MINISTER FOR THE ENVIRONMENT AND HERITAGE

Statement No.

000606

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

TELFER PROJECT, EXPANSION OF TELFER GOLD MINE
GREAT SANDY DESERT

Proposal: The expansion of mining at the Telfer Gold Mine to include the mining and processing of 400 million tonnes of gold ore at a rate of up to 23 million tonnes per annum, and the transport of copper concentrate to Port Hedland by road, as documented in schedule 1 of this statement.

The expansion will require the development or expansion of mine facilities and infrastructure at the Telfer Gold Mine.

Proponent: Newcrest Mining Limited

Proponent Address: Level 9, 600 St Kilda Road, MELBOURNE VIC 3004

Assessment Number: 1445

Report of the Environmental Protection Authority: Bulletin 1059

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

Procedural conditions

1 Implementation and Changes

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

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- 1 OCT 2002

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1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.

1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is not substantial, the proponent may implement those changes upon receipt of written advice.

2 Proponent Commitments

2-1 The proponent shall implement the 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 the conditions in this statement.

3 Proponent Nomination and Contact Details

3-1 The proponent for the time being nominated by the Minister for the Environment and Heritage 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 and Heritage 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 Environmental Protection 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 provide evidence to the Minister for the Environment and Heritage within five years of the date of this statement that the proposal has been substantially commenced or the approval granted in this statement shall lapse and be void.

Note: The Minister for the Environment and Heritage 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 and Heritage, prior to the expiration of the five-year period referred to in condition 4-1.

The application shall demonstrate that:

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

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

Environmental conditions

5 Compliance Audit and Performance Review

5-1 The proponent shall prepare an audit program in consultation with and submit compliance reports to the Department of Environmental Protection which address:

- the implementation of the proposal as defined in schedule 1 of this statement;
- evidence of compliance with the conditions and commitments; and
- the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the *Environmental Protection Act 1986*, the Chief Executive Officer of the Department of Environmental Protection is empowered to audit 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.

Usually, the Department of Environmental Protection prepares an audit table which can be utilised by the proponent, if required, to prepare an audit program to ensure that the proposal is implemented as required. The Chief Executive Officer is responsible for the preparation of written advice to the proponent, which is signed off by either the Minister or, under an endorsed condition clearance process, a delegate within the Environmental Protection Authority or the Department of Environmental Protection that the requirements have been met.

5-2 The proponent shall submit a performance review report every five years after the start of the operations phase to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority, which addresses:

- the major environmental issues associated with the project; the targets for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those targets;

- the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best available technology where practicable;
- significant improvements gained in environmental management, including the use of external peer reviews;
- stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and
- the proposed environmental targets over the next five years, including improvements in technology and management processes.

6 Subterranean Fauna Sampling Plan

6-1 Prior to commissioning of the ore processing plant, the proponent shall develop a Subterranean Fauna Sampling Plan for mine and borefields, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

Advisory agencies (See procedure 3):

- Department of Environmental Protection;
- Department of Conservation and Land Management; and
- Western Australian Museum.

The objective of this Plan is:

- to increase scientific knowledge about subterranean fauna to assist in the conservation of this element of the environment.

This Plan shall address:

1 subterranean fauna surveys of the areas to be affected by dewatering operations and borefield operations to assist in establishing the conservation significance of any species within the affected areas;

2 characterisation of subterranean fauna habitats to be affected by dewatering operations and borefield operations, and identification of similar subterranean fauna habitats outside the affected areas;

3 subterranean fauna surveys of similar habitats outside the areas to be affected by dewatering operations and borefield operations to assist in establishing the conservation significance of fauna within the areas to be affected; and

4 specific measures to record and preserve biological information on any species collected in the project area.

6-2 The proponent shall implement the Subterranean Fauna Sampling Plan required by condition 6-1, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

6-3 The proponent shall make the Subterranean Fauna Sampling Plan required by condition 6-1 publicly available, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

6-4 The proponent shall submit the results from the Subterranean Fauna Sampling Plan to the Environmental Protection Authority, the Department of Conservation and Land Management and the Western Australian Museum.

6-5 In the event that the Environmental Protection Authority considers, based on the results of the Subterranean Fauna Sampling Plan, that its objective would be compromised, the proponent shall develop an action plan to the requirements and timing of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

7 Greenhouse Gas Emissions

7-1 Prior to commencement of construction of the processing plant, the proponent shall prepare a Greenhouse Gas Emissions Management Plan to:

- ensure that "greenhouse gas" emissions from the project are adequately addressed and best available efficient technologies are used to minimise total net "greenhouse gas" emissions and / or "greenhouse gas" emissions per unit of product; and

- mitigate "greenhouse gas" emissions in accordance with the Framework Convention on Climate Change 1992, and consistent with the National Greenhouse Strategy;

to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

This Plan shall include:

1 calculation of the "greenhouse gas" emissions associated with the proposal, as indicated in "Minimising Greenhouse Gas Emissions, Guidance for the Assessment of Environmental Factors, No. 12" published by the Environmental Protection Authority;

2 specific measures to minimise the total net "greenhouse gas" emissions and/or the "greenhouse gas" emissions per unit of product associated with the proposal;

3 monitoring of "greenhouse gas" emissions;

4 estimation of the "greenhouse gas" efficiency of the project (per unit of product and/or other agreed performance indicators) and comparison with the efficiencies of other comparable projects producing a similar product;

5 analysis of the extent to which the proposal meets the requirements of the National Greenhouse Strategy using a combination of:

- "no regrets" measures;
- "beyond no regrets" measures;
- land use change or forestry offsets; and
- international flexibility mechanisms;

6 a target set by the proponent for the reduction of total net "greenhouse gas" emissions and/or "greenhouse gas" emissions per unit of product over time, and annual reporting of progress made in achieving this target.

Note: In part 5 above, the following definitions apply:

(1) "no regrets" measures are those that can be implemented by a proponent which are effectively cost-neutral and provide the proponent with returns in savings which offset the initial capital expenditure that may be incurred; and

(2) "beyond no regrets" measures are those that can be implemented by a proponent which involve some additional cost that is not expected to be recovered.

