



## **Rio Tinto Exploration Pty. Limited**

ABN 76 000 057 125 / ACN 000 057 125

A member of the Rio Tinto Group

Mine Management Plan  
Yambarra  
EL3403 Barwolla, EL6517 Cui-eci Creek,  
EL3404 Fitzmaurice, EL 6551 Greenwood, EL1640 Keats,  
EL1923 Keats 2, EL3406 Keyling,  
EL1641 Port Keats, EL1638 Port Keats 1,  
EL1639 Port Keats 2, EL6516 Tom Turners Creek,  
SD5211 Port Keats, SD5212 Fergusson River,  
SD5207 Cape Scott  
Northern Territory

### **Exploration Report No. 25615**

Tenement Holder: Rio Tinto Exploration Pty Ltd.

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### **LIST OF APPENDICES**

#### **Appendix**

#### **File**

1	Yambarra Project EPBC Checklist and Search Results	ED2845ANC02.pdf ED2854ANC02.pdf
2	List of Environmental Procedures	ED2341SLS02.pdf
3	Weed Management Plan – Yambarra Project	ED3224SLS02.pdf
4	Stream Sample Locations	SP337RAC03.pdf
5	Loam Sample Locations	SP338RAC03.pdf
6	Fuel Storage Locations	SP339RAC03.pdf

### **LIST OF PLANS**

#### **Plan No.**

#### **Scale**

WAp45250	Tenement Location Plan	1:2 000 000
WAp45243	Sample Location Plan	1:200 000

## **1. SUMMARY**

This Mine Management Plan (MMP) documents the proposed work activities that Rio Tinto Exploration – Australasia Region (RTE-AR) will carry out in the Yambarra Project Area. The MMP will be used as the management document for all planned ground disturbance activities on EL3403 Barwolla, EL6517 Cui-eci Creek, EL3404 Fitzmaurice, EL 6551 Greenwood, EL1640 Keats, EL1923 Keats 2, EL3406 Keyling, EL1641 Port Keats, EL1638 Port Keats 1, EL1639 Port Keats 2, EL6516 Tom Turners Creek. The exploration programme is likely to involve reconnaissance work. Therefore only minimal ground disturbance is expected at this stage. The MMP will document all types of environmental impacts and the control measures that will be put in place by RTE-AR for the life of the project.

An Annual Environmental Report (AER) will document all ground disturbance and rehabilitation on this programme at the completion of each reporting period. At the cessation of the project, RTE-AR will complete a Final Rehabilitation Report (FRR).

## **2. INTRODUCTION**

This Mine Management Plan (MMP) covers EL3403 Barwolla, EL6517 Cui-eci Creek, EL3404 Fitzmaurice, EL6551 Greenwood, EL1640 Keats, EL1923 Keats 2, EL3406 Keyling, EL1641 Port Keats, EL1638 Port Keats 1, EL1639 Port Keats 2, EL6516 Tom Turners Creek. Field personnel are expecting to mobilise for the project in about May-June. The project will involve approximately five to ten Rio Tinto Exploration – Australia Region (RTE-AR) personnel on-site, which will include field technicians, and Project Geologists. Other personnel may visit the site, such as the Safety and Environmental Officers.

RTE-AR will manage environmental issues associated with this tenement according to the RTE-AR Environmental Management System and guidelines set out in this EMP. Relevant authorities/groups will receive a copy of the Environmental Procedures (Appendix 2) at the beginning of each field season.

### **2.1 Location and Access**

The Yambarra Project area is located approximately 315 km South-West of Darwin (refer Plan WAp45250). It is situated on the Daly River-Port Keats Aboriginal Land Trust Land. Access to the project areas is from the sealed Stuart Hwy then onto the Daly Rivers Rd and

the Wadeye Rd. Numerous access tracks exist in the northern part of the tenement group. Helicopter access will be utilised for most of the program, planned to commence in May / June 2003 (weather dependent).

