

Central Queensland Coal Project

Appendix 4c – Draft Road-Use Management Plan

Central Queensland Coal

CQC SEIS, Version 3

October 2020



Central Queensland Coal Project Draft Road-Use Management Plan

Client //	CDM Smith				
Office //	QLD				
Reference //	Q155380				
Date //	29/10/18				

Central Queensland Coal Project

Draft Road-Use Management Plan

Issue: A 29/10/18

Client: CDM Smith Reference: Q155380 GTA Consultants Office: QLD

Quality Record

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1. Introduction

1.1 Purpose of Road-Use Management Plan

This Road-Use Management Plan (RMP) has been prepared in accordance with the Department of Transport and Main Roads "Guideline for Preparing a Road-Use Management Plan" (DTMR 2018). The purpose of the Road-Use Management Plan (RMP) is to outline measures that will be implemented to appropriately manage road impacts, particularly associated with heavy vehicles, during the life of the Central Queensland Coal Project (The Project). This RMP is based on the findings of the Road Impact Assessment (RIA) report (dated 29/10/18, Issue A) which has been developed for the Project EIS. The RMP outlines measures which aim to "avoid", "manage" and "mitigate" Project generated impacts. The RMP will also detail monitoring and reporting processes associated with the implementation strategies.

The RMP will be reviewed and updated as required, to reflect any significant changes to the Project and/or its transport profile (e.g. vehicle numbers/type, routes used, hours of operation or changes in the Project life). This will be done to ensure that the latest Project learnings are represented, and that current information is detailed within the RMP.

1.2 Objectives of Road-Use Management Plan

The key objectives of the RMP are as follows:

- To promote safe operation of vehicles.
- To avoid and manage impacts to the safety and operation of the State (and Local Authority) Controlled Network.
- To help minimise traffic incidents that could be related to the Project.
- To avoid and manage impacts on transport infrastructure (e.g. pavements, intersections, vulnerable structures).
- To avoid and manage traffic impacts on community amenity (e.g. vehicle dust and noise).

1.3 RMP Strategy

At this stage of Project planning and with Project details still under development, this draft RMP has been developed based on various assumptions made for the RIA. Commitment to specific strategies is problematic while Project specifics are still subject to vary. This draft RMP is expected to be finalised at the detailed design phase of the Project and is to include any conditions required through the Environmental Authority.

The RMP will be a transforming document that will be updated (as required) with current information based on Project requirements and local environmental factors. The details contained in the following sections are to meet the objectives of the RMP and include:

- A summary of the Project description, construction schedule, transport arrangements and numbers.
- An outline of the road-use impact assessment, management strategies, and mitigation required.
- Details of the monitoring processes adopted, to ensure that mitigation strategies are undertaken.



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- Details of the triggers that will be adopted to determine when changes in Project details or transport arrangements warrant advising the Department of Transport and Main Roads (DTMR) and/or revision of the RMP.
- Details of stakeholder consultation, and the outcomes and action items that arise during consultation.

1.4 References

This RMP has been prepared with consideration of the following reference resources:

- DNRM 2013, QGN 16 Guidance Note for Fatigue Risk Management, Department of Natural Resources and Mines, Queensland Government.
- DTMR 2017 Guide to Traffic Impact Assessment, Department of Transport and Main Roads, Queensland Government.
- DTMR 2018, Guideline for Preparing a Road-Use Management Plan, Department of Transport and Main Roads, Queensland Government
- Moridpour, S., Mazloumi, E. and Mesbah, M. 2015, Impact of heavy vehicles on surrounding traffic characteristics, Journal of Advanced Transportation 2014; 49:535-552.

Abbreviation	Meaning
AADT	Annual Average Daily Traffic
СНРР	Coal Handling and Preparation Plants
DIDO	Drive-in / Drive-out
EIS	Environmental Impact Statement
Fairway Coal	Fairway Coal Proprietary Limited
FIFO	Fly-in / Fly-out
GTIA	Guide to Traffic Impact Assessment
GTA	GTA Consultants
LOS	Level of Service
Mtpa	Million Tonnes Per Annum
Project	Central Queensland Coal Project
QTRIP	Queensland Transport and Roads Investment Program
RIA	Road Impact Assessment
RMP	Road Use Management Plan
ROM	Run of Mine
RPDM	Road Planning and Design Manual
SCR	State Controlled Road
TMR	Department of Transport and Main Roads
TOR	Terms of Reference
VPD	Vehicles Per Day
VPH	Vehicles Per Hour

1.5 List of Abbreviations



2. Project Details

2.1 Description and Location

Central Queensland Coal Proprietary Limited (Central Queensland Coal) and Fairway Coal Proprietary Limited (Fairway Coal) (the joint Proponents), propose to develop the Central Queensland Coal Mine Project (the Project). As Central Queensland Coal is the senior proponent, Central Queensland Coal is referred to throughout this Supplementary Environmental Impact Statement (SEIS). The Project comprises the Central Queensland Coal Mine where coal mining and processing activities will occur along with a train loadout facility (TLF).

The Project is located 130 km northwest of Rockhampton in the Styx Coal Basin in Central Queensland. The Project is located within the Livingstone Shire Council Local Government Area. The Project is generally located on the "Mamelon" property, described as real property Lot 11 on MC23, Lot 10 on MC493 and Lot 9 on MC496. The TLF is located on the "Strathmuir" property, described as real property Lot 9 on MC230. A small section of the haul road to the TLF is located on the "Brussels" property described as real property Lot 85 on SP164785.

The Project will involve mining a maximum combined tonnage of up to 10 million tonnes per annum (Mtpa) of semi-soft coking coal (SSCC) and high grade thermal coal (HGTC). The Project will be located within Mining Lease (ML) 80187 and ML 700022, which are adjacent to Mineral Development Licence 468 and Exploration Permit for Coal 1029, both of which are held by the Proponent. It is intended that all aspects of the Project will be authorised by a site specific environmental authority (EA).

Development of the Project is expected to commence in 2019 with initial early construction works and extend operationally for approximately 19 years until the depletion of the current reserve, and rehabilitation and mine closure activities are successfully completed.

The Project consists of two open cut operations that will be mined using a truck and shovel methodology. The run-of-mine (ROM) coal will ramp up to approximately 2 Mtpa during Stage 1 (2019 - 2022), where coal will be crushed, screened and washed to SSCC grade with an estimate 80% yield. Stage 2 of the Project (2023 - 2037) will include further processing of up to an additional 4 Mtpa ROM coal within another coal handling and preparation plant (CHPP) to SSCC and up to 4 Mtpa of HGTC with an estimated 95% yield. At full production two CHPPs, one servicing Open Cut 1 and the other servicing Open Cut 2, will be in operation. Rehabilitation works will occur progressively through mine operation, with final rehabilitation and mine closure activities occurring between 2036 to 2038.

