Hon Mark McGowan MLA
Minister for Environment;
Racing and Gaming

197 St Georges Terrace, Perth WESTERN AUSTRALIA 6000
Telephone: (+61 8) 9222 9111 Facsimile: (+61 8) 9222 9410
Email: mark-mcgowan@dpc.wa.gov.au • Website: www.ministers.wa.gov.au/mcgowan/

Statement No.

000715

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

KOOLAN ISLAND IRON ORE MINE AND PORT FACILITY
SHIRE OF DERBY-WEST KIMBERLEY

Proposal:	Re-opening of an iron ore mine; construction of associated infrastructure and a port facility on Koolan Island; and subsequent rehabilitation and decommissioning of the site, as documented in schedule 1 of this statement.
Proponent:	Aztec Resources Limited
Proponent Address:	6 King's Park Road, WEST PERTH WA 6005
Assessment Number:	1605

Report of the Environmental Protection Authority: Bulletin 1203

The proposal referred to above may be implemented by the proponent 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 implement the environmental management commitments documented in schedule 2 of this statement.

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22 FEB 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 addresses:

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 programmes.

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 following the formal authority issued to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986*, 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 implementing 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 practicable measures available;

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 four years, including improvements in technology and management processes.

5-3 The proponent may submit a report prepared by an independent auditor to the Chief Executive Officer of the Department of Environment on each condition and commitment of this statement which requires the preparation of a management plan, programme, strategy or system, stating whether the requirements of each condition and commitment have been fulfilled within the timeframe stated within each condition and commitment.

6 Closure

6-1 Within 12 months following the formal authority issued to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986*, the proponent shall prepare a Closure Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Department of Conservation and Land Management and the Department of Industry and Resources.

The objectives of this Plan are to manage the environmental impacts that arise from the implementation of the proposal to:

- identify those areas of Koolan Island that have been impacted by previous mining activities;
- achieve construction of landforms which are stable, non-polluting and aesthetically compatible with the surrounding natural landscape;
- establish sustainable endemic vegetation communities, consistent with the natural ecosystems of Koolan Island; and
- ensure that closure planning and rehabilitation are carried out in a coordinated, progressive manner and are integrated with development planning, consistent with current best practice, and the agreed end land use.

This Plan shall set out procedures to:

1. manage the ground and surface water systems affected by the implementation of the proposal to ensure that there are no long-term impacts;
2. ensure that the areas in the marine environment impacted by the implementation of the proposal display similar floral, faunal and benthic habitat diversity, health and water quality as surrounding marine ecosystems following rehabilitation;
3. rehabilitate all areas disturbed by the implementation of the proposal to a standard suitable for the agreed end land use(s), with
    - consideration of the characteristics of the pre-mining ecosystems within Koolan Island (through research and baseline surveys); and
    - incorporation of best practice rehabilitation techniques, including topsoil management, used elsewhere in the mining industry;
4. identify completion criteria, which ensure that there is adequate rehabilitation of the landforms disturbed during implementation of the proposal and that appropriate species are used in rehabilitation;
5. monitor rehabilitation to assess the performance of all rehabilitated areas against the completion criteria;
6. report on the rehabilitation and monitoring results;

7. identify and manage any contaminated material, soil or sediment caused by or disturbed during the implementation of the proposal; and

8. develop management strategies and/or contingency measures in the event that operational experience and/or monitoring indicate that a closure objective is unlikely to be achieved.

6-2 The proponent shall review and revise the Closure Plan required by condition 6-1 at intervals not exceeding four years to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Department of Conservation and Land Management and the Department of Industry and Resources.

6-3 The proponent shall implement the Closure Plan required by condition 6-1 and subsequent revisions required by condition 6-2.

6-4 The proponent shall make the Closure Plan required by condition 6-1 and subsequent revisions required by condition 6-2 publicly available.

7 Marine Environment

7-1 Prior to the commencement of activities which may affect the marine environment, the proponent shall prepare a Marine Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Department of Conservation and Land Management and the Department of Fisheries.

The objectives of this Plan are to manage the impacts on the marine environment that arise from the implementation of the proposal to:

- maintain the ecological integrity and biodiversity of the marine environment;
- avoid impacts that arise from the implementation of the proposal on the coral pool community at Mangrove Inlet; and
- manage project activities to ensure that impacts on marine habitats, communities and biota outside the project footprint are avoided.

This Plan shall set out procedures to:

1. identify the potential direct and indirect impacts on the marine environment arising from all phases of project activities;

2. minimise the disturbance footprint of the seawall and the revetment structure;

3. identify the cause and effect pathways associated with the potential impacts identified in point 1 above;

4. spatially and temporally define the zones of direct and indirect impact on sediment and water quality and benthic habitat health caused by the implementation of the

proposal, as well as the boundary of the zone beyond which the marine environment will be protected;

5. minimise the sediment movement from waves, tidal currents and runoff during construction of the seawall through construction techniques and use of a sediment curtain;

6. manage the direct and indirect impacts, identified in point 1 above, on sediment and water quality and benthic habitat health, including the use of geotextile materials;

7. analyse the quality of the water to be discharged from dewatering of the Main Pit;

8. spatially and temporally define the mixing zones where water will be discharged to the marine environment;

9. manage impacts associated with dewatering discharge to the marine environment;

10. manage stormwater to minimise sediment impacts on the marine environment that arise from the implementation of the proposal;

11. establish suitable reference sites from which to collect data for sediment and water quality and benthic habitat health indicators and derive site-specific environmental quality criteria for the direct and indirect impact zones;

12. develop a marine environmental quality monitoring programme, which incorporates:

    (1) scale maps showing the locations of each monitoring site and reference site;

    (2) the rationale for the selection of the monitoring and reference sites;

    (3) procedures for routine monitoring of sediment and water quality and benthic habitat health during the life of the mine;

    (4) the environmental quality criteria for triggering pre-determined management action(s) and where necessary the rationale for their derivation;

    (5) methodologies for evaluating data collected at the monitoring and reference sites against the environmental quality criteria; and

    (6) the pre-determined adaptive management actions which will be implemented in the event that environmental quality criteria are not being achieved;

13. carry out a baseline survey and regular ongoing surveys for introduced marine pests;

14. develop a spill contingency plan;

15. restore or rehabilitate the marine environment, where impacts arising from the implementation of the proposal have occurred outside the identified indirect impact zone, during the life of the mine;

16. restore or rehabilitate the marine environment during the decommissioning phase to the extent that it is impacted by the implementation of the proposal, and ensure that there is no net loss of benthic primary producer habitats and where practicable generate a net gain in the area of benthic primary producer habitat and/or their associated communities.

    Note: The relevant 'net loss' shall be determined by comparing the area of the benthic primary producer habitat and/or their associated communities that existed prior to the commencement of the implementation of the proposal to that which exists after the proposal is implemented.

17. ensure that construction of the seawall and port facility, blasting in the pits and shipping activity which occurs during the Humpback Whale migration period do not significantly impact on the whales during the life of the mine; and

18. undertake surveillance during the Humpback Whale migration period to avoid interference with the whales.

7-2 The proponent shall review and revise the Marine Management Plan required by condition 7-1 at intervals not exceeding four years.

7-3 The proponent shall implement the Marine Management Plan required by condition 7-1 and subsequent revisions required by condition 7-2.

7-4 The proponent shall make the Marine Management Plan required by condition 7-1 and subsequent revisions required by condition 7-2 publicly available.

8 Water

8-1 Prior to dewatering or groundwater abstraction, the proponent shall prepare a Water Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The objective of this Plan is to maintain the quality and quantity of water so that existing and potential environmental values, including ecosystem maintenance are protected.

This Plan shall set out procedures to:

1. complete a hydrogeological investigation to determine the current quantity and quality of the groundwater aquifers of Koolan Island;

2. model the current groundwater system and the short and long-term hydrogeological impacts of implementing the proposal;

3. develop a Water Operating Strategy, incorporating the results of the hydrogeological investigation and modelling, in consultation with the Water and Rivers Commission, that includes:

   (1) appropriate dewatering and discharge rates;

   (2) monitoring of groundwater abstraction and discharge;

   (3) monitoring of groundwater quality and quantity;

   (4) methods to maximise water efficiency; and

   (5) measures of dewatering to achieve target groundwater levels;

4. manage and minimise impacts on the groundwater aquifers arising from implementation of the proposal; and

5. report on the management actions and monitoring results.

8-2 The proponent shall review and revise the Water Management Plan required by condition 8-1 at intervals not exceeding two years.

8-3 The proponent shall implement the Water Management Plan required by condition 8-1 and subsequent revisions required by condition 8-2.

8-4 The proponent shall make the Water Management Plan required by condition 8-1 and subsequent revisions required by condition 8-2 publicly available.

9 Conservation of Significant Flora and Fauna

9-1 Prior to ground-disturbing activities, the proponent shall commence staged pre-land clearing surveys of the areas to be disturbed for conservation-significant flora and fauna species, particularly:

- *Phyllanthus aridus*;
- *Gymnanthera cunninghamii*;
- *Brachychiton xanthophyllus*;
- *Corymbia* aff. *cadophera*;
- *Eucalyptus kenneallyi*;
- *Ramphotyphlops yampiensis* (Blind Snake);
- *Erythrotriorchis radiatus* (Red Goshawk);
- *Dasyurus hallucatus* (Northern Quoll);
- *Macroderma gigas* (Ghost Bat);
- *Rhinonicteris aurantius* (Orange Leaf-nosed Bat);
- *Hipposideros stenotis* (Northern Leaf-nosed Bat); and
- short range endemic invertebrate fauna, including the land snails *Kimboraga koolanensis* and *Amplirhagada astuta*.

The summary report of the results of the staged pre-land clearing surveys shall be provided to the Environmental Protection Authority and the Department of Conservation and Land Management within two weeks of becoming available.

9-2 Prior to ground-disturbing activities in a particular staged area to be cleared, the proponent shall prepare a Significant Species Management Plan for conservation-significant flora or fauna species recorded during the staged pre-land clearing surveys required by condition 9-1, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Department of Conservation and Land Management and the Western Australian Museum.

The objective of this Plan is to maintain the abundance, diversity, geographic distribution, conservation status and productivity of flora and fauna at species and ecosystem levels through the avoidance or management of adverse impacts and improvement in knowledge.

This Plan shall describe the significant, identified species of flora and fauna, and describe significant vegetation associations and habitat areas, and shall set out procedures to:

1. demarcate identified populations and/or individuals of conservation-significant species of flora and fauna, vegetation associations and habitat areas;

2. modify land clearing plans and evaluate alternative mine plans, to minimise or avoid impacts on the conservation-significant, identified species of flora and fauna, vegetation associations and habitat areas;

3. minimise impacts where proposed mining activities are likely to impact on conservation-significant, identified species of flora and fauna, vegetation associations and habitat areas;

4. monitor and record impacts on conservation-significant, identified species of flora and fauna, vegetation associations and habitat areas; and

5. implement appropriate contingency measures where impacts on conservation-significant, identified species of flora and fauna, vegetation associations and habitat areas are identified.

9-3 The proponent shall review and revise the Significant Species Management Plan required by condition 9-2 at intervals not exceeding four years.

9-4 The proponent shall implement the Significant Species Management Plan required by condition 9-2 and subsequent revisions required by condition 9-3.

9-5 The proponent shall make the Significant Species Management Plan required by condition 9-2 and subsequent revisions required by condition 9-3 publicly available.

10 Subterranean Fauna

10-1 Within six months following the formal authority issued to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986*, the proponent shall commence surveys for subterranean fauna in accordance with a Subterranean Fauna Survey Programme to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

This Programme shall set out procedures to:

1. survey areas affected by project operations for subterranean fauna; and

2. survey areas with similar habitats outside the areas to be affected by project operations to establish the conservation significance of subterranean fauna within the areas to be affected.

