Statement No.

MINISTER FOR THE ENVIRONMENT; SCIENCE

000711

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

ARGYLE DIAMOND MINE, UNDERGROUND PROJECT
110 KM SOUTH OF KUNUNURRA
SHIRE OF WYNDHAM-EAST KIMBERLEY

Proposal: To extend the current Argyle Diamond Mine Operations at Argyle Diamond Mine to develop an underground diamond mine and associated infrastructure, as documented in schedule 1 of this statement.

Proponent: Argyle Diamond Mines Pty Limited

Proponent Address: Private Mail Bag 11
WEST PERTH WA 6872

Assessment Number: 1606

Report of the Environmental Protection Authority: Bulletin 1205

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

1 Implementation

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

2 Proponent Commitments

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

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3 Proponent Nomination and Contact Details

3-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposal.

3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposal will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposal shall also be provided.

3-3 The nominated proponent shall notify the Department of Environment of any change of contact name and address within 60 days of such change.

4 Commencement and Time Limit of Approval

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

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

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

The application shall demonstrate that:

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

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

5 Compliance Auditing and Performance Review

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

1. the status of implementation of the proposal as defined in schedule 1 of this statement;

2. evidence of compliance with the conditions and commitments; and

3. the performance of the environmental management plans and programs.

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

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

1. the major environmental issues associated with implementing the project; the environmental objectives for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those objectives;

2. the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best available technology where practicable;

3. significant improvements gained in environmental management, including the use of external peer reviews;

4. stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and

5. the proposed environmental objectives over the next five years, including improvements in technology and management processes.

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

6 Groundwater

6-1 The proponent shall review and revise the Groundwater Management Plan which forms part of the *Argyle Underground Environmental Management Plan* (September 2005), if deemed necessary by the Department of Environment.

6-2 The proponent shall implement the Groundwater Management Plan referred to in condition 6-1.

6-3 The proponent shall make the Groundwater Management Plan referred to in condition 6-1 publicly available.

7 Surface Water

7-1 The proponent shall review and revise the Surface Water Management Plan which forms part of the *Argyle Underground Environmental Management Plan* (September 2005), if deemed necessary by the Department of Environment.

7-2 The proponent shall implement the Surface Water Management Plan referred to in condition 7-1.

7-3 The proponent shall make the Surface Water Management Plan referred to in condition 7-1 publicly available.

8 Wesley Springs Management Plan

8-1 The proponent shall review and revise, in consultation with the Water and Rivers Commission, the Wesley Springs Management Plan which forms part of the *Argyle Underground Environmental Management Plan* (September 2005), if deemed necessary by the Department of Environment.

8-2 In addition to the matters included in the Wesley Springs Management Plan referred to in condition 8-1, the proponent shall address and implement the following matters:

1. a response strategy in the event of unacceptable environmental impacts on Wesley Springs;

2. a risk assessment of potential unacceptable impacts on the spring;

3. mathematical models of the potential impacts on the spring;

4. determination of appropriate response actions;

5. formation of a site team to decide on trigger levels for the response strategy (the site team to include the proponent's environmental personnel, a groundwater specialist and a representative of the Water and Rivers Commission); and

6. incorporation of the findings of this site team in the Management Plan.

8-3 The proponent shall implement the Wesley Springs Management Plan referred to in conditions 8-1 and 8-2.

8-4 The proponent shall make the Wesley Springs Management Plan referred to in conditions 8-1 to 8-3 publicly available.

9 Flora and Vegetation

9-1 The proponent shall review and revise the Flora and Vegetation Management Plan which forms part of the *Argyle Underground Environmental Management Plan* (September 2005), if deemed necessary by the Department of Environment.

9-2 The proponent shall implement the Flora and Vegetation Management Plan referred to in condition 9-1.

9-3 The proponent shall make the Flora and Vegetation Management Plan referred to in condition 9-1 publicly available.

10 Weed Management

10-1 The proponent shall review and revise, in consultation with the Department of Agriculture, the Weed Management Plan which forms part of the *Argyle Underground Environmental Management Plan* (September 2005), if deemed necessary by the Department of Environment.

10-2 The proponent shall implement the Weed Management Plan referred to in condition 10-1.

10-3 The proponent shall make the Weed Management Plan referred to in condition 10-1 publicly available.

11 Terrestrial Fauna

11-1 The proponent shall review and revise the Terrestrial Fauna Management Plan which forms part of the *Argyle Underground Environmental Management Plan* (September 2005), if deemed necessary by the Department of Environment.

11-2 The proponent shall implement the Terrestrial Fauna Management Plan referred to in condition 11-1.

11-3 The proponent shall make the Terrestrial Fauna Management Plan referred to in condition 11-1 publicly available.

12 Subterranean Fauna

12-1 The proponent shall review and revise the Subterranean Fauna Management Plan which forms part of the *Argyle Underground Environmental Management Plan* (September 2005), if deemed necessary by the Department of Environment.

12-2 The proponent shall implement the Subterranean Fauna Management Plan referred to in condition 12-1.

12-3 The proponent shall make the Subterranean Fauna Management Plan, the monitoring and associated subterranean fauna reports required by and/or resulting from condition 12-1 publicly available.

13 Decommissioning, Closure and Rehabilitation

13-1 The proponent shall decommission and rehabilitate the new project areas in accordance with the Decommissioning and Closure Management Plan and the Rehabilitation Management Plan which form part of the *Argyle Underground Environmental Management Plan* (September 2005), or subsequent revisions of the Plans, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that advice of the following agencies will be obtained:

- Water and Rivers Commission;
- Department of Industry and Resources;
- Department of Consumer and Employment Protection;
- Department of Agriculture; and
- Department of Conservation and Land Management.

The objective of these plans is to ensure that decommissioning and closure planning and rehabilitation are carried out in a coordinated, progressive manner and are integrated with development planning, consistent with the Australian and New Zealand Minerals and Energy Council / Minerals Council of Australia *Strategic Framework for Mine Closure (2000),* current best practice, and the agreed land uses.

The Decommissioning and Closure Management Plan and the Rehabilitation Management Plan shall set out procedures and measures to:

1. manage over the long-term ground and surface water systems affected by the underground operations, tailings dams, reclamation ponds and waste rock dumps;

2. rehabilitate all disturbed areas to a standard suitable for the agreed end land use(s);

3. rehabilitate disturbed areas to a level determined by a set of completion criteria;

4. identify contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities;

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

6. review and revise the plans at appropriate intervals;

7. contour and revegetate the outer embankment of Tailings Storage Facility 1 immediately after commencement of initial civil works for construction of Tailings Storage Facility 2; and

8. design Tailings Storage Facility 2 so that the outer embankment slope will not be steeper than 1:3 across any section and will be compatible with the final landform.

