



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

ABN 76 000 057 125 / ACN 000 057 125

A member of the Rio Tinto Group

### **Mine Management Plan Wonarah Region**

**EL9976 Wonarah 1, ELA9977 Wonarah 2, ELA9978  
Wonarah 3, EL9979 Wonarah 4, EL22167 Wonarah 5,  
EL22168 Wonarah 6, EL22594 Frew River South, EL22596  
Frew River North, EL22597 Frew River West, ELA22810  
Barkly 3, EL22811 Barkly 4,  
SE 5315 Alroy, SE 5316 Ranken, SF303 Frew River  
& SF 5304 Avon Downs,  
Northern Territory**

**Exploration Report No. 25462**

Tenement Holder: Rio Tinto Exploration Pty Limited  
AKD Limited

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Author: A N Christie / S Smith

Submitted: G C Broadbent

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**Appendix**

		<b><u>File</u></b>
1	EPBC Checklist	ED1924SLS02.msg
		ED2370SLS02.pdf
2	List of Environmental Procedures	ED2341SLS02.pdf
3	Procedure for <i>Sporobolus latzii</i>	ED2356SLS02.pdf

**LIST OF PLANS**

<b><u>Plan No.</u></b>		<b><u>Scale</u></b>
WAp45218	Location Plan	1: 1 000 000
WAp45261	PHOSPHATE PROGRAMME EL9976 WONARAH 1, EL22167 WONARAH, EL22168 WONARAH 6 Fact Map	1:50 000

## **1. SUMMARY**

This Mine Management Plan (MMP) documents the proposed work activities that Rio Tinto Exploration – Australasia Region (RTE-AR) will carry out on the Wonarah programme. The MMP is the working document to be used by RTE-AR for management of environmental issues associated with all exploration activities on: EL9976 Wonarah 1; ELA9977 Wonarah 2; ELA9978 Wonarah 3; EL9979 Wonarah 4; EL22167 Wonarah 5, EL22168 Wonarah 6, EL22594 Frew River South; EL22596 Frew River North; EL22597 Frew River West; EL22810 Barkly 3; EL22811 Barkly 4. EL9977 Wonarah 2; EL9978 Wonarah 3, ELA22810 Barkly 3 are still under application. These tenements are located approximately 300km east of Tennant Creek, on the Barkly Highway.

RTE-AR does not plan to conduct an exploration work programme on the tenement in the next year. RTE-AR will notify the Department of Business, Infrastructure, and Resource Development (DBIRD) if RTE-AR commission an exploration programme later. If RTE-AR commences exploration on these tenements, RTE-AR will submit an Annual Environmental Report (AER), which will document all ground disturbance and rehabilitation on this programme. At the cessation of the project, RTE-AR will complete a Final Rehabilitation Report (FRR).

## 2. INTRODUCTION

This Mine Management Plan (MMP) covers EL9976 Wonarah 1; EL9979 Wonarah 4; EL22167 Wonarah 5; EL22168 Wonarah 6; EL22594 Frew River South; EL22596 Frew River North; EL22597 Frew River West; EL22811 Barkly 4. It also includes the following tenements, which are under application, ELA9977 Wonarah 2, ELA9978 Wonarah 3 and, ELA22810 Barkly 3. The site is located on Aboriginal Freehold Land on the eastern portion of the Northern Territory, approximately 300km east from Tennant Creek.

RTE-AR does not plan to work on the tenement in the next year. Should RTE-AR decide to conduct an exploration programme at Wonarah, RTE-AR will manage the environmental issues associated with the activities on these tenements in accordance with the RTE-AR Environmental Management System, and guidelines detailed in this MMP.

### 2.1 Location and Access

Wonarah is located approximately 300km from Tennant Creek (Plan WAp45218). RTE-AR will access the tenements from an unsealed track, which extends south from the Barkly Highway (Plan WAp45261).