10-2 In the event that subterranean fauna have been identified, in meeting the requirements of condition 10-1, the proponent shall prepare a Subterranean Fauna Management Plan prior to any dewatering or groundwater abstraction, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

The objective of this Plan is to maintain the abundance, diversity, geographic distribution and productivity of subterranean fauna at species and ecosystem levels through the avoidance or management of adverse impacts and through improvements in knowledge.

This Plan shall set out procedures to:

1. avoid and/or manage impacts on subterranean fauna species and communities and their habitats where the long-term survival of those species and/or communities may be at risk as a result of project operations;

2. monitor the distribution and abundance of subterranean species and communities, particularly those identified by the surveys required by condition 10-1 as being at risk of loss as a result of project operations;

3. monitor the groundwater levels, groundwater quality and other relevant aspects of subterranean fauna habitat;

4. take timely remedial action in the event that monitoring indicates that project operations may compromise the long-term survival of subterranean fauna species and/or communities; and

5. report on the survey results and management actions.

10-3 The proponent shall review and revise the Subterranean Fauna Management Plan required by condition 10-2 at intervals not exceeding four years.

10-4 The proponent shall implement the Subterranean Fauna Management Plan required by condition 10-2 and subsequent revisions required by condition 10-3.

10-5 The proponent shall make the Subterranean Fauna Management Plan required by condition 10-2 and subsequent revisions required by condition 10-3 publicly available.

11 Quarantine

11-1 Prior to ground-disturbing activities, the proponent shall prepare a Quarantine Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Department of Conservation and Land Management and the Department of Agriculture.

The objectives of this Plan are to manage the environmental impacts concerning introduced flora and fauna species that arise from the implementation of the proposal to:

- prevent the spread of existing introduced flora and fauna species within Koolan Island and between the island and the mainland;
- prevent the further establishment of introduced flora and fauna species on Koolan Island as a result of the implementation of the proposal; and
- control or eradicate introduced flora and fauna species on Koolan Island.

This Plan shall set out procedures to:

1. identify the location, approximate number and type of each weed species recorded within the project area during previous vegetation surveys, while having regard for weed species outside the project area;
2. undertake ongoing surveys for introduced fauna;
3. identify weeds of environmental significance in the project area as target weeds in collaboration with the Department of Conservation and Land Management;
4. map the presence of target weeds;
5. control or eradicate target weeds within the proposal area;
6. control or eradicate introduced fauna within the proposal area;
7. identify performance indicators for quarantine management;
8. monitor the distribution and success of weed control;
9. implement appropriate hygiene practices to prevent the establishment and spread of introduced flora and fauna;
10. monitor the success of quarantine management; and

11. report on the quarantine management actions and monitoring results.

11-2 The proponent shall review and revise the Quarantine Management Plan required by condition 11-1 at intervals not exceeding four years.

11-3 The proponent shall implement the Quarantine Management Plan required by condition 11-1 and subsequent revisions required by condition 11-2.

11-4 The proponent shall make the Quarantine Management Plan required by condition 11-1 and subsequent revisions required by condition 11-2 publicly available.

12 Potable Water Supply

12-1 The proponent shall ensure that the quality of groundwater to be used for potable supply is to the satisfaction of the Department of Health.

13 Contamination

13-1 Prior to ground-disturbing activities, the proponent shall prepare a Contamination Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

In this condition, 'contamination', has the same meaning as in section 4 of the *Contaminated Sites Act 2003.*

The objective of this Plan is to identify and manage contamination that may be disturbed by the implementation of the proposal to manage the risks to human health and the environment.

This Plan shall set out procedures to:

1. define the extent and nature of contamination within the project area that is likely to be disturbed by the implementation of the proposal;

2. where the contamination identified in point 1 above is posing a risk to human health and/or the environment, manage the identified contamination to an acceptable level, in liaison with the Department of Environment and Department of Health. ;

3. identify the timing schedule for management actions;

4. detail the site validation methods; and

5. develop contingency plans in the event that additional contamination is identified.

Note: Nothing within this condition removes any liability that the proponent may have in relation to contamination that may arise from the implementation of the proposal.

13-2 The proponent shall review and revise the Contamination Management Plan required by condition 13-1 at intervals not exceeding four years.

13-3 The proponent shall implement the Contamination Management Plan required by condition 13-1 and subsequent revisions required by condition 13-2.

13-4 The proponent shall make the Contamination Management Plan required by condition 13-1 and subsequent revisions required by condition 13-2 publicly available.

14 Asbestos

14-1 Prior to ground-disturbing activities, the proponent shall prepare an Asbestos Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Department of Health and the Commission for Occupational Safety and Health.

The objective of this Plan is to ensure that asbestos does not become airborne and represent an unacceptable risk to human health arising from the implementation of the proposal.

This Plan shall set out procedures to:

1. identify the extent and nature of asbestos within the project area that may present a risk to human health because of the implementation of the proposal;

2. manage the identified asbestos-contaminated material in liaison with the Department of Health and the Commission for Occupational Safety and Health;;

3. identify the timing schedule of management actions;

4. detail the site validation methods; and

5. develop contingency plans in the event that additional asbestos material is identified.

14-2 The proponent shall review and revise the Asbestos Management Plan required by condition 14-1 at intervals not exceeding four years.

14-3 The proponent shall implement the Asbestos Management Plan required by condition 14-1 and subsequent revisions required by condition 14-2.

14-4 The proponent shall make the Asbestos Management Plan required by condition 14-1 and subsequent revisions required by condition 14-2 publicly available.

Procedures

1. 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.

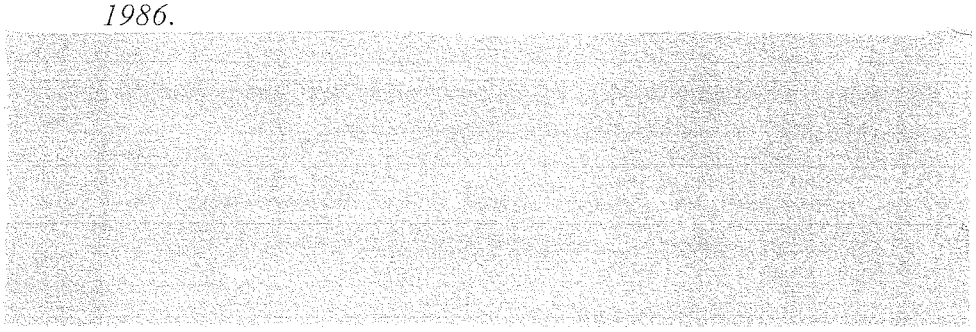
2. The Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environment.

3. 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

1. 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.

2. The proponent is required to apply for a Works Approval, Licence and/or Registration for this project under the provisions of Part V of the *Environmental Protection Act 1986*.



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

22 FEB 2006

Schedule 1

The Proposal (Assessment No. 1605)

The proposal involves the re-opening and expansion of previously mined ore bodies and the construction of associated infrastructure and a port facility on Koolan Island. Koolan Island is within the Buccaneer Archipelago, and is 130 kilometres northeast of Derby. The proponent has applied for mining leases 04/416 and 04/417 and miscellaneous licences 04/28, 04/29 and 04/47.

Significant features of the proposal are:

- construction of a seawall across Arbitration Cove to allow deepening of the Main Pit and prevent access of sea water, and construction of a revetment structure to stabilise the outer margins of the seawall (Figure 3);
- construction of a port facility at Mangrove Inlet (Figure 4), with a rock causeway, barge lay-down area, wharf and shiploader; and
- open cut mining of overburden and ore from the Main, Mullet and Eastern Pits.

The main components of the proposal are:

- placement of overburden in out-of-pit waste dumps;
- dewatering of the Main Pit;
- dewatering discharge to the sea;
- processing, stockpiling and ship loading of the ore;
- construction of the following infrastructure:
    - dry primary and secondary crushing and screening plant;
    - haul and access roads;
    - diesel-fuelled power station;
    - fuel storage facility;
    - conveyor system to transfer ore from the stockpiles to the shiploader;
    - accommodation village, administration offices and workshops; and
- decommissioning and rehabilitation of all disturbed areas.

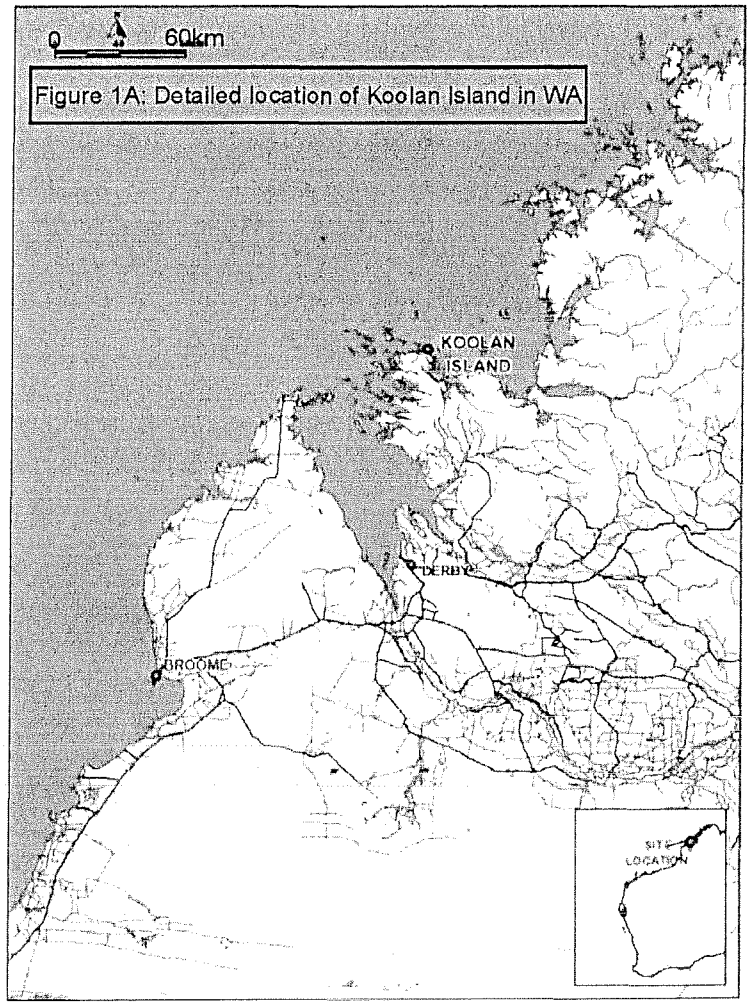
The summary of key proposal characteristics are shown in Table 1.