7-2 The proponent shall implement the Greenhouse Gas Emissions Management Plan required by condition 7-1 to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

7-3 The proponent shall make the Greenhouse Gas Emissions Management Plan required by condition 7-1 publicly available, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

Procedures

1 Where a condition states "to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority", the Chief Executive Officer of the Department of Environmental Protection will obtain that advice for the preparation of written advice to the proponent.

2 The Environmental Protection Authority may seek advice from other agencies, as required, in order to provide its advice to the Chief Executive Officer of the Department of Environmental Protection.

3 Where a condition lists "advisory agencies", it is expected that the proponent will obtain the advice of those listed as part of its compliance reporting to the Department of Environmental Protection.

Notes

1 The Minister for the Environment and Heritage will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environmental Protection over the fulfilment of the requirements of the conditions.

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

Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT AND HERITAGE

- 1 OCT 2002

Schedule 1

The Proposal (Assessment No. 1445)

The proposal is to mine and process oxide and primary ores, and to operate associated facilities at the Telfer Project as specified in the key proposal characteristics (Table 1 below).

Figures (attached)

Figure 1 - Project Location

Figure 2 - Telfer Project General Arrangement

Figure 3 - Potable Water and Raw Water Borefields

Table 1 - Key Proposal Characteristics

Element	Description
Life of Mine	Approximately 25 years
Land Disturbance Area	The existing Telfer Gold Mine covers some 1,800 ha. The proposal will disturb a further 1,800 ha
Surface Mining	Conventional truck and shovel open pit mining techniques in the Main Dome and West Dome pits.
Underground Mining	Sublevel caving operations in the Telfer Deeps Ore Zone below the Main Dome pit.
	Options for materials handling from the underground to the surface include a conveyor incline ***or*** haulage shaft.
Ore Production	Up to approximately 23 million tonnes per annum of ore (including dump leach ore).
Ore Processing	Use of parts of the existing processing plant and/or construction of a new ore processing plant comprising conventional copper and pyrite flotation and CIL circuits to treat sulphide ore.
Processing Throughput	Up to 20 million tonnes per annum
Low Grade Ores	Existing dump leach facilities will be used to treat low grade oxide ore.
Waste Rock Production	Up to approximately 90 million tonnes per annum
Waste Rock Dumps	Two waste dump extensions will be developed to contain approximately 1,300 Mt of waste material.
Tailings Disposal	A new tailings storage facility will be constructed to contain some 370 Mt of tailings.
Products	Gold Bullion and gold/copper concentrate.
Concentrate Transport Method	Copper concentrate will be transported by road from Telfer to Port Hedland.
Port Hedland Concentrate Facility	The existing facility will be expanded to include a new 25,000 t concentrate storage shed.
Transport Requirements	Up to 290 truck round trips per month hauling consumables and mineral concentrate.
Water Supply	Water supply requirements increased from 44 ML/day to some 50 ML/day.
	Existing borefield capacity (44 ML/day) to be expanded to supply up to 65 ML/day.
	Waters produced by mine dewatering to be included in the Project raw water supply.
Employment	Up to 1300 people during construction and approximately 650 people during the operational period.

Major Consumables	Agent	Estimated Maximum Annual Usage	Estimated Maximum Storage Quantity
	Lime	37,000 t	4,800 t
	Sodium Cyanide	8,350 t	810 t
	Carbon	120 t	10 t
	Antiscalant	240 t	20 t
	Caustic Soda	4,500 t	145 t
	Hydrochloric Acid	240 t	20t
	Collector	425 t	60 t
	Xanthate	1,400t	200 t
	Frother	190 t	20 t
	Flocculant	650 t	66 t
	Grinding Media	18,800 t	2,025 t
	Sodium Hydrogen Sulphide	1,400 t	95 t
	Sulphuric Acid	11,200 t	590 t
	Sodium Sulphide	13,500 t (years 1 and 2 only)	935 t
	Diesel	70 ML/annum (average 45 ML/annum)	9 ML

Abbreviations

Mtpa	million tonnes per annum
Mt	million tonnes
CIL	Carbon in Leach
t	tonnes
ML	million litres
ha	hectares

