



Statement No.

MINISTER FOR THE ENVIRONMENT;  
LABOUR RELATIONS

000509

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

**RAVENSTHORPE NICKEL PROJECT, BANDALUP HILL  
SHIRE OF RAVENSTHORPE**

- Proposal:** The mining and processing of up to 4 million tonnes per annum of nickel ore from Bandalup Hill, approximately 35 kilometres east of Ravensthorpe, producing 30 000 tonnes per annum of nickel metal and 2 200 tonnes per annum of cobalt sulphide over a period of 20 years, as documented in schedule 1 of this statement.
- Proponent:** Comet Resources NL
- Proponent Address:** Level 1, 619 Murray Street, WEST PERTH WA 6005
- Assessment Number:** 1199
- Report of the Environmental Protection Authority:** Bulletin 930

The proposal to which the above report of the Environmental Protection Authority relates may be implemented subject to the following conditions and procedures:

**1 Implementation**

- 1-1 Subject to these conditions and procedures, the proponent shall implement the proposal as documented in schedule 1 of this statement.
- 1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.
- 1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

Published on

- JUN 1999

## 2 Proponent Commitments

- 2-1 The proponent shall implement the consolidated environmental management commitments documented in schedule 2 of this statement.
- 2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of conditions and procedures in this statement.

## 3 Environmental Management System

- 3-1 In order to manage the environmental impacts of the project, and to fulfil the requirements of the conditions and procedures in this statement, prior to commissioning, the proponent shall demonstrate to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection that there is in place an environmental management system which includes the following elements:
- 1 An environmental policy and corporate commitment to it;
  - 2 Mechanisms and processes to ensure:
    - (1) planning to meet environmental requirements;
    - (2) implementation and operation of actions to meet environmental requirements;
    - (3) measurement and evaluation of environmental performance; and
  - 3 Review and improvement of environmental outcomes.
- 3-2 The proponent shall implement the environmental management system referred to in condition 3-1.

## 4 Priority Flora / Significant Vegetation Communities Management Plan

- 4-1 Prior to ground-disturbing activities and in consultation with the Department of Conservation and Land Management, the proponent shall prepare a Priority Flora / Significant Vegetation Communities Management Plan to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection and the 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:

- 1 the management and monitoring of impacts on Priority Flora species within the project area, in particular, *Spyridium glaucum*, *Dampiera deltoidea*, and *Kunzea similis*;
- 2 further regional surveys to confirm the conservation status of each of the above species;
- 3 revegetation strategies including industry best practice completion criteria to be met as the mining area progresses;

- 4 preliminary research into the propagation of these species during the first few years of mining, in order to select initial rehabilitation techniques to be used during this time;
- 5 further investigations into the regeneration and seed ecology of these species (particularly *Dampiera deltoidea*) in order to determine appropriate regeneration methodologies, if completion criteria are not being achieved; and
- 6 the management and monitoring of impacts on significant vegetation communities within the project area, in particular, *Eucalyptus flocktoniae* - *Melaleuca coronicarpa* 'gorse'.

4-2 The proponent shall implement the Priority Flora / Significant Vegetation Communities Management Plan required by condition 4-1.

4-3 The proponent shall make the Priority Flora / Significant Vegetation Communities Management Plan required by condition 4-1 publicly available, to the requirements of the Environmental Protection Authority.

## 5 Fauna Management Plan

5-1 Prior to ground-disturbing activities and in consultation with the Department of Conservation and Land Management, the proponent shall prepare a Fauna Management Plan to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection and the Department of Conservation and Land Management.

This Plan shall address:

- 1 management and monitoring to minimise impacts on fauna within the project area and the adjacent Bandalup corridor; and
- 2 in particular, management and monitoring of the Heath Rat (*Pseudomys shortridgei*) and the Western Mouse (*Pseudomys occidentalis*);

5-2 The proponent shall implement the Fauna Management Plan required by condition 5-1.

5-3 The proponent shall make the Fauna Management Plan required by condition 5-1 publicly available, to the requirements of the Environmental Protection Authority.