Figures (attached)

Figure 1 – Site location
Figure 2 – Site layout
Figure 3 – Seawall and revetment
Figure 4 – Port facility
Figure 5 – Identified contaminated sites

Table 1: Key Proposal Characteristics

Characteristic	Quantities / Description
Mining	
Project life	Approximately 9 years
Total resource and ore deposits	Approximately 29 million tonnes - Main Pit approximately 17.4 million tonnes - Mullet Pit approximately 6.3 million tonnes - Eastern Pit approximately 5.4 million tonnes
Mining rate	Approximately 2 to 4 million tonnes per annum
Current pit depths	Main Pit approximately 80 metres below sea level Mullet Pit approximately 50 metres below surface level Eastern Pit approximately 60 metres below surface level
Pit depths at closure	Main Pit approximately 165 metres below sea level Mullet Pit approximately 80 metres below surface level Eastern Pit approximately 115 metres below surface level
Stockpile of Run-of-Mine material	Approximately 100,000 tonnes over 10 hectares
Strip ratio (waste : ore)	6 : 1
Waste dump capacity	Approximately 124 million cubic metres over 280 hectares
Total disturbance area	Approximately 540 hectares (45% previously disturbed)
Dewatering of the Main Pit	
▪ Initial dewatering of approximately 7 million cubic metres of sea water at 300 litres per second ▪ Maintenance rate of approximately 50 to 150 litres per second ▪ Water abstracted from the dewatering process will be placed in a settling pond prior to discharge to the sea	
Processing and ship loading	
▪ Construction of a two-stage dry crushing and screening plant ▪ Construction of a shiploader ▪ Ore will be stockpiled, loaded onto conveyors and transferred to the shiploader	
Construction of a seawall at Arbitration Cove	
Reclamation of seabed	- Approximately 1.3 hectares for construction of a seawall across the reef flat - Approximately 1.1 hectares for construction of a rock revetment across the reef slope
Dimensions	Approximately 300 metres across Arbitration Cove, 75 metres wide and 15 metres high
Construction of a port facility at Mangrove Inlet	
▪ Approximately 2.3 hectares of the seabed will be reclaimed for the lay-down area and the rock causeway ▪ The shiploader will be located at the end of the wharf, which will extend approximately 75 metres from the rock causeway. The pile-supported wharf will then extend approximately 370 metres across the lower slope ▪ No dredging will be required	
Infrastructure required	
▪ Haul and access roads ▪ Three fuel storage facilities ▪ Workshops ▪ Bulk storage facility ▪ Bioremediation facility	▪ Accommodation village for approximately 200 people ▪ Diesel-fuelled two mega watt power station ▪ Minor landfill (inert and putrescible waste) ▪ Conveyor system ▪ Administration offices
Water use	
Extraction of approximately 75 kilolitres per day of fresh water from existing bores, for potable use.	



