



Statement No.

**MINISTER FOR THE ENVIRONMENT;
EMPLOYMENT AND TRAINING**

000476

**STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL
(PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

**RARE EARTHS MINING & BENEFICIATION AT MT WELD, LAVERTON AND
SECONDARY PROCESSING AT MEENAAR, NEAR NORTHAM**

Proposal: Mining and beneficiation of a rare earths deposit at Mt Weld, and processing the beneficiated material to produce various rare earth oxides, concentrates and compounds at Meenaar.

The Mt Weld mine site will be located within mining leases M38/58 and M38/59, some 35 kilometres south-east of Laverton.

The secondary processing plant will be located at Lot 7 on the east side of the proposed Meenaar Industrial Park, which is located about 18 kilometres east of Northam, as documented in schedule 1 of this statement.

Proponent: Ashton Rare Earths Pty Limited

Proponent Address: 441 Saint Kilda Road, Melbourne, Victoria 3004

Assessment Number: 1194

Previous Assessment Number: 611

Previous Statement Number: Statement No. 290 published on 9 November 1992

Report of the Environmental Protection Authority: Bulletin 884

Previous Report of the Environmental Protection Authority: Bulletin 646

The implementation of the proposal to which the above reports of the Environmental Protection Authority relate is now subject to the following conditions and procedures which replace all previous 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.

Published on

26 MAY 1998

- 1-2 Where, in the course of implementing the proposal, 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.

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 ground-disturbing activities at Mt Weld or construction of the secondary processing plant at Meenaar, whichever is the sooner, the proponent shall prepare Environmental Management System documentation with components such as those adopted in Australian Standards AS/NZ ISO 14000 series, to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.
- 3-2 The proponent shall implement the Environmental Management System referred to in condition 3-1.

4 Environmental Management Programme

- 4-1 Prior to ground-disturbing activities at Mt Weld, the proponent shall prepare an Environmental Management Programme to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection, the Department of Minerals and Energy, the Radiological Council and the Water and Rivers Commission, as appropriate.

This Programme shall consist of the following environmental management plans for the Mt Weld site:

1. surface and groundwater management plan, including conservation of groundwater (prior to ground-disturbing activities) [see condition 5];
2. native flora and fauna conservation plan (prior to ground-disturbing activities);
3. wastewater and residue disposal management plan (prior to ground-disturbing activities);
4. decommissioning management plan, including rehabilitation of disturbed sites, overburden dumps and residue ponds [see condition 8];
5. plan for transportation of process materials, such as ore concentrate, residues and dangerous goods (prior to ground-disturbing activities);
6. radiation management plan (prior to ground-disturbing activities);
7. greenhouse gas emissions management plan (prior to ground-disturbing activities) [see condition 6]; and
8. noise management plan (prior to ground-disturbing activities) [see condition 7].

- 4-2 The proponent shall implement the environmental management plans required by condition 4-1 for the Mt Weld site.
- 4-3 The proponent shall make the environmental management plans required by condition 4-1 for the Mt Weld site publicly available, to the requirements of the Environmental Protection Authority.
- 4-4 Prior to commencement of construction at Meenaar, the proponent shall prepare an Environmental Management Programme to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection, the Department of Minerals and Energy, the Radiological Council and the Water and Rivers Commission, as appropriate.

This Programme shall consist of the following environmental management plans for the Secondary processing operation at Meenaar:

- 1. surface and groundwater management plan, including groundwater protection (prior to construction) [see condition 5];
 - 2. wastewater and residue disposal management plan (prior to construction);
 - 3. emergency management plan for major seismic events (prior to construction);
 - 4. visual impacts and landscaping plan (prior to construction);
 - 5. plan for transportation of process materials, such as ore concentrate, residues and dangerous goods (prior to commissioning);
 - 6. radiation management plan (prior to commissioning);
 - 7. greenhouse gas emissions management plan (prior to construction) [see condition 6]; and
 - 8. noise management plan (prior to construction) [see condition 7].
- 4-5 The proponent shall implement the environmental management plans required by condition 4-4 for the Meenaar site.
 - 4-6 The proponent shall make the environmental management plans required by condition 4-4 for the Meenaar site publicly available, to the requirements of the Environmental Protection Authority.

5 Surface and Ground Water Management Plan

- 5-1 Prior to construction of the secondary processing operation plant at Meenaar, the construction of the beneficiation operation plant, and the disturbance of soil at the mine at Mt Weld, the proponent shall develop a Surface and Ground Water Management Plan including pre-operational monitoring (stage 1) for surface and ground water including quality assurance procedures, to the requirements of the Environmental Protection Authority on advice of the Radiological Council, the Department of Minerals and Energy, the Water and Rivers Commission and the Department of Environmental Protection.
- 5-2 The proponent shall implement the pre-operational surface and ground water management plan required by condition 5-1.
- 5-3 Prior to commissioning of the secondary processing operation plant at Meenaar, and the beneficiation operation plant at Mt Weld, the proponent shall develop a Surface and Ground Water Management Plan including operational monitoring (stage 2) for surface and ground water including quality assurance procedures, to the requirements of the Environmental Protection Authority on advice of the Radiological Council, the Department of Minerals and Energy, the Water and Rivers Commission and the Department of Environmental Protection.

- 5-4 The proponent shall implement the operational surface and ground water management plan required by condition 5-3.

6 Greenhouse Gas Emissions Management Plan

- 6-1 Prior to commencement of construction of the secondary processing operation plant at Meenaar, and the beneficiation operation plant at Mt Weld, the proponent shall prepare a Greenhouse Gas Emissions Management Plan 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 (using methodology developed for Australia);
 - 2 measures to limit "greenhouse gas" emissions; and
 - 3 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.
- 6-2 The proponent shall implement the Greenhouse Gas Emissions Management Plan required by condition 6-1.

Note: The proponent should consider entry (whether on a project-specific basis, company-wide arrangement or within an industrial grouping, as appropriate) into the Commonwealth Government's "Greenhouse Challenge" voluntary co-operative agreement program.

Components of the agreement program include:

- 1 an inventory of emissions;
- 2 opportunities for abating "greenhouse gas" emissions in the organisation;
- 3 a "greenhouse gas" mitigation action plan;
- 4 regular monitoring and reporting of performance; and
- 5 independent performance verification.

7 Noise Management Plan

- 7-1 Prior to construction of the secondary processing operation plant at Meenaar, the construction of the beneficiation operation plant, and the dewatering of the mine at Mt Weld, the proponent shall prepare a Noise Management Plan to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

This Plan shall address:

- 1 the location, dimensions and form of noise barriers to be constructed for the project;
- 2 the sound power levels for equipment to be used for the project and details of acoustical treatment to be applied;
- 3 special procedures necessary to restrict activities under weather conditions which increase noise propagation toward the residential area at Meenaar; and
- 4 routine operating procedures to be adopted for particular operations to control noise emanating from the project.

7-2 The proponent shall implement the Noise Management Plan required by condition 7-1.

8 Decommissioning Management Plan

8-1 At least six months prior to decommissioning of the secondary processing operation plant at Meenaar, and the beneficiation operation plant at Mt Weld, the proponent shall prepare a Decommissioning Management Plan to the requirements of the Environmental Protection Authority on advice of the Radiological Council, the Department of Minerals and Energy and the Department of Environmental Protection.

This Plan shall address:

- 1 removal or, if appropriate, disposal on-site of plant and infrastructure;
- 2 rehabilitation of all disturbed areas to agreed final land use(s); and
- 3 identification of contaminated areas, including provision of evidence of notification to relevant statutory authorities.

8-2 The proponent shall implement the Decommissioning Management Plan required by condition 8-1.

9 Performance Review

9-1 Each six years following the commencement of construction of the secondary processing operation plant at Meenaar or the beneficiation operation plant at Mt Weld, whichever is the sooner, the proponent shall submit a Performance Review to evaluate the environmental performance relevant to:

- 1 environmental issues and objectives reported on in Environmental Protection Authority Bulletins 646 and 884;
- 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 management targets;
- 4 Environmental Management Programmes and Plans; and
- 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.

10 Proponent

10-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the Environmental Protection Act 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.

- 10-2 Any request for the exercise of that power of the Minister referred to in condition 10-1 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.
- 10-3 The proponent shall notify the Minister for the Environment of any change of proponent contact name and address within 30 days of such change.

11 Commencement

- 11-1 The proponent shall provide evidence to the Minister for the Environment within three years of the date of this statement that the proposal has been substantially commenced.
- 11-2 Where the proposal has not been substantially commenced within three years of the date of this statement, the approval to implement the proposal as granted in statement no. 290 shall lapse and be void. The Minister for the Environment will determine any question as to whether the proposal has been substantially commenced.
- 11-3 The proponent shall make application to the Minister for the Environment for any extension of approval for the substantial commencement of the proposal beyond three years from the date of this statement.
- 11-4 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 three years for the substantial commencement of the proposal.

12 Compliance Auditing

- 12-1 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.
- 12-2 Unless otherwise specified, the Department of Environmental Protection is responsible for assessing compliance with the conditions contained in this statement and for issuing formal clearance of conditions.
- 12-3 Where compliance with any condition or procedure 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

2 MAY 1998

Schedule 1

The Proposal

The proponent will mine and beneficiate a rare earths deposit at Mt Weld, and process the beneficiated material to produce various rare earth oxides, concentrates and compounds at Meenaar. The Mt Weld mine site is located within mining leases M38/58 and M38/59, some 35 kilometres south-east of Laverton. The secondary processing plant is to be located at Lot 7 on the eastern side of the proposed Meenaar Industrial Park, which is located about 18 kilometres east of Northam.

Key characteristics table

Element	Description
Life of project	> 15 years
Size of ore body	1 200 000 tonnes
Area of disturbance (including access)	mine (Mt Weld) < 250 hectares secondary plant (Meenaar) < 100 hectares
List of major components <ul style="list-style-type: none"> • pit • residue disposal • overburden stockpiles • infrastructure (water supply, roads, etc) 	refer plans, specifications, charts section immediately below for details.
Mt Weld beneficiation process <ul style="list-style-type: none"> • input maximum • output maximum 	<ul style="list-style-type: none"> • 50 000 to 60 000 tonnes per annum of ore containing 5000 tonnes per annum of water) • 10 000 tonnes per annum of ore concentrate (12 000 tonnes per annum wet weight)
Meenaar secondary processing plant <ul style="list-style-type: none"> • input maximum • output maximum 	<ul style="list-style-type: none"> • 10 000 tonnes per annum of ore concentrate (12 000 tonnes per annum wet weight) • 5 000 tonnes per annum of rare earth products
Solid waste materials <ul style="list-style-type: none"> • maximum residue returned to Mt Weld for disposal 	<ul style="list-style-type: none"> • 20 000 tonnes per annum of rare earth and phosphorus residues

<p>Water supply</p> <ul style="list-style-type: none"> • Mt Weld beneficiation process <ul style="list-style-type: none"> ⇒ source ⇒ maximum annual requirement • Meenaar secondary processing plant <ul style="list-style-type: none"> ⇒ source ⇒ maximum annual requirement 	<ul style="list-style-type: none"> • dewatering • 400 megalitres over 12 - 18 months • Goldfields and Agricultural Supply Scheme • 388 megalitres per annum
<p>Transport</p> <ul style="list-style-type: none"> • Dangerous goods and feedstock materials (classified) • Chemicals (unclassified) • Rare earth products (maximum) • wet ore concentrate • residue 	<ul style="list-style-type: none"> • 1 000 trips per annum from Kwinana to Meenaar and • 15 trips per annum from Kwinana to Mt Weld • 500 trips per annum from Kwinana to Meenaar • 250 trips per annum from Meenaar to Fremantle • 600 trips per annum from Mt Weld to Meenaar • 750 trips per annum from Meenaar to Mt Weld
<p>Energy</p> <p>Meenaar secondary processing plant</p>	<ul style="list-style-type: none"> • 400 tiga-Joule per annum of energy from liquefied petroleum gas (8 000 tonnes per annum) • 1 mega-Watt of electricity (8 000 000 kilo-Watt hour per annum)
<p>Carbon dioxide</p> <ul style="list-style-type: none"> • output maximum 	<ul style="list-style-type: none"> • 13 940 tonnes per annum
<p>Development stages</p>	<p>3 over a 5 to 10 year period</p>

Plans attached:

Figure 1 - Regional setting of the Mt Weld area;

Figure 2 - Location and conceptual layout of proposed facilities at Mt Weld;

Figure 3 - Regional setting of proposed Meenaar Industrial Park;

Figure 4 - Proximity of proposed secondary processing plant to residences at Meenaar; and

Figure 5 - Conceptual layout of proposed secondary processing facilities at Meenaar.