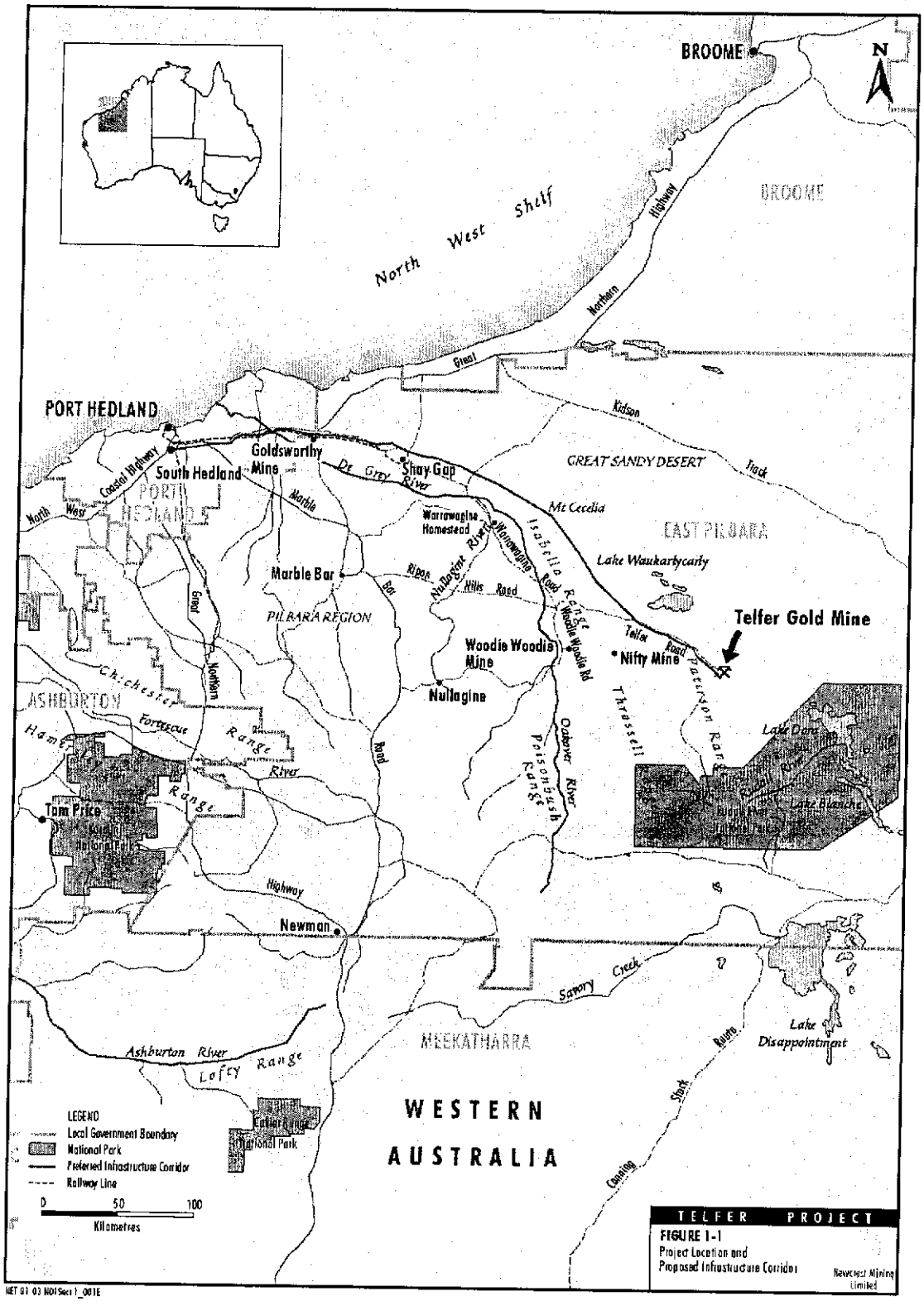


Figure 1 *Project Location (Source: Newcrest Mining Limited, 2002a)*

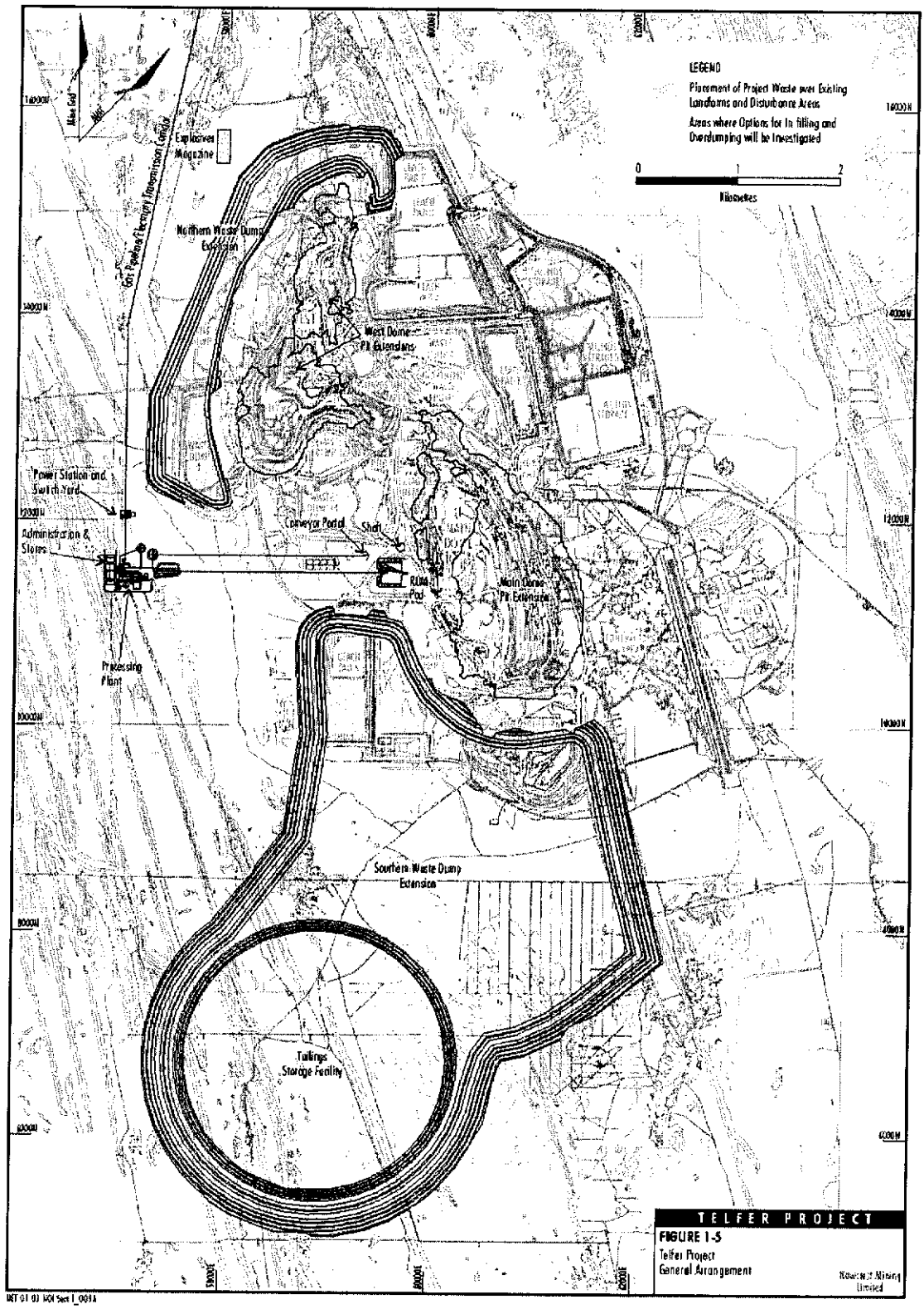


Figure 2 ***Telfer Project Expansion, General Arrangement (Source: Newcrest Mining Limited, 2002a)***