13-2 The proponent shall make the Decommissioning and Closure Management Plan and the Rehabilitation Management Plan referred to in condition 13-1 publicly available.

13-3 At least five years prior to the anticipated date of closure, or at a time agreed with the Environmental Protection Authority, the proponent shall prepare a Final Closure Plan which is consistent with the Australian and New Zealand Minerals and Energy Council / Minerals Council of Australia *Strategic Framework for Mine Closure (2000)* and is designed to ensure that the site is left in an environmentally acceptable condition, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The Final Closure Plan shall be based on the Decommissioning and Closure Management Plan and the Rehabilitation Management Plan which form part of the *Argyle Underground Environmental Management Plan* (September 2005) and its subsequent revisions.

13-4 The proponent shall implement the Final Closure Plan required by condition 13-3 until such time as the Minister for the Environment determines, on advice of the Environmental Protection Authority, that the proponent's closure responsibilities have been fulfilled.

13-5 The proponent shall make the Final Closure Plan required by condition 13-3 publicly available.

13-6 The proponent shall monitor the crater void formed from the mine operations against stability criteria, until the ground is deemed stable in the opinion of the Department of Consumer and Employment Protection and the Department of Industry and Resources.

Procedures

1. Where a condition states "to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority", the Environmental Protection Authority will provide that advice to the Department of Environment for the preparation of written notice to the proponent.

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

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

Notes

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

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

3. Compliance and performance reporting will endeavour to be in accord with the timing requirements of reporting under the *Diamond (Argyle Diamonds Mines Joint Venture) Agreement Act 1981-1983*.

John Bowler MLA
ACTING MINISTER FOR THE ENVIRONMENT; SCIENCE

11 JAN 2006

Schedule 1

The Proposal (Assessment No. 1606)

The proposal extends the life of mining at the site of the open pit mine by developing an underground mine and associated infrastructure. The mine is located approximately 110 kilometres south of Kununurra in the East Kimberley region (figure 1). The ore body will be mined in two stages using both block cave mining and sub-level cave mining from 2008:

Stage 1 involves mining the Upper Block and Southern Tail Block. The proposed completion date for Stage 1 is 2017.

Stage 2 involves mining the Lower Block and it is proposed to commence in approximately 2017 and to complete by 2024.

The underground proposal will also include the construction of a new Tailings Storage Facility (TSF2) and a new Reclaim Pond (RCP3).

The main characteristics of the proposal are summarized in Table 1 below.

Table 1: Key Proposal Characteristics

Element	**Underground Project**
Life of Mine	20 years approximately
Mining depth	Maximum of 675 metres
Mining Methods	Stage 1 - Upper Level Block Cave Mining Stage 2 – Sub-Level Cave Mining
Major Project Components Underground Declines Underground Mining Levels Underground and surface conveyors Box-cut portal Surge bin Secondary crusher Extension to some existing surface infrastructure Temporary ore and waste stockpiles Laydown areas Refrigeration plant Bulk Air Cooler and fans Exhaust shafts Services corridor Dewatering system New Tailings Storage Facility New Reclaim Pond	Refer to Figures 2 and 3

Total Ore Production	Stage 1 - 60 Mt (approximately) Stage 2 – 37 Mt (approximately)
Ore Processing	Through existing Processing Plant at around 8 Mtpa for Stage 1 and 4.5 Mtpa for Stage 2
Key materials Ground support construction materials Fibrecrete Explosives Electric cables, pipes and ventilation ducting Diesel fuel Concrete Steel	(approximate values) 4, 700 t 330,000 t 15,000 t 6,000 t 26 ML 24,000 cubic metres 5,000 t
Total Waste Rock Over Project Life	4.3 Mt (approximately)
Dewatering Requirements	19 – 83 ML/day (approximately)
Crater Area	Mostly within the existing open pit and waste rock dump area
Tailings	100 Mt (approximately)
TSF2 Area of Disturbance	126 ha (approximately)
RCP3 Area of Disturbance	133 ha (approximately)
Underground mine water requirements	700 kL/day (approximately)
Processing water requirements	12, 000 - 22,000 kL/day
Water Supply	From dewatering operations, Gap Dam, Upper Limestone Creek Waste Rock Dump Seepage Retention Dam, Reclaim Ponds, and if necessary, Lake Argyle.
Power Requirements	Additional 4 - 12 MW
Power Supply	Ord Hydroelectric Scheme, with the deficit to be provided for an initial two - three years by the on-site diesel power station until alternative power supply established.
Heavy Vehicle Movements	Offsite – reduce from 12 per day to one - two per day On site – Reduce from 670 hours/day to 36 hours/day

Construction Workforce	Maximum of approximately 500
Total Workforce	Approximately 450

Abbreviations:

ha	hectares
m	metres
Mt	Million tonnes
Mtpa	Million tonnes per annum
ML	Megaliters
MW	Mega watts
t	tonnes

Figures (attached)

Figure 1 - Regional Location of Argyle Diamond Mine Operations.
Figure 2 - Argyle Diamond Mine Operations.
Figure 3 - Location of the Proposed Works for the Underground Mine.