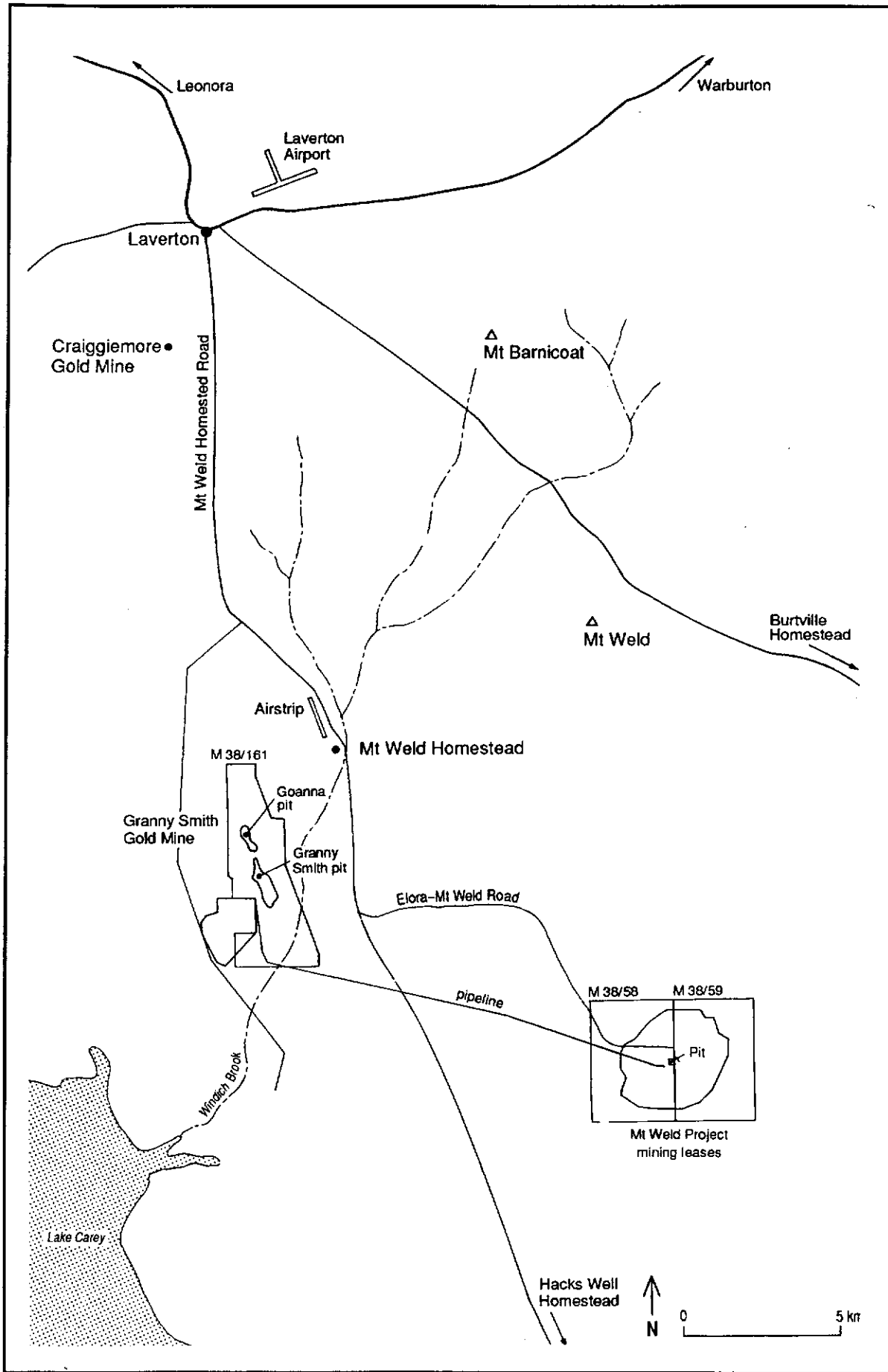


Figure 1. Regional setting of the Mt Weld area (Source: Ashton's PER).

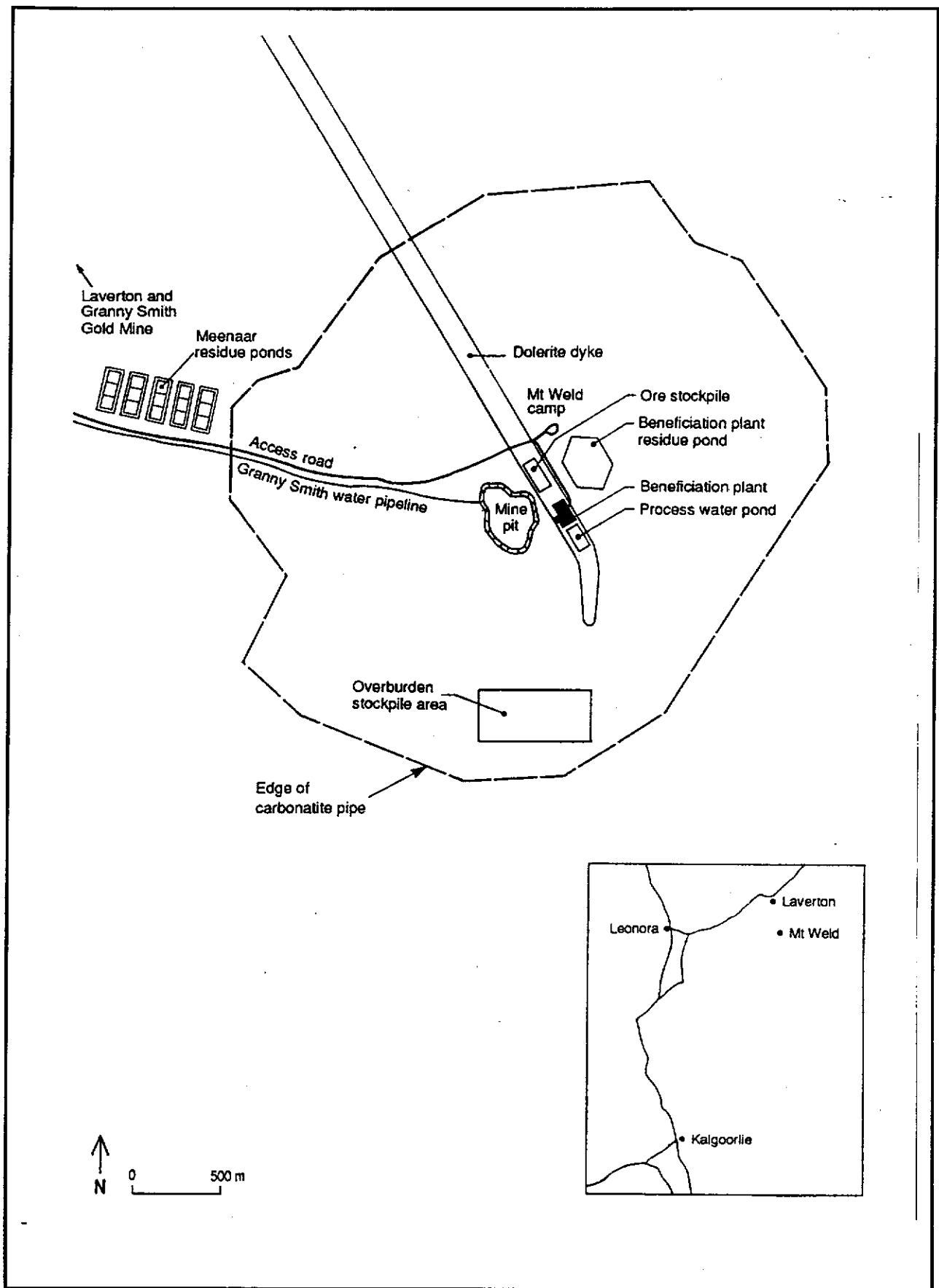


Figure 2. Location and conceptual layout of proposed facilities at Mt Weld (Source: Ashton's PER).

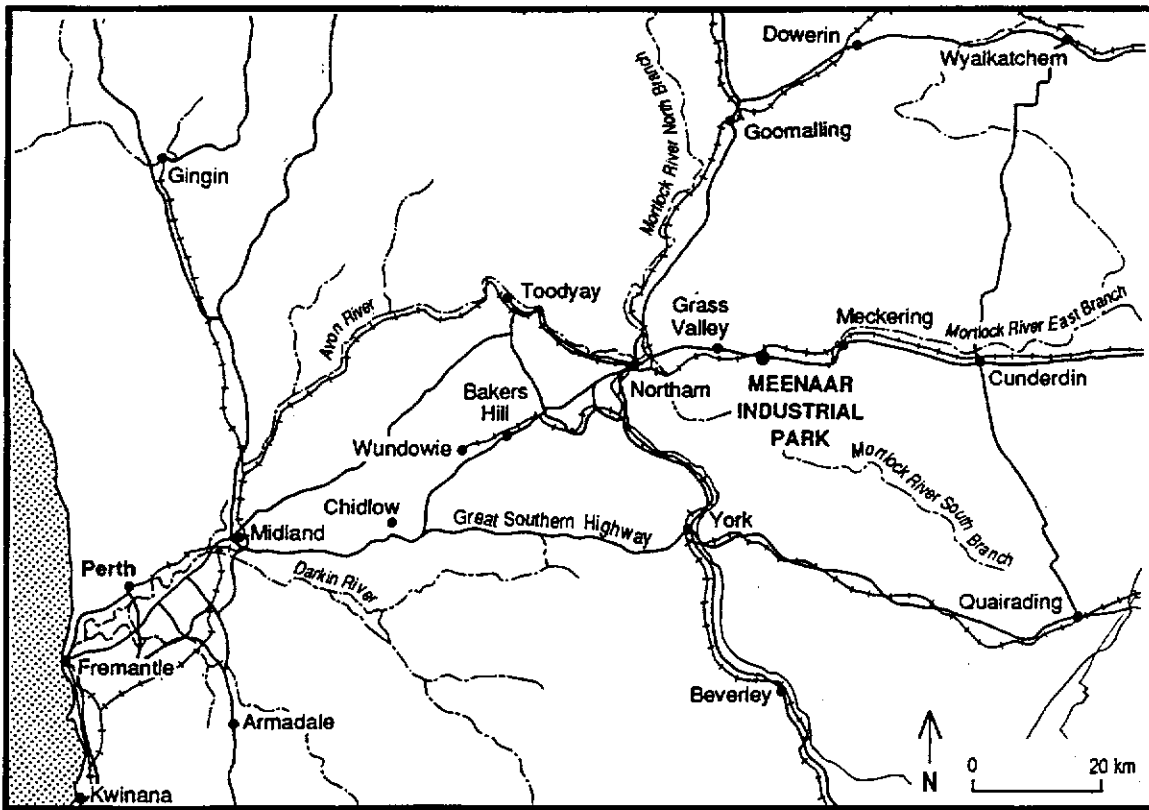


Figure 3. Regional setting of proposed Meenaar Industrial Park (Source: Ashton's PER).