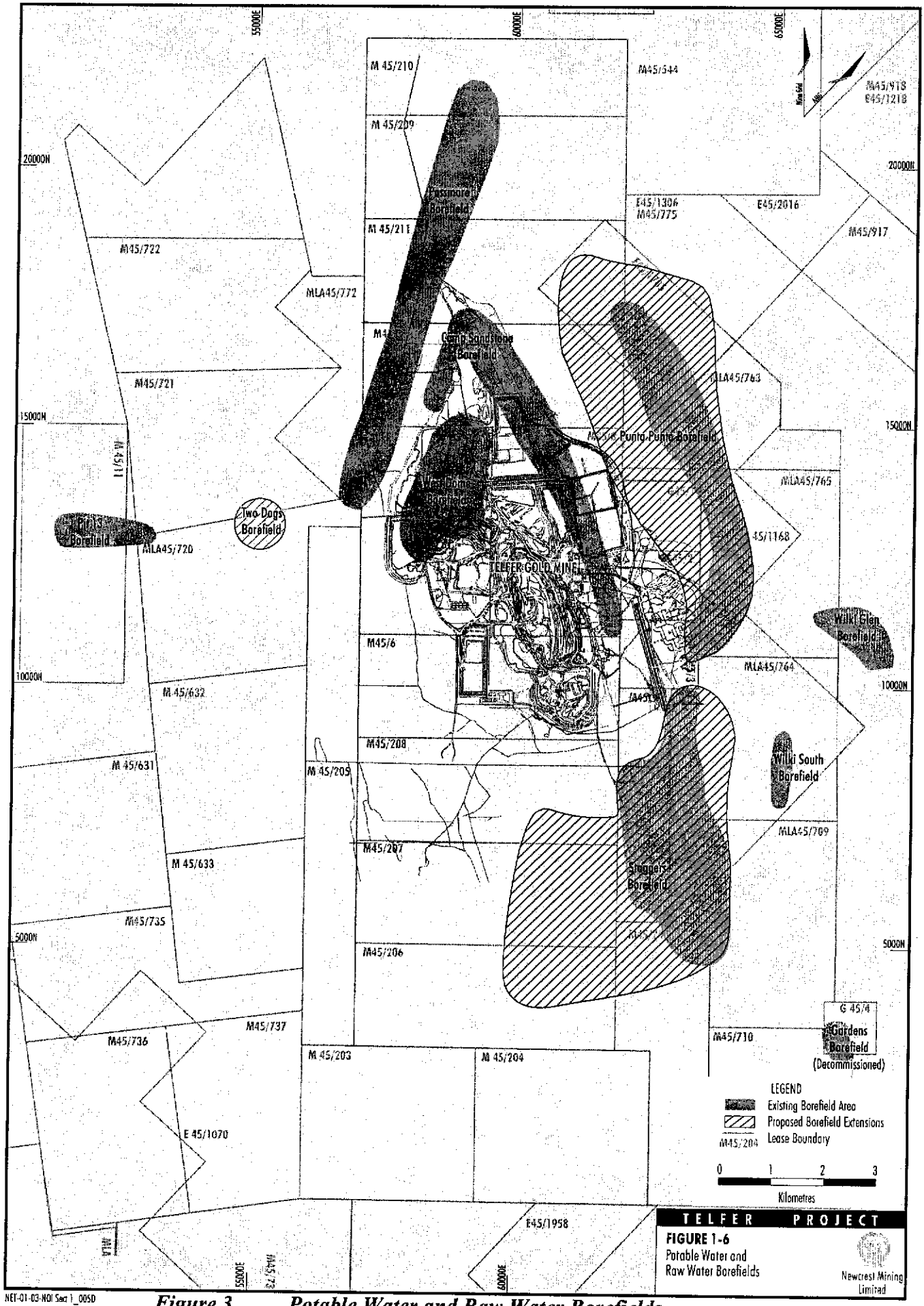


Figure 3 Potable Water and Raw Water Borefields

Schedule 2

Proponent's Environmental Management Commitments

31 July 2002

Telfer Project, Expansion of Telfer Gold Mine Great Sandy Desert

(Assessment No. 1445)

Newcrest Mining Limited

Proponent's Environmental Management Commitments - Expansion of Telfer Gold Mine (Assessment No. 1445)

Number	Topic	Objective	Action	Timing	Whose Advice
1.	Environmental Management System	To install an environmental management system that provides a tool for continual environmental improvement.	The proponent will review and revise the existing Telfer Gold Mine EMS. The revised EMS will provide details of the organisational structure, responsibilities, practices, processes and resources for achieving the proponent's environmental objectives at the mine. The principal components of the EMS will include: • environmental policy; • planning to meet environmental requirements; • implementation and operation to meet environmental requirements; • checking and corrective action; and • management review and continuous improvement. The Management Plans required by other environmental commitments (ie. those presented below) will form part of the EMS.	The EMS will be completed prior to the commissioning of the ore processing plant.	
2.	Environmental Management Plan	Manage environmental impacts of the Project.	2.1 Develop an EMP. The aim of the EMP is to describe how the proponent will address the following: • minimisation of disturbance areas; • protection of environmentally sensitive areas; • minimisation of impacts on native fauna and flora; • prevention of weed and pest infestations; • preservation and management of soil resources; • minimisation of dust and noise impacts; • control of erosion and sedimentation from disturbed areas; • protection of archaeological and anthropological sites/features; • rehabilitation of disturbed areas; and • management of traffic impacts. 2.2 Implement the EMP	Prior to the commencement of the construction period. During operations	WRC, DMPR, CALM
3.	Groundwater Management and Final Void Study	To determine the long-term behaviour and interaction of the final voids with the regional groundwater system.	A groundwater and final void study will be conducted during the initial years of the operation to verify the predicted infilling rates and final pit lake levels within the open pit voids. The long-term water quality of the pit lakes will also be examined. (Note: The findings of the study will be used as input into revisions of the Mine Closure Plan of Commitment 9.)	During the first three years of the operational period.	WRC

