

Hon Mark McGowan MLA Minister for the Environment; Racing and Gaming

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Statement No.

000716

STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION ACT 1986)

PHILLIPS RIVER GOLD PROJECT SHIRE OF RAVENSTHORPE

Proposal:

The developing of mining operations at the areas of Trilogy and

Kundip, construction of a haul road, construction and operation of a processing plant, and disposal of tailings at the RAV 8 site, as

documented in schedule 1 of this statement.

Proponent:

Tectonic Resources NL

Proponent Address:

Suite 4, 100 Hay Street

SUBIACO WA 6008

Assessment Number:

1618

Report of the Environmental Protection Authority: Bulletin: 1213

The proposal referred to above may be implemented subject to the following conditions and procedures:

1 Implementation

1-1 The proponent shall implement the proposal as documented in schedule 1 of this statement subject to the conditions and procedures of this statement.

2 Proponent Commitments

2-1 The proponent shall fulfil the environmental management commitments documented in schedule 2 of this statement.

Published on 2 2 MAR 2006

3 Proponent Nomination and Contact Details

- 3-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposal.
- 3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposal will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposal shall also be provided.
- 3-3 The nominated proponent shall notify the Department of Environment of any change of contact name and address within 60 days of such change.

4 Commencement and Time Limit of Approval

4-1 The proponent shall substantially commence the proposal within five years of the date of this statement or the approval granted in this statement shall lapse and be void.

Note: The Minister for the Environment will determine any dispute as to whether the proposal has been substantially commenced.

4-2 The proponent shall make application for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement to the Minister for the Environment, prior to the expiration of the five-year period referred to in condition 4-1.

The application shall demonstrate that:

- 1. the environmental factors of the proposal have not changed significantly;
- 2. new, significant, environmental issues have not arisen; and
- 3. all relevant government authorities have been consulted.

Note: The Minister for the Environment may consider the grant of an extension of the time limit of approval not exceeding five years for the substantial commencement of the proposal.

5 Compliance Audit and Performance Review

- 5-1 The proponent shall prepare an audit program and submit compliance reports to the Department of Environment which address:
 - 1. the status of implementation of the proposal as defined in schedule 1 of this statement;
 - 2. evidence of compliance with the conditions and commitments; and
 - 3. the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the *Environmental Protection Act 1986*, the Chief Executive Officer of the Department of Environment is empowered to monitor the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement.

- 5-2 The proponent shall submit a performance review report every four years after the start of operations, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, which addresses:
 - 1. the major environmental issues associated with the project; the environmental objectives for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those objectives;
 - 2. the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best available technology where practicable;
 - 3. significant improvements gained in environmental management, including the use of external peer reviews;
 - 4. stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and
 - 5. the proposed environmental objectives over the next five years, including improvements in technology and management processes.

6 Flora and Vegetation Communities

6-1 Prior to ground-disturbing activities, the proponent shall prepare a Flora and Vegetation Communities Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Advisory agency (See procedure 3):

• Department of Conservation and Land Management

The objective of this Plan is:

• to ensure the conservation of flora species and vegetation communities which occur within the project area.

This Plan shall address:

- management to minimise the clearing of Declared Rare and Priority Flora during implementation of the proposal;
- 2 minimisation of the impact of the haul road on the population of *Allocasuarina* sclerocada spp Bandalup located in the road reserve, including further review of the road alignment to avoid the population;
- measures to be taken to protect vegetation of conservation significance outside areas of direct impact from accidental damage, including the establishment of buffers;
- design and construction of haul road and drains to avoid impact on Declared Rare and Priority Flora as far as practicable;
- design and construction of haul road and drains to avoid adverse impact on vegetation from drainage of surface water;
- establishment of vegetation quadrats for monitoring and analogue purposes prior to implementation of the proposal, utilising species accumulation curves to determine the appropriate number of baseline quadrats (but should include at least two quadrants of at least ten by ten metres in each of the eight vegetation units most affected by disturbance);
- baseline photographic monitoring prior to the implementation of the proposal and on-going monitoring of vegetation upstream and downstream of creek diversions;
- preliminary research into the propagation of suitable species and conservation species during the first year of mining, in order to select initial rehabilitation techniques to be used during rehabilitation;
- baseline and on-going monitoring of vegetation condition and appropriate management along haul roads and adjacent to mining areas for impacts from dust and the use of saline water for dust control;
- baseline and on-going monitoring of and appropriate management for, vegetation of conservation significance, including Declared Rare Flora, key priority flora and the proposed melaleuca over mallee Threatened Ecological Community for indirect impacts, such as dust and dewatering and any other disturbances;
- monitoring of vegetation condition to detect impact from saline water storage in underground mine workings;