## 6 Greenhouse Gas Emissions Management Plan

6-1 Prior to commissioning, the proponent shall prepare a Greenhouse Gas Emissions Management Plan:

- to ensure that "greenhouse gas" emissions from the project are adequately addressed and best available efficient technologies are used in Western Australia to minimise Western Australia's "greenhouse gas" emissions; and
- to mitigate "greenhouse gas" emissions in accordance with the Framework Convention on Climate Change 1992 and consistent with the National Greenhouse Strategy,

to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

This Plan shall include:

- 1 calculation of the "greenhouse gas" emissions associated with the proposal, as indicated in "Minimising Greenhouse Gas Emissions, Guidance for the Assessment of Environmental Factors, No. 12" published by the Environmental Protection Authority;
  - 2 specific measures to minimise the "greenhouse gas" emissions associated with the proposal;
  - 3 monitoring of "greenhouse gas" emissions;
  - 4 estimation of the "greenhouse gas" efficiency of the project (per unit of product and/or other agreed performance indicators) and comparison with the efficiencies of other comparable projects producing a similar product; and
  - 5 an analysis of the extent to which the proposal meets the requirements of the National Strategy using a combination of:
    - "no regrets" measures;
    - "beyond no regrets" measures;
    - land use change or forestry offsets; and
    - international flexibility mechanisms.
- 6-2 The proponent shall implement the Greenhouse Gas Emissions Management Plan required by condition 6-1.

## **7 Decommissioning Plan**

- 7-1 Within five years following commissioning, or at such later time considered appropriate by the Minister for the Environment on advice of the Department of Environmental Protection, the proponent shall prepare a Decommissioning Plan to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection, the Department of Minerals and Energy and the Department of Conservation and Land Management.

This Plan shall:

- 1 describe the processes for decommissioning and rehabilitation of the project area;
- 2 provide for the long term management of ground and surface waters systems affected by the tailings storage facility (and evaporation pond if one is required);
- 3 provide for the development of a 'walk away' solution for the decommissioned mine pit, process plant, tailings dam (evaporation pond), and all associated infrastructure;
- 4 identify all contaminated areas, including provision of evidence of notification to relevant statutory authorities; and
- 5 recognise the importance of restoring the Bandalup corridor to its former size at the conclusion of operations.

Note: A 'walk away' solution means that the site shall either no longer require management at the time the proponent ceases operations, or if further management is

deemed necessary, the proponent shall make adequate provision so that the required management is undertaken with no liability to the State.

7-2 The proponent shall implement the Decommissioning Plan required by condition 7-1 until such time as the Minister for the Environment determines that decommissioning is complete.

7-3 The proponent shall make the Decommissioning Plan required by condition 7-1 publicly available, to the requirements of the Environmental Protection Authority.

## **8 Performance Review**

8-1 Each six years following the commencement of construction, the proponent shall submit a Performance Review to the Department of Environmental Protection:

- to document the outcomes, beneficial or otherwise;
- to review the success of goals, objectives and targets; and
- to evaluate the environmental performance over the six years;

relevant to the following:

- 1 environmental objectives reported on in Environmental Protection Authority Bulletin 930;
- 2 proponent's consolidated environmental management commitments documented in schedule 2 of this statement and those arising from the fulfilment of conditions and procedures in this statement;
- 3 environmental management system environmental performance targets;
- 4 environmental management programs and plans; and/or
- 5 environmental performance indicators;

to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

Note: The Environmental Protection Authority may recommend changes and actions to the Minister for the Environment following consideration of the Performance Review.

## **9 Proponent**

9-1 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 in respect of the proposal.

9-2 Any request for the exercise of that power of the Minister referred to in condition 9-1 shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the proposal in accordance with the conditions and procedures set out in the statement.

- 9-3 The proponent shall notify the Department of Environmental Protection of any change of proponent contact name and address within 30 days of such change.

## **10 Commencement**

- 10-1 The proponent shall provide evidence to the Minister for the Environment within five years of the date of this statement that the proposal has been substantially commenced.
- 10-2 Where the proposal has not been substantially commenced within five years of the date of this statement, the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment will determine any question as to whether the proposal has been substantially commenced.
- 10-3 The proponent shall make application to the Minister for the Environment for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement at least six months prior to the expiration of the five year period referred to in conditions 10-1 and 10-2.
- 10-4 Where the proponent demonstrates to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority that the environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding five years for the substantial commencement of the proposal.