Number	Topic	Objective	Action	Timing	Whose Advice
4.	Flora and Fauna Management Plan	Maintain the abundance, diversity, geographical distribution and productivity of flora and fauna at species and ecosystems levels through the avoidance or management of adverse impacts and improvement in knowledge.	4.1 Prepare a Flora and Fauna Management Plan addressing the following control measures: • protecting native vegetation by limiting clearing as much as practicable; • undertaking rehabilitation of disturbed areas as soon as practical; • avoiding the Priority plant species where possible, particularly where they occur in low-lying habitat areas; • carrying out pre-clearance surveys of the major disturbance areas for rare burrowing mammal species; • if pre-clearance surveys identify rare burrowing mammal species, which cannot be avoided by adjusting the proposed disturbance area, re-location of the individuals will be undertaken, where practicable. 4.2 Implement the Flora and Fauna Management Plan.	Prior to major land disturbance (pre-clearance surveys) During construction and operation	CALM
5.	Cyanide Monitoring and Management Programme.	To minimise the potential impacts on fauna that could result from elevated cyanide concentrations in Project tailings.	5.1 Prepare a Cyanide Monitoring and Management Programme to ensure that: • weak acid dissociable (WAD) cyanide levels in deposited tailings are kept below 50 mg/L. 5.2 Implement the Cyanide Monitoring and Management Programme.	Prior to the commissioning of the ore processing plant. During operations.	CALM, WRC
6.	Waste Management Plan	Ensure that wastes are contained and isolated and that recycling and reuse are maximised.	6.1 Develop a Waste Management Plan with appropriate procedures for: • collecting; • containing; and • disposing of wastes. 6.2 Implement the Waste Management Plan.	Prior to construction. During construction and operations.	WRC, CALM
7.	Aboriginal Heritage.	To ensure that changes to the biophysical environment do not adversely affect historical and cultural associations and comply with relevant heritage legislation.	The proponent will ensure that its workforce and contractors are made aware of the requirements of the *Aboriginal Heritage Act, 1972,* not to damage or interfere with Aboriginal sites, via an induction programme. Consultation with Aboriginal groups with an interest in the Project will continue in order to address Aboriginal heritage issues that may arise.	During construction.	CALM, DIA, Aboriginal Communities.

Number	Topic	Objective	Action	Timing	Whose Advice
8.	Waste Rock Management Plan	To design and construct waste rock dumps that are compatible with the regional physiography, stable in the long term, and do not present ongoing acid mine drainage risks	8.1 Prepare a Waste Rock Management Plan which includes the following: • prediction mechanisms and scheduling of potentially acid-forming waste rock (including AMD testwork programmes and refinement of the AMD model); • management procedures and encapsulation mechanisms for waste rock materials identified as having AMD potential. • Management of long-term stability and integration of final waste dumps with the surrounding landforms. 8.2 Implement the Waste Rock Management Plan.	Prior to commissioning of the ore processing plant. During operations.	CALM, WRC, DMPR
9.	Mine Closure Plan.	To develop and implement a closure plan that will enable planned closure of the Project and will leave the site in a safe and stable condition such that tenements can be relinquished without any future liability for proponent or the community.	9.1 Development of a Closure Plan which will address: • decommissioning and removal of residual infrastructure; • rehabilitation of mine landforms; • management of final voids; and • post-mining monitoring and maintenance requirements. 9.2 Implement the Closure Plan.	Within three years following the commissioning of the ore processing plant (initial closure plan) and with review every three years thereafter. During closure	DMPR

Abbreviations

AMD	Acid Mine Drainage
CALM	Department of Conservation and Land Management
DIA	Department of Indigenous Affairs
DMR	Department of Mineral and Petroleum Resources
WRC	Water and Rivers Commission

Attachment 1 to Statement 606

Change to Proposal

Proposal: Telfer Gold Mine – Proposed amendments to Ministerial Condition 606

Proponent: Newcrest Mining Limited

Change: *To clear 145 hectares of land to house an additional waste dump and additional topsoil stock piles*

Amendment of Schedule 1 – Key Proposal Characteristics

Features of previously approved Proposal as implemented:

Element	Quantities/Description
Mining area	Expansion of existing underground mining areas and deepening of the existing open pits
Southern Waste Rock Dump	Extension to the existing southern waste rock dump and several other dumps
Tailings Storage facility	Construction of a new tailings storage facility
Processing	Construction of a new ore processing plant and associated infrastructure
Borefields	Expansion of the capacity of water supply borefields
Accommodation Village	Upgrading of the existing accommodation village to accommodate 650 people
Transport	Transport of copper concentrate to Port Hedland via road

Features of changed Proposal:

Element	Quantities/Description
Extension of Southern Waste Dump and creation of topsoil stock pile	To clear 145 hectares of native vegetation

Figure 1. Layout map revised

Approved under delegation from Minister for the Environment:

EPA Chairman

Approval Date: 7.1.08

Attachment 2 to Ministerial Statement 606

Change to Proposal

Proposal: Telfer Project, Expansion of Telfer Gold Mine Great Sandy Desert

Proponent: Newcrest Mining Limited

Change: To increase disturbance impacts, by clearing an additional 11.5 hectares (ha) for extension of the existing staggers borefield, and increase to ore production, processing throughput and water supply.

Key Characteristics Table:

Element	Description of proposal	Description of approved change to proposal
Life of Mine	Approximately 25 years.	Approximately 25 years.
Land Disturbance Area	The existing Telfer Gold Mine covers some 1,800 ha. The proposal will disturb a further 1,945 ha.	The original Telfer Gold Mine covers some 1,800 ha. **The proposal will disturb a further 1,956.5 ha.**
Surface Mining	Conventional truck and shovel open pit mining techniques in the Main Dome and West Dome pits.	Conventional truck and shovel open pit mining techniques in the Main Dome and West Dome pits.
Underground Mining	Sublevel caving operations in the Telfer Deeps Ore Zone below the Main Dome pit.	Sublevel caving operations in the Telfer Deeps Ore Zone below the Main Dome pit.
	Options for materials handling from the underground to the surface include a conveyor incline or haulage shaft.	Options for materials handling from the underground to the surface include a conveyor incline or haulage shaft.
Ore Production	Up to approximately 23 million tonnes per annum of ore (including dump leach ore).	**Up to 29 million tonnes per annum of ore (including dump leach ore).**
Ore Processing	Use of parts of the existing processing plant and/or construction of a new ore processing plant comprising conventional copper and pyrite flotation and CIL circuits to treat sulphide ore.	Use of parts of the existing processing plant and/or construction of a new ore processing plant comprising conventional copper and pyrite flotation and CIL circuits to treat sulphide ore.
Processing Throughput	Up to 20 million tonnes per annum.	**Up to 26 million tonnes per annum.**
Low Grade Ores	Existing dump leach facilities will be used to treat low grade oxide ore.	Existing dump leach facilities will be used to treat low grade oxide ore.
Waste Rock Production	Up to approximately 90 million tonnes per annum.	Up to approximately 90 million tonnes per annum.
Waste Rock Dumps	Two waste dump extensions will be developed to contain approximately 1,300 Mt of waste material.	Two waste dump extensions will be developed to contain approximately 1,300 Mt of waste material.
Tailings Disposal	A new tailings storage facility will be constructed to contain some 370 Mt of tailings.	A new tailings storage facility will be constructed to contain some 370 Mt of tailings.
Products	Gold Bullion and gold/copper concentrate.	Gold Bullion and gold/copper concentrate.

