# Traffic management

1. **AIM:** The aim of this program is to control traffic movements at the mine and to minimise the risks associated with machinery, vehicles, structures and pedestrian interactions.
2. **WHAT:** We intend to openly discuss and educate all workers and visitors on the mine’s traffic management plan. The person nominated to produce and approve a site-specific traffic management is:
3. **WHO:** This plan will apply to all people who are required to travel around the site either by machine, vehicle or as a pedestrian and will include workers, contractors and visitors.
4. **HOW:** The plan will consist of two components:

Traffic plan (Form 18A) – a diagram that will be displayed in a prominent location and highlights the controls to be used to direct traffic and pedestrians around the site. This plan will include, but is not be limited to:

* speed limits
* direction of traffic flow
* signs
* communication requirements
* access points
* pedestrian traffic controls
* parking bays
* load covering areas
* hold points
* PPE requirements

**Driver code of conduct (Form 18B)** – a clear and concise record of what is expected by all sales truck drivers, including those engaged as sub-contractors, and will be explained and signed off during the induction process.

## **Quarry design and layout**

Effective traffic management begins with a well-designed quarry plan, as shown in Program 20 mine planning. This will show the location of plant, stockpiles, haul road gradients and widths, traffic directions, speeds, passing points, parking areas, overhead power lines, etc.

## **Equipment**

All equipment selected to operate on site, including contractor’s equipment, hired equipment, and our existing equipment will be assessed using the relevant parts of the contractor equipment induction process or using the equivalent forms contained in Program 10 mechanical engineering control plan. These assessments will take into consideration the original equipment manufacturer (OEM) operating limits and specifications and will confirm that equipment is capable of operating within these parameters.

## **Operation**

Inspection of equipment using Form 13C will be carried out by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(person/role) when it arrives on site before use.

Operation of equipment on site must be undertaken by workers deemed competent through our Program 14 training, or a worker or contractor who has supplied the necessary training details as per Program 13 contractor management.

## **Equipment maintenance**

To ensure that equipment continues to be fit for purpose, we will maintain the plant as per the requirements of our mechanical engineering control plan.

## **Road construction and maintenance**

Our haul roads and permanent access roads, will be constructed using suitable material to ensure that they are fit for the equipment and loads that the roads will be used for. This will include drainage to prevent slippery surfaces, scaling back of high walls to minimised falling rock and installation of suitable rock traps where applicable and edge protection where fall offs could occur.

What kind of system do we have? (Edit the following to suit your site)

Where we have a single lane haul road these will be 2 times the width of the largest vehicle on site \_\_\_\_\_\_\_m x 2 = \_\_\_\_\_\_\_\_m wide road

Where we have two lane haul roads, these will be 3.5 times the width of the largest vehicle on site \_\_\_\_\_\_\_m x 3.5 = \_\_\_\_\_\_\_\_m wide road



Benches and roads will be designed with viewing distances and alignment in mind to ensure that a vehicle rounding a curve, cresting a hill, descending a grade, or approaching a junction can stop in time to avoid an object on the road or a vehicle pulling onto the road. Junctions or intersections should be designed at right angles to minimise blind spots for the driver.

Roads will be designed at a maximum of 10% gradient, where the gradient needs to be greater than 10% additional controls will be put in place:

Reduction in speed limit, restricted access to specific equipment, low gear to be used only, signposted and minimised use until the road gradient can meet the 10% gradient requirement.

Edge protection (berms, windrows, etc) will be provided to prevent mobile plant and ancillary vehicles from being driven over an unprotected edge. All benches and roads which run alongside free edges where there is a drop, lagoon or other hazard which would put the driver, or others, at risk if the vehicle left the bench or road, shall have adequate edge protection provided.

On roads used by mobile plant the minimum acceptable height of the edge protection is 0.5 of the height of the largest wheel/tyre. Additional protection will be needed in high risk areas such as sharp bends or steep haul roads.

The aim of the edge protection is to stop the largest, fully loaded vehicle crossing it when travelling at the maximum foreseeable speed.

During the course of preparing our principal hazard management plan for roads and other operating areas, we will reference our traffic management plan.

## **Communication**

All mobile plant and vehicles entering and leaving the working area of the mine site will be required to carry a UHF radio that will operate on channel \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Vehicles are required to announce their movements at each hold point and are required to establish positive communication before approaching any other mobile equipment or vehicles working in the quarry.

## **Pedestrian traffic**

People walking around an office area or car park will be separated from heavy equipment traffic and are not permitted to enter the working area of the quarry on foot without being escorted by a quarry worker. Pedestrians will carry a hand-held UHF radio and will make positive radio contact with people working in the production area before entering. People will not approach any working mobile plant without making positive contact with the operator of the equipment.

