



Oyu Tolgoi LLC

Health, Safety and Environment Management System Procedures

Element 10. Oyu Tolgoi Site Wide Traffic Management Plan
(C3 Vehicles and Driving Safety Standard)

Oyu Tolgoi Site Wide Traffic Management Plan		
Effective Date: 2012.04.16	Document Number: OT-10-C3-PRC-0005-E	Version: 1.2

1 PURPOSE

This Traffic Management Plan (TMP) provides the traffic management procedures to be followed by drivers and pedestrians while on site at the Rio Tinto Oyu Tolgoi Mine Site.

This TMP is effective from the Mine Site Entry Gates. This TMP incorporates traffic and pedestrian movements between and around the Accommodation Village, Mine Administration, Mobile Equipment Maintenance and the Fixed Plant Operational area. The Pit Operations are governed by the Oyu Tolgoi Pit Permit Rules.

The objectives of the TMP are to:

- Provide for a safe environment for all road users;
- Provide protection to pedestrians and workers from traffic hazards that may arise as a result of vehicle movements,
- Provide adequate parking areas for vehicles

To achieve the above objectives, the Traffic Management Plan will:

- Ensure segregation between pedestrian walkways and vehicles,
- Ensure that parking areas are well defined,
- Ensure access is restricted where required,
- Ensure that appropriate/sufficient warning and information signs are installed and that adequate guidance is provided to delineate the travel paths through the site.

2 SCOPE

This procedure applies to all employees and contractors of Oyu Tolgoi. It includes all roads owned and operated by Oyu Tolgoi or contractors that are employed onsite or offsite for Oyu Tolgoi LLC business purposes.

3 ROLES AND RESPONSIBILITIES

Role	Responsibilities
Employees, Contractors and Visitors	<p>Ensuring that they are aware of and comply with applicable statutory regulations and company policies such as:</p> <ul style="list-style-type: none"> • The need to hold a current motor vehicle driver's licence. • Statutory road regulations. • C3 Vehicles and Driving standard • Statutory mining regulations. • Alcohol and other drugs. • Site traffic rules. • Driver Permitting • Checking light vehicles as prescribed by Safety Standard C3. • The guidelines outlined in this Traffic Management Plan
Supervisor	<ul style="list-style-type: none"> • For allocating resources to repair the road conditions when required. • Ensuring training is provided for any drivers or operators and retrain when necessary.

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	<ul style="list-style-type: none"> • Inspection of the road conditions on a monthly basis.
Superintendent	<ul style="list-style-type: none"> • Ensuring training is provided for any drivers or operators and retrain when necessary. • Ensuring systems and controls are in place for verification of all licenses held by employees and contractors are current and appropriate for the work. • For allocating resources to repair the road conditions when required. • Ensuring training is provided for any drivers or operators and retrain when necessary.
Leader Once Removed (LOR) / Manager	<ul style="list-style-type: none"> • No person drives a vehicle unless they are trained, competent, tested and licensed to operate that vehicle. • There is a system in place to annually reinforce safe driver techniques for all employees required to drive for work purposes. • Speed limits are enforced. • Weekly inspections are carried out.

4 PROCEDURE

4.1 Road Design

All roads will conform to the design standards in C3 Vehicle and Driving Standard

- Roads must be wide enough to allow vehicles to pass in all conditions without risk of crashing or going over the edge.
- Demarcation, using such devices as berms, marker posts, tires, barriers, etc. is all acceptable. Safety berms are required to prevent vehicles from driving over the edge.
- Temporary road work may include Temporary Traffic Management plans that are aligned with but in addition to this Traffic Management plan.

4.2 Signage

All signs shall be in accordance with Refer to HSE Standard Notices and Signs and Mongolian regulations.

Signs and devices shall be erected in accordance with the locations and spacing's shown on the Traffic Control Diagrams such that:

- They are properly displayed and securely mounted;
- They are within the driver's line of sight;
- They cannot be obscured from view;
- They do not obscure other devices from the driver's line of sight;
- They do not become a possible hazard to pedestrians or vehicles; and
- They do not deflect traffic into an undesirable path.

4.3 Speed Limits

All vehicles are to travel no faster than the posted speed limits. Speed limits are outlined in the area specific requirements.