## **11 Compliance Auditing**

- 11-1 The proponent shall submit periodic Performance and Compliance Reports, in accordance with an audit program prepared in consultation between the proponent and the Department of Environmental Protection.
- 11-2 Unless otherwise specified, the Chief Executive Officer of the Department of Environmental Protection is responsible for assessing compliance with the conditions, procedures and commitments contained in this statement and for issuing formal written advice that the requirements have been met.
- 11-3 Where compliance with any condition, procedure or commitment is in dispute, the matter will be determined by the Minister for the Environment.

### **Note**

- 1 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.

CHERYL EDWARDES (Mrs) MLA  
MINISTER FOR THE ENVIRONMENT

- 4 JUN 1999

## Schedule 1

### The Proposal (1199)

The mining and processing of nickel and cobalt ores from Bandalup Hill, approximately 35 kilometres east of Ravensthorpe, employing open-cut mining of up to 4,000,000 tpa (tonnes per annum) of ore to produce up to 30,000 tpa of nickel metal and 2,200 tpa of cobalt sulphide over a period of approximately 20 years.

The major features of the project are:

- mining at Bandalup Hill, approximately 35 kilometres east of Ravensthorpe and 155 kilometres west of Esperance;
- a processing plant comprising facilities for ore beneficiation, pressure acid leaching, neutralisation precipitation, solvent extraction and electrowinning;
- a sulphuric acid manufacturing plant;
- a power station and steam generation facility;
- a water supply scheme using seawater pumped from the coast, about 40 kilometres south of the project site, to a water treatment facility producing potable and demineralised water;
- a pipeline returning brine to the ocean;
- a new, all-weather, project site access road from the South Coast Highway, about 4 kilometres north of the project site;
- a village to accommodate a construction workforce of around 900 and, thereafter, an operational workforce of up to 250;
- tailings storage facility;
- waste rock stockpile;
- offices, workshops, laboratory and other ancillary buildings; and
- haul roads and access roads within the project site.

### Figures

See figures 1 and 2 for location plan and project layout, respectively.

**Key Characteristics Table (1199)**

Project life	approx. 20 years
Size of deposit (at cut-off grade of 0.5% Ni)	60 million tonnes
Mining rate - maximum	4.0 million tonnes per annum
Beneficiated concentrate production (average)	1.8 million tonnes per annum
Acid leach throughput	1.8 million tonnes per annum
Maximum depth of mining	50 metres
Tailings storage area - ground level footprint	144 hectares
- final surface area	115 hectares
Evaporation pond - maximum likely area	144 hectares
Water Supply - source	sea water
- raw water (average) (35,000 mg/L Total Dissolved Solids)	13,000 kL/day
- process/potable water (210 mg/L Total Dissolved Solids)	6,000 kL/day
(The process/potable water stream is a component of the total requirement of 13,000 kL/d)	
Energy generation - installed capacity	60 MW
- normal (power station)	40 MW
- recovered (acid plant)	12 MW
Major resource use - limestone	300,000 tonnes per annum
- sulphur	220,000 tonnes per annum
- diesel	59,000 tonnes per annum
Workforce - construction	900
- operation	250
Pit area	199 hectares
Plant area	25.4 hectares
Stockpile area (ore)	18 hectares
Overburden storage area	65 hectares
Accommodation village	~25 hectares
Nickel production	30,000 tonnes per annum
Cobalt sulphide production	2,200 tonnes per annum
Transport rate - to site	675,000 tonnes per annum
- from site (product)	32,200 tonnes per annum
(Approximately 70 truck movements per day, mainly between the site and Esperance)	