A new TLF will be developed to connect into the existing Queensland Rail North Coast Rail Line. This connection will allow the product coal to be transported to the established coal loading infrastructure at the Dalrymple Bay Coal Terminal (DBCT).

Access to the Project will be via the Bruce Highway. The Project will employ a peak workforce of approximately 275 people during construction and between 100 (2019) to 500 (2030) during operation, with the workforce reducing to approximately 20 during decommissioning. Central Queensland Coal will manage the Project construction and ongoing operations with the assistance of contractors.



2.2 Project Schedule

Based on the Project Description in the RIA, project years include:

- 2019 2020: Construction period of eastern mine 0
- 2020 2032: Operations period of eastern mine 0
- 2027 2029: Construction period of western mine 0
- 2028 2036: Operations period of western mine 0
- 2036 2038: Decommissioning / rehabilitation period. 0

Based on the above-mentioned schedule the expected periods of critical traffic generation (design horizons) are:

- 2020 Project Year 2 0
- 2028 Project Year 9 0
- 0 2030 - Project Year 12
- 2038 Project Year 20. 0

2.3 Workforce Projections

The Project's workforce will be sourced from people residing within the local or regional area (e.g. existing residents and/or new residents that choose to reside locally or regionally as a result of the Project's approval) and will include a 100% Drive-in/Drive-out (DIDO) scenario. Local workers are assumed to reside in nearby townships such as Marlborough, Ogmore, St Lawrence, Clairview, Yaamba and The Caves, whilst regional workers are assumed to reside in either Mackay or Rockhampton. These assumptions are the best Project estimates to date based on discussions with the Proponent and apply to all phases of the Project, including construction, operations and decommissioning / rehabilitation personnel. Figure 2.1 shows the indicative workforce projections for the Project.

No workers are assumed to operate on a Fly-in/Fly-out (FIFO) arrangement.



Figure 2.1: Indicative Workforce Projections

(Source: Information provided by CDM Smith, dated 22 August 2018)

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2.4 Haul Movement Projections

All materials, plant and equipment are intended to be delivered to the Project via road-based transport. Construction traffic will primarily involve a mix of rigid trucks, articulated vehicles (e.g. semi-trailers) and B-Doubles. Some oversize loads are also expected, particularly during the CHPP, dump station, stacker / reclaimer and heavy mining equipment construction and installation phase. The CHPP will be transported to site in containerised format from origins including the Port of Mackay, Port of Gladstone and / or Port of Brisbane. Other Project infrastructure will be transported from regional centres such as Rockhampton, Gladstone and Mackay. Heavy Mining equipment will be transported to site from either Rockhampton or Mackay, or, from existing mining operations in the Bowen Basin, via Rockhampton or Mackay.

Heavy vehicle traffic flows and associated vehicle types will vary over the Project period, reflecting the types of materials and equipment required at a specific time. Indicative heavy vehicle projections are provided in Table 2.1.

Project Phase	Vehicle Type	Origin / Destination					
		Local	Regional	State [1]			
	Rigid Truck	320	380	10			
Construction (2019 – 2020 and 2027 – 2029)	Semi-Trailer	1,015	96	292			
	B-Double	-	250	50			
	Oversized	-	-	70			
	Sub-Total	1,335	726	422			
	Rigid Truck	4,575	37,005	845			
	Semi-Trailer	-	2,176	-			
Operational (2019 – 2036)	B-Double	-	- 9,518				
	Oversized	-	-	272			
	Sub-Total	4,575	48,699	1,117			

Table 2.1:	Total Project	Heavy Vehicle	Movements
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[1] Note that state-based movements include movements to and from the Port of Mackay, Brisbane and Gladstone



3.1 Bruce Highway

All traffic associated with the Project will access the Project site via the two proposed access intersections (eastern side and western side) each forming a T-intersection with the Bruce Highway. Project traffic is anticipated to be generally limited to the Bruce Highway between Rockhampton and Mackay. Characteristics of the Bruce Highway proximate to the Project (and at the proposed access location) are described in Table 3.1.

Characteristic	Description
Direction	Northwest – Southeast
Jurisdiction	DTMR
Cross-Section	Two-lane / Two-way / Undivided
Pavement	Sealed
AADT	~2,000vpd
Speed Limit	110 km/h

Table 3.1: Bruce Highway road characteristics (proximate to the Project site)

The typical cross-section of the Bruce Highway proximate to the Project site is presented in Figure 3.1.



Figure 3.1: Bruce Highway (typical cross-section)

Image provided by CDM Smith (12 June 2017)

The geometry of the Bruce Highway varies to the south of the Project, with provision for overtaking lanes available on approach to Rockhampton and a four-lane / two-way / divided arrangement available south of Yeppoon Road.



Consultation with TMR and review of TMR's 'Queensland Transport and Roads Investment Program 2017-18 to 2020-21' (QTRIP) has been undertaken with regards to known future planning for the Bruce Highway between Mackay and Rockhampton. For the Bruce Highway between Mackay and Rockhampton the works identified in QTRIP are presented in Table 3.2.

Table 3.2: QTRIP Works Schedule

Project Location	Location Description	Works Description
Bruce Highway – Rockhampton northern access upgrade	Rockhampton – Yeppoon Road – Parkhurst	Duplicate from two to four lanes
	Kalarka Road and Mosquito Creek	Construct overtaking lane/s
	Camila	Construct overtaking lane/s
Bruce Highway (St Lawrence – Mackay)	Lagoon Street	Improve Intersection/s
(Ji Lawience Mackay)	Sarina Northern Access	Construct Roundabout/s
	Hay Point Road – Temples Lane	Undertake transport project planning

As described in Table 3.2, a number of capacity improvement projects are planned on the Bruce Highway, generally within close proximity to the regional centres of Mackay and Rockhampton. These works are planned to be undertaken prior to 2021.

Upgrades identified in Table 3.2, are generally projects to improve road capacity, safety and intersection operations along the Bruce Highway proximate to the site, and therefore, are expected to have a net benefit to the Project. Details regarding the extent of these upgrade works is not currently known. On this basis, the additional capacity likely to be available from the upgrades has not been considered in the RIA to allow for a worst-case assessment.

It should also be noted that there may be a need to improve / upgrade (e.g. road widenings) sections / elements of the Bruce Highway in the future as a result of other future projects and developments (by others), or currently unknown growth in traffic which may result in road capacity impacts. Should any future improvements / upgrades be required to the Bruce Highway proximate to the Project site due to the above-mentioned factors, it is expected that TMR and/or the future proponent of these projects will be responsible for providing the required future upgrades.

