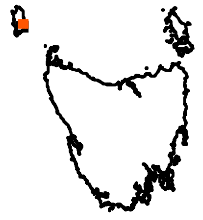

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Trucks would leave the mine and head north onto Fraser Road, then turn into North Pegarah Road to access Pegarah Road then Grassy Road (see Figure 3b). Trucks would then drive to Grassy Port to unload and return via Grassy Road, Pegarah Road, Forrest Street and then Cable Station Road (see Figure 3a).

Speed limits are those stated in Table 4 or as sign-posted on the road network.

Saturday

Trucks would leave the mine and head north onto Fraser Road, then turn into North Pegarah Road to access Pegarah Road then Grassy Road (see Figure 3b). Trucks would return the same route.

Speed limits are those stated in Table 4 or as sign-posted on the road network.

VEHICLES

Vehicles transporting the material are to be –

- Total weight must not exceed a weight of 42.5 tonnes.
- Must meet statutory safety requirements including proper brake system, reverse alarm system, seatbelt.
- Trucks (and trailers) are to be lawfully registered in the State of Tasmania or other State jurisdiction that is recognised by the State of Tasmania.

DRIVER MANAGEMENT

Professional Conduct

All heavy vehicle drivers (truck drivers) must maintain a high level of professional conduct and as a minimum they must:

- Hold a valid license issued in any Australian jurisdiction that confirms their competency to drive and operate the truck (with or without trailer).
- Adhere to posted speed limits and road signs (and those imposed by the TMP).
- Use the horn only as a warning device.
- Minimise noise impacts by limiting truck compression braking and avoiding the use of engine brakes in residential areas (unless their use is necessary to avoid an accident – drivers must exercise due care and judgement).
- Allow enough room between vehicles for movement to occur without adverse interactions.
- Respect and be watchful for pedestrians and other drivers on the dedicated transport routes – apply the Road Rules.
- Follow instructions given by Police and road traffic authorities/controllers.

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FIGURE 3A: CAMPAIGN CART ROUTE (RETURN ROUTE)

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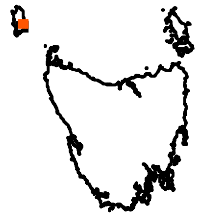

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FIGURE 3B: CAMPAIGN CART ROUTE (LOADED ROUTE)

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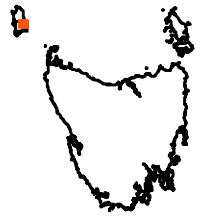

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Management Strategies

The following traffic management strategies will be implemented to reduce the potential for identified hazards to cause concern, loss of amenity or risks to safety of residents:

- The Mine Manager will supervise, monitor, and enforce the implementation of this Traffic Management Plan through monthly spot checks.
- The Mine Manager will be responsible for ensuring that all staff are appropriately licensed and that all vehicles operating on public roads are registered.
- The Mine Manager is responsible for checking that vehicles are in a roadworthy condition.
- Road intersections will have adequate line of sight for trucks exiting the mine site – the works would need to be conducted by Council as the road authority so the Mine Manager will need to provide feedback on roadside vegetation management to the Council.
- All personnel, contractors, sub-contractors, and visitors will be briefed on the traffic rules and requirements on site through an induction process.

TRAFFIC MONITORING, REVIEW AND REPORTING

Monitoring Program

Inspection and monitoring results will be kept on NMS's document management system to ensure that all monitoring activities will assist to measure the effectiveness of the traffic control measures implemented.

The measures detailed in Table 5 are to monitor and record the movement of vehicles accessing the NMS site. NMS will use monitoring data to review and identify any exceedances against the goals with the appropriate corrective actions applied as discussed below in Table 5.

Table 3: Traffic Monitoring Program

Parameter	Monitoring Required	Frequency	Criteria/ Performance Measure/Trigger	Response
Onsite Truck routes	Spot Monitoring	Weekly	Onsite blockages or disturbance	Follow up with driver Review procedures
Traffic Flow	Congestion	As Required, but at least once per week	Complaints Detection	Respond according to result.
Driver Management	Spot Monitoring	Ongoing on a case by case basis	Complaints Detection	Review of procedures and operations Follow up with driver

Road Monitoring

Monitoring of Council infrastructure will include visual inspections as per below;

- Bridge on Fraser Road
    - Monitor bridge performance during cartage operations by joint Council and Mine Manager (or their delegated representative) inspections.
- Esplanade Road Pavement
    - Monitoring of the road pavement will be undertaken by the Council and the operator.

Additional inspections may be conducted jointly with Council staff to identify areas of degradation or where improvements (eg signage) can be made. Where significant deterioration occurs, agreed remediation works will be undertaken per the terms of the Agreement.

Performance Reporting and Review

Annual management reviews of the environmental performance of the TMP will assess the continuing suitability, adequacy and effectiveness of the on-site environmental management measures implemented. This review will include performance against the goals of the TMP.