SECTION'S 2, 28, 29, 30, 31 AND 35

ADDITIONAL INFORMATION

TO SUPPORT THE

LADY ANNIE MINING LEASE APPLICATION

RTI DL RELEASE - DNRM

MINING LEASE APPLICANT: REEFWAY PTY LIMITED A.C.N. 076 289 097

SEPTEMBER 2006

Released

TABLE OF CONTENTS

		Page
1.0	Sections 29–31: Mining Lease Description:-	4
1.1	Reference start point (Section 29).	4
1.2	Datum post markings (Section 30).	4
1.3	External boundary description (Section 31).	5
2.0	Section 35: Access Description	15
2.1	Width of access	15
2.2	Start point of access	15
2.3	End point of access	15
2.4	Access description	15
3.0	Section 28: A Statement Acceptable to the Minister:-	15
3.1	Outlining the mining program proposed and the method of its operation on any other use proposed for the land and an indication of when operations are expected to commence.	15
3.1.1	Background	15
3.1.2	Project Summary	16
3.1.3	Feasibility Study Summary	17
3.1.4	Justification of ML Applications	18
3.1.5	MLA 90168 – Mount Clarke (Mining)	19
3.1.6	MLA – Lady Annie (Mining and Infrastructure)	20
3.1.7	Justification for Term of Application	20
3.2	Proposal for any infrastructure requirements that will or may be necessary to enable the mining program to proceed, on on additional activities to be carried on to work out the infrastructure requirements.	21
3.3	A statement acceptable to the Minster detailing the financial and technical resources of the applicant.	21

RTI DL RELEASE - DNRM

3.3.1 Financial Ability of the Applicant 21

3.3.2 Technical Ability of the Applicant 22

3.4 Sketch maps acceptable to the Mining Registrar setting out:- 25

3.4.1 The boundaries of the land which is subject to this application. 25

3.4.2 The location of the datum post. 25

3.4.3 The surface area. 25

3.4.4 The proposed access. 25

3.5 Proof of identity of applicant. 25

Attachments

Attachment A – CopperCo Limited 2005 Annual Report
Attachment B – Figures and sketches
Attachment C – Proof of identity of applicant
Attachment D - Authorisation letter

RTI DL RELEASE - DNRM

1.0 Sections 29-31: Mining Lease Description

1.1 Reference Start Point (Section 29)

The Reference Point is PSM 71415 located at 19°46' 27.6" south latitude, 139°02' 42.6" east longitude and elevation 331.847 on the Australian Height Datum.

The Datum Post is located at 19°46' 30.1" south latitude, 139°03'07" east longitude at a north eastern corner of the Mining Lease Application (MLA) area at a bearing of 90° 04' for a distance of 715 metres from PSM 71415. (Refer to sketch 1 in attachment B).

1.2 Datum Post Markings (Section 30)

The datum post is marked RPL 13/9/2006.

1.3 External Boundary Description (Section 31)

Commencing from the datum corner, thence by:					
at a bearing of	164° 38'	for a distance of	215	metres, to a point within existing ML 5568	thence by,
at a bearing of	219° 36'	for a distance of	3222	metres, to a point on the southern boundary of ML 5568	thence by,
at a bearing of	281° 53'	for a distance of	1300	metres, along the southern boundary of ML 5568,	thence by,
at a bearing of	354° 39'	for a distance of	536	metres, along the western boundary of ML 5568,	thence by,
at a bearing of	56° 07'	for a distance of	282	metres, to a point within existing ML 5568,	thence by,
at a bearing of	33° 17'	for a distance of	403	metres, to a point within existing ML 5568,	thence by,
at a bearing of	24° 23'	for a distance of	788	metres, to a point within existing ML 5568,	thence by,
at a bearing of	79° 15'	for a distance of	676	metres, to a point within existing ML 5568,	thence by,
at a bearing of	62° 20'	for a distance of	464	metres, to a point within existing ML 5568,	thence by,
at a bearing of	54° 17'	for a distance of	464	metres, to a point within existing ML 5568,	thence by,
at a bearing of	34° 23'	for a distance of	572	metres, to a point within existing ML 5568,	thence by,
at a bearing of	47°08'	for a distance of	144	metres, to a point within existing ML 5568,	thence by,
at a bearing of	84°36'	for a distance of	366	metres, to a point within existing ML 5568,	thence by,
at a bearing of	174° 39'	for a distance of	213	metres, to a point within existing ML 5568,	thence by,
at a bearing of	139° 39'	for a distance of	425	metres, to a point within existing ML 5568,	thence by,
Back to the point of commencement.					

RTI DL RELEASE - DNRM

Notes - Bearings are magnetic, add 5°21' for AMG.
- Co-ordinates are Australian Geodetic Datum 1984.
- Surface area – whole.
  Surface Area:- within ML5568 about 490 hectares.
  Strata: the lease extends below the surface to elevation 174.0 metres on the Australian Height Datum as derived from PSM71415.

Released

2.0 Section 35: Access Description

2.1 Width of access

Access is 100 metres wide along the centreline.

2.2 Start point of access

Commencing from the intersection of the Barkly Highway and McNamara's Highway situated some 67km from Mount Isa at 20°20'52" south latitude and 139°8'33" longitude.

2.3 End point of access

A point situated on the south eastern boundary of MLA, "Lady Annie" 786 metres south west of the easternmost corner.

2.4 Access Description

Commencing from the intersection of the Barkly Highway and McNamara's Highway situated some 67km from Mount Isa at 20°20'52" south latitude and 139°8'33" longitude; thence northerly along McNamara's Highway for 52.9 km to a junction at 19°54'12" south latitude and 139°7'7" east longitude, thence northerly and westerly along an existing road for 17.4 km to a point situated on the south eastern boundary of MLA, "Lady Annie" at a bearing of 219°36' for a distance of 786 metres from the easternmost corner of the area applied for. This access is shown as minor road on the Department of Mines, 1975, 1:100000 map sheets 6757 and 6758.

Approximate areas within:-

Lot 2 on SP162421	Calton Hills Pty. Ltd.	46.9 km	469 hectares
Lot 5 on CP865892	Calton Hills Pty. Ltd.	18.2 km	182 hectares
Lot 1 on UN6	Buka Minerals	5.2 km	52 hectares
	Total Area of access		703 hectares
Balance of ML5568			22 hectares

Dimensions are approximate only and subject to formal survey.
Australian Geodetic Datum, 1984.

3.0 Section 28 – A Statement Acceptable to the Minister

3.1 Outlining the mining program proposed and the method of its operation on any other use proposed for the land and an indication of when operations are expected to commence.

RTI DL RELEASE - DNRM

Released

3.1.1. Background

This document forms part of a mining lease application being applied for over part of the Lady Annie Sub Lease within ML 5568.

CopperCo purchased Buka Minerals (Lady Loretta) Pty Limited which held the Lady Annie Sub Lease including the Lady Annie oxide copper deposit. On the 26 October 2004, Buka Minerals (Lady Loretta) Pty Limited changed its name to Lady Annie Pty Limited. Lady Annie Pty Limited is a wholly owned subsidiary of CopperCo Limited. Simultaneously, CopperCo Limited ("CopperCo") acquired the Mt Kelly project comprising of EPM 7487 and a number of adjoining Mining Leases through the purchase of Reefway Pty Ltd ("Reefway") in September 2004 (Figure 1).

Since October 2004, CopperCo has been actively exploring and defining oxide copper resources at Lady Annie and Mt Kelly as part of a feasibility study aimed at establishing an open-cut, heap leach SX-EW copper project with an annual on-site metal production of at least 19,000 tonnes per annum.

At Lady Annie, CopperCo's development and exploration drilling to date has totalled 237 Reverse Circulation (RC) holes for 15,317 meters and 40 diamond drill holes for 2,672 metres.

RTI DL RELEASE - DNRM

3.1.2 Project Summary

CopperCo intends to create a specialist independent copper producer with a primary focus on the Mount Isa region. The Company has assembled:

- the Lady Annie Copper Project. A feasibility study at Lady Annie has been completed, debt and equity funding has been put in place, and first production at a rate of 19,000 tonnes of copper per year is scheduled for 2nd quarter 2007;
- a coherent major regional tenement package exceeding 2,500 km² within the Mount Isa Block that hosts several known copper and sulphide resources and prospects that continues to yield exciting exploration results;
- an experienced management team with a track record of successfully financing, developing, building, commissioning and operating mining projects.

Located 137km north of Mount Isa, Lady Annie is a large and high grade oxide copper resource relative to comparable deposits found elsewhere in Australia. The Mount Kelly Project located approximately 20km to the southeast of Lady Annie and forming part of the Lady Annie Project, contains material that has complementary physical properties.

A Feasibility Study into the production of about 19,000 tonnes of copper per year for at least eight years was completed in April 2006. With core

Released

A Feasibility Study into the production of about 19,000 tonnes of copper per year for at least eight years was completed in April 2006. With core financing completed, and key approvals and permits for the Mount Kelly minesite in final stages of processing, a start to site activities in October should see copper cathode being plated mid 2007.

In May 2006 the Company raised $46.7 million of new equity from institutional and professional investors. In early July 2006 CopperCo advised that it had arranged debt facilities totalling $61 million with Macquarie Bank, thus completing the financing for the Project and clearly seeing the development off to a flying start.

CopperCo will use heap leach SX-EW technology for the recovery of copper from oxide deposits. Heap leach SX-EW was first applied to stand alone copper extraction in Australia at the Girilambone Mine in the early 1990s. SX-EW now accounts for approximately 20% of world primary copper production.

CopperCo acquired their tenement package in September 2004. In the 18 month period through to the completion of the Feasibility Study in April 2006, the company increased the resource base by 70% to 18Mt @ 0.9% Cu for 165,000 tonnes of contained copper. CopperCo's Ore Reserve now stands at 11Mt at 1.1% for 125,600 tonnes of contained copper.

RTI DL RELEASE - DNRM

3.1.3 Feasibility Study Summary

- Completed Feasibility Study confirms an economic and technically viable Project with site operating costs of US$0.70 per pound of LME "A" grade copper, at nameplate capacity of 19,000 tonnes per annum to produce 114,000 tonnes cathode over initial 8 years.
- Base Case NPV (8%, geared, after tax) estimated at $86 million, Net Revenue of $568 million, average gross operating margin (EBITDA) of 51% and EBIT margin of 30%. At year to date May 2006) average copper price and exchange rate equivalent NPV is $183 million.
- Development Strategy aimed at bringing forward capital expenditure and eliminating long run cost burdens on operations. Future expansion capacity in key areas built in for target output upgrade in years 3-4.
- Mineral Resource increased by 20% to 18Mt at 0.9%Cu. Proven and probable Ore Reserve increased by 12% to 11Mt at 1.1% Cu. Mine plan currently set for 10.1Mt at 1.27% Cu average grade.
- Direct Capital cost to commencement of production estimated at A$59 million after a decision to own and operate crushing and stacking plant, and investment for future growth; indirects of $17 million, (including EPCM, contingency of approximately 13% and temporary construction facilities) and $3 million provision for first fill, spares and owners costs.

Released

- Detailed engineering nearing completion with procurement commenced in May 2006.
- Commencement site activities scheduled for October 2006
- Cathode Production forecast for June 2007.

The Project will initially mine three ore bodies by conventional open pit mining. The ore will be treated by a heap leaching, solvent extraction and electrowinning process.

The Study demonstrates that the three ore bodies can be economically mined and processed based on the assumptions used to generate the **Corporate Base Case Project Financials** (Table 1). Table 1 summarises the key parameters and the resulting project financials.

RTI DL RELEASE - DNRM

Released

Table 1: Corporate Base Case Model

PARAMETERS	RESULTS ASSUMPTIONS	
1. OREBODY, PLANT & PRODUCTION		
Resources[1] (Table 1) Measured, Indicated & Inferred @ 0.3% Cu cut-off	18.0 Mt @ 0.9% Cu	
Ore Reserve (Table 2) Proved & Probable @ 0.3% Cu cut-off Optimisation carried out using US$1.30/lb copper	**Proved:** 6.0 Mt @ 1.3% Cu **Probable:** 5.0 Mt @ 1.0% Cu **Totals:** 11.0 Mt @ 1.1% Cu	
Designed Plant Output LME Grade "A" copper Cathode	nameplate capacity 19,000 tpa	
Initial Project Life (Oxide copper resources only)	8 years	
Mine Plan **Cathode Production**	10.1Mt at 1.27% Cu 114,000 tonnes	
Metallurgical Recoveries[2] Total copper recovery	89%	
2. FINANCIALS		
Capital Cost Estimate to commissioning Direct Costs (plant, civils & associated infrastructure) Indirect Costs (EPCM, temporary facilities, contingency 13%) Other (1st fill & capital spares, insurance, owner's costs) Total	A$59.3M A$17.3M A$3.0M A$79.6M	
Metal Price & FX assumptions Copper Price Exchange Rate (A$/US$)	**Base Case** US$2.20? US$1.15/lb[3] A$0.69	**YTD Price** US$2.28/lb A$0.738
Operating Costs Life-of-mine Cash Operating Cost (mining, processing and site overheads) Life-of-mine average C2 Cash Cost (including mining, processing, marketing, state royalties and overheads)	A$25.30/tonne or US$0.70/lb US$0.75/lb Cu plated	
Project Returns NPV @ 8%, geared after tax basis	**Base Case** A$ 86M	**YTD Price** A$183M

RTI DL RELEASE - DNRM

Mining Lease applications have been applied for in respect of the Mt Kelly tenements in order to cover the following.

- Extraction of oxide copper ores from open pits
- Waste dumps
- Haul roads
- Site infrastructure
- Process plant infrastructure

A Mining Lease for Transport has been applied for over the proposed power and water corridor from Lake Wogaboonya near Gunpowder to the Mount Kelly processing facility.

Released

At Lady Annie (Figure 2), the mining lease application will cover the following.

- Extraction of oxide copper ores from an open pit
- Waste dump

3.1.4 Justification of ML Applications

An average of approximately 1.5 Mt of copper oxide ore (including the Lady Annie deposit) will be extracted for processing by heap leach and SX-EW each year (maximum 1.9 Mtpa). A total of approximately 11 Mt of copper oxide ore (at an average coper grade of 1.2%) will be extracted from the Project deposits during the life of mine. The current mine life is estimated at eight years.

The mining rate is determined by the process plant capacity, which will be designed to produce a maximum of 19,000 tpa of copper cathode. Table 2 and 3 show the mining and production rate from the Project for the life of the mine, in addition to the projected waste movements. The total resource at the Project may increase with ongoing exploration and this will have the affect of increasing the mine life.

The Mount Clarke, Flying Horse and Lady Annie deposits will be mined using conventional open cut methods, using a 100 tonne excavator (PC 1000 or equivelant) and 75 tonne dump trucks (Cat 777 or equivelant) with copper ore being trucked to the Run of Mine (ROM) pad. Benches within the pit will be at a 15 m intervals and the overall batter angle of the pit walls will be 45 degrees.

Pit scheduling will involve the extraction of ore from Mt Clarke and Lady Annie in the first six years with Flying Horse and any additional resources not yet delineated over the final three years. Land disturbance associated with final voids will be approximately 20 ha (Mt Clarke , Flying Horse and Lady Annie).

Copper ore from the Lady Annie deposit will be trucked to the proposed processing plant at Mount Kelly. The total maximum mining rate of 1.9 Mtpa includes ore transported from the Lady Annie and Mount Kelly deposits.

RTI DL RELEASE - DNRM

Table 2: Proposed ROM Ore and Metal Production from Lady Annie and Mt Kelly

Ore Tonnes and Grade by Year								
Year		2006	2007	2008	2009	2010	2011	2012
Mount Kelly	ROM Ore (t)	361,732	395,010	570,285	631,009	435,830	221,950	250,229
	Grade Cu (%)	0.98	0.99	0.78	0.74	0.96	1.20	1.40
	Cu Metal (t)	3,561	3,896	4,458	4,639	4,190	2,663	3,503
Lady Annie	ROM Ore (t)	736,291	1,045,978	1,238,145	1,228,484	1,081,656	1,336,929	993,500
	Grade Cu (%)	2.07	1.55	1.24	1.14	1.82	1.10	0.91
	Cu Metal (t)	15,270	16,171	15,335	14,046	19,632	14,761	9,029
Total	ROM Ore (t)	1,098,023	1,440,988	1,808,430	1,859,493	1,517,486	1,558,878	1,243,729
	Grade Cu (%)	1.71	1.39	1.09	1.00	1.57	1.12	1.01
	Cu Metal (t)	18,831	20,067	19,793	18,685	23,823	17,424	12,533

Released

3.1.5 MLA – Lady Annie (Mining and Infrastructure)

This MLA comprises an area of 490 ha (Figure 3) and is depth limited above elevation 174.0 AHD. Reasons for the MLA are given as follows.

Mining Activities

- The Lady Annie proposed pit is located within the proposed MLA.

Infrastructure requirements will be as follows.

- Waste Dump to accommodate waste rock for Lady Annie. It is anticipated that one dump will be required. The waste rock dump will to be constructed via 10m lifts, to an approximate final height of 30 – 40 meters. The proposed waste rock dump will be located as shown in Figure 4.

Whilst the waste rock dump is being constructed, a bund wall will be in place around the toe of the dump to contain water runoff and sediments from the waste dump during storm events. Should sediment dams also be required down slope of the waste rock dump then these will also be constructed to prevent sedimentation of drainage lines.

Once a lift has been completed the outer face of the waste rock dump will be dozed down to an angle of less than 20 degrees. A seven metre wide berm will be left between each lift for drainage and access. The waste rock dump will be progressively rehabilitated as areas become available.

- It is further anticipated that sufficient area will be required for dump truck parking, mining contractor offices and ablutions.

RTI DL RELEASE - DNRM

Table 3: Proposed Waste Movement from Lady Annie and Mt Kelly

	Waste Tonnes by Year						
Year	2006	2007	2008	2009	2010	2011	2012
Mt Kelly	575,988	576,344	784,379	985,990	362,637	819,216	800,502
Lady Annie	4,892,561	2,777,052	3,278,336	2,972,490	1,182,574	1,498,129	878,092
Total Waste	5,468,549	3,353,396	4,062,715	3,958,480	1,545,212	2,317,346	1,678,594

The reasons for applying for this area for the Lady Annie MLA is given as follows

3.1.6 Justification for Term of Application

CopperCo have requested a 21 year term for the ML application. Whilst current mine life is anticipated to be 8 years, the remaining 13 years is requested as follows.

CopperCo believe that with further exploration, a further 10 years can be added to the current life of mine through continued near mine exploration.

Released

Further, at the completion of oxide mining and processing CopperCo will be addressing the potential to mine the sulphide ores that exist below the current oxide material. As the Company's cash flows become positive, resource definition of the sulphide potential will be undertaken.

3.2 Proposal for any infrastructure requirements that will or maybe necessary to enable the mining program to proceed, on additional activities to be carried on to work out the infrastructure requirements.

Due to the Nature of this operation and the fact that the majority of the infra structure required for the project is located on the Mount Kelly Mining Leases, infrastructural requirements for the Lady Annie mining lease application will be minimal. Details of for the infrastructure required for the Lady Annie MLA was detailed in Section 3.1.5 of this document.

3.3 A statement acceptable to the Minister detailing the financial and technical resources of the applicant

3.3.1 Financial Ability of the Applicant

Reefway Pty Ltd is a wholly-owned subsidiary of CopperCo Limited.

In support of the applicants financial ability to conduct the proposed operations, find enclosed in Attachment A a copy of the 2005 Annual Report for CopperCo Limited.

On 16 November 2005, CopperCo released results from their Feasibility Study relating to their operational and financial metrics. This is presented as part of Attachment A.

3.3.2 Technical Ability of the Applicant

Reference to the enclosed 2005 Annual Report for CopperCo Limited (Attachment A) provides details of the qualifications and experience of the Directors of the company and its wholly-owned subsidiary Reefway Pty Ltd.

All employees and contractors involved in the project will possess suitable qualifications. Local employees will be utilised where possible. Details of the other project staff are as follows:-

Barry Deans - General Manager (Operations)

RTI DLRELEASE - DNRM

s.49

Ken Maiden – Chief Geologist

s.49

Tenement Consultant
Mr Brian Martin B.Sc, Ass Dip Cart.

s.49

RTI DL RELEASE - DNRM

Environmental Consultant
Austral Asian Resources Consultants (AARC) have been appointed as environmental consultants for the project. The AARC consultants working on the project have extensive experience on all aspects relating to environmental issues applicable to the project.

3.4 Sketch maps acceptable to the Mining Registrar setting out:-

3.4.1 The boundaries of the land the subject of this application

Reference should be made to Sketch 1 in Attachment B.

3.4.2 The location of the Datum post

Reference should be made to Sketch 1 in Attachment B.

3.4.3 The surface area

Reference should be made to Sketch 1 in Attachment B.

s78B(2) - Personal Information

Thomas Lancaster - Operations Manager

s.49

RTI DL RELEASE - DNRM

Simon Pooley – Exploration Manager

s.49

3.4.4 The proposed access

The access for the Lady Annie Sub Lease MLA is detailed in Section 2.0 of this document. Reference should also be made to Sketch 2 in Attachment B for a graphical representation of the proposed access.

3.5 Proof of identity of the applicant

Reference should be made to Attachment C for an Australian Securities Commission extract for Reefway Pty Ltd as proof of the identity of the applicant.

RTI DL RELEASE - DNRM

Released

ATTACHMENT A

CopperCo Limited
2005 Annual Report

RTI DL RELEASE - DNRM

Released

ML 90170.
Ref.: Copper#192/aj

SECTION'S 28, 29, 30, 31 AND 35

ADDITIONAL INFORMATION

TO SUPPORT THE

MOUNT KELLY EXTENDED MINING LEASE APPLICATION

RTI/DLRELEASE - DNRM

MINING LEASE APPLICANT: REEFWAY PTY LTD

NOVEMBER 2005

Released

TABLE OF CONTENTS

		Page
1.0	Sections 29–31: Mining Lease Description:-	4
1.1	Reference start point (Section 29).	4
1.2	Datum post markings (Section 30).	4
1.3	External boundary description (Section 31).	4
2.0	Section 35: Access Description	5
2.1	Width of access	5
2.2	Start point of access	5
2.3	End point of access	5
2.4	Access description	5
3.0	Section 28: A Statement Acceptable to the Minister:-	5
3.1	Outlining the mining program proposed and the method of its operation on any other use proposed for the land and an indication of when operations are expected to commence.	5
3.1.1	Background	5
3.1.2	Project Summary	6
3.1.3	Feasibility Study Progress	7
3.1.4	Justification of ML Applications	8
3.1.5	MLA 90168 – Mount Clarke (Mining)	9
3.1.6	MLA – Mount Kelly Extended (Mining and mine infrastructure)	9
3.1.7	Justification for Term of Applications	10
3.2	Proposal for any infrastructure requirements that will or may be necessary to enable the mining program to proceed, on on additional activities to be carried on to work out the infrastructure requirements.	10
3.3	A statement acceptable to the Minster detailing the financial	

RTI DL RELEASE - DNRM

and technical resources of the applicant. 11

3.3.1 Financial Ability of the Applicant 11

3.3.2 Technical Ability of the Applicant 11

3.4 Sketch maps acceptable to the Mining Registrar setting out:- 13

3.4.1 The boundaries of the land which is subject to this application. 13

3.4.2 The location of the datum post. 13

3.4.3 The surface area. 14

3.4.4 The proposed access. 14

3.5 Proof of identity of applicant. 14

Attachments

Attachment A – CopperCo Limited 2005 Annual Report
Attachment B – Figures and sketches
Attachment C – Proof of identity of applicant
Attachment D - Authorisation letter
Attachment E – Computerised title for background land tenure

RTI DL RELEASE - DNRM

Released

2.0 Section 35: Access Description

2.1 Width of access

The width of access required is 100 metres wide along a centreline as described in section 2.3 of this document (refer to sketch 2 in attachment B).

2.2 Start point of access

Commencing from the intersection of the Barkly Highway and McNamara's Highway situated some 67km from Mount Isa at 20°20'52" south latitude and 139°8'33" east longitude.

2.3 End point of access

The access description terminates at a point on the western boundary of the Mount Kelly Extended MLA being 160 metres north of the south-western corner.

2.4 Access description

Commencing at the start point thence, northerly along McNamara's Highway for 51.6 km to the south-western corner of the area applied for. This access is shown as a minor road of the Department of Mines 1975 1:100000 map sheets 6757 and 6758.

Approximate areas within:-

Lot 2 on SP162421	Calton Hills Pty Ltd	46.9km	469 hectares
Lot 5 on CP865892	Calton Hills Pty Ltd	4.7km	47 hectares
	Total Area of access	516 hectares	

Notes:-
- Dimensions are approximate only and subject to formal survey.
- Australian Geodetic Datum, 1966.

RTI DL RELEASE - DNRM

3.0 Section 28 – A Statement Acceptable to the Minister

3.1 Outlining the mining program proposed and the method of its operation on any other use proposed for the land and an indication of when operations are expected to commence

3.1.1 Background

This document forms part of the three (3) Mining Lease applications being applied for over the Mount Kelly area.

CopperCo Limited ("CopperCo") (formerly Avon Resources Limited) acquired the Mount Kelly project comprising of EPM 7487 and a number of adjoining Mining Leases through the purchase of Reefway Pty Ltd

Released

("Reefway") in September 2004. Simultaneously, CopperCo purchased Buka Minerals tenements in the Lady Loretta area, including the Lady Annie oxide copper deposit.

This rationalisation also included the purchase of Savannah Resources Pty Ltd ("Savannah") which was in joint venture with Reefway and had EPM applications pending in the region. As a result of this amalgamation CopperCo holds Mining Leases over oxide copper resources at Lady Annie and Mount Kelly and 28 EPM's and applications covering some 2,500 km^2 (Figure 1). Both Reefway and Savannah are wholly owned subsidiaries of CopperCo.

Since October 2004, CopperCo has been actively exploring and defining oxide copper resources at Lady Annie and Mount Kelly as part of a feasibility study aimed at establishing an open-cut, heap leach SX-EW copper project with an annual on-site metal production of at least 15,000 tonnes per annum.

At Mount Kelly, CopperCo's development and exploration drilling to date has totalled 279 Reverse Circulation (RC) holes for 18,500 meters and 29 diamond drill holes for 1,750m. As a result, two satellite oxide copper deposits have been delineated at the Mount Clarke and Flying Horse prospects. RC drilling is continuing at Mount Kelly Workings, the Mount Kelly Fault Zone and the Swagman prospect. CopperCo are confident that further satellite deposits will be delineated from these prospects.