3.2 Baseline Traffic Volumes

Background traffic volumes have been sourced from DTMR, by way of 2015 and 2016 Annual Average Daily Traffic (AADT) segment reports (obtained 2 February and 12 June 2017 respectively) for the Bruce Highway between Rockhampton and Mackay. A copy of these segment reports is contained at Appendix A of the RIA, with a summary of data provided in Table 3.3.

For the purposes of converting AADT volumes to peak hour volumes (for the road link and intersection assessments), a peak-to-daily ratio of 15% has been assumed, in accordance with guidance for rural roads provided in the RPDM 1st Edition – Chapter 5.

Growth rates obtained from historic data detailed within the AADT segment reports indicate that the Bruce Highway has experienced negative growth for various road sections over the past five to ten years. This could be attributable to a slowdown in mining sector projects occurring within the region, and the conclusion of construction activities associated with large project development. As such, a growth rate of 2% per annum (linear) has been adopted to inform the basis of future traffic forecasts, to reflect typical background traffic growth in the absence of major project development. This assumption is considered conservative and therefore appropriate for determining a worst-case scenario for the RIA.

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A review of the Coordinator-General projects currently available online indicates that there are no major projects planned in the vicinity of the Project. Should any such projects become apparent in the future, these should be considered in the context of a cumulative impact assessment.

Road Name	Segment	AADT					Historic Growth		
		NBD	HV%	SBD	HV%	Total	HV%	5 Yr	10 Yr
	@ Archer St (Lights)	9,388	11.9	6,996	10.4	16,384	11	-6.7%	-
	100m Sth Knight St	16,118	8.5	17,462	8.8	33,580	9	0.0%	0.5%
	@ Boland St	12,153	7.8	12,411	7.8	24,564	8	0.6%	0.4%
	800m Sth Rton- Yeppoon Rd	8,194	10.4	8,516	10.1	16,710	10	0.7%	1.2%
	200m Sth Mason Ave (Parkhurst)	5,969	12.7	5,862	13.6	11,831	13	1.4%	2.0%
Bruce Highway (Rockhampton – St	150m North Terra Nova Dr	3,785	19.3	3,710	14.4	7,495	17	-0.8%	0.4%
Lamoneoy	200m North 14 Mile Ck Rd	2,022	27.7	2,048	21.7	4,070	25	-1.3%	0.2%
	40m Sth Mountain Ck (Kunwarara)	1,332	24.2	1,295	24.7	2,627	24	-0.3%	1.2%
	1 km south of Montrose Creek	1,163	28.6	1,117	29.3	2,280	29	-1.9%	0.0%
	South of Waverley Creek	956	31.4	1,001	30.3	1,957	31	-3.3%	-1.4%
	North of Clairview	1,060	28.0	1,099	31.0	2,159	30	-2.3%	-0.9%
	WiM Site Koumala	1,755	21.9	1,721	23.5	3,476	23	0.1%	0.8%
	South of Armstrong's Beach Turnoff	2,053	19.7	2,057	32.9	4,110	26	-0.8%	0.2%
	Sichter Street - Broad Street	4,638	15.7	2,458	9.2	7,096	13	-11.7%	-6.4%
	Between Sarina and Sarina - Homebush TO	3,641	29.7	3,837	26.6	7,478	28	-3.7%	-0.9%
Bruce Highway (St Lawrence – Mackay)	Sarina - Homebush Road to Hay Point TO	3,204	10.3	3,342	27.2	6,546	19	-4.1%	-1.2%
	North of Macks Truck Stop	5,205	17.8	5,171	16.9	10,376	17	-3.0%	-0.4%
	Broadsound Road Permanent Counter	6,900	12.4	6,845	12.3	13,745	12	-2.0%	-0.9%
	City Gates to Lagoon Street	12,562	15.7	11,856	11.6	24,418	14	-2.1%	3.3%
	Lagoon St to Bridge Rd	9,327	19.2	9,167	11.6	18,494	15	-4.4%	0.5%
	George Street Pedestrian Crossing	10,011	8.5	9,693	8.7	19,704	9	-8.3%	-6.2%

Table 3.3: Baseline Traffic Volumes – Bruce Highway (2015/16)



4. Project Generated Traffic

Project generated traffic projections have been derived based on assumptions made for the RIA and are described in the following sections. Prior to finalisation of the RMP, Project traffic generation and road-use will be updated with more specific detail, guided by the DTMR Freight Summary spreadsheet.

The updated summary of project traffic generation / road-use will use the most up to date information available following formal approval of the project and will include as a minimum:

- Project traffic generation including schedule of transport tasks, haulage volumes, workforce traffic etc during construction
- Project traffic generation/ routes etc during operations
- Proposed transport routes during construction and operations (origin / destinations)
- Key transport origin/ destinations (Project / workforce / any workers accommodation camp site/s / supplies / inputs and outputs)
- Excess mass / dimension vehicle details.

4.1 Workforce Traffic Generation

Workforce generated traffic for the Project has been derived based on Proponent provided assumptions regarding the following items:

- Workforce numbers
- Workforce locations
- Directional proportions of workforce
- Workforce rosters
- Vehicle occupancy
- Vehicle access point distribution.

Summary of the estimated workforce generated traffic is provided in Table 4.1, with details of the above-mentioned assumptions and methodology used to determine these estimates provided in Section 4 of the RIA report.

Design year	Bru	uce Highway	Bruce Highway Western Access						
	AM Peak (vph)		PM Peak (vph)		AM Peak (vph)		PM Peak (vph)		Total (vpd)
	In	Out	In	Out	In	Out	In	Out	() []]
2020	176	95	95	176	-	-	-	-	542
2028	59	50	50	59	141	10	10	23	402
2030	119	100	100	119	119	100	100	119	876
2038	8	-	-	8	8	-	-	8	32

 Table 4.1:
 Workforce Traffic Generation Summary

vph – vehicles per hour; vpd - vehicles per day

A summary of expected workforce locations and associated directional distribution to the north and south of the Project, are presented in Figure 4.1.



Figure 4.1: Assumed Directional Proportions of Workforce

for The Caves, noting that this represents the furthest centre from the Project and therefore allows for a 'worst case' scenario.

4.2 Heavy Vehicle Traffic Generation

Heavy vehicle generated traffic for the Project was initially derived based on assumptions regarding the following items:

- Construction heavy vehicle movements
- Operations heavy vehicle movements
- Directional distribution of heavy vehicle movements during construction
- o Directional distribution of heavy vehicle movements during operations
- Operational days per year
- Construction and operations roster
- The split between IN/OUT movements.