### 2.2 Licence Details

Table 1: Tenement Summary

Tenement No.	Tenement Name	Ownership	Application Date	Grant Date	No. Blocks Applied	No. Blocks Granted
EL22594	Frew River South	Rio Tinto Exploration Pty Ltd	17-05-00	30-08-01	376	374
EL22596	Frew River North	Rio Tinto Exploration Pty Ltd	17-05-00	30-08-01	364	350
EL22597	Frew River West	Rio Tinto Exploration Pty Ltd	17-05-00	20-02-02	488	488
EL9976	Wonarah1	AKD Ltd	26-09-97	06-02-98	188	188
EL9977	Wonarah 2	Rare Earth's and Pilbara Chemical Co. (RTE-AR to manage)	26-09-97	Under application	30	
EL9978	Wonarah 3	Rare Earth's	26-09-97	Under	81	

		and Pilbara Chemical Co. (RTE-AR to manage)		application		
EL9979	Wonarah 4	AKD Ltd (RTE-AR to manage)	26-09-97	31-02-02	24	24
EL22167	Wonarah 5	Rio Tinto Exploration Pty Ltd	31-08-99	04-08-00	15	7
EL22168	Wonarah 6	Rio Tinto Exploration Pty Ltd	31-08-99	04-08-00	123	6
EL22810	Barkly 3	Rio Tinto Exploration Pty Ltd	04-10-00	Under application	156	
EL22811	Barkly 4	Rio Tinto Exploration Pty Ltd	04-10-00	10-01-02	63	63

### **2.3 Project Management**

Principal Geologist: Graeme Broadbent  
Phone: (08) 9270 9324

Project Geologist: Graham Lilley  
Phone: (08) 9270 9215

Fax: (08) 9270 9223  
Mailing Address: PO Box 175, Belmont, WA 6104  
Location Address: 37 Belmont Avenue, Belmont, WA 6984

## **3. STAKEHOLDERS**

### **3.1 Leaseholders**

Exploration Licence 9976 was subject to a Farm-in Agreement between Rio Tinto Exploration – Australasia Region (RTE-AR) and Australian Kimberley Diamonds Ltd (AKD). RTE-AR is the manager of this tenement. RTE-AR applied for these Exploration Licences 22167 and 22168 in late 1999, and they were granted in July 2000. RTE-AR conducted 2 drilling programmes on the tenements. The first was from August to November 2000, and the second was from May to June 2001.

The area is prospective for large tonnage phosphate deposits additional to those defined by IMC resource drilling (Rio Tinto Exploration Pty Ltd, 2001).

Table 2: Lease Details

Lease Name/Number	Leaseholder	Tenure Type	Contact Details
BARKLY 04246	Crown	Vacant Crown Land	
DALMORE DOWNS 03976	Wakaya Aboriginal Land Trust	Freehold Title	C/- Central Land Council , 33 Stuart Highway, Alice Springs NT 0871
BARKLY 03767,03764,03773 & 03774	Arruwurra Aboriginal Community Corporation	Freehold Title	C/- Central Land Council, 33 Stuart Highway, Alice Springs NT 0871
DALMORE DOWNS 00773	Stanbroke Pastoral Company Pty Ltd	Pastoral Property Lease	79 Eagle Street Brisbane QLD 4000

### 3.2 Native Title Groups

Table 3: Details of Native Title Group for the Area

NNTT No.	Group/Holder Name	Legal Representative	
		Name	Contact Details
DC01/030	Dalmore Downs	NLC	Dixie Chapman

### 3.3 Communities / Interest Groups

Table 4: Details of Community/Interest Groups

Community/Interest Group	Contact
Wunara Community	Julalikari Buramana Aboriginal Corporation (T/CK)
Purrukuwurru Community	Julalikari Buramana Aboriginal Corporation (T/CK)
Canteen Creek Community	Canteen Creek Dwaitillia Association
Gulungura	Julalikari Buramana Aboriginal Corporation (T/CK)

## **4. REGULATORY COMPLIANCE**

### **4.1 Environmental Approvals**

RTE-AR has in place two sets of conditions governing the conduct of its activities on the Wonarah programme, the Exploration Licence (EL) conditions and the conditions agreed on, with the Arruwurra Aboriginal Corporation, in the Deed of Exploration.

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 ie. interference with culturally significant areas or sites. Must consult Aboriginal Areas Protection Authority and inspect the Register of Sacred Sites
- The Licensee (and contractors) shall carry out its activities in such a way as to minimise environment impact of the licenced area ie. reduce land clearing; prevent noxious weed spread; establish temporary structures, facilities, survey markings, or other relate 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/holders, 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.

The following environmental conditions are specified in the Deed of Exploration agreement.