RTI DL RELEASE - DNRM

3.1.2 Project Summary

The flagship of CopperCo's Mount Isa tenement holding is the Lady Annie project, located 137 km north of Mount Isa (Figure 1). The Company's development strategy is to bring the Lady Annie deposit into production by completing a feasibility study into producing a minimum of 15,000 tpa copper cathode. In parallel with the feasibility study, the Company is carrying out resource drilling at the nearby Mount Kelly project area, 24 km south of the Lady Annie project, with the aim of delineating satellite oxide copper deposits. The Company's objective since October 2004 has been to define a mineral resource inventory of at least 150,000 tonnes of contained leachable copper, centred on a production base at Lady Annie. This has now been achieved

Mineral Resource estimates were announced in May for Lady Annie and Mount Clarke (ASX Releases of 16 May and 19 May, 2005). A new Mineral Resource estimate for Flying Horse, located within the Mount Kelly project has been completed. All three estimates will now be incorporated into the Feasibility Study. The combined Mineral Resources for inclusion in the feasibility study at a 0.3% Cu cut-off are given as follows.

Released

	Million Tonnes	Cu Grade	Cu Tonnes
Lady Annie	10.5Mt	1.00%	109,500
Mount Clarke	4.3Mt	0.70%	30,500
Flying Horse	1.0Mt	1.00%	10,500
Totals	**15.8Mt**	**0.91%**	**150,500**

3.1.3 Feasibility Study Progress

Based on the Mineral Resource inventory, mining studies have so far concluded that the Lady Annie project has a resource base that will sustain a heap leach SX/EW operation producing 18,000 tpa of copper cathode for eight years. Any additional resources delineated will add to the projected mine life.

The major proportion of oxide feed will be sourced from the Lady Annie pit that has a projected strip ratio of 2.2:1. The remaining oxide feed will be sourced from deposits within the Mount Kelly project, approximately 20km to the southeast of Lady Annie. The principal oxide source will be from the Mount Clarke pit with a strip ratio of 1.7:1 with lesser oxide feed from Flying Horse and any additional satellite sources delineated in the future.

The heap leach pad, process plant and site infrastructure will be located within 5kms of the Mount Kelly deposits. The ore will be trucked from Mount Kelly utilizing dump trucks along a number of proposed haul roads between the two sites. Ore from Lady Annie will be trucked utilising triple road trains along a proposed haul road route between the two sites. Approximate haul distance is 17.5kms.

Metallurgical studies have shown that heap leaching is a viable form of copper extraction for the Lady Annie and Mount Kelly oxide copper ore types. The Lady Annie oxide copper ore is highly weathered containing a moderate clay component and, by itself, would restrict heap stacking heights to 3-4 meters. The Mount Kelly ores, on the other hand, display excellent leach kinetics and physical characteristics under acid leaching conditions. When blended with Lady Annie ore they will provide stable leach conditions up to 8 meters stack height. The optimal blend is about 70% Lady Annie to 30% Mount Kelly, although this is still being refined with further column work.

Having arrived at this understanding of heap leach design criteria the initial pad area and volume has now been determined. Working within these metallurgical constraints, the leach pad dimensions need to be 1100 metres long by 600 metres wide to be able to support the blended ore tonnage over the currently understood life of mine. Hydrological testwork on blended ore indicates a six metre lift height will provide acceptable leach conditions. It is anticipated that three by six metre lifts can be

RTIDL RELEASE DNRM

Released

achieved. The nominal capacity of the pad under these design conditions is 12Mt.

Environmental studies are currently in progress. Australasian Resource Consultants have been contracted to complete this part of the Feasibility Study. Pre submission advice indicates the project will likely attract an Environmental Management Plan rather than an EIS.

Mining Lease applications have been applied for in respect of the Mount Kelly tenements in order to cover the following.

- Extraction of oxide copper ores from open pits
- Waste dumps
- Haul roads
- Site infrastructure
- Process plant infrastructure

With Lady Annie, it is anticipated that the Sub-Lease will be partially conditionally surrendered and applied for as a separate Mining Lease in the near future.

RTI DL RELEASE - DNRM

3.1.4 Justification of ML Applications

An average of approximately 1.5 Mt of copper oxide ore (including the Lady Annie deposit) will be extracted for processing by heap leach and SX-EW each year (maximum 1.9 Mtpa). A total of approximately 11 Mt of copper oxide ore (at an average copper grade of 1.2%) will be extracted from the Project deposits during the life of mine. The current mine life is estimated at eight years.

The mining rate is determined by the process plant capacity, which will be designed to produce a maximum of 18,000 tpa of copper cathode. Table 1 and 2 show the mining and production rate from the Project for the life of the mine, in addition to the projected waste movements. The total resource at the Project may increase with ongoing exploration and this will have the affect of increasing the mine life.

The Mount Clarke, Flying Horse and Lady Annie deposits will be mined using conventional open cut methods, using a 100 tonne excavator (PC l000 or equivalent) and 75 tonne dump trucks (Cat 777 or equivalent) with copper ore being trucked to the Run of Mine (ROM) pad. Benches within the pit will be at a 15 m intervals and the overall batter angle of the pit walls will be 45 degrees.

Pit scheduling will involve the extraction of ore from Mount Clarke and Lady Annie in the first six years with Flying Horse and any additional resources not yet delineated over the final three years. Land disturbance associated with final voids will be approximately 20 ha (Mount Clarke , Flying Horse and Lady Annie).

Released

Copper ore from the Lady Annie deposit will be trucked to the proposed processing plant at Mount Kelly. The total maximum mining rate of 1.9 Mtpa includes ore transported from the Lady Annie and Mount Kelly deposits.

Table 1: Proposed ROM Ore and Metal Production from Lady Annie and Mount Kelly

Ore Tonnes and Grade by Year								
Year		2006	2007	2008	2009	2010	2011	2012
Mount Kelly	ROM Ore (t)	361,732	395,010	570,285	631,009	435,830	221,950	250,229
	Grade Cu (%)	0.98	0.99	0.78	0.74	0.96	1.20	1.40
	Cu Metal (t)	3,561	3,896	4,458	4,639	4,190	2,663	3,503
Lady Annie	ROM Ore (t)	736,291	1,045,978	1,238,145	1,228,484	1,081,656	1,336,929	993,500
	Grade Cu (%)	2.07	1.55	1.24	1.14	1.82	1.10	0.91
	Cu Metal (t)	15,270	16,171	15,335	14,046	19,632	14,761	9,029
Total	ROM Ore (t)	1,098,023	1,440,988	1,808,430	1,859,493	1,517,486	1,558,878	1,243,729
	Grade Cu (%)	1.71	1.39	1.09	1.00	1.57	1.12	1.01
	Cu Metal (t)	18,831	20,067	19,793	18,685	23,823	17,424	12,533

Table 2: Proposed Waste Movement from Lady Annie and Mount Kelly

Waste Tonnes by Year							
Year	2006	2007	2008	2009	2010	2011	2012
Mt Kelly	575,988	576,344	784,379	985,990	362,637	819,216	800,502
Lady Annie	4,892,561	2,777,052	3,278,336	2,972,490	1,182,574	1,498,129	878,092
Total Waste	5,468,549	3,353,396	4,062,715	3,958,480	1,545,212	2,317,346	1,678,594

RTI DLRELEASE - DNRM

The reasons for applying for these areas for each of the three MLA's (Figure 2) are given as follows.

3.1.5 MLA 90168 – Mount Clarke (Mining)

This MLA covers an area of approximately 200 metres by 200 metres (Figure 3) currently held as part of EPM 7487 and is wholly contained within current ML 5447 – Spinifex Queen. The area was originally a mining lease that was surrendered prior to CopperCo's purchase of Reefway.

The Mount Clarke oxide copper deposit and proposed pit encompass this area. As such, this "EPM hole" needs to be converted to a mining lease in order for mining to be undertaken.

3.1.6 MLA – Mount Kelly Extended (Mining and mine infrastructure)

This MLA comprises an area of 4 sub blocks (Figure 4) over part of EPM 7487. Exploration success at Mount Kelly has been particularly pleasing with Mineral Resource estimates being outlined at Mount Clarke and Flying Horse. RC drilling is continuing on oxide copper targets within the current Mining Leases and the surrounding EPM. Reasons for the MLA are given as follows.

Mining Activities

- The Mount Clarke proposed pit is principally located within ML 5447.

Released

However, parts of the pit are located within the Mount Kelly Extended MLA.

- Similarly the Flying Horse proposed pit is principally located within ML's 5446 and 5448. However, the western portion of the pit falls within the Mount Kelly Extended MLA.

- Swagman Prospect. Located approximately 1.5 km south of Mount Kelly falls entirely within the Mount Kelly Extended MLA. It is expected that this zone will produce sufficient mineralization to be classified as a Mineral Resource in the near future and will be incorporated into the Mine Plan.

3.1.7 Justification for Term of Applications

CopperCo have requested a twenty-one year term for each of the three ML applications. Whilst current mine life is anticipated to be eight years, the remaining thirteen years is requested as follows:

The siting of the process plant and heap leach pad at Mount Kelly increases the economic viability of other identified but not yet delineated oxide resources within a 50 km radius. As a central processing facility for this area. the Company are confident that McLeod Hill, Lady Maggie and Buckley River oxide copper mineralization can be economically treated through the Mount Kelly plant site at the completion of the current mining scope.

CopperCo believe that with further exploration, a further ten years can be added to the current life of mine through the exploitation of these potential resources. Further at the completion of oxide mining and processing, CopperCo will be addressing the potential to mine the sulphide ores that exist below the current oxide material. As the company's cash flow becomes positive, resource definition of the sulphide potential will be undertaken.

RTI DL RELEASE - DNRM

3.2 Proposal for any infrastructure requirements that will or maybe necessary to enable the mining program to proceed, on additional activities to be carried on to work out the infrastructure requirements.

- Waste Dumps to accommodate waste rock for Mount Clarke, Flying Horse and Swagman. Given the spatial separation of these areas, it is anticipated that three dumps will be required. The waste rock dumps will to be constructed via 10m lifts, to an approximate final height of 30 – 40 meters. The proposed waste rock dumps will be located as shown in Figure 4.

Released

Whilst the waste rock dumps are being constructed, a bund wall will be in place around the toe of the dump to contain water runoff and sediments from the waste dump during storm events. Should sediment dams also be required down slope of the waste rock dump then these will also be constructed to prevent sedimentation of drainage lines.
Once a lift has been completed the outer face of the waste rock dump will be dozed down to an angle of less than 20 degrees. A seven metre wide berm will be left between each lift for drainage and access. Waste rock dumps will be progressively rehabilitated as areas become available.

- Haul Roads. Each of these deposits are likely to be linked and given the terrain conditions within this area, can only be linked one way. It is anticipated that Mount Clarke will be serviced by a haul road entering the lease from the northwest side and Flying Horse from the west side. Swagman will be serviced from the southwest side.
- It is further anticipated that sufficient area will be required for dump truck parking, mining contractor offices and ablutions.
- The Project camp accommodation will be sited to the south of Swagman at Mount Kelly. It is anticipated that the camp will house self contained accommodation for up to 120 personnel.
- The majority of the infrastructure for the project including processing plant and office facilities will be located on the Mount Kelly West MLA.

RTI DL RELEASE - DNRM

3.3 A statement acceptable to the Minister detailing the financial and technical resources of the applicant

3.3.1 Financial Ability of the Applicant

Reefway Pty Ltd is a wholly-owned subsidiary of CopperCo Limited.

In support of the applicants financial ability to conduct the proposed operations, find enclosed in Attachment A a copy of the 2005 Annual Report for CopperCo Limited.

On 16 November 2005, CopperCo released results from their Feasibility Study relating to their operational and financial metrics. This is presented as part of Attachment A.

3.3.2 Technical Ability of the Applicant

Reference to the enclosed 2005 Annual Report for CopperCo Limited (Attachment A) provides details of the qualifications and experience of the directors of the company and its wholly-owned subsidiary Reefway Pty Ltd.

All employees and contractors involved in the project will possess suitable qualifications. Local employees will be utilised where possible. Details of

Released

the other project staff are as follows:-

Barry Deans - General Manager (Operations)

s.49

Thomas Lancaster - Operations Manager

s.49

Simon Pooley – Exploration Manager

s.49

RTI DL RELEASE - DNRM

s.49

Ken Maiden – Chief Geologist

s.49

Tenement Consultant
Mr Brian Martin B.Sc, Ass Dip Cart.

s.49

RTI DL RELEASE - DNRM

Environmental Consultant
Austral Asian Resources Consultants (AARC) have been appointed as environmental consultants for the project. The AARC consultants working on the project have extensive experience on all aspects relating to environmental issues applicable to the project.

3.4 Sketch maps acceptable to the Mining Registrar setting out:-

3.4.1 The boundaries of the land the subject of this application

Reference should be made to Sketch 1 in Attachment B.

3.4.2 The location of the Datum post

Reference should be made to Sketch 1 in Attachment B.

3.4.3 The surface area

Reference should be made to Sketch 1 in Attachment B.

3.4.4 The proposed access

The access for the Mount Kelly Extended MLA is detailed in Section 2.0 of this document. Reference should also be made to Sketch 2 in Attachment B for a graphical representation of the proposed access.

3.5 Proof of identity of the applicant

Reference should be made to Attachment C for an Australian Securities Commission extract for Reefway Pty Ltd as proof of the identity of the applicant.

RTI DL RELEASE - DNRM

Released

ATTACHMENT A

CopperCo Limited
2005 Annual Report

RTI DL RELEASE - DNRM

Released

16 November 2005

The Manager
Company Announcements Office
Australian Stock Exchange
4th Floor, 20 Bridge Street
SYDNEY NSW 2000

(By Electronic Lodgement – 6 pages)

Dear Sir

- LADY ANNIE FEASIBILITY STUDY -

- Feasibility Study results confirm an economic and technically viable Project with low operating cost of US$0.69 per pound of LME Grade "A" copper.
- Initial Ore Reserve estimate of 9.8Mt at 1.2%Cu from Lady Annie, Mt Clarke and Flying Horse.
- Initial planned production ramping up to 18,000 tonnes of Grade "A" copper cathode per annum to produce ~~124~~114,000 tonnes of LME over initial project life of 8 years.
- Total ~~plant and infrastructure~~development capital cost estimated ~~to start up estimated~~ at A$~~47-54~~ million with further optimisation in progress.
- Base case Project NPV (after tax, ungeared) of A$43 million (8% discount rate). Based on the average year to date exchange rate of 0.76 and a copper price of US$1.54/lb, the NPV increases to $91 million (8% discount rate).
- Initial Mineral Resource estimates for Swagman, Mount Kelly Workings and Mount Kelly Fault Zone are in progress. Importantly, these deposits are not currently included in the Feasibility Study.
- Final engineering and financing planned for first quarter 2006 with first production planned for fourth quarter 2006.

PTI DLRELEASE - DNRM

ABN 96 004 434 804
Level 22 Allendale Square, 77 St Georges Tce Perth WA 6000 GPO Box 2536 Perth WA 6001 www.copperco.com.au
T +61 8 9421 1999 F +61 8 9421 1999

Released

LADY ANNIE FEASIBILITY STUDY

CopperCo Ltd (ASX: CUO) is pleased to announce the latest results from the Feasibility Study (the "Study") on the Company's Lady Annie copper project (the "Project"), located 137 km north of Mount Isa in north east Queensland.

The Project will initially mine three ore bodies by conventional open pit mining. The ore will be treated by a heap leaching, solvent extraction and electrowinning process (SX-EW). Resource estimation and pit optimisation is currently underway in respect of three additional prospects namely the Mount Kelly Mine workings, the Mount Kelly Fault Zone and the Swagman Prospect.

The Study demonstrates that the three ore bodies can be economically mined and processed based on the assumptions used to generate the **Corporate Base Case Project Financials**. The following table summarises the key parameters and the resulting project financials:

Corporate Base Case Model

PARAMETERS	RESULTS &/OR ASSUMPTIONS
1. OREBODY, PLANT & PRODUCTION	
Resources Measured, Indicated & Inferred @ 0.3% Cu cut-off	15.8 Mt @ 0.91% Cu
Ore Reserve[1] (Table 1) Proved & Probable @ 0.3% Cu cut-off Optimisation carried out using US$1.0/lb copper	**Proved:** 5.4 Mt @ 1.4% Cu **Probable:** 4.5 Mt @ 1.0% Cu **Totals:** 9.8 Mt @ 1.2% Cu
Designed Plant Output LME Grade "A" copper Cathode	Initial rate 15,000 tpa nameplate capacity 18,000 tpa
Initial Project Life (Oxide copper resources only)	8 years
Cathode Production	~~121~~114,000 tonnes
Metallurgical Recoveries[2] Total copper recovery	88%
2. FINANCIALS	
Capital Cost Estimate to commissioning Direct Costs (Plant & Associated infrastructure) Indirect Costs (EPCM, temporary facilities, contingency) Other (1st fill & capital spares, insurance, owner's costs) Total	~~A$34.5M~~41M A$11M ~~A$2.1M~~ ~~A$47.6M~~54M
Metal Price & FX assumptions Copper Price Exchange Rate (A$/US$)	**Base Case** / **YTD Price** US$1.47→US$1.05/lb[43] / US$1.54/lb A$0.69 / A$0.76
Operating Costs Life-of-mine Cash Operating Cost (mining, processing and site overheads) Life-of-mine average C2 Cash Cost (including mining, processing, marketing & state royalties)	A$24.5/tonne or US$0.69/lb US$0.71/lb Cu plated
Project Returns NPV @ 8%, ungeared after tax basis	**Base Case** A$ 48M / **Current Price** A$91M

RTIDL RELEASE - DNRM

[1] LME Forward Contract Rate/lb of US$1.47 for 2007 and A$1.20 for 2008. The Cu price is assumed to be US$1.10 for 2009 and US$1.05 thereafter.

Released

Table 1: Lady Annie Project Ore Reserve									
0.3% Cu Cut off	Proved			Probable			Total		
	Tonnes (t)	Grade (% Cu)	Metal (t)	Tonnes (t)	Grade (% Cu)	Metal (t)	Tonnes (t)	Grade (% Cu)	Metal (t)
Lady Annie	4,065,000	1.4	59,000	2,972,000	1.1	32,000	7,036,000	1.3	90,000
Mount Clarke	1,078,000	0.9	11,000	1,338,000	0.9	12,000	2,416,000	0.9	21,000
Flying Horse	226,000	1.4	3,000	185,000	1.3	2,000	410,000	1.2	5,000
Totals	5,369,000	1.4	73,000	4,494,000	1.0	46,000	9,863,000	1.2	117,000

Note: Mount Kelly Mine, Mount Kelly Fault Zone and Swagman prospect not yet included in resource or reserve data.

Table 1: Lady Annie Project Ore Reserve									
0.3% Cu Cut off	Proved			Probable			Total		
	Tonnes (t)	Grade (% Cu)	Metal (t)	Tonnes (t)	Grade (% Cu)	Metal (t)	Tonnes (t)	Grade (% Cu)	Metal (t)
Lady Annie	4,065,000	1.4	59,000	2,972,000	1.1	32,000	7,036,000	1.3	90,000
Mount Clarke	1,078,000	0.9	9,000	1,338,000	0.9	12,000	2,416,000	0.9	21,000
Flying Horse	226,000	1.4	3,000	185,000	1.3	2,000	410,000	1.3	5,000
Totals	5,369,000	1.3	71,000	4,494,000	1.0	46,000	9,863,000	1.2	117,000

Note: Mount Kelly Mine, Mount Kelly Fault Zone and Swagman prospect not yet included in resource or reserve data.

RTI DL RELEASE - DNRM

PROJECT FINANCING

The Company has been in discussions with a number of financial institutions and off-take parties in respect of the Project's capital development requirements. Based on initial responses as to debt carrying capacity and preliminary financing proposals, and strong interest in off-take arrangements, the Company intends to engage selected parties from early December 2005 in detailed negotiations in this regard. Several approaches by parties interested in wider strategic alliances will also be evaluated. The Company's intention remains to have the total Project financing secured and available for drawdown, subject to satisfaction of all conditions precedent, in the 1st quarter of 2006.

DEVELOPMENT STRATEGY

Project Optimisation

The Company believes there is opportunity to further enhance the Project's financial returns by:

- Optimisation of the mining schedule having regard for the deposits selected for start-up;
- Competitive construction tendering; and
- Selective use of second hand equipment to accelerate the construction timetable.

These activities are in progress and will be completed progressively over the next two months.

Development Timetable

The Project development timetable remains:

▪ Project finance available for drawdown	1st Quarter 2006
▪ Detailed engineering commences	1st Quarter 2006
▪ Statutory approvals received	2nd Quarter 2006
▪ Plant construction commences	2nd Quarter 2006
▪ Plant commissioning commences	4th Quarter 2006
▪ 1st cathode plated	4th Quarter 2006

RESOURCE BASE AND CORE TECHNICAL PARAMETERS

Released

The Lady Annie Copper Project currently is predicated on the following geological and mining parameters;

- Lady Annie, Mount Clarke and Flying Horse ore bodies.
- Further oxide targets still to be factored into the Project include Mount Kelly Workings, Swagman and the new area referred to as the Mount Kelly Fault Zone. An assumption of 750,000 tonnes has been added into the business model.
- The current Ore Reserve is 9.8Mt @ 1.2%Cu, containing 117,000 tonnes contained copper. The business model assumes the addition of defined low grade ore between 0.3 and 0.5% Cu.
- Copper plated and sold is assumed to represent 88% of ~~this total~~130,000 tonnes, or approximately ~~121~~114,000 tonnes. Overall leach recoveries are based on a series of leach column tests that reflect the likely blend of ore types over the first six years of production. The actual leaching rate from these design columns is consistent over this period and ranges between 90% and 93% based on total copper contained in the blend.
- Copper leach time has been assumed to be 160 days for design purposes however we note that column leaching times of 60 days have been achieved during testing.
- The average strip ratio is 2:1 (about 1.8:1 if low grade ore categories are leached at the end of mine life). This is a significant and positive element of the Project and has a marked impact on overall site operating costs. The projected mine life is nominally 8 years and annual cathode production will ramp up from 15,000 tonnes at start up to 18,000 tonnes. In the 2006/7 financial year (start up year) expected cathode production is assumed to be 10,300 tonnes though this estimate has not yet been optimized. There is a focus on engineering the shortest possible construction and commissioning schedule with ramp up to design capacity occurring during the first production year.
- Prevailing copper prices have the potential to alter the pit plans as the pit designs have been run at US$1/lb. If copper prices remain materially above this level through 2006 start up pit schedules could benefit from lower cut-off grades. This would have the effect of pulling some of the low grade into "ore" grade category.
- Acid consumption levels vary from 6 kg/tonne of ore to 20 kg/tonne and by industry standards are considered moderate. The financial model assumes 20 kg/tonne.
- The low average strip ratios, moderate acid consumption, attractive leach kinetics and recovery are the key drivers for operating costs. Mine site cash operating costs are estimated at $24.50/tonne ore leached or US$0.69/lb cathode copper plated.

Key Financial Parameters

The main financial outputs of the project on a mine life basis are as follows:

Revenue	~~$419 million~~
Total cash costs	$263 million (includes royalties)
Royalties	$10 million
Total Capital	~~$47.654~~ million
Operating Surplus	$164 million
~~Tax Losses carried forward~~	~~$~~
Tax Paid	$24 million
Ungeared after tax NPV@ 8%	$48 million
Average unit cost	$24/tonne ore processed
	US$0.69/lb

Timetable

The Company is targeting the end of January 2006, to complete the technical programme associated with the base case project, including bringing to account the newer discoveries at Mount Kelly including Swagman, Mount Kelly Workings, and the Mount Kelly Fault Zone that runs between Mount Clarke and Flying Horse. This would enable the Company to confirm the final parameters for the Project's development as modelled. Key elements that will run past this date include environmental permitting and native title agreements. Some delays (to permitting and EPA) have arisen by our decision to locate the process facilities at Mount Kelly rather than the Lady Annie sub-lease. This has necessitated a new mining lease application and re-work of the site layout. However the chosen site is capable of ready expansion, is flat and lends itself to better design. We concluded that the Lady Annie site was too restricted in respect of expansion and optimum layout.

RTIDL RELEASE - DNRM

Released

The objective is to select the likely financing party, offtake partner and establish final finance requirements by end January 2006. The final financing documentation is planned to be completed by end March 2006.

RTI DL RELEASE - DNRM

Released

Summary

As noted above, the Feasibility Study does not incorporate the potential expansion of the Lady Annie project from the discoveries at Swagman, Mount Kelly Workings and Mount Kelly Fault Zone prospects. Initial Mineral Resource estimates for Swagman, Mount Kelly Workings and Mount Kelly Fault Zone are in progress with targeted completion in January 2006.

Resource definition RC drilling has been completed at Swagman, Mount Kelly Workings and the Mount Kelly Fault Zone. Diamond drilling for metallurgical testwork and check assaying is due to begin in December. As soon as Mineral Resource estimates have been completed, these prospects will be included in the Lady Annie Project mine plan and schedule. A brief summary of each prospect is given below.

1. Swagman Prospect

The Swagman prospect is located approximately 1.5 kms south of Flying Horse. Mineralisation has been defined over 200 metres of strike.

Results include:

- 21 metres at 1.14 % Cu from 13 metres,
- 18 metres at 1.12 % Cu from 2 metres including 5 metres at 2.56 % Cu from 13 metres,
- 22 metres at 0.80 % Cu from 27 metres,
- 45 metres at 0.60 % Cu from 5 metres.

Whilst this zone of mineralisation is currently smaller than both Mount Clarke and Flying Horse, it is near surface and hosted within competent siltstones and sandstones. These host rocks are very similar to Mount Clarke and Flying Horse and boast excellent leach kinetics from recently completed metallurgical testwork. The Company believes that this zone has the potential to become a satellite deposit within the Mount Kelly Project area and will further add to the Project's Mineral Resource inventory.

2. Mount Kelly Fault Zone Prospect

The Mount Kelly Fault Zone is located between Mount Clarke and Flying Horse. A preliminary RC drill programme of 10 holes indicated the potential for further oxide copper mineralisation. A follow up RC programme of 19 holes for 2600 metres has now been completed and results are pending. Geological logging indicates that this zone may be up to 200 metres in strike by 300 metres wide, joining up with Flying Horse to the southwest.

Results include:

- 29 metres at 0.85 % Cu from 19 metres including 15 metres at 1.30% Cu from 33 metres,
- 21 metres at 0.80 % Cu from 33 metres including 6 metres at 1.14% Cu from 33 metres,
- 12 metres at 2.57 % Cu from 66 metres,
- 15 metres at 0.89 % Cu from 18 metres.