Section 4 of the RIA report for the Project details the assumptions adopted for each of the abovementioned items. Based on the above, hourly heavy vehicle volumes resulted in less than 3 vehicles per hour (total of in and out movements). As such, to allow for a conservative estimate, a nominal heavy vehicle volume of 10 vehicles per hour (total of in and out movements) has been adopted for a worst-case assessment for the road link and intersection turn warrant assessments shown in Table 4.2. The directional distribution assumptions used within the RIA, which have been derived based on best knowledge of the Project to date, are presented in Figure 4.2.



All Journey to Work movements associated with Clairview, St Lawrence and Ogmore are assumed to be originating or destined for St Lawrence, noting that this represents the furthest centre from the Project and therefore allows for a 'worst case' scenario.
 All Journey to Work movements associated with The Caves, Yaamba and Marlborough are assumed to be originating or destined

	Br	uce Highway	Bruce Highway Western Access					
Design year	AM Peak (vph)		PM Peak (vph)		AM Peak (vph)		PM Peak (vph)	
	In	Out	In	Out	In	Out	In	Out
2020	5	5	5	5	-	-	-	-
2028	5	5	5	5	5	5	5	5
2030	5	5	5	5	5	5	5	5

Table 4.2: Hourly Heavy Vehicle Traffic Generation

vph – vehicles per hour; vpd - vehicles per day







5. Road-Use Management Strategies

5.1 Road Safety

Safety is a key consideration for developments interacting with the State controlled road (SCR) network. A safety assessment was identified as necessary due to the following:

- Increased traffic volumes because of the Project
- The introduction of new infrastructure (i.e. new access intersections with the Bruce Highway)
- Increased number of conflict points between vehicles and other vehicles (because of new access intersections)
- Reduced road link capacity because of narrower road and shoulder widths along the Bruce Highway (for impacted road links).

A Road Safety Risk Assessment was undertaken, as detailed in Section 8 of the RIA. Potential risks resulting from the Project have been identified and mitigation measures outlined in the following sections. Furthermore, a road safety audit as noted in GTIA is required for major developments with AADT's larger than 8,000 on roads with speeds exceeding 80 km/hr. As such, a road safety audit will be required on impacted SCR road links at the detailed design stage of the Project, particularly the detailed design and approval stage for each of the Project's site accesses with the Bruce Highway.

5.1.1 New Access Road Intersections

The introduction of new access intersections on the Bruce Highway will result in vehicles slowing down to turn in a high-speed environment. As such, access intersections will be designed in consultation with DTMR to appropriately meet the turn warrant requirements, as detailed in Section 6.2 of the RIA.

5.1.2 Visibility

As visibility may be limited driving to/from the development at night time, appropriate lighting and signage will be provided along the SCR network to and from the site, with special consideration proximate to the site accesses.

5.1.3 Driver Behaviour

Central Queensland Coal are committed to ensuring the health, safety and welfare of all employees and others. Vehicles, equipment and safe systems of work will be provided to minimise potential problems which can arise from work-related driving. Actions will include:

- Branding of vehicles and display of a free call number for community members to contact if they have concerns or queries about driving behaviour.
- Driver Behaviour Training will be undertaken by all project personnel.

A Driver Behaviour Policy will be developed, outlining requirements for employees and contractors to drive in a safe manner. The policy will inform personnel of strategies, monitoring and reporting of driver behaviour.



Central Queensland Coal management will ensure that:

- Schedules and rosters are structured in a way as to ensure employees (i.e. drivers) capacity to drive in a safe manner is not compromised through fatigue and/or time constraints
- Consultation is carried out with employees regarding health and safety matters in relation to work-related driving and outcomes are integrated into all components of work
- Effective action is taken to reduce or eliminate the risks related to work-related driving
- Training is provided for employees and contractors in safe driving as well as training in company expectations with respect to road rules, the use of mobile phones when driving, speeding and driving under the influence (i.e. drugs and alcohol)
- All risks related to driving (i.e. loading and unloading of vehicles, driving in adverse conditions, in-vehicle distractions) will be identified, assessed and controlled as far as practicable.

Employees have a commitment to ensure that they:

- Comply with all safe driving practices in which training has been received
- Comply with road and traffic legislation (i.e. the use of mobile phones in vehicles)
- Manage personal factors which could impact driving safety (i.e. no use of drugs and alcohol when using a vehicle and stop and revive when driving to prevent driver fatigue
- Assist in the identification and the risk assessment of work-related driving risks
- Assist in the design and implementation of work-related driving risk control measures and adhere to these work-related driving risk control measures.

Central Queensland Coal has a Standard for Fitness for Duty, which outlines requirements to help employees and contractors appropriately manage the risks of their work by being fit for their duties. Requirements such as those relating to drugs and alcohol and fatigue management (see Section 5.1.4) contribute to safe driver behaviour. Processes to ensure the workplace is free from illegal substances and alcohol include:

- drug testing random, post incident and testing when there is reasonable suspicion to believe a person is impaired by drugs or alcohol
- declaration of prescription and non-prescription drugs that could impair performance prior to conducting any work or commencing a visit.

5.1.4 Driver Fatigue

The Project workforce will be sourced from people living within the local and regional area and will include a 100% Daily Commute scenario. Local workers will be commuting from nearby townships such as Marlborough, Ogmore, St Lawrence, Clairview, Yaamba and the Caves. The commute to and from the mine site can involve significant distances of driving for some workers which can add a number of hours to the period that workers will be awake. Fatigue has long been recognised as a hazard in the mining industry, and it is important to consider factors such as the number of hours driving to and from site on a daily basis, distances travelled and/or likely number of hours driving before and after rosters (DNRM 2013).

In an effort to reduce fatalities, suitable rostering will be incorporated so as to reduce irregular shift patterns and ensure drivers of heavy vehicles, buses and / or private vehicles are well rested. The Road Accident Action Group (RAAG) will be consulted to advise on local policy and strategies relating to driver fatigue. The RMP will include mechanisms to address driver fatigue



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- Sponsorship of driver reviver rest areas
- Developing policy on how long drivers can operate a vehicle and how many breaks they require (note: vehicles classed as fatigue regulated heavy vehicles are required to adhere to respective national laws)
- Limiting overtime
- Managing vehicle fleet
- Developing policy on driving including in-vehicle distractions and driving during adverse conditions
- Undertaking fitness for duty assessments
- Developing safe driving plans
- Specific fatigue management training for management and employees by providing information on:
 - the common causes of fatigue (for example extended working hours, roster patterns and varying hours of shift work)
 - signs of fatigue. Drivers may be impaired by fatigue even when complying with work and rest limits
 - the various different health and safety effects of fatigue
 - responsibilities with respect to self-management
 - measures to take when driving including journey planning (considering pre and post journey commitments, duration of travel and cumulative fatigue risks) and rest breaks.