## 2.2 Licence Details

Table 1: Tenement Summary

Tenement No.	Tenement Name	Ownership	Application Date	Grant Date	No. Blocks Applied	No Blocks Granted	No Blocks Current
EL3403	Barwolla	Ashton Mining Limited	28/09/1981	23/09/2002	23	23	23
EL6517	Cui-eci Creek	Ashton Mining Limited	22/02/1989	23/09/2002	194	194	194
EL3404	Fitzmaurice	Ashton Mining Limited	28/09/1981	23/09/2002	118	118	118
EL6551	Greenwood	Ashton Mining Limited	23/03/89	23/09/2002	365	365	365
EL1640	Keats	AO (Australia) Pty Limited	02/06/1977	23/09/2002	389	389	389
EL1923	Keats 2	AO (Australia) Pty Limited	08/09/1978	23/09/2002	414	414	414
EL3406	Keyling	Ashton Mining Limited	28/09/1981	23/09/2002	214	214	214
EL1641	Port Keats	AO (Australia) Pty Limited	02/06/1977	23/09/2002	394	394	394
EL1638	Port Keats 1	AO (Australia) Pty Limited	02/06/1977	23/09/2002	358	358	358
EL1639	Port Keats 2	AO (Australia) Pty Limited	02/06/1977	23/09/2002	390	390	390
EL6516	Tom Turners Creek	Ashton Mining Limited	22/02/1989	23/09/2002	97	97	97

### 2.3 Project Management

Principal Geologist: Gerard Rheinberger  
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## 3. STAKEHOLDERS

### 3.1 Lease Holders

Table 2: Lease Details

<u>Lease Name/Number</u>	<u>Leaseholder</u>	<u>Tenure Type</u>	<u>Name</u>	<u>Contact Details</u>
Port Keats 01637	Daly River/Port Keats Aboriginal Land Trust	PPL	Port Keats	<b>C/o Northern Land Council</b> PO Box 1249 Palmerston NT 0831

### 3.2 Native Title Groups

No Native Title groups, (claimants or title holders) exist for this area.

### 3.2 Communities – Interest Groups

Table 3: Details of Communities / Interest groups for the area

<u>Community/Interest Group</u>	<u>Contact</u>
Wadeye Community	C/o Northern Land Council PO Box 42921,Casurina NT 0811
Palumpa Community	C/o Northern Land Council PO Box 42921,Casurina NT 0811
Peppimentarti Community	C/o Northern Land Council PO Box 42921,Casurina NT 0811

## 4. REGULATORY COMPLIANCE

### 4.1 Environmental Approvals

The following is a summary of the EL conditions, pertaining to environmentally related issues, which the Schedule of Conditions attached to the EL's stipulate (Section 24a Mining Act).

- The Licensee (and contractors) shall carry out its activities in such a way as to minimise any impact to native/freehold title rights and interests in the licence area i.e. interference with culturally significant areas or sites. The Licensee and Contractors must consult Aboriginal Areas Protection Authority and inspect the Register of Sacred Sites.
- The Licensee (and contractors) shall carry out it's activities in such a way as to minimise environment impact of the licenced area i.e. reduce land clearing; prevent noxious weed spread; establish temporary structures, facilities, survey markings, or other related infrastructure; minimise disturbance to soil, rock, rock formations, creeks and watercourses; prevent contamination of water sources (surface and ground water); cap and report artesian groundwater encountered during drilling; cut, cap and mound over all drill-holes; rehabilitate all cleared areas (inc. replacing topsoil); do not use fire except for preparing food or heating water.
- Remove all waste material, rubbish, plastic sample bags, abandoned equipment, and temporary buildings before or at the termination of the exploration program and, put in appropriate disposal facilities.

- No firearms or traps, and hence killing of wildlife is permitted on the licence area.
- No new tracks are to be created unless unavoidable.
- The Licensee is to meet with the Native Title Claimants/Holder, on the Licence Area before the commencement of the programme to explain the exploration activities, and to discuss any issues/concerns. The Licensee may also invite the relevant pastoral lessees or landholders to this meeting. Appropriate notification, in accordance with the Mining Act (NT), is to be given to the group(s).
- Pursuant to s.166 (1A) Mining Act (NT), the Licensee must obtain prior approval from the Minister for all exploration activities likely to cause substantial disturbance to the surface of the licence area such as drilling, costeaning, gridding, bulk sampling, camp establishment or road constructions. The Minister may set specific conditions as to the rehabilitation requirements and audit procedures.