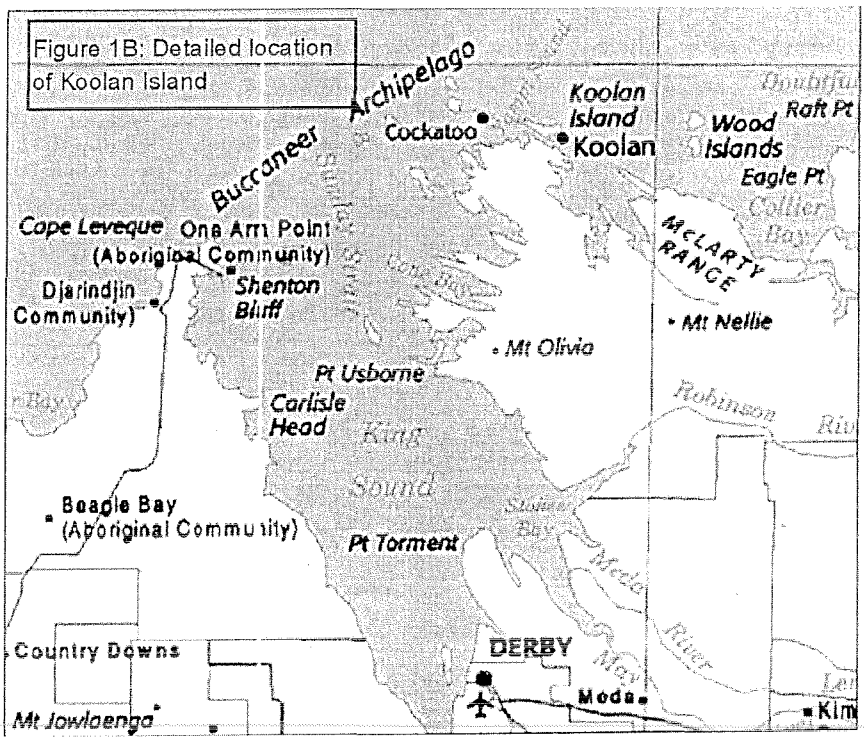


Figure 1: Site location

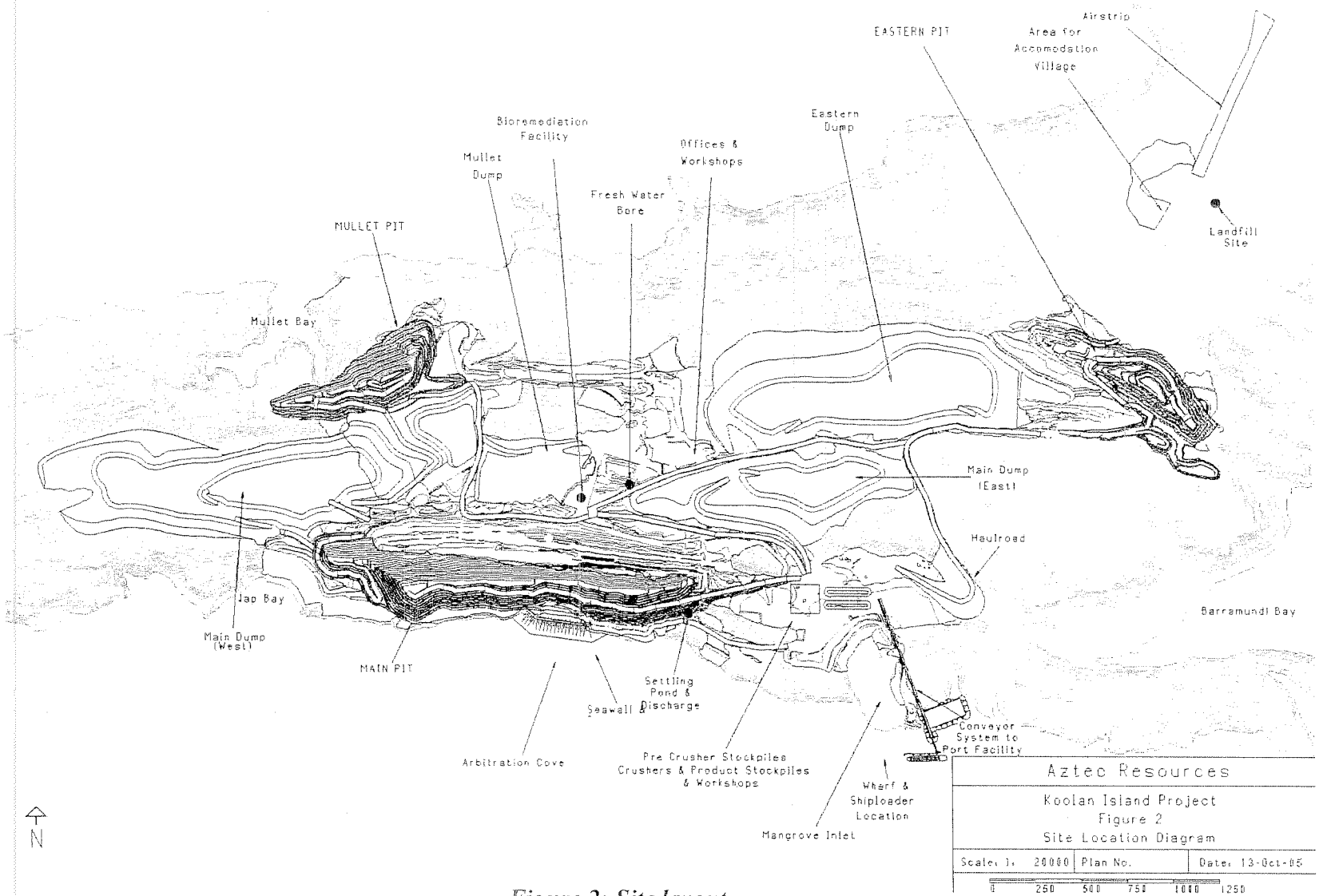


Figure 2: Site layout

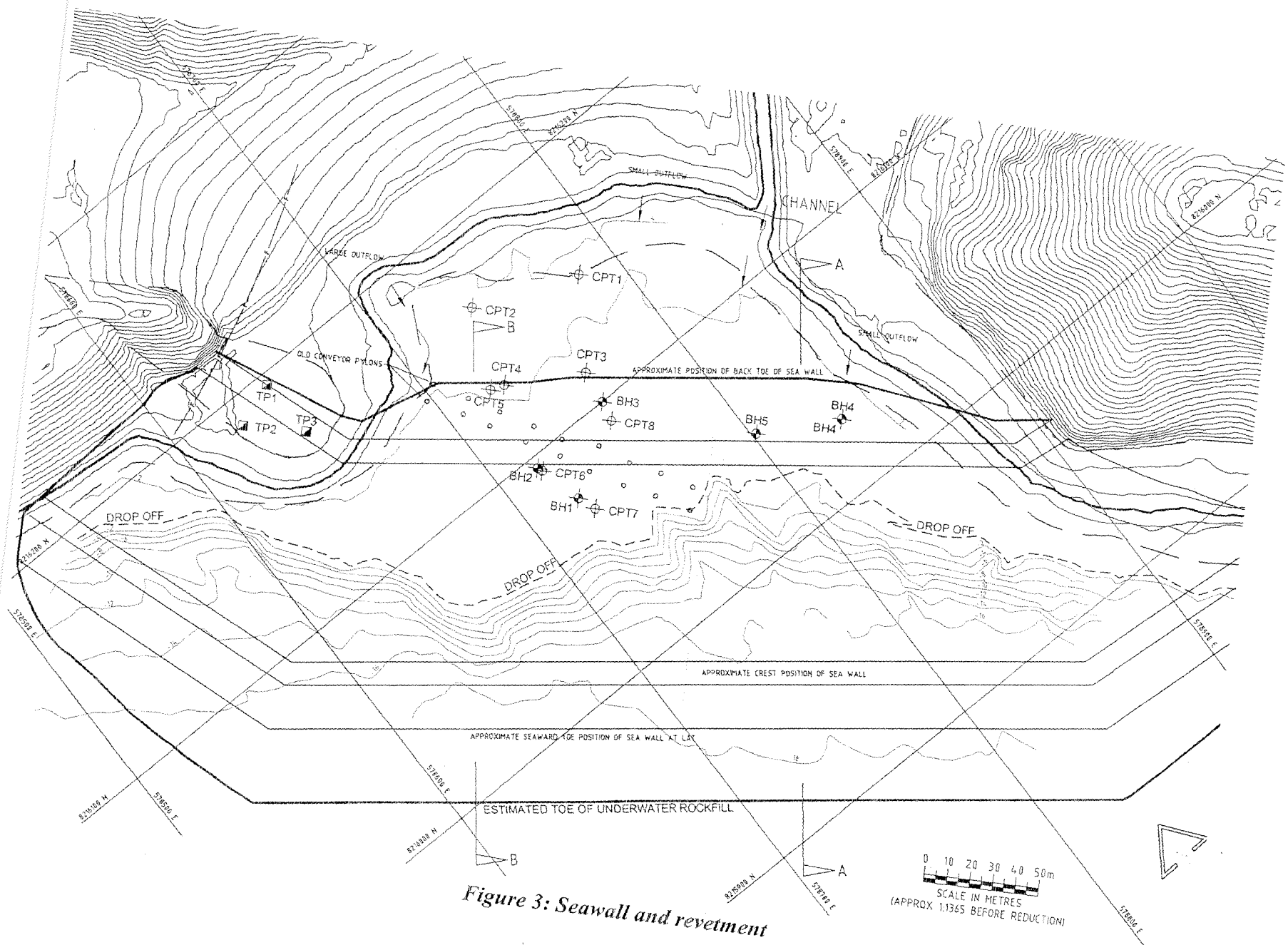


Figure 3: Seawall and revetment

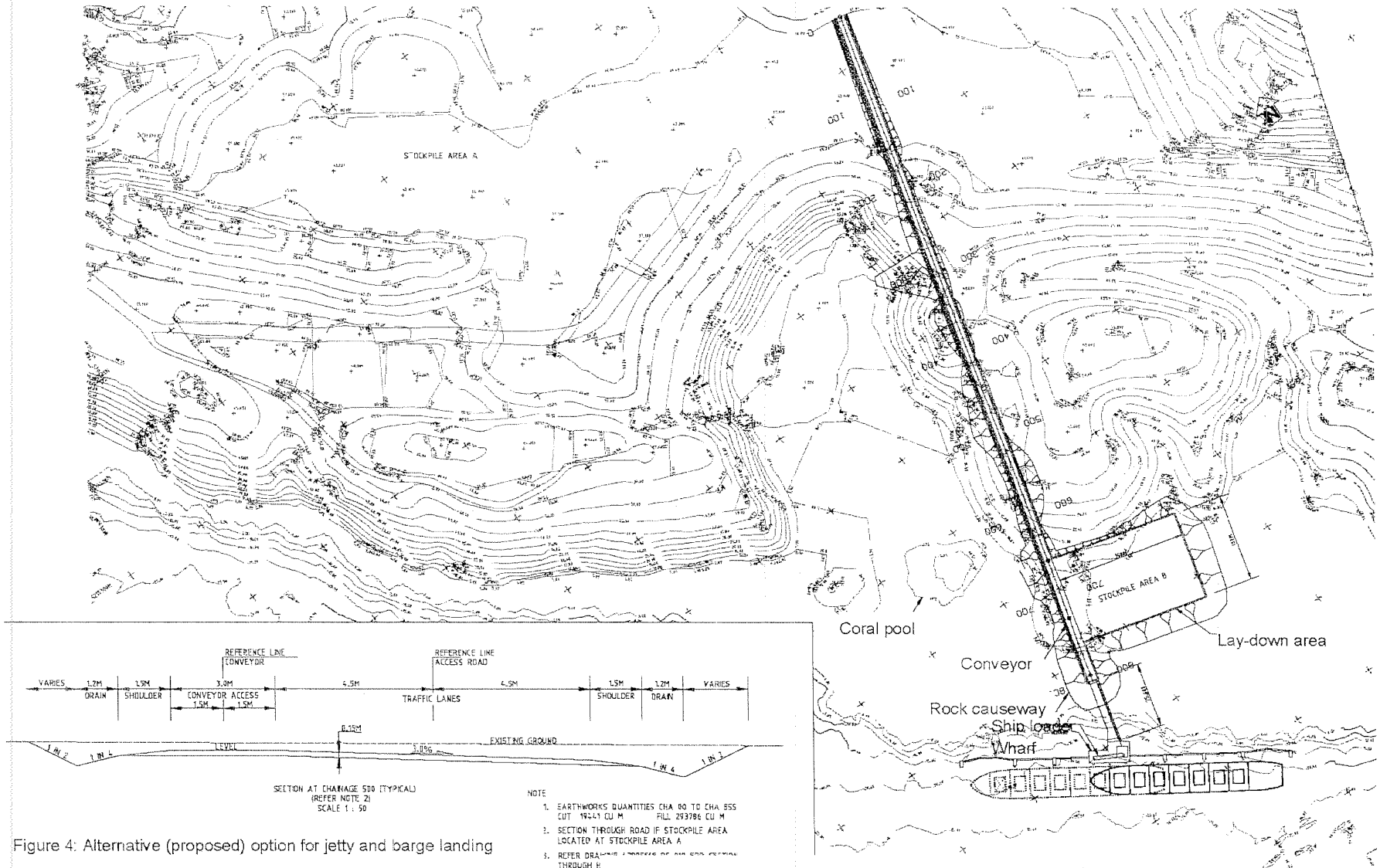
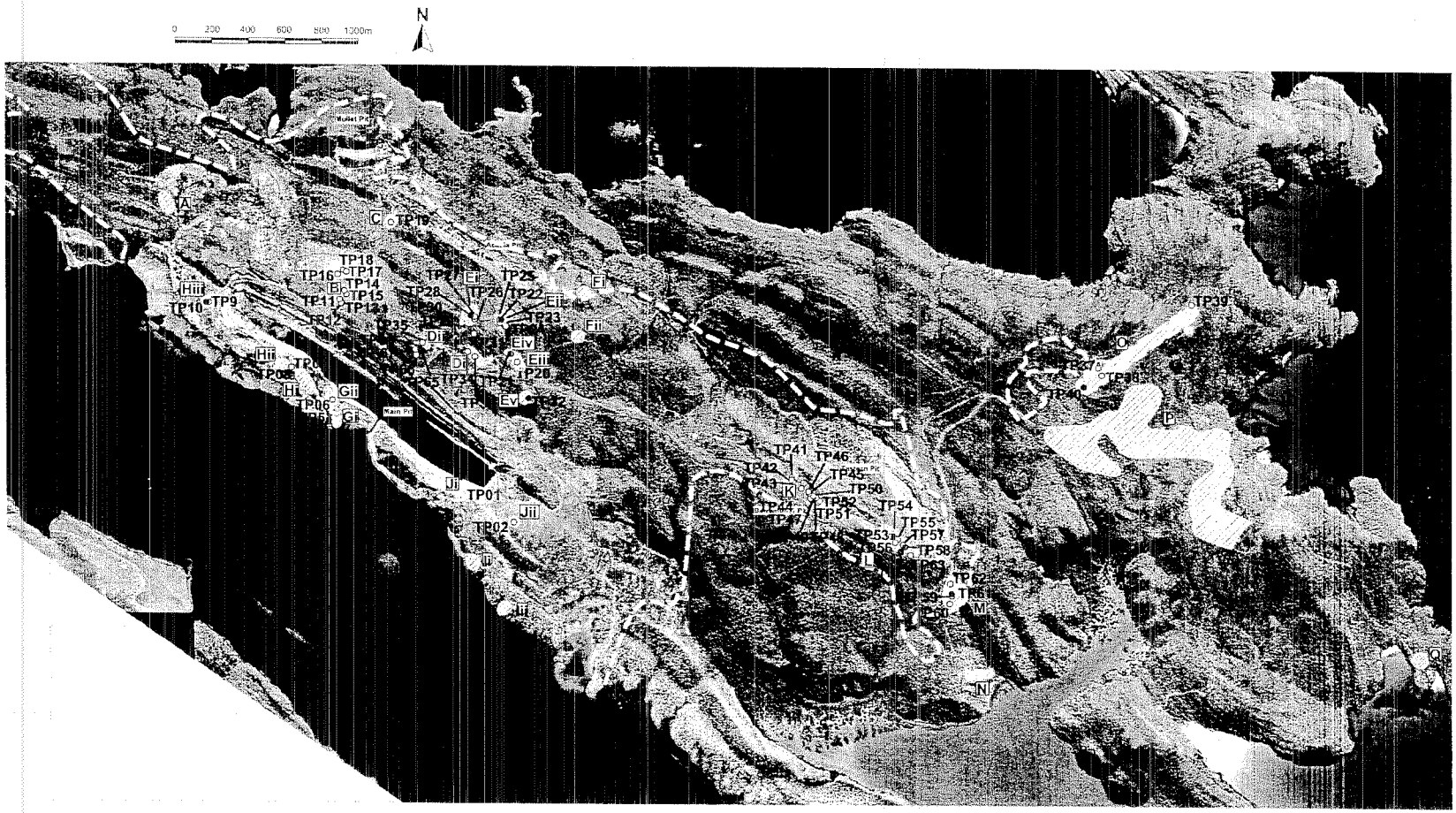


Figure 4: Alternative (proposed) option for jetty and barge landing

Figure 4: Port facility



KEY

	General expected extent of historical impact areas
TP01	Test Pit location with concentrations below investigation levels
TP36	Test Pit location with TPH impact above investigation levels
TP28	Test Pit location where asbestos was detected
TP21	Test Pit location with OC pesticide impact above investigation levels and where absestos was detected
TP56	Test Pit location with TPH and metal impacts above investigation levels

Figure 5: Identified contaminated sites

Schedule 2

Proponent's Environmental Management Commitments – November 2005
KOOLAN ISLAND IRON ORE MINE AND PORT FACILITY (Assessment No. 1605)

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 number;
- a commitment topic;
- the objective of the commitment;
- the 'action' to be undertaken by the proponent;
- the timing requirements of the commitment; and
- the agency to provide technical advice to the Department of Environment.

No	Topic	Objective	Action	Timing	Advice
1	Environmental Management Plan	Provide operational control documentation for the management of environmental impacts during construction and operation	Implement the Environmental Management Plan (October 2005) which addresses the management of key environmental aspects, including: 1. environmental training; 2. inspections and auditing; 3. Aboriginal heritage; 4. weed and pest management; 5. vegetation clearing and demarcation; 6. topsoil management; 7. borrow pits; 8. surface water; 9. hydrocarbon and chemical management and spills; 10. waste management; and 11. fire control. For each aspect, the objective, management measures, monitoring programme and reporting requirements shall be described.	Construction and operation	CALM
2	Environmental Management System	Provide a risk-based management system for the identification and control of impacts	Implement the Environmental Management System for the project which embraces the ISO 14001 standards.	All phases	-

No	Topic	Objective	Action	Timing	Advice
3	Offset	Contribute to sustainable development of the industry	1) Ameliorate previous impacts wherever feasible. 2) Contribute AUD$100,000 to CALM over a 3-year period for a suitable weed research program.	Life of mine	CALM
4	Groundwater	Maintain or improve the quality of groundwater to ensure that existing and potential uses, including ecosystem maintenance are protected, consistent with the Australian and New Zealand Water Quality Guidelines (ANZECC, 2000)	1) Use information from dewatering studies to develop appropriate plant design and management plans to prevent groundwater contamination and ensure that the marine environment (and associated commercial industries) is not effected by discharge of groundwater from pit dewatering. 2) Implement the plant designs and management plans.	Prior to dewatering or groundwater abstraction Construction and operation	-
5	Contaminated sites	To identify contamination, assess any associated risks to the environment and/or human health and remediate where necessary	1) Carry out additional investigations of previously identified contamination. 2) Develop and implement management plans to prevent mobilisation of contaminants and impacts on the environment and/or the health of personnel.	Pre-construction Construction and operation	DoH DoCEP
6	Short range endemic fauna	Maintain the abundance, diversity and geographic distribution of short range endemic fauna at species and ecosystem levels	1) Conduct targeted surveys for all land snail species (as an indicator of short range endemic fauna) to ascertain the distribution and habitats of land snails on the island. 2) Where impacts on short range endemic fauna of conservation significance are identified, prepare and implement species-specific management plans for those species.	Pre-constructionConstruction and operation	CALM
7	Landscape values	Manage and mitigate impacts on landscape values and maintain the integrity, ecological functions and environmental values of soil and landform	1) Consult with stakeholders to assess existing landform/landscape values and how these will be affected by the proposal. Note: Stakeholders include but are not restricted to Kimberley Environs, Dambimangari Native Title Claimants, Conservation Council, Wildflower Society, local government.	Life of mine	-
8	Consultation	To consult with relevant stakeholders	1) Consult with stakeholders during preparation of management plans and programmes required by conditions 6, 7, 8, 9, 10, 11, 13 and 14. 2) Deliver a presentation on the project operations to the key stakeholders at least once a year. Note: stakeholders include but are not restricted to Kimberley Environs, Dambimangari Native Title Claimants, Conservation Council, Wildflower Society, local government.	Life of mine	-

CALM Department of Conservation and Land Management
DoCEP Department of Consumer and Employment Protection
DoH Department of Health
DoIR Department of Industry and Resources

Attachment 1 to Statement 715

Change to Proposal

Proposal: Koolan Island Iron Ore Mine and Port Facility

Original Proponent: **Aztec Resources Ltd.**
Current proponent: **Mount Gibson Iron Limited**

Change: Increase in the accommodation capacity from 200 to 320 people.