3. Mount Kelly Workings Prospect

The Mount Kelly Workings Prospect is located approximately 100 metres to the south east of Flying Horse. Oxide copper mineralisation is exposed in old adits and scrapes over 100 metres of strike. This Prospect was worked in the late 1930's where old records show that a few thousand tonnes of high grade oxide ore were extracted.

Due to logistical difficulties encountered with the terrain in the area, access to RC drill sites has been restricted. Over the past month access has been gained to those drill sites and RC drilling has recently been completed. Assay results are pending.

RTI DL RELEASE - DNRM

Released

Yours faithfully

s.49 - Signature

BRIAN REAR
Managing Director

Mr SJ Pooley (MAusIMM, MAIG), a geologist employed full-time by CopperCo Limited, compiled the technical aspects of this report. Mr Pooley is a member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being reported on to qualify as a Competent Person as defined in the 2004 edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Pooley consents to the inclusion in the report of the matters in the form and context in which it appears.

For further information please contact:

• *Keith Liddell*	*Chairman*	*(08) 9221 7466*
• *Brian Rear*	*Managing Director*	*(08) 9421 1999*

---

[1] *The information in this report that relates to the Mineral Resource and Ore Reserve estimate is based on information compiled by Malcolm Titley BSc (Geology/Chemistry), MAusIMM, MAIG, of Finore Pty Ltd. Malcolm Titley is a Member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Malcolm Titley consents to the inclusion in the report of the matters based on his information in the form and context in which they appear.*

[2] *Mr K Liddell (FAusIMM, CP (Metallurgy)), a Director of CopperCo Limited, compiled the metallurgical aspects of this report. Mr Liddell is a fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being reported on to qualify as a Competent Person as defined in the 2004 edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Liddell consents to the inclusion in the report of the matters in the form and context in which it appears.*

[3] LME Forward Contract Rate/lb of US$1.47 for 2007 and A$1.20 for 2008. The Cu price is assumed to be US$1.10 for 2009 and US$1.05 thereafter

RTI DL RELEASE - DNRM

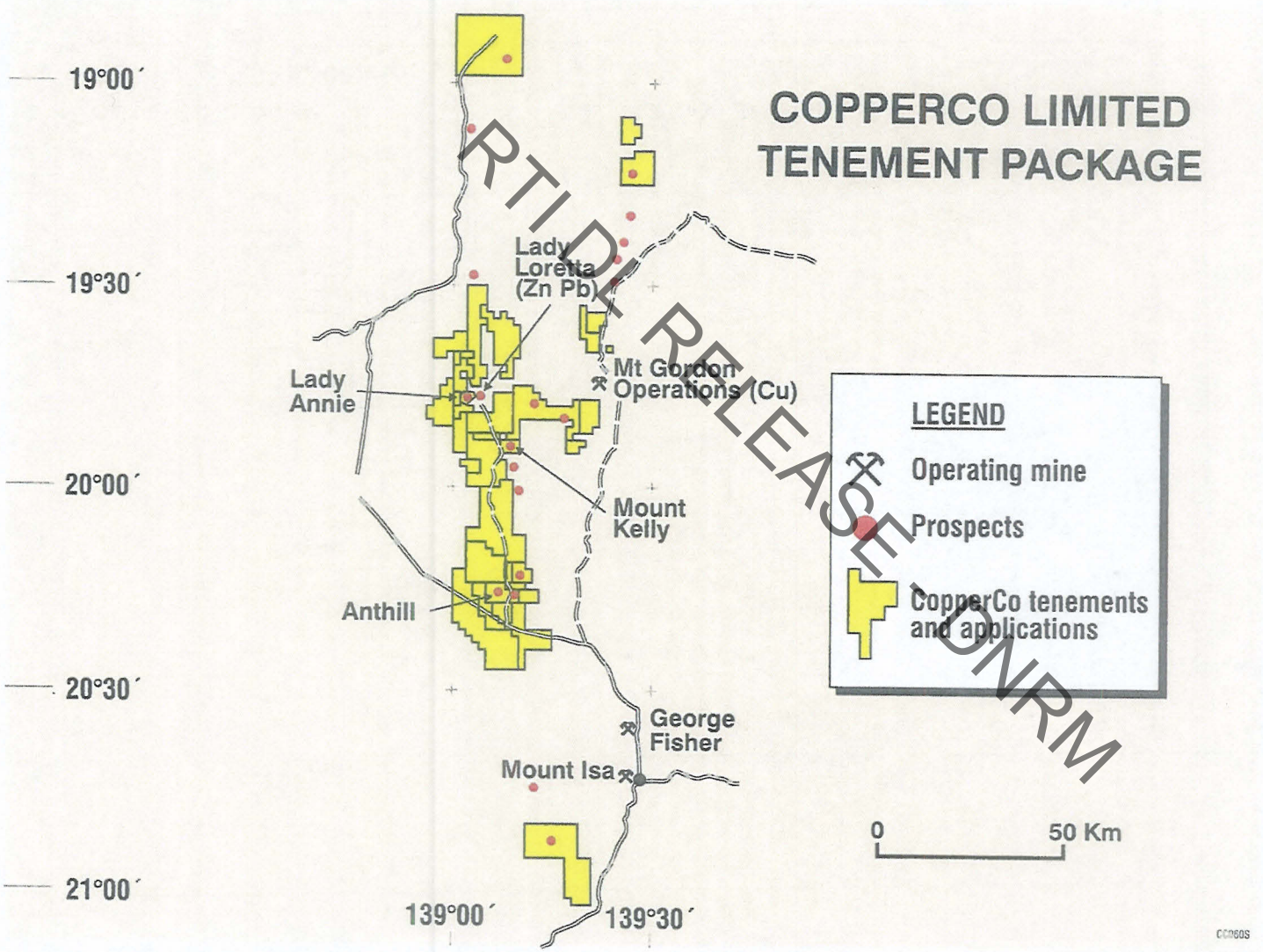
ATTACHMENT B
Figures and Sketches

RTI DL RELEASE - DNRM

Released

12-513

Figure 1: CopperCo Tenement Location Plan

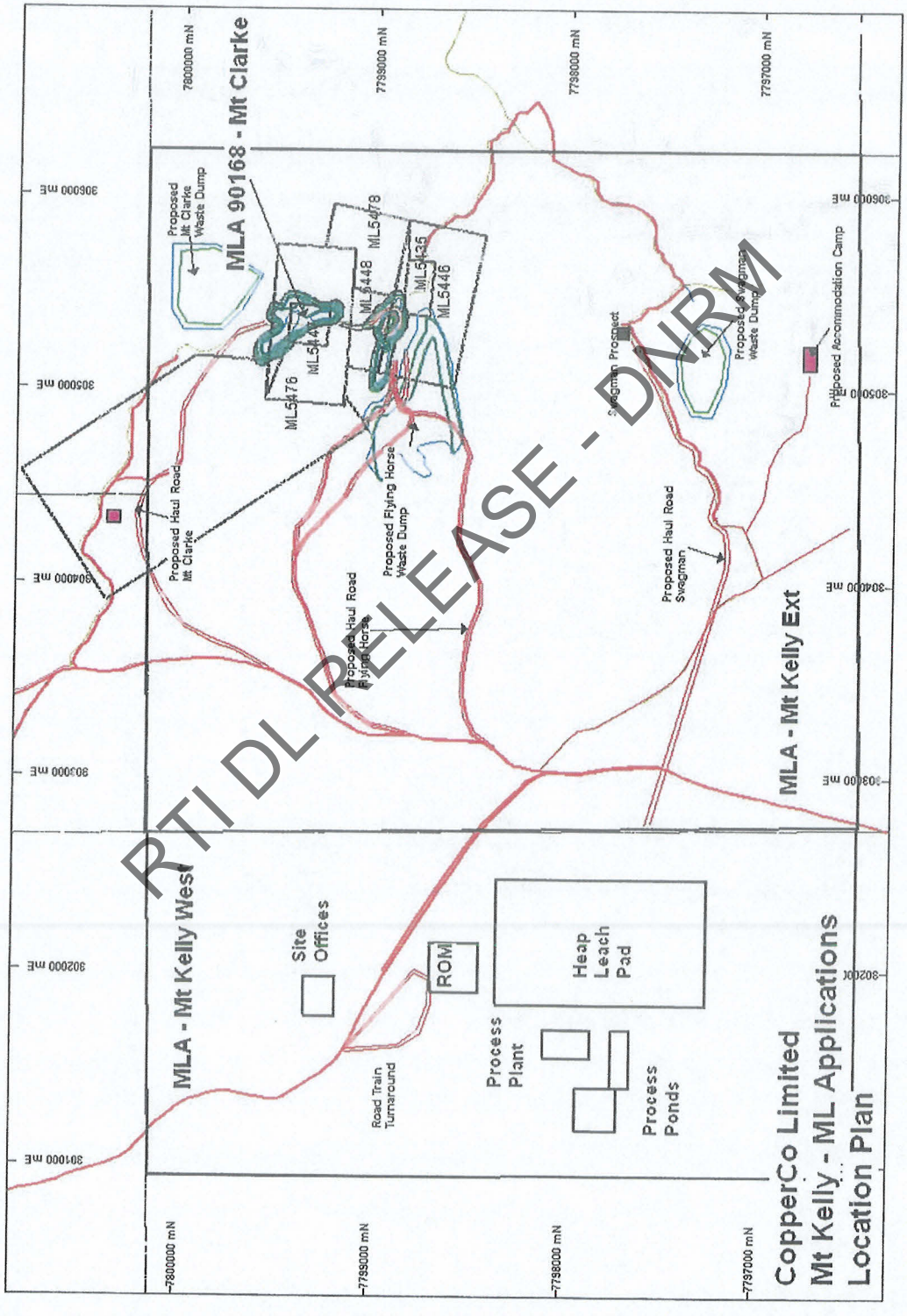


RTI DI RELEASE ONRM

File D Part 1

Released

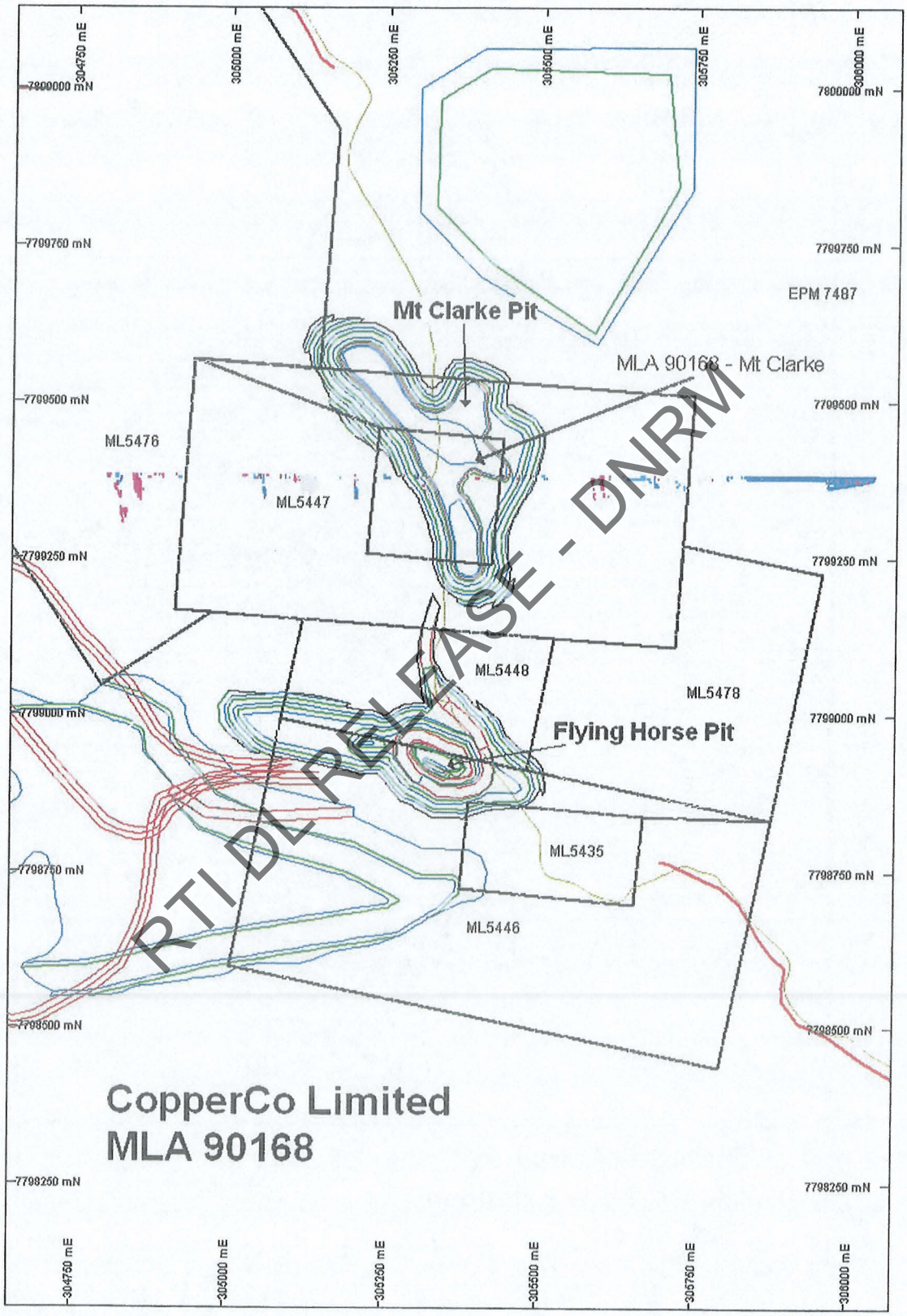
Figure 2: Mt Kelly Project – MLA Location Plan



RTI DL RELEASE - DNRM

Released

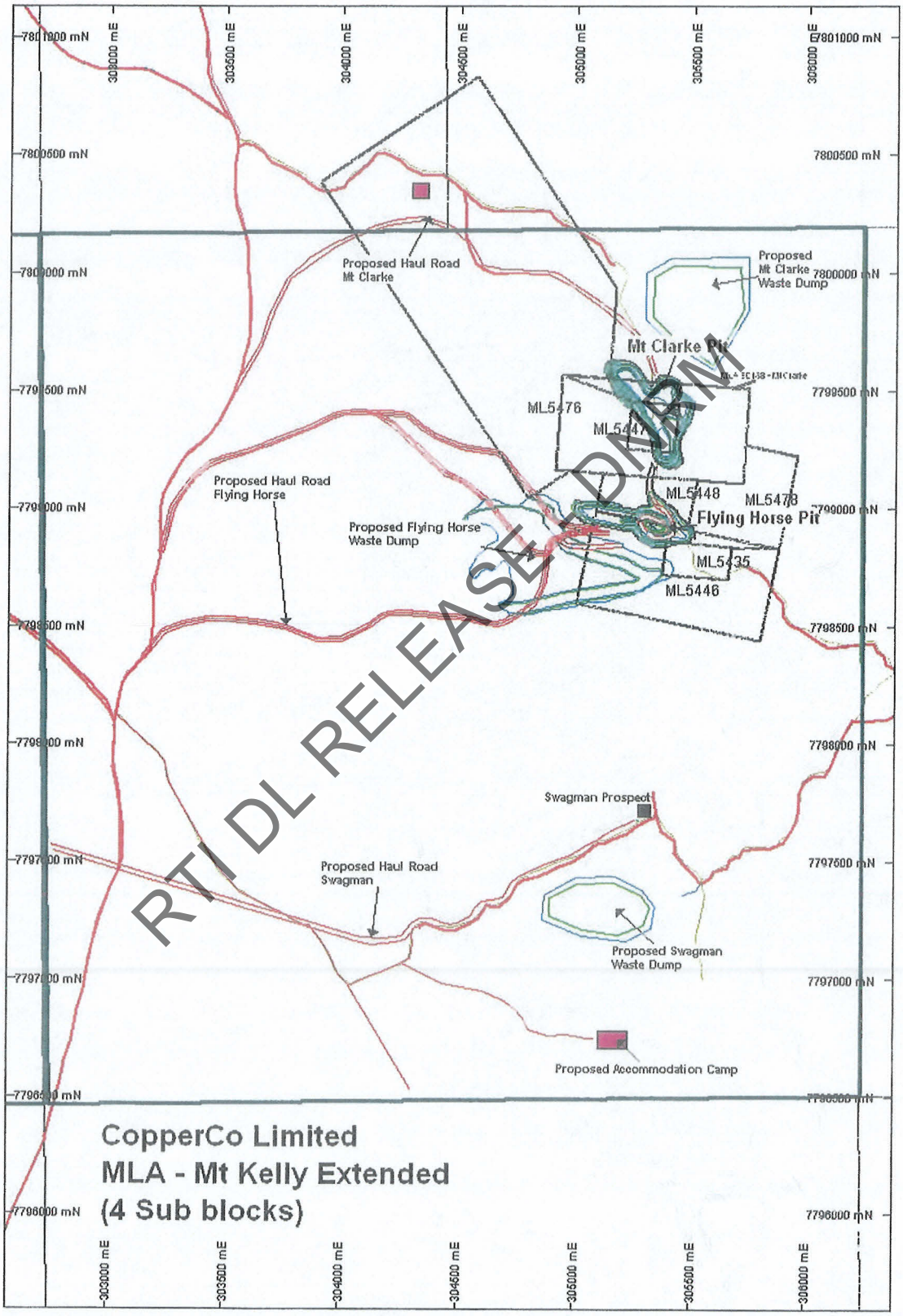
Figure 3: MLA 90168 – Mt Clarke Location Plan



RTI DL RELEASE - DNRM

Released

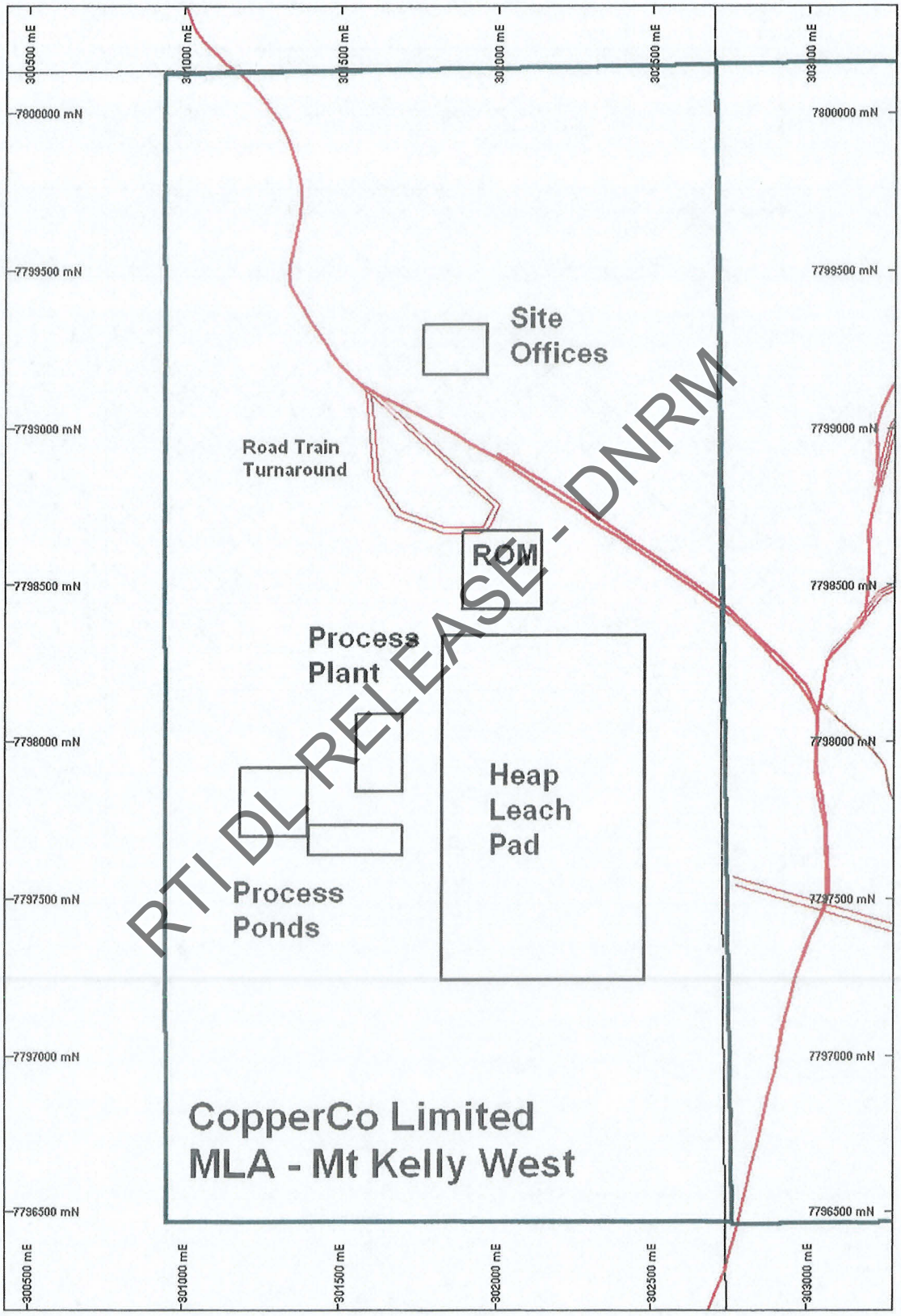
Figure 4: MLA – Mt Kelly Extended Location Plan



RTI DL RELEASE - DNRM

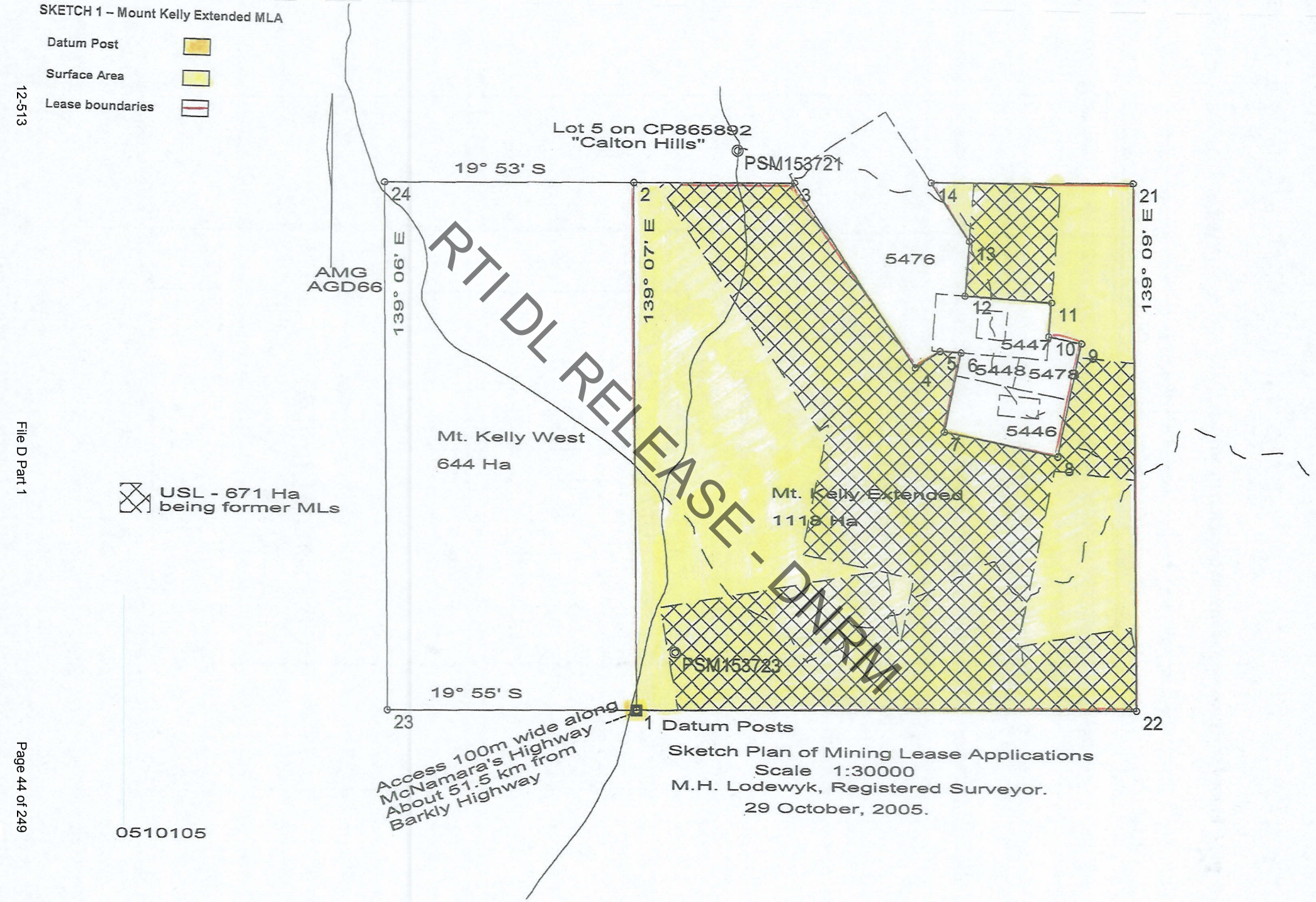
Released

Figure 5: MLA – Mt Kelly West Location PLan

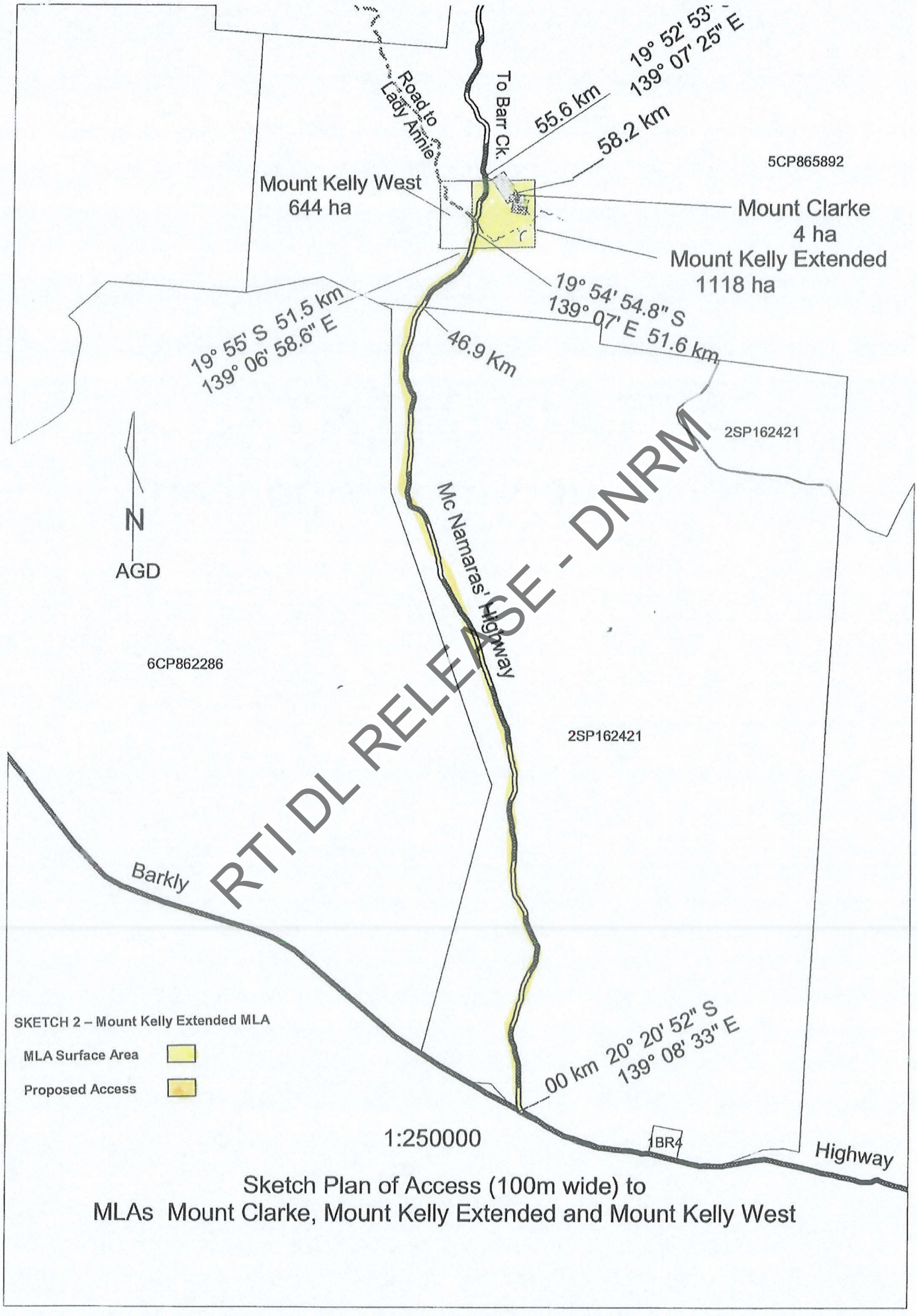


RTI DL RELEASE - DNRM

Released



RTI DL RELEASE - DNRM



RTI DL RELEASE - DNRM

Released

ATTACHMENT C

Proof of Identity of Applicant

RTI DL RELEASE - DIBRM

ASIC
Australian Securities & Investments Commission

National Names Index
Index of corporate and business names

SEARCH TIPS

Extracted from ASIC's database at 17:29:11 on 21/11/2005

Name REEFWAY PTY. LTD.
ACN 076 289 097
ABN 47 076 289 097
Type Australian Proprietary Company, Limited By Shares
Registration Date 07/11/1996
Next Review Date 07/11/2006
Status Registered
Locality of Registered Office Perth WA 6000
Jurisdiction Australian Securities & Investments Commission

These are the documents that ASIC has most recently received from or in relation to this organisation. Page numbers are shown if processing is complete and the document is available for purchase.