## **Other**

Seat belts will be worn at all times when operating mobile plant.

Vehicles that enter the production area are required to have an operating amber flashing light or if the vehicle is visiting infrequently it can use the vehicles hazard lights.

1. **WHEN:** All people involved with this program will be made aware of their requirements during their induction and will be given a copy of the latest traffic plan.
2. **ACTION:** To ensure that the operating environment, roads, berms, dust, etc continues to be fit for purpose we will ensure that it is inspected through Program 6 workplace inspection and hazard reporting.
3. **DOCUMENT CONTROL:** All documents associated with this program shall be recorded on document control master list (Form 3A) and filed in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(location).

Form 18A: Traffic plan

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| --- |
| **Mine name:** |

|  |  |
| --- | --- |
|  | **Traffic rules** |
| **Drawn by:** |
| **Approved by:** |

# Form 18B – Driver code of conduct

## **Heavy vehicles hauling to and from site**

### **General requirements (driver)**

* Have undertaken a site induction.
* Hold a valid driver’s licence for the class of vehicle that they operate.
* Ensure vehicle registration is up to date.
* Only operate machinery on the mine site that they have been authorised to do so.
* Operate the vehicle in a safe manner within and external to the quarry site.
* Comply with the direction of authorised site personnel when within the mine site.
* Comply with all site rules and road rules.
* Drivers will notify their employer immediately should the status or conditions of their driver’s license change in any way.
* Report all accidents and incidents immediately to the mine operator.

### **Loading-related**

* Drivers will remain in their vehicle during the loading of their truck by a third party.
* If a driver is required to vacate their cabin they are required to wear the sites recommended PPE.
* Drivers more than 5 metres from their vehicle will be treated as a pedestrian.
* Drivers are not allowed to work in and around raised tailgates where they could be exposed to material or an object falling from height.
* Tarping of trucks will only be permitted using ‘ground based’ tarping systems, unless a specific tarping station is provided to manage working at height hazards.
* Drivers are not allowed to climb onto the rear of their vehicles other than at a purpose built tarping station.
* All loads of sales product that are transported out of the mine will be covered.
* Drivers are to ensure that any loose debris is removed from wheels, drawbars before leaving the mine site.
* All ‘hold points’ must be obeyed and positive communications made with other vehicles where required.
* No driver shall knowingly leave the mine site with an overloaded vehicle.

### **Vehicle-related**

* Drivers are to carry out daily checks of vehicles they are operating and sign off as completed.
* Any vehicle defects are to be reported.
* No vehicle should be operated if it is considered mechanically unsafe.
* Seat belts are to be fit for purpose and worn at all times.
* Ensure the machine is clean and tidy.
* Drive to weather conditions.
* Be courteous to other road users.
* Do not smoke in the vehicle.
* Do not use mobile phones when the vehicle is in operation unless it is in an approved manner.
* Do not exceed a posted speed sign.
* Drive at a safe distance between you and the vehicle in front of you – do not tailgate.

### **Community-related**

* The loading and restraint of all loads shall be in accordance with National Transport Commission Load Restraint Guide.
* Limit the use of engine/exhaust brakes in areas as indicated by management and where the community will be adversely affected.
* Minimise generation of dust by driving to the speed limit and reporting to the mine the need to water the access roads and stockpile areas.
* Not commence work at the mine site until such times as advised by management and in accordance with the times outlined in the development consent conditions for the operation of the mine.

### **Health-related**

* Drivers must obey the applicable driving hours specific to their state/s of operation in accordance with legislation and take all reasonable steps to manage their fatigue and not drive when fatigued.
* Present yourself in a fit and proper state to commence and undertake your assigned work, without risk to yourself or others.
* Drivers must notify their employer and the mine operator if they are not fit for duty before the start of their shift.
* As a contractor or sub-contractor, you may be tested for alcohol and drugs by persons engaged or authorised by the mine in the following circumstances:
	+ where a manager reasonably suspects that you are under the influence of alcohol or drugs
	+ during any authorised random alcohol or drug test
	+ where an incident has occurred, which in the reasonable opinion of a manager involves a risk to the safety of you or others.

The mine operator will strictly enforce these requirements and will take the necessary action to initially assist you if you are affected.

* If you are involved in an incident, lose your licence or fail a test due to being under the influence of alcohol or drugs while driving a vehicle, the operation will implement the site disciplinary procedure.
* If you are taking prescriptive substances that could affect your condition or efficiency, you must notify management in the interests of safety of all concerned.
* Plan trips including breaks and meals.

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| --- |
| **Driver** |
| Name: |
| Signature: | Date: |
|  |
| **Manager** |
| Name: |
| Signature: | Date: |