The Central Queensland Coal Standard Fitness for Duty (2018) has specific fatigue management measures which must be observed. These measures include, but are not limited to:

- Shift rosters and work arrangements to be designed to reduce the impacts of employee fatigue
- Any person that is fatigued must not operate equipment, drive a vehicle or perform a role deemed safety sensitive
- All employees travelling for work purposes must develop a journey management plan if the duration of work and work-related travel is to exceed 16 hours of continuous travel or wakeful time
- Policy requiring employees to notify HR if they have a second job which could increase the level of 'work hours'.

The following shift scheduling limits apply at operating locations:

- Any person working in excess of 13.5 hours must be assessed for fatigue
- No person is to work in excess of 16 hours within a 24-hour period
- Shift rosters should be scheduled such that people have a minimum of 10 hours break between scheduled shifts
- Where shifts deviate from approved and risk assessed rosters, no person is to work more than 6 consecutive days of 10 or more hours; or more than 12 consecutive days of less than 10 hours, without approval by the site General Manager.



5.2 Transport Modes

This strategy relates to the use of communal transport and travel modes related to the construction, operation and decommissioning of the Project. To avoid and reduce impact on the local community and the operation of the road network, external road traffic has been limited by the following measures:

- Provision of workforce shuttle bus services for transport of personnel to the site will be investigated once the workforce is employed
- Workforce ride sharing schemes for transport of personnel to the site will be encouraged
- Scheduling of shift times and heavy vehicle movements such that Project traffic does not coincide with the road network peak periods including school bus services
- Staggering of shift times and heavy vehicle movements to minimise impacts on the SCR network.

Potentially the use of shuttle bus services and ride sharing schemes for the majority of workers also assists with the management of driver fatigue (further discussed in Section 5.1.4).

5.3 Transport Routes

The Bruce Highway, between Rockhampton and Mackay is the major proposed heavy vehicle transport route for the Project. Introducing mitigation measures detailed in Section 5.2 along this major transport route forms part of the mitigation strategy to minimise impacts to road links, other road users and overall road safety. These mitigation measures will lower Project generated traffic volumes on the Bruce Highway and in turn lower impacts on the following affected road links as identified in the RIA report:

- 150 m North Terra Nova Dr
- o 200 m North 14 Mile Ck Rd
- 40 m Sth Mountain Ck (Kunwarara)
- 1 km south of Montrose Creek
- South of Waverley Creek
- North of Clairview.

Implementation of these measures will also aid in lowering road impacts (if any) along the SCR network beyond Rockhampton with regards to marginal heavy vehicle movements originating from the Port of Brisbane or Port of Gladstone.

5.4 Heavy Vehicles

Heavy vehicles have more influence on surrounding traffic compared with passenger cars, particularly during heavy traffic conditions. They impose physical and psychological effects in surrounding traffic flow due to their physical and operational characteristics (Moridpour et al. 2014). The presence of heavy vehicles is known to influence on travel times, and increase the number of passenger car lane changing, which can potentially reduce traffic safety. As such, shift times and heavy vehicle movement scheduling will be adjusted so the Project traffic peaks do not coincide with the network peak period. All heavy vehicles travelling to or from the site will follow Heavy Vehicle detour routes to avoid built up areas to the extent practicable.

The Project is likely to utilise oversized vehicles for some of the transport activities as part of construction and operations. The use of these vehicles will be undertaken in accordance with the National Heavy Vehicle Regulator guidelines and be subject to permit applications and DTMR





approvals for the use of such vehicles. The use of these vehicles will be assessed as part of these permit applications.

5.5 Dangerous Goods

Transport of hazardous substances to the Project area will be in accordance with the Australian Dangerous Goods Code 7th Edition (National Transport Commission 2014), in accordance with the Queensland Transport Operations (Road Use Management – Dangerous Goods) Regulation 2018 and the *Transport Infrastructure Act* 1994. Access to a delivery route for hazardous substances to the Project area will be dependent on the origin of the material.

5.6 Pavement Impacts

The impact of traffic can deteriorate road pavements over time, resulting in surface wear and tear and small cracks, potentially allowing water to enter the underlying surface of the pavement. In combination with continual stress due to traffic flow, water infiltration can weaken the pavement, causing potholes, major cracks, deformation and ultimately road failure. This impacts speed, efficiency and safety of the traffic using the roads and requires ongoing maintenance activities.

Analysis of potential pavement impacts undertaken as part of the RIA predict impacts of less than five percent on the Bruce Highway for the entirety of the Project operation. It is industry standard practice in Queensland to classify the pavement impacts of a project as 'insignificant' where the project will impact existing conditions by less than 5%. Consequently, it is not expected that any contribution for pavement maintenance and / or rehabilitation will be required. Similarly, it is not expected that an infrastructure agreement surety or bind will be necessary.

Should the estimated material movements change significantly from those modelled in the RIA, reassessment may potentially be warranted. Central Queensland Coal will liaise with DTMR should such material changes eventuate.



6. Traffic Management Planning

Traffic Management Plans (TMP) will be prepared to implement the Road-Use Management Strategies outlined in Section 5. The TMPs will describe how the Project will manage traffic and access during specific aspects of construction to ensure:

- The provision of a safe environment for road users and workers
- Any impact on road users and asset operation is kept to a minimum
- Access is maintained for the local community, transport operators, (including overdimension load movements) and commercial developments; and road users and local communities are regularly informed in relation to changed traffic conditions
- Advance warning of changes to normal traffic conditions.

The objectives for managing the impact of the Project activities on traffic through the TMPs are:

- Safety of all road users
- Minimise disruption to all road users
- Ensure the Bruce Highway and surrounding road network continues to function adequately
- Limit impacts on school bus services and other forms of public transport services
- Minimise changes to traffic operations
- Minimise access disruptions to adjoining properties
- o Minimise construction activities on local roads in residential areas wherever possible
- Avoid heavy vehicle movements in peak traffic and outside of standard working hours
- Effective management of complaints in accordance with the Project's complaints management procedures (see Section 9).

The TMPs will detail the specific road safety and traffic management and access measures that will be applied by the Project during the different Project phases. The TMPs will be based on the principles and strategies of the RMP, the obligations under the Project's approval conditions and the requirements of DTMR and other stakeholders. TMPs will include the associated Traffic Control Plans, and where required, temporary works Drawings and will be submitted to DTMR and / or the relevant Council for review and approval. TMPs will include as required:

- An overview of the construction activities and traffic management requirements
- A description of traffic management during establishment, construction and operations
- Traffic management measures that will be implemented
- An analysis of resultant traffic conditions and impacts analysis
- Appendices, including:
 - Construction Drawings
 - Traffic Control Plans
 - Speed zone information and plans not required for all TMP's
 - A program for traffic management establishment
 - Details of stakeholder consultations.