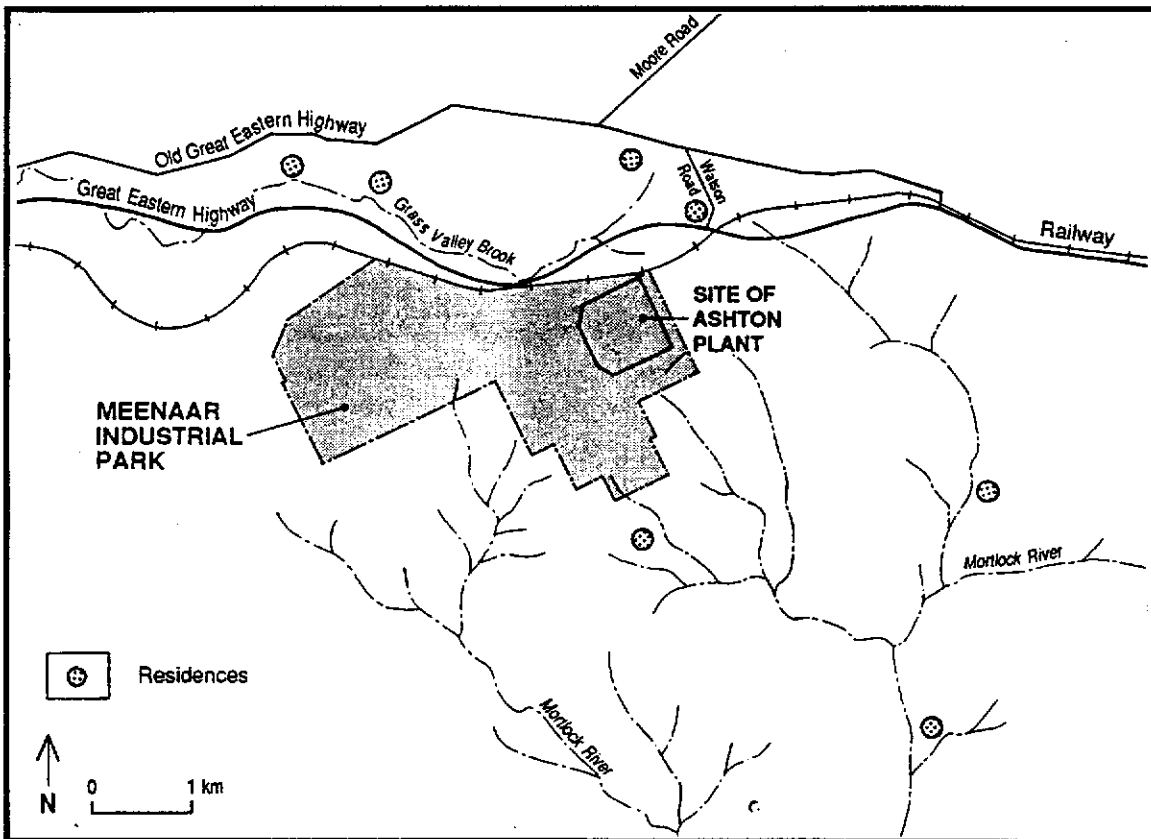


Figure 4. Proximity of proposed secondary processing plant site to residences at Meenaar (Source: Ashton's PER).

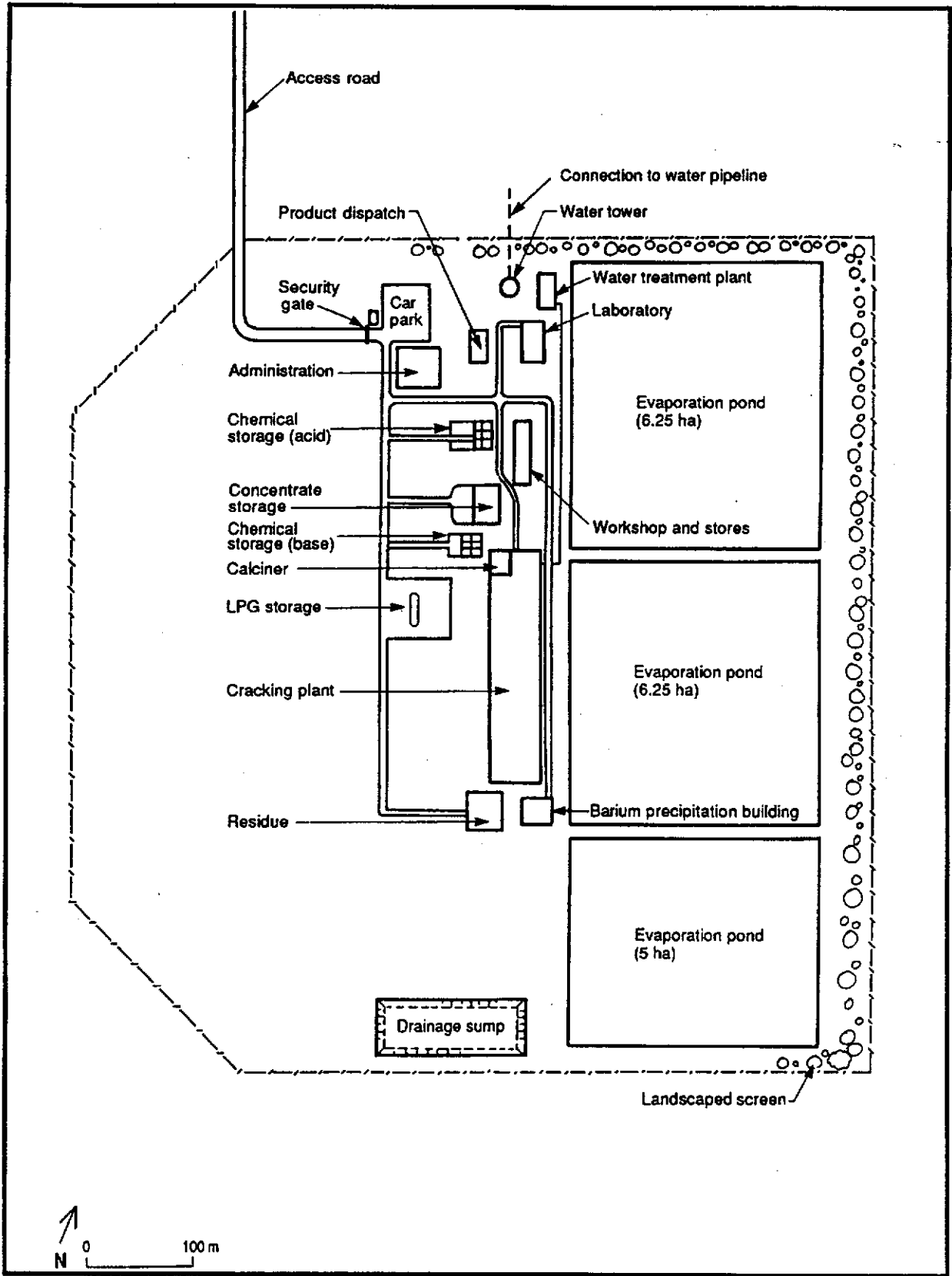


Figure 5. Conceptual layout of proposed secondary processing facilities at Meenaar (Source: Ashton's PER).

Proponent's Consolidated Environmental Management Commitments

20 May 1998

**RARE EARTHS MINING & BENEFICIATION AT MT WELD,
LAVERTON & SECONDARY PROCESSING AT MEENAAR, NEAR
NORTHAM (1194)**

ASHTON RARE EARTHS PTY LIMITED

The proponent has made the following environmental commitments:

1 GENERAL

MANAGEMENT PROGRAMME

- 1 Prior to commissioning facilities at Mt Weld and Meenaar, the proponent will prepare and submit a Radiation Management Plan, in accordance with the Mine Safety and Inspection Regulations 1995, that will address the management and monitoring of occupational and environmental radiation issues associated with:
 - mining and milling
 - transport
 - residue disposal

to the requirements of the Department of Environmental Protection (DEP) on advice from the Department of Minerals and Energy (DME), the Health Department of WA and the Radiological Council.

ANNUAL REPORTING

- 2 Annual reports that described the actions undertaken to comply with these environmental management and monitoring commitments will be prepared by the proponent and submitted to the DEP.

CONSTRUCTION GENERAL

- 3 Solid refuse and material wastes will be removed from construction sites and disposed of in accordance with the requirements of the DEP, in liaison with the Shire of Laverton (for the Mt Weld site) and the Shire of Northam (for the Meenaar site).

2 MT WELD OPERATIONS

CONSERVATION OF FLORA AND FAUNA

- 4 To conserve flora and fauna, an education programme for all employees will be implemented to outline the purpose of imposing restrictions to limit access to domestic pets, firearms and recreational use of motor vehicles to the premises.

REHABILITATION AND DECOMMISSIONING

- 5 To protect rehabilitated area's flora and fauna, the proponent will participate in an appropriate programme to control feral animals (goats and rabbits), in consultation with Agriculture WA and pastoral owners, prior to the commencement of rehabilitation measures.
- 6 Rehabilitation at Mt Weld will be progressively undertaken, generally in accordance with DME's guidelines. Rehabilitation activities will be reported annually to DME.
- 7 A plan outlining the decommissioning of the Mt Weld facilities will be prepared by the proponent in accordance with the Mine Safety and Inspection Regulations 1995.

POLLUTION CONTROL

Water

- 8 A surface and groundwater management plan, including water conservation, will be prepared by the proponent at Mt Weld to detail appropriate measures to manage the groundwater resources in the carbonatite pipe area. The plan will be prepared prior to the commencement of mining operations, in consultation with, and to the requirements of the DEP, on advice from the Water and Rivers Commission.
- 9 A management plan for the disposal of residues from the Meenaar secondary processing plant at Mt Weld will be prepared by the proponent prior to commissioning of the project. The plan will be prepared in consultation with, and to the requirements of the DEP, on advice from DME.
- 10 A groundwater monitoring programme will be prepared in consultation with, and to the requirements of the DEP on advice from the Water and Rivers Commission.
- 11 All wastewater is to be confined to the Mt Weld premises.

3 MEENAAR OPERATIONS

POLLUTION CONTROL

Air

- 12 At the design and commissioning phases of the project, through dispersion modelling the proponent is to demonstrate that atmospheric emissions of carbon monoxide, nitrogen dioxide, photochemical oxidant, sulphur dioxide, lead and particulate, at the site boundary nearest residences, is in compliance with the current acceptable standard [National Environment Protection Council (NEPC), national environmental protection measure (NEPM)] for air quality, the current goals of which are shown in the table below. Best practice emission control equipment and clean production plant design will be used where appropriate, to comply with these concentrations.

Pollutant	Maximum Concentration	Averaging Time	Allowed Exceedances
Carbon monoxide	9.0ppm	8h	1 day a year
Nitrogen dioxide	0.125ppm 0.03ppm	1h 1year	1 day a year none
Photochemical oxidants (as ozone)	0.1ppm 0.08ppm	1h 4h	1 day a year 1 day a year
Sulphur dioxide	0.2ppm 0.08ppm 0.02ppm	1h 24h 1 year	1 day a year 1 day a year none
Lead (as TSP)	0.5µg/m ³	3 months (1 year)	none
Particles (as PM ₁₀)	50.0µg/m ³	24h	1 day per year 5 (days a year)

Note: Concentrations are expressed in terms of mean arithmetic concentrations.

Water

- 13 All wastewater, and surface water from within the plant area, is to be confined to the Meenaar premises.
- 14 Plans and associated documentation for the design of the Meenaar facility and evaporation ponds to withstand predicted seismic events will be prepared by the proponent prior to construction, in consultation with, and to the requirements of the DEP and the Water and Rivers Commission.
- 15 A groundwater monitoring programme will be implemented. The results of this monitoring will be issued annually to the Water and Rivers Commission and the DEP.
- 16 To ensure that there will be no significant radionuclides disposed in the ponds, all effluents to the ponds will be analysed to determine if there are any significant traces of radionuclides and to ensure these levels are below the levels acceptable to the DEP on advice of the DME, the Radiological Council, and the Water and Rivers Commission.

Decommissioning

- 17 The decommissioning strategy for the secondary processing plant at Meenaar will be in accordance with the Mine Safety and Inspection Regulations 1995.

4 TRANSPORT OPTIONS

REVIEW OF TRANSPORT OPTIONS

- 18 The proponent will undertake a further comparative review of the practicability of the transport options (road-rail versus road only) for the Mt Weld project prior to the commencement of construction of transport-related facilities at Mt Weld and Meenaar. The results will be made available to the DEP.

5 ENVIRONMENTAL MANAGEMENT PROCEDURES, OBJECTIVES AND STRATEGIES

GENERAL CONSTRUCTION

- 19 All construction materials and practices will comply with relevant Australian standards and codes of practice.

RADIATION GENERAL

- 20 The ALARP principle (which requires that exposures to radiation be reduced to as low as practicable, in accordance with the Mine Safety and Inspection Regulations 1995, taking into account social and economic factors) will be adopted for all components of the project.

LEGISLATIVE COMPLIANCE

- 21 The management of all radioactive materials will be in accordance with the Mine Safety and Inspection Regulations 1995.

RADIATION PROTECTION DESIGN TARGETS

- 22 The proponent's commitment to radiation protection design targets for:
- all employees will be less than 2 milliSievert per annum;
 - for members of the public will be 0.05 milliSievert per annum; and
 - all employees and the public in handling and transport procedures, will be 1 milliSievert per annum dose limit for employees, and 0.01 milliSievert per annum dose limit for members of the public.

MEENAAR OPERATIONS GENERAL

- 23 The proponent will co-operate with other occupants of the Meenaar Industrial Park in the development of a comprehensive safety and environmental protection programme for the park.

MEENAAR OPERATIONS SAFETY

- 24 The storage and handling of hazardous materials will be undertaken in accordance with relevant statutes and codes, and the proponent will institute an ongoing worker safety training programme.

- 25 An emergency management plan will be developed by the proponent prior to commissioning, in consultation with DME. The plan would include measures to be taken in the event of seismic activity.
- 26 The storage of dangerous goods will comply with the requirements of the Dangerous Goods Regulations 1992.
- 27 Studies will be undertaken by the proponent during the design phase of Stages II and III to identify an economic means of removing the nitrate from the wastewater before it entered the evaporation ponds.