Components of original Proposal as implemented:

Component	Quantities/Description
Infrastructure required	Accommodation village for approximately 200 people

Components of changed Proposal:

Component	Quantities/Description
Infrastructure required	Accommodation village for approximately 320 people

Approved under delegation
from Minister for the Environment:

Approval Date: 2.4.08

Attachment 2 to Statement 715

Change to Proposal

Proposal: **Koolan Island Iron Ore Mine and Port Facility**

Proponent: **Mount Gibson Iron Limited**

Change: Increase to the disturbance area from 540 hectares to 590 hectares

Components of original Proposal as implemented:

Characteristic	Quantities / Description
Total resource and ore deposits	Approximately 29 million tonnes - Main Pit approximately 17.4 million tonnes - Mullet Pit approximately 6.3 million tonnes - Eastern Pit approximately 5.4 million tonnes
Waste dump capacity	Approximately 124 million cubic metres over 280 hectares
Total disturbance area	Approximately 540 hectares (45% previously disturbed)

Components of changed Proposal:

Characteristic	Quantities / Description
Total resource and ore deposits	Approximately 29 million tonnes - Main Pit approximately 17.4 million tonnes - Mullet Pit approximately 6.8 million tonnes - Eastern Pit approximately 5.4 million tonnes
Waste dump capacity	Approximately 132 million cubic metres over 280 hectares
Total disturbance area	Approximately 590 hectares (45% previously disturbed)

Figure 6. Additional disturbance area

Dr Paul Vogel
Chairman
Environmental Protection Authority
under delegated authority

Approval date: 4.3.09

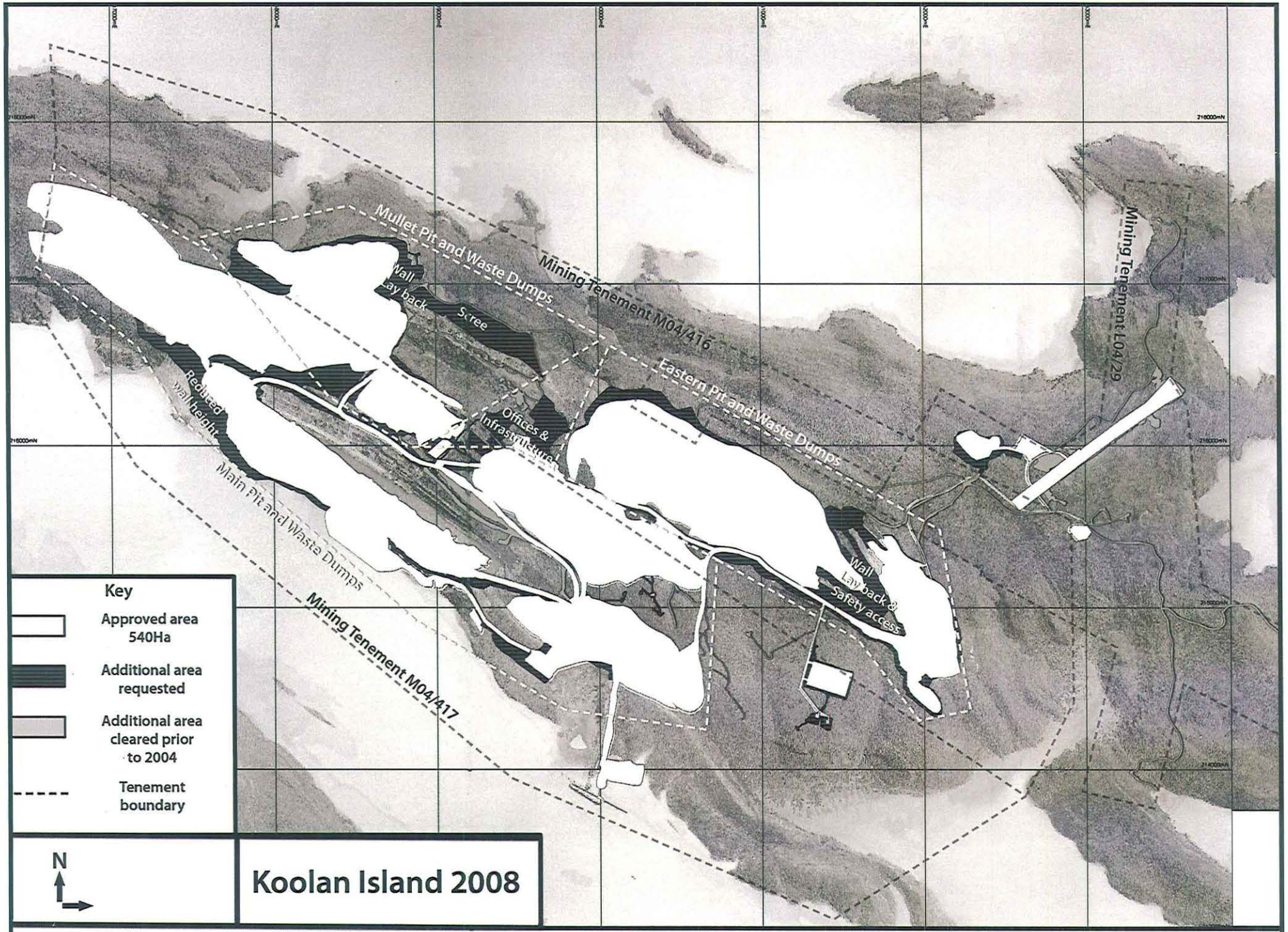


Figure 6 - Additional disturbance area

Attachment 3 to Ministerial Statement 715

Change to Proposal

Proposal: Koolan Island Iron Ore Mine and Port Facility

Proponent: Mount Gibson Iron Limited

Change: Increase in groundwater abstraction from 75 kilolitres per day to 120 kilolitres per day of fresh water from existing bores, for potable use.

Key Characteristics Table:

Element	Description of proposal	Description of approved change to proposal
Water Use	Extraction of approximately 75 kilolitres per day of fresh water from existing bores, for potable use	Extraction of approximately **120** kilolitres per day of fresh water from existing bores, for potable use

Note: Text in bold in the Key Characteristics Table, indicates change/s to the proposal.

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 11 January 2012

Attachment 4 to Ministerial Statement 715

Change to Proposal under section 45C of the
Environmental Protection Act 1986

Proposal: Koolan Island Iron Ore Mine and Port Facility

Proponent: Mount Gibson Iron Limited

Change: Increase to Disturbance Footprint from 590 ha to 650 ha

Key Characteristics Table: This table replaces Table 1 in Schedule 1

Characteristic	Current Approved Operation Quantities / Description	Proposed Operation Quantities / Description
Mining		
Project Life	Approximately 9 years.	Approximately 9 years.
Total resource and ore deposits	Approximately 29 million tonnes: • Main Pit approx 17.4 million tonnes. • Mullet Pit approx 6.8 million tonnes. • Eastern Pit approx 5.4 million tonnes.	• Main Pit approx 17.4 million tonnes. • Mullet Pit approx 6.8 million tonnes. • Eastern Pit approx 5.4 million tonnes. • **Acacia East Pit approx 4.1 million tonnes**
Mining rate	Approximately 2 to 4 million tonnes per annum.	Approximately 2 to 4 million tonnes per annum.
Current pit depths	• Main Pit approx 80 metres below sea level. • Mullet Pit approx 50 metres below surface level. • Eastern Pit approx 60 metres below surface level.	• Main Pit approx 80 metres below sea level. • Mullet Pit approx 50 metres below surface level. • Eastern Pit approx 60 metres below surface level • **Acacia East Pit approx 120 metres above sea level**.
Pit depths at closure	• Main Pit approx 165 metres below sea level. • Mullet Pit approx 80 metres below surface level. • Eastern Pit approx 115 metres below surface level.	• **Main pit approx 186m below mean sea level** • **Mullet pit approx 67m below mean sea level** • **Eastern pit approx 111m below natural ground level** • **Acacia East Pit approx 2 metres above sea level.**
Stockpile of Run-of-Mine Material	Approximately 100,000 tonnes over 10 hectares	Approximately 100,000 tonnes over 10 hectares
Strip ratio (waste : ore)	6 : 1	**Removed as not environmentally significant**
Total disturbance area	Approximately 590 hectares	**Approximately 650 hectares (>45% previously disturbed),**
Waste Dump capacity	Approximately 132 million cubic metres over 280 hectares	Approximately 132 million cubic metres over 280 hectares, **with an additional 14.7 million cubic metres of waste from Acacia East Pit.**
Characteristic	**Current Approved Operation Quantities / Description**	**Proposed Operation Quantities / Description**
Dewatering of Main Pit	• Initial dewatering of approximately 7 million cubic meters of sea water at 300 litres per second	• Initial dewatering of approximately 7 million cubic meters of sea water at 300 litres per second

	• Maintenance rate of approximately 50 to 150 litres per second • Water abstracted from the dewatering process will be placed in a settling pond prior to discharge to sea	• Maintenance rate of approximately 50 to 150 litres per second • Water abstracted from the dewatering process will be placed in a settling pond prior to discharge to sea
Processing and ship loading	• Construction of a two-stage dry crushing and screening plant • Construction of a ship loader • Ore will be stockpiled, loaded into conveyors and transferred to the ship loader	• Construction of a two-stage dry crushing and screening plant • Construction of a ship loader • Ore will be stockpiled, loaded into conveyors and transferred to the ship loader
Construction of seawall at Arbitration Cove	Reclamation of seabed • Approximately 1.3 hectares for construction of seawall across the reef flat • Approximately 1.1 hectares of construction rock revetment across the reef slope Dimensions • Approximately 300 metres across Arbitration Cove, 75 metres wide and 15 metres high	Reclamation of seabed • Approximately 1.3 hectares for construction of seawall across the reef flat • Approximately 1.1 hectares of construction rock revetment across the reef slope Dimensions • Approximately 300 metres across Arbitration Cove, 75 metres wide and 15 metres high
Construction of a port facility at Mangrove inlet	• Approximately 2.3 hectares of sea bed will be reclaimed for the laydown area and the rock causeway • The ship loader will be located at the end of the wharf, which will extend approximately 75 metres from the rock causeway. The pile-supported wharf will then extend approximately 370 metres across the lower slope • No dredging will be required	• Approximately 2.3 hectares of sea bed will be reclaimed for the laydown area and the rock causeway • **Removed as not environmentally significant** • **Removed as not environmentally significant**
Infrastructure required	• Haul and access roads, • Three fuel storage facilities • workshops • Bulk storage facility • Bioremediation facility • Accommodation village, and administration offices • Diesel fuelled two mega watt power station • Minor landfill (inert and putrescible waste) • Conveyor system	**Removed as managed by other regulatory authorities.**
Water use	Extraction of approximately 120 kilolitres per day of fresh water from existing bores, for potable use	Extraction of approximately 120 kilolitres per day of fresh water from existing bores, for potable use

Note: Text in **bold** in the Key Characteristics Table, indicates change/s to the proposal.