- management of vegetation and topsoil stockpiling, including ensuring that these can be matched to an appropriate rehabilitation area;
- seed collection protocols for rehabilitation;
- contingency plans for the management of impacts on vegetation detected during operations;
- 15 progressive rehabilitation, including previously disturbed areas; and
- 16 education of workforce to minimise vegetation damage.
- 6-2 The proponent shall implement the Flora and Vegetation Communities Management Plan required by condition 6-1.
- 6-3 The proponent shall make the Flora and Vegetation Communities Management Plan required by condition 6-1 publicly available, in a manner approved by the Department of Environment.

7 Fauna

7-1 Prior to ground-disturbing activities, the proponent shall prepare a Fauna Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Advisory agency (See procedure 3):

• Department of Conservation and Land Management.

This Plan shall address:

- management and monitoring to minimise impacts on fauna within the project area and the adjacent proposed conservation areas;
- 2 monitoring and keeping a register of road kill, particularly on the haul roads through Kundip to RAV 8 site;
- 3 contingency plans to reduce road kill in the event that this be found to be impacting conservation species and other native fauna;
- 4 management of saline and contaminated surface waters to discourage birds and other fauna;
- 5 monitoring of birdlife at RAV8 to determine any impact from the tailings water pond; and
- 6 contingency plans for the management of any impacts on fauna detected during operations.
- 7-2 The proponent shall implement the Fauna Management Plan required by condition 7-1.

7-3 The proponent shall make the Fauna Management Plan required by condition 7-1 publicly available, in a manner approved by the Department of Environment.

8 Weed Management

8-1 Prior to ground-disturbing activities and in consultation with the Department of Conservation and Land Management and the Department of Agriculture, the proponent shall prepare a Weed Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The Weed Management Plan shall set out the procedures and/or measures for:

- 1. control and eradication of weed species on the Kundip and haul road sites;
- 2. weed control during construction and operation at the Kundip site and haul road;
- 3. hygiene and wash-down for all plant and equipment; and
- 4. monitoring the success of weed control.
- 8-2 The proponent shall implement the Weed Management Plan required by condition 8-1.
- 8-3 The proponent shall make the Weed Management Plan required by condition 8-1 publicly available, in a manner approved by the Department of Environment.

9 Dieback Management

9-1 Within one month following the issuing of the notice to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986* and in consultation with the Department of Conservation and Land Management, the proponent shall prepare a Dieback Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The objective of the Dieback Management Plan is to prevent the introduction of dieback to the Kundip mining site and haul road area.

The Plan shall include the procedures and/or measures for:

- 1. hygiene and wash-down for all plant and equipment;
- 2. restrictions on the vehicular use of the haul road to avoid the introduction of dieback.
- 3. monitoring of vegetation condition along the haul road and within the Kundip site for signs of dieback;
- 4. training of personnel; and

- 5. contingency plans for the management of dieback, if introduced.
- 9-2 Within two months following the issuing of the notice to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986*, the proponent shall implement the Dieback Management Plan required by condition 9-1 for all activities on the Kundip site and the haul road.
- 9-3 The proponent shall make the Dieback Management Plan required by condition 9-1 publicly available, in a manner approved by the Department of Environment.