MEENAAR OPERATION SOLIDS

- 28 The proponent will continue to investigate the feasibility of selling the calcium phosphate material produced from regeneration of caustic soda or otherwise making it available to others (for possible use as fertiliser feedstock).

LEGISLATIVE COMPLIANCE

- 29 Transport and handling procedures will comply with the Western Australian Dangerous Goods Regulations 1992 and the Radiation Safety (Transport of Radioactive Substances) Regulations 1991.

EMERGENCY PROCEDURES

- 30 Emergency procedure guides and emergency contacts will be documented and available in vehicle cabs, and all drivers will be instructed in the actions, as specified under the Western Australian Hazardous Materials Emergency Management Scheme, to be taken in the event of an accident.

MONITORING

- 31 A programme of occupational health and safety monitoring of transport drivers will be developed by the proponent prior to commissioning, in consultation with the Health Department of WA.

Attachment 1 to Ministerial Statement 476

Change to proposal

Mt Weld Rare Earths Project

Attachment 1 to Ministerial Statement 476

Change to Proposal

Proposal: Mt Weld Rare Earths Project

Proponent: Lynas Corporation Ltd

Change: Change to Schedule 1, Key Proposal Characteristics Table:

- Change to name of proponent
- Removal of secondary processing at Meenaar; increased rate of mining and processing, change in transport routes, and return of residues to Mt Weld for disposal.

Key Characteristics Table:

<u>Element</u>	<u>Description of proposal</u>	<u>Description of approved change to proposal</u>
Life of project	>15 years	20 years
Size of ore body	1,200,000 tonnes	200,00 tonnes (mineable reserves of separated Rare Earth Oxide product)
Area of disturbance (including access)	Mine (Mt Weld) <250 ha Secondary plant (Meenaar) <100 hectares	Mine (Mt Weld) <250 ha Secondary plant removed as no longer a requirement
Tailings Dam area		15.7 ha startup 27.3 ha (by year 5) 34.2 ha (Life of Mine)
List of Major components <ul style="list-style-type: none"> • Pit • residue disposal • overburden stockpiles • infrastructure (water supply, roads etc.) 	Refer plans, specifications, charts in Schedule 1	Refer plans, specifications, charts in Schedule 1 <ul style="list-style-type: none"> • Pit • Infrastructure (water supply, roads etc.) • Beneficiation plant • Tailings Storage Facility • Evaporation Pond • Waste/low grade ore stockpiles
Mt Weld processing <ul style="list-style-type: none"> • input maximum 	<ul style="list-style-type: none"> • 50,000 to 60,000 tpa of ore containing 5000 tpa of water 	119,000 tpa (Start-up) 202,500 tpa (by year 5)

<ul style="list-style-type: none"> output maximum 	<ul style="list-style-type: none"> 10,000 tpa of ore concentrate (12,000 tpa wet weight) 	31,000 tpa (Start-up) 49,000 tpa (by year 5)
<p>Meenaar Secondary processing plant</p> <ul style="list-style-type: none"> input maximum 	<ul style="list-style-type: none"> 10,000 tpa of ore concentrate (12,000 tpa wet weight) 	Removed as no longer a requirement
<ul style="list-style-type: none"> output maximum 	<ul style="list-style-type: none"> 5,000 tpa of rare earth products 	Removed as no longer a requirement
<p>Solid waste materials</p> <ul style="list-style-type: none"> maximum residue returned to Mt Weld for disposal Dry tailings 	<ul style="list-style-type: none"> 20,000 tonnes per annum of rare earth and phosphorus residues. 	Removed as no longer a requirement <ul style="list-style-type: none"> 88,000 tpa (Start-up) 153,000 tpa (by year 5)
<p>Water supply</p> <ul style="list-style-type: none"> Mt Weld processing ⇒ Source ⇒ maximum annual requirement Meenaar secondary processing plant ⇒ Source ⇒ maximum annual requirement 	<ul style="list-style-type: none"> Dewatering 400 megalitres over 12-18 months Goldfields and Agricultural Supply Scheme 388 megalitres per annum 	<ul style="list-style-type: none"> Dewatering 140 megalitres/yr (Start-up, Mt Weld aquifer) 225 megalitres/yr (by year 5, Mt Weld aquifer) <p>Removed as no longer a requirement</p> <p>Removed as no longer a requirement</p>
<p>Transport</p> <ul style="list-style-type: none"> Dangerous goods and feedstock materials (classified) Chemicals (unclassified) Rare earth products (maximum) 	<ul style="list-style-type: none"> 1,000 trips per annum from Kwinana to Meenaar and 15 trips per annum from Kwinana to Mt Weld 500 trips per annum from Kwinana to Meenaar 250 trips per annum from Meenaar to Fremantle 	<p>By road from Kwinana to Mt Weld (Start-up) and by rail from Kwinana to Kalgoorlie and then road to Mt Weld (by year 5)</p> <p>By road from Mt Weld to Malcolm Siding, by rail Malcolm Siding to Fremantle</p>

<ul style="list-style-type: none"> wet ore concentrate residue 	<ul style="list-style-type: none"> 600 trips per annum from Mt Weld to Meenaar 750 trips per annum from Meenaar to Mt Weld 	<p>(Start-up).</p> <p>By road from Mt Weld to Malcolm Siding, and by rail to Fremantle (year 5)</p> <p>Removed as no longer a requirement</p>
<p>Energy Meenaar secondary processing plant</p> <p>Mt Weld</p>	<ul style="list-style-type: none"> 400 giga-joule per annum of energy form liquefied petroleum gas (8,000 tonnes per annum) 1 mega-watt of electricity (8 000 000 kilo-watt hour per annum) 	<p>Removed as no longer a requirement</p> <p>2 MW per year (Start-up) 3 MW per year (by year 5)</p>
<p>Carbon dioxide</p> <ul style="list-style-type: none"> output maximum 	<ul style="list-style-type: none"> 13,940 tonnes per annum 	<ul style="list-style-type: none"> 13 940 tonnes per annum
Development stages	3 over a 5 to 10 year period	3 over a 5 to 10 year period

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

Approved: 14 May 2003

Attachment 2 to Ministerial Statement 476

Section 45C change to proposal

Mt Weld Rare Earths Project

Attachment 2 to Ministerial Statement 476

Change to Proposal

Proposal: Mt Weld Rare Earths Project

Proponent: Lynas Corporation Ltd

Change: Change to transport route to allow transport of concentrate through Fremantle or Esperance.

Key Characteristics Table:

<u>Element</u>	<u>Description to proposal</u>	<u>Description of approved change to proposal</u>
Life of project	20 years	20 years
Size of ore body	200,00 tonnes (mineable reserves of separated Rare Earth Oxide product)	200,00 tonnes (mineable reserves of separated Rare Earth Oxide product)
Area of disturbance (including access)	Mine (Mt Weld) <250 ha	Mine (Mt Weld) <250 ha
Tailings Dam area	15.7 ha startup 27.3 ha (by year 5) 34.2 ha (Life of Mine)	27.3 ha 34.2 ha (Life of Mine)
List of Major components <ul style="list-style-type: none"> • Pit • residue disposal • overburden stockpiles • infrastructure (water supply, roads etc.) 	Refer plans, specifications, charts in Schedule 1 <ul style="list-style-type: none"> • Pit • Infrastructure (water supply, roads etc.) • Beneficiation plant • Tailings Storage Facility • Evaporation Pond • Waste/low grade ore stockpiles 	Refer plans, specifications, charts in Schedule 1 <ul style="list-style-type: none"> • Pit • Infrastructure (water supply, roads etc.) • Beneficiation plant • Tailings Storage Facility • Evaporation Pond • Waste/low grade ore stockpiles
Mt Weld processing <ul style="list-style-type: none"> • input maximum 	119,000 tpa (Start-up) 202,500 tpa (by year 5)	202,500 tpa
<ul style="list-style-type: none"> • output maximum 	31,000 tpa (Start-up) 49,000 tpa (by year 5)	49,000 tpa

<p>Solid waste materials</p> <ul style="list-style-type: none"> • Dry tailings 	<ul style="list-style-type: none"> • 88,000 tpa (Start-up) • 153,000 tpa (by year 5) 	<ul style="list-style-type: none"> • 153,000 tpa
<p>Water supply</p> <ul style="list-style-type: none"> • Mt Weld processing ⇒ Source <p>⇒ maximum annual requirement</p>	<ul style="list-style-type: none"> • Dewatering • 140 megalitres/yr (Start-up, Mt Weld aquifer) • 225 megalitres/yr (by year 5, Mt Weld aquifer) 	<ul style="list-style-type: none"> • Dewatering • 225 megalitres/yr (Mt Weld aquifer)
<p>Transport</p> <ul style="list-style-type: none"> • Dangerous goods and feedstock materials (classified) • Chemicals (unclassified) • Rare earth products (maximum) • wet ore concentrate 	<p>By road from Kwinana to Mt Weld (Start-up) and by rail from Kwinana to Kalgoorlie and then road to Mt Weld (by year 5)</p> <p>By road from Mt Weld to Malcolm Siding, by rail Malcolm Siding to Fremantle (Start-up).</p> <p>By road from Mt Weld to Malcolm Siding, and by rail to Fremantle (year 5)</p>	<p>By rail from Kwinana to Kalgoorlie and then road to Mt Weld</p> <p>By road from Mt Weld to Leonora, and by rail to Fremantle or Esperance</p> <p>By road from Mt Weld to Leonora, and by rail to Fremantle or Esperance</p>
<p>Energy Mt Weld</p>	<p>2 MW per year (Start-up) 3 MW per year (by year 5)</p>	<p>3 MW per year</p>
<p>Carbon dioxide</p> <ul style="list-style-type: none"> • output maximum 	<ul style="list-style-type: none"> • 13 940 tonnes per annum 	<ul style="list-style-type: none"> • 13 940 tonnes per annum
<p>Development stages</p>	<p>3 over a 5 to 10 year period</p>	<p>3 over a 5 to 10 year period</p>

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

Approved: 8 February 2005

Attachment 3 to Ministerial Statement 476

Section 45C change to proposal

Mt Weld Rare Earths Project

Attachment to Statement 476

Change to Description of Proposal

Proposal: Access Road Alignment and Construction – Lynas Mt Weld Rare Earths Project

Proponent: Lynas Corporation Limited

Change: Construction of an access road requiring vegetation clearance between Mt Weld Mine Site and Mt Weld-Elora Rd

Add to “The Proposal” in Schedule 1 “*An access road between Mt Weld Mine Site and Mt Weld Elora Rd will be constructed primarily for ore haulage for the duration of the project as per Figure 1*”.

From:

Element	Quantities/Description
Area of disturbance (including access)	Mine (Mt Weld) <250 hectares

To:

Element	Quantities/Description
Area of disturbance (including access)	Mine (Mt Weld) <250 hectares (including 19.2 hectares of vegetation clearance for access road)

Figure 1. Layout map showing access road (Schedule 1)

Approval Date: 31 July 2006

Attachment 4 to Ministerial Statement 476

Change to Proposal

Proposal: Mt Weld Rare Earths Project

Proponent: Mt Weld Mining Pty Ltd

Change: Change to Schedule 1, Key Proposal Characteristics Table, incorporating Stage 2 Expansion of Operations, and Revised Regional Location Map (Figure 1), Location of Existing Infrastructure (Figure 2), and Waste Dump Footprint (Figure 3). Changes to Schedule 1, Key Proposal Characteristics Table, include:

- Increase in ore processing, concentrate production, area of disturbance and tailings generation; and
- Removal of some key characteristics as they are regulated by other authorities or not considered environmentally significant.

These changes replace all previous Key Characteristics for the Proposal.