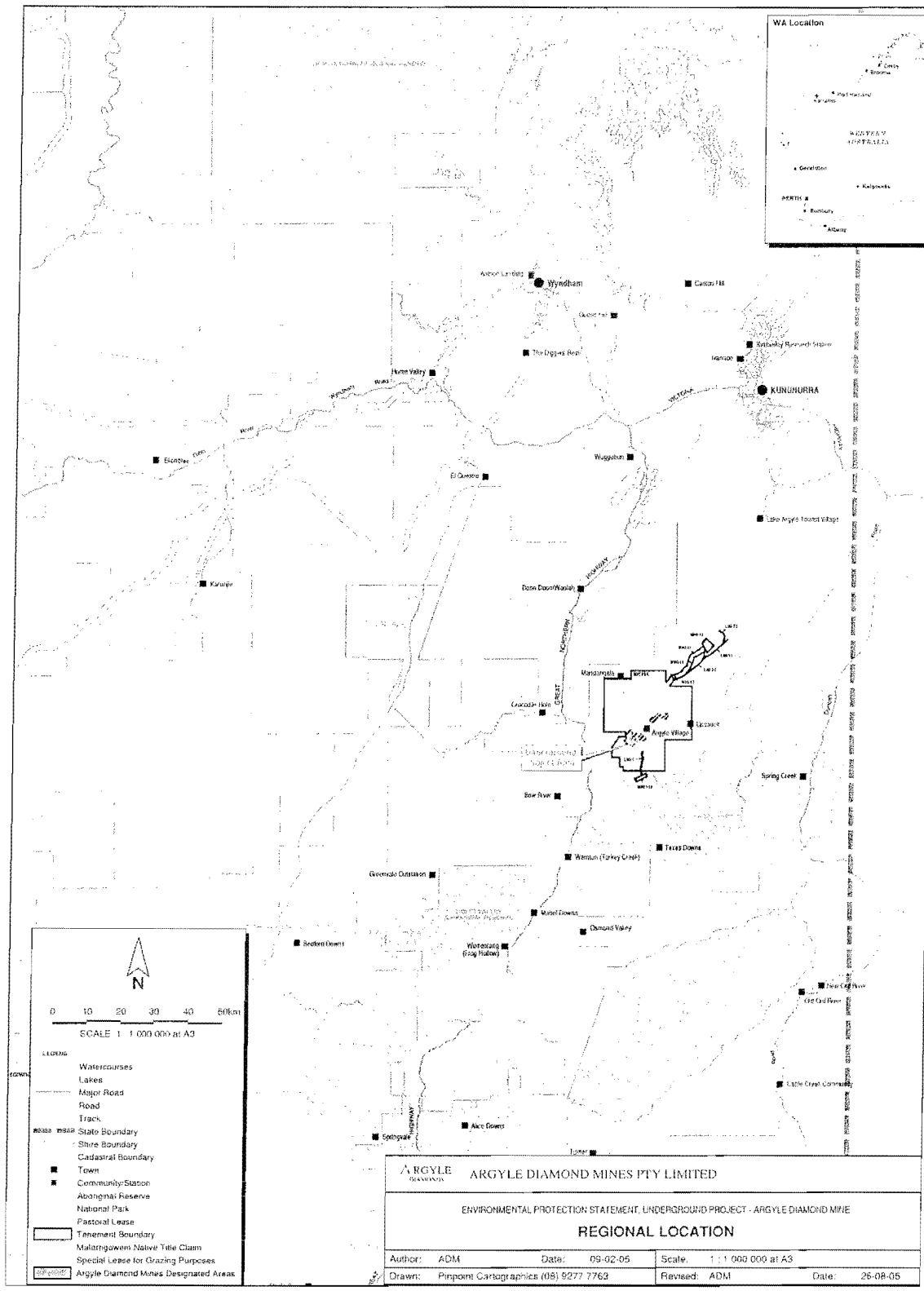

Figure 1 - Regional Location of Argyle Diamond Mine Operations.