10 Bush Fire Management

10-1 Prior to commencement of ground-disturbing activity and in consultation with the Department of Conservation and Land Management and the Fire and Emergency Services Authority, the proponent shall prepare a Bush Fire Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This Plan shall include:

- 1. bush fire prevention measures;
- 2. bush fire detection and reporting procedures;
- 3. fire brigade and the proponent's fire suppression equipment and preparedness measures; and
- 4. training of personnel for fighting fires.
- 10-2 The proponent shall implement the Bush Fire Management Plan required by condition 10-1.
- 10-3 The proponent shall make the Bush Fire Management Plan required by condition 10-1 publicly available, in a manner approved by the Department of Environment.

11 Waste Management

- 11-1 The proponent shall encapsulate potential acid-forming waste within waste dumps in such a manner that it remains isolated from oxygen and rainfall after placement and in the long-term post site closure.
- 11-2 The proponent shall encapsulate mineralised waste within waste dumps in such a manner that it remains isolated from oxygen and rainfall after placement and in the long term post site closure.

12 Rehabilitation and Closure

- 12-1 Prior to construction and during operation, the proponent shall implement the Rehabilitation and Preliminary Closure Management Plans as provided with the Environmental Protection Statement (dated November 2005) and subsequent revisions, which provide the framework to ensure that the site is left in an environmentally acceptable condition to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Department of Conservation and Land Management the Commissioner of Soil and Land Conservation and the Department of Industry and Resources.
- 12-2 At least 12 months prior to the anticipated date of closure, or at a time agreed with the Environmental Protection Authority, the proponent shall prepare Final Rehabilitation and Closure Management Plans designed to ensure that all project sites are left in an environmentally acceptable condition to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Department of Conservation and Land Management the Commissioner of Soil and Land Conservation and the Department of Industry and Resources.

The Final Rehabilitation and Closure Management Plans shall address:

- removal or, if appropriate, retention of plant and infrastructure in consultation with relevant stakeholders;
- 2 post-closure monitoring of groundwater around the tailings storage facility for seepage and criteria for when monitoring will no longer be required;
- 3 long-term management of ground and surface water systems affected by the tailings storage facility and waste rock dumps;
- 4 long-term management of pit voids and groundwater impacts from voids;
- 5 applicable criteria for rehabilitation to be considered as successful;
- rehabilitation of all disturbed areas to a standard suitable for the agreed new land use(s); and
- 7 identification of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities.
- 12-3 The proponent shall implement the Final Rehabilitation and Closure Management Plans required by condition 12-2 until such time as the Minister for the Environment determines, on advice of the Environmental Protection Authority, that the proponent's closure responsibilities have been fulfilled.
- 12-4 The proponent shall make the Final Rehabilitation and Closure Management Plan required by condition 12-2 publicly available.

Procedures

- Where a condition states "to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority", the Environmental Protection Authority will provide that advice to the Department of Environment for the preparation of written notice to the proponent.
- The Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environment.
- Where a condition lists advisory bodies, it is expected that the proponent will obtain the advice of those listed as part of its compliance reporting to the Department of Environment.

Notes

- The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environment over the fulfilment of the requirements of the conditions.
- The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.
- Within this statement, to "have in place" means to "prepare, implement and maintain for the duration of the proposal".

HON MARK McGOWAN MLA MINISTER FOR THE ENVIRONMENT; RACING AND GAMING

2 2 MAR 2006

The Proposal (Assessment No. 1618)

The proposal is to undertake mining in the areas of Trilogy on mining lease M74/176 and Kundip on mining leases M74/41, M74/51, M74/53, M74/135, M74/121 P74/153 and L74/34; construct a haul road within M74/176 and M74/51 and within Gazetted Road No. 8432; upgrade the processing plant situated east of Ravensthorpe on M74/13; and discharge process tailings to the existing pit on M74/13. Figure 1 shows the project location.