Key Characteristics Table:

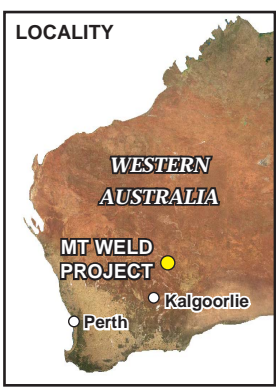
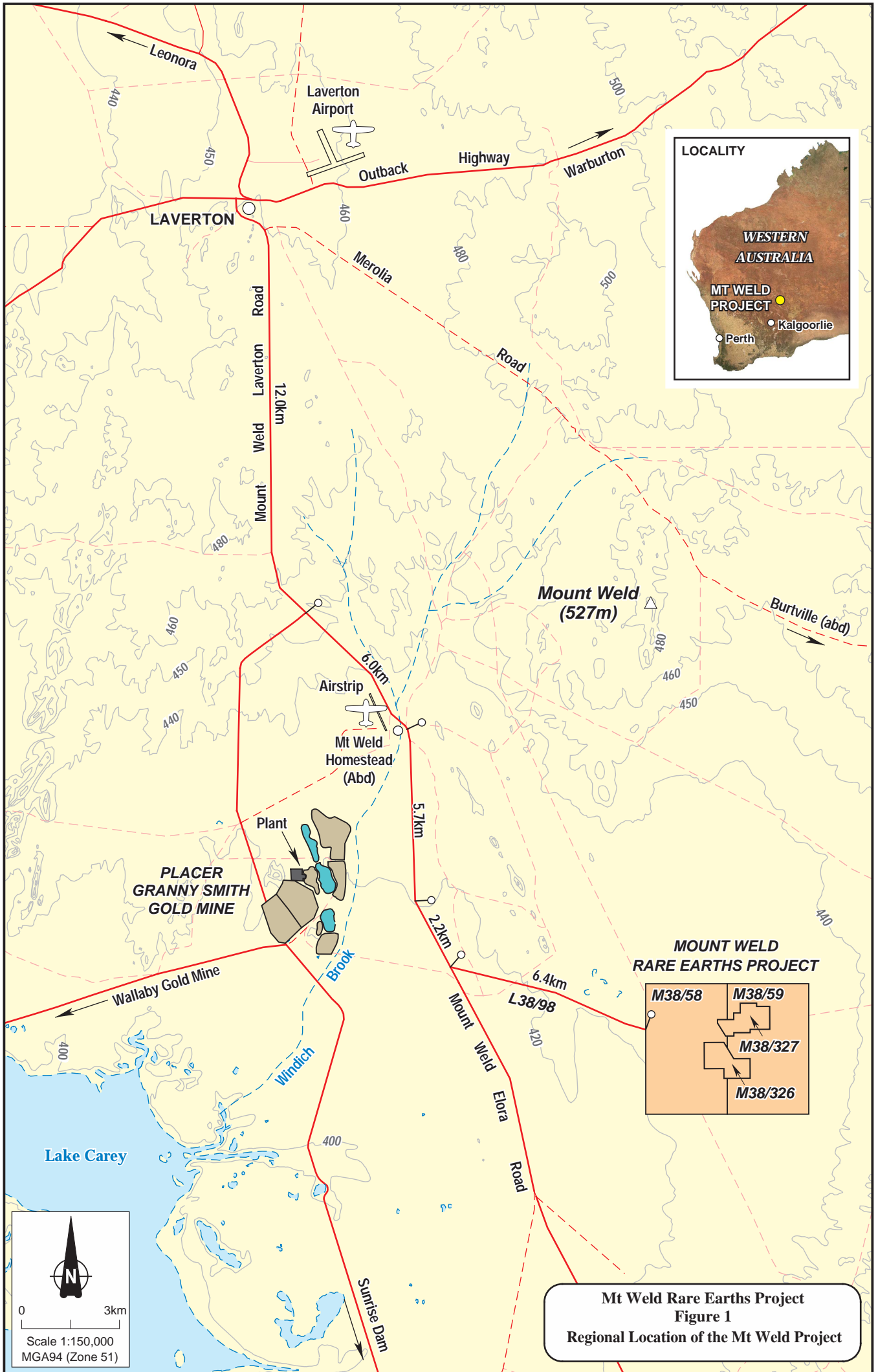
<u>Element</u>	<u>Description of approved change to proposal</u>	<u>Description of approved change to proposal</u>
Life of project	20 years	20 years
Size of ore body	200,00 tonnes (mineable reserves of separated Rare Earth Oxide product)	1,416,000 tonnes
Area of disturbance (including access)	Mine (Mt Weld) <250 ha	Mine (Mt Weld) <270 ha
Tailings Dam area	27.3 ha 34.2 ha (Life of Mine)	27.3 ha 34.2 ha (Life of Mine)
List of Major components <ul style="list-style-type: none"> • Pit • residue disposal • overburden stockpiles • infrastructure (water supply, roads etc.) 	Refer plans, specifications, charts in Schedule 1 <ul style="list-style-type: none"> • Pit • Infrastructure (water supply, roads etc.) • Beneficiation plant • Tailings Storage Facility • Evaporation Pond • Waste/low grade ore 	Refer figures in this Attachment <ul style="list-style-type: none"> • Pit • Infrastructure (water supply, roads etc.) • Beneficiation plant • Tailings Storage Facility • Evaporation Pond • Waste/low grade ore

	stockpiles	stockpiles
Mt Weld processing <ul style="list-style-type: none"> input maximum output maximum 	202,500 tpa 49,000 tpa	242,000 tpa 64,800 tpa (75,000 tpa upper limit)
Solid waste materials <ul style="list-style-type: none"> Dry tailings 	<ul style="list-style-type: none"> 153,000 tpa 	<ul style="list-style-type: none"> 177,600 tpa
Water supply <ul style="list-style-type: none"> Mt Weld processing <ul style="list-style-type: none"> ⇒ Source ⇒ maximum annual requirement 	<ul style="list-style-type: none"> Dewatering 225 megalitres/yr (Mt Weld aquifer) 	<ul style="list-style-type: none"> Dewatering <2.8 GL/yr (Mt Weld aquifer)
Transport <ul style="list-style-type: none"> Dangerous goods and feedstock materials (classified) Chemicals (unclassified) Rare earth products (maximum) wet ore concentrate 	<p>By rail from Kwinana to Kalgoorlie and then road to Mt Weld</p> <p>By road from Mt Weld to Leonora, and by rail to Fremantle</p> <p>By road from Mt Weld to Leonora, and by rail to Fremantle</p>	Removed as transport is regulated by other authorities.
Energy Mt Weld	3 MW per year	Removed as not environmentally significant
Carbon dioxide <ul style="list-style-type: none"> output maximum 	<ul style="list-style-type: none"> 13 940 tonnes per annum 	<ul style="list-style-type: none"> 44,310 tonnes per annum
Development stages	3 over a 5 to 10 year period	3 over a 5 to 10 year period

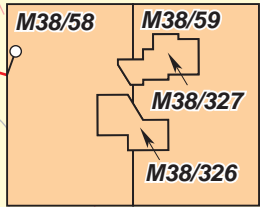
Note: Text in **bold** in the Key Characteristics Table, indicates change/s to the proposal.

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

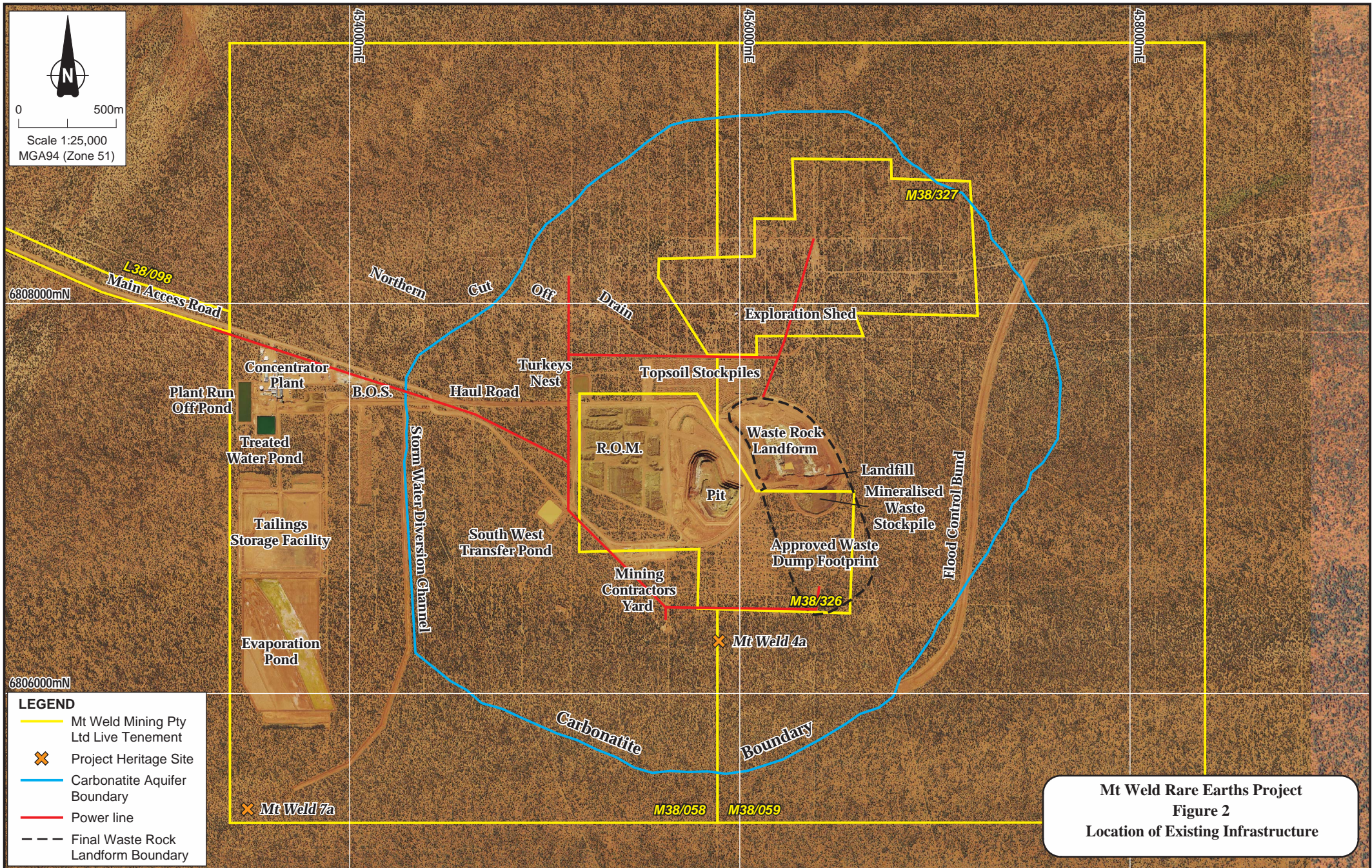
Approval date: 11 January 2012



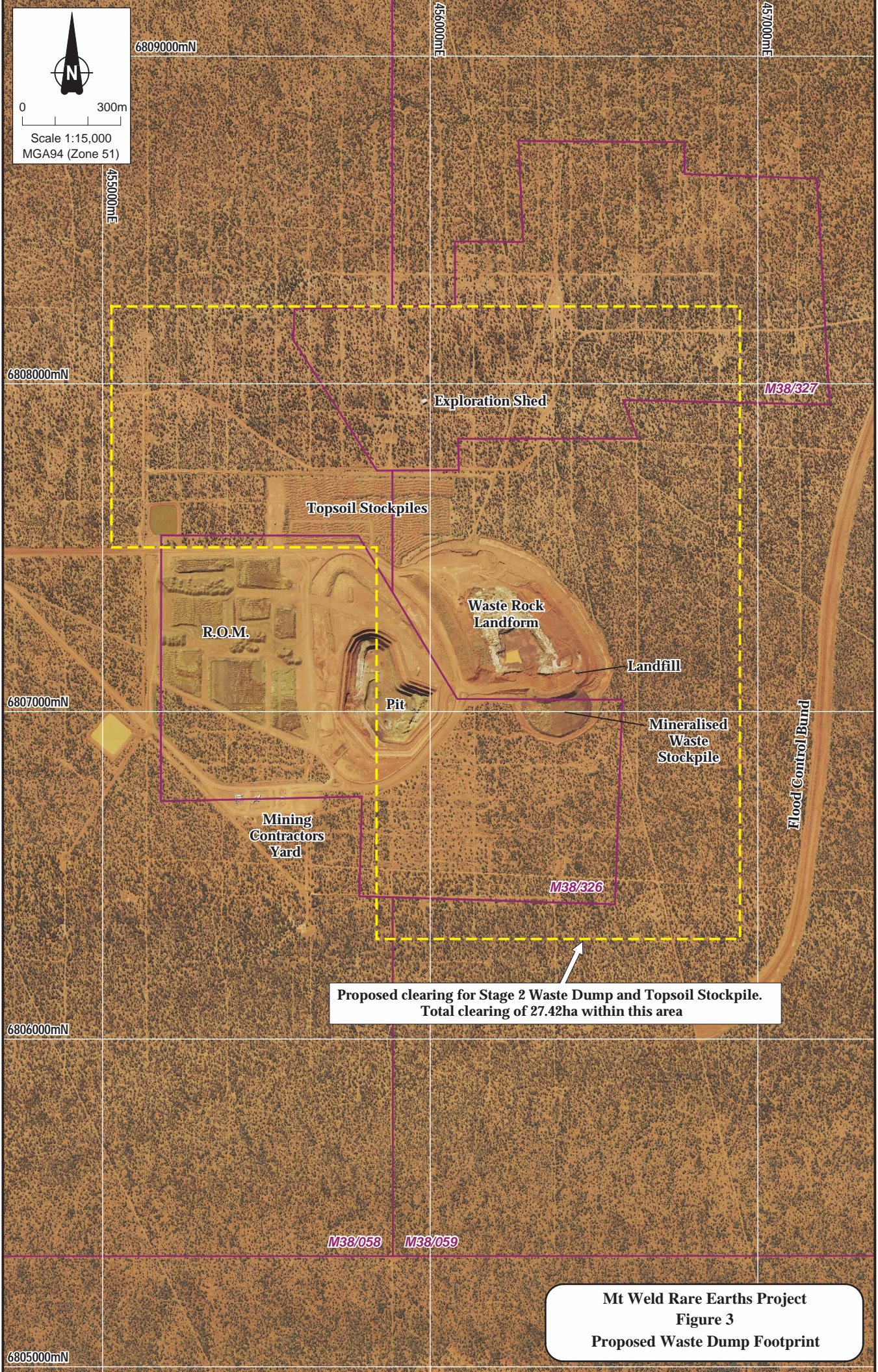
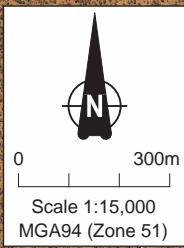
MOUNT WELD RARE EARTHS PROJECT