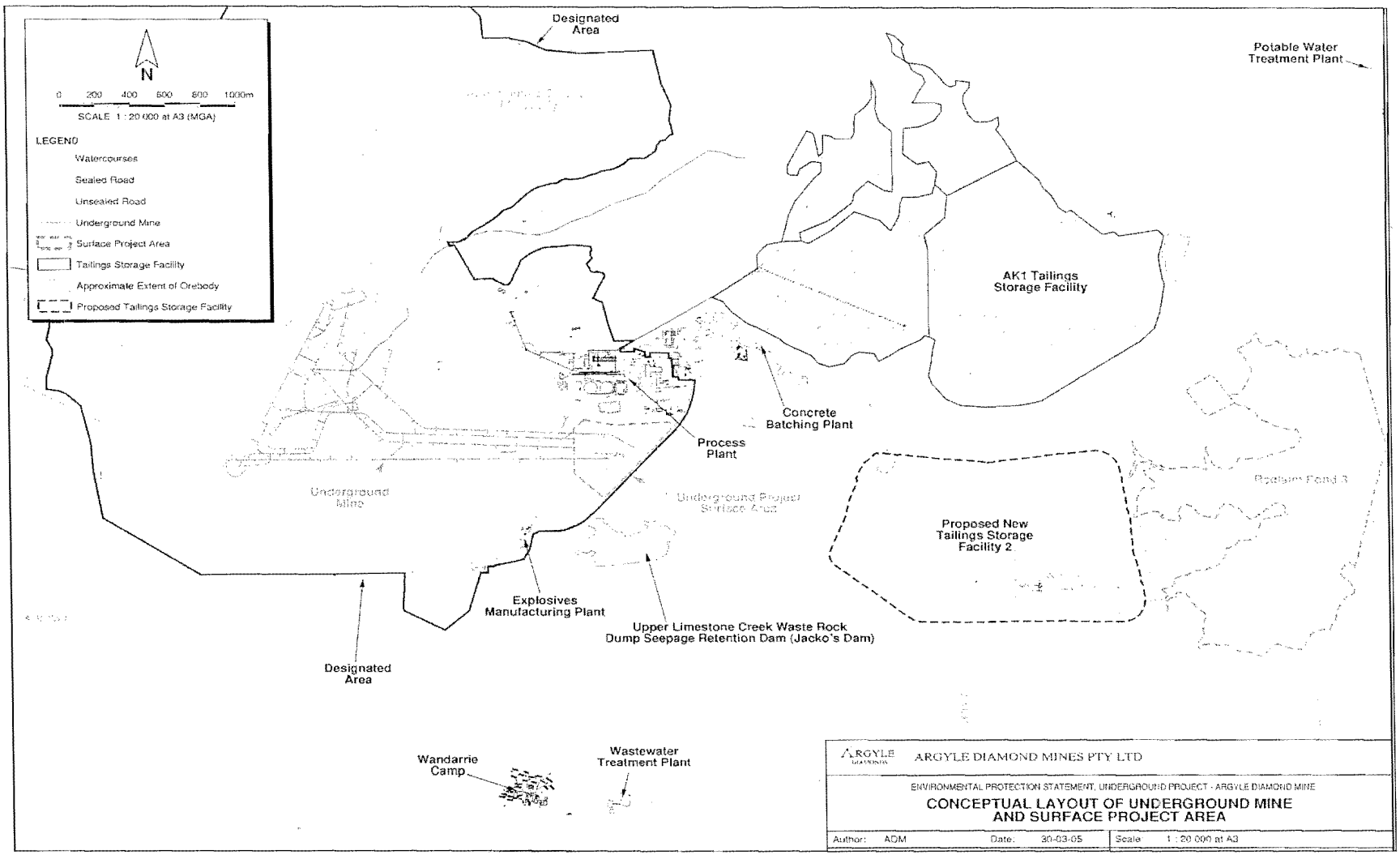

Figure 2 – Argyle Diamond Mine Operations

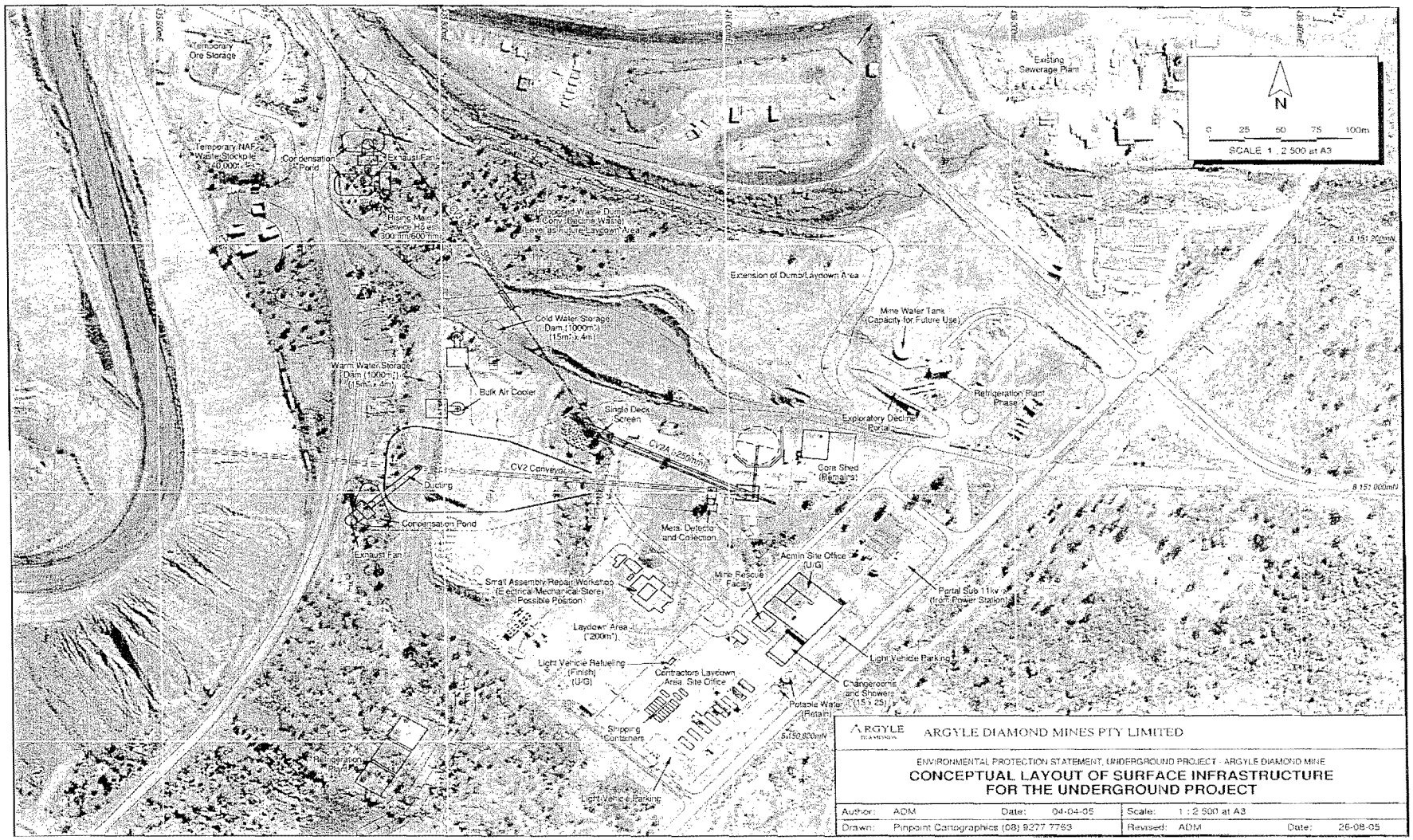

Figure 3 - Location of the Proposed Works for the Underground Mine.

Schedule 2

Proponent's Environmental Management Commitments

November 2005 – edited December 2005

Argyle Diamond Mine, Underground Project
110 Km South Of Kununurra
Shire Of Wyndham-East Kimberley

(Assessment No. 1606)

Argyle Diamond Mines Pty Limited

Schedule 2

Proponent's Environmental Management Commitments – November / December 2005

Argyle Diamond Mine Underground Project (Assessment No. 1606)

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

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

Topic	Objective	No.	Action	Timing	Advice
Area of Disturbance	To minimise the area of disturbance required for the Project infrastructure	1.1	Ensure that the area of disturbance for the Project is minimised.	During planning, construction, operation and decommissioning.	DoIR DIA
Groundwater	To ensure that the lowering of groundwater due to dewatering operations does not cause adverse impacts on local hydrogeology and the environment.	2.1	The Devil Devil Spring Management Plan prepared and agreed with Traditional Owners in conjunction with the Indigenous Land Use Agreement, will be implemented.	Construction, operation and decommissioning phases.	DIA
		2.2	The groundwater monitoring programme conducted at the site will be continued and expanded.	Construction and operations, and decommissioning.	DIA

		2.3	Monitoring results will be provided to Traditional Owners (via the Relationship Committee), regulatory authorities in the Annual Environmental Report and will be made publicly available.	Relationship Committee – quarterly, AER – annually,	DoIR DIA CALM D Ag
Dewatering Discharge	To ensure that the dewatering discharge is managed to ensure that its disposal does not adversely affect the environment.	3.1	Handle and manage the dewatering discharge as described in the Groundwater Management Plan for the Underground Project submitted to the regulatory authorities.	Submission prior to construction. Implementation during construction and operation.	
Surface Hydrology	To maintain surface hydrology so that environmental values, including ecosystem maintenance, are protected. To ensure that surface water runoff is managed to ensure that it does not adversely affect the environment.	4.1	Surface water management infrastructure will be established to manage surface water flows in the Project Area.	Construction	
		4.2	The Surface Water Management Plan, submitted to the regulatory authorities, will be implemented.	Submission prior to construction. Implementation during construction and operation.	
		4.3	The surface water monitoring conducted at the site will continue and will be expanded.	Construction and operations	
		4.4	The results of surface water monitoring will be provided to Traditional Owners (via the Relationship Committee), the regulatory authorities in the Annual Environmental Report, and also made publicly available.	Relationship Committee - quarterly, AER - annually	DoIR DIA CALM D Ag
Acid Rock Drainage and Magnesium Sulphate Generation	To ensure that Acid Rock Drainage (ARD) and magnesium sulphate generation does not adversely affect environmental values or the health, welfare and amenity of people and land uses by	5.1	The ARD Management Plan, submitted to the regulatory authorities, will be implemented.	Submission prior to construction. Implementation during construction and operation.	DoIR