Development within the Trilogy Project area (Figure 2) includes:

- mining of the ore body within the Trilogy project area;
- transport of overburden to one surface waste rock dump, which will be rehabilitated to form a permanent landscape feature of the site;
- transport of the ore to a designated Run-Of-Mine (ROM) pad;
- development of a 1.4 kilometre internal haul road from the Trilogy ROM pad to the Ravensthorpe Hopetoun Road;
- development of a vegetation corridor along the 1.4 kilometre length of the internal haul road; and
- construction of a water storage facility to contain excess water pumped from the open pit. The water will be returned to the open pit and the embankment walls removed at the end of the project.

Development within the Kundip Project area (Figure 3) includes:

- mining of the ore bodies from nine pits by open-cut method and underground mining from Kaolin, Maydon and Flag West pits;
- transport of overburden to surface waste rock dumps, which will be rehabilitated to form permanent landscape features of the site;
- transport of the ore to designated Run-Of-Mine (ROM) pad;
- construction of two dams to intercept water and redirect it around the Flag pit; and
- office complex, workshop facilities, fuel storage area and power generation station.

The route of the haul road is shown in Figure 4. The haul road is to be built with a running surface of 11 metres and a total width of 15 to 18 metres.

Devlopment at the RAV 8 site (Figure 5) includes:

- a treatment plant with conventional ore processing facilities;
- existing flotation, thickening, filtration, concentrate storage, reagent mixing and distribution, laboratory, workshop/store, fuel storage area, power generation area and offices; and
- storage of tailings in the RAV 8 pit.

Table 1 – Key Proposal Characteristics (1618)

Element	Mining and development of the Trilogy ore body	Mining and development of the Kundip ore body	RAV 8 ore processing and tailings disposal
Approximate life of project (mine production)	5 to 6 months	4.3 years	4.3 years
Size of Resource (tonnes)	4,200,000	3,700,000	•
Number of open pits	1 .	9	PV
Number of underground operations	0	3	Ph.
Depth of mine pits (metres)	44	20 to 85	_
Total mined ore (tonnes)	350,000	1,200,000	
Total waste (tonnes)	1,500,000	8,200,000	-
Ore mining rate (maximum tonnes)	75 000 per month	62 000 per month	-
Water table depth (metres)	33.5	37	
Area of disturbance (including access) (hectares)	29 (approx.)	110 (approx.)	-
Native vegetation to be cleared (hectares, approximate)	0	70 – Kundip 15 – Haul Road	
Operating hours (hours/day)	24	24	24
List of major components pit waste dump treatment plant infrastructure	See Figure 2	See Figure 3 & 4	See Figure 5
Water supply source	Groundwater	Run-off / Ground water	Tails return/ groundwater
Water usage - approximate maximum annual requirement (cubic metres)	10,000	30,000	630,000
Fuel storage (kilolitres)	55,000	110,000	165,000
Fuel usage (litres)	90,000 life of mine	10,500,000 life of mine	580 per hour
Power supply	Hopetoun Grid	Diesel generators	Diesel generator
Haulage times	1 truck/hour 7 days/week	1 truck/hour 7 days/week	_

Figures (attached)