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 21 June 2012

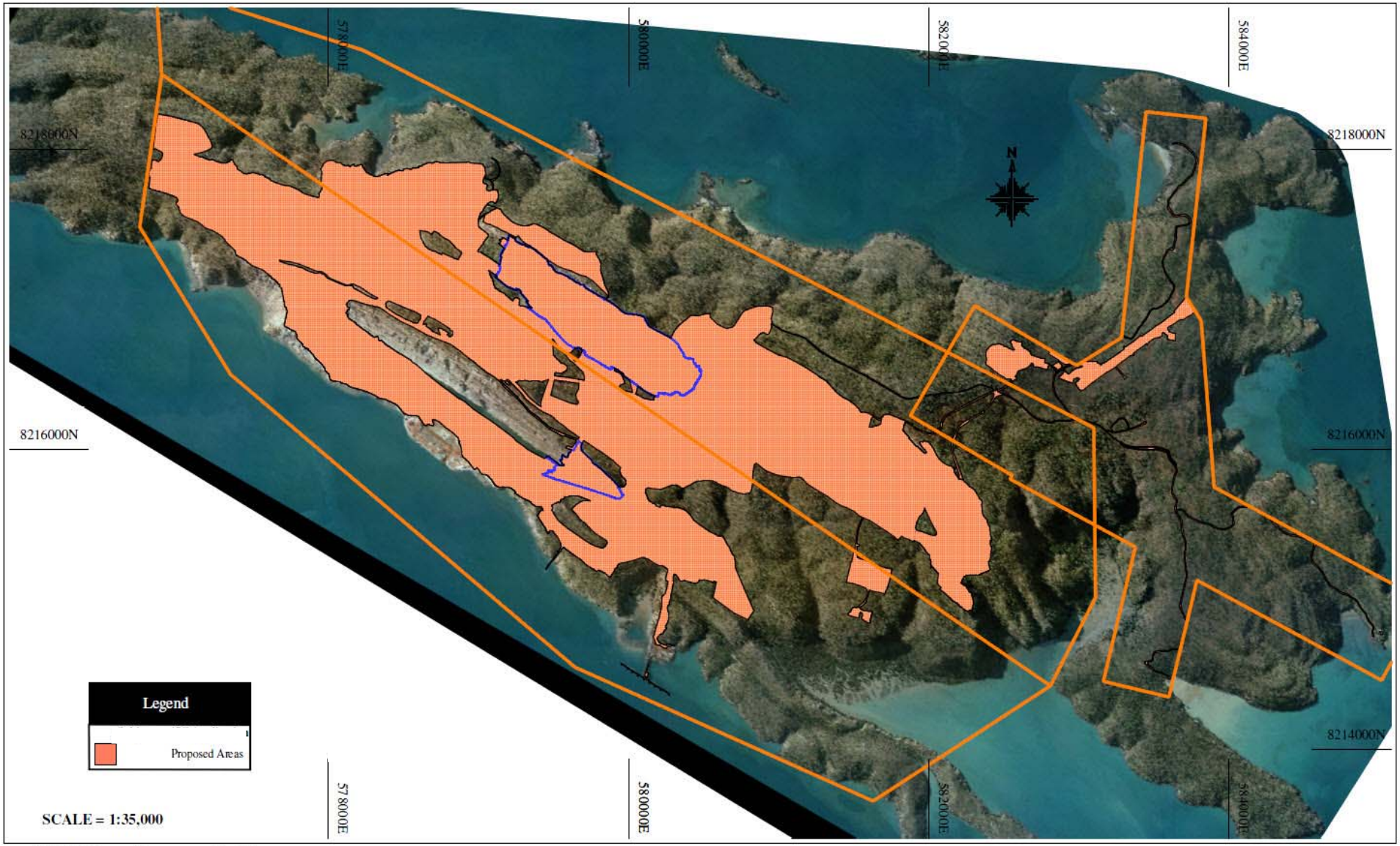


Figure 7 – Additional Disturbance Area

Attachment 5 to Ministerial Statement 715

Change to Proposal under section 45C of the *Environmental Protection Act 1986*

This Attachment replaces Table 1 in Schedule 1 and Attachment 4 of Ministerial Statement 715

Proposal: Koolan Island Iron Ore Mine and Port Facility
Proponent: Mount Gibson Iron Limited

Change: Increase to Disturbance Footprint from 650 ha to 655 ha

Table 1: Key Characteristics Table

Characteristic	Current Approved Operation Quantities / Description	Proposed Operation Quantities / Description
Mining		
Project Life	Approximately 9 years.	Approximately 9 years.
Total resource and ore deposits	Approximately 29 million tonnes: • Main Pit approx 17.4 million tonnes • Mullet Pit approx 6.8 million tonnes • Eastern Pit approx 5.4 million tonnes • Acacia East Pit approx 4.1 million tonnes	• Main Pit approx 17.4 million tonnes. • Mullet Pit approx 6.8 million tonnes. • Eastern Pit approx 5.4 million tonnes • Acacia East Pit approx 4.1 million tonnes
Mining rate	Approximately 2 to 4 million tonnes per annum.	**Removed as not a key characteristic relevant to the environment**
Current pit depths	• Main Pit approx 80 metres below sea level. • Mullet Pit approx 50 metres below surface level. • Eastern Pit approx 60 metres below surface level. • Acacia East Pit approx 120 metres above sea level.	**Removed as these pit depths relate to pit depths at the commencement of the Ministerial Statement and are no longer relevant.**
Pit depths at closure	• Main pit approx 186m below mean sea level • Mullet pit approx 67m below mean sea level • Eastern pit approx 111m below natural ground level • Acacia East Pit approx 2 metres above sea level.	• Main pit approx 186m below mean sea level • Mullet pit approx 67m below mean sea level • Eastern pit approx 111m below natural ground level • Acacia East Pit approx 2 metres above sea level.
Stockpile of Run-of-Mine Material	Approximately 100,000 tonnes over 10 hectares	**Removed as not a key characteristic relevant to the environment**
Total disturbance area	Approximately 650 hectares (>45% previously disturbed)	**Approximately 655 hectares (>45% previously disturbed)**
Waste Dump capacity	Approximately 132 million cubic metres over 280 hectares, with an additional 14.7 million cubic metres of waste from Acacia East Pit.	Approximately 132 million cubic metres over 280 hectares, with an additional 14.7 million cubic metres of waste from Acacia East Pit.

Characteristic	Current Approved Operation Quantities / Description	Proposed Operation Quantities / Description
Dewatering of Main Pit	• Initial dewatering of approximately 7 million cubic meters of sea water at 300 litres per second • Maintenance rate of approximately 50 to 150 litres per second • Water abstracted from the dewatering process will be placed in a settling pond prior to discharge to sea	• Initial dewatering of approximately 7 million cubic meters of sea water at 300 litres per second • Maintenance rate of approximately 50 to 150 litres per second • Water abstracted from the dewatering process will be placed in a settling pond prior to discharge to sea
Processing and ship loading	• Construction of a two-stage dry crushing and screening plant • Construction of a ship loader • Ore will be stockpiled, loaded into conveyors and transferred to the ship loader	• Construction of a two-stage dry crushing and screening plant • Construction of a ship loader • Ore will be stockpiled, loaded into conveyors and transferred to the ship loader
Construction of seawall at Arbitration Cove	Reclamation of seabed • Approximately 1.3 hectares for construction of seawall across the reef flat • Approximately 1.1 hectares of construction rock revetment across the reef slope Dimensions • Approximately 300 metres across Arbitration Cove, 75 metres wide and 15 metres high	Reclamation of seabed • Approximately 1.3 hectares for construction of seawall across the reef flat • Approximately 1.1 hectares of construction rock revetment across the reef slope Dimensions • Approximately 300 metres across Arbitration Cove, 75 metres wide and 15 metres high
Construction of a port facility at Mangrove inlet	• Approximately 2.3 hectares of sea bed will be reclaimed for the laydown area and the rock causeway	• Approximately 2.3 hectares of sea bed will be reclaimed for the laydown area and the rock causeway
Water use	Extraction of approximately 120 kilolitres per day of fresh water from existing bores, for potable use	Extraction of approximately 120 kilolitres per day of fresh water from existing bores, for potable use

Note: Text in **bold** in the Key Characteristics Table, indicates change/s to the proposal.

Figure 7 - Approved Disturbance Areas replaces Figure 7 in Attachment 4

[Signed 26 November 2014]

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

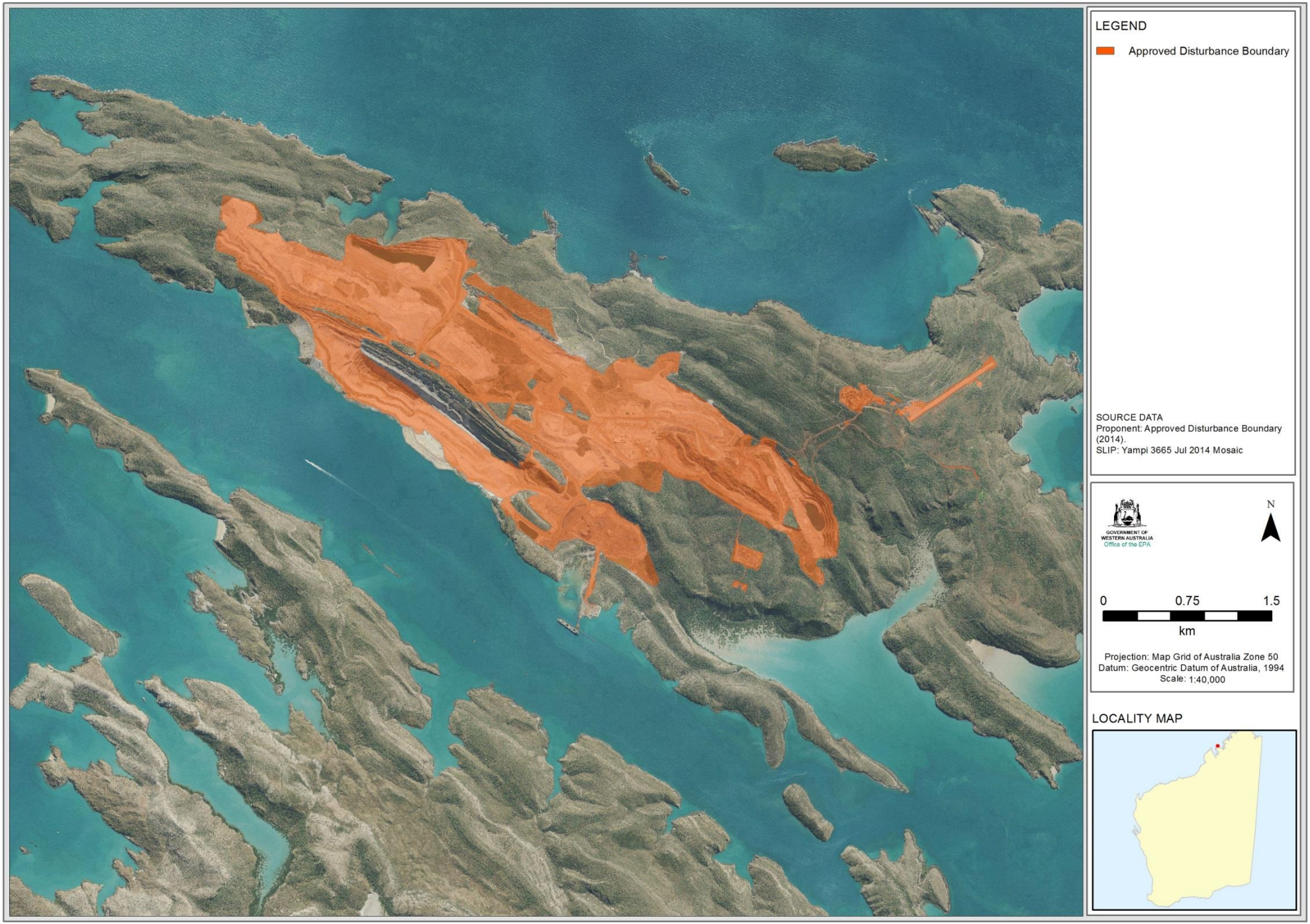


Figure 7 – Approved Disturbance Boundary

Attachment 6 to Ministerial Statement 715

Change to proposal approved under section 45C of the
Environmental Protection Act 1986