	meeting statutory requirements and acceptable standards.	5.2	All waste rock material to be removed from the underground mine will be characterised for its ARD potential. Any acid-forming material will be identified and managed in accordance with the ARD Management Plan.	During construction.	DoIR
		5.3	Ensure that seepage water and rainfall infiltration entering the underground mine is collected and regularly analysed, and pumped to the process water storage areas.	During construction and operation	DoIR
		5.4	Place any potentially acid-forming waste rock material removed during the development of the underground mine into dedicated areas of the waste rock dumps and isolate the material by the use of appropriate cover systems.	During construction.	DoIR
		5.5	Investigate and implement surface water drainage measures, which are agreed by the regulatory authorities, in the waste rock dump design in order to manage rainfall runoff, infiltration and the quality of surface and sub-surface drainage.	During construction and operation	DoIR
		5.6	Characterise all material to be processed from the underground mine for its ARD potential.	During construction and operations	DoIR
		5.7	Monitor the groundwater, surface water, tailings, water storage dams and seepage to determine if any products of ARD are being generated.	Prior to and during construction and operations	DoIR
		5.8	Results of the monitoring will be provided to the Traditional Owners (via the Relationship Committee), regulatory authorities in the Annual Environmental Reports, and will be made publicly available.	Annually	DoIR
Air Emissions	To ensure that air emissions do not adversely affect environmental values or the health, welfare and amenity of people and land uses by	6.1	Position discharge vents from the underground mine downwards into a collection pond.	During construction	DoIR

	meeting statutory requirements and acceptable standards.				
Dust	To ensure that dust emissions do not adversely affect environmental values or the health, welfare and amenity of people and land uses by meeting statutory requirements and acceptable standards.	7.1	The Dust Management Plan, submitted to the regulatory authorities, will be implemented.	Submission prior to construction. Implementation during construction and operation.	DoIR
		7.2	The dust-monitoring programme at the site will continue and may be expanded to include the area near the tailings storage facilities.	During operation	DoIR
		7.3	Dust monitoring results will be provided to the regulatory authorities in the Annual Environmental Report.	Annually	DoIR
Greenhouse Gas Emissions	To minimise emissions to levels as low as practicable on an ongoing basis and consider offsets to further reduce cumulative emissions.	8.1	The Greenhouse Gas Emissions Management Plan, submitted to the regulatory authorities, will be implemented.	Submission prior to construction. Implementation during construction and operation.	DoIR
		8.2	Greenhouse Gas emissions will be calculated and reported under the National Greenhouse Challenge Programme (by Rio Tinto).	Annually	Australian Greenhouse Office
Radiation	To ensure that radiological impacts on people and the environment are kept as low as reasonably achievable and comply with acceptable standards.	9.1	Develop and implement a radiation monitoring programme, which will be submitted to the Department of Consumer and Employment Protection, for those working in the underground mine.	During construction and operation.	DOCEP
		9.2	Report the results of the radiation monitoring to the Department of Consumer and Employment Protection on a 12-monthly basis, if required.	Annually	DOCEP

Noise	To protect the amenity of nearby residents from noise impacts resulting from the activities associated with the proposal by ensuring that noise levels meet statutory requirements and acceptable standards.	10.1	Noise sources will be identified, evaluated, prioritised and managed.	During design, construction and operation	
Flora and Vegetation	To maintain the abundance, diversity, geographic distribution and productivity of flora at species and ecosystem levels through the avoidance and/or management of adverse impacts and improvement in knowledge.	11.1	The vegetation monitoring programme undertaken on the site will continue and will be expanded to include additional monitoring sites which will allow impacts associated with changes in groundwater flow to be assessed.	During construction, operation and rehabilitation	CALM DoIR D Ag
		11.2	Vegetation monitoring results will be provided to the regulatory authorities in the Annual Environmental Report.	Annually	DoIR CALM D Ag DIA
Terrestrial Fauna	To maintain the abundance, diversity, geographic distribution and productivity of fauna at species and ecosystem levels through the avoidance and/or management of adverse impacts and improvement in knowledge.	12.1	The feral cat control programme at the site will continue as required.	During construction and operations	DoIR D Ag CALM
Aquatic Biota	To maintain the abundance, diversity, geographic distribution and productivity of aquatic biota at species and ecosystem levels through the avoidance and/or management of adverse	13.1	Undertake ecotoxicological studies on the impacts of magnesium and sulphate ions on aquatic biota.	Prior to and during construction and operation	CALM DoIR
		13.2	The results of any aquatic biota studies will be provided to the regulatory authorities in the relevant year Annual Environmental Report.	Annually	DoIR CALM DIA

	impacts and improvement in knowledge.	13.3	The fish and macroinvertebrate monitoring programme on the Lease Area will be regularly assessed, and continued.	As required	DoIR CALM
Erosion	To ensure that erosion does not adversely affect environmental values and land uses by meeting statutory requirements and acceptable standards.	14.1	The erosion management measures presented in the Erosion Management Plan submitted to the regulatory authorities will be implemented.	Submission prior to construction. Implementation during construction, operation and rehabilitation.	DoIR CSLC
		14.2	Undertake erosion modelling on the waste rock dumps and rehabilitated areas.	Prior to and during construction and operation	DoIR CSLC
Waste Rock	To ensure that the placement of waste rock in waste rock dumps does not adversely affect environmental values or the health, welfare and amenity of people and land uses by meeting statutory requirements and acceptable standards.	15.1	The Waste Rock Dump Management Plan developed for the waste rock removed from the underground mine, submitted to the regulatory authorities, will be implemented.	Submission prior to construction. Implementation during construction.	DoIR
Tailings	To ensure that the storage of tailings does not adversely affect environmental values or the health, welfare and amenity of people and land uses by meeting statutory requirements and acceptable standards.	16.1	Construct and operate the new Tailings Storage Facility as per the Design Report submitted to the Department of Industry and Resources.	During the life of the Project	DoIR
		16.2	The Tailings Management Plan, submitted to the regulatory authorities, will be implemented for the management of the tailings generated by the Project.	Submission prior to construction. Implementation during construction and operation.	DoIR