Figure 1 - Project location

Figure 2 - Trilogy mining site

Figure 3 - Kundip mining site

Figure 4 - Haul road route

Figure 5 - RAV 8 plant site and tailings disposal site

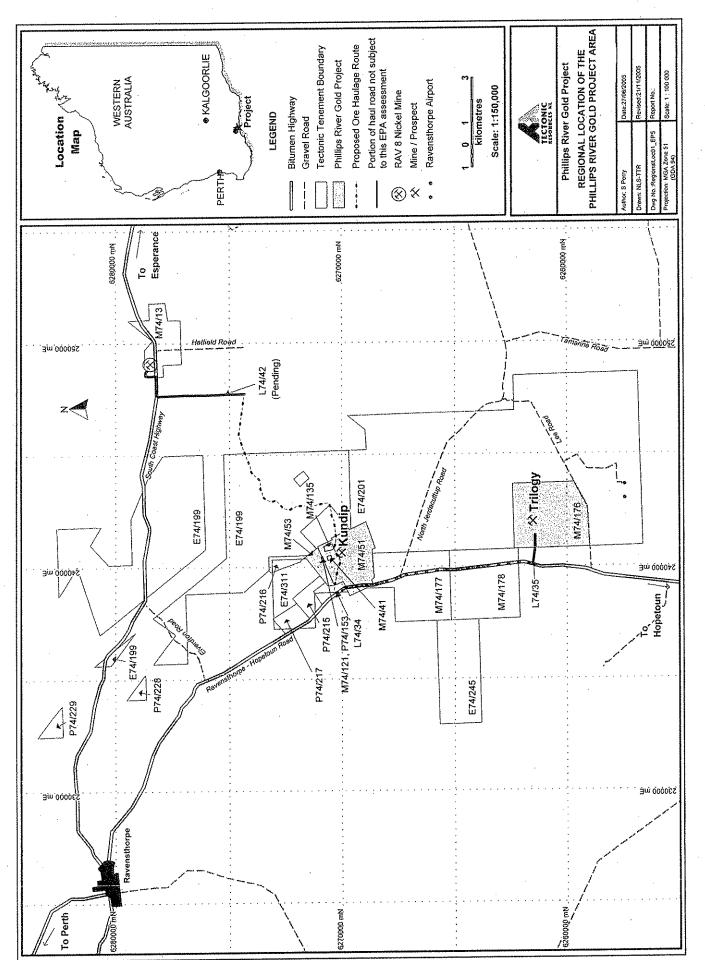


Figure 1: Project location

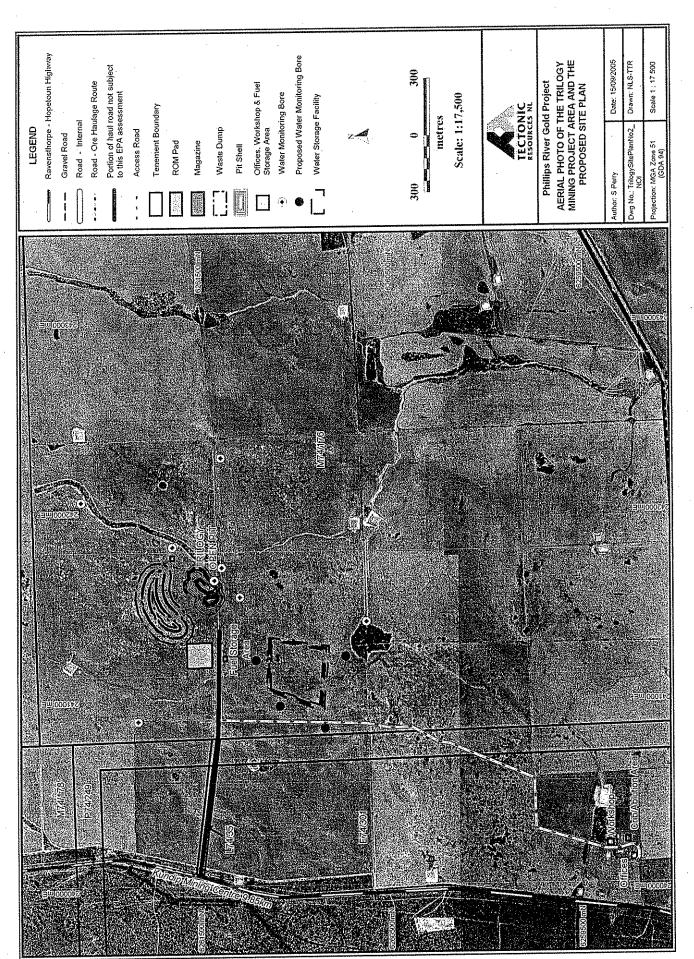


Figure 2: Trilogy mining site

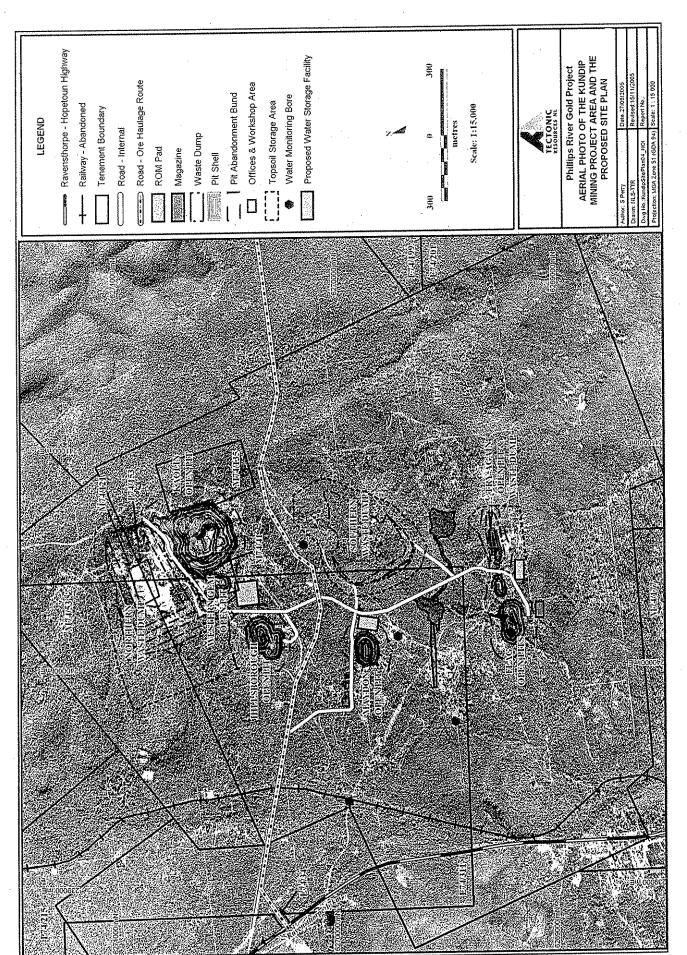


Figure 3: Kundip mining site

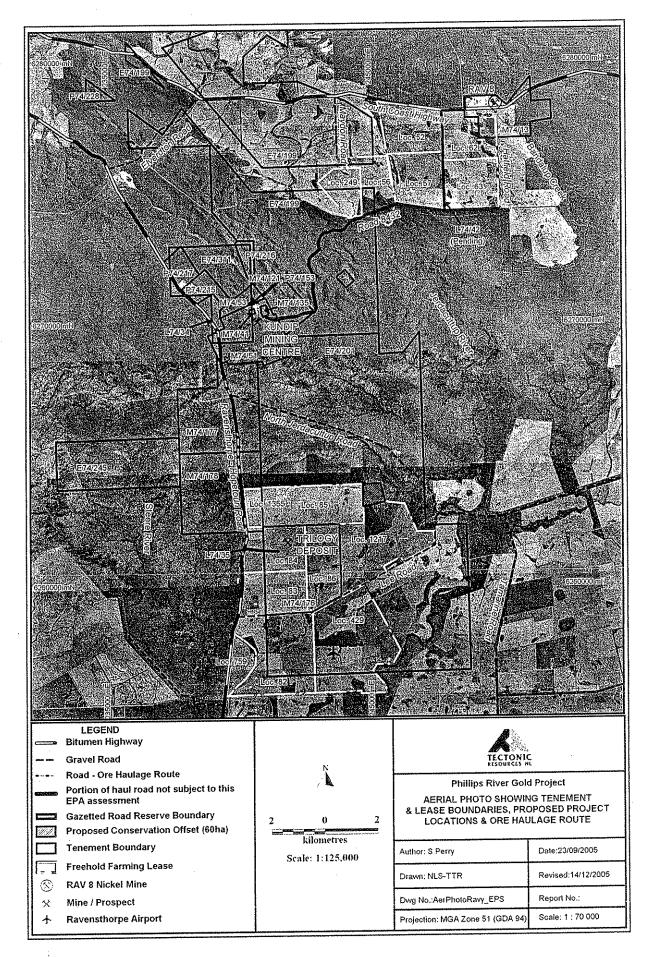


Figure 4: Haul road route

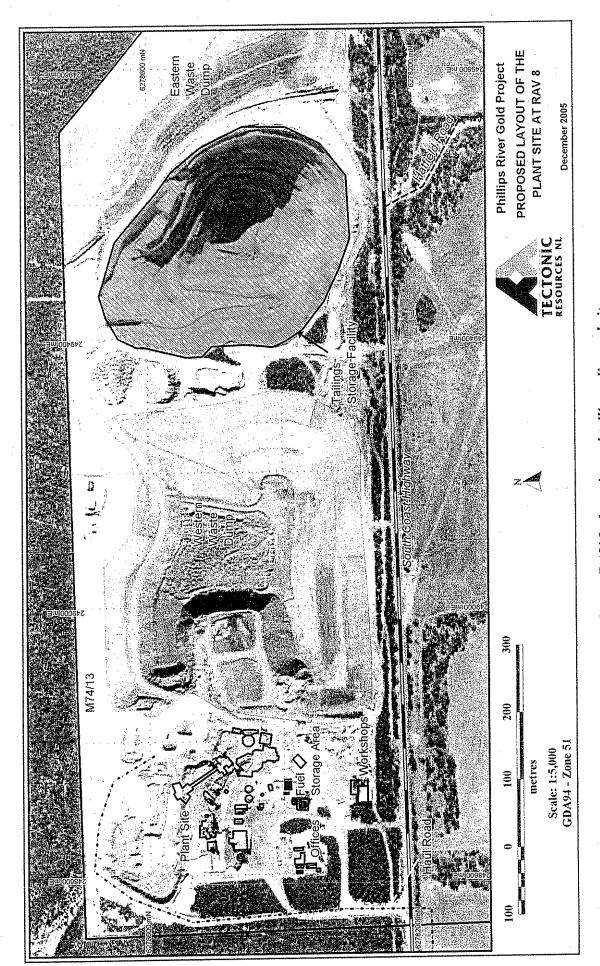


Figure 5: RAV 8 plant site and tailings disposal site

Proponent's Environmental Management Commitments

January 2006

PHILLIPS RIVER GOLD PROJECT SHIRE OF RAVENSTHORPE

(Assessment No. 1618)

Tectonic Resources NL

Proponent's Environmental Management Commitments - January 2006