- 11.1 The Exploration Company shall ensure that the Project is conducted so as to -
- (a) conserve and protect the environment to the extent reasonably practicable;
  - (b) not unreasonably damage or alter adversely natural hydrological systems;
  - (c) disturb the least amount of soil and vegetation reasonably practicable and take all practical steps to prevent erosion;
  - (d) minimise Pollution; and
  - (e) to the extent practicable, prevent the introduction of exotic fauna and noxious plants to the Project Area.
- 11.2 Without limiting the generality of sub-clause 11.1 hereof, the Exploration Company shall:
- (a) comply with the environmental procedures as required by any Applicable Law;
  - (b) not, without prior consultation with the Association, undertake any exploration activities on any areas in the Project Area designated by the Association in writing as environmentally sensitive;
  - (c) where practicable, limit its use of vehicular traffic on the Project Area to roads existing at the date of this Deed and approved tracks established in accordance with Clause 8 [Work Programmes and Reports];
  - (d) take all reasonable precautions to prevent the occurrence of wild fires;
  - (e) keep each site of activity to the minimum area necessary to efficiently conduct the Project and keep such sites clean and tidy and free from rubbish and debris;
  - (f) where reasonably practicable or desirable remove, separately stockpile and retain adjacent to each site of activity all vegetation cut or removed from that area and not burn that vegetation ;
  - (g) where reasonably practicable or desirable remove and separately stockpile topsoil away from drainage lines in piles not exceeding two (2) metres in height from each area it excavates;
  - (h) take reasonable safeguards against stock and wildlife being injured, in particular, by reason of holes drilled or trenches dug;
  - (i) not remove material from the vicinity of creek banks or beds where such action is likely to create bank erosion or destruction of trees;

- (j) take reasonable precautions to minimise disturbance to vegetation, in particular, so as not to destroy mature trees; and
  - (k) take all due care to prevent erosion during road construction and other works and, without limiting the generality of this obligation, the Exploration Company shall, prior to the commencement of each wet season during the Term of this Deed, rehabilitate areas disturbed by it or take such protective action as is prudent having regard to the Exploration Company's requirements for future access or use for the purposes of the Project and the environmental impact which may result should no rehabilitation or protective action be undertaken at that time.
- 11.3 The Exploration Company shall comply with any reasonable recommendation of the Association for the purposes of sub-clauses 11.1 and 11.2 hereof. Such requirements may recommend, but shall not be limited to, the location and manner of construction of any roads that are necessary for the Project, and any erosion control measures, the sole costs of which shall be borne by the Exploration Company.
- 11.4 Without limiting the generality of sub-clauses 11.1 and 11.2 hereof, the Exploration Company shall:-
- (a) replace topsoil removed from disturbed areas and take all reasonable action including, if reasonably required, preparation of such areas to return self-sustaining plant stands;
  - (b) carry out works to remedy erosion of disturbed areas with the objective of reducing erosion rates to natural levels;
  - (c) leave the surface in a safe condition and in a reasonable contour having regard to the state of the surface area and its contour prior to the activity;
  - (d) ensure that all soil which is scraped and stockpiled from any areas is, upon the cessation of exploration activities in that area, respread evenly over the disturbed area for the purposes of aiding re-vegetation;
  - (e) ensure that all retained vegetation cut or removed in the course of exploration activities is, upon the respreading of soil in a disturbed area, distributed over the respread soil for the purposes of aiding re-vegetation, reducing erosion and creating animal habitats; and
  - (f) rehabilitate disturbed areas as soon as reasonably practicable after the Exploration Company no longer requires access to the area for the purposes of the Project.
- 11.5 Unless the Exploration Company is earlier released in writing by the Association from its obligations under sub-clauses 11.4, and 11.5 hereof the Parties agree that the rights and obligations granted and imposed pursuant to sub-clauses 11.4, and 11.5 hereof shall continue in respect of each area disturbed by the Exploration Company's exploration activities for so long as it is entitled to enter upon or occupy any part of the Association's land pursuant to, any mining tenement or otherwise.

11.6 If the conduct of the Project contravenes any provision of this Clause 11, the Association may serve notice on the Exploration Company requiring it to take, within a reasonable time specified in the notice, such reasonable steps as are necessary (which steps may be recommended by the Association) to remedy any contravention of such provision and to prevent any continued or repeated contravention of such provision and the Exploration Company shall forthwith comply with the notice to the extent reasonably practicable.

#### **4.2 Utility Services**

Power, water, and sewerage service infrastructure are located along the Barkly Highway. The tenements included in the Wonarah programme are on this arterial road. IF RTE-AR commission an exploration programme on or near the Barkly Highway, RTE-AR will identify the specific location of the infrastructure (in-ground) before any ground disturbance occurs on the tenement(s).