Date	Number	Pages	Description
14/12/2004	020931439	4	484E Change to Company Details Appointment or Cessation of A Company Officeholder
15/10/2004	020747427	18	484 Change to Company Details 484B Change of Registered Address 484C Change of Principal Place of Business (Address) 484D Change to Ultimate Holding Company 484E Appointment or Cessation of a Company Officeholder 484N Changes to (Members) Share Holdings
28/09/2004	020737265	3	370 Notification By Officeholder of Resignation or Retirement

COMPLETE DOCUMENT LISTING

RTI DE RELEASE - DNRM

BPAY Biller Code: 17301
Ref: 2290762890973

You can find out more about this company or order copies of the documents from the following ASIC information brokers:

Shelco Searches and Services
Lawpoint
Hazlett Information Services
eSearch
Universal Title Searches
Espreon
Access Business Information
ABR Pty Ltd
National Data Centre Pty Ltd

Released

ATTACHMENT D
Authorisation Letter

RTI DL RELEASE - D

Released

Reefway Pty Ltd
ACN 076 289 097

c/- The Plaza
7th Floor 14 Martin Place
Sydnev NSW 2000
Telephone: s.49 **M)**
(0) (02) 9349 6836
Facsimile: (02) 9224 8910
Mail: GPO Box 3596
Sydney NSW 1444

19 August 2002

The Director General
Department of Natural Resources and Mines
PO Box 194
Brisbane Qld 4011

Dear Sir

Please let this letter serve as notice that employees of Hetherington Exploration & Mining Title Services Pty Ltd (ACN 003 122 996) are authorised by **REEFWAY PTY LTD** (ACN076 289 097) to maintain and do such things as may be necessary from time to time to satisfy the requirements of the Queensland Mineral Resources Act in relation to Exploration Permits, Prospecting Permits, Mining Leases and Mineral Development Licences held by or applied for by this company in Queensland.

This authorisation does not apply to, or provide approval to, the relinquishment of any Authority/Licence.

In addition, it entitles access to any information the Agency may normally make available to the applicant or holder in the course of maintaining any authority/Licence.

Yours faithfully

s.49 - Signature

Malcolm Mayger
Managing Director

RTI DL RELEASE - DNRM

ATTACHMENT E
Computerised Title for Background Land Tenure

RTI DL RELEASE

Released

STATE TENURE SEARCH
NATURAL RESOURCES & MINES, QUEENSLAND

Request No: 112981592
Search Date: 28/02/2005 12:14 pm

Title Reference: 17669155
Date Created: 21/10/1995

DESCRIPTION OF LAND

Tenure Reference: PH 13/4151

LOT 5 CROWN PLAN 865892

County of BRAHE	Parish of ARCAS
County of UNDILLA	Parish of BURBURGATE
County of TEWINGA	Parish of EASTERN
County of TEWINGA	Parish of EDGEROY
County of UNDILLA	Parish of GUNDERMAINE
County of BRAHE	Parish of KEPLER
County of TEWINGA	Parish of LOCHNESS

Local Government: MOUNT ISA CITY

For exclusions refer to Plan CP 865892

Area: 297000.000000 Ha. (ABOUT)

No Land Description

No Forestry Entitlement Area

Purpose for which granted:
No Purpose

TERM OF LEASE

Term and day of beginning of lease

Term: 53 years commencing on 01/01/1962

Expiring on 31/12/2014

REGISTERED LESSEE

CALTON HILLS PTY LTD A.C.N. 066 708 727

CONDITIONS

M76 The lessees shall, within five years from the commencement of the term of the lease and to the satisfaction of the Minister, provide one permanent water improvement in the vicinity of Barney's Well site.

M76 The lessee shall, within five years from the commencement of the term of the lease and to the satisfaction of the Minister, equip Trial Bore or provide one additional permanent water improvement in the general locality.

RTI DL RELEASE - DNRM

STATE TENURE SEARCH
NATURAL RESOURCES & MINES, QUEENSLAND
Request No: 112981592

Released

CONDITIONS (Continued)

M76 The lessee shall, within three years from the commencement of the term of the lease and to the satisfaction of the Minister, provide muster accommodation in the northern part of the holding.

M76 The lessee shall, during the whole term of the lease, maintain all improvements on the holding existing at the commencement thereof, together with the improvements effected in compliance with conditions (1), (2) and (3) hereof, in a good and substantial state of repair.

ENCUMBRANCES

1. EASEMENT No 602805745 (A1005) 31/03/1977
EASEMENT IN PURSUANCE OF AN AGREEMENT DATED THE 18TH DAY OF SEPTEMBER, 1 975, BETWEEN THE LESSEE OF THE WITHIN DESCRIBED HOLDING AND
THE COMMONWEALTH OF AUSTRALIA
FOR PURPOSES AS DEFINED IN SUCH AGREEMENT.

2. RESUMPTION EASEMENT No 703693352 15/11/1999 at 10:06
burdening the land
NORTH QUEENSLAND ELECTRICITY CORPORATION LIMITED A.C.N. 078 848 978
over
EASEMENT J ON SP102693

3. RESUMPTION EASEMENT No 704055303 18/05/2000 at 09:58
burdening the land
NORTH QUEENSLAND ELECTRICITY CORPORATION LIMITED
over
EASEMENTS E TO G ON SP102677 AND
EASEMENT H ON SP102679

ADMINISTRATIVE ADVICES - NIL
UNREGISTERED DEALINGS - NIL

ORIGINAL LEASE IN EXISTENCE - Yes VERSION 1

Caution - Charges do not necessarily appear in order of priority

** End of State Tenure Search **

COPYRIGHT THE STATE OF QUEENSLAND (NATURAL RESOURCES & MINES) [2005]
Requested By: ABR ONLINE

RTI DL RELEASE - DNRM

STATE TENURE SEARCH
NATURAL RESOURCES & MINES, QUEENSLAND

Request No: 1129981591
Search Date: 28/02/2005 12:14 pm

Title Reference: 17666023
Date Created: 21/10/1995

DESCRIPTION OF LAND

Tenure Reference: PH 13/2614

LOT 2 SURVEY PLAN 162421
County of ERAHE Parish of INCA
County of ERAHE Parish of LIMA
Local Government: MOUNT ISA CITY

Area: 26000.000000 Ha. (ABOUT)

No Land Description

No Forestry Entitlement Area

Purpose for which granted:
* No Purpose

TERM OF LEASE

Term and day of beginning of lease

Term: 53 years commencing on 01/01/1964

Expiring on 31/12/2016

REGISTERED LESSEE

CALTON HILLS PTY LTD A.C.N. 066 708 727

CONDITIONS

M76 The lessee shall, during the whole term of the lease, maintain all improvements on the holding existing at the commencement thereof in a good and substantial state of repair.

ENCUMBRANCES

ADMINISTRATIVE ADVICES - NIL
UNREGISTERED DEALINGS - NIL

ORIGINAL LEASE IN EXISTENCE - Yes

VERSION 1

STATE TENURE SEARCH
NATURAL RESOURCES & MINES, QUEENSLAND
Request No: 1129981591

http://www.abr.com.au/live/dnr/inboxviewer.php3?requestnr=4214949&display=docc 28/02/2005

RTI DL RELEASE - DNRM

Released

Search Date: 28/02/2005 12:14 pm

Title Reference: 17666023
Date Created: 21/10/1995

Corrections have occurred - Refer to Historical Search

** End of State Tenure Search **

COPYRIGHT THE STATE OF QUEENSLAND (NATURAL RESOURCES & MINES) [2005]
Requested By: ABR ONLINE

RTI DL RELEASE - DNRM

Client Reference: 01.089

Released

ML 90169
Ref.: Copper#195/aj

SECTION'S 28,29, 30, 31 AND 35

ADDITIONAL INFORMATION

TO SUPPORT THE

MOUNT KELLY WEST MINING LEASE APPLICATION

RTIDL RELEASE - DNRM

MINING LEASE APPLICANT: SAVANNAH RESOURCES PTY LTD

NOVEMBER 2005

Released

TABLE OF CONTENTS

		Page
1.0	Sections 29–31: Mining Lease Description:-	4
1.1	Reference start point (Section 29).	4
1.2	Datum post markings (Section 30).	4
1.3	External boundary description (Section 31).	4
2.0	Section 35: Access Description	5
2.1	Width of access	4
2.2	Start point of access	4
2.3	End point of access	5
2.4	Access description	5
3.0	Section 28: A Statement Acceptable to the Minister:-	5
3.1	Outlining the mining program proposed and the method of its operation on any other use proposed for the land and an indication of when operations are expected to commence.	5
3.1.1	Background	5
3.1.2	Project Summary	6
3.1.3	Feasibility Study Progress	6
3.1.4	Justification of ML Applications	8
3.1.5	MLA 90168 – Mount Clarke (Mining)	9
3.1.6	MLA – Mount Kelly Extended (Mining and mine infrastructure)	9
3.1.7	Justification for Term of Applications	10
3.2	Proposal for any infrastructure requirements that will or may be necessary to enable the mining program to proceed, on on additional activities to be carried on to work out the infrastructure requirements.	10
3.2.1	Ore stacking and heap leach pad design	

RTI DL RELEASE - DNRM

3.2.2 Copper leaching process 11

3.2.3 Solvent extraction (Sx) and electro-winning (EW) process 11

3.2.4 General infrastructure 12

3.3 A statement acceptable to the Minster detailing the financial and technical resources of the applicant. 12

3.3.1 Financial Ability of the Applicant 12

3.3.2 Technical Ability of the Applicant 12

3.4 Sketch maps acceptable to the Mining Registrar setting out:- 14

3.4.1 The boundaries of the land which is subject to this application. 14

3.4.2 The location of the datum post. 14

3.4.3 The surface area. 15

3.4.4 The proposed access. 15

3.5 Proof of identity of applicant. 15

Attachments

Attachment A – CopperCo Limited 2005 Annual Report
Attachment B – Figures and sketches
Attachment C – Proof of identity of applicant
Attachment D - Authorisation letter
Attachment E – Computerised title for background land tenure

PUBLIC RELEASE - DNRM

Released

1.0 Sections 29-31: Mining Lease Description

1.1 Reference Start Point (Section 29)

The Reference Point is PSM153723 located 208 metres east of McNamara's Highway about 52.9 km from the Barkly Highway at 19°54' 46.92" south latitude, 139°07'09.36" east longitude.

The Datum Post is located at 19°55' south latitude, 139°07' east longitude at a bearing of 208° 02' for a distance of 485.8 metres from PSM153723. (Refer to sketch 1 in attachment B).

1.2 Datum Post Markings (Section 30)

The datum post and all corner posts are marked SRPL 22-11-05.

1.3 External Boundary Description (Section 31)

Commencing at the datum post thence,
- at a bearing of 263°56' for a distance of 1745.10 metres along the southern boundary of EPM 14384 thence,
- at a bearing of 353°56' for a distance of 3690.30 metres along the western boundary of EPM 14384 thence,
- at a bearing of 83°56' for a distance of 1745.10 metres along the northern boundary of EPM 14384 thence,
- at a bearing of 173°56' for a distance of 3690.3 metres along the eastern boundary of EPM 14384 also being the western boundary of the Mount Kelly Extended MLA thence,
- back to the point of commencement.

Notes - Bearings are magnetic, add 5°26' for AMG.
- Co-ordinates are Australian Geodetic Datum 1966.
- Surface area – whole
- Area – 644 hectares
- Parish of Gundermaine, County of Undilla

RTI DE RELEASE - DNRM

2.0 Section 35: Access Description

2.1 Width of access

The width of access required is 100 metres wide along a centreline as described in section 2.3 of this document (refer to sketch 2 in attachment B).

2.2 Start point of access

Commencing from the intersection of the Barkly Highway and McNamara's Highway situated some 67km from Mount Isa at 20°20'52" south latitude and 139°8'33" east longitude.

Released

2.3 End point of access

The access description terminates at a point on the southern boundary of the Mount Kelly West MLA being 40 metres west of the south-eastern corner.

2.4 Access description

Commencing at the start point thence, northerly along McNamara's Highway for 51.5 km to the southern boundary of the area applied for. This access is shown as a minor road of the Department of Mines 1975 1:100000 map sheets 6757 and 6758.

Approximate areas within:-

Lot 2 on SP162421	Calton Hills Pty Ltd	46.9km	469 hectares
Lot 5 on CP865892	Calton Hills Pty Ltd	4.6km	46 hectares
	Total Area of access	515 hectares	

Notes:-
- Dimensions are approximate only and subject to formal survey.
- Australian Geodetic Datum, 1966.

RTI DLRELEASE - DNRM

3.0 Section 28 – A Statement Acceptable to the Minister

3.1 Outlining the mining program proposed and the method of its operation on any other use proposed for the land and an indication of when operations are expected to commence

3.1.1 Background

This document forms part of the three (3) Mining Lease applications being applied for over the Mount Kelly area.

CopperCo Limited ("CopperCo") (formerly Avon Resources Limited) acquired the Mount Kelly project comprising of EPM 7487 and a number of adjoining Mining Leases through the purchase of Reefway Pty Ltd ("Reefway") in September 2004. Simultaneously, CopperCo purchased Buka Minerals tenements in the Lady Loretta area, including the Lady Annie oxide copper deposit.

This rationalisation also included the purchase of Savannah Resources Pty Ltd ("Savannah") which was in joint venture with Reefway and had EPM applications pending in the region. As a result of this amalgamation CopperCo holds Mining Leases over oxide copper resources at Lady Annie and Mount Kelly and 28 EPM's and applications covering some 2,500 km^2 (Figure 1). Both Reefway and Savannah are wholly owned subsidiaries of CopperCo.

Since October 2004, CopperCo has been actively exploring and defining oxide copper resources at Lady Annie and Mount Kelly as part of a

feasibility study aimed at establishing an open-cut, heap leach SX-EW copper project with an annual on-site metal production of at least 15,000 tonnes per annum.

At Mount Kelly, CopperCo's development and exploration drilling to date has totalled 279 Reverse Circulation (RC) holes for 18,500 meters and 29 diamond drill holes for 1,750m. As a result, two satellite oxide copper deposits have been delineated at the Mount Clarke and Flying Horse prospects. RC drilling is continuing at Mount Kelly Workings, the Mount Kelly Fault Zone and the Swagman prospect. CopperCo are confident that further satellite deposits will be delineated from these prospects.

3.1.2 Project Summary

The flagship of CopperCo's Mount Isa tenement holding is the Lady Annie project, located 137 km north of Mount Isa (Figure 1). The Company's development strategy is to bring the Lady Annie deposit into production by completing a feasibility study into producing a minimum of 15,000 tpa copper cathode. In parallel with the feasibility study, the Company is carrying out resource drilling at the nearby Mount Kelly project area, 24 km south of the Lady Annie project, with the aim of delineating satellite oxide copper deposits. The Company's objective since October 2004 has been to define a mineral resource inventory of at least 150,000 tonnes of contained leachable copper, centred on a production base at Lady Annie. This has now been achieved

Mineral Resource estimates were announced in May for Lady Annie and Mount Clarke (ASX Releases of 16 May and 19 May, 2005). A new Mineral Resource estimate for Flying Horse, located within the Mount Kelly project has been completed. All three estimates will now be incorporated into the Feasibility Study. The combined Mineral Resources for inclusion in the feasibility study at a 0.3% Cu cut-off are given as follows.

RTI DO RELEASE UNDER

	Million Tonnes	Cu Grade	Cu Tonnes
Lady Annie	10.5Mt	1.00%	109,500
Mount Clarke	4.3Mt	0.70%	30,500
Flying Horse	1.0Mt	1.00%	10,500
Totals	**15.8Mt**	**0.91%**	**150,500**

3.1.3 Feasibility Study Progress

Based on the Mineral Resource inventory, mining studies have so far concluded that the Lady Annie project has a resource base that will sustain a heap leach SX/EW operation producing 18,000 tpa of copper cathode for

Released

eight years. Any additional resources delineated will add to the projected mine life.

The major proportion of oxide feed will be sourced from the Lady Annie pit that has a projected strip ratio of 2.2:1. The remaining oxide feed will be sourced from deposits within the Mount Kelly project, approximately 20km to the southeast of Lady Annie. The principal oxide source will be from the Mount Clarke pit with a strip ratio of 1.7:1 with lesser oxide feed from Flying Horse and any additional satellite sources delineated in the future.

The heap leach pad, process plant and site infrastructure will be located within 5kms of the Mount Kelly deposits. The ore will be trucked from Mount Kelly utilizing dump trucks along a number of proposed haul roads between the two sites. Ore from Lady Annie will be trucked utilising triple road trains along a proposed haul road route between the two sites. Approximate haul distance is 17.5kms.

Metallurgical studies have shown that heap leaching is a viable form of copper extraction for the Lady Annie and Mount Kelly oxide copper ore types. The Lady Annie oxide copper ore is highly weathered containing a moderate clay component and, by itself, would restrict heap stacking heights to 3-4 meters. The Mount Kelly ores, on the other hand, display excellent leach kinetics and physical characteristics under acid leaching conditions. When blended with Lady Annie ore they will provide stable leach conditions up to 8 meters stack height. The optimal blend is about 70% Lady Annie to 30% Mount Kelly, although this is still being refined with further column work.

Having arrived at this understanding of heap leach design criteria the initial pad area and volume has now been determined. Working within these metallurgical constraints, the leach pad dimensions need to be 1100 metres long by 600 metres wide to be able to support the blended ore tonnage over the currently understood life of mine. Hydrological testwork on blended ore indicates a six metre lift height will provide acceptable leach conditions. It is anticipated that three by six metre lifts can be achieved. The nominal capacity of the pad under these design conditions is 12Mt.

Environmental studies are currently in progress. Australasian Resource Consultants have been contracted to complete this part of the Feasibility Study. Pre submission advice indicates the project will likely attract an Environmental Management Plan rather than an EIS.

Mining Lease applications have been applied for in respect of the Mount Kelly tenements in order to cover the following.

- Extraction of oxide copper ores from open pits
- Waste dumps
- Haul roads

PTUD RELEASE - DNRM

Released

- Site infrastructure
- Process plant infrastructure

With Lady Annie, it is anticipated that the Sub-Lease will be partially conditionally surrendered and applied for as a separate Mining Lease in the near future.

3.1.4 Justification of ML Applications

An average of approximately 1.5 Mt of copper oxide ore (including the Lady Annie deposit) will be extracted for processing by heap leach and SX-EW each year (maximum 1.9 Mtpa). A total of approximately 11 Mt of copper oxide ore (at an average coper grade of 1.2%) will be extracted from the Project deposits during the life of mine. The current mine life is estimated at eight years.

The mining rate is determined by the process plant capacity, which will be designed to produce a maximum of 18,000 tpa of copper cathode. Table 1 and 2 show the mining and production rate from the Project for the life of the mine, in addition to the projected waste movements. The total resource at the Project may increase with ongoing exploration and this will have the affect of increasing the mine life.

The Mount Clarke, Flying Horse and Lady Annie deposits will be mined using conventional open cut methods, using a 100 tonne excavator (PC 1000 or equivalent) and 75 tonne dump trucks (Cat 777 or equivalent) with copper ore being trucked to the Run of Mine (ROM) pad. Benches within the pit will be at a 15 m intervals and the overall batter angle of the pit walls will be 45 degrees.

Pit scheduling will involve the extraction of ore from Mount Clarke and Lady Annie in the first six years with Flying Horse and any additional resources not yet delineated over the final three years. Land disturbance associated with final voids will be approximately 20 ha (Mount Clarke , Flying Horse and Lady Annie).

Copper ore from the Lady Annie deposit will be trucked to the proposed processing plant at Mount Kelly. The total maximum mining rate of 1.9 Mtpa includes ore transported from the Lady Annie and Mount Kelly deposits.

RTIDOLRELEASE - DNRM

Table 1: Proposed ROM Ore and Metal Production from Lady Annie and Mount Kelly

Ore Tonnes and Grade by Year								
Year		2006	2007	2008	2009	2010	2011	2012
Mount Kelly	ROM Ore (t)	361,732	395,010	570,285	631,009	435,830	221,960	250,229
	Grade Cu (%)	0.98	0.99	0.78	0.74	0.96	1.20	1.40
	Cu Metal (t)	3,561	3,896	4,458	4,639	4,190	2,663	3,503
Lady Annie	ROM Ore (t)	736,291	1,045,978	1,238,145	1,228,484	1,081,656	1,336,929	993,500
	Grade Cu (%)	2.07	1.55	1.24	1.14	1.82	1.10	0.91
	Cu Metal (t)	15,270	16,171	15,335	14,046	19,632	14,761	9,029
Total	ROM Ore (t)	1,098,023	1,440,988	1,808,430	1,859,493	1,517,486	1,558,878	1,243,729
	Grade Cu (%)	1.71	1.39	1.09	1.00	1.57	1.12	1.01
	Cu Metal (t)	18,831	20,067	19,793	18,685	23,823	17,424	12,533

Table 2: Proposed Waste Movement from Lady Annie and Mount Kelly

Waste Tonnes by Year							
Year	2006	2007	2008	2009	2010	2011	2012
Mt Kelly	575,988	576,344	784,379	985,999	362,637	819,216	800,502
Lady Annie	4,892,561	2,777,052	3,278,336	2,972,490	1,182,574	1,498,129	878,092
Total Waste	5,468,549	3,353,396	4,062,716	3,958,489	1,545,212	2,317,348	1,678,594

The reasons for applying for these areas for each of the three MLA's (Figure 2) are given as follows.

3.1.5 MLA 90168 – Mount Clarke (Mining)

This MLA covers an area of approximately 200 metres by 200 metres (Figure 3) currently held as part of EPM 7487 and is wholly contained within current ML 5447 – Spinifex Queen. The area was originally a mining lease that was surrendered prior to CopperCo's purchase of Reefway.

The Mount Clarke oxide copper deposit and proposed pit encompass this area. As such, this "EPM hole" needs to be converted to a mining lease in order for mining to be undertaken.

3.1.6 MLA – Mount Kelly Extended (Mining and mine infrastructure)

This MLA comprises an area of 4 sub blocks (Figure 4) over part of EPM 7487. Exploration success at Mount Kelly has been particularly pleasing with Mineral Resource estimates being outlined at Mount Clarke and Flying Horse. RC drilling is continuing on oxide copper targets within the current Mining Leases and the surrounding EPM. Reasons for the MLA are given as follows.

Mining Activities

- The Mount Clarke proposed pit is principally located within ML 5447. However, parts of the pit are located within the Mount Kelly Extended MLA.

- Similarly the Flying Horse proposed pit is principally located within ML's 5446 and 5448. However, the western portion of the pit falls within the Mount Kelly Extended MLA.

- Swagman Prospect. Located approximately 1.5 km south of Mount

PT DL RELEASE DNRM

Kelly falls entirely within the Mount Kelly Extended MLA. It is expected that this zone will produce sufficient mineralization to be classified as a Mineral Resource in the near future and will be incorporated into the Mine Plan.

3.1.7 Justification for Term of Applications

CopperCo have requested a twenty-one year term for each of the three ML applications. Whilst current mine life is anticipated to be eight years, the remaining thirteen years is requested as follows:

The siting of the process plant and heap leach pad at Mount Kelly increases the economic viability of other identified but not yet delineated oxide resources within a 50 km radius. As a central processing facility for this area. the Company are confident that McLeod Hill, Lady Maggie and Buckley River oxide copper mineralization can be economically treated through the Mount Kelly plant site at the completion of the current mining scope.