PHILLIPS RIVER GOLD PROJECT, SHIRE OF RAVENSTHORPE (Assessment No. 1618)

Note: The term "commitment" as used in this schedule includes the entire row of the table and its six separate parts as follows:

a commitment topic;

the objective of the commitment;

the 'action' to be undertaken by the proponent;

the timing requirements of the commitment; and

the body/agency to provide technical advice to the Department of Environment.

Topic	Objective	Action	Timing	Advice
Conservation Offset	Onservation Provide a contribution to regional conservation that will offset the clearing of native vegetation within the Kundip project area and the haul road.	1 Rehabilitation of historically disturbed areas within the Kundip site. 2 Purchase a 60 ha parcel of vegetated land for contribution to the conservation estate. 3 Contribute \$10,000 per year to the Western Shield project to allow fox baiting of the entire Ravensthorpe Range for five years. 4 Contribute \$10,000 towards a targeted survey of Melaleuca stramentosa. 5 Contribute \$10,000 towards a regional survey of the proposed Melaleuca-over-mallee Threatened Ecological Community. 6 Contribute 10% or 10 000 seeds where practicable, of seeds collected from each native species to the Millenium Seed Bank.	1 – Progressive, during life of project. 2 – Transferred to Executive. Director, CALM within 12 months of project approval. 3 – Within 12 months of project approval. 4 – Timing determined in consultation with CALM. 5 – Timing determined in consultation with CALM. 6 – By 30 June 2006.	Department of Conservation and Land Management (CALM)