Mt Weld Rare Earths Project
Figure 1
Regional Location of the Mt Weld Project



Mt Weld Rare Earths Project
 Figure 2
 Location of Existing Infrastructure



Proposed clearing for Stage 2 Waste Dump and Topsoil Stockpile.
Total clearing of 27.42ha within this area

Mt Weld Rare Earths Project
Figure 3
Proposed Waste Dump Footprint

Attachment 5 to Ministerial Statement 476

Change to proposal under s45C of the *Environmental Protection Act 1986*

This Attachment replaces Schedule 1 and Attachment 4 in Ministerial Statement 476

Proposal: Mt Weld Rare Earths Project

Proponent: Lynas Corporation Ltd

The Proposal (Assessment No.1194)

The proposal is for the mining and beneficiation of a rare-earths deposit at Mt Weld, located within mining leases M38/58 and M38/59, approximately 35 kilometres south-east of Laverton.

Changes:

- Increase "*Life of project*" from 20 to 25 years.
- Remove "*Size of ore body*";
- Increase in the "*area of disturbance*" from approximately <270 hectares (ha) to <370 ha. Of the 100 ha increase in area of clearing, approximately 55 ha is for Mining Campaign 2, the remaining 45 ha is associated with the increase in Tailings Dam Area foot print from 27.3 to 67.3 ha (40 ha) and Process Water Pond Facility (5 ha);
- Remove "*maximum carbon dioxide output*"; and
- Remove "*Development Stages*".

Key Characteristics Table

<u>Element</u>	<u>Description of approved proposal</u>	<u>Description of approved change to proposal</u>
Life of project	20 years	25 years
Size of ore body	1,4600,000 tonnes	Removed as not a key characteristic relevant to the environment.
Area of disturbance (including access)	<270 ha	<370 ha Area of Disturbance within a Development Envelope of 455 ha.
Tailings Dam Area	27.3 ha 34.2 ha (Life of Mine)	Tailings Storage Facility 67.3¹ ha Area of Disturbance within a 455 ha Development Envelope.

¹ This increase of 40 ha forms part of the 100 ha increase in "*Area of disturbance*".

Major components	Pit	Pit
	Infrastructure (water supply, roads etc.)	Infrastructure (water supply, roads etc.)
	Beneficiation Plant	Beneficiation Plant
	Tailings Storage Facility	Tailings Storage Facility
	Evaporation Ponds	Evaporation Ponds
	Waste/low grade ore stockpiles	Waste/low grade ore stockpiles
Mt Weld Processing	Input Maximum: <ul style="list-style-type: none"> • 242,000 tonnes per annum (tpa) 	Input Maximum: <ul style="list-style-type: none"> • 242,000 tonnes per annum (tpa)
	Output Maximum: <ul style="list-style-type: none"> • 64,800 tonnes per annum tpa (75,000 tpa upper limit) 	Output Maximum: <ul style="list-style-type: none"> • 64,800 tonnes per annum tpa (75,000 tpa upper limit)
Solid waste materials <ul style="list-style-type: none"> • Dry tailings 	<ul style="list-style-type: none"> • 177,600 tpa 	<ul style="list-style-type: none"> • 177,600 tpa
Water supply <ul style="list-style-type: none"> • Mt Weld processing 	Source: Dewatering	Source: Dewatering
	Maximum annual requirements: <2.8 GL/yr	Maximum annual requirements: <2.8 GL/yr
Carbon dioxide output maximum	44,310 tonnes per annum (tpa)	Removed as greenhouse gas emission is regulated under <i>Clean Energy Act, 2011</i>.
Development stages	3 over a 5 to 10 year period	Removed as not a key characteristic relevant to the environment.

Note: Text in **bold** in the Key Characteristics Table, indicates changes to the proposal.

List of Figures: Figures 1 to 3 replace all Figures in Schedule 1 and Attachment 4.

Figure 1: Regional location

Figure 2: Mt Weld Rare Earths Project Location

Figure 3: Mt Weld Mining Pit and Associated Infrastructure

[Signed 10 December 2013]