CopperCo believe that with further exploration, a further ten years can be added to the current life of mine through the exploitation of these potential resources. Further, at the completion of oxide mining and processing, CopperCo will be addressing the potential to mine the sulphide ores that exist below the current oxide material. As the company's cash flow becomes positive, resource definition of the sulphide potential will be undertaken.

s.49 - Signature

Mt Kelly west MLA.

3.2 Proposal for any infrastructure requirements that will or maybe necessary to enable the mining program to proceed, on additional activities to be carried on to work out the infrastructure requirements.

This MLA comprises an area of 2 sub blocks (Figure 5) abutting the Mt Kelly Extended lease on its proposed eastern boundary. The principal use of this MLA will be for the siting of the leach pad and plant processing facility for the production of copper cathode.

3.2.1 ORE STACKING AND HEAP LEACH PAD DESIGN

Ore will be trucked to the proposed processing plant site on this MLA from the open cut pits at Mt Kelly and Lady Annie. The ore will be temporally stockpiled at the ROM pad and crushed. Blending of the Mount Kelly Project and Lady Annie Project ore will occur as ore is transferred from the ROM Pad to the heap leach pad. Agglomeration of the ore will occur prior to staking on the heap leach pads.

RTI DL RELEASE - DNRM

The heap leach pads will cover an area of approximately 46 ha and contain 10 Mt of ore. Each individual pad will cover approximately 12.5 ha and be constructed in lifts of 6 m, with three lifts per pad to a total height of 18 meters. The final pad height may vary dependant on the characteristics of the material being stacked.

All heap leach pads will be constructed with a High Density Polyethylene HDPE liner under the pads, drainage controls and associated pond infrastructure. Each heap leach pad will use river gravel as a filter media and drain coil to collect leachate from the heap leach pads. Between each lift of the heap leach pads it will be necessary to reinstall a HDPE liner and drainage network.

A 1 m high bund wall will be built 5 m from the toe of the heap leach pads to contain any material should a slump occur. This will also act as a solution control bund to contain stormwater runoff from the pads. Clean stormwater will be diverted around the heap leach pads if required.

A stormwater pond downstream of the heap leach pads, process water ponds and process plant will provide secondary containment for contaminated stormwater in large rainfall events.

RTI DX RELEASE - DNRM

3.2.2 COPPER LEACHING PROCESS

Two HDPE pipelines will carry raffinate and intermediate leach liquor containing sulphuric acid to the heap leach pads. From these main pipelines, distribution header pipelines will carry the leach solution onto the top of the leach pads where drippers will distribute the leach solution onto the top and sides of the heap leach pads. This solution will percolate through the ore heap and dissolves the copper bearing minerals.

Once the leach liquor (leachate) has passed through the heap, it is collected in drain coil and pipes and it transferred to a HDPE lined Pregnant Leach Solution (PLS) pond or Intermediate pond.

3.2.3 SOLVENT EXTRACTION (SX) AND ELECTRO-WINNING (EW) PROCESS

The liquor from the PLS pond will be pumped through an SX circuit using mixers and settlers to produce a clean high grade copper electrolyte that is pumped through EW cells where the copper is plated onto stainless steel cathodes. After loading, the copper is stripped from the cathodes which are in the form of 1m square sheets of 99.99999 % LME Grade A copper cathode, and transported off site to be sold. It is proposed to produce up to 18,000 tpa of copper cathode.

Released

The liquor from which the copper has been removed in the SX circuit (raffinate) will be pumped back to a raffinate pond were further acid is added (if required). This solution will then be returned for heap leach irrigation. All process water will be recycled.

3.2.4 GENERAL INFRASTRUCTURE

General infrastructure that will be required on the Project that has not been discussed previously will include:

- Workshops and administration buildings;
- Fuel Storage - 2 x 50,000 litres tanks;
- Sulphuric acid and extractant storage;
- General rubbish disposal site;
- Sewage treatment and disposal infrastructure.

3.3 A statement acceptable to the Minister detailing the financial and technical resources of the applicant

3.3.1 Financial Ability of the Applicant

Savannah Resources Pty Ltd is a wholly-owned subsidiary of CopperCo Limited.

In support of the applicants financial ability to conduct the proposed operations, find enclosed in Attachment A a copy of the 2005 Annual Report for CopperCo Limited.

On 16 November 2005, CopperCo released results from their Feasibility Study relating to their operational and financial metrics. This is presented as part of Attachment A.

RTI DE RELEASE - DNRM

3.3.2 Technical Ability of the Applicant

Reference to the enclosed 2005 Annual Report for CopperCo Limited (Attachment A) provides details of the qualifications and experience of the directors of the company and its wholly-owned subsidiary Savannah Resources Pty Ltd.

All employees and contractors involved in the project will possess suitable qualifications. Local employees will be utilised where possible. Details of the other project staff are as follows:-

Released

Barry Deans - General Manager (Operations)

s.49

Thomas Lancaster - Operations Manager

s.49

Simon Pooley – Exploration Manager

s.49

RTI DL RELEASE - DNRM

s.49

Ken Maiden – Chief Geologist

s.49

Tenement Consultant
Mr Brian Martin B.Sc, Ass Dip Cart.

s.49

RTI DL RELEASE - DNRM

Environmental Consultant
Austral Asian Resources Consultants (AARC) have been appointed as environmental consultants by the project. The AARC consultants working on the project have extensive experience on all aspects relating to environmental issues for the project.

3.4 Sketch maps acceptable to the Mining Registrar setting out:-

3.4.1 The boundaries of the land the subject of this application

Reference should be made to Sketch 1 in Attachment B.

3.4.2 The location of the Datum post

Reference should be made to Sketch 1 in Attachment B.

3.4.3 The surface area

Reference should be made to Sketch 1 in Attachment B.

3.4.4 The proposed access

The access for the Mount Kelly Extended MLA is detailed in Section 2.0 of this document. Reference should also be made to Sketch 2 in Attachment B for a graphical representation of the proposed access.

3.5 Proof of identity of the applicant

Reference should be made to Attachment C for an Australian Securities Commission extract for Savannah Resources Pty Ltd as proof of the identity of the applicant.

RTI DL RELEASE - DNRM

Released

ATTACHMENT A

CopperCo Limited

2005 Annual Report

RTI DL RELEASE - DNRM

16 November 2005

The Manager
Company Announcements Office
Australian Stock Exchange
4th Floor, 20 Bridge Street
SYDNEY NSW 2000

(By Electronic Lodgement – 6 pages)

Dear Sir

LADY ANNIE FEASIBILITY STUDY

- **Feasibility Study results confirm an economic and technically viable Project with low operating cost of US$0.69 per pound of LME Grade "A" copper.**
- **Initial Ore Reserve estimate of 9.8Mt at 1.2%Cu from Lady Annie, Mt Clarke and Flying Horse.**
- **Initial planned production ramping up to 18,000 tonnes of Grade "A" copper cathode per annum to produce ~~121~~114,000 tonnes of LME over initial project life of 8 years.**
- **Total ~~plant and infrastructure~~development capital cost estimated ~~to start up estimated at A$47-54~~ million with further optimisation in progress.**
- **Base case Project NPV (after tax, ungeared) of A$48 million (8% discount rate). Based on the average year to date exchange rate of 0.76 and a copper price of US$1.54/lb, the NPV increases to $81 million (8% discount rate).**
- **Initial Mineral Resource estimates for Swagman, Mount Kelly Workings and Mount Kelly Fault Zone are in progress. Importantly, these deposits are not currently included in the Feasibility Study.**
- **Final engineering and financing planned for first quarter 2006 with first production planned for fourth quarter 2006.**

RULE RELEASE - DNRM

ASN 63 [illegible]
Level 27 [illegible], 77 St Georges Tce, Perth WA 6000 GPO Box [illegible], Perth WA 6831 [illegible]
Ph: [illegible] Fax: [illegible]

Released

LADY ANNIE FEASIBILITY STUDY

CopperCo Ltd (ASX: CUO) is pleased to announce the latest results from the Feasibility Study (the "Study") on the Company's Lady Annie copper project (the "Project"), located 137 km north of Mount Isa in north east Queensland.

The Project will initially mine three ore bodies by conventional open pit mining. The ore will be treated by a heap leaching, solvent extraction and electrowinning process (SX-EW). Resource estimation and pit optimisation is currently underway in respect of three additional prospects namely the Mount Kelly Mine workings, the Mount Kelly Fault Zone and the Swagman Prospect.

The Study demonstrates that the three ore bodies can be economically mined and processed based on the assumptions used to generate the **Corporate Base Case Project Financials.** The following table summarises the key parameters and the resulting project financials:

Corporate Base Case Model

PARAMETERS	RESULTS/OR ASSUMPTIONS
1. OREBODY, PLANT & PRODUCTION	
Resources Measured, Indicated & Inferred @ 0.3% Cu cut-off	15.8 Mt @ 0.91% Cu
Ore Reserve[1] (Table 1) Proved & Probable @ 0.3% Cu cut-off Optimisation carried out using US$1.0/lb copper	**Proved:** 5.4 Mt @ 1.4% Cu **Probable:** 4.5 Mt @ 1.0% Cu **Totals:** 9.8 Mt @ 1.2% Cu
Designed Plant Output LME Grade "A" copper Cathode	Initial rate 15,000 tpa nameplate capacity 18,000 tpa
Initial Project Life (Oxide copper resources only)	8 years
Cathode Production	~~121~~114,000 tonnes
Metallurgical Recoveries[2] Total copper recovery	88%
2. FINANCIALS	
Capital Cost Estimate to commissioning Direct Costs (Plant & Associated infrastructure) Indirect Costs (EPCM, temporary facilities, contingency) Other (1st fill & capital spares, insurance, owner's costs) Total	~~A$34.5M~~41M A$11M ~~A$2.1M~~ ~~A$47.6M~~54M
Metal Price & FX assumptions Copper Price Exchange Rate (A$/US$)	**Base Case** / **YTD Price** US$1.47→US$1.05/lb[13] / US$1.54/lb A$0.69 / A$0.76
Operating Costs Life-of-mine Cash Operating Cost (mining, processing and site overheads) Life-of-mine average C2 Cash Cost (including mining, processing, marketing & state royalties)	A$24.5/tonne or US$0.69/lb US$0.71/lb Cu plated
Project Returns NPV @ 8%, ungeared after tax basis	**Base Case** A$ 48M / **Current Price** A$91M

[1] LME Forward Contract Rate/lb of US$1.47 for 2007 and A$1.20 for 2008. The Cu price is assumed to be US$1.10 for 2009 and US$1.05 thereafter.

RTDL RELEASE - DNRM

Released

Table 1: Lady Annie Project
Ore Reserve

0.3% Cu Cut off	Proved			Probable			Total		
	Tonnes (t)	Grade (% Cu)	Metal (t)	Tonnes (t)	Grade (% Cu)	Metal (t)	Tonnes (t)	Grade (% Cu)	Metal (t)
Lady Annie	4,065,000	1.4	59,000	2,972,000	1.1	32,000	7,036,000	1.3	90,000
Mount Clarke	1,078,000	0.9	11,000	1,338,000	0.9	12,000	2,416,000	0.9	21,000
Flying Horse	226,000	1.4	3,000	185,000	1.3	2,000	410,000	1.2	5,000
Totals	5,369,000	1.4	73,000	4,494,000	1.0	46,000	9,863,000	1.2	117,000

~~Note: Mount Kelly Mine, Mount Kelly Fault Zone and Swagman prospect not yet included in resource or reserve data.~~

Table 1: Lady Annie Project
Ore Reserve

0.3% Cu Cut off	Proved			Probable			Total		
	Tonnes (t)	Grade (% Cu)	Metal (t)	Tonnes (t)	Grade (% Cu)	Metal (t)	Tonnes (t)	Grade (% Cu)	Metal (t)
Lady Annie	4,065,000	1.4	59,000	2,972,000	1.1	32,000	7,036,000	1.3	90,000
Mount Clarke	1,078,000	0.9	9,000	1,338,000	0.9	12,000	2,416,000	0.9	21,000
Flying Horse	226,000	1.4	3,000	185,000	1.3	2,000	410,000	1.3	5,000
Totals	5,369,000	1.3	71,000	4,494,000	1.0	46,000	9,863,000	1.2	117,000

Note: Mount Kelly Mine, Mount Kelly Fault Zone and Swagman prospect not yet included in resource or reserve data.

PROJECT FINANCING

The Company has been in discussions with a number of financial institutions and off-take parties in respect of the Project's capital development requirements. Based on initial responses as to debt carrying capacity and preliminary financing proposals, and strong interest in off-take arrangements, the Company intends to engage selected parties from early December 2005 in detailed negotiations in this regard. Several approaches by parties interested in wider strategic alliances will also be evaluated. The Company's intention remains to have the total Project financing secured and available for drawdown, subject to satisfaction of all conditions precedent, in the 1st quarter of 2006.

RTI DL RELEASE - DNRM

DEVELOPMENT STRATEGY

Project Optimisation

The Company believes there is opportunity to further enhance the Project's financial returns by:

- Optimisation of the mining schedule having regard for the deposits selected for start-up;
- Competitive construction tendering; and
- Selective use of second hand equipment to accelerate the construction timetable.

These activities are in progress and will be completed progressively over the next two months.

Development Timetable

The Project development timetable remains:

▪ Project finance available for drawdown	1st Quarter 2006
▪ Detailed engineering commences	1st Quarter 2006
▪ Statutory approvals received	2nd Quarter 2006
▪ Plant construction commences	2nd Quarter 2006
▪ Plant commissioning commences	4th Quarter 2006
▪ 1st cathode plated	4th Quarter 2006

RESOURCE BASE AND CORE TECHNICAL PARAMETERS

Released

The Lady Annie Copper Project currently is predicated on the following geological and mining parameters;

- Lady Annie, Mount Clarke and Flying Horse ore bodies.
- Further oxide targets still to be factored into the Project include Mount Kelly Workings, Swagman and the new area referred to as the Mount Kelly Fault Zone. An assumption of 750,000 tonnes has been added into the business model.
- The current Ore Reserve is 9.8Mt @ 1.2%Cu, containing 117,000 tonnes contained copper. The business model assumes the addition of defined low grade ore between 0.3 and 0.5% Cu.
- Copper plated and sold is assumed to represent 88% of ~~this total~~130,000 tonnes, or approximately ~~124~~114,000 tonnes. Overall leach recoveries are based on a series of leach column tests that reflect the likely blend of ore types over the first six years of production. The actual leaching rate from these design columns is consistent over this period and ranges between 90% and 93% based on total copper contained in the blend.
- Copper leach time has been assumed to be 160 days for design purposes however we note that column leaching times of 60 days have been achieved during testing.
- The average strip ratio is 2:1 (about 1.8:1 if low grade ore categories are leached at the end of mine life). This is a significant and positive element of the Project and has a marked impact on overall site operating costs. The projected mine life is nominally 8 years and annual cathode production will ramp up from 15,000 tonnes at start up to 18,000 tonnes. In the 2006/7 financial year (start up year) expected cathode production is assumed to be 10,500 tonnes though this estimate has not yet been optimized. There is a focus on engineering the shortest possible construction and commissioning schedule with ramp up to design capacity occurring during the first production year.
- Prevailing copper prices have the potential to alter the pit plans as the pit designs have been run at US$1/lb. If copper prices remain materially above this level through 2006 start up pit schedules could benefit from lower cut-off grades. This would have the effect of pulling some of the low grade into "ore" grade category.
- Acid consumption levels vary from 6 kg/tonne of ore to 20 kg/tonne and by industry standards are considered moderate. The financial model assumes 20 kg/tonne.
- The low average strip ratios, moderate acid consumption, attractive leach kinetics and recovery are the key drivers for operating costs. Mine site cash operating costs are estimated at $24.50/tonne ore leached or US$0.69/lb cathode copper plated.

Key Financial Parameters

The main financial outputs of the project on a mine life basis are as follows:

Revenue	$419 million
Total cash costs	$263 million (includes royalties)
Royalties	$10 million
Total Capital	$47.654 million
Operating Surplus	$164 million
~~Tax Losses carried forward~~	~~$~~
Tax Paid	$24 million
Ungeared after tax NPV@ 8%	$48 million
Average unit cost	$24/tonne ore processed
	US$0.69/lb

Timetable

The Company is targeting the end of January 2006, to complete the technical programme associated with the base case project, including bringing to account the newer discoveries at Mount Kelly including Swagman, Mount Kelly Workings, and the Mount Kelly Fault Zone that runs between Mount Clarke and Flying Horse. This would enable the Company to confirm the final parameters for the Project's development as modelled. Key elements that will run past this date include environmental permitting and native title agreements. Some delays (to permitting and EPA) have arisen by our decision to locate the process facilities at Mount Kelly rather than the Lady Annie sub-lease. This has necessitated a new mining lease application and re-work of the site layout. However the chosen site is capable of ready expansion, is flat and lends itself to better design. We concluded that the Lady Annie site was too restricted in respect of expansion and optimum layout.

RTIDL RELEASE - UNREVIEWED

Released

The objective is to select the likely financing party, offtake partner and establish final finance requirements by end January 2006. The final financing documentation is planned to be completed by end March 2006.

RTI DL RELEASE - DNRM

Released

Summary

As noted above, the Feasibility Study does not incorporate the potential expansion of the Lady Annie project from the discoveries at Swagman, Mount Kelly Workings and Mount Kelly Fault Zone prospects. Initial Mineral Resource estimates for Swagman, Mount Kelly Workings and Mount Kelly Fault Zone are in progress with targeted completion in January 2006.

Resource definition RC drilling has been completed at Swagman, Mount Kelly Workings and the Mount Kelly Fault Zone. Diamond drilling for metallurgical testwork and check assaying is due to begin in December. As soon as Mineral Resource estimates have been completed, these prospects will be included in the Lady Annie Project mine plan and schedule. A brief summary of each prospect is given below.

1. Swagman Prospect

The Swagman prospect is located approximately 1.5 kms south of Flying Horse. Mineralisation has been defined over 200 metres of strike.

Results include:

- 21 metres at 1.14 % Cu from 13 metres,
- 18 metres at 1.12 % Cu from 2 metres including 5 metres at 2.56 % Cu from 13 metres,
- 22 metres at 0.80 % Cu from 27 metres,
- 45 metres at 0.60 % Cu from 5 metres.

Whilst this zone of mineralisation is currently smaller than both Mount Clarke and Flying Horse, it is near surface and hosted within competent siltstones and sandstones. These host rocks are very similar to Mount Clarke and Flying Horse and boast excellent leach kinetics from recently completed metallurgical testwork. The Company believes that this zone has the potential to become a satellite deposit within the Mount Kelly Project area and will further add to the Project's Mineral Resource Inventory.

2. Mount Kelly Fault Zone Prospect

The Mount Kelly Fault Zone is located between Mount Clarke and Flying Horse. A preliminary RC drill programme of 10 holes indicated the potential for further oxide copper mineralisation. A follow up RC programme of 19 holes for 2600 metres has now been completed and results are pending. Geological logging indicates that this zone may be up to 200 metres in strike by 300 metres wide, joining up with Flying Horse to the southwest.

Results include:

- 29 metres at 0.85 % Cu from 19 metres including 15 metres at 1.30% Cu from 33 metres,
- 21 metres at 0.80 % Cu from 33 metres including 6 metres at 1.14% Cu from 33 metres,
- 12 metres at 2.57 % Cu from 66 metres,
- 15 metres at 0.89 % Cu from 18 metres.

3. Mount Kelly Workings Prospect

The Mount Kelly Workings Prospect is located approximately 100 metres to the south east of Flying Horse. Oxide copper mineralisation is exposed in old adits and scrapes over 100 metres of strike. This Prospect was worked in the late 1930's where old records show that a few thousand tonnes of high grade oxide ore were extracted.

Due to logistical difficulties encountered with the terrain in the area, access to RC drill sites has been restricted. Over the past month access has been gained to those drill sites and RC drilling has recently been completed. Assay results are pending.

RT DL RELEASE - DNRM

Released

Yours faithfully

s.49 - Signature

BRIAN REAR
Managing Director

Mr SJ Pooley (MAusIMM, MAIG), a geologist employed full-time by CopperCo Limited, compiled the technical aspects of this report. Mr Pooley is a member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being reported on to qualify as a Competent Person as defined in the 2004 edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Pooley consents to the inclusion in the report of the matters in the form and context in which it appears.

For further information please contact:

•	***Keith Liddell***	***Chairman***	***(08) 9221 7466***
•	***Brian Rear***	***Managing Director***	***(08) 9421 1999***

---

[1] The information in this report that relates to the Mineral Resource and Ore Reserve estimate is based on information compiled by Malcolm Titley BSc (Geology/Chemistry), MAusIMM, MAIG, of Finore Pty Ltd. Malcolm Titley is a Member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Malcolm Titley consents to the inclusion in the report of the matters based on his information in the form and context in which they appear.

[2] Mr K Liddell (FAusIMM, CP (Metallurgy)), a Director of CopperCo Limited, compiled the metallurgical aspects of this report. Mr Liddell is a fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being reported on to qualify as a Competent Person as defined in the 2004 edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Liddell consents to the inclusion in the report of the matters in the form and context in which it appears.

[3] LME Forward Contract Rate/lb of US$1.47 for 2007 and A$1.20 for 2008. The Cu price is assumed to be US$1.10 for 2009 and US$1.05 thereafter