Process Wastewater	To ensure that process wastewaters are managed to ensure that they do not adversely affect environmental values or the health, welfare and amenity of people and land uses by meeting statutory requirements and acceptable standards.	17.1	Handle and manage the process wastewater generated by the Project as described in the Surface Water Management Plan submitted to the regulatory authorities.	During operation	
General Waste	To ensure that wastes are managed to ensure that their disposal does not adversely affect environmental values or the health, welfare and amenity of people and land uses by meeting statutory requirements and acceptable standards.	18.1 18.2	General waste generated will be disposed of in accordance with the Non-Mineral Waste Management Plan, submitted to the regulatory authorities. The waste recycling programme undertaken on site will continue for the Project.	Submission prior to construction. Implementation during construction and operation. During construction and operation.	DoIR
Sewage	To ensure that sewage and sewerage facilities do not impact on people's health and the environment.	19.1	Sewage will be managed at the site in accordance with the Non–Mineral Waste Management Plan prepared for the Project, and submitted to the regulatory authorities.	During construction and operation	
Hydrocarbons	To ensure that hydrocarbons are managed and do not impact on people's health and safety, and the environment.	20.1	The measures presented for hydrocarbon management in the Hazardous Materials Management Plan, submitted to the regulatory authorities, will be implemented.	Submission prior to construction. Implementation during construction and operation.	DoIR

Hazardous Materials	To ensure that hazardous materials do not impact on people's health and safety, and the environment.	21.1	The Hazardous Materials Management Plan, submitted to the regulatory authorities, will be implemented.	Submission prior to construction. Implementation during construction and operation.	DoIR
Site Contamination	To ensure that the environment is not impacted by contaminants.	22.1	Apply the management measures described in the Environmental Management Plan, submitted to the regulatory authorities, to minimise the risks of contamination due to the Project.	Submission prior to construction. Implementation during construction, operation and decommissioning.	DoIR CALM D Ag DIA
Crater Formation	To ensure that the formation of a crater due to underground cave mining does not adversely affect environmental values or the health, welfare and amenity of people and meets statutory requirements and acceptable standards.	23.1 23.2 23.3	As the crater forms, its shape will be surveyed and the actual profile will be compared with the crater modelling predictions. Water levels and quality in the groundwater surrounding the underground mine and crater area will be monitored during the crater formation process. Restrict people access to the crater area and erect fencing, where appropriate, and signage around the crater area.	During operations During operations During operations, decommissioning and closure.	DoIR DoIR DoIR DOCEP
Health, Safety and Risk	To plan and implement the Project to ensure that risks are minimised and safety aspects are maximized.	24.1	A Project Management Plan will be prepared and submitted to the Department of Industry and Resources.	Prior to construction	DoIR DOCEP
Rehabilitation	To ensure, as far as practicable, that rehabilitation achieves a stable and functioning landform, which is consistent with the surrounding	25.1	Site specific completion criteria will be developed together with regulatory authorities and other key stakeholders and will be included in the Rehabilitation and Closure Plan.	During construction, operations, decommissioning and closure.	CALM DoIR D Ag DIA

	landscape and other environmental values.	25.2	Indicators required to monitor the ecosystem function will be selected in conjunction with the regulatory authorities.	During construction, operations, decommissioning and closure	CALM DoIR D Ag DIA
		25.3	Investigate the use of Ecosystem Function Analysis as a measure for developing completion criteria and for the assessment of rehabilitation.	Prior to and during construction and operations.	DoIR CALM D Ag
		25.4	Develop appropriate revegetation completion criteria together with the regulatory authorities.	During construction, operations and decommissioning.	DoIR CALM D Ag
		25.5	Develop, together with the regulatory authorities, appropriate completion criteria for assessing fauna return to rehabilitated areas.	During construction, operations and. decommissioning	DoIR CALM D Ag
		25.6	Studies will be implemented to determine acceptable water quality criteria which do not permit adverse environmental impacts.	During construction, operations and decommissioning.	
		25.7	Water quality criteria will be agreed with the regulatory authorities.	During construction, operation and. decommissioning.	
		25.8	Conduct studies to determine the appropriate local seed mix and rates. The results will be applied to revise the Rehabilitation Plan submitted to the regulatory authorities.	During construction and operation.	CALM DoIR

		25.9	Revegetation trials will be conducted on areas disturbed by mining activities including the waste rock dumps and tailings storage facility.	During construction and operations.	CALM DoIR
		25.10	Results of the rehabilitation trials will be provided to the regulatory authorities in the Annual Environmental Report and will also be used to revise the site's Rehabilitation Plan and Programme.	Annually	DoIR CALM D Ag
		25.11	Develop and implement a rehabilitation monitoring programme which will assess progress against the agreed completion criteria.	Following rehabilitation	DoIR CALM D Ag
		25.12	The results of the monitoring programme will be provided to the regulatory authorities in the Annual Environmental Report.	Annually	DoIR CALM D Ag
		25.13	Rehabilitation trials will be undertaken on the waste rock dumps to assess various treatments and designs. Apply the results, once obtained, in the development of a detailed Rehabilitation Plan for the waste rock dumps to be submitted to the regulatory authorities.	During construction, operations.	DoIR CALM
		25.14	Ensure that progressive rehabilitation is undertaken on areas of the waste rock dumps identified as being completed.	Following completion of sections of the waste rock dumps.	DoIR
		25.15	Rehabilitation will be undertaken on the waste rock dumps to ensure that the resulting landforms are safe, stable, minimal eroding, non-polluting and will conform with the surrounding landscape.	Following completion of the waste rock dumps.	DoIR CALM

		25.16	Rehabilitation trials will be undertaken on the tailings storage facility to assess various methods and treatment for revegetation. Apply the results, once obtained, in the development of a detailed Rehabilitation Plan for the tailings storage facilities to be submitted to the regulatory authorities.	Following completion of sections of the tailings storage facility.	DoIR CALM
		25.17	Rehabilitation will be undertaken on the tailings storage facility to ensure that the resulting landforms are safe, stable, minimal eroding, non-polluting and will conform with the surrounding landscape.	Following completion and filling of the tailings storage facility.	DoIR CALM
Decommissioning and Closure	To ensure that decommissioning and closure activities are undertaken in safe and effective manner and that the site is left in a safe, stable and non-polluting manner.	26.1	The Decommissioning and Closure Plan for the Underground Project and submitted to the regulatory authorities will be regularly revised and submitted to the regulatory authorities.	Revised and submitted on a five-yearly basis.	DoIR

Abbreviations

CALM = Department of Conservation & Land Management
CSLC = Commissioner of Soil & Land Conservation
D Ag = Department of Agriculture
DOCEP = Department of Consumer & Employment Protection
DIA = Department of Indigenous Affairs
DoIR = Department of Industry & Resources

Attachment 1 to Ministerial Statement 711

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

Attachment 1 replaces Schedule 1 in Ministerial Statement 711

Proposal: Extend the current Argyle Diamond Mine operations to develop an underground diamond mine and associated infrastructure

Proponent: Argyle Diamonds Limited

The Proposal (Assessment No. 1606)

The proposal extends the life of mining at the site of the open pit mine by developing an underground mine and associated infrastructure. The mine is located approximately 110 kilometres south of Kununurra in the East Kimberley region (figure 1). The ore body will be mined in two stages using both block cave mining and sub-level cave mining from 2008:

Stage 1 involves mining the Upper Block and Southern Tail Block. The proposed completion date for Stage 1 is 2017.