Dr Paul Vogel

CHAIRMAN

Environmental Protection Authority

under delegated authority

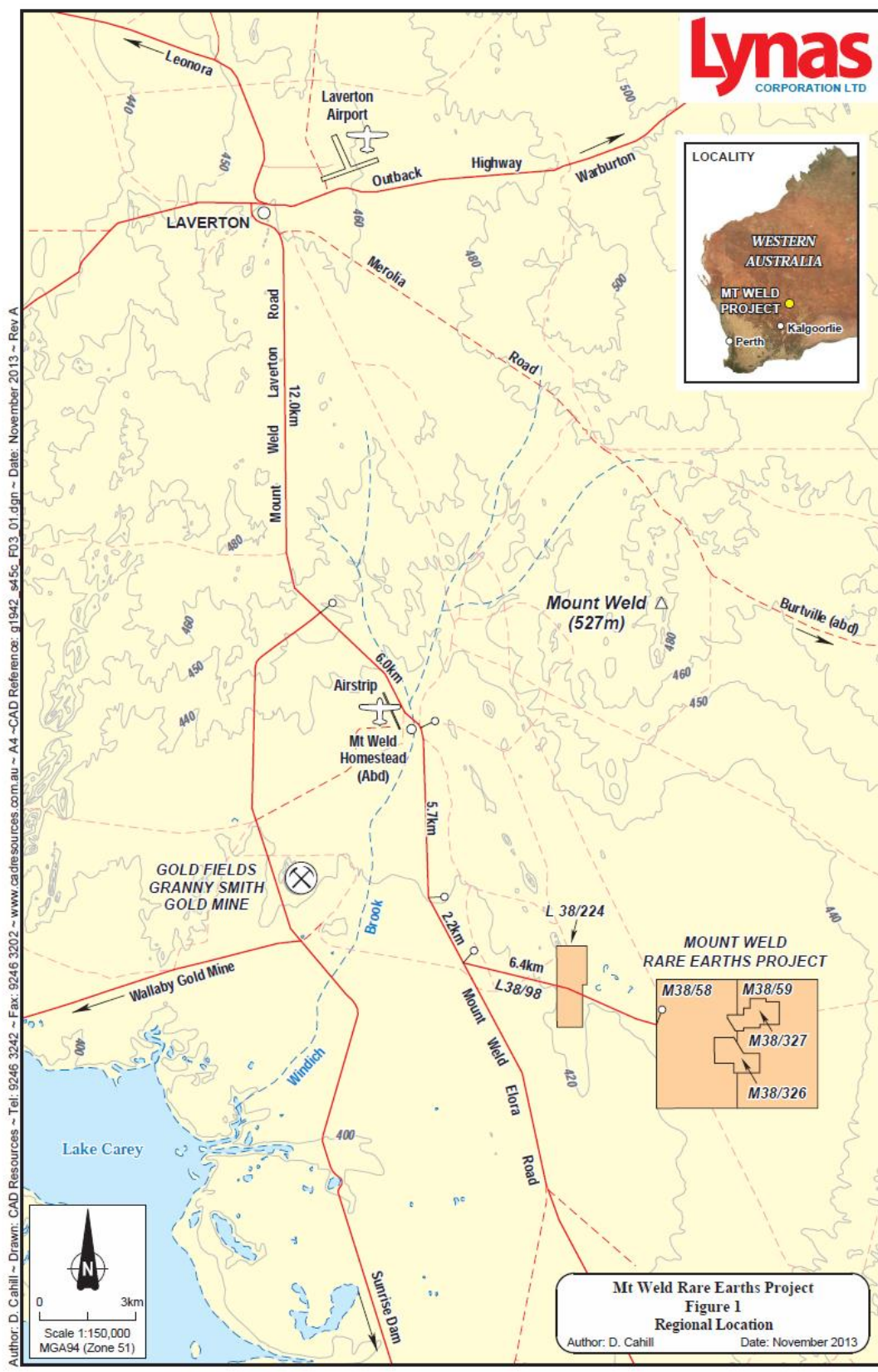


Figure 1 Regional Location

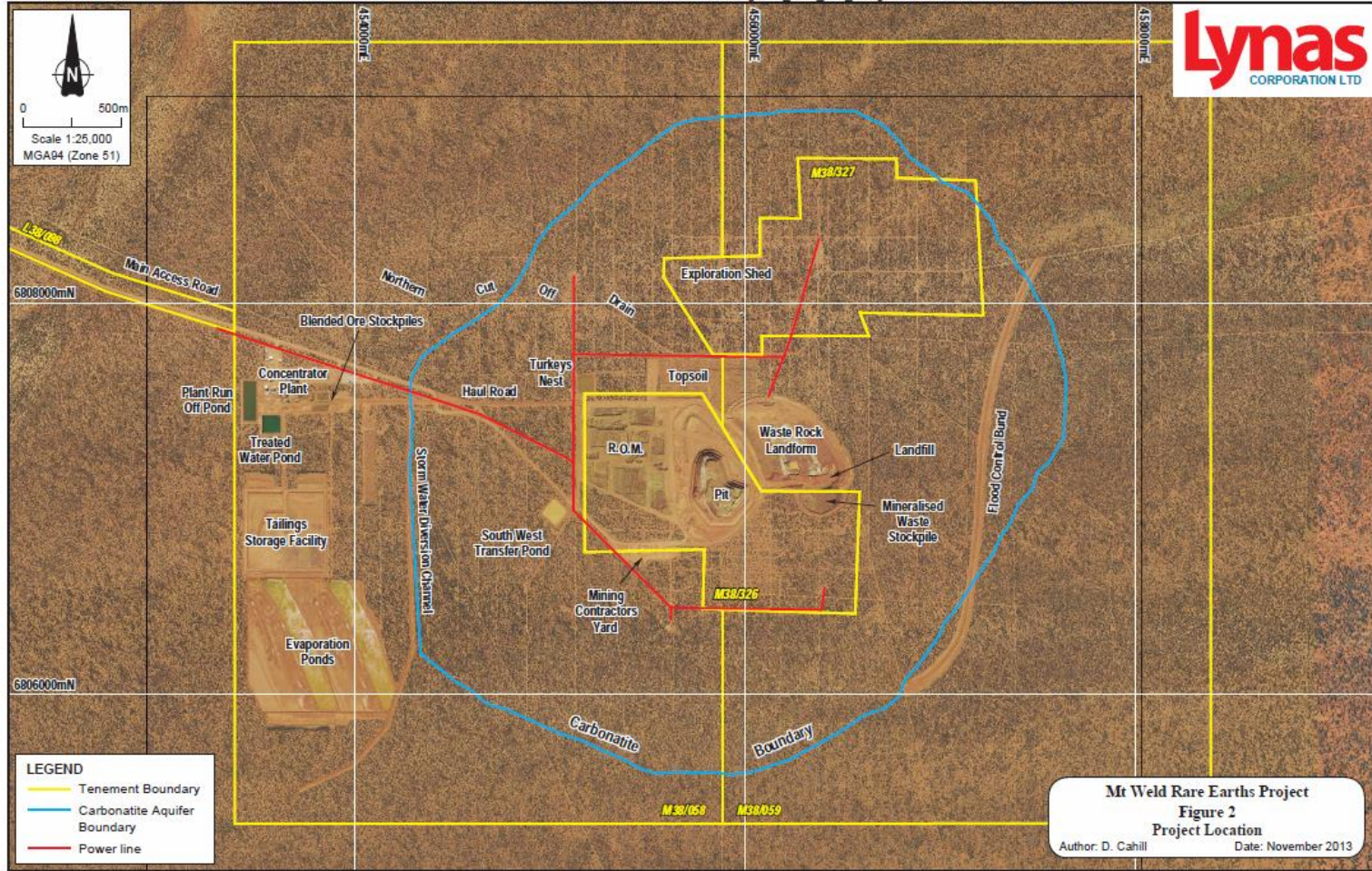


Figure 2 Mt Weld Rare Earths Project Location

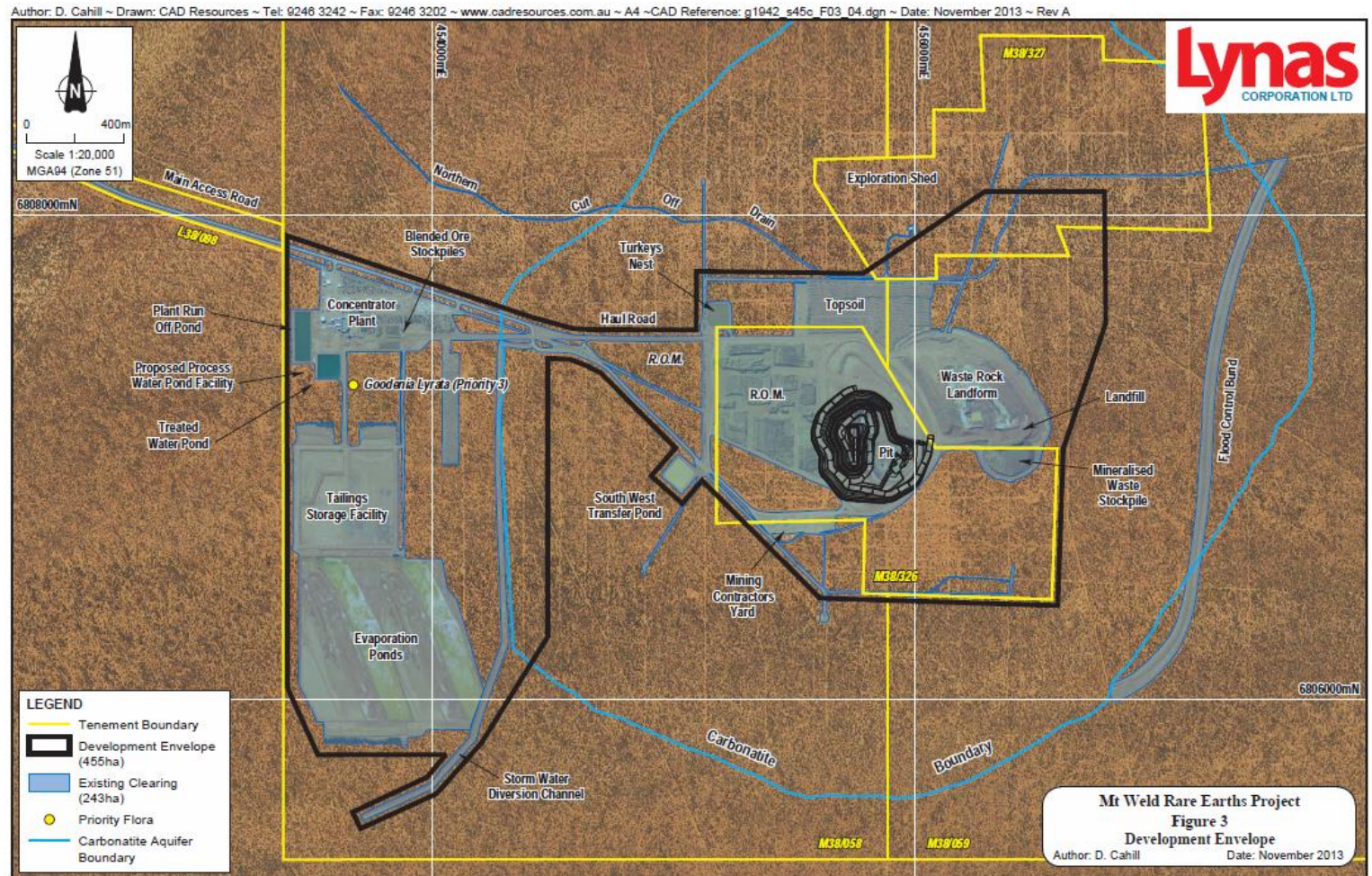


Figure 3 Mt Weld Mining Pit and Associated Infrastructure

Attachment 6 to Ministerial Statement 476
Change to proposal approved under s45C of the
Environmental Protection Act 1986

This Attachment replaces Schedule 1 and Attachment 5 of Ministerial Statement 476

Proposal: Mt Weld Rare Earths Project

Proponent: Mt Weld Mining Pty Limited

Changes:

- Inclusion of a third Tailings Storage Facility (TSF 3) to be incorporated into the current approved TSF footprint;
- Remove key characteristics which:
 - Have no direct environmental impact; and
 - Are regulated through legislation enforced by other agencies

Table 1: Summary of the Proposal

Proposal Title	Mt Weld Rare Earths Project
Short Description	The proposal is for the mining and beneficiation of a rare-earths deposit at Mt Weld, located within mining leases M38/58 and M38/59, approximately 35 kilometres south-east of Laverton.

Table 2: Authorised extent of physical and operational elements

Element	Previously Authorised Extent	Authorised Extent
Life of project	25 years	Removed as not a key characteristic relevant to the environment
Area of disturbance (including access)	<370 ha Area of Disturbance within a Development Envelope of 455 ha	<370 ha Area of Disturbance within a Development Envelope of 455 ha
Tailings Dam area	Tailings Storage Facility 67.3 ha Area of Disturbance within a 455 ha Development Envelope.	Tailings Storage Facility 67.3 ha Area of Disturbance within a 455 ha Development Envelope.
Major components	Pit	Pit
	Infrastructure (water supply, roads etc.)	Infrastructure (water supply, roads etc.)
	Beneficiation Plant	Beneficiation Plant
	Tailings Storage Facility	Tailings Storage Facility
	Evaporation Ponds	Evaporation Ponds
	Waste/low grade ore stockpiles	Waste/low grade ore stockpiles

Element	Previously Authorised Extent	Authorised Extent
Mt Weld Processing	Input Maximum: <ul style="list-style-type: none"> 242,000 tonnes per annum (tpa) 	Removed as regulated under EP Act Part V Licence L814/2007/2 and Mining Proposal (Registration ID 33811)
	Output Maximum: <ul style="list-style-type: none"> 64,800 tonnes per annum tpa (75,000 tpa upper limit) 	Removed as regulated under EP Act Part V Licence L814/2007/2
Solid waste materials <ul style="list-style-type: none"> Dry tailings 	<ul style="list-style-type: none"> 177,600 tpa 	Removed as regulated under EP Act Part V Licence L814/2007/2 and Mining Proposal (Registration ID 33811)
Water supply <ul style="list-style-type: none"> Mt Weld processing 	Source: Dewatering	Removed as groundwater abstraction is regulated under Groundwater Licence GWL17130(2) and the Groundwater Operating Strategy
	Maximum annual requirements: <2.8 GL/yr	

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

Table 3: Abbreviations

Abbreviation	Term
ha	hectare
tpa	tonnes per annum
GL/yr	Gigalitres per year

Figures

Figure 1: Regional location

Figure 2: Mt Weld Rare Earths Project Location

Figure 3: Mt Weld Mining Pit and Associated Infrastructure

[Signed 22 January 2018]