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Speed limits will be reviewed regularly in compliance with Vehicles and Driving standard clause 5.2. Regular speed audits will be conducted on site. Drivers found speeding will be subject to disciplinary action.

4.4 Vehicle Requirements

- All vehicles shall be subject to a risk assessment to clearly identify the conditional and behavioural factors that impact vehicles and driving safety before the vehicle is authorised for use on site. The risk assessment shall:
 - Involve operators and maintainers who will use the equipment; and,
 - Address all aspects of safe operation including handling, driver vision, brake failure, tire blow out and access/egress for operators and maintainers.
 - Ensure Equipment aligns with OT Standards.
- All light vehicles used for work purposes must comply with all aspects of the Light Vehicle Operating procedure and the Rio Tinto vehicles and driving guidance note unless the risk assessment specifies a specific rationale for non-compliance
- All vehicles shall be inspected and approved before use on the Oyu Tolgoi mine site and surrounding areas controlled by Oyu Tolgoi Operations. The inspection shall be undertaken in accordance with requirements of the Oyu Tolgoi Mobile Equipment Maintenance department and include a check to ensure compliance with the Rio Tinto Oyu Tolgoi equipment specifications.

4.5 Inspections

- Inspections of vehicles will be undertaken;
 - Pre-delivery - for new vehicles to ensure suitability for their site duties
 - Pre-operation – daily or during each shift based on a risk assessment
 - Post-Operational – daily after each shift
 - Pre-service - to identify any faults able to be remedied during the service
- All vehicles used for work purposes shall display an Authorisation Sticker. This sticker is issued by the Gobi Shop
- All vehicles must be equipped with:
 - Pre-start book
 - Wheel chocks
- Vehicles for use off site and between sites must also be equipped with:
 - 1 Set of safety triangles
 - 1 Set of wheel chocks
 - 1 Safety vest
 - 1 Torch
 - LV Tire changing SWP

4.6 Communications

All mining vehicles used on the Oyu Tolgoi site must be equipped with an operable UHF 2 way radio unless being escorted

Pit Operations Channel is to be used while travelling on all pit roads

Mobile phone use while driving is not permitted at any time unless authorized to do so, and must be used in accordance with the Mobile Phone Usage Policy.

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1.2**4.7 Parking**

Parking areas will be provided for light vehicles and mobile mining equipment in locations clear of the normal traffic flow and designed to reduce the interface of different vehicle sizes and types, and pedestrian traffic.

4.7.1 Designated Parking Areas

Areas designated for use in parking light vehicles or mining equipment will be designed and constructed after consideration of;

- Segregation of light vehicles and mining equipment,
- Wheel ditches or mounds to prevent unexpected vehicle movement,
- Exit points positioned and constructed to maximise visibility for vehicles,
- Signposts indicating the entry and exit points,
- Signposts indicating maximum speed in parking areas.
- Adequate area lighting will be provided to allow safe vehicle and pedestrian movement,
- Ground surface and drainage designed to maintain consistent underfoot conditions,
- Wherever practicable, traffic direction or flow to be controlled, with all vehicles entering or driving in a parking area to be moving in the same direction,
- In areas of pedestrian traffic, vehicles to be reverse-parked (drive forward) wherever practicable.
- Unless otherwise authorized, all light vehicles will be parked in the designated car parks across site

4.7.2 Non Designated Parking Method

Where vehicles are parked outside of Designated parking areas, the following factors will be considered;

- The area will be clear of passing traffic, with sufficient clearance to ensure safety from spillage from haul truck trays and movement of other operating equipment,
- Vehicles will be positioned to ensure clear visibility for approaching traffic,
- Vehicles will be parked fundamentally stable to prevent unexpected movement,
- Vehicle hazard lights and/or flashing beacons will be activated.