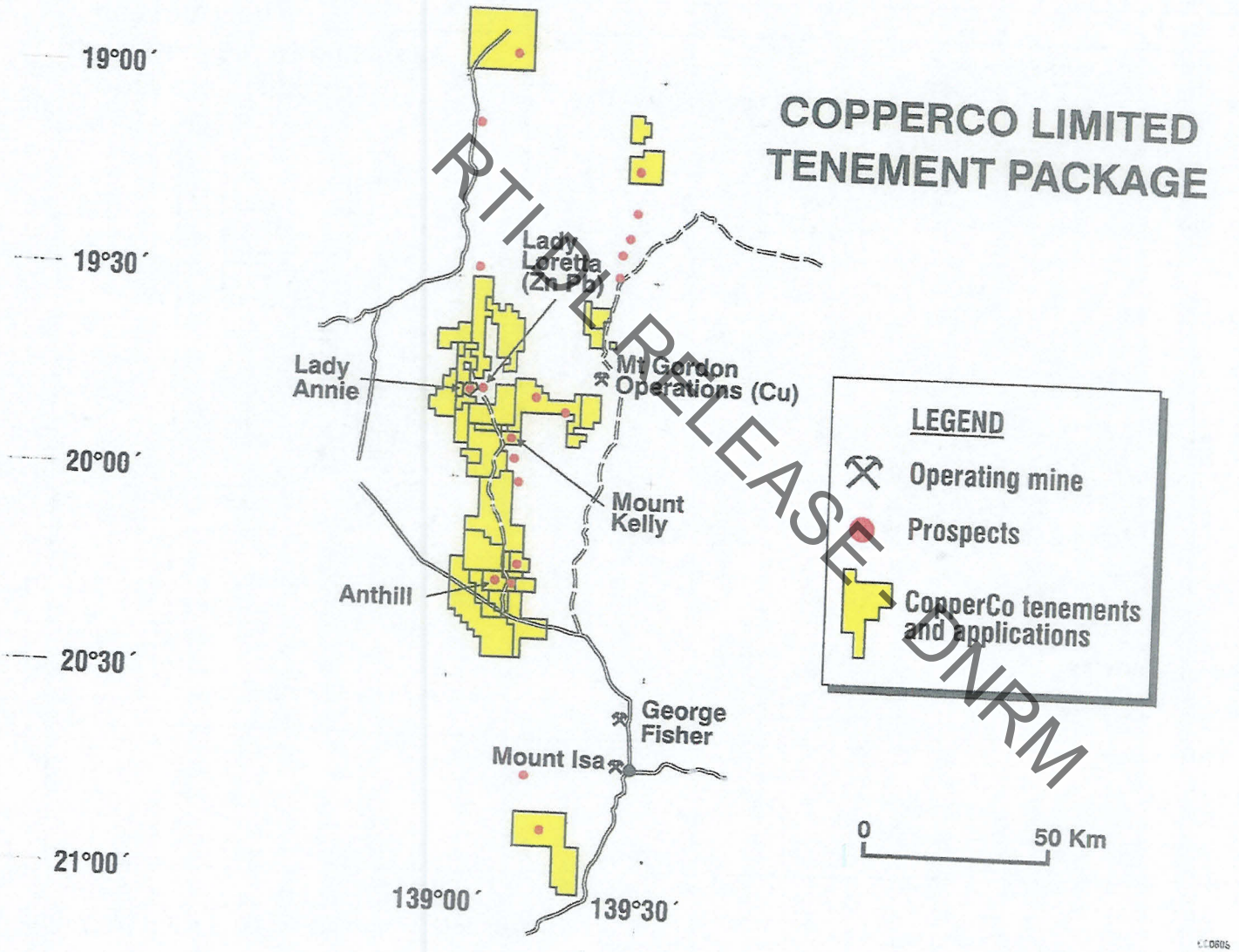
RTI DISCLOSURE - DNRM

ATTACHMENT B
Figures and Sketches

RTI DL RELEASE - DNRM

12-513

Figure 1: CopperCo Tenement Location Plan

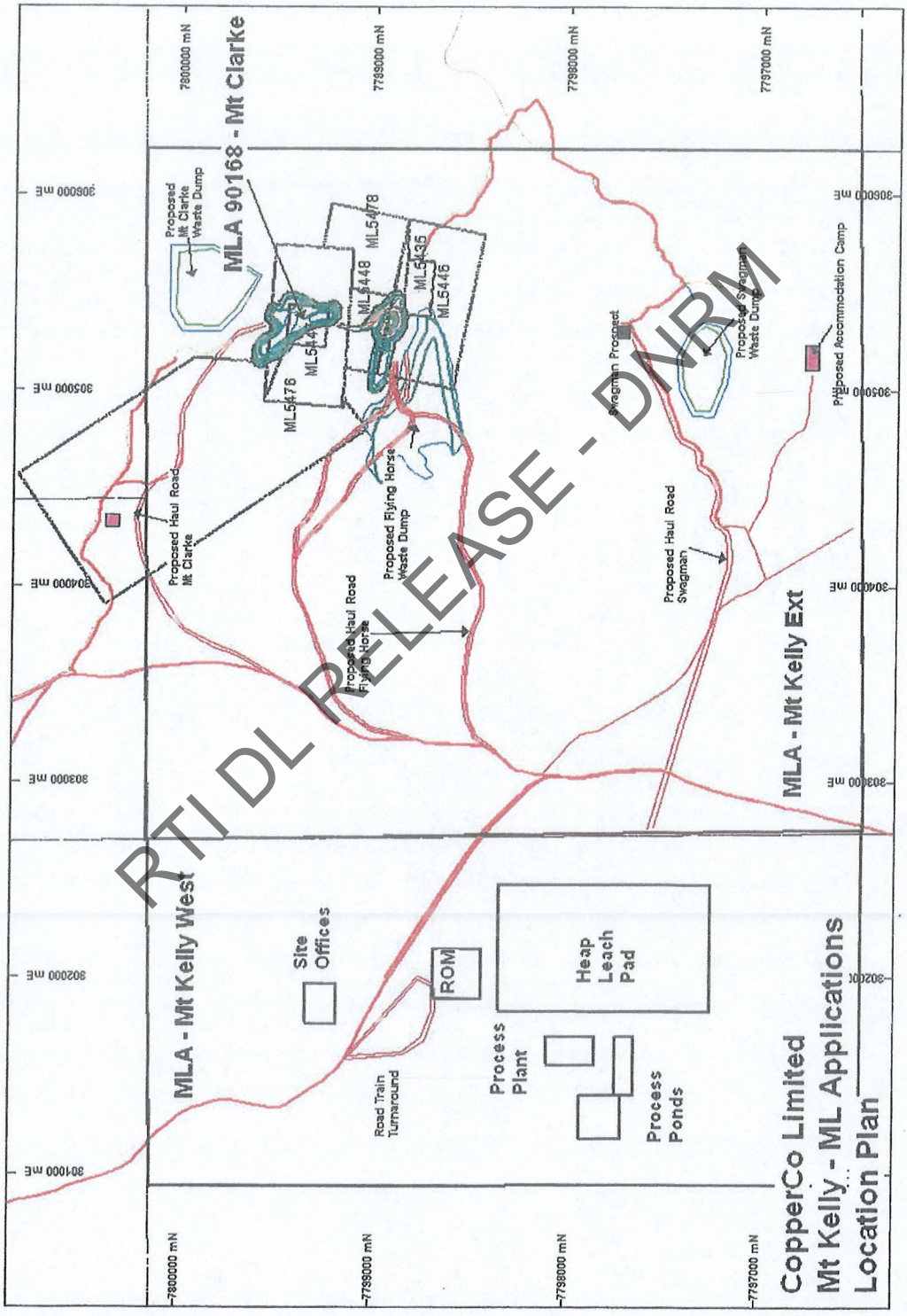


RTI RELEASE DNRM

File D Part 1

Released

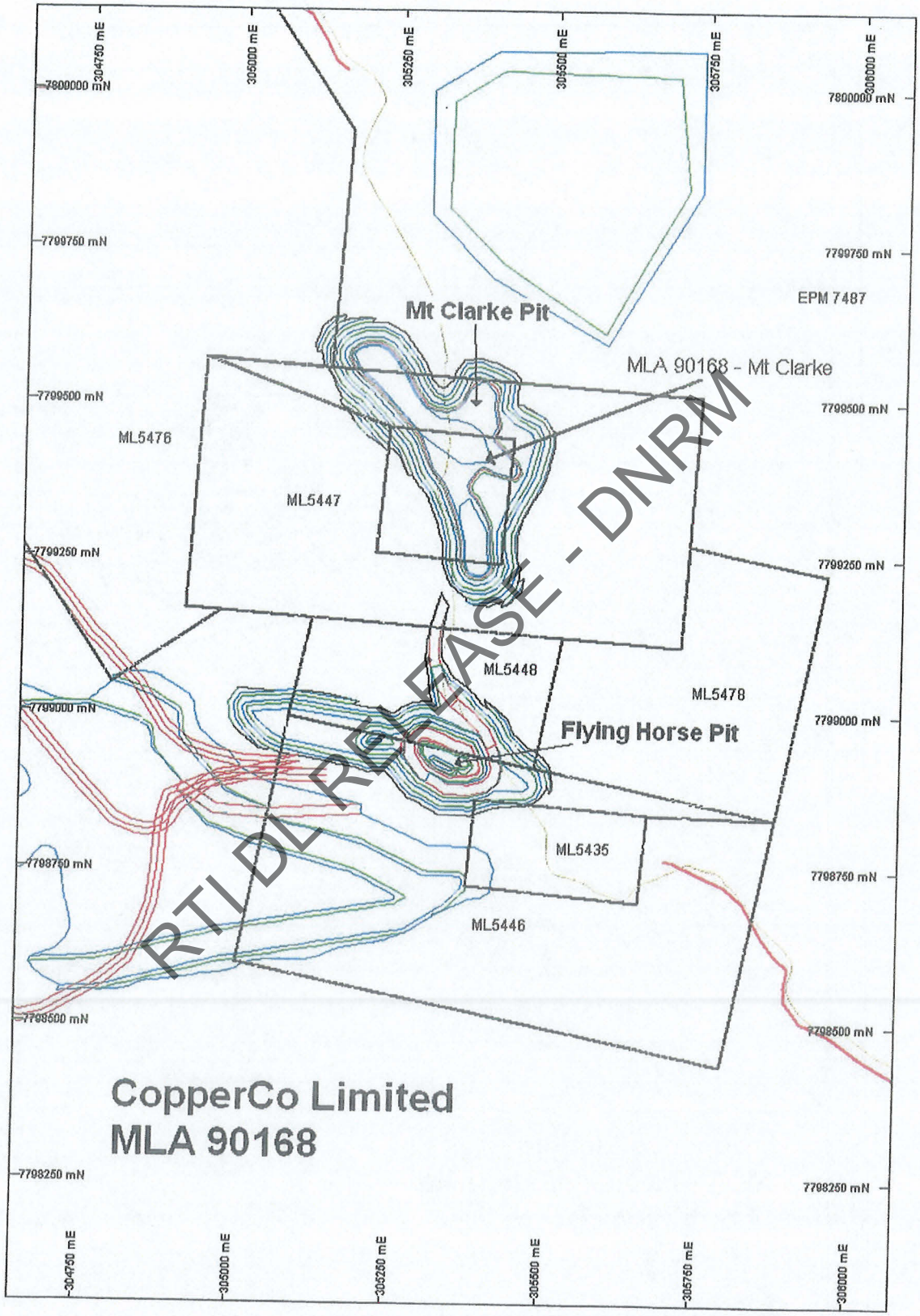
Figure 2: Mt Kelly Project – MLA Location Plan



RTI DL RELEASE - DNRM

Released

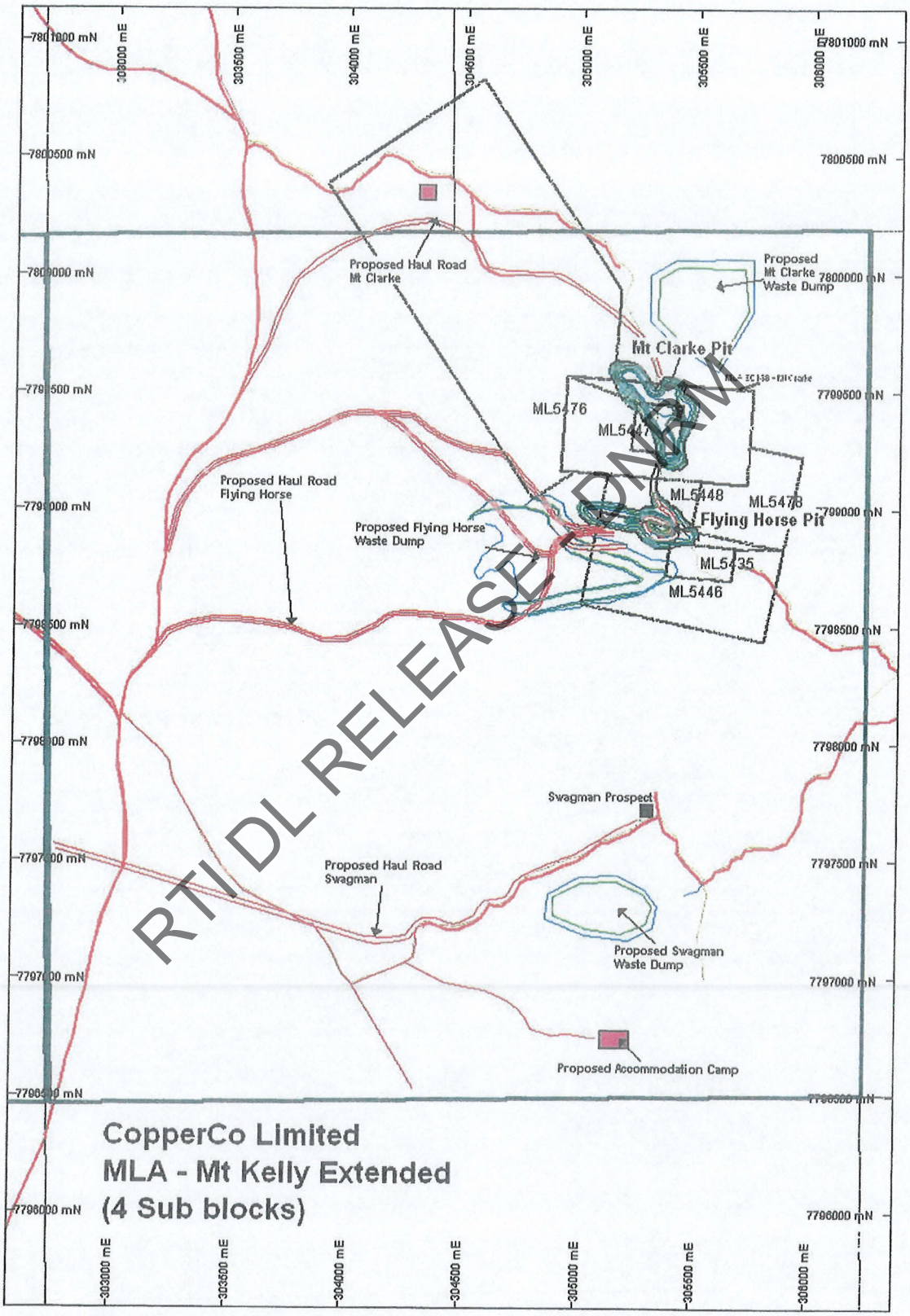
Figure 3: MLA 90168 – Mt Clarke Location Plan



RTI DL RELEASE - DNRM

Released

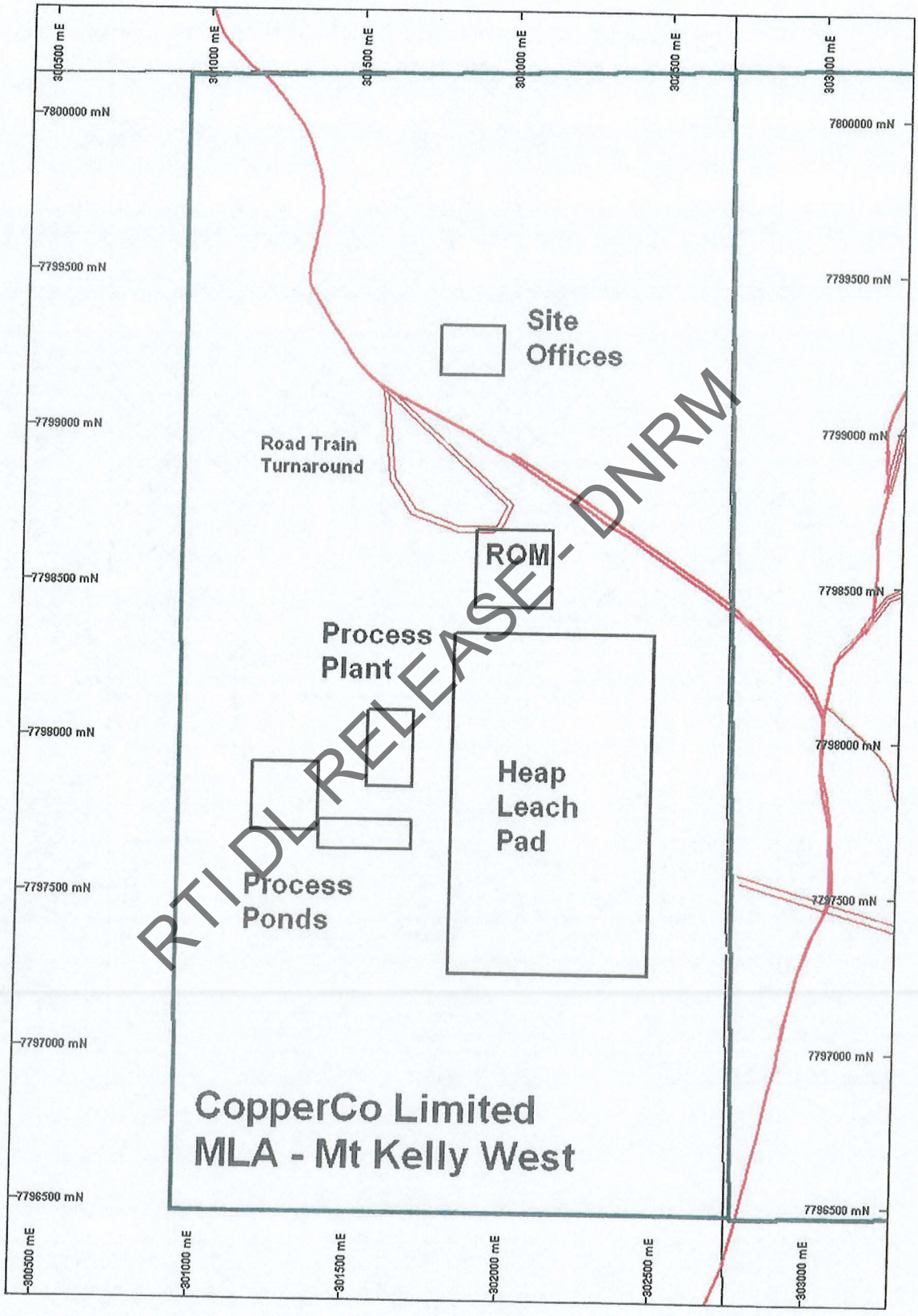
Figure 4: MLA – Mt Kelly Extended Location Plan



RTI DL RELEASE - DNRM

Released

Figure 5: MLA – Mt Kelly West Location PLan



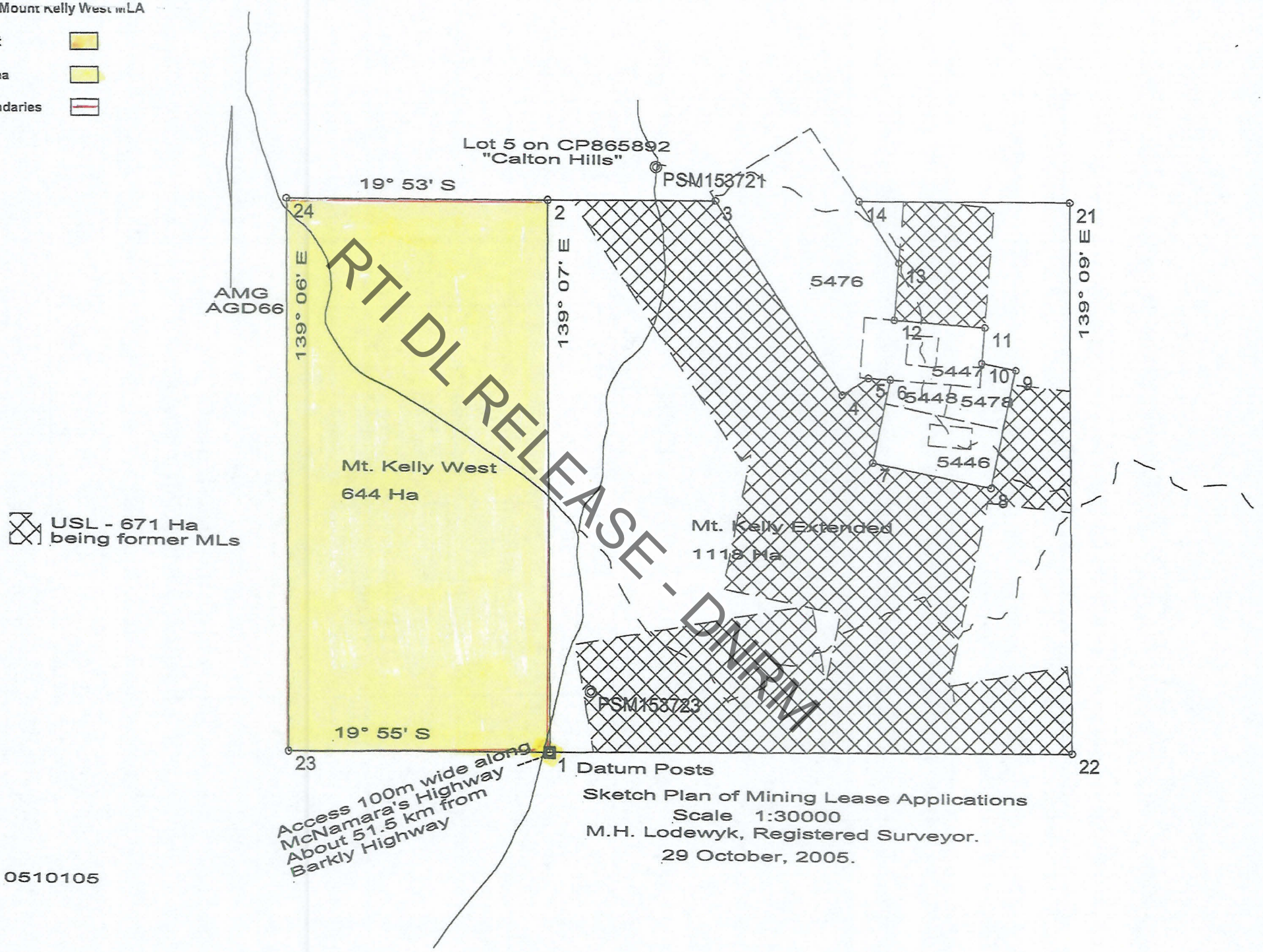
RTI DL RELEASE - DNRM

SKETCH 1 – Mount Kelly West MLA

Datum Post

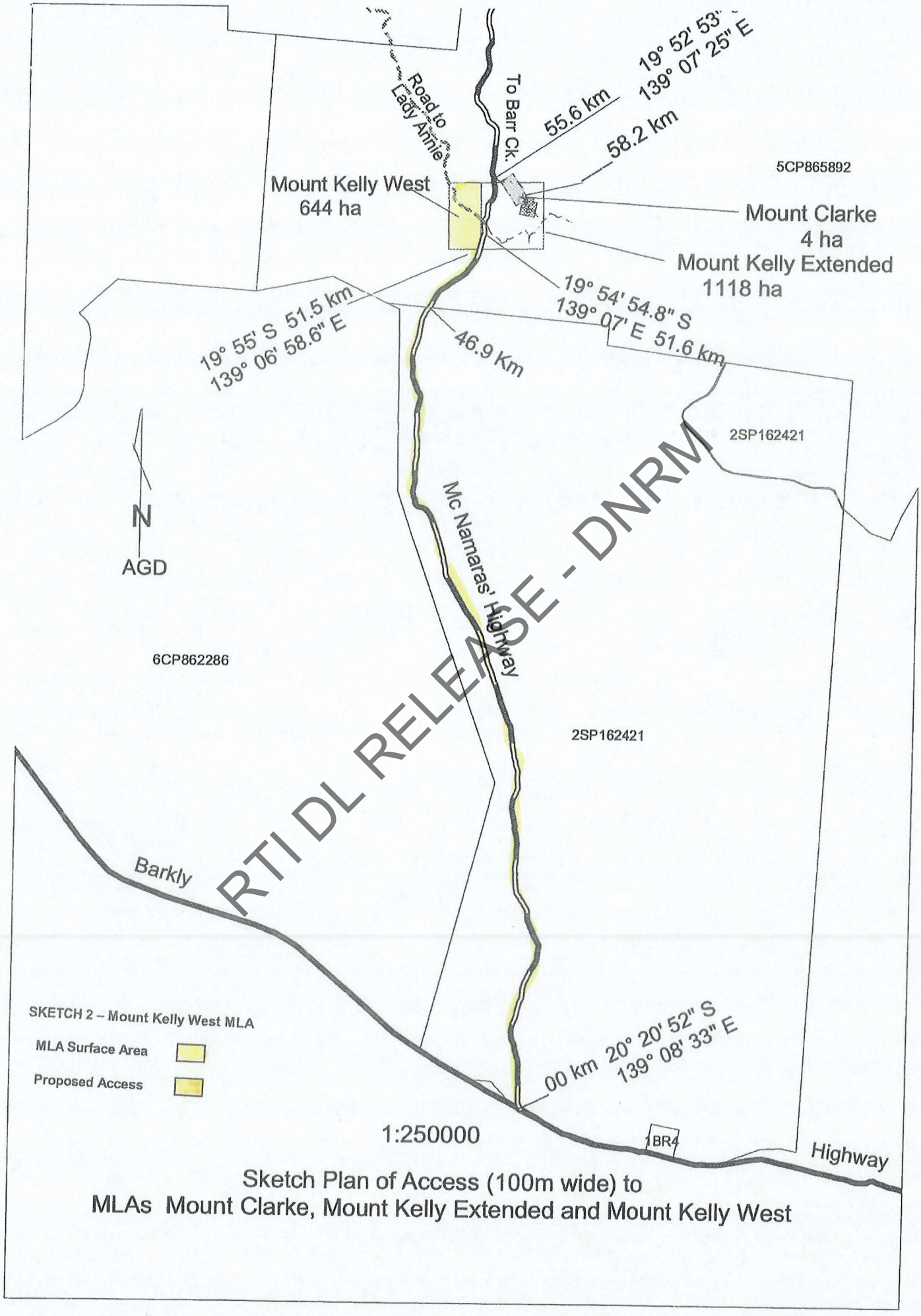
Surface Area

Lease boundaries



RTI DL RELEASE - DNRM

0510105



RTI DL RELEASE - DNRM

Released

ATTACHMENT C

Proof of Identity of Applicant

RTI DL RELEASE - DNRM

ASIC
Australian Securities & Investments Commission

National Names Index
Index of corporate and business names

SEARCH TIPS

Extracted from ASIC's database at 13:01:09 on 22/11/2005

Name	SAVANNAH RESOURCES PTY LTD
ACN	096 358 735
ABN	20 096 358 735
Type	Australian Proprietary Company, Limited By Shares
Registration Date	28/03/2001
Next Review Date	28/03/2006
Status	Registered
Locality of Registered Office	Perth WA 6000
Jurisdiction	Australian Securities & Investments Commission

These are the documents that ASIC has most recently received from or in relation to this organisation. Page numbers are shown if processing is complete and the document is available for purchase.

Date	Number	Pages	Description
11/05/2005	021241692	3	484 Change to Company Details
			484D Change to Ultimate Holding Company
			484E Appointment or Cessation of a Company Officeholder
14/12/2004	020931435	4	484E Change to Company Details Appointment or Cessation of A
			Company Officeholder
15/10/2004	020747428	14	484 Change to Company Details
			484B Change of Registered Address
			484C Change of Principal Place of Business (Address)
			484D Change to Ultimate Holding Company
			484E Appointment or Cessation of a Company Officeholder
			484N Changes to (Members) Share Holdings

COMPLETE DOCUMENT LISTING

RTI DLP RELEASE - DNRM

BPAY
Biller Code: 17301
Ref: 2290963587352

You can find out more about this company or order copies of the documents from the following ASIC information brokers:

eSearch

ATTACHMENT D
Authorisation Letter

RTI DL RELEASE - DIERM

Released

SAVANNAH RESOURCES PTY LTD

(A.C.N. 096 358 735)
146 River Road, Greenwich, NSW 2065 Australia
Tel: 61 2 9901 4644 Fax: 61 2 9901 4090 Email:sblackman@interbasemetals.com

13 November 2003

The Deputy Director-General (Mines)
Department of Natural Resources and Mines
GPO Box 2454
BRISBANE QLD 4001

Ref.: Blackm#7/hc

Dear Sir

Please let this letter serve as notice that employees of **Hetherington Exploration and Mining Title Services Pty Ltd (A.C.N. 003 122 996)**, are authorised by *SAVANNAH RESOURCES PTY LTD (A.C.N. 096 358 735)* to maintain and do such things as may be necessary from time to time to satisfy the requirements of the Queensland Mineral Resources Act 1989 in relation to Exploration Permits, Prospecting Permits, Mining Leases and Mineral Development Licences held by or applied for by the applicant in Queensland.

This authorisation does not apply to provide approval to relinquish any title and is to remain valid until further advised by the applicant.

In addition, it entitles access to any information the Department may normally make available to the applicant or holder in the course of maintaining any title.

Yours faithfully

s.49 - Signature

Name Stephen Edward Blackman
Position Director

s.49 - Signature

Name Kenneth John Maiden
Position Director

RTI DL RELEASE - ENRM

ATTACHMENT E
Computerised Title for Background Land Tenure

RTI DL RELEASE - DNRM

STATE TENURE SEARCH
NATURAL RESOURCES & MINES, QUEENSLAND

Request No: 112981592
Search Date: 28/02/2005 12:14 pm

Title Reference: 17669155
Date Created: 21/10/1995

DESCRIPTION OF LAND

Tenure Reference: PH 13/4151

LOT 5 CROWN PLAN 865892

County of BRAHE	Parish of ARCAS
County of UNDILLA	Parish of BURBURGATE
County of TEWINGA	Parish of EASTERN
County of TEWINGA	Parish of EDGEROY
County of UNDILLA	Parish of GUNDERMAINE
County of BRAHE	Parish of KEPLER
County of TEWINGA	Parish of LOCHNESS

Local Government: MOUNT ISA CITY

For exclusions refer to Plan CP 865892

Area: 297000.000000 Ha. (ABOUT)

No Land Description

No Forestry Entitlement Area

Purpose for which granted:
No Purpose

TERM OF LEASE

Term and day of beginning of lease

Term: 53 years commencing on 01/01/1962

Expiring on 31/12/2014

REGISTERED LESSEE

CALTON HILLS PTY LTD A.C.N. 066 708 727

CONDITIONS

M76 The lessees shall, within five years from the commencement of the term of the lease and to the satisfaction of the Minister, provide one permanent water improvement in the vicinity of Barney's Well site.

M76 The lessee shall, within five years from the commencement of the term of the lease and to the satisfaction of the Minister, equip Trial Bore or provide one additional permanent water improvement in the general locality.

RTI DL RELEASE - DNRM

STATE TENURE SEARCH
NATURAL RESOURCES & MINES, QUEENSLAND
Request No: 112981592

Released

CONDITIONS (Continued)

M76 The lessee shall, within three years from the commencement of the term of the lease and to the satisfaction of the Minister, provide muster accommodation in the northern part of the holding.