If a Native Title Claimant or Holder lodge a written complaint with the Minister regarding the adverse impact, to Native Title rights and interests, resulting from the conduct of activities, the Minister may:

- a) Request a written explanation about the matter from the Licensee.
- b) Request the Licensee attend a meeting with the Minister to discuss the matter.
- c) Request the Licensee attend a conference with the Minister and the complainant with a view to resolving the matter.

The Minister may then:

- d) Direct the Licensee to carry out rectification work.
  - e) Carry out rectification work at cost to the Licensee.
  - f) Take any other action, including the cancellation of the licence that the Minister sees fit.
- The Licensee is to inform the Native Title claimants or holders, in writing, if the licensee is to proceed with productive mining. This may trigger further act process, as is the procedural right.

The Licensee should employ local persons and contractors from the licence area and give them the opportunity of quoting or tendering for contract work.

## **4.2 Utility Services**

Minimal Utility Services exist in the Yambarra Project Area. These are contained in the Wadeye, Palumpa and Peppimentarti Aboriginal Communities. A Sewerage treatment plant exists at Peppimentarti. No water, gas or power lines exist outside of these communities.

## **5. ENVIRONMENTAL FACTORS**

RTE-AR has considered environmental factors in the planning stages of exploration activities. This planning process has identified the potential impacts and likely environmental issues associated with the exploration activities in this tenement. RTE-AR has implemented appropriate Environmental Procedures to manage these activities. RTE-AR will conduct all its exploration activities in accordance with these Environmental Procedures.

### **5.1 Physiography**

The climate for the Yambarra Project Area can be generally described as monsoonal. Annual rainfall is between 1200 and 1400 mm, which falls almost entirely between the Months of October to April. Temperature averages between 36°C maximum to 20°C minimum. Humidity is high throughout the year.

The tenements lie in the Victoria-Bonaparte and Top-End Coastal bioregions. These can be divided up into four general physiographic units, Coastal plains, Litchfield plains, Foothills and Mesas.

The Coastal plains make up most of the Yambarra project area. They consist of soil and alluvial plains with mangrove swamps, tidal mud flats and sand dunes. There are numerous lagoons and inland swamps.

The Litchfield plains are stony soil plains that are underlain by granite, which usually crops out into low stony rises. The major difference between the Litchfield and Coastal plains is that the Litchfield plains are not seasonally flooded and therefore has no wet vegetation cover.

Foothills make up a small part of the Yambarra physiography and average between 60 to 120 metres above sea level. Small outcrops of laterite occur within the foothills unit.

The mesas or the Docherty Hills & Barthelemy Hills consists of Precambrian sandstone and laterite profiles. The mesas are bounded by cliffs up to 24 metres high and vary significantly in elevation.

Vegetation within the four physiographic units varies from Eucalypt forests on the higher ground to wild rice grass in the low lying coastal plains. Paperbarks and areas of Eucalypt rainforest occur around springs and water bodies.

Drainage shows the Moyle, Tom Tuner and Daly Rivers feeding a classical dendritic pattern.

## 5.2 Previous Exploration/Mining or other Disturbances

The Yambarra project area has had minimal exploration activity conducted on it previously. BMR (Bureau of Mines and Resources NT) records show only preliminary geological surveys were carried out in the late 1950's (Walpole et al., 1968) and in 1965 (Dickins, Roberts, & Veevers, 1972)

## 5.3 Quarantine Issues and Weed Management

Survey data collated by the Department of Environment and Primary Industries lists the following introduced plant species (declared weeds) as occurring on the tenements.

Table 4: Introduced Plants on the Yambarra Project

SCIENTIFIC NAME	COMMON NAME
<b>Plant</b>	
<i>Brachiaria mutica</i>	Para Grass
<i>Crotolaria goreensis</i>	Gambia Pea
<i>Cynodon dactylon</i>	Turf Grass
<i>Echinochloa polystachya</i>	Barnyard Grass
<i>Hyptis suaveolens</i>	Hyptis
<i>Ipomoea quamoclit</i>	Morning Glory
<i>Leucaena leucophala</i>	
<i>Melinis repens</i>	Molasses Grass
<i>Mimosa pigra</i>	Mimosa
<i>Passiflora foetida</i>	Stinking Passion Flower
<i>Senna obtusifolia</i>	Sicklepod
<i>Sida acuta</i>	<i>Spinyhead sida</i>
<i>Sida cordifolia</i>	<i>Flannel Weed</i>

The department has identified these introduced species as having the most significant impact on this environment. The department has not yet surveyed some areas on the tenement. Other introduced species may occur on these parts of the tenement.