Concentrate Transport Method	Copper concentrate will be transported by road from Telfer to Port Hedland.	Copper concentrate will be transported by road from Telfer to Port Hedland.
Port Hedland Concentrate Facility	The existing facility will be expanded to include a new 25,000 t concentrate storage shed.	The existing facility will be expanded to include a new 25,000 t concentrate storage shed.
Transport Requirements	Up to 290 truck round trips per month hauling consumables and mineral concentrate.	Up to 290 truck round trips per month hauling consumables and mineral concentrate.
Water Supply	Water supply requirements increased from 44 ML/day to some 50 ML/day.	**Water supply requirements increased from 50 ML/day to 80 ML/day.**
	Existing borefield capacity (44 ML/day) to be expanded to supply up to 65 ML/day.	**Removed as not environmentally relevant.**
	Water produced by mine dewatering to be included in the Project raw water supply.	Water produced by mine dewatering to be included in the Project raw water supply.
Employment	Up to 1300 people during construction and approximately 650 people during the operational period.	Up to 1300 people during construction and approximately 650 people during the operational period.

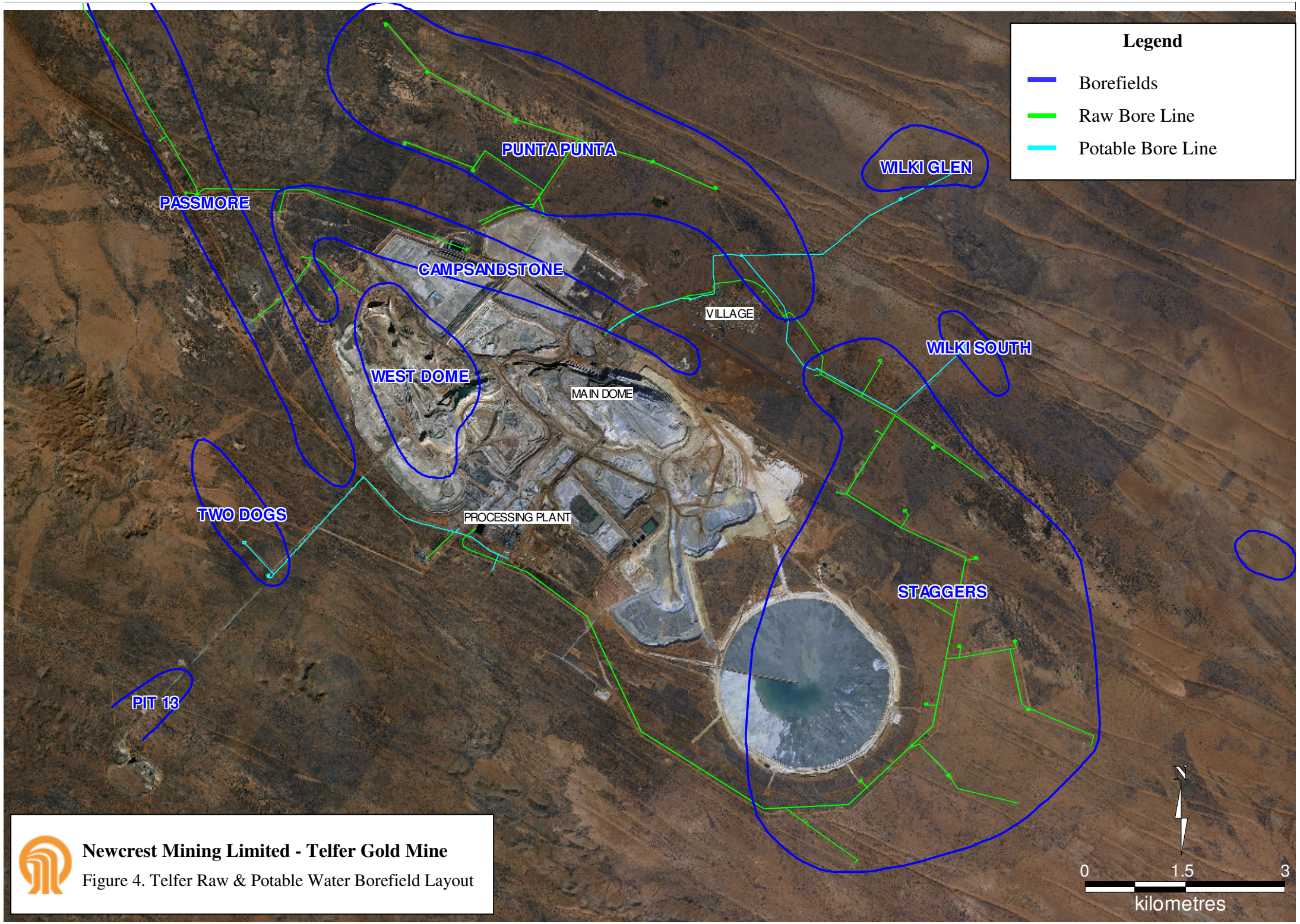
Note: Text in bold in the Key Characteristics Table, indicates changes to the proposal.

Note: The Major Consumables component of the original Key Aspects table of Statement 606 remains unchanged.

Figure 4: Telfer Raw & Potable Water Borefield Layout

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 11 January 2012



Newcrest Mining Limited - Telfer Gold Mine

Figure 4. Telfer Raw & Potable Water Borefield Layout

Attachment 3 to Ministerial Statement 606

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

Proposal: Telfer Project, Expansion of Telfer Gold Mine Great Sandy Desert

Proponent: Newcrest Mining Limited

Changes: Increase land disturbance area, correct miscalculated land disturbance area, extend waste rock dumps, expand dump leach facilities, amend water supply and administrative changes to the key characteristics table.