4.7.3 Parking Method

- All vehicles will be parked in a fundamentally stable position that prevents uncontrolled movement. Testing for fundamentally stable ground, requires the release of all braking systems and the vehicle to be out of gear. If the vehicle does not roll under these conditions then it is deemed to be fundamentally stable.
- If a vehicle cannot be made fundamentally stable by means of a hump, ditch, mound of dirt or any permanently fixed device, use of wheel chokes will be required.
- All vehicles will be reverse parked to ensure the first movement is forward where drive through parking is not utilized.
- Standard Operating Procedures will be developed that describe the preferred methods for parking for all vehicles

4.8 General Driving Rules

The following rules will apply to the operation of vehicles:

- Unless otherwise stated, Mongolian road rules will apply across Oyu Tolgoi operating areas.
- All speed and direction signs must be obeyed,

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- Keep to the right when traveling on roadways,
- Persons are not allowed to travel in the tray section of vehicles,
- Alcohol and other drugs may not be carried in vehicles
- Zero blood alcohol content and drug levels apply at all times while driving company owned vehicles on/off site
- Seat belts will be provided for each passenger in a vehicle and be worn at all times.
- Use of mobile phones while operating Heavy Earth Moving Equipment is strictly prohibited.
- Emergency vehicles displaying a red flashing light and/or a siren will have right of way over all other vehicles on site.
- Use of 4wd is recommended for all on site unsealed roads if weather conditions dictate the use.

4.9 1.11 Segregation

- Wherever practicable, pedestrian traffic will be segregated from vehicle traffic, with physical barriers providing protection.
- Designated pathways for pedestrians will be provided where appropriate, with signposting and road markings to define the pedestrian safety zones.
- Vehicle speed limits will be reduced in areas of high pedestrian traffic.
- Speed limiting devices will be provided where needed.

4.10 1.12 Breakdown and Recovery

No vehicle is to be towed unless it conforms to the Rio Tinto C3 Standards. A JHA must be performed prior to towing any heavy equipment if there is no SWP for the task. Drivers are to be notified by the responsible person who has conducted the JHA of any out of normal vehicle conditions such as no power steering or brakes.

Vehicles suffering a mechanical or electrical breakdown requiring recovery or towing will;

- Be parked clear of other traffic;
- Be secured from unplanned movement;
- Have hazard lights activated,
- Provide radio communication to other road users of the location of the stranded vehicle, and
- Ensure the driver will remain in the vehicle until assistance arrives.
- No vehicle will be used for towing equipment unless it has been engineered to do so. Slings, chains and equipment used for towing or recovery purposes will be specifically tagged or marked to prevent use for other purposes.
- Vehicles will, where possible, be towed from roads before repairs are conducted.
- Before towing operations commence on haul roads, notification will be given to all users through the radio communication system.

4.11 Training requirements

Minimum requirements to drive on site are:

- Current drivers licence
- Current OT HSE and General induction
- Annual Pit Permit assessment for those who carry the Pit Drivers Permit

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5 DEFINITIONS

Vehicle: Any motorised wheeled conveyance used for work purposes including light vehicles and mobile equipment; but excluding locomotives and machines operated on a rail system.

Shall: Indicates that a requirement is mandatory

Should: Indicates that a requirement is recommended

Light vehicle: A light vehicle is any land-based vehicle weighing less than 4.5 tonnes gross.

Heavy vehicle: Larger vehicles and machinery used in the mining process which can move from one part of the site to another under their own power.

Unattended vehicle: A vehicle is unattended when a competent person to operate that vehicle is not positioned at the controls of that vehicle.

Fundamentally stable: Where mobile equipment is left in a manner where it will not roll away or move if the equipment is left in neutral and the braking system, including park brakes are not applied.

6 REFERENCES AND RELATED DOCUMENTS

	Name	Location
Legal and Other Requirements	C3 Vehicles and Driving Standard	Prospect
Oyu Tolgoi HSE Management System	Element 10 – Operational Control	OT HSE Portal
	OT-10-PRC-0005-E-HSE Standard Notices and Signs Procedure	
	OT-10-C3-PRC-0005-E-Traffic Management Plan	
	OT-10-C3-PRC-0004-E-Tyre and Rims Management Plan	
	OT-10-C3-PRC-0006-E-Licencing Procedure	
	OT-10-C3-PRC-0002-E-Light Vehicle Procedure	
	OT-10-C3-PRC-0003-E-Heavy Vehicle Procedure	
	OT-10-C3-PRC-0001-E-Road Construction and Maintenance Procedure	



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7 DOCUMENT CONTROL

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