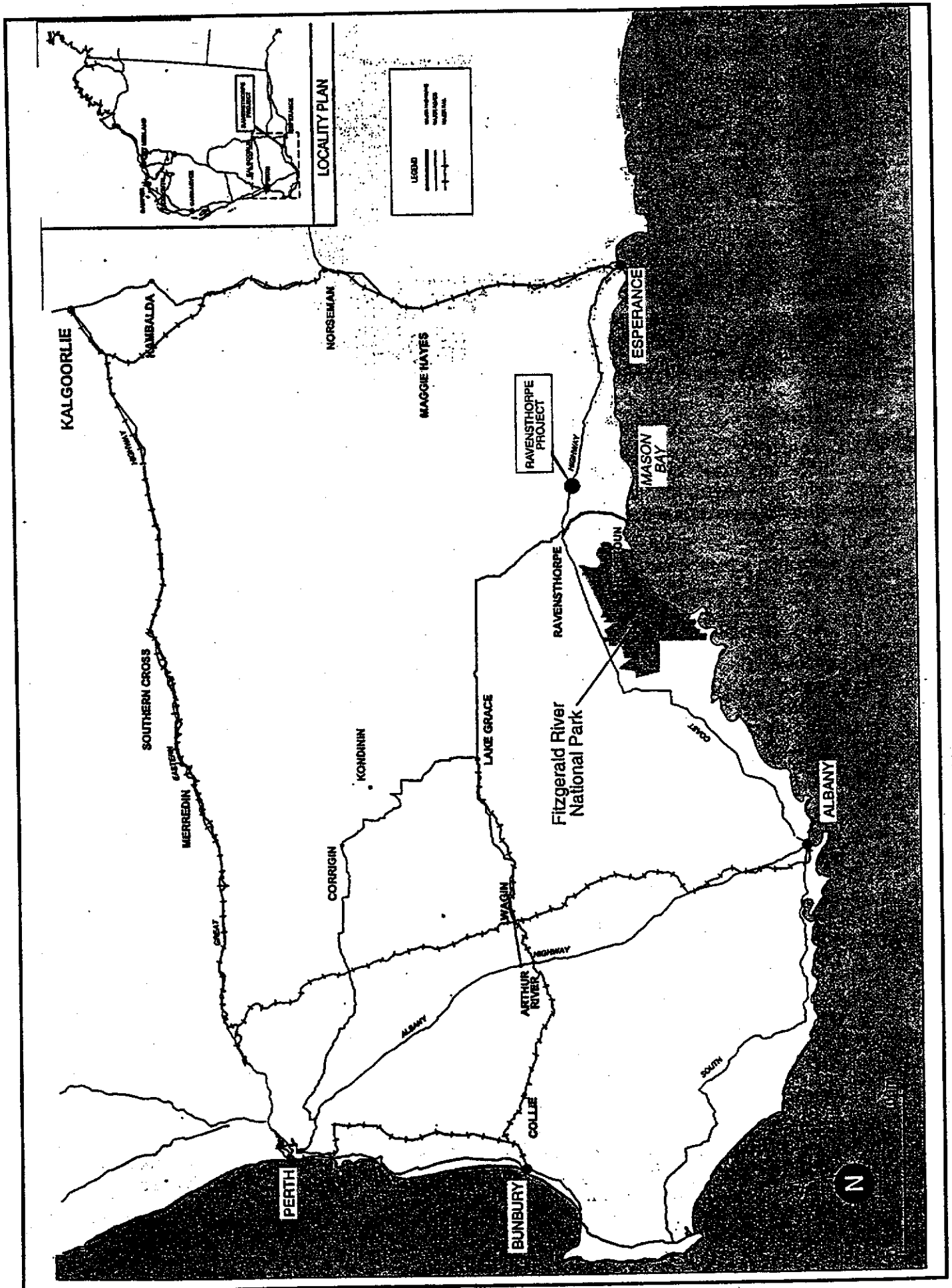


Figure 1. Location plan (Source: Kaiser Simons Joint Venture, 1998).