Traffic Phasing Drawings

Traffic Phasing Drawings (TPD) are prepared progressively to illustrate the proposed traffic phasing to be implemented at each stage of the Project. If required, these drawings will form part of the TMP and shall include:

- Traffic staging sequencing
- Construction methodology

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- Identify the need for temporary works
- Specify any particular traffic management measures / controls
- Define work areas
- Illustrate the available travel lanes.

The phasing drawings are based on the design drawings and are prepared in association with the construction program.

Temporary Works Drawings

Temporary Works Drawings are detailed design plans of changes to roadways that are required to facilitate construction phasing and are developed progressively during the Project. These drawings are based on the TPDs and include (note: not all types of drawings are applicable to every TMP):

- Earthworks
- Drainage
- Horizontal and vertical alignments
- Carriageway cross sections
- Lane configuration
- Junction treatments
- Property access modifications
- Environmental controls
- Pavement design
- Lines and sign posting
- Traffic Control Plans (TCP)
- Safety barriers
- Road side furniture.

Traffic Control Plans

The TCPs are diagrams that illustrate the signs and traffic control devices that will be installed to warn traffic, and guide it around or past, or if necessary through the work site, e.g. contra-flow utilising opposing carriageways. These plans will address the specific measures stipulated within the TMPs and will comply with the requirements of relevant legislation and Australian Standards, in addition to other DTMR and / or stakeholder requirements.

Safe Work Method Statements

Where it is considered that a work process must be carried-out in a strictly controlled manner to ensure the specified safety requirements are met, a specific Safe Work Method Statements (SWMS) will be prepared and implemented. The SWMS are prepared in consultation with the workforce, relevant functional managers and engineers. The SWMS are briefed to the workforce and implement before the related work starts, to ensure the issues relating to safety are appropriately addressed.



7. Transport Related Conditions of Development

7.1 Project Specific Approval Conditions

This section will be updated on approval of the Project and will describe any traffic and transport specific conditions that are required for the Project.



GTAconsultants

8. Roles and responsibilities

The following sections outline the indicative roles and responsibilities for the delivery of the mitigation measures described in the draft RMP.

The section will be updated once all transport related approval conditions are known. In doing so responsibilities will be assigned to the approval conditions and articulated in the RMP.

8.1 Contract Transport and Haulage - Construction

The following outlines the roles and responsibilities during construction.

Senior Site Executive

The Senior Site Executive (SSE) will have overall responsibility for ensuring all traffic and transport obligations as required under relevant legislation and standards. The SSE will be responsible for ensuring the construction manager has the relevant transport and safety management procedures in place so as to be compliant with legislation, Australian Standards and project specific conditions of approval.

Project Manager

The Project Managers is responsible for ensuring traffic management:

- Is properly planned, organised, directed and controlled
- o Is properly resourced with people, equipment, facilities and systems
- Meets the requirements of the contract
- Complies with all other legislation
- Is achieving its objectives.

Construction Manager

The Construction Manager is responsible for implementation of this RMP including ensuring that competent transport operators and contractors are used for all Project transport requirements. The Construction Manager will be responsible for ensuring all required permits and approvals are in place for heavy vehicle, wide loads and over-dimensional / indivisible load movements. The Construction Manager will also be responsible for liaison with DTMR, relevant Councils and emergency services as necessary.

Construction Superintendent(s)

Construction Superintendent(s) are responsible for the correct execution of this RMP. The Construction Superintendent(s) are to ensure the resources are adequate to provide the services required to implement the necessary mitigation measures, including conduct any traffic management as required.

The Construction Superintendent(s) shall:

- Undertake a timely assessment of traffic management risks
- Ensure that any signage design meets the specifications
- Ensure that all personnel are aware of their responsibilities
- Ensure that traffic controllers, if required, are appropriately trained and informed of their duties
- Ensure all Project personnel who drive vehicles are appropriately licensed, competent, and knowledgeable on Project road and traffic requirements



• Ensure all appropriate permits and associated requirements (under the relevant legislation and standards) are obtained and complied with.

Transport Operators, Contractors, Drivers

Transport operators, contractors and drivers are responsible for ensuring that all loads carried do not exceed the legal limit, are permitted as required, are transported only on approved access routes and that all transport is undertaken in accordance with this RMP. All Project drivers will be required to hold current licences for the plant / vehicle they drive. A qualifications and training register for permanent employees will be maintained onsite and for external companies' qualifications will be required prior to contracts being awarded.

Road Haulage Company (Personnel and Responsibilities)

A road haulage contract has not been awarded at this early stage of the Project. However, the successful contractor/s will be required to have plans and procedures in place that meet or exceed the requirements of the Central Queensland Coal Safety Management Plans and Procedures.

Community Relations Manager

The Community Relations Manager is responsible for:

- Liaison with the community for all aspects of community and stakeholder issues
- Representation of the Project for all community and stakeholders issues
- Consultation with stakeholders for traffic planning, and provides an on-going liaison role
- Preparation and distribution of changed traffic condition information to the community
- Community relations including addressing complaints.

8.2 Contract Transport and Haulage – Operations

The following outlines the roles and responsibilities during operations.

Senior Site Executive

The Senior Site Executive (SSE) will have overall responsibility for ensuring all traffic and transport obligations as required under relevant legislation and standards. The SSE will be responsible for ensuring the Store Manager has the relevant transport and safety management procedures in place so as to be compliant with legislation, Australian Standards and project specific conditions of approval.

Store / Warehouse Manager

The Store Manager is responsible for implementation of this RMP including ensuring that competent transport operators and contractors are used for all Project transport requirements. The Store Manager will be responsible for ensuring all required permits and approvals are in place for heavy vehicle, wide loads and over-dimensional / indivisible load movements. The Store Manager will also be responsible for liaison with DTMR, relevant Councils and emergency services as necessary.

Store / Warehouse Superintendent(s)

Store / Warehouse Superintendents are responsible for the correct execution of this RMP. The Store / Warehouse Superintendent(s) are to ensure the resources are adequate to provide the services required to implement the necessary mitigation measures, including conduct any traffic management as required.