The department highlighted the following species as requiring special control,

- *Mimosa Pigra* (Mimosa);
- *Passiflora foetida* (Stinking Passion Flower);
- *Crotolaria goreensis* (Gambia Pea); and,
- *Echinochloa polystachya* (Barnyard Grass).

All RTE-AR personnel will be made aware of presence of these species. RTE-AR will supply an information pack with photographs of these species, a copy of the ENVT105 Quarantine procedure, and the wash-down procedure to all personnel on site (Appendix 3). Personnel will report sightings of any of the abovementioned species. RTE-AR will implement a wash-down procedure, in accordance with ENVT105 Quarantine, RTE-AR environmental procedure (Appendix 2), for all vehicles and equipment operating on this programme. Either the wash-down will occur at an existing local wash-down facility, that is, in one of the communities, or, it will be located at the RTE-AR camp.

Table 5 lists the introduced animals that potentially occur, on the Yambarra Project.

Table 5: Introduced Animals on the Yambarra Project

Animals	
Bufo marinus	Cane Toad
Columba livia	Feral Pigeon
Passer montanus	Tree Sparrow
Passer domesticus	House Sparrow
Rattus rattus	Black Rat
Mus musculus	House Mouse
Felis catus	Feral Cat
Bos javanicus	Bali Cattle
Capra hircus	Feral Goat
Hemidactylus frenatus	
Ramphotyphlops braminus	
Oryctolagus cuniculus	European Rabbit
Equus caballus	Feral Horse
Equus asinus	Feral Donkey
Sus scrofa	Feral Pig
Bubalus bubalis	Water Buffalo
Bos taurus	Feral European Cattle

## 5.4 Significant Environmental Issues

### 5.4.1 Conservation Areas

No Conservation areas exist within the Yambarra project area.

### 5.4.2 Heritage Sites

No nationally significant heritage sites exist within the Yambarra project area. RTE-AR will conduct a clearance survey before any ground disturbance activities occur.

### 5.4.3 Protected Flora

Species are listed in the Appendix 1.

### 5.4.4 Protected Fauna

Species are listed in Appendix 1

## **5.5 Surface Water**

Surface water is present over a large area in the Yambarra project area. This is due to monsoonal rains that occur over the summer months, and the drainage received by the Moyle, Tom Tuner and Daly Rivers. A few water bodies (lakes and lagoons) exist in the western part of the tenement group. This area co-exists with the low-lying coastal plains, and will not be accessed during the exploration programme.

Surface water may be taken from one of the small intermittent creeks / water holes within the polygon defining the proposed camp area (Plan WAp45243). Samples will be taken and the water will be appropriately sterilised prior to consumption.

## **5.6 Ground Water**

There are no artesian aquifers in the area that would offer a problem to any ground disturbance. If a perched aquifer is intercepted then the hole will be capped and RTE-AR will notify the Department of Business Infrastructure and Resource Development.

## **5.7 Contaminated Land**

No areas of contaminated land reside within the Yambarra project area. Refuse sites have been created at the three main Aboriginal Communities of Wadeye, Palumpa & Peppimentarti.

## **5.8 Fire Management**

Fire is a natural part of the environment in this region. The need for fires is not foreseen, however if a fire is required (eg. a camp fire), RTE-AR addresses fire management in ENVT103 Camp Management. The procedure states that RTE-AR will:

- Contact the local authorities to ensure that no fire restrictions are in place.
- Only permit fires under carefully controlled conditions. They must be a safe distance from flammable materials, accommodation and work areas. Locate fires in a site cleared of dry vegetation with a radius of at least three meters.
- Adhere to procedures designed to minimise the risk of bushfires occurring. In the event that a fire does escape, RTE-AR will make reasonable attempts to extinguish it without placing unnecessarily personal safety at risk. These procedures include:

- Using gas barbecues or other facilities where possible in preference to open fires.
- Ensuring that all fireplaces have a barrier made of stone or other appropriate material to act as a windbreak and to prevent dispersion of heat sources. Alternatively, they can be located within a 30 cm (or deeper) excavated depression.
- Ensuring that whenever a fire is established appropriate fire fighting equipment is available and in good working order.