### **5. ENVIRONMENTAL FACTORS**

RTE-AR has considered environmental factors in the planning stages of exploration activities. This planning process identified the potential impacts and likely environmental issues associated with the exploration activities on these tenements. RTE-AR will implement appropriate Environmental Procedures to manage these activities, if exploration work proceeds. RTE will conduct all its exploration activities in accordance with these Environmental Procedures.

#### **5.1 Physiography**

The Wonarah tenements cover shallow dipping lower Middle Cambrian siltstones, limestones, and cherts of the Gum Ridge Formation. These rocks host the Wonarah phosphate resource (72Mt @ 23% P<sub>2</sub>O<sub>5</sub>).

The area has very low relief, and is characterised by extensive areas of sand covered stony plains with low bevelled stony rises. Low, broad NW-SE trending longitudinal aeolian sand dunes have largely obliterated drainage. The few established drainage features are discontinuous; many drain into clay pans and sink holes.

The Wonarah region lies within the Tanami Bioregion. This is typically a semi-desert environment, which supports mixed species of low open woodland. This comprises 1-9% Bloodwood trees (<10m), *Eucalyptus opaca*, and 30-69% hummock grasslands, predominantly *Triodia pungens* (soft spinifex), understorey.

## 5.2 Previous Exploration/Mining or other Disturbances

IMC resource drilling in the region, and outside the existing tenement boundaries was involved with drilling 139 shallow holes (most holes <50 m) between 1967-1970. ICI drilled approximately 10 holes in the late 1970s. Tracks were cleared to facilitate drilling. No rehabilitation process was recorded and vegetation scars remain in the landscape. These can be viewed from sky level but, on the ground, these remnant tracks are not clearly visible.

Gravel pits were excavated adjacent to the Barkly Highway during construction and recurrent upgrading phases. Several water bores are also located adjacent to the highway (Rio Tinto Exploration Pty Ltd, 2001).

In 2000-2001 RTE-AR drilled 136 drill-holes (RC, aircore and diamond), cleared 35 drill-pads, and put in approximately 113km of track.

## 5.3 Quarantine Issues

The RTE-AR ENVT105 Quarantine Environmental Procedure was used to identify and manage any potential risks. The following is a list of introduced flora and fauna that occur across the bioregion. 16 introduced flora species have been identified within the Tanami bioregion. Some of these could potentially occur in the Wonarah area.

Table 5: Introduced Plants and animals on Wonarah

SCIENTIFIC NAME	COMMON NAME
<b>Plants</b>	
Acacia nilotica	Prickly Acacia
Brachiaria mutica	Summer Grass
Cenchrus ciliaris	Buffel Grass
Chloris virgata	Rhodes Grass
Citrullus colocynthis	Colocynth
Cynodon dactylon	-
Dichanthium annulatum	Annual Bluegrass
Hyptis suaveolens	Hyptis
Jatropha gossypifolia	Bellyache Bush
Malvastrum americanum	Malvastrum
Parkinsonia aculeata	Parkinsonia
Passiflora foetida	Stinking Passionfruit
Prosopis limensis	Mesquite

Sida acuta	Spinyhead Sida
Sida rhombifolia	Sida
Xanthium strumarium	Burr
<b>Animals</b>	
Passer domesticus	House Sparrow
Rattus rattus	Black Rat
Mus musculus	House Mouse
Felis catus	Feral Cat
Hemidactylus frenatus	-
Oryctolagus cuniculus	European Rabbit
Vulpes vulpes	Fox
Equus asinus	Feral Donkey
Bos taurus	Feral European Cattle
Equus caballus	Feral Horse

#### 5.4 Significant Environmental Issues

Two significant environmental issues were identified on the Wonarah tenements. A protected species, *Sporobolus latzii*, was identified as occurring on the tenements in seasonal swamps with clay soils. Secondly, the Barry Caves, a small limestone cave system, occur outside the tenement area, 9 km southeast of the Wunara community. Numerous Cambrian-age fossil sites occur throughout the region, containing trilobites, brachiopods, hyoliths, and sponges.

##### 5.4.1 Conservation Areas

No conservation areas exist on the tenement.