Stage 2 involves mining the Lower Block and it is proposed to commence in approximately 2017 and to complete by 2024.

The underground proposal will also include the construction of a new Tailings Storage Facility (TSF2) and a new Reclaim Pond (RCP3).

Changes:

- Deletion of the "Key Characteristics" from Table 1 which are not relevant to the environment;
- Amendment to "Dewatering Requirements" limits;
- Removal of reference to "Alternative Power Supply"; and
- Update all Figures in Schedule 1.

Key Characteristics Table:

Element	Description of proposal	Description of approved change to proposal
Life of Mine	Approximately 20 years	**Removed as it is contained in the project description.**
Mining Depth	Maximum of 675 metres	Maximum of 675 metres
Mining Methods	Stage 1 Upper Level Block Cave mining Stage 2 Sub Level Cave mining	**Removed as it is contained in the project description.**
Major Project Components	Major Project Components Underground Declines	**Removed as most of "Major Project Components" are not**

Element	Description of proposal	Description of approved change to proposal
	Underground Mining Levels Underground and surface conveyors Box-cut portal Surge bin Secondary crusher Extension to some existing surface infrastructure Temporary ore and waste stockpiles Laydown areas Refrigeration plant Bulk Air Cooler and fans Exhaust shafts Service corridor Dewatering system New Tails Storage Facility New Reclaim Pond	**significant key characteristics relevant to the environment except for the following components:** Major Project Components Temporary ore and waste stockpiles; Dewatering system; Tails Storage Facility; Reclaim Pond.
Total Ore Production	Stage 1 – 60 Mt (approximately) Stage 2 – 37 Mt (approximately)	Stage 1 – 60 Mt (approximately) Stage 2 – 37 Mt (approximately)
Ore Processing	Through existing processing plant at around 8 Mtpa for Stage 1 and 4.5 Mtpa for Stage 2	Through existing processing plant at around 8 Mtpa for Stage 1 and 4.5 Mtpa for Stage 2
Key Materials	(approximate values) Ground support construction materials - 4,700 t Fibrecrete - 330,000 t Explosives -15,000 t Electric cables, pipes and ventilation ducting - 6,000 t Diesel fuel - 26 ML Concrete -24,000 cubic metres Steel - 5,000 t	**Removed as majority of "key materials" are not significant key characteristics relevant to the environment.** **Regulating and dealing with explosives and Diesel fuel are addressed under *Mines Safety and Inspection Act 1994.***
Total Waste Rock Over Project Life	4.3 Mt (approximately)	4.3 Mt (approximately)
Dewatering Requirements	18 – 83 ML/day (approximately)	**Up to 9 GL/annum**
Crater Area	Mostly within the existing open pit and waste rock dump area	Mostly within the existing open pit and waste rock dump area
Tailings	100 Mt (approximately)	100 Mt (approximately)
TSF2 Area of Disturbance	126 ha (approximately)	126 ha (approximately)
RCP3 Area of Disturbance	133 ha (approximately)	133 ha (approximately)
UG mine water requirements	700 kL per day	700 kL per day

Element	Description of proposal	Description of approved change to proposal
Processing Water Requirements	12,000 – 22,000 kL/day	12,000 – 22,000 kL/day
Water Supply	From dewatering operations, Gap Dam, Upper Limestone Creek Waste Rock Dump Seepage Retention Dam, Reclaim Ponds, and if necessary, Lake Argyle.	From dewatering operations, Gap Dam, Upper Limestone Creek Waste Rock Dump Seepage Retention Dam, Reclaim Ponds, and if necessary, Lake Argyle.
Power Requirements	Additional 4-12 MW	**Removed as power supply is managed by EP Act Part V Site Operating Licence.**
Power Supply	Ord Hydroelectric Scheme, with the deficit to be provided for an initial two - three years by the onsite diesel power station until alternative power supply established.	**Ord Hydroelectric Scheme, with the deficit to be provided by the onsite diesel power station.**
Heavy Vehicle Movements	Offsite – reduce from 12 per day to one - two per day On site – Reduce from 670 hours/day to 36 hours/day	**Removed as not a significant key characteristic relevant to the environment.**
Construction Workforce	Max 500 (approx.)	**Removed as not a significant key characteristic relevant to the environment.**
Total Workforce	Approximately 450	**Removed as not a significant 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 and 2 replace all Figures in Schedule 1.

Figures (attached)

Figure 1 – Regional Location of Argyle Diamond Mine Operations

Figure 2 – Argyle Diamond Mine Operations Indicative Layout and Development Envelope

[Signed 17 April 2014]