Dr Tom Hatton
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: _____

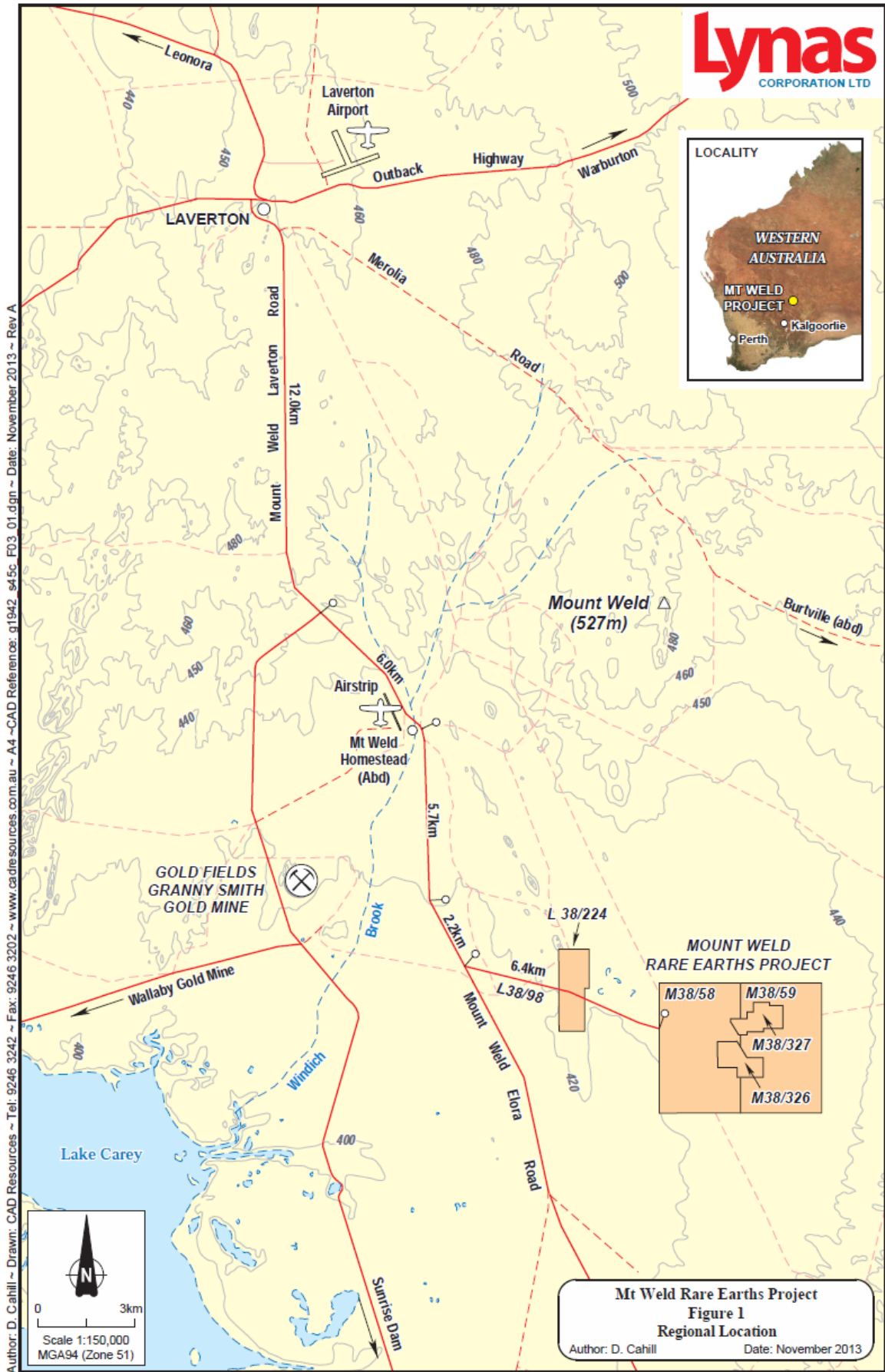


Figure 1 Regional Location

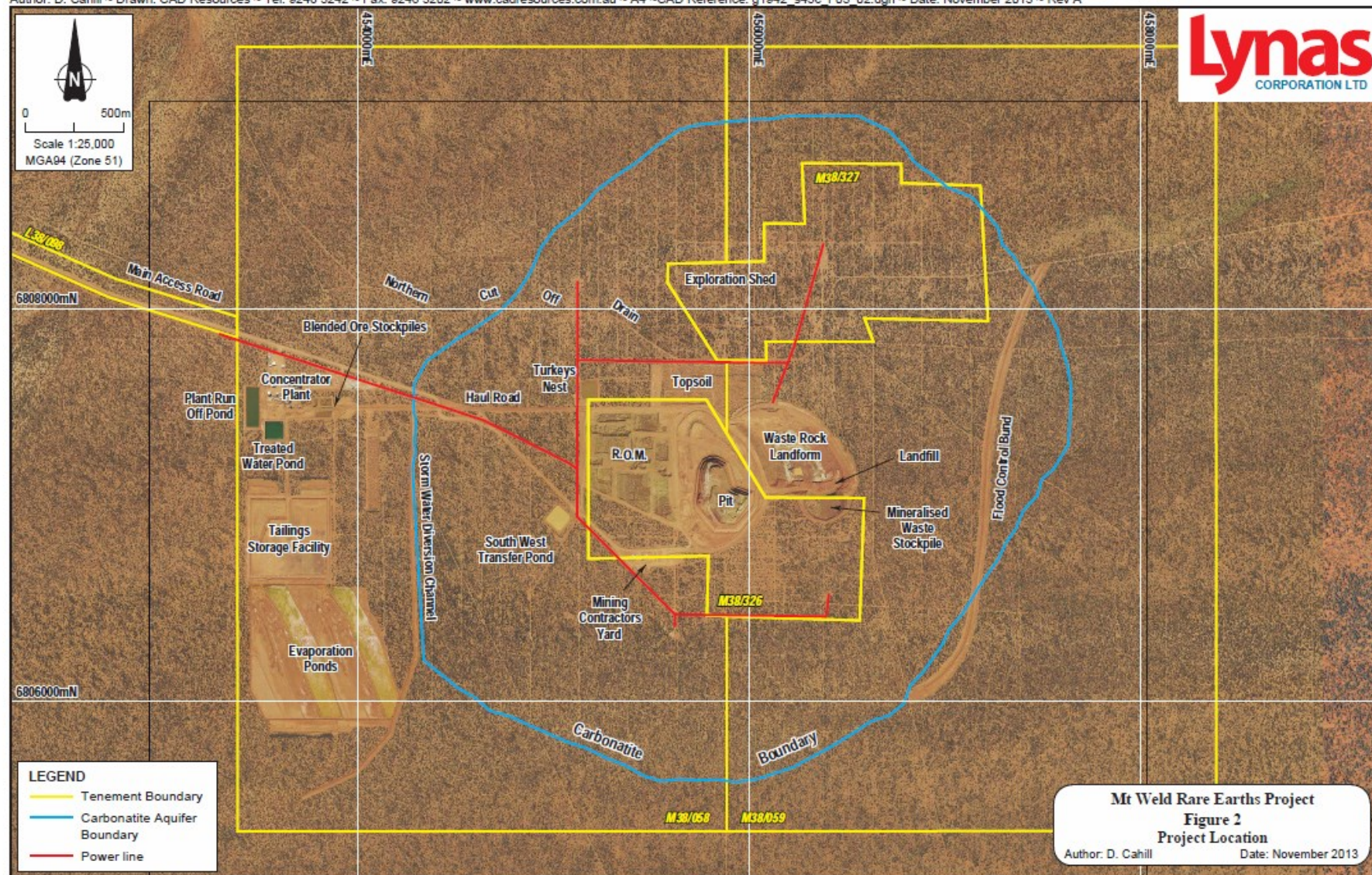


Figure 2 Mt Weld Rare Earths Project Location

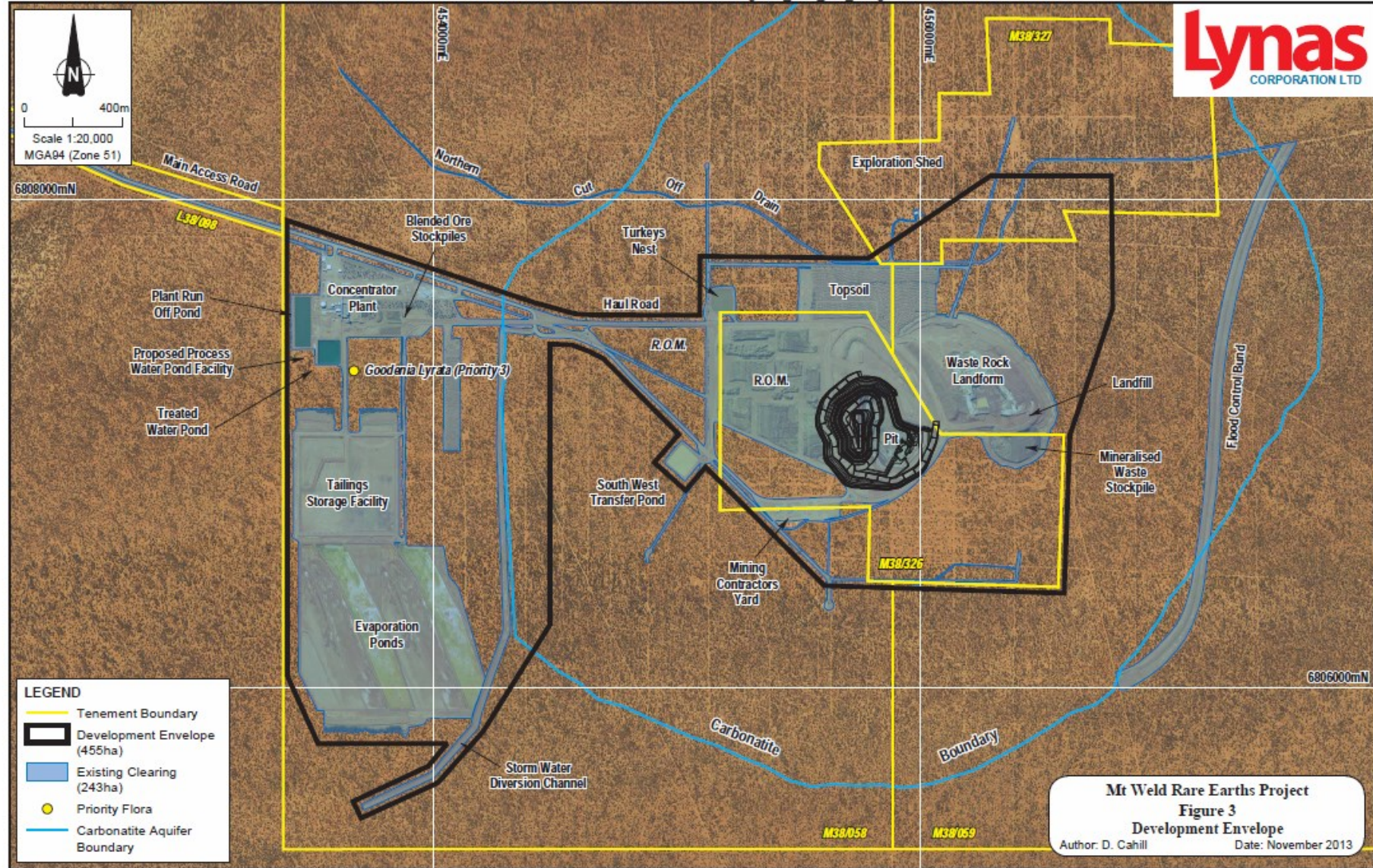


Figure 3 Mt Weld Mining Pit and Associated Infrastructure

Attachment 7 to Ministerial Statement 476

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

This Attachment replaces Schedule 1 and Attachment 6 of Ministerial Statement 476

Proposal: Mt Weld Rare Earths Project

Proponent: Mt Weld Mining Pty Limited

Changes:

- Increase in the area of disturbance from 370 ha to 429 ha – an increase of 59 ha; and
- An increase in the development envelope from 455 ha to 505 ha – an increase of 50 ha.

Table 1: Summary of the Proposal

Proposal Title	Mt Weld Rare Earths Project
Short Description	The proposal is for the mining and beneficiation of a rare-earths deposit at Mt Weld, located within mining leases M38/58 and M38/59, approximately 35 kilometres south-east of Laverton.

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

Element	Location	Previously Authorised Extent	Authorised Extent
Area of disturbance (including access)	Mt Weld	<370 ha Area of Disturbance within a Development Envelope of 455 ha	Up to 429 ha of Disturbance within a Development Envelope of 505 ha .
Tailings Dam area		Tailings Storage Facility 67.3 ha Area of Disturbance within a 455 ha Development Envelope.	Tailings Storage Facility 67.3 ha Area of Disturbance within a 455 ha Development Envelope
Major components	Mt Weld	Pit	Pit
		Infrastructure (water supply, roads etc.)	Infrastructure (water supply, roads etc.)
		Beneficiation Plant	Beneficiation Plant
		Tailings Storage Facility	Tailings Storage Facility
		Evaporation Ponds	Evaporation Ponds
		Waste/low grade ore stockpiles	Waste/low grade ore stockpiles

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

Table 3: Abbreviations

Abbreviation	Term
ha	hectare

Figures (attached)

Figure 1 Regional Location

Figure 2 Mt Weld Rare Earths Development Envelope and Disturbance Area



Dr Tom Hatton

CHAIRMAN

Environmental Protection Authority
under delegated authority

Approval date: 16 September 2020



Figure 1: Regional Location

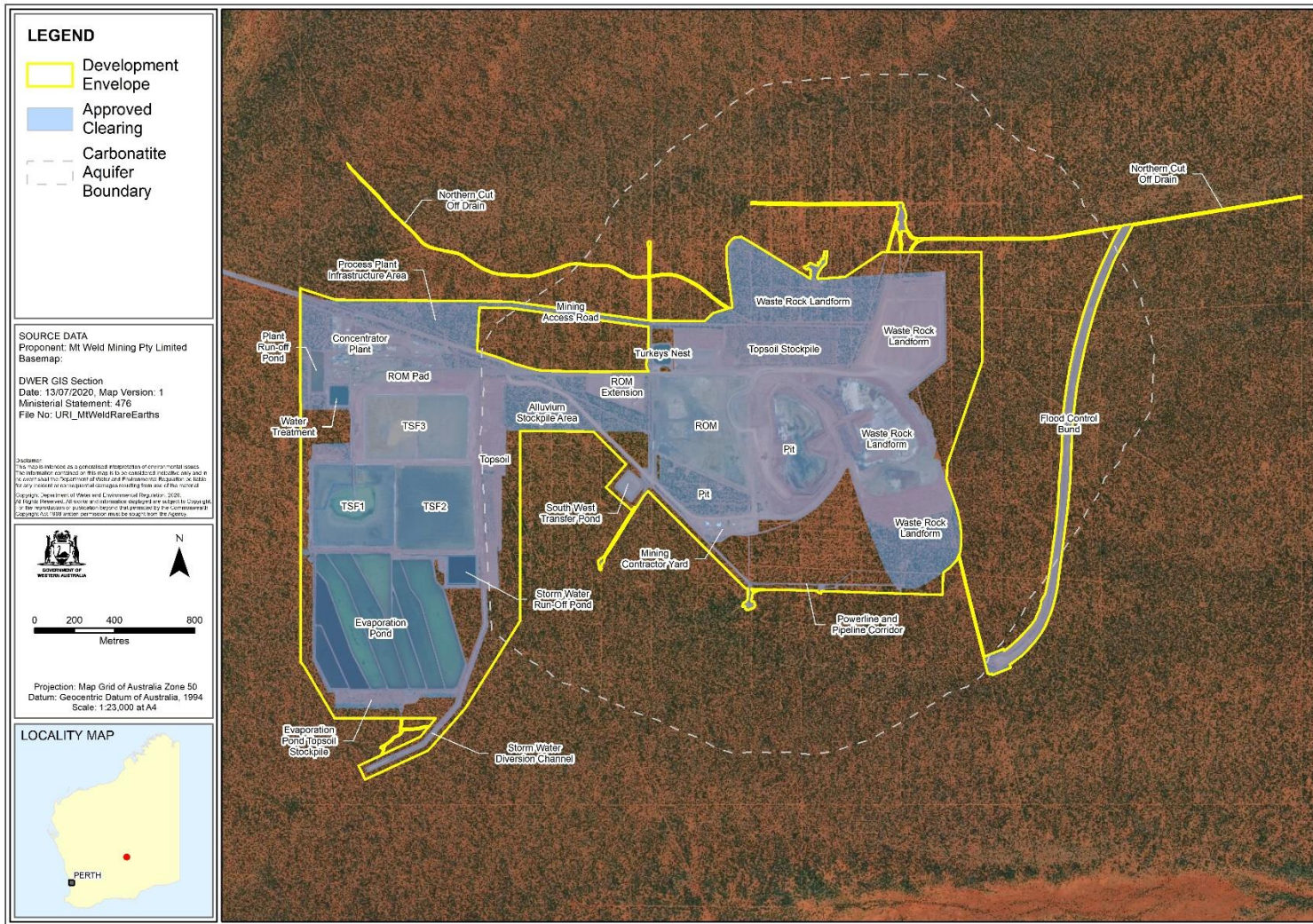


Figure 2: Mt Weld Rare Earths Development Envelope and Disturbance Area