The Store / Warehouse Superintendent(s) shall:

- Undertake a timely assessment of traffic management risks
- Ensure that any signage design meets the specifications
- Ensure that all personnel are aware of their responsibilities
- Ensure that traffic controllers, if required, are appropriately trained and informed of their duties
- Ensure all Project personnel who drive vehicles are appropriately licensed, competent, and knowledgeable on Project road and traffic requirements
- Ensure all appropriate permits and associated requirements (under the relevant legislation and standards are obtained and complied with.

Transport Operators, Contractors, Drivers

Transport operators, contractors and drivers are responsible for ensuring that all loads carried do not exceed the legal limit, are permitted as required, are transported only on approved access routes and that all transport is undertaken in accordance with this RMP. All Project drivers will be required to hold current licences for the plant / vehicle they drive. A qualifications and training register for permanent employees will be maintained onsite and for external companies' qualifications will be required prior to contracts being awarded.

Road Haulage Company (Personnel and Responsibilities)

A road haulage contract has not been let at this early stage of the Project. However, the successful contractor/s will be required to have plans and procedures in place that meet or exceed the requirements of the Central Queensland Coal Safety Management Plans and Procedures.

Community Relations Manager

The Community Relations Manager is responsible for:

- Liaison with the community for all aspects of community and stakeholder issues
- Represents the Project for all community and stakeholders issues
- Conducts consultation with stakeholders for traffic planning, and provides an on-going liaison role
- Prepares and distributes changed traffic condition information to the community
- Community relations including addressing complaints.

8.3 Traffic Control

The Following outlines the roles and responsibilities where traffic control is required. These roles are anticipated to be the same during construction and operations.

Contractors Responsibility

The Contractor will engage a local accredited contractor to provide all Traffic Control measures where deemed necessary for the Project. This contractor shall deliver all traffic control services to the standards required by the DTMR.

Foreman

The Foreman is responsible for ensuring:

Compliance to the approved Traffic Management Plans (TMP);



Issue the required TMPs and, where relevant, road occupancy approvals and speed zone authorisations to the traffic control crew / or subcontractor

Adequate plant, equipment and human resources are made available for the installation and maintenance of temporary control devices

Pre-start inspections and regular night / weekly inspections of traffic control arrangements are undertaken, and ensure all deficiencies are rectified

Assistance is provided with the implementation of mitigation measures to address unsafe road conditions, and unusual traffic congestion

Assistance is provided with the management of unplanned incidents, providing initial response to make the site safe

Recording of unplanned incident details, and when traffic controls are in operation, including the installation and removal of regulatory signage.

Traffic Controller

The Traffic Controller shall be responsible for placement, maintenance and removal of signage and conduct of traffic control on public roads. The Traffic Controller shall be familiar with, and act as far as is practicable, in accordance with the provisions of the relevant legislation and Australian Standards.



9. Stakeholder Consultation

Engagement with Project stakeholders and the community will continue for the life of the Project and be delivered through a Stakeholder and Community Engagement Plan. The Plan will be designed to maximise community and stakeholder input into the Project's development and delivery (including mine decommissioning) through capacity building and two-way communication mechanisms which will be in place for the life of the Project. It will also outline the communications tools which will be used and the purpose of these tools. The Plan will remain a dynamic document and will be updated as required throughout the Project's duration. The Plan will outline the intended methods, details (i.e. information to be shared) and timing of any future consultation required. The outcomes and required actions arising from ongoing stakeholder consultation are to be documented and reviewed to ensure completion.

Targeted consultation with central and regional DTMR officers has occurred on several occasions during 2018. On 3 July 2018 consultation between representatives of DTMR, the Proponent, CDM Smith and GTA was held (in Rockhampton). The purpose of this meeting was to openly discuss traffic and transport-related matters and agree on the course of action such that the traffic and transport material (i.e. RIA, RMP and EIS chapter) adequately addressed these matters, while at the same time being commensurate with the level of detail, analysis and reporting required to meet the planning guidelines.

The agreed outcomes of the meeting included:

- Ensuring that the RIA and EIS chapter (Chapter 6 Traffic and Transport) provides the suitable level of detail and sufficient information to identify and address the likely traffic impacts (through the approach of "avoid", "manage" or "mitigate"), and to adequately address the Project's ToR.
- Providing suitable level of detail and supporting "best at time" information relating to:
 - workforce numbers, workforce resident locations and workforce transport logistics
 project-related traffic generation, traffic/vehicle types, times/periods of
 - movements, and likely origins and destinations.
- The provision of reporting related to the assessment of road safety inclusive of the geographic-scope of impact identification and assessment, likely and potential impacts to road safety, and measures to "avoid", "manage" or "mitigate" impacts should they arise.
- Provision in the reporting providing suitable detail to gain an informed appreciation of construction and traffic management activities relating to the Project's conveyor underneath the Bruce Highway (noting that two-way movement on the Bruce Highway is to be maintained during this construction activity), and also mine-related blasting activities.
- The inclusion of detailed information and assessment relating to the coverage of roads and intersections expected to be impacted by the Project, including a detailed appreciation of which elements of the road network have been included, how they have been assessed as being impacted or not (in accordance with the relevant guidelines and processes, for operational, pavement and safety impacts), and how impacts would be "avoided", "managed" or "mitigated".
- The inclusion of a Commitments Table relating to ongoing reporting, monitoring, impact avoidance, management and mitigation measures as reasonably identified in the RIA and RMP.



9.1 Community Liaison and Complaint Handling

Central Queensland Coal is committed to working with anyone who is impacted by the Project making a complaint or raising a grievance in a timely, respectful and competent manner.

A company representative will be responsible for community liaison in this regard, and will:

- Assist Central Queensland Coal in managing the interface between the Project, stakeholders and the community
- Be the first point of contact for managing complaints, enquiries and/or comments in relation to the Project.

The Central Queensland Coal representative will be responsible for:

- Coordinating a response to any complaints, enquiries and/or comments received
- Monitoring monthly frequency and number of complaints received.

Central Queensland Coal will develop a complaints and grievance procedure for receiving, managing, investigating and responding to community or stakeholder grievance.

Complaints and grievances about the Project will be able to be lodged:

- In writing or in person to identified staff members
- By email
- By phone.

Any employee or contractors receiving a complaint will record the details on a Complaint Form. The Complaints Form will include sections for:

- Name, address and contact number for the complainant
- Nature and details of the complaint
- Date and time the complaint was received.

The completed Complaints Form will be forwarded to the company representative in a timely manner. The person taking the complaint is to inform the complainant in a timely manner after receiving the initial complaint that (initial response):

- The complaint has been recorded
- Status of the complaint
- When a formal reply will be expected to be provided.