Any fire outbreaks will be reported within the Rio Tinto incident reporting system, and to relevant Government authorities.

## **6. WORK PROTOCOL AND REHABILITATION**

RTE-AR will conduct its activities in accordance with the RTE Environmental Procedures. The completed ENVT100 Environment Protection and Biodiversity Conservation Checklist (EPBC) for the Yambarra Project identifies the planned activities for the programme. This section addresses the proposed work program, impacts associated with these activities and the appropriate management techniques that RTE-AR will implement.

### **6.1 Work Program**

#### *6.1.1 Proposed Exploration Methods*

The tenements are considered prospective for diamond bearing kimberlite pipes.

The tenements cover portions of the Palaeozoic Bonaparte Basin, the Proterozoic Victoria River Basin and the Proterozoic Pine Creek Orogen. The area is dominated by sedimentary sequences of sandstone, shale and siltstone, with some metamorphic equivalents in the Pine Creek Orogen. The area is transected by significant NNE trending faults, which may control the location of diamondiferous kimberlite deposits.

Work to be conducted within the licences (refer Table 1) will comprise the collection of approximately 250 helicopter supported gravel, loam and stream sediment samples. Sample locations are shown on Plan WAp45243 and locations are provided in Appendices 4 and 5. It is stressed that not all of these sample sites will necessarily be sampled. These sites provide RTE with sampling options, which are necessary due to the possibility that some sites will be unsuitable for either technical (eg no trap site) or cultural reasons.

Geological mapping, and rock chip and/or soil sampling, will also be undertaken within the area specified by the polygon as indicated on Plan WAp45243. Proposed activities are described as follows:

**Gravel Sampling** This comprises the extraction of approximately 30 kg of less than 1 mm gravel from the active stream channel. Each site takes approximately 2 hours to collect though this can vary considerably. All samples are forwarded to Rio Tinto's Perth laboratory for analysis.

**Stream Sediment Sampling** This comprises collection of approximately 150 grams of fine fraction (0.5 mm) sediment from the active stream channel. This sample is taken concurrently with the gravel sample and takes approximately 15 minutes to collect.

**Loam Sampling** This comprises the collection of surface materials over a discrete (approximately 5 m<sup>2</sup>) surface area. This sample type is collected when there is no active channel present. Materials are commonly swept together with an outdoor broom and then passed through a 1 mm sieve. Materials are again processed at the Rio Tinto laboratory in Perth.

**Soil Sampling** This comprises digging a small, shallow hole (<30 cm depth) to collect a soil sample (of the order of a cupful of soil), and placing the sample into a sample bag. The hole is completely filled in and is taken from a single, discrete sample site.

**Rock Chip Sampling** This involves hammering off an approximately fist size pieces of rock (up to 2kg in weight) from outcrops and collecting in a sample bag.

**Geological Mapping** This involves walking across country and recording details of outcropping rocks and surface materials (sand, soil, etc). This activity has no surface impact.

The nature of this initial sampling program is to simply identify those areas of interest worthy of follow-up in subsequent field programs. It is expected that a considerable proportion of the agreement area will not be of further interest, based on sample results. The proposed environmental impact will be negligible and the decision to land and sample a site will be completely at the guide's discretion. As follow-up programs would involve the same exploration methods in the drainage catchments sampled during this initial program, it is suggested that further clearances will be unnecessary.

### 6.1.2 *Expected Project Life and Schedule*

The probable duration of the work program is 3-4 weeks. Work is planned to commence in June following the initial work program meeting (weather permitting). The work may be delayed if drainages are still full of water.

To assist in the sampling process, it will be necessary to establish a camp site (refer section 6.3) and place supplies of helicopter fuel within the Land Trust areas. A polygon indicating the area RTE would like to establish a campsite is shown on Plan WAp45243. The campsite would occupy an area of approximately 100 x 200 metres in a location acceptable to Traditional Owners. Two sites for fuel storage have also been selected close to existing roads (refer Plan WAp45243 and Appendix 6). Fuel would also be stored at the campsite helipad. Approximately 20-30 drums of Jet A1 (kerosene) fuel will be stored at each site at any one time. No petrol or other fuel will be present at these sites. Collected samples will also be stored temporarily at these sites, pending transport via truck or helicopter to the exploration camp.