M76 The lessee shall, during the whole term of the lease, maintain all improvements on the holding existing at the commencement thereof, together with the improvements effected in compliance with conditions (1), (2) and (3) hereof, in a good and substantial state of repair.

ENCUMBRANCES

1. EASEMENT No 602805745 (A1005) 31/03/1977
EASEMENT IN PURSUANCE OF AN AGREEMENT DATED THE 18TH DAY OF SEPTEMBER, 1 975, BETWEEN THE LESSEE OF THE WITHIN DESCRIBED HOLDING AND
THE COMMONWEALTH OF AUSTRALIA
FOR PURPOSES AS DEFINED IN SUCH AGREEMENT.

2. RESUMPTION EASEMENT No 703693352 15/11/1999 at 10:06
burdening the land
NORTH QUEENSLAND ELECTRICITY CORPORATION LIMITED A.C.N. 078 848 978
over
EASEMENT J ON SP102693

3. RESUMPTION EASEMENT No 704055303 18/05/2000 at 09:58
burdening the land
NORTH QUEENSLAND ELECTRICITY CORPORATION LIMITED
over
EASEMENTS E TO G ON SP102677 AND
EASEMENT H ON SP102679

ADMINISTRATIVE ADVICES - NIL
UNREGISTERED DEALINGS - NIL

ORIGINAL LEASE IN EXISTENCE - Yes VERSION 1

Caution - Charges do not necessarily appear in order of priority

** End of State Tenure Search **

COPYRIGHT THE STATE OF QUEENSLAND (NATURAL RESOURCES & MINES) [2005]
Requested By: ABR ONLINE

RTI DL RELEASE - DNRM

STATE TENURE SEARCH
NATURAL RESOURCES & MINES, QUEENSLAND

Request No: 112981591
Search Date: 28/02/2005 12:14 pm

Title Reference: 17666023
Date Created: 21/10/1995

DESCRIPTION OF LAND

Tenure Reference: PH 13/2514

LOT 2 SURVEY PLAN 162421
County of BRAHE Parish of INCA
County of BRAHE Parish of LIMA
Local Government: MOUNT ISA CITY

Area: 96000.000000 Ha. (ABOUT)

No Land Description

No Forestry Entitlement Area

Purpose for which granted:
No Purpose

TERM OF LEASE

Term and day of beginning of lease

Term: 53 years commencing on 01/01/1964

Expiring on 31/12/2016

REGISTERED LESSEE

CALTON HILLS PTY LTD A.C.N. 066 708 727

CONDITIONS

M76 The lessee shall, during the whole term of the lease, maintain all improvements on the holding existing at the commencement thereof in a good and substantial state of repair.

ENCUMBRANCES

ADMINISTRATIVE ADVICES - NIL
UNREGISTERED DEALINGS - NIL

ORIGINAL LEASE IN EXISTENCE - Yes

VERSION 1

RTI DL RELEASE - DNRM

STATE TENURE SEARCH
NATURAL RESOURCES & MINES, QUEENSLAND
Request No: 112981591

Released

Search Date: 28/02/2005 12:14 pm

Title Reference: 17666023
Date Created: 21/10/1995

Corrections have occurred - Refer to Historical Search

** End of State Tenure Search **

COPYRIGHT THE STATE OF QUEENSLAND (NATURAL RESOURCES & MINES) [2005]
Requested By: ABR ONLINE

RTI DL RELEASE - DNRM

Client Reference: 01.089

Released

RECEIVED
5297
9 OCT 2007
DEPARTMENT OF
MINES AND ENERGY
MOUNT ISA

Queensland Government

Environmental Protection Agency
Incorporating the
Queensland Parks and Wildlife Servi

Enquiries	Chantel Mackenzie
Telephone	(07) 4744 7820
Your reference	MIN100401006
Our reference	ISA658

5 October 2007

Reefway Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

CC/ Savannah Resources Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

Dear Sir/Madam

Re: Amendment of Environmental Authority MIN100401006.

I refer to the application for amendment of Environmental Authority (Mining Activities) MIN100401006 received at this office on 14 May 2007.

Please find attached the amended Environmental Authority (EA) MIN100401006. This EA takes effect from 5 October 2007 and the anniversary date of this authority is 24 July of each year.

If you have any inquiries in relation to the above details please contact Chantel Mackenzie on (07) 4744 7820.

Yours faithfully

s.49 - Signature

Geoff Metcalfe
District Manager
Environmental Operations
Mount Isa District, Northern Region

C/c Mining Registrar

RTI DL RELEASE - DNRM

Cnr Camooweal & Mary Streets Mount Isa
Queensland 4825 Australia
PO Box 2316 Mount Isa
Queensland 4825 Australia
Telephone (07) 4744 7888
Facsimile (07) 4744 7800
Website www.epa.qld.gov.au
ABN 87 221 158 786

Printed on 100% recycled paper

ENVIRONMENTAL PROTECTION ACT 1994

Queensland Government
Environmental Protection Agency
Queensland Parks and Wildlife Service

Environmental Authority No. MIN100401006 (mining activities)

Section 258 *Environmental Protection Act 1994*

This environmental authority is granted under the *Environmental Protection Act 1994* and includes conditions to minimise environmental harm caused, or likely to be caused, by the authorised mining activities. An environmental authority (mining activities) may be for mining activities authorised (under the *Mineral Resources Act 1989*) to occur under one of the following mining tenements: a prospecting permit; mining claim; exploration permit; mineral development licence; or mining lease. In general, a mining activity means: prospecting, exploring, mining; or processing minerals; remediation; rehabilitation; and includes facilitation and supporting activities and any action taken to prevent environmental harm.

Under the provisions of the *Environmental Protection Act 1994* this Environmental Authority is issued to:

Lady Annie Operations Pty Ltd
Level 22 Allendale Square
77 St Georges Terrace
Perth WA 6000

Savannah Resources Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

In respect of carrying out activities as part of the following mining project:

Type of Environmental Authority (mining activities)	Authorised mining tenements	Location
Mining Leases	ML5426, ML5435, ML5446, ML5447, ML5448, ML 5474, ML5476, ML5478, ML90168 ML90169, ML90170, ML90178, ML90179, ML90184	100km north of Mount Isa

The mining activities are authorized to the extent defined in Schedule 6 Section 14(c) of the *Environmental Protection Regulation 1998*.

This Environmental Authority is subject to the conditions set out in the attached schedules.

The anniversary date of this Environmental Authority is **24 July** each year.

This Environmental Authority takes effect from **5 October 2007** for granted tenements and will take effect for ML90184 upon date of grant under the *Mineral Resources Act 1989*.

s.49 - Signature

5/10/07

Geoff Metcalfe
District Manager
Mount Isa District, Northern Region
Delegate of Administering Authority
Environmental Protection Act 1994

RTI DL RELEASE - DNRM

This **Environmental Authority** incorporates the following schedules:

- Schedule A - General
- Schedule B - Air
- Schedule C - Water
- Schedule D - Noise and Vibration
- Schedule E - Waste
- Schedule F - Land
- Schedule G - Community
- Schedule H - Definitions
- Schedule I - Maps / Plans

Schedule A - General

Financial Assurance

(A1-1) Provide a financial assurance in the amount and form required by the administering authority prior to the commencement of activities proposed under this environmental authority.

NOTE: The calculation of financial assurance for condition (A1-1) must be in accordance with Guideline 17 and may include a performance discount. The amount is defined as the maximum total rehabilitation cost for complete rehabilitation of all disturbed areas, which may vary on an annual basis due to progressive rehabilitation. The amount required for the financial assurance must be the highest Total Rehabilitation Cost calculated for any year of the Plan of Operations and calculated using the formula: (Financial Assurance = Highest Total Annual Rehabilitation Cost x Percentage Required).

(A1-2) The financial assurance is to remain in force until the administering authority is satisfied that no claim on the assurance is likely.

NOTE: Where progressive rehabilitation is completed and acceptable to the administering authority, progressive reductions to the amount of financial assurance will be applicable where rehabilitation has been completed in accordance with the acceptance criteria defined within this environmental authority.

Maintenance of Measures, Plant and Equipment

(A2-1) The environmental authority holder must ensure:

- that all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority are installed;
- that such measures, plant and equipment are maintained in a proper condition; and
- that such measures, plant and equipment are operated in a proper manner.

Monitoring

(A3-1) Record, compile and keep for a minimum of five years all monitoring results required by this environmental authority and make available for inspection all or any of these records upon request by the administering authority.

(A3-2) Where monitoring is a requirement of this environmental authority, ensure that a competent person(s) conducts all monitoring.

Storage and Handling of Flammable, Combustible and Corrosive Liquids

(A4-1) Spillage of all flammable and combustible liquids must be contained within an on-site containment system and controlled in a manner that prevents environmental harm (other than trivial harm) and maintained in accordance with Section 5.8 of AS 1940 - Storage and Handling of Flammable and Combustible Liquids of 2004.

(A4-2) The on-site storage of corrosive liquids must be in accordance with Section 5.7 of AS 3780 - Storage and Handling of Corrosive Substances 1994.

FINAL RELEASE - 5/10/07

Released

Definitions

(A5-1) Words and phrases used throughout this environmental authority are defined in Schedule H – Definitions. Where a definition for a term used in this environmental authority is sought and the term is not defined within this environmental authority, the definitions in the *Environmental Protection Act 1994*, its Regulations and Environmental Protection Policies must be used.

END CONTIONS FOR SCHEDULE A

Schedule B - Air

Dust Nuisance

(B1-1) Subject to Conditions (B1-2) and (B1-3) the release of dust or particulate matter or both resulting from the mining activity must not cause an environmental nuisance at any sensitive or commercial place.

(B1-2) When requested by the administering authority, dust and particulate monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(B1-3) If the environmental authority holder can provide evidence through monitoring that the following limits are not being exceeded then the holder is not in breach of (B1-1):

a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with AS 3580.10.1 Methods for sampling and analysis of ambient air - Determination of particulates - Deposited matter - Gravimetric method of 1991.

(B1-4) If monitoring indicates exceedence of the relevant limits in Condition (B1-3), then the environmental authority holder must:

a) address the complaint including the use of appropriate dispute resolution if required; or
b) immediately implement dust abatement measures so that emissions of dust from the activity do not result in further environmental nuisance.

Odour Nuisance

(B2-1) Subject to condition (B2-2), the release of noxious or offensive odour(s) or any other noxious or offensive airborne contaminant(s) resulting from the mining activity must not cause an environmental nuisance at any sensitive or commercial place.

(B2-2) When requested by the administering authority, odour monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(B2-3) If monitoring indicates Condition (B2-1) is not being met then the environmental authority holder must:

a) address the complaint including the use of appropriate dispute resolution if required; or
b) immediately implement odour abatement measures so that emissions of odour from the activity do not result in further environmental nuisance.

END CONDITIONS FOR SCHEDULE B

FULL RELEASE - DERM

Released

Schedule C - Water

Release to Waters

(C1-1) Receiving waters affected by the release of process water or storm water contaminated by the mining activities or both must be monitored at the locations and frequencies defined in Schedule C - Table 1 and Schedule I – Map 1 & 2, and the results of the test sites comply with the contaminant limits defined in Schedule C - Table 3.

Schedule C - Table 1 (Receiving Water Monitoring Locations and Frequency)

Monitoring point	Easting (AMG 84 Zone 54)	Northing (AMG 84 Zone 54)	Monitoring frequency
MKUS 1- reference site*	305625	7797450	Each flow event,
MKUS 2- reference site*	300451	7793920	Each flow event
MKDS 1- test site	301160	7800135	Each flow event
MKDS 2- test site	306046	7800375	Each flow event
MKDS 3- test site	306370	7798363	Each flow event
MKDS 4- test site	301300	7797265	Each flow event
LA- US1- reference site*	295150	7812680	Each flow event
LA- US2- reference site*	295750	7812480	Each flow event
LA- DS1- test site	294000	7810100	Each flow event
LA- DS2- test site	295500	7810400	Each flow event

NOTE: This does not apply to dams containing hazardous waste
**Reference sites must:*

a) *be from the same biogeographical and climatic region;*
b) *have similar geology, soil types and topography*
c) *contain a range of habitats similar to those at the test site*
d) *be of similar flow regime; and*
e) *not be so close to the test sites that any disturbances at the test site also result in a change at the reference site.*

C1-2 Subject to Condition (C1-1), if the receiving water contaminant trigger levels defined in Schedule C - Table 2 are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within **3 months** of receiving the analysis results.

RTI DISCLOSURE - DNRM

Released

Schedule C - Table 2 (Receiving Water Trigger Limits)

Parameter	Units	Minimum	Maximum	Trigger Type
pH [1]	pH	6	8.5	Range
EC[1]	µS/cm	N/A	250	Maximum
Sulphate [2]	mg/L	N/A	500	Maximum
Aluminium[4]	mg/L	N/A	2.5	Maximum
Aluminium[5]	mg/L	N/A	11.5	Maximum
Arsenic[2]	mg/L	N/A	0.25	Maximum
Boron[2]	mg/L	N/A	0.37	Maximum
Cadmium[2]	mg/L	N/A	0.005	Maximum
Chromium[2]	mg/L	N/A	0.5	Maximum
Cobalt[2]	mg/L	N/A	0.5	Maximum
Copper[4]	mg/L	N/A	0.5	Maximum
Copper[5]	mg/L	N/A	0.83	Maximum
Fluoride[2]	mg/L	N/A	1	Maximum
Lead[4]	mg/L	N/A	0.05	Maximum
Lead[5]	mg/L	N/A	0.065	Maximum
Manganese[3]	mg/L	N/A	1.9	Maximum
Mercury[2]	mg/L	N/A	0.001	Maximum
Molybdenum[2]	mg/L	N/A	0.075	Maximum
Nickel[2]	mg/L	N/A	0.5	Maximum
Selenium[2]	mg/L	N/A	0.01	Maximum
Zinc[2]	mg/L	N/A	10	Maximum

[1] Contaminant triggers limits are based on Table 3.3.4 and 3.3.5 of Aquatic Ecosystems ANZECC (2000).
[2] Contaminant trigger limits are based on 50% of the contaminant limits defined in the ANZECC (2000) Livestock Drinking Water and are to be analysed as total metals (unfiltered).
[3] Contaminant trigger limits based on ANZECC (2000) trigger levels for aquatic ecosystems of slightly - moderately disturbed systems – table 3.4.1 level of protection 95% / Table 3.3.4 / 3.3.5 – Tropical Australia upland rivers.
[4] Contaminant trigger limits are based on 50% of the contaminant limits defined in the ANZECC (2000) Livestock Drinking Water and are to be analysed as total metals (unfiltered). These limits are set for the Mount Kelly Leases only (ML 5426, ML 5478, ML90168, ML90169, ML90170, ML90178, ML 5435, ML 5446, ML 5447, ML 5448, ML 5474 and ML 5476.)
[5] Contaminant trigger limits are based on site specific background data and are to be analysed as total metals (unfiltered). These trigger limits are set for the Lady Annie Lease only (ML90179).

PUBLIC RELEASE - DNRM

Lm 5/10/07

Released

Schedule C - Table 3 (Receiving Water Contaminant Limits)

Parameter	Units	Minimum	Maximum	Trigger Type
pH	pH	6	9	Range
TDS[2]	mg/L	N/A	4000	Maximum
Sulphate [1]	mg/L	N/A	1000	Maximum
Aluminium[5]	mg/L	N/A	5	Maximum
Aluminium[6]	mg/L	N/A	23	Maximum
Arsenic[1]	mg/L	N/A	0.5	Maximum
Boron[1]	mg/L	N/A	5	Maximum
Cadmium[1]	mg/L	N/A	0.01	Maximum
Chromium[1]	mg/L	N/A	1	Maximum
Cobalt[1]	mg/L	N/A	1	Maximum
Copper[5]	mg/L	N/A	1	Maximum
Copper[6]	mg/L	N/A	1.66	Maximum
Fluoride[1]	mg/L	N/A	2	Maximum
Lead[5]	mg/L	N/A	0.1	Maximum
Lead[6]	mg/L	N/A	0.13	Maximum
Manganese[3]	mg/L	N/A	2.5	Maximum
Mercury[1]	mg/L	N/A	0.002	Maximum
Molybdenum[1]	mg/L	N/A	0.15	Maximum
Nickel[1]	mg/L	N/A	1	Maximum
Selenium[1]	mg/L	N/A	0.02	Maximum
Zinc[1]	mg/L	N/A	20	Maximum

[1] Contaminant limits based on table 4.3.2 ANZECC (2000) Livestock drinking water quality and are analysed as Total metals (unfiltered)
[2] Contaminant limits are based on Table 4.3.1 Livestock drinking water quality and are analysed as Total metals (unfiltered)
[3] Contaminant limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) 80% and are to be analysed as filtered metals.
[4] Contaminant limits based on Table 3.3.4 of Aquatic Ecosystems ANZECC (2000)
[5] Contaminant limits are based on table 4.3.2 ANZECC (2000) Livestock drinking water quality and are analysed as Total metals (unfiltered). This limit is set for the Mount Kelly Leases only (ML 5426, ML 5478, ML90168, ML90169, ML90170, ML90178, ML 5435, ML 5446, ML 5447, ML 5448, ML 5474 and ML 5476.)
[6] Contaminant limits are based on site specific background data and are to be analysed as total metals (unfiltered). These trigger limits are set for the Lady Annie Lease only (ML90179).

PUBLIC RELEASE - DNRM

End of Pipe Release

(C1-3) End of pipe release limits for storm water contaminated by mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 4 and Schedule I – Map 3, 4 and 5 and comply with the contaminant limits defined in Schedule C - Table 5.

GM 5/10/07

Released

Schedule C - Table 4 (End of pipe monitoring locations and frequency)

Monitoring point	Easting (AMG 84, Zone 54)	Northing (AMG 84, Zone 54)	Monitoring frequency
Mount Clarke ROM Area Sediment Dam	303834	7799496	Each flow event
Mount Clarke Pit Area Sediment Dam	305336	7799592	Each flow event
Mount Clarke/Flying Horse Sediment Dam	305887	7798726	Each flow event
Process Plant ROM Pad Sediment Dam 1	303040	7798656	Each flow event
Process Plant ROM Pad Sediment Dam 2	302905	7798900	Each flow event
Process Plant ROM Pad Sediment Dam 3	302771	7799016	Each flow event
Lady Annie Sediment Dam	295307	7811464	Each flow event

NOTE: This does not apply to dams containing hazardous waste.

Schedule C - Table 5 (End of pipe contaminant release limits)

Parameter	Units	Minimum	Maximum	Limit Type
pH	pH	6	9	Range
TDS	mg/L	N/A	4000	Maximum
Sulphate	mg/L	N/A	1000	Maximum
Arsenic	mg/L	N/A	5	Maximum
Cadmium	mg/L	N/A	0.01	Maximum
Chromium	mg/L	N/A	1	Maximum
Cobalt	mg/L	N/A	1	Maximum
Copper	mg/L	N/A	1	Maximum
Lead	mg/L	N/A	0.1	Maximum
Mercury	mg/L	N/A	0.002	Maximum
Zinc	mg/L	N/A	20	Maximum

Contaminant limits based on ANZECC (2000) Livestock drinking water quality and are analysed as Total metals (unfiltered)
NOTE: This does not apply to dams containing hazardous waste.

PRI DL RELEASE DNRM

Dams Containing Hazardous Waste

(C1-4) Water storages containing process water and storm water contaminated by mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 6 and Schedule I - Map 6 and samples analysed for the parameters defined in Schedule C - Table 7.

Released

Schedule C - Table 6 (Water Storage Monitoring Locations of Hazardous Dams)

Monitoring point	Easting (Zone 54, AMG 84)	Northing (Zone 54, AMG 84)	Monitoring frequency
PLS Ponds	302000	7797450	Annually, March
ILS Pond	301900	7797450	Annually, March
Raffinate Pond Pre-Settler	301850	7797450	Annually, March
Raffinate Pond	301800	7797450	Annually, March
Storm water Pond 1	301750	7797450	Annually, March
Storm water Pond 2	301750	7797350	Annually, March

(C1-5) In the event that the water quality within any dam containing hazardous waste does not comply with the contaminant limits defined in Schedule C - Table 7, implement measures to prevent access by all livestock and minimise access by fauna to the dam.

Schedule C - Table 7 (Water Quality Limits for Dams Containing Hazardous Waste)

Parameter	Units	Contaminant Limit	Limit Type
pH	pH	4-9	Range
TDS	mg/L	5,000	Maximum
Boron	mg/L	5	Maximum
Sulphate	mg/L	1000	Maximum
Aluminum	mg/L	5	Maximum
Arsenic	mg/L	0.5	Maximum
Cobalt	mg/L	1	Maximum
Copper	mg/L	1	Maximum
Lead	mg/L	0.1	Maximum
Nickel	mg/L	1	Maximum
Zinc	mg/L	20	Maximum

Contaminant limits based on ANZECC (2000 Livestock drinking water quality and are analysed as total metals (unfiltered).)

(C1-6) The design storage allowance on 1 November of each year for any dam containing hazardous w constructed or operated within the operational land must comply with Schedule C - Table 8.

Schedule C - Table 8 (Storage Design for Dams Containing Hazardous Waste)

Storage Type	Design Storage Allowance [1]	Spillway Critical Design Storm [2]	Mandatory Reporting Level [3]
Stormwater Pond 1	1: 100 Year ARI 2 month wet season plus process inputs for the 2 month wet season	1: 1000 Year ARI	1: 100 year ARI
Stormwater Pond 2	1: 100 Year ARI 2 month wet season plus process inputs for the 2 month wet season	1: 1000 Year ARI	1: 100 year ARI

Note [1]: The design storage allowance on 1 November of each year for any dam containing hazardous waste constructed within the operational land must be equivalent to the run-off from a 1 in 100 ARI 2 month wet season plus process inputs for the equivalent wet season. Process inputs refers to hazardous mineral process waste and water, which is being disposed of in the storage facility.

Note [2]: The critical design storm has a duration that produces the peak discharge for the catchments.

Note [3]: The mandatory reporting level refers to the volume below the spillway crest, either the 1: 100 ARI 72 hour storm or the 1:100 ARI wave allowance, whichever is lower.

(C1-7) The spillway for any dam containing hazardous waste, constructed or operated within the operational land must be designed and maintained to withstand the peak flow from the spillway critical design storm defined in Schedule C - Table 8.

GM 5/10/07

RTI DE RELEASED - DNRM

Released

(C1-8) The holder of the environmental authority must mark the mandatory reporting level defined in Schedule C - Table 8 on the spillway of all dams containing hazardous waste within the operational land.

(C1-9) The holder of the environmental authority must notify the administering authority when the pondage level of the dam containing hazardous waste, reaches the mandatory reporting level defined in Schedule C - Table 8.

Stream Sediment Contaminant Levels

(C2-1) All reasonable and practicable erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.

(C2-2) The bed of the receiving waters, affected by the release of process water and storm water contaminated by the mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 9 and Schedule I – Map 7 & 8.

Schedule C - Table 9 (Receiving Stream Sediment Monitoring Locations and Frequency)

Monitoring point	Easting (AGD 84 Zone 54)	Northing (AGD 84 Zone 54)	Monitoring frequency
MKUS 1- reference site *	305625	7797450	May each year
MKUS 2- reference site*	300451	7793920	May each year
MKDS 1- test site	301160	7800135	May each year
MKDS 2- test site	306046	7800375	May each year
MKDS 3- test site	306370	7798363	May each year
MKDS 4- test site	301300	7797255	May each year
LA- US1- reference site*	295150	7812680	May each year
LA- US2- reference site*	295750	7812480	May each year
LA- DS1- test site	294000	7810100	May each year
LA- DS2- test site	295500	7810400	May each year

NOTE: This does not apply to dams containing hazardous waste
**Reference sites must:*

a) be from the same biogeographical and climatic region;
b) have similar geology, soil types and topography
c) contain a range of habitats similar to those at the test site
d) be of similar flow regime; and
e) not be so close to the test sites that any disturbances at the test site also result in a change at the reference site.

(C2-3) Subject to Condition (C2-2), if the stream sediment contaminant trigger levels defined in Schedule C - Table 10 are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within 3 months of receiving the analysis results.

RTI RELEASE - DNRW

Em 5/10/07

Released

Schedule C - Table 10 (Receiving Stream Sediment Contaminant Trigger Levels)

Parameter	Units	Contaminant trigger levels	Trigger Type
Antimony[1]	mg/kg dry wt	2	Maximum
Arsenic[1]	mg/kg dry wt	20	Maximum
Cadmium[1]	mg/kg dry wt	1.5	Maximum
Chromium[1]	mg/kg dry wt	80	Maximum
Copper[2]	mg/kg dry wt	100	Maximum
Copper[3]	mg/kg dry wt	400	Maximum
Lead[1]	mg/kg dry wt	50	Maximum
Nickel[1]	mg/kg dry wt	21	Maximum
Silver[1]	mg/kg dry wt	1	Maximum
Mercury[1]	mg/kg dry wt	0.15	Maximum
Zinc[1]	mg/kg dry wt	200	Maximum

[1] ANZECC (2000): ISQG Low trigger values, Sediment Quality Guidelines, Aquatic Ecosystems, Table 3.5.1.
[2] Site specific trigger value as calculated in section 3.7 of EM Plan September 2006 is for the Mount Kelly Leases only. (ML 5426, ML 5478, ML90168, ML90169, ML90170, ML90178, ML 5435, ML 5446, ML 5447, ML 5448, ML 5474 and ML 5476.)
[3] This limit is set for the Lady Annie Lease only (ML90179).

(C2-4) Subject to Condition (C2-2), stream sediment contaminant limits must not exceed the contaminant limits defined in Schedule C - Table 11.

Schedule C - Table 11 (Receiving Stream Sediment Contaminant Limits)

Parameter	Units	Contaminant limits	Limit Type
Antimony[1]	mg/kg dry wt	25	Maximum
Arsenic[1]	mg/kg dry wt	70	Maximum
Cadmium[1]	mg/kg dry wt	10	Maximum
Chromium[1]	mg/kg dry wt	370	Maximum
Copper[2]	mg/kg dry wt	120	Maximum
Copper[3]	mg/kg dry wt	500	Maximum
Lead[1]	mg/kg dry wt	220	Maximum
Nickel[1]	mg/kg dry wt	52	Maximum
Silver[1]	mg/kg dry wt	3.7	Maximum
Mercury[1]	mg/kg dry wt	1	Maximum
Zinc[1]	mg/kg dry wt	410	Maximum

[1] ANZECC (2000): ISQG High trigger values, Sediment Quality Guidelines, Aquatic Ecosystems, Table 3.5.1.
[2] Site specific trigger value as calculated in section 3.6 of EM Plan July 2006 is for the Mount Kelly Leases only. (ML 5426, ML 5478, ML90168, ML90169, ML90170, ML90178, ML 5435, ML 5446, ML 5447, ML 5448, ML 5474 and ML 5476.)
[3] This limit is set for the Lady Annie Lease only (ML90179).