The following processes will apply to the investigation, resolution and reporting of complaints received:

- Upon receiving the Complaints Form, an appointed company officer shall investigate the cause of the complaint and liaise with management in developing an appropriate response
- An initial response to the complainant acknowledging the receipt of the complaint and advising the complainant of the status of the investigation is to be provided as soon as possible upon receiving the complaint
- The appointed Central Queensland Coal representative shall address the complaint and communicate a full response to the complainant in an appropriate medium within the timeframe in the initial response
- The full complaint response and any identified action will be recorded in the Project Complaints Register
- The action plan to correct any valid issues which lead to the complaint will be implemented as soon as practicable



• Action(s) will be monitored by the appointed Central Queensland Coal representative to ensure they are implemented satisfactorily.

Once the Central Queensland Coal representative is satisfied the action(s) have been completed they will record this on the Complaints Form and the Complaints Register.



10.1 Monitoring Processes

The implementation of the management strategies identified in Section 5 of the draft RMP is to be monitored.

Potential monitoring requirements include:

- 0 Undertaking road inspections / site visits
- 0 Undertaking route monitoring
- Issuing and reviewing log books for drivers 0
- 0 Reviewing intersection treatments
- Maintaining an incident register 0
- 0 Maintaining an RMP Commitments Register (see Table 10.1 for example).

The draft RMP Commitments Register will be finalised once the Project approval conditions are received guided by the DTMR provided RMP Commitments Table template. Management and mitigation strategies, monitoring, timing and triggers will be summarised.

The frequency and duration of the monitoring requirements, as well as details as to who is responsible for undertaking any monitoring activities, will be addressed in the final RMP Commitments Register.

Corrective action is to be taken if the implementation of the management strategies does not comply with the set requirements, as identified under Section 10.2 of the RMP.

Triggers for Revision 10.2

Triggers for revision are required to identify when corrective action is to be taken for issues of noncompliance or if the management strategies are found to be ineffective.

Potential triggers include:

- Frequency and/or severity of incidents recorded 0
- Frequency and consistency of community / stakeholder feedback 0
- Evidence of route deviation 0
- 0 Incomplete work identified upon road inspections / site visits.

A follow-up action plan is to be developed to mandate what steps are required should a trigger for revision be identified.



ltem Number	Commitment	Implementation	Trigger / Timing	Monitoring Process	Responsibility
1	Undertake a Road Safety Audit of the Project impacted road links as identified in the RIA report.	At all times	Detailed design phase		
2	Access for emergency vehicles to Project site will be maintained.	At all times	Detailed design phase		
3	Ensure appropriate lighting and signage along the SCR network to and from site, with special consideration proximate to the site access.	At all times	From commencement of traffic		
4	Branding of Project vehicles and display of a free call number for community members to contact.	At all times	From commencement of traffic		
5	A Standard for Fitness for Duty to manage driver fatigue and behaviour.	At all times	From commencement of traffic		
6	A Driver Behaviour policy to manage driver safety and fatigue, including in-vehicle distractions and driving in adverse conditions.	At all times	From commencement of traffic		
7	Consultation with RAAG to establish local policy and strategies relating to driver fatigue.	At all times	Prior to commencement of traffic		
8	Policy outlining how long drivers can operate a vehicle and required break schedules.	At all times	From commencement of traffic		
9	Fatigue regulated heavy vehicles to adhere to respective national laws.	At all times	From commencement of traffic		
10	Appropriate training of employees on risks and signs of fatigue.	At all times	Induction		
11	Ride sharing scheme and shuttle bus service to reduce traffic.	Where possible	From commencement of traffic		
12	Maintenance check and register of vehicle condition.	At all times	From commencement of traffic		
13	Consult with and gain approvals from the state's Heavy Vehicle Road Operations Office, with representatives from Qld Police Service and rail	At all times	Prior to commencement of movements		

Table 10.1: Example Commitments Register (frequency and duration of monitoring to be confirmed).

ltem Number	Commitment	Implementation	Trigger / Timing	Monitoring Process	Responsibility
	authorities regarding any over-sized transport movements.				
14	Liaison with DTMR in the event of material movement changes which may require reassessment of pavement impacts.	As required	From commencement of traffic		
15	Prepare a Traffic Management Plan (TMP) for DTMR approval for works proposed to be conducted on or within close proximity of roads.	At all times	From commencement of traffic		
16	Develop a strategy for ongoing consultation between Project operators and relevant stakeholders.	3/6 monthly basis			
17	Dangerous goods will be transported in accordance with the Australian Code for the Transport of Dangerous Goods by Road or Rail (ADG Code) and in accordance with the Qld Transport Operations (Road Use Management – Dangerous Goods) Regulation 2018 and the Transport Infrastructure Act 1994.	At all times	From commencement of traffic		
18	Auditing of compliance with all relevant approval conditions will be undertaken.	Annually	Annually		
19	All issues of non-compliance will be rectified.	At all times	From commencement of traffic		
20	Incidents or complaints in relation to Project traffic will be documented, monitored, followed up and reported on.	At all times	From commencement of Project construction	Incidents will be recorded within site safety and environmental management systems and reported to site managers for corrective action. Compliance will be ensured by the Project managers.	



10.3 Training and Awareness

All construction and mine operations personnel, sub-contractors and consultants will receive training and be informed of their personal obligations during the inductions, toolbox talks and specific training. A general Project induction will be provided to all construction personnel prior to commencing work with the Project. This will include a traffic component to reinforce potential impacts and responsibilities relating to traffic management.

Regular toolbox talks will highlight the specific mitigation measures for activities being undertaken in each work area and advise of any project wide traffic requirements.

Daily pre-start briefings will be held with the Foreman and the site workforce for each work area before the commencement of each shift or where changes occur during a shift. The pre-start informs the workforce of the day's activities, safe work practices, environmental protection requirements, work area restrictions, activities that may affect the works, coordination issues with other trades, hazards and other information relevant to the day's work.

10.4 Continuous Improvement

Continuous improvement of this RMP will be achieved by the ongoing evaluation of management performance against RMP strategies, objectives and targets for the purpose of identifying opportunities for improvement.

The continuous improvement process will be designed to:

- o Identify areas of opportunity for improvement of performance
- Determine the cause or causes of non-conformances and deficiencies
- Develop and implement a plan of corrective and preventative action to address any nonconformances and deficiencies
- Verify the effectiveness of the corrective and preventative actions
- Document any changes in procedures resulting from process improvement
- Make comparisons with objectives and targets.

10.5 RMP Updates

From time to time there may be a requirement to update the RMP. The RMP will sit within the Central Queensland Coal document management system and as such, the SSE or delegate will be permitted to update the RMP as necessary. Once updated, a copy of the updated RMP will be distributed to all relevant stakeholders in accordance with the approved document control procedure.



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