Key Characteristics Table: This table replaces the Key Characteristics Table in Attachment 2 to Statement 606

Key proposal characteristics	**Description of proposal**	**Description of approved change to proposal**
Life of Mine	Approximately 25 years.	Approximately 25 years.
Land Disturbance Area	The original Telfer Gold Mine covers some 1,800 ha. The proposal will disturb a further 1,956.5 ha	**Total land disturbance area of 4,921 ha, which includes the original Telfer Gold Mine land disturbance of 2,278.23 ha.**
Surface Mining	Conventional truck and shovel open pit mining techniques in the Main Dome and West Dome pits.	Conventional truck and shovel open pit mining techniques in the Main Dome and West Dome pits.
Underground Mining	Sublevel caving operations in the Telfer Deeps Ore Zone below the Main Dome pit.	Sublevel caving operations in the Telfer Deeps Ore Zone below the Main Dome pit.
	Options for materials handling from the underground to the surface include a conveyor incline or haulage shaft.	Options for materials handling from the underground to the surface include a conveyor incline or haulage shaft.
Ore Production	Up to 29 million tonnes per annum of ore (including dump leach ore).	Up to 29 million tonnes per annum of ore (including dump leach ore).
Ore Processing	Use of parts of the existing processing plant and/or construction of a new ore processing plant comprising conventional copper and pyrite flotation and CIL circuits to treat sulphide ore.	Use of parts of the existing processing plant and/or construction of a new ore processing plant comprising conventional copper and pyrite flotation and CIL circuits to treat sulphide ore.
Processing Throughput	Up to 26 million tonnes per annum.	Up to 26 million tonnes per annum.
Low Grade Ores	Existing dump leach facilities will be used to treat low grade oxide ore.	**Existing dump leach facilities will be used to treat low grade oxide ore. Waste dump leach facilities will be expanded to**

Key proposal characteristics	**Description of proposal**			**Description of approved change to proposal**
				include Dump Leach 10 for processing of low grade ores.
Waste Rock Production	Up to approximately 90 million tonnes per annum.			Up to approximately 90 million tonnes per annum.
Waste Rock Dumps	Two waste dump extensions will be developed to contain approximately 1,300 Mt of waste material.			**Two waste dump extensions will be developed to contain approximately 1,562 Mt of waste material.**
Tailings Disposal	A new tailings storage facility will be constructed to contain some 370 Mt of tailings.			A new tailings storage facility will be constructed to contain some 370 Mt of tailings.
Products	Gold Bullion and gold/copper concentrate.			Gold Bullion and gold/copper concentrate.
Concentrate Transport Method	Copper concentrate will be transported by road from Telfer to Port Hedland.			Copper concentrate will be transported by road from Telfer to Port Hedland.
Port Hedland Concentrate Facility	The existing facility will be expanded to include a new 25,000 t concentrate storage shed.			The existing facility will be expanded to include a new 25,000 t concentrate storage shed.
Transport Requirements	Up to 290 truck round trips per month hauling consumables and mineral concentrate.			Up to 290 truck round trips per month hauling consumables and mineral concentrate.
Water Supply	Water supply requirements increased from 50 ML/day to 80 ML/day.			**Water supply limit of 29,700 ML/year**
	Water produced by mine dewatering to be included in the Project raw water supply.			Water produced by mine dewatering to be included in the Project raw water supply.
Employment	Up to 1300 people during construction and approximately 650 people during the operational period.			**Removed as not a key proposal characteristic.**
Major consumables	Agent	Estimated Maximum Annual Usage	Estimated Maximum Storage Quantity	**Removed as managed under the *Dangerous Goods Safety Act 2004*, (Dangerous Goods Site Licence) and regulations**
	Lime	37,000 t	4,800 t	
	Sodium cyanide	8,350 t	810 t	
	Carbon	120 t	10 t	
	Antiscalant	240 t	20 t	
	Caustic Soda	4,500 t	145 t	

Key proposal characteristics	Description of proposal			Description of approved change to proposal
	Hydrochloric Acid	240 t	20 t	
	Collector	425 t	60 t	
	Xanthate	1,400 t	200 t	
	Frother	190 t	20 t	
	Flocculant	650 t	66 t	
	Grinding Media	18,800 t	2,025 t	
	Sodium Hydrogen Sulphide	1,400 t	95 t	
	Sulphuric Acid	11,200 t	590 t	
	Sodium Sulphide	13,500 t (years 1 and 2 only)	935 t	
	Diesel	70 ML/annum (average 45 ML/annum)	9 ML	

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

List of Figures:

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 28 June 2013

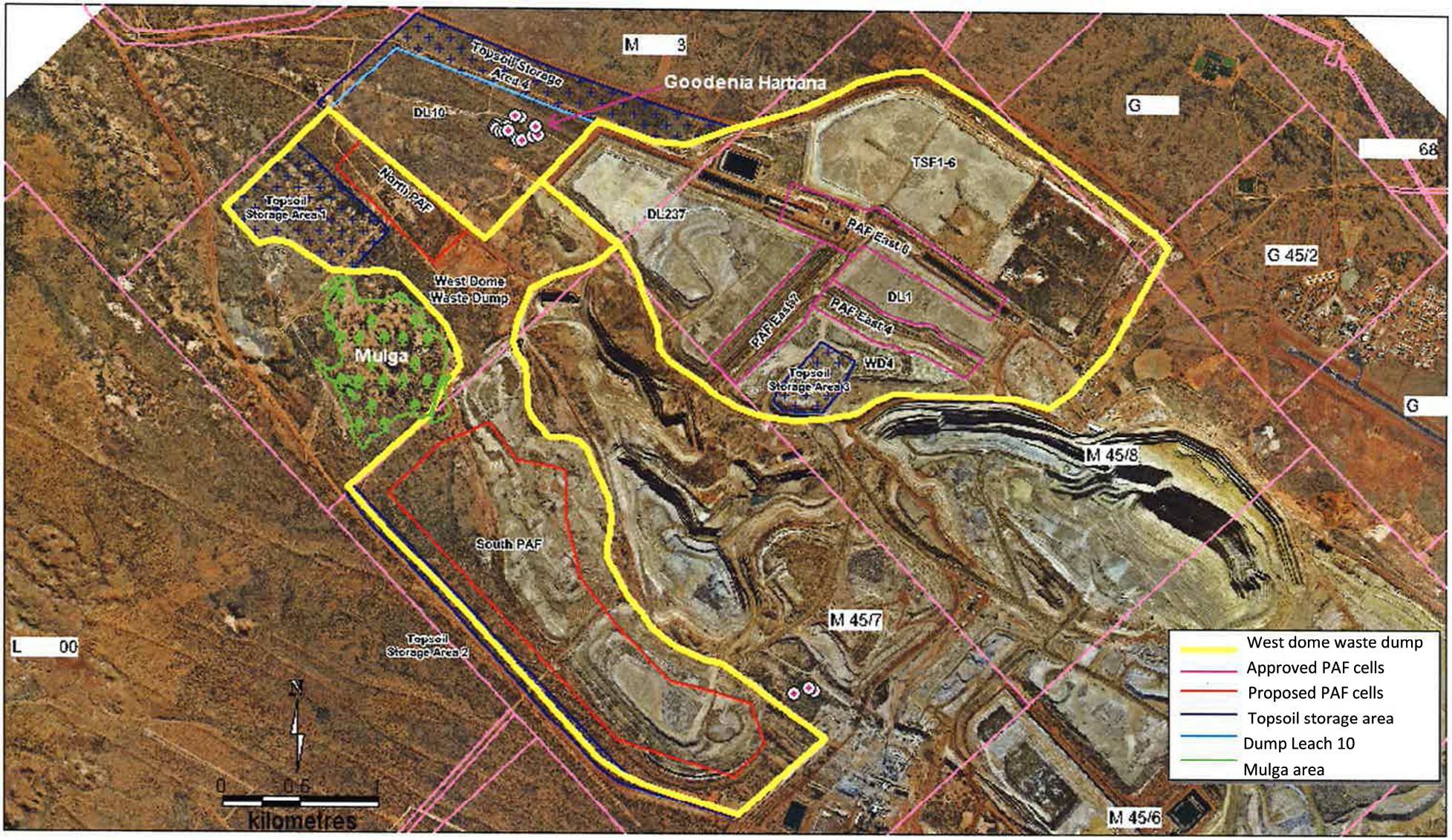


Figure 5: Telfer Gold Mine additional land disturbance area (West Dome Waste Dump and Dump Leach 10)

Attachment 4 to Ministerial Statement 606

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

This Attachment replaces replaces the Key Characteristics Table in Attachment 3 to Statement 606 and inserts Figure 6

Proposal: Telfer Project, Expansion of Telfer Gold Mine Great Sandy Desert

Proponent: Newcrest Mining Limited

Changes:

- construction of an additional tailings storage facility (TSF8) on an area previously approved for waste rock disposal

Key Characteristics Table: This table replaces the Key Characteristics Table in Attachment 3 to Statement 606 and inserts Figure 6

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

Element	Previously Authorised Extent	Authorised Extent
Life of Mine	Approximately 25 years	Approximately 25 years
Land Disturbance Area	Total land disturbance area of 4,921 ha, which includes the original Telfer Gold Mine land disturbance of 2,278.23 ha.	Total land disturbance area of 4,921 ha, which includes the original Telfer Gold Mine land disturbance of 2,278.23 ha.
Surface Mining	Conventional truck and shovel open pit mining techniques in the Main Dome and West Dome pits.	Conventional truck and shovel open pit mining techniques in the Main Dome and West Dome pits.
Underground Mining	Sublevel caving operations in the Telfer Deeps Ore Zone below the Main Dome pits	Sublevel caving operations in the Telfer Deeps Ore Zone below the Main Dome pits
	Options for materials handling from the UG to the surface include a conveyor incline or haulage shaft.	Options for materials handling from the underground to the surface include a conveyor incline or haulage shaft.
Ore Production	Up to 29 million tonnes per annum of ore (including dump leach ore).	Up to 29 million tonnes per annum of ore (including dump leach ore).
Ore Processing	Use of parts of the existing processing plant and/or construction of a new ore processing plant comprising conventional copper and pyrite	Use of parts of the existing processing plant and/or construction of a new ore processing plant comprising conventional copper and pyrite

Element	Previously Authorised Extent	Authorised Extent
	flotation and CIL circuits to treat sulphide ore.	flotation and CIL circuits to treat sulphide ore.
Processing Throughput	Up to 26 million tonnes per annum. Up to 26 million tonnes per annum.	Up to 26 million tonnes per annum. Up to 26 million tonnes per annum.
Low Grade Ores	Existing dump leach facilities will be used to treat low grade oxide ore. Waste dump leach facilities will be expanded to include Dump Leach 10 for processing of low grade ores.	Existing dump leach facilities will be used to treat low grade oxide ore. Waste dump leach facilities will be expanded to include Dump Leach 10 for processing of low grade ores.
Waste Rock Production	Waste Rock Production Up to approximately 90 million tonnes per annum. Up to approximately 90 million tonnes per annum.	Waste Rock Production Up to approximately 90 million tonnes per annum. Up to approximately 90 million tonnes per annum.
Waste Rock Dumps	Two waste dump extensions will be developed to contain approximately 1,562 Mt of waste material.	Two waste dump extensions will be developed to contain approximately 1,562 Mt of waste material.
Tailings Disposal	A new tailings storage facility will be constructed to contain some 370 Mt of tailings.	**Tailings storage facilities constructed to contain 550 Mt of tailings (Figure 6).**
Products	Gold Bullion and gold/copper concentrate	Gold Bullion and gold/copper concentrate
Concentrate Transport Method	Copper concentrate will be transported by road from Telfer to Port Hedland.	Copper concentrate will be transported by road from Telfer to Port Hedland.
Port Hedland Concentrate Facility	The existing facility will be expanded to include a new 25,000 t concentrate storage shed.	The existing facility will be expanded to include a new 25,000 t concentrate storage shed.
Transport Requirements	Up to 290 truck round trips per month hauling consumables and mineral concentrate.	Up to 290 truck round trips per month hauling consumables and mineral concentrate.
Water Supply	Water supply limit of 29,700 ML/year.	Water supply limit of 29,700 ML/year
	Water produced by mine dewatering to be included in the Project raw water supply.	Water produced by mine dewatering to be included in the Project raw water supply.

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

Abbreviation	Term
km	kilometre

Figures (attached)

Figure 6 – Location of Tailings Storage Facility 8

Dr Tom Hatton
CHAIRMAN
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under delegated authority

Approval date: 16 September 2020

Figure 6 – Telfer Gold Mine, Footprint of tailings storage facility 8