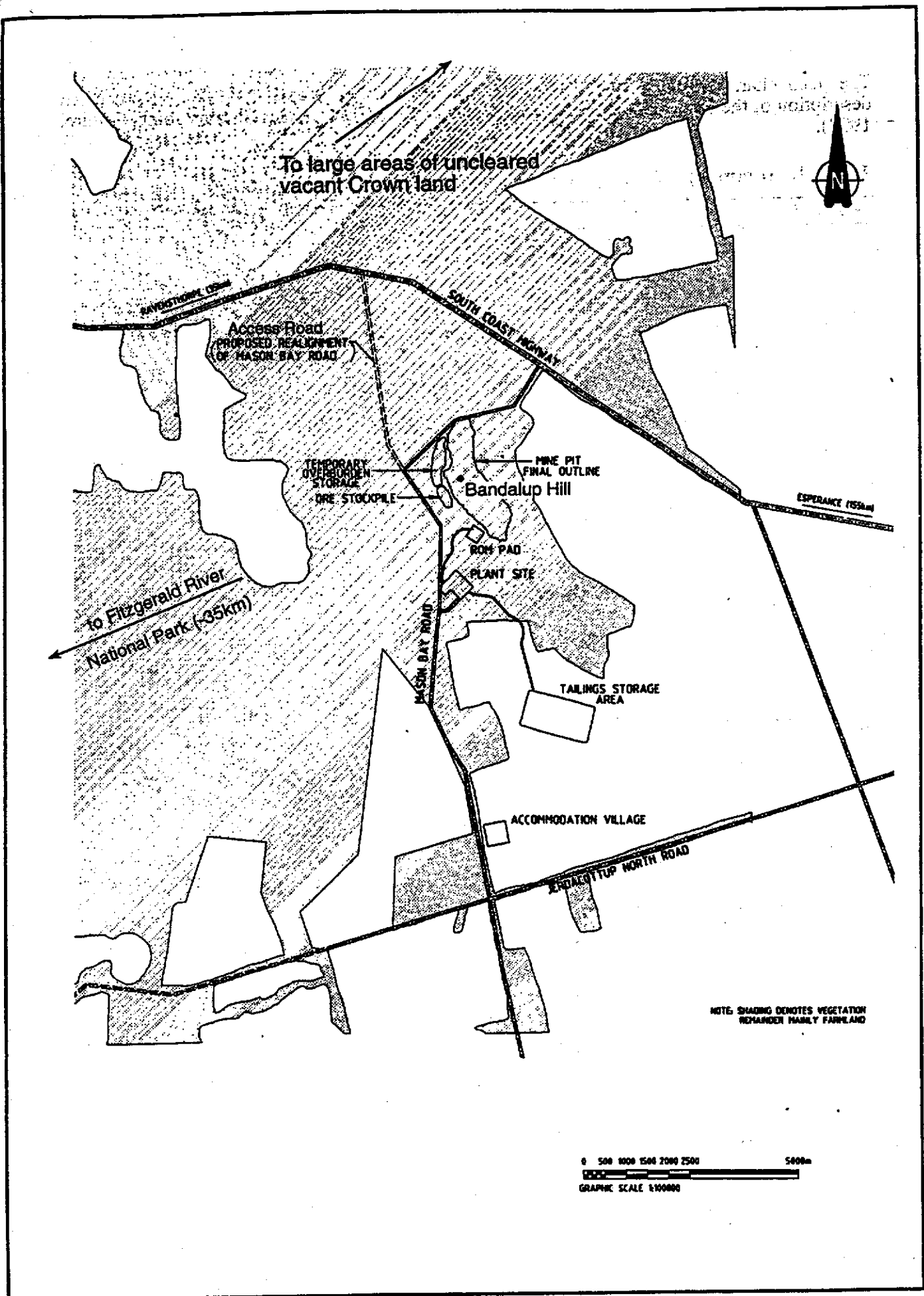


Figure 2. Project layout (Source: Comet Resources NL).