Vehicles accessing these tracks will be either Toyota 4WD's or HINO 4WD trucks.

Work will be undertaken in a single phase, following the initial liaison meeting to be held with traditional owners in early May. It is anticipated that the initial program will be completed no later than July, thereby allowing the possibility for sample results to be obtained and a follow-up sampling program to be initiated prior to the onset of the following wet season.

### 6.1.3 *Workforce*

Approximately five to ten RTE-AR staff will be engaged in the programme. All personnel will have work-related transit and entry permits for the area obtained through the NLC system of land access permits prior to work commencing.

During the fieldwork period, Rio Tinto Exploration would like to offer employment to Traditional Owners to work as field assistants. These persons must:

- Be of working age.
- Be physically fit, capable and willing to do physical work in the field.
- Pass a pre-employment medical check completed by a qualified medical practitioner.

Work activities will be conducted during the dry season, preferably between May and September 2003. The initial work programme should take approximately four to six weeks to complete.

## 6.2 Tracks

Several established access tracks occur within the Yambarra project area and will be used where possible. At this stage it is envisaged that no additional access tracks will require construction, as the work will be conducted using mainly helicopter access. However, should RTE-AR need to construct a track then RTE-AR shall be responsible for its condition, maintenance and rehabilitation (where required) throughout and upon completion of field activities (Table 5). Track construction would involve pushing aside small shrubs, logs and rocks with a front-end loader or similar equipment. Rootstock will be preserved to enable natural rehabilitation. Clearing of trees will be avoided wherever possible.

*The proposed work program specifically excludes the destruction or removal of mature trees in the vicinity of waterholes or the beds and banks of water-courses.*

A representative photographic record of the tracks used (existing and RTE-AR constructed) during field activities shall be maintained. These will be reported in the subsequent Annual Environmental Report or the Final Rehabilitation Report.

Table 5: Environmental Impact Management for Tracks

Action	Impact	Control
Vehicles driving on track	Generation of dust (bulldust) Compaction of red clay areas Erosion of sandy soils	ENVT102 Ground Disturbance

## 6.3 Camp-sites

RTE-AR plans to establish a campsite close to or along the existing track in the area highlighted on Plan WAp45243. The actual site selected will require access to water and an area suitable to land a helicopter. The selected site will be chosen after consultation with the traditional owners, and consideration of environmental and safety issues (Table 6). The Project Geologist is the designated site manager. They are responsible for ensuring that all appropriate Environmental Procedures are known to site personnel and are adhered to.

The polygon indicated on Plan WAp45243 has been selected to allow for the possibility that if a particular site is in anyway deemed unsuitable during heritage site clearances then other alternative locations exist.

***Rio Tinto requires advice on the location of any areas in the vicinity of the proposed campsite (or alternate camp sites) where such activities may not be conducted.***

Representative photographic records of any campsites established will be maintained and an inspection carried out by RTE-AR prior to the relinquishment of the tenement.

Table 6: Environmental Management for Potential Campsite Impacts

Action	Impact	Control
Clearing vegetation	Generation of Dust	ENVT103 Camp Management and ENVT102 Ground Disturbance
Improper disposal of domestic waste	Visually unappealing Encourages vermin	ENVT103 Camp Management

#### **6.4 Drill-sites**

RTE-AR does not plan to drill at this stage.

#### **6.5 Drilling**

RTE-AR does not plan to drill at this stage.

#### **6.6 Surface Sampling**

All surface sampling will be undertaken according to the procedures listed in Table 7. At the completion of each sample, the topsoil will be returned to the sample site.

Table 7: Environmental Management for Surface Sampling Impacts

Action	Impact	Control
<p><u>Hand Sampling</u></p> <p>Foot access, Tyred vehicle access, and Helicopter access.</p> <p>Digging, Rock chipping</p>	<p>Compaction, minor ground disturbance (soil and vegetation), water and wind erosion</p>	<p>ENVT102 Ground Disturbance</p> <p>ENVT110 Sampling</p> <p>ENVT 111 Hydrocarbons and Hazardous substances</p> <p>ENVT112 Flagging Tape</p> <p>ENVT114 Monitoring and Monitoring Equipment</p>

### 6.7 Geophysical Surveys

No geophysical surveys are planned at this stage.