This Attachment replaces Table 1 in Schedule 1 and Attachment 5 of Ministerial Statement 715

Proposal: Koolan Island Iron Ore Mine and Port Facility

Proponent: Mount Gibson Iron Limited

Changes:

- Reclamation, Crushing and Shipping of Quartzite Ore from Waste Dumps

Table 1: Summary of the Proposal

Proposal Title	Koolan Island Iron Ore Mine and Port Facility
Short Description	This proposal is for the mining and shipping of iron ore resources. The proposal involves the open-cut mining of iron ore deposits, the construction and operation of associated infrastructure, **reclamation of quartzite ore from waste dumps**, and the subsequent decommissioning and rehabilitation of the site

Table 2: Authorised extent of physical and operational elements

Element	Previously Authorised Extent	Authorised Extent
Project life	Approximately 9 years.	**Removed as not a key characteristic relevant to the environment**.
Total resource and ore deposits	• Main Pit approx 17.4 million tonnes. • Mullet Pit approx 6.8 million tonnes. • Eastern Pit approx 5.4 million tonnes • Acacia East Pit approx 4.1 million tonnes	**Removed as not a key characteristic relevant to the environment**.
Pit depths at closure	• Main pit approx 186m below mean sea level • Mullet pit approx 67m below mean sea level • Eastern pit approx 111m below natural ground level • Acacia East Pit approx 2 metres above sea level.	• Main pit approx 186m below mean sea level • Mullet pit approx 67m below mean sea level • Eastern pit approx 111m below natural ground level • Acacia East Pit approx 2 metres above sea level.
Total disturbance area	Approximately 655 hectares (>45% previously disturbed)	Approximately 655 hectares (>45% previously disturbed)
Waste Dump Capacity	Approximately 132 million cubic metres over 280 hectares, with an additional 14.7 million cubic metres of waste from Acacia East Pit	Approximately 132 million cubic metres over 280 hectares, with an additional 14.7 million cubic metres of waste from Acacia East Pit
Dewatering of Main Pit	• Initial dewatering of approximately 7 million cubic meters of sea water at 300 litres per second	• Initial dewatering of approximately 7 million cubic meters of sea water at 300 litres per second

Element	Previously Authorised Extent	Authorised Extent
	• Maintenance rate of approximately 50 to 150 litres per second • Water abstracted from the dewatering process will be placed in a settling pond prior to discharge to sea	• Maintenance rate of approximately 50 to 150 litres per second • Water abstracted from the dewatering process will be placed in a settling pond prior to discharge to sea
Processing and ship loading	• Construction of a two-stage dry crushing and screening plant • Construction of a ship loader Ore will be stockpiled, loaded into conveyors and transferred to the ship loader	• Construction of a two-stage dry crushing and screening plant • Construction of a ship loader Ore will be stockpiled, loaded into conveyors and transferred to the ship loader
Construction of seawall at Arbitration Cove	Reclamation of seabed • Approximately 1.3 hectares for construction of seawall across the reef flat • Approximately 1.1 hectares of construction rock revetment across the reef slope Dimensions • Approximately 300 metres across Arbitration Cove, 75 metres wide and 15 metres high	Reclamation of seabed • Approximately 1.3 hectares for construction of seawall across the reef flat • Approximately 1.1 hectares of construction rock revetment across the reef slope Dimensions • Approximately 300 metres across Arbitration Cove, 75 metres wide and 15 metres high
Construction of port facility at Mangrove inlet	• Approximately 2.3 hectares of sea bed will be reclaimed for the laydown area and the rock causeway	• Approximately 2.3 hectares of sea bed will be reclaimed for the laydown area and the rock causeway
Water Use	Extraction of approximately 120 kilolitres per day of fresh water from existing bores, for potable use	Extraction of approximately 120 kilolitres per day of fresh water from existing bores, for potable use

Note: Text in **bold** in Table 1 & 2 indicate a change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
ha	hectare
km	kilometre
GL	gigalitre

[Signed 20 May 2015]

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Attachment 7 to Ministerial Statement 715

Change to proposal approved under section 45C of the
Environmental Protection Act 1986

This Attachment replaces Attachment 6 of Ministerial Statement 715

Proposal: Koolan Island Iron Ore Mine and Port Facility

Proponent: Mount Gibson Iron Limited

Changes:

- Reconstruction of a portion of engineered seawall at Arbitration Cove;
- Dewatering approximately 25 GL of seawater from the inundated Main Pit at a rate of up to approximately 1,600 L/s; and
- Administrative change to amend total disturbance area for the proposal from approximately 655 ha" to "up to 670 ha".

Table 1: Summary of the Proposal

Proposal Title	Koolan Island Iron Ore Mine and Port Facility
Short Description	This proposal is for the mining and shipping of iron ore resources. The proposal involves the open-cut mining of iron ore deposits, the construction and operation of associated infrastructure, reclamation of quartzite ore from waste dumps, and the subsequent decommissioning and rehabilitation of the site.

Table 2: Location and authorised extent of physical and operational elements

Element	Previously Authorised Extent	Authorised Extent
Pit depths at closure	• Main pit approx. 186 m below mean sea level • Mullet pit approx. 67 m below mean sea level • Eastern pit approx. 111 m below natural ground level • Acacia East Pit approx. 2 m above sea level.	• Main pit approx 186 m below mean sea level • Mullet pit approx 67 m below mean sea level • Eastern pit approx 111 m below natural ground level • Acacia East Pit approx 2 m above sea level.
Total disturbance area	Approximately 655 ha (>45% previously disturbed)	**Up to 670 ha** (>45% previously disturbed)
Waste Dump Capacity	Approximately 132 million cubic metres over 280 ha, with an additional 14.7 million cubic metres of waste from Acacia East Pit	Approximately 132 million cubic metres over 280 ha, with an additional 14.7 million cubic metres of waste from Acacia East Pit
Dewatering of Main Pit **and discharge**	• Initial dewatering of approximately 7 million cubic meters of sea water at 300 L/s • Maintenance rate of approximately 50 to 150 L/s • Water abstracted from the dewatering process will be placed in a settling pond prior to discharge to sea	• ***"Initial dewatering rate"*** **removed as the requirement for this element has been met.** • Maintenance rate of approximately 50 to 150 L/s • **If water pumped from the Main Pit exceeds the Trigger Levels for "Water Quality of Direct Release of Pit Dewatering" in the approved**

Element	Previously Authorised Extent	Authorised Extent
		Marine Management Plan, the water will be placed in a settling pond and discharged to the sea via a diffuser when the Trigger Levels are met.
Dewatering of Main Pit and discharge associated with re-construction of the seawall	**This element was not part of the key characteristics table**	• **Dewatering of approximately 25 GL of water to base pit level at an average rate of approximately 1,600 L/s over a period of up to six months** • **If water pumped from the Main Pit exceeds the Trigger Levels for "Water Quality of Direct Release of Pit Dewatering" in the approved Marine Management Plan, the water will be placed in a settling pond and discharged to the sea via a diffuser when the Trigger Levels are met.**
Processing and ship loading	• Construction of a two-stage dry crushing and screening plant • Construction of a ship loader Ore will be stockpiled, loaded into conveyors and transferred to the ship loader	• Construction of a two-stage dry crushing and screening plant • Construction of a ship loader Ore will be stockpiled, loaded into conveyors and transferred to the ship loader.
Construction of seawall at Arbitration Cove	Reclamation of seabed • Approximately 1.3 ha for construction of seawall across the reef flat • Approximately 1.1 ha of construction rock revetment across the reef slope Dimensions • Approximately 300 m across Arbitration Cove, 75 m wide and 15 m high	Reclamation of seabed • Approximately 1.3 ha for construction of seawall across the reef flat • Approximately 1.1 ha of construction rock revetment across the reef slope Dimensions • Approximately 300 m across Arbitration Cove, 75 m wide and 15 m high
Construction of port facility at Mangrove inlet	• Approximately 2.3 ha of sea bed will be reclaimed for the laydown area and the rock causeway	• Approximately 2.3 ha of sea bed will be reclaimed for the laydown area and the rock causeway
Water Use	Extraction of approximately 120 kL per day of fresh water from existing bores, for potable use	Extraction of approximately 120 kL per day of fresh water from existing bores, for potable use

Note: Text in **bold** in Table 2 indicates a change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
ha	hectare
km	kilometre
kL	kilolitre
GL	gigalitre
L/s	litres per second

List of Replacement Figures – All other Figures in previous Attachments are deleted and replaced by the following:

Figure 1: Approved Total Disturbance Area for the Koolan Island Iron Ore Mine and Port Facility

Coordinates defining the Approved Total Disturbance Area for the Koolan Island Iron Ore Mine and Port Facility are held by the Department of Water and Environmental Regulation (Document Reference Number: 2017-1499303732151).

[Signed 13 April 2018]

Dr Tom Hatton
CHAIRMAN
Environmental Protection Authority
under delegated authority

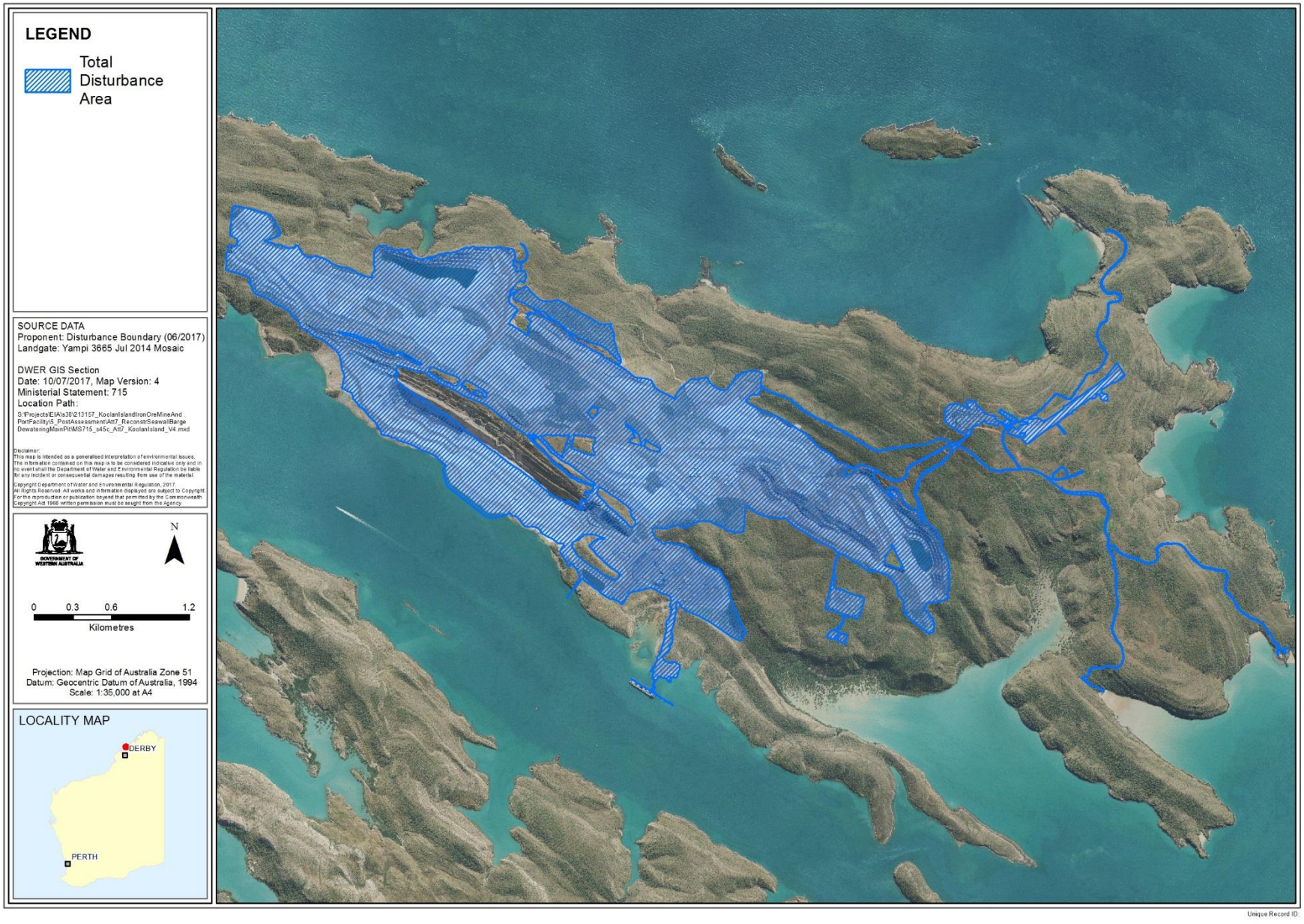


Figure 1: Location of Approved Total Disturbance Area for the Koolan Island Iron Ore Mine and Port Facility

Attachment 8 to Ministerial Statement 715

Change to proposal approved under section 45C of the *Environmental Protection Act 1986*

This Attachment replaces Schedule 2 and Attachment 7 of Ministerial Statement 715

Proposal: Koolan Island Operations

Proponent: Koolan Island Ore Pty Ltd

Changes:

- Include airfield as part of the infrastructure required
- Minor (<1ha) change to KIO disturbance footprint at the site of the proposed airstrip to be offset with the exclusion of an equivalent sized area.