**Proponent's Consolidated Environmental Management  
Commitments**

March 1998

**RAVENSTHORPE NICKEL PROJECT  
BANDALUP HILL  
SHIRE OF RAVENSTHORPE (1199)**

Comet Resources NL

**RAVENSTHORPE NICKEL PROJECT, BANDALUP HILL (1199)  
SUMMARY OF PROPONENT'S COMMITMENTS**

Environmental Factor	Commitments (The No. refers to the Commitment No. listed in the main text of the report)		Objectives	Timing (phase)	Regulatory Agencies	Compliance Criteria Environmental Protection Act, 1986, plus the following:
	No.	Description				
Management Plan	1	The proponent will develop and implement an Environmental Management Plan (EMP) as part of an Environmental Management System complying with the principles of the ISO 14000 series. The EMP will be developed in consultation with the DEP and DME and other regulatory authorities. In the following two stages: 1. Project Construction EMP; to be submitted for DEP endorsement before the start of construction 2. Project Operation EMP; to be submitted for DEP endorsement before project commissioning The EMP will be reviewed and continuously improved. The EMP will incorporate procedures that will ensure fulfillment of the following Commitments, Nos. 2 to 38. Prohibit unauthorised clearance of terrestrial flora and vegetation, particularly old growth vegetation and rare or priority classified flora.	Implement and maintain an approved EMP in order to: - comply with Commonwealth environmental policies - achieve the goals of protection of the environment, public and workforce.	Develop Construction EMP during design, implement before site works commence (early to mid 1998). Develop Operation EMP during construction, implement before project commissioning (mid 2001). Continuous review, improvement will be key principle of Operation EMP throughout project life.	Develop both EMPs in consultation with DEP, DME, CALM, WRCC. Receive approval by DEP and DME.	ISO 14000 series
Terrestrial Flora  refer also Commitment 38 re flora protection on proposed Access Road alignment	2 3 4	The EMP will be reviewed and continuously improved. The EMP will incorporate procedures that will ensure fulfillment of the following Commitments, Nos. 2 to 38. Prohibit unauthorised clearance of terrestrial flora and vegetation, particularly old growth vegetation and rare or priority classified flora.	Maintain the abundance, species diversity, geographic distribution and productivity of vegetation communities.	Exploration, development, construction, operation and decommissioning of all project facilities and infrastructure	CALM DEP	Wildlife Conservation Act 1950
	5	Develop and operate a debark management plan in consultation with CALM	Protect Declared Rare and Priority Flora, consistent with the provisions of the Wildlife Conservation Act 1950. Avoid introduction or spread of disease.			
	6 7	Encourage the establishment of priority species in rehabilitation areas Develop and implement procedures, within the Environmental Management Plan for the construction and operation of the project, to avoid unnecessary disturbance to terrestrial flora and vegetation, particularly old growth vegetation and rare or priority-classified flora. During the course of mining and backfilling the Hellyer deposit over 15 years, the proponent will monitor the success of the revegetation of priority species in the mine topsoil reclamation and backfilling program. During the period prior to mining other areas not the subject of the current CER, the proponent will be required to complete further site flora surveys. The proponent would also undertake further regional work to ascertain regional populations where necessary. Should it become evident that regeneration was not successful within the backfilling program and that regional populations did not exist to reduce the impact of site disturbance, then the proponent would undertake to fund seed collection and specific research aimed at maintaining the species.	Maintain the abundance, species diversity and geographic distribution of terrestrial fauna. Protect Specially Protected (Threatened) Fauna consistent with the provisions of the Wildlife Conservation Act 1950			
Terrestrial Fauna	11 12	Prohibit unauthorised activities that may impact upon terrestrial fauna and their habitats. EMP procedures will address early revegetation of cleared land, prohibition of pits and firearms, restricted vehicle access to bush areas, sponsorship of Weiborn Shield program, prompt and correct disposal of punishable waste to discourage vermin.	Maintain the abundance, species diversity and geographic distribution of terrestrial fauna. Protect Specially Protected (Threatened) Fauna consistent with the provisions of the Wildlife Conservation Act 1950			
Marine Flora and Fauna	13 14	Develop and implement procedures within the EMP to avoid unnecessary disturbance to marine flora and fauna, and to design facilities accordingly. Undertake thorough investigation, to the satisfaction of the DEP, into the possible impacts of seawater abstraction and brine discharge before proceeding with development of either of these schemes.	Maintain the ecological function, abundance, species diversity and geographic distribution of marine flora. Maintain the abundance, species diversity and geographic distribution of marine fauna	Construction and operation of seawater intake and return brine pipelines	DEP	
Watercourses, Including Surface Water Quality	15 16 17	Prohibit unauthorised activities that could impact on the hydraulic function of the drainage system or the downstream water quality. Implement a change monitoring programme to assess any impacts on vegetation arising from unavoidable changes to the drainage regime; development and operation of the monitoring programme will be undertaken in consultation with the DEP and WRCC. Incorporate holding basins within the site drainage system to arrest and assess possibly contaminated run-off before release to the environment.	Maintain the integrity, functions and environmental values of watercourses Maintain or improve the quality of surface water to ensure that existing and potential uses, including ecosystem maintenance, are protected.	Exploration, development, construction, operation and decommissioning of all project facilities and infrastructure	Water and Rivers Commission DEP	Draft WA Water Quality Guidelines for Fresh and Marine Waters (EPA, 1993) NHARC/ARMCANZ Australian Drinking Water Quality Guidelines - National Water Quality Management Strategy
Landform, Including Visual Amenity and Rehabilitation	18	Prohibit unauthorised disturbance to landforms and introduction of visual impact to areas not required for mining, processing or infrastructure development.	Establish stable and sustainable landform consistent with surroundings.	Development, construction, operation and decommissioning of all project facilities and infrastructure	DME CALM State of Ravensthorpe DEP	Guidelines for Mining in Arid Areas, DME Environmental Management of Quarries: Development, Operation and Rehabilitation Guidelines, DME