##### 5.4.2 Heritage Sites

RTE-AR retained records of the 2001 Aboriginal surveys. Some of the tenements, included in this MMP, were part of this survey. If RTE-AR proceeds with exploration work, the traditional owners will conduct surveys over the remaining tenements.

##### 5.4.3 Protected Flora

The Tanami Bioregion, in which the Wonarah region is located, has numerous rare and threatened recorded plant species. Only one of these species is located on the Wonarah tenements. *Sporobolus latzii* is located within the 'Wonarah Beds Site Bioregion', in the eastern Wakaya Desert of the Tanami Bioregion. The grass species has a 1K national conservation status, which denotes the species as having poorly known taxonomic records.

Aerial photographs will identify potential habitat areas. Ground-truthing is the only certain method of establishing the exact location and existence of this species on the tenements. If RTE-AR plans to conduct an exploration programme, RTE-AR will apply the 'Procedure for protecting *Sporobolus latzii* on the Wonarah tenements' (Appendix 3) to complement the existing Environmental Procedures, ENVT104 Site Monitoring and ENVT112 Flagging Environmental Procedures. The procedure provides guidelines on identification of the species and methods to reduce or prevent disturbance to the species (Rio Tinto Exploration Pty Ltd, 2001).

#### 5.4.4. Protected Fauna

The EPBC search (Appendix 1) identified one protected animal species as likely to occur on the tenements. RTE-AR personnel also sighted a Spectacled Hare Wallaby, *Lagorchestes conspicillatus*, on the Frew River tenements (EL22594 Frew River South, EL22596 Frew River North, and, EL22597 Frew River West). The sighting was reported to the Northern Territory Parks and Wildlife Commission. As RTE-AR do not plan to work on the tenements in the next year, RTE-AR will not develop special procedures to manage these species.

#### **5.5 Surface Water**

Several small clay pans are located on the tenement, but no permanent surface water exists.

#### **5.6 Ground Water**

Several water bores occur adjacent to the Barkly Highway. RTE-AR checked out the bores, in which they were found to be either dry or had collapsed. These bores were not useable.

#### **5.7 Contaminated Land**

No contaminated land is known to occur on the tenements. If RTE-AR locate a contaminated site, RTE-AR will record the location and report the site to the Department of Business, Infrastructure, and Resource Development.

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

RTE-AR does not plan to conduct work on the Wonarah tenements. If work is proposed, then RTE-AR will conduct its activities in accordance with the RTE-AR Environmental Procedures. This section addresses the impacts associated with these activities and the appropriate management techniques that RTE-AR will implement.

It is important to note that RTE-AR will not conduct any field activities until RTE-AR consult the traditional owners, and an agreement(s) is finalised.

## 6.1 Tracks

RTE-AR will use existing tracks where available. If RTE-AR needs to construct tracks, construction will be in accordance with the following procedures:

Table 6: Environmental Impact Management of Tracks

Action	Impact	Control
Construction of tracks and use of vehicles (heavy and light) on tracks	Compaction, vegetation destruction, heritage site damage, impact on local fauna / flora distribution, water and wind erosion, dust generation, river and creek bank damage	ENVT102 Ground Disturbance ENVT112 Flagging Tape

## 6.2 Camp-sites

If RTE-AR decide that a camp-site is required, RTE-AR will construct the camp-site in accordance with the following:

Table 7: Environment Impact Management of Camp-site

Action	Impact	Control
Establishing and utilising an area for temporary use as accommodation and messing facilities.	Compaction, vegetation destruction, heritage site damage, pollution, water and wind erosion, visually unappealing.	ENVT103 Camp Management ENVT102 Ground Disturbance ENVT 111 Hdrocarbons and Hazardous substances

## 6.3 Drill-sites

If RTE-AR decide to go head with a drill programme, and drill-pads are required, the following guidelines will be applicable:

Table 8: Environmental Impact Management of Drill-sites

Action	Impact	Control
Construction of access tracks, tyred vehicle access Drill pad construction, heavy equipment mobilisation, drilling waste discharge, drilling	Ground and surface water contamination, vegetation and soil disturbance, water and wind erosion, dust generation	ENVT102 Ground Disturbance ENVT107 Drilling ENVT108 Drill Hole Capping ENVT109 Water Bores ENVT114 Monitoring and Monitoring Equipment

#### 6.4 Drilling

If RTE-AR plans to conduct a drilling programme, the following guidelines will apply:

Table 9: Environmental Impact Management for Drilling

Action	Impact	Control
Construction of access tracks, tyred vehicle access  Drill pad construction, heavy equipment mobilisation, drilling waste discharge, drilling	Ground and surface water contamination, vegetation and soil disturbance, water and wind erosion, dust generation	ENVT102 Ground Disturbance ENVT107 Drilling ENVT108 Drill Hole Capping ENVT109 Water Bores ENVT114 Monitoring and Monitoring Equipment

#### 6.5 Sampling

If RTE-AR commissions a sampling programme, the following applies:

Table 10: Environmental Impact Management of Sampling

Action	Impact	Control
Foot access Digging, Rock chipping Construction of access tracks, tyred vehicle access, digging of shallow (<30cm deep) trenches/pits Ground excavation, heavy equipment mobilisation, Soil removal and storage	Compaction, minor ground disturbance (soil and vegetation), water and wind erosion, ground and surface water contamination, dust generation	ENVT102 Ground Disturbance ENVT110 Sampling ENVT 111 Hydrocarbons and Hazardous substances ENVT112 Flagging Tape ENVT114 Monitoring and Monitoring Equipment

### 6.6 Geophysical Surveys

If RTE-AR plans to conduct geophysical work the following will apply:

Table 11: Environmental Impact management of Geophysical Surveys

Action	Impact	Control
Foot access Tyred vehicle access, construction of access tracks Flying aircraft	Transient noise, Minor compaction, minor ground disturbance (soil and vegetation), minor water and wind erosion	ENVT101 Environmental Management Plan CREL002 Community Relations Environmental Procedure ENVT110 Sampling ENVT102 Ground Disturbance

### 6.7 Other Ground Disturbing Activities

If RTE-AR conducts other ground disturbing activities, (trenches, costeans, winze, bulk sampling) the activities will be in accordance with the following:

Table 12: Environmental Impact Management for Other Ground Disturbing Activities

Action	Impact	Control
Tyred vehicle access, construction of access tracks  Ground excavation, heavy equipment mobilisation, Soil removal and storage	Ground and surface water contamination, vegetation and soil disturbance, water erosion, dust generation	ENVT110 Sampling  ENVT102 Ground Disturbance  ENVT114 Monitoring and Monitoring Equipment  ENVT 111 Hydrocarbons and Hazardous substances

## 6.8 Hydrocarbons and Hazardous Substances

If RTE-AR conduct a programme on these tenements, the following hydrocarbons and hazardous substances are likely to be on site: domestic gas, diesel, domestic cleaning products, degreaser, and engine oil. RTE-AR will ensure that appropriate MSD sheets are available on site for these substances.

Table 13: Environmental Impact Management for Hydrocarbons and Hazardous Substances

Action	Impact	Control
Handling, transport, storage and use of Hydrocarbons and Hazardous Substances	Soil and vegetation contamination, ground water pollution, adversely affect fauna.	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 Wonarah Region covers EL9976 Wonarah 1, ELA9977 Wonarah 2, ELA9978 Wonarah 3, EL9979 Wonarah 4, EL22167 Wonarah 5, EL22168 Wonarah 6, EL22594 Frew River South, EL22596 Frew River North, EL22597 Frew River West, ELA22810 Barkly 3, EL22811 Barkly 4. The tenements are located 300km east of Tennant Creek. This document sets out the environmental management that RTE-AR will implement for the environmental impact of potential activities associated with the Wonarah Region tenements.

## **KEYWORDS**

Mine Management Plan, Rehabilitation, Ground Disturbance, Wonarah, EL9976 Wonarah 1; ELA9977 Wonarah 2; ELA9978 Wonarah 3; EL9979 Wonarah 4; EL22167 Wonarah 5, EL22168 Wonarah 6, EL22594 Frew River South; EL22596 Frew River North; EL22597 Frew River West; ELA22810 Barkly 3; EL22811 Barkly 4, Barkly Highway.

## **REFERENCES**

Rio Tinto Exploration Pty Ltd. (2001). *Annual Environmental Report EL9976, EL22167 & EL22168 Wonarah Region*. Report No. PR299GJL01.doc

**APPENDIX 1**

**EPBC Checklist**

**D1924SLS02.msg**

**ED2370SLS02.pdf**

**APPENDIX 2**

**List of Environmental Procedures**

**ED2341SLS02.pdf**

**APPENDIX 3**

**Procedure for *Sporobolus latzii***

**ED2364SLS02.pdf**