Table 1: Summary of the Proposal

Proposal Title	Koolan Island Operations
Short Description	Develop airfield on 60ha of waste rock landform.

Table 2: Location and authorised extent of physical and operational elements

Element	Location	Previously Authorised Extent	Authorised Extent
Pit depths at closure		• Main pit approx. 186 m below mean sea level • Mullet pit approx. 67 m below mean sea level • Eastern pit approx. 111 m below natural ground level • Acacia East Pit approx. 2 m above sea level.	• Main pit approx. 186 m below mean sea level • Mullet pit approx. 67 m below mean sea level • Eastern pit approx. 111 m below natural ground level • Acacia East Pit approx. 2 m above sea level.
Total disturbance area		Up to 670 ha (>45% previously disturbed)	Up to 670 ha (>45% previously disturbed)
Waste Dump Capacity		Approximately 132 million cubic metres over 280 ha, with an additional 14.7 million cubic metres of waste from Acacia East Pit	Approximately 132 million cubic metres over 280 ha, with an additional 14.7 million cubic metres of waste from Acacia East Pit
Dewatering of Main Pit and discharge		"Initial dewatering rate" removed as the requirement for this element has been met. • Maintenance rate of approximately 50 to 150 L/s • If water pumped from the Main Pit exceeds the	"Initial dewatering rate" removed as the requirement for this element has been met. • Maintenance rate of approximately 50 to 150 L/s • If water pumped from the Main Pit exceeds the

Element	Location	Previously Authorised Extent	Authorised Extent
		Trigger Levels for “Water Quality of Direct Release of Pit Dewatering” in the approved Marine Management Plan, the water will be placed in a settling pond and discharged to the sea via a diffuser when the Trigger Levels are met.	Trigger Levels for “Water Quality of Direct Release of Pit Dewatering” in the approved Marine Management Plan, the water will be placed in a settling pond and discharged to the sea via a diffuser when the Trigger Levels are met.
Dewatering of Main Pit and discharge associated with reconstruction of the seawal		• Dewatering of approximately 25 GL of water to base pit level at an average rate of approximately 1,600 L/s over a period of up to six months • If water pumped from the Main Pit exceeds the Trigger Levels for “Water Quality of Direct Release of Pit Dewatering” in the approved Marine Management Plan, the water will be placed in a settling pond and discharged to the sea via a diffuser when the Trigger Levels are met.	• Dewatering of approximately 25 GL of water to base pit level at an average rate of approximately 1,600 L/s over a period of up to six months • If water pumped from the Main Pit exceeds the Trigger Levels for “Water Quality of Direct Release of Pit Dewatering” in the approved Marine Management Plan, the water will be placed in a settling pond and discharged to the sea via a diffuser when the Trigger Levels are met.
Processing and ship loading		Construction of a two-stage dry crushing and screening plant Construction of a ship loader Ore will be stockpiled, loaded into conveyors and transferred to the ship loader	Construction of a two-stage dry crushing and screening plant Construction of a ship loader Ore will be stockpiled, loaded into conveyors and transferred to the ship loader
Construction of seawall at Arbitration Cove		Reclamation of seabed • Approximately 1.3 ha for construction of seawall across the reef flat • Approximately 1.1 ha of construction rock revetment across the reef slope Dimensions: Approximately 300 m across Arbitration	Reclamation of seabed • Approximately 1.3 ha for construction of seawall across the reef flat • Approximately 1.1 ha of construction rock revetment across the reef slope. Dimensions: Approximately 300 m across Arbitration

Element	Location	Previously Authorised Extent	Authorised Extent
		Cove, 75 m wide and 15 m high	Cove, 75 m wide and 15 m high
Construction of port facility at Mangrove inlet		Approximately 2.3 ha of sea bed will be reclaimed for the laydown area and the rock causeway	Approximately 2.3 ha of sea bed will be reclaimed for the laydown area and the rock causeway
Water Use		Extraction of approximately 120 kL per day of fresh water from existing bores, for potable use	Extraction of approximately 120 kL per day of fresh water from existing bores, for potable use
Construction of airstrip			**Construct 2200m airfield and associated facilities on 60 ha**

Note: Text in **bold** in Table 2 indicates a change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
CEO	Chief Executive Officer
GL	gigalitre
ha	hectare
km	kilometre

Figures (attached)

Figure 1 Approved Total Disturbance Area of the Koolan Island Iron Ore Mine and Port facility

Coordinates defining the Approved Total Disturbance Area for the Koolan Island Iron Ore Mine and Port Facility are held by the Department of Water and Environmental Regulation (Document Reference Number: 2019-A-1810507).

(Signed 20 August 2019)

Dr Tom Hatton
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: _____

Figure 1 Approved Total Disturbance Area of the Koolan Island Iron Ore Mine and Port facility

Attachment 9 to Ministerial Statement 715

Amendment to proposal approved under section 45C of the *Environmental Protection Act 1986*

This Attachment replaces Schedule 1 and all previous Attachments of Ministerial Statement 715

Proposal: **Koolan Island Iron Ore Mine and Port Facility**

Proponent: **Koolan Iron Ore Pty Ltd**

Changes:

- Introduce a 1,211 ha development envelope and amend disturbance footprint as depicted in Figure 1.
- Remove the prescribed pit depths at closure.
- Remove the prescribed waste rock capacity.
- Remove maintenance of dewatering and reference to the Marine Management Plan (MMP) and remove dewatering of Main Pit and discharge associated with reconstruction of the seawall.
- Amend the prescribed potable water use limit of 120 kl per day to a maximum of 200000 kl/annum inclusive of both potable and non-potable water use over the remaining of the life of mine.
- Include operation of the seawall barge ramp and the construction of the seawall decommission trench within the proposed development envelope.
- Amend the reference to processing in the key characteristics table from 'two-stage dry crushing and screening plant' to 'dry crushing and screening plant'.

Table 1: Summary of the proposal

Proposal title	Koolan Island Iron Ore Mine and Port Facility
Short description	This proposal is for the mining and shipping of iron ore resources. The proposal involves the open-cut mining of iron ore deposits, the construction and operation of associated infrastructure, reclamation of quartzite ore from waste dumps, and the subsequent decommissioning and rehabilitation of the site.

Table 2: Location and authorised extent of physical and operational elements

Element	Location	Previously authorised extent	Authorised extent
Development envelope	Figure 1	N/A	**1,211** ha
Total disturbance area	Figure 1	Up to 670 ha (>45% previously disturbed)	**Up to 670** ha within the mapped development envelope
Pit depths at closure		• Main pit approx. 186 m below mean sea level • Mullet pit approx. 67 m below mean sea level • Eastern pit approx. 111 m below natural ground level • Acacia East Pit approx. 2 metres above sea level.	**Removed**
Waste Dump Capacity		Approximately 132 million cubic metres over 280 ha, with an additional 14.7 million cubic metres of waste from Acacia East Pit	**Removed**
Dewatering of Main Pit and discharge		"Initial dewatering rate" removed as the requirement for this element has been met. • Maintenance rate of approximately 50 to 150 L/s • If water pumped from the Main Pit exceeds the Trigger Levels for "Water Quality of Direct Release of Pit Dewatering" in the approved Marine Management Plan, the water will be placed in a settling pond and discharged to the sea via a diffuser when the Trigger Levels are met.	**Removed**
Dewatering of Main Pit and discharge		• Dewatering of approximately 25 GL of water to base pit	**Removed**

Element	Location	Previously authorised extent	Authorised extent
associated with reconstruction of the seawall		level at an average rate of approximately 1,600 L/s over a period of up to six months • If water pumped from the Main Pit exceeds the Trigger Levels for "Water Quality of Direct Release of Pit Dewatering" in the approved Marine Management Plan, the water will be placed in a settling pond and discharged to the sea via a diffuser when the Trigger Levels are met.	
Processing and ship loading		• Construction of a two-stage dry crushing and screening plant • Construction of a ship loader • Ore will be stockpiled, loaded into conveyors and transferred to the ship loader	• **Construction of a dry crushing and screening plant** • Construction of a ship loader • Ore will be stockpiled, loaded into conveyors and transferred to the ship loader
Construction of seawall at Arbitration Cove.		Reclamation of seabed • Approximately 1.3 ha for construction of seawall across the reef flat • Approximately 1.1 ha of construction rock revetment across the reef slope. Dimensions: Approximately 300 m across Arbitration Cove, 75 m wide and 15 m high	Reclamation of seabed • Approximately 1.3 ha for construction of seawall across the reef flat • Approximately 1.1 ha of construction rock revetment across the reef slope. Dimensions: Approximately 300 m across Arbitration Cove, 75 m wide and 15 m high
Construction of port facility at Mangrove inlet		Approximately 2.3 ha of seabed will be reclaimed for the laydown area and the rock causeway	Approximately 2.3 ha of seabed will be reclaimed for the laydown area and the rock causeway
Groundwater abstraction		Extraction of approximately 120 kl per	**Abstraction of up to 200,000 kl/a**

Element	Location	Previously authorised extent	Authorised extent
		day of fresh water from existing bores, for potable use	
Construction of airstrip		Construct 2200m airfield and associated facilities on 60 ha	Construct 2200m airfield and associated facilities on 60 ha
Operation of seawall barge ramp	Figure 2	N/A	**Vessel movements only within barge access corridor**
Construction of the seawall decommissioning trench	Figure 1	N/A	**Decommissioning trench with up to 60 m overall width**

Note: Text in **bold** in Table 2 indicates a change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
GL	gigalitre
kl	kilolitre
ha	hectare
L/s	litres per second
km	kilometre
m	meter
%	percent

Figures (attached)

Figure 1: Koolan Island Development Envelope and Disturbance Footprint
Figure 2: Barge Access Corridor and Development Envelope

Development Envelope Coordinates

Spatial data depicting the figures are held on Environment Online by the Department of Water and Environmental Regulation.

[Signed 24 April 2024]

Prof Matthew Tonts
CHAIR
Environmental Protection Authority
under delegated authority

Figure 1 - Koolan Island Development Envelope and Disturbance Footprint

Figure 2 - Barge Access Corridor and Development Envelope