Environmental Factor	Commitments (The No. refers to the Commitment No. stated in the main text of the report)		Objectives	Timing (phase)	Regulatory Agencies	Compliance Criteria Environmental Protection Act, 1986, plus the following:	
	No.	Description					
Groundwater Quality including Groundwater Quality	19	Develop a reclamation programme designed to restore disturbed areas to stable, self-sustaining conditions that are consistent with the desired post-mining land-use objectives.	Rehabilitate impacted areas to an acceptable standard which will integrate the post-mining landform with the surrounding environment	Programme will be developed during design stage; implemented before site works commence; maintained/reviewed/improved through all phases of project, up to and including decommissioning.			
	20	Comply with all regulations pertaining to groundwater exploration, development and abstraction, including seeking the approval of the EPA and the WRC.	Maintain the quantity of groundwater so that existing and potential uses, including ecosystem maintenance, are protected	Exploration, development, construction, operation and decommissioning of all project facilities and infrastructure	Water and Rivers Commission DEP	Draft WA Water Quality Guidelines for Fresh and Marine Waters (EPA, 1983) Guidelines on the Safe Design and Operating Standards for Tailings Storages, DME Water and Rivers Commission Act, 1985	
	21	Include the DME during the design, construction and operation of the tailings storage facility (TSF) to ensure its compliance with all relevant regulations.	Ensure that the beneficial uses of groundwater can be maintained, consistent with the draft WA Guidelines for Fresh and Marine Waters (EPA, 1983).				
	22	Install and routinely sample and groundwater monitoring bores down-hydraulic-gradient of the TSF.					
	23	Install and routinely sample and record water levels in groundwater monitoring bores down-hydraulic-gradient of any groundwater abstraction bores; prepare annual monitoring report for WRC review and approval.					
Odour	24	Arrange for air-dispersion modelling to be undertaken following detailed design of the hydrogen sulphide plant, to confirm that odour impacts are below the draft Queensland criteria at odour-sensitive premises.	Odours emanating from the proposed development should not adversely affect the welfare and amenity of other land users.	Operation of process facilities	DEP	Queensland Department of Environment and Heritage, 1994, "Policy for Odours from New Developments", in the absence of equivalent WA Criteria. IDGLC OU = 2.5 O&I Criteria are referenced in Table 4 of draft DEP (WA) paper "Determination of Acceptable Air Discharges from Stationary Sources, 1987".	
	25	Seek world's best practice in the detection and control of hydrogen sulphide and prepare and implement an emergency response plan to address any possibility of malfunction that could result in the release of hydrogen sulphide to the atmosphere.					
Dust and Particulates	26	Prepare and implement a dust management plan based on advice from the DME and DEP. The plan will include ambient monitoring proposals to verify that dust levels comply with the relevant standards or guidelines.	To ensure that the dust levels generated by the project do not adversely impact upon welfare and amenity of cause health problems, by meeting statutory requirements and acceptable standards.	Construction and operation, especially during blasting and mining	DEP	Draft National Environment Protection Measure and Impact Statement for Ambient Air Quality for alternative agreed with EPA, with compliance levels established in conjunction with DEP/EPA	
	27	Establish an on-site meteorological station for the purpose of collecting data suitable for detailed air dispersion modelling at the plant site, for emission concentration predictions.	To ensure that all reasonable and practicable measures are taken, in accordance with the Environmental Protection Act 1986, to minimise the discharge of SO <sub>2</sub> (sulphur dioxide) and NO <sub>x</sub> (nitric oxide, nitrogen dioxide etc.) gases	Operation of process facilities and infrastructure	DEP	Air quality standards and limits stated in the Queensland Environmental Protection (Atmospheric) Policy Draft National Environment Protection Measure and Impact Statement for Ambient Air Quality National guidelines for control of emission of air pollutants from new stationary sources. Aust. Env. Council/NIH/MRC	
Greenhouse Gases	28	To conduct detailed dispersion modelling of SO <sub>2</sub> , NO <sub>x</sub> and any other significant emissions using collected meteorological data and final plant design data.					
	29	The results from the modelling, demonstrating compliance with the relevant standards or guidelines, will be submitted to the DEP when applying for a works approval under the Environmental Protection Act.					
Greenhouse Gases	30	Ensure that equipment and processes used for the project are energy efficient. Measures that will be pursued include: - investigating natural gas as the principle energy source for the project; - a purchasing policy which prefers energy-efficient equipment; - minimising clearing of vegetation; - progressive revegetation; - investigating the use of alternative and renewable energy sources; - energy monitoring and information systems; - energy assessments and waste minimisation training. The proponent will join the Commonwealth's Greenhouse Challenge Programme prior to commissioning.	To ensure that greenhouse gas emissions meet acceptable standards and requirements of the Environmental Protection Act 1986, using all reasonable and practicable measures to minimise greenhouse gas discharge	Operation of process facilities and infrastructure	DEP	Guidance for the Assessment of Environmental Factors: Minimising Greenhouse Gas Emissions, No. 32, Preliminary guidance, EPA, 1988	
	31						
Solid Waste	32	Monitor all liquid waste streams and leachates from solid waste storages which have the potential to impact groundwater or surface water quality.	To ensure that wastes are contained and isolated from groundwater and surface surrounds.	Construction, operation and decommissioning of all project facilities and infrastructure	DME DEP	DEP Code of Practice for Country Landfill Management Guidelines on the Safe Design and Operating Standards for Tailings Storages, DME	
	33	Install systems and procedures to ensure containment of any uncontrollably contaminated waste stream before its release into the environment.					
Noise	34	Manage project-related noise levels within the acceptable limits stated by the Environmental Protection (Noise) Regulations, 1987, and oblige all contractors to comply with this undertaking.	To protect the amenity of nearby residents from noise impacts resulting from activities associated with the proposal, by ensuring that noise levels meet statutory requirements and acceptable standards. The relevant statutory requirements and standards are understood to be those listed in the Environmental	Construction and operation, especially during blasting and mining	DME DEP	Environmental Protection (Noise) Regulations, 1987 Part 7 of the Mines Safety and Inspection Act 1985	
	35	Respond to any complaints from the local community regarding project-related noise levels, and rectify them if investigations show them to be unacceptable.					