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
Under delegated authority

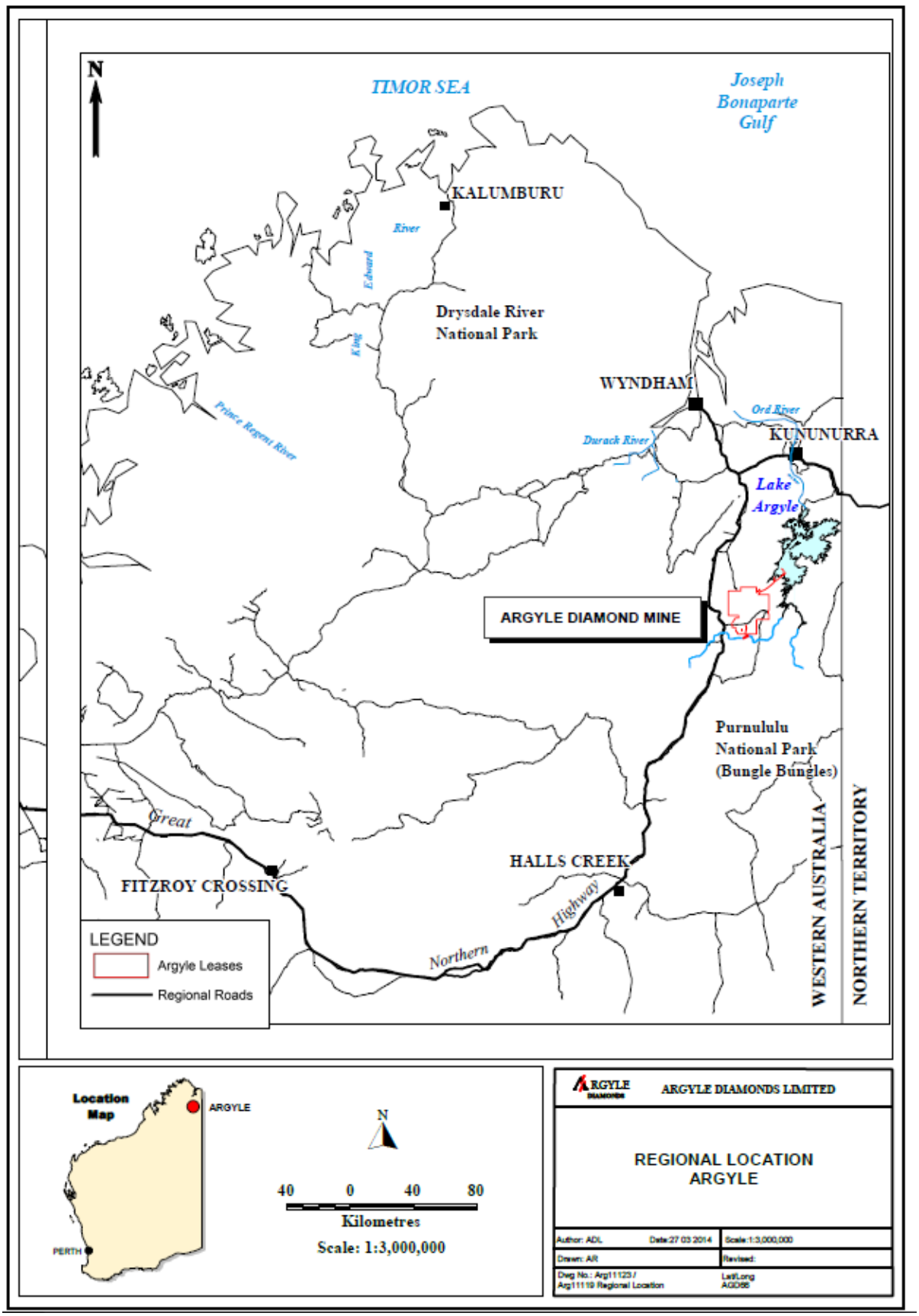

Figure 1 – Regional Location of Argyle Diamond Mine Operations

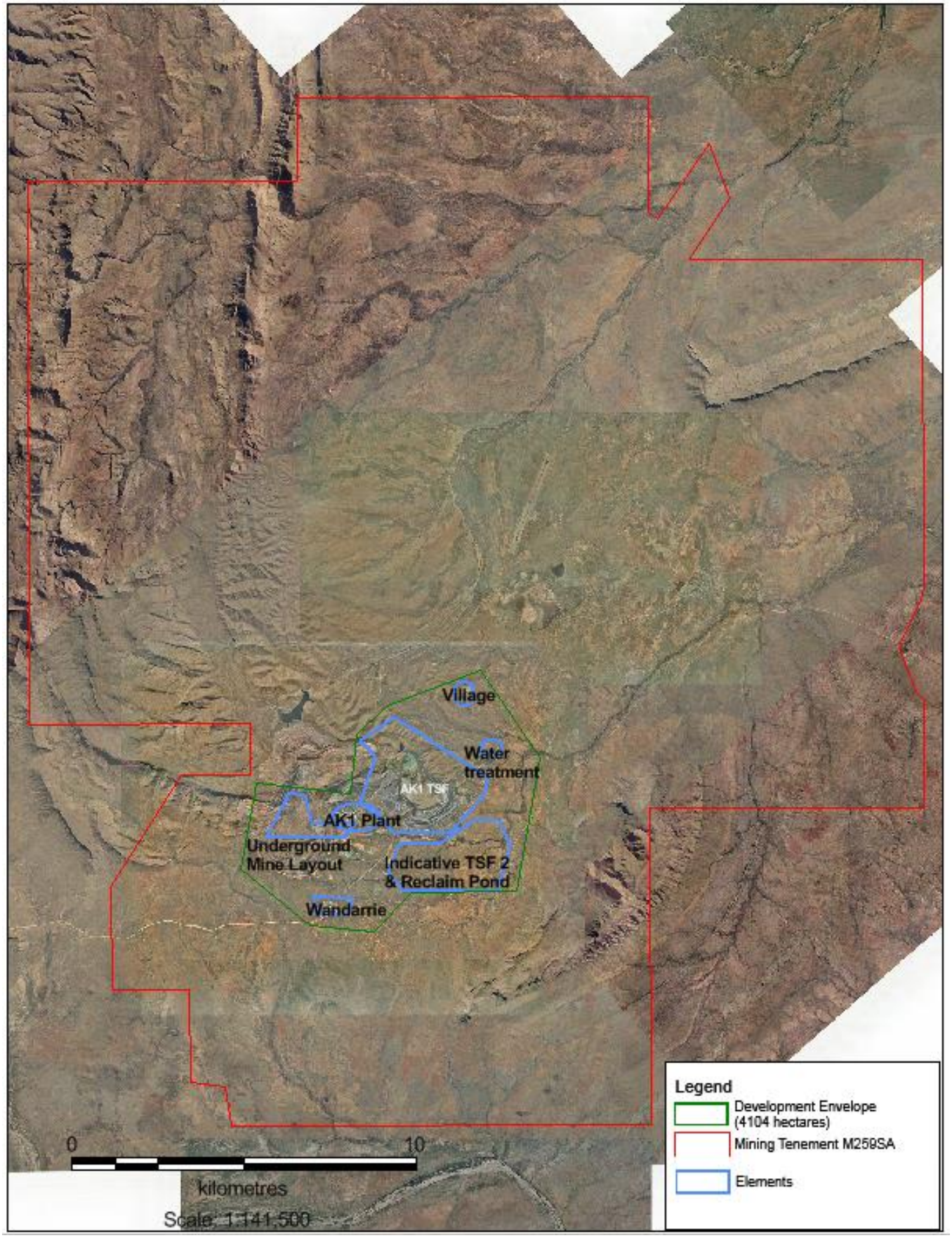

Figure 2 – Argyle Diamond Mine Operations Indicative Layout and Development Envelope