### 6.8 Gridding

RTE-AR will not clear gridlines. Instead gridlines will be put in using GPS equipment and wooden pegs. RTE-AR will remove the pegs at the completion of the project.

### 6.9 Hydrocarbons and Hazardous Substances

As this is a relatively small-scale and short programme the equipment required will be minimal. Therefore minor quantities of hydrocarbons and hazardous substances will be present. Such substance may include diesel, petroleum, oils, domestic cleaning products, brake fluid, drilling chemicals and LPG. The transport, storage, use, disposal and emergency procedures for these substances are subject to the relevant RTE procedures (Table 8). Refer to Appendix 2.

Table 8: Environmental Management for Hydrocarbons and Hazardous Substances

Action	Impact	Control
Spillage of >20L	Contamination of soil and vegetation, which potentially inhibits growth. Leads to poisoning of animals through consumption of vegetation.	ENVT111 Hydrocarbons and Hazardous Substances; SAFE 109 Hazardous Substances (Minimum Standards); and, Australia District Field Operations Hazardous Materials Procedure.
Chemical fire	Spread to vegetation and cause multiple impacts ie. Habitat loss, threat to animals.	ENVT111 Hydrocarbons and Hazardous Substances; SAFE 109 Hazardous Substances (Minimum Standards); and, Australia District Field Operations Hazardous Materials Procedure.
Intersection of asbestiform or radioactive material during drilling	Contamination of soil from uriferous materials or asbestos.	ENVT111 Hydrocarbons and Hazardous Substances; SAFE 109 Hazardous Substances (Minimum Standards); and, Australia District Field Operations Hazardous Materials Procedure.

## 7. SAFETY

The Rio Tinto safe systems of work are encompassed in the Australia District Field Operations Manual. The field operations manual has Twenty Three (23) sections, each section guides and controls a different area of the exploration operation although some areas of work are likely to be covered in more than one section.

The sections in the manual are:

1. Introduction
2. Legislative Requirements
3. Recruitment
4. Induction
5. Contract Management
6. Change Management
7. Incident Accident Reporting and Investigation
8. Electrical

9. Communications
10. Field Camp Pre-departure
11. Field Administration
12. Field Geotechnical
13. Inspections and Audits
14. Safety and Health Committee
15. PPE
16. Work Permits
17. Drilling Operations
18. Vehicle Operations
19. Aviation Operations
20. Manual handling
21. Training
22. Hazardous Materials
23. Isolation Procedure

Copies of the Rio Tinto Australia District Field Operations Manual have been passed onto the relevant Government Departments.

## **DESCRIPTOR**

This Mine Management Plan for the Yambarra Project covers EL3403 Barwolla, EL6517 Cui-eci Creek, EL3404 Fitzmaurice, EL6551 Greenwood, EL1640 Keats, EL 1923 Keats 2, EL3406 Keyling, EL1641 Port Keats, EL1638 Port Keats 1, EL1639 Port Keats 2, EL6516 Tom Turners Creek. This document will set out the environmental management that RTE will implement for the environmental impact of activities associated with this programme.

## **KEYWORDS**

Mine Management Plan, Rehabilitation, Ground Disturbance, EL3403 Barwolla, EL6517 Cui-eci Creek, EL 3404 Fitzmaurice, EL6551 Greenwood, EL1640 Keats, EL1923 Keats 2, EL3406 Keyling, EL1641 Port Keats, EL1638 Port Keats 1, EL1639 Port Keats 2, EL6516 Tom Turners Creek.

APPENDIX 1

ENVIRONMENTAL, PROTECTION, BIODIVERSITY &  
CONSERVATION CHECKLIST SEARCH RESULTS

**ED2845ANC02.pdf**

**ED2854ANC02.pdf**

APPENDIX 2

LIST OF ENVIRONMENTAL PROCEDURES

**ED2341SLS02.pdf**

APPENDIX 3

WEED MANAGEMENT PLAN – YAMBARRA PROJECT

**ED3224SLS02.pdf**

APPENDIX 4

STREAM SAMPLE LOCATIONS

**SP337RAC03.pdf**

APPENDIX 5

LOAM SAMPLE LOCATIONS

**SP338RAC03.pdf**

APPENDIX 6

FUEL DUMP LOCATIONS

**SP339RAC03.pdf**