Environmental Factor	Commitments (The No. refers to the Commitment No. stated in the main text of the report)		Objectives	Timing (phase)	Regulatory Agencies	Compliance Criteria Environmental Protection Act, 1986, plus the following:
	No.	Description				
Public Health and Safety	35	Develop and implement a Hazardous Substances Management Programme (HSMP) and a Hazard and Operability Study (HAZOPS).	Protection (Noise) Regulations, 1997, published by the DEP, and the workforce safety requirements. Ensure that risk is managed to meet the EPA's criteria for individual fatality risk offsets and the DME's requirements in respect of public safety. Ensure that roads are maintained or improved and road traffic managed to meet an adequate standard of level of service and safety and MRWA requirements.	Construction and operation of all project facilities and infrastructure	DME	Explosives and Dangerous Goods Act, 1981 Dangerous Goods Regulations, 1992
Heritage	37	Undertake awareness training of all the workforce in regard to the significance of Aboriginal and non-Indigenous heritage and the identification and requirement to report any such indications.	Ensure that the proposal complies with the requirements of the Aboriginal Heritage Act 1972 Ensure that changes to the biological and physical environment resulting from the project do not adversely affect cultural associations with the area. Comply with statutory requirements in relation to areas of cultural or historical significance.	Construction and operation of all project facilities and infrastructure	Aboriginal Affairs Department Australian Heritage Commission	Aboriginal Heritage Act 1972
Access Road	38	The detailed access road alignment, within the boxed outline provided in the CER report (July 1998) and the Response to Public Review report (November 1998), will be prepared in consultation with CALM and the DEP prior to construction of the access road. A detailed flora survey of the route will be carried out as one of the considerations when selecting the alignment.	Protect Declared Rare and Priority Flora, consistent with the provisions of the Wildlife Conservation Act 1950.	During selection of road alignment, prior to detailed road design.	CALM DEP	Wildlife Conservation Act 1950

Abbreviations:

CALM  
DEP  
DGLC  
DME  
EIMP  
EPA  
FRNP  
Department of Conservation and Land Management  
Department of Environmental Protection  
design ground level concentration  
Department of Minerals and Energy  
Environmental Management Plan  
Environmental Protection Authority  
Fitzgerald River National Park

MRWA  
NEPC  
OU  
SC  
TSF  
WRC

Main Roads, Western Australia  
National Environment Protection Council  
odour unit  
South Coast (Highway)  
tailings storage facility  
Water and Rivers Commission