(C2-5) All stream sediment sampling must be undertaken in accordance with AS 5667.1 Guidance on Sampling of Bottom Sediments of 1998

RTI DLPRELEASE - DNRM

GM 5/12/07

Released

Sewage effluent

(C3-1) All effluent released from the treatment plant must be monitored at the frequency and for the parameters specified in Schedule C - Table 12.

(C3-2) Sewage effluent used for dust suppression must not exceed sewage effluent release limits defined in Schedule C - Table 12.

(C3-3) Sewage Effluent used for dust suppression must not cause spray drift or over spray to any sensitive or commercial place, and must not be applied at a rate that causes pooling, ponding and/or runoff of any effluent irrigated.

(C3-4) Subject to Conditions (C3-1) to (C3-3) inclusive, sewage effluent from sewage treatment facilities must be reused or evaporated and must not be directly released from the sewage treatment plant to any water way or drainage line other than in accordance with Schedule C - Table 12.

Schedule C - Table 12 (Sewage effluent quality targets for dust suppression)

	Release Limit [3]			Monitoring Frequency
Quality characteristics	Minimum	Median	Maximum	
pH (pH Units)	6[3]		8.5[2]	Quarterly
Faecal Coliforms (organisms/100mL)		1000[1]		Quarterly

[1] A minimum of five samples must be collected at not less than a weekly interval for the quarterly sampling
[2] A minimum of five samples must be collected at not less than a weekly interval for the quarterly sampling with four out of five samples must be less than the maximum
[3] A minimum of five samples must be collected at not less than a weekly interval for the quarterly sampling with four out of five samples must be higher than the minimum but lower than the maximum limit.
Release limits sourced from Queensland Water Recycling Guidelines December 2005 Table 6:2b

RTI DL RELEASE - DNRM

Released

Groundwater

(C4-1) Groundwater, affected by the mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 13 and Schedule I – Map 9 & 10.

Schedule C - Table 13 (Groundwater Monitoring Locations and Frequency)

Monitoring point	Easting (AGD 84 Zone 54)	Northings (AGD 84 Zone 54)	Surface RL	Monitoring frequency
LA MB01 (Process Plant) - reference site	302484	7796800	TBD	Monthly
LA MB02 (Process Plant) - reference site	302891	7797385	TBD	Monthly
LA MB03 (Process Plant) - reference site	302128	7797950	TBD	Monthly
LA MB04 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB05 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB06 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB07 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB08 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB09 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB010 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB011 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB012 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB013 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB014 (Process Plant)	TBD	TBD	TBD	Monthly
MK MB01 (Mount Kelly pit area)	305360	7799013	315.467	Quarterly
MK PB01 (Mount Kelly pit area)	305356	7799019	315.424	Quarterly
LA - TB07 (Lady Annie pit area)	295790	7812280	TBD	Quarterly
LA - TB08 (Lady Annie pit area)	295855	7812247	TBD	Quarterly
LA - TB09 (Lady Annie pit area)	295770	7812179	TBD	Quarterly
LA - TB010 (Lady Annie pit area)	295194	7812022	TBD	Quarterly
LA - TB011 (Lady Annie pit area)	295205	7811904	TBD	Quarterly
LA - TB012 (Lady Annie pit area)	295124	7811933	TBD	Quarterly

RTDL RELEASE - DNRM

NOTE: This does not apply to dams containing hazardous waste
TBD- To be determined
Reference sites must:

a) be from the same biogeographical and climatic region;
b) have similar geology, soil types and topography
c) contain a range of habitats similar to those at the test site
d) be of similar flow regime; and not be so close to the test sites that any disturbances at the test site also result in a change at the reference site.

(C4-2) Subject to Condition (C4-1), if the groundwater contaminant trigger levels defined in Schedule C - Table 14 are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within 3 **months** of receiving the analysis results.

cm 5/10/07

Released

Schedule C - Table 14 (Groundwater Contaminant Trigger Levels)

Parameter	Units	Minimum	Maximum	Trigger type
pH[1]	pH	6	8	Range
TDS[2]	mg/L	N/A	2000	Maximum
Sulphate [2]	mg/L	N/A	500	Maximum
Aluminium[2]	mg/L	N/A	2.5	Maximum
Arsenic[2]	mg/L	N/A	0.25	Maximum
Boron[2]	mg/L	N/A	0.37	Maximum
Cadmium[2]	mg/L	N/A	0.005	Maximum
Chromium[2]	mg/L	N/A	0.5	Maximum
Cobalt[2]	mg/L	N/A	0.5	Maximum
Copper[2]	mg/L	N/A	0.5	Maximum
Fluoride[2]	mg/L	N/A	1	Maximum
Lead[2]	mg/L	N/A	0.05	Maximum
Manganese[3]	mg/L	N/A	1.9	Maximum
Mercury[2]	mg/L	N/A	0.001	Maximum
Molybdenum[2]	mg/L	N/A	0.075	Maximum
Nickel[2]	mg/L	N/A	0.5	Maximum
Selenium[2]	mg/L	N/A	0.01	Maximum
Zinc[2]	mg/L	N/A	10	Maximum

[1] Contaminant triggers limits are based on Table 3.3.4 and 3.3.5 of Aquatic Ecosystems ANZECC (2000)
[2] Contaminant trigger limits are based on 50% of the contaminant limits defined in the ANZECC (2000) Livestock Drinking Water and are to be analysed as total metals (unfiltered).
[3] Contaminant trigger limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) and are analysed as Filtered Metals

(C4-3) Subject to Condition (C4-1), groundwater contaminant limits must not exceed the contaminant limits defined in Schedule C –Table 15.

RTI DL RELEASE - DNRM

Released

Schedule C – Table 15 (Groundwater Contaminant Limits)

Parameter	Units	Minimum	Maximum	Limit Type
pH[1]	pH	6	9	Range
TDS[1]	mg/L	N/A	4000	Maximum
Sulphate[1]	mg/L	N/A	1000	Maximum
Aluminum[1]	mg/L	N/A	5	Maximum
Arsenic[1]	mg/L	N/A	0.5	Maximum
Boron[1]	mg/L	N/A	5	Maximum
Cadmium[1]	mg/L	N/A	0.01	Maximum
Chromium[1]	mg/L	N/A	1	Maximum
Cobalt[1]	mg/L	N/A	1	Maximum
Copper[1]	mg/L	N/A	1	Maximum
Fluoride[1]	mg/L	N/A	2	Maximum
Lead[1]	mg/L	N/A	0.1	Maximum
Manganese[2]	mg/L	N/A	2.5	Maximum
Mercury[1]	mg/L	N/A	0.002	Maximum
Molybdenum[1]	mg/L	N/A	0.15	Maximum
Nickel[1]	mg/L	N/A	1	Maximum
Selenium[1]	mg/L	N/A	0.02	Maximum
Zinc[1]	mg/L	N/A	20	Maximum

[1] Contaminant limits based on ANZECC (2000) Livestock drinking water quality and are analysed as Total Metals (unfiltered)
[2] Contaminant limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) and are analysed as Filtered Metals.

(C4-4) The method of water sampling required by this environmental authority must comply with that set out in the latest edition of the Environmental Protection Agency's Water Quality Sampling Manual.

Voids

(C5-1) Water quality in mining voids and final voids must be monitored at the locations and frequencies defined in Schedule C - Table 16 and for the parameters detailed in Schedule C – Table 17.

(C5-2) In the event that water quality within the mining voids or final voids does not comply with the contaminant limits defined in Schedule C – Table 17, implement measures to prevent access by all livestock and minimise access by fauna to the void.

Schedule C - Table 16 (Voids Monitoring Locations and Frequency)

Monitoring point	Monitoring frequency
Mount Kelly/Flying Horse Pit	Annually
Mount Clarke Pit	Annually
Lady Annie Pit	Annually

RTI DL RELEASE - DNRM

Released

Schedule C - Table 17 (Void Water Quality Limits)

Parameter	Units	Limit	Limit Type
pH	pH	6-9	Range
TDS	mg/L	4000	Maximum
Sulphate	mg/L	1000	Maximum
Arsenic	mg/L	0.5	Maximum
Cadmium	mg/L	0.01	Maximum
Chromium	mg/L	1	Maximum
Copper	mg/L	1	Maximum
Lead	mg/L	0.1	Maximum
Mercury	mg/L	0.002	Maximum
Zinc	mg/L	20	Maximum

Contaminant limits are based on ANZECC (2000 Livestock drinking water quality and analysed for total metals (unfiltered))

Acid Rock Drainage and Leachate Management

(C6-1) Subject to limits defined in Schedule C all reasonable and practicable measures must be implemented to prevent hazardous leachate being directly or indirectly released or likely to be released as a result of the activity to any groundwater, watercourse and waters.

END CONDITIONS FOR SCHEDULE C

RTI DL RELEASE - DNRM

Released

Schedule D - Noise and Vibration

Noise Nuisance

(D1-1) Subject to Conditions (D1-2) and (D1-3) noise from the mining activity must not cause an environmental nuisance to an affected building.

(D1-2) When requested by the administering authority, noise monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(D1-3) The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual.

Vibration nuisance

(D2-1) Subject to Conditions (D2-2) and (D2-3) vibration from the mining activity must not cause an environmental nuisance to an affected building.

(D2-2) When requested by the administering authority, vibration monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

END CONDITIONS FOR SCHEDULE D

Schedule E - Waste

Storage of Tyres

(E1-1) Tyres stored awaiting disposal or transport for take-back and, recycling, or waste-to-energy options - should be stockpiled in volumes less than 3m in height and 200m^2 in area and at least 10m from any other tyre storage area.

(E1-2) All reasonable and practicable fire prevention measures must be implemented, including removal of grass and other materials within a 10m radius of the scrap tyre storage area.

Disposal of Tyres

(E2-1) Disposing of scrap tyres resulting from the mining activities in spoil emplacements is acceptable, provided tyres are placed as deep in the spoil as reasonably practicable.

(E2-2) Scrap tyres resulting from the mining activities disposed within the operational land must not impede saturated aquifers or compromise the stability of the consolidated landform.

Waste Management

(E3-1) A Waste Management Program, in accordance with the Environmental Protection (Waste Management) Policy 2000, must be included in the Plan of Operations.

RTI DL RELEASE - DNRM

GM 5/10/07

Released

Regulated Waste

(E 4-1) All regulated waste received and removed from the site that is over 250kg in weight, must be transported by a person who holds a current authority to transport such waste under the provisions of the *Environmental Protection Act 1994.*

(E4-2) Except as otherwise provided by the conditions of this authority, all waste removed from the site must be taken to a facility that is lawfully allowed to accept such waste under the provisions of the *Environmental Protection Act 1994.*

(E4-3) Where regulated waste is removed from the Project (other than by a release as permitted under another schedule of this environmental authority), records must be kept of the following:

a) the date, quantity and type of waste removed; and
b) name of the waste transporter that removed the waste; and
c) the intended treatment/disposal destination of the waste.

Note: Records of documents maintained in compliance with a waste tracking system established under the Environmental Protection Act 1994 or any other law for regulated waste will be deemed to satisfy this condition.

Waste Rock Characterisation

(E5-1) All areas to be mined must undergo a waste rock characterisation survey (where waste rock is to be disposed of on the surface) and a report submitted to the administering authority prior to mining where this survey has not previously been carried out.

END CONDITIONS FOR SCHEDULE E

RTI DL RELEASE - DNRM

Released

12-513
File D Part 1
Page 113 of 249
Released

Schedule F - Land

Rehabilitation Landform Criteria

(F1-1) All areas significantly disturbed by mining activities must be rehabilitated to a stable landform with a self-sustaining vegetation cover in accordance with Schedule F – Table 1 and 2.

RTI RELEASE - DNRM

Schedule F - Table 1 (Final Land Use and Rehabilitation Approval Schedule)

Disturbance Category	Max. Area (ha)	Land Use		Land Capability		Reference Site	
		PRE DISTURBANCE	POST DISTURBANCE	PRE DISTURBANCE	POST DISTURBANCE	Longitude	Latitude
Mount Kelly Mining Lease & Infrastructure							
Mount Kelly/Flying Horse Pit	13.2	Habitat	Water Storage	Class 5	Water Storage		
Mount Kelly/Flying Horse Waste Rock Dump	28	Habitat	Habitat	Class 5	Class 5	Hilltop	
						304745	7799087
						Mid Slope	
						304800	7798974
						Bottom Slope	
						304851	7798977
Mount Kelly/Flying Horse Topsoil Stockpile	1.1	Habitat	Habitat	Class 5	Class 5	304851	7798977
Mount Kelly/Flying Horse Sediment Dams	1.3	Habitat	Water Storage	Class 5	Water Storage		
Mount Kelly/Flying Horse Diversion Drains	1.3	Habitat	LIG or diversion Habitat	Class 5	Class 5	304851	7798977
Mount Clarke Pit	9.5	Habitat	Water Storage	Class 5	Water Storage		
Mount Clarke Waste Rock Dump	16.3	Habitat/LIG	Habitat/LIG	Class 4 - 5	Class 4 -5	Hilltop	
						305806	7799695
						Mid Slope	
						305760	7799718
						Bottom Slope	
						305741	7799750
Mount Clarke Low Grade Stockpile	5.4	Habitat/LIG	Habitat/LIG	Class 4 - 5	Class 4 - 5	305741	7799750
Mount Clarke/Flying Horse/Mount Kelly ROM Storage & Live Rehandle	5.5	Habitat	Habitat/LIG	Class 4 - 5	Class 4 - 5	302766	7799144

Disturbance Category	Max. Area	Land Use		Land Capability		Reference Site	
Mount Clarke Topsoil Stockpile	4.5	Habitat/LIG	Habitat/LIG	Class 4 - 5	Class 4 - 5	305741	7799750
Mount Clarke Pit Area Sediment Dam	0.6	Habitat	Water Storage	Class 4 - 5	Water Storage		
Mount Clarke ROM Area Sediment Dam	0.4	Habitat	Water Storage	Class 4 - 5	Water Storage		
Mount Clarke – Diversion/Interception/Sediment Dam Drains	3.2	Habitat	LIG or diversion Habitat	Class 4 - 5	Class 4 - 5	305741	7799750
Roads/Tracks	18.8	Existing tracks or LIG	Tracks for grazier or LIG	Class 4 - 5	Class 4 - 5	303422	7797704
Accommodation Camp and Facilities	5	LIG	LIG	Class 4	Class 4	303422	7797704
Sewage Plant and Pond	0.2	LIG	LIG	Class 4	Class 4	303422	7797704
ROM Pad – at process plant	7.8	LIG	LIG	Class 4 - 5	Class 4 -5	302766	7799144
Process plant and associated buildings	3.3	LIG	LIG	Class 4	Class 4	302766	7799144
Overland Conveyor	1.8					303422	7797704
Workshop/Office Access Circuit Area	2.9	LIG	LIG	Class 4	Class 4	302659	7797575
Heap Leach Pads – Stage 1 and 2	43.2	LIG	Habitat/LIG	Class 4	Class 4- 5	302659	7797575
Process Water Ponds – PLS, ILS and Raffinate	3.4	LIG	Water storages	Class 4	Water storages		
Stormwater Ponds 1 and 2	11.4	LIG	Water storages	Class 4	Water storages		
Stormwater Pond spillway channel	0.7	LIG	LIG or diversion	Class 4	Class 4 -5	302659	7797575
Raw Water Pond	0.6	LIG	LIG/Water storage	Class 4	Class 4 or water storage	302659	7797575
Process Area Topsoil Stockpiles	9.7	LIG	LIG	Class 4	Class 4	302659	7797575
Process Plant Drainage Diversions	2.7	LIG	LIG or diversion	Class 4	Class 4 - 5	302659	7797575
Process Plant Sediment Ponds	1	LIG	LIG or ponds	Class 4 - 5	Class 4 - 5		
Bulk Fill Stockpile	2.6	LIG	LIG	Class 4	Class 4	302659	7797575
Pipelines and Powerlines (on Mt Kelly MLs)	1	LIG/Habitat	Permanent infrastructure	Class 4 - 5	Permanent infrastructure		
Pipelines and Power lines on ML90178	83	LIG/Habitat	Permanent infrastructure	Class 4 - 5	Permanent infrastructure		

RTI RELEASED DNRM

12-513
File D Part 1
Page 114 of 249
Released

Disturbance Category	Max. Area	Land Use		Land Capability		Reference Site	
Pipeline and Power line on Birla MLT	9	LIG/Habitat	Permanent Infrastructure	Class 4 - 5	Permanent Infrastructure		
Rubbish Dumps	0.2	LIG	LIG	Class 4 - 5	Class 4 - 5	303422	7797704
Concrete Batch Plant	0.3	LIG	LIG	Class 4	Class 4	302659	7797575
Fuel Storage Area	0.3	LIG	LIG	Class 4	Class 4	302659	7797575
Contractor Laydown Area	4.3	LIG	LIG	Class 4	Class 4	302659	7797575
Exploration	5	LIG	LIG/Habitat	Class 4 - 5	Class 4 - 5	303422	7797704
Construction Access (net of specific areas)	59.9	LIG	LIG/Habitat	Class 4 - 5	Class 4 - 5	303422	7797704
Gravel Borrow Pits (on and off ML)	6.7	LIG/Habitat	LIG/Habitat	Class 4 - 5	Class 4 - 5	303422	7797704
Upgrade to Access Road (off ML)	2.0	LIG/Habitat	Permanent access road for landholder	Class 4 - 5	Permanent access road for landholder		
Total	**377.1**						
Lady Annie Mining Lease							
Lady Annie Pit	36.1	Disturbed	Water Storage	Class 5	Water Storage		
ROM pad	1.5	LIG	LIG/Habitat	Class 4	Class 4	295496	7810802
Waste Rock Dump	61.8	LIG	LIG/Habitat	Class 4 - 5	Class 4	295496	7810802
Top Soil Stores	12.1	LIG	LIG/Habitat	Class 4 - 5	Class 4	295496	7810802
Low Grade Ore Stockpile	9.5	LIG	LIG/Habitat	Class 4	Class 4	295496	7810802
Sediment Pond	1.9	LIG	LIG/Habitat	Class 4	Water Storage		
Retention Basin	0.4	LIG/Habitat	LIG/Habitat	Class 4-5	Water Storage		
Pit Haul Road	1.3	LIG/Habitat	LIG/Habitat	Class 4-5	Class 4-5	295496	7810802
Diversion Channels	1.7	LIG/Habitat	LIG/Habitat	Class 4-5	Permanent Diversion		
Lady Annie Mine Construction Area (net of specific areas)	22.3	LIG/Habitat	LIG/Habitat	Class 4-5	Class 4-5	295496	7810802
Upgrade to Haul / Access Road (off ML)	14.0	LIG/Habitat	Permanent access road for landholder	Class 4-5	Permanent access road for landholder		
Old Open Cut and Sanderson's Shaft	0.3	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Old Tailings Areas	1.0	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802

RTI DL RELEASE - DERM

12-513
File D Part 1
Page 115 of 249
Released

Disturbance Category	Max. Area	Land Use		Land Capability		Reference Site	
Exploration Tracks and Drill Pads	12.4	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Rubbish Tip	0.4	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Core Shed	0.3	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Exploration Sample Yard	0.6	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Total	**177.6**						

LIG- Low Intensity Grazing
Classes are derived from the Department of Minerals and Energy's Land Suitability Assessment Techniques (1995)

(F1-2) Progressive rehabilitation must commence when areas become available within the operational land.

(F1-3) Complete an investigation into rehabilitation of disturbed areas and submit a report to the administering authority proposing acceptance criteria to meet the outcomes in Schedule F - Table 1 and landform design criteria in Schedule F - Table 2 by **30 June 2007**

(F1-4) The holder of this environmental authority must rehabilitate all existing land disturbances located within the boundary leases of ML90179 (Lady Annie) as identified in Table 1. The holder of this environmental authority must ensure these areas of existing land disturbance, where not otherwise disturbed and rehabilitated under this authority, are rehabilitated to the final land descriptions identified in Tables 1 and 2.

RTI RELEASE DNRM

12-513
File D Part 1
Page 116 of 249
Released

Schedule F - Table 2 (Landform Design)

Disturbance type	Slope range (%)	Projective surface area (ha)
Waste Rock Dumps	33%-76% (1:3 to angle of repose)	121
Heap Leach Pads	<33% or 1:3	43.2
ROM Pads	33%-76% (1:3 to angle of repose)	14.8

Residual Void Outcome

(F2-1) Residual voids must not cause any serious environmental harm to land, surface waters or any recognised groundwater aquifer, other than the environmental harm constituted by the existence of the residual void itself and subject to any other condition within this environmental authority.

Dams Containing Hazardous Waste

Description of Dam

(F3-1) The construction or operation of any dam containing hazardous waste within the operational land must comply with Schedule F - Table 3.

Schedule F — Table 3 (Size and Purpose of Dams Containing Hazardous Waste)

Name of dam containing hazardous waste [1]	Maximum surface area of dam (ha)	Maximum volume of dam (m^3)	Maximum depth of dam (m) [2]	Purpose of dam [3]
Process Water Ponds (Raffinate Pre-Settler, Raffinate, ILS and PLS)	3.4	53,475	4.5	Storage of Process Solutions
Heap Leach Pads	43.2	N/A	N/A	Storage of Process Solutions
Stormwater Pond 1 (Stage 1 only)	6.47	303,625	6.35	Storage of storm water runoff from processing area
Stormwater Pond 1 & 2 (Stage 2)	10.4	467,720	6.35	Storage of storm water runoff from processing area

Note [1]: The name of the dam containing hazardous waste should refer to the name of the dam e.g. process residue facility and decant dam.

Note [2]: For dams that do not require a dam wall, input the maximum void depth e.g. where dams are formed by excavating below the land surface or backfilling a residual void.

Note [3]: Purpose of the dam should outline the designed function, e.g. "the permanent containment of tailings resu[illegible] from the extraction of nickel, cobalt and other metals at the XYZ Refinery".

RTI RELEASE - DNRM

Released

Location of Dam

(F3-2) The location of any dam containing hazardous waste within the licensed place must be located within the polygonal area defined by the co-ordinates defined in Schedule C- Table 4 –Map 4.

Schedule F — Table 4 (Location of Dams Containing Hazardous Waste)

Name of dam containing hazardous waste	Easting(AMG 84, Zone 54) [1]	Northing (AMG 84, Zone 54) [1]
PLS Ponds, ILS, Raffinate Pre-settler and Raffinate Pond	301760 302065 302035 301760	7797640 7797640 7797310 7797310
Stormwater Pond 1 and 2	301470 301760 301760 301470	7797640 7797640 7797110 7797110
Heap Leach Pads	302065 302720 302720 302035	7797945 7797945 7796825 7796825

Note [1]: A minimum of 3 control points is required to constrain the location of all activities associated with the dam containing hazardous waste. Additional infrastructure which forms part of any dam containing hazardous waste may include appurtenant works consisting of tailings discharge pipelines, seepage collection systems, runoff diversion bunds, containment systems, pressure relief wells, decant and recycle water systems.

Standards and Criteria

(F3-3) The holder of the environmental authority must design, construct, repair, maintain, operate and decommission the dams defined in Schedule F – Table 3 and 4 in accordance with an acknowledged design plan that must comply with the standard environmental conditions in the "Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste".

(F3-4) The holder of the environmental authority must design, construct, and operate all low hazardous dams containing hazardous waste and non-hazardous dams in accordance with the criteria outlined in Appendix B of the Code of Environmental Compliance for Mining Activities.

Inspection of Dams

(F3-5) High hazard dams containing hazardous waste shall be inspected by a Registered Professional Engineer Queensland (RPEQ) prior to **1 November** each year or at any time if alarming, unusual or otherwise unsatisfactory conditions are observed.

(F3-6) For each inspection, the engineer shall assess the condition of the dam and its foundations, determine the hydraulic adequacy of the dam and assess the adequacy of the works with respect to dam safety.

(F3-7) For each inspection, two copies of the engineer's report and any recommendations as to measures to be taken to ensure the integrity of the dam shall be furnished to the administering authority within **28 days** of the inspection.

Decommissioning of Dam – Objective

(F3-8) Dams containing hazardous waste must not be abandoned and must be decommissioned to a situation where water can no longer be stored in the dams. The dams and their contained waste(s) must be stable, whereafter the dams are no longer dams and they become landforms on the operational land and must comply with the rehabilitation requirements of this environmental authority.

Decommissioning of Dam – Documentation and Compliance

(F3-9) Decommissioning activities for dams must be documented in detail in the plan of operations under which the activities are to occur. Where the detailed documentation is not already contained in the Design Plan for the

RTI - RELEASE - DNRM

Released

dam, the detailed documentation is considered to be an amendment to the design plan and must be submitted as an amendment to the design plan required by the "Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste".

Infrastructure

(F4-1) All infrastructure, constructed by or for the environmental authority holder during the mining activities including water storage structures, must be removed from the site prior to mining lease surrender, except where agreed in writing by the post mining landowner / holder.

NOTE: This is not applicable where the landowner / holder is also the environmental authority holder.

Contaminated Lands

(F5-1) A register and map of all potentially contaminated sites and any remediation details, must be kept on site, updated regularly, and included in each Plan of Operations.

(F5-2) A Spillage Management Plan and an Emergency Plan for all hazardous materials stored on-site, together wi. description of suitable equipment and training must be updated and included with each Plan of Operations.

END CONDITIONS FOR SCHEDULE F

Schedule G - Community

Complaint Response

(G1-1) All complaints received must be recorded including details of complainant, reasons for the complaint, investigations undertaken, conclusions formed and actions taken. This information must be made available for inspection by the administering authority on request.

END CONDITIONS FOR SCHEDULE G

RTI DL RELEASE - DNRM

Gm 3/10/07

Released

Schedule H – Definitions

"acceptance criteria" means the measures by which the actions implemented to rehabilitate the land are deemed to be complete. The acceptance criteria indicate the success of the rehabilitation outcome or remediation of areas which have been significantly been disturbed by the mining activities. Acceptance criteria may include information regarding:

- vegetation establishment, survival and succession;
- vegetation productivity, sustained growth and structure development;
- fauna colonisation and habitat development;
- ecosystem processes such as soil development and nutrient cycling, and the recolonisation of specific fauna groups such as collembola, mites and termites which are involved in these processes;
- microbiological studies including recolonisation by mycorrhizal fungi, microbial biomass and respiration;
- effects of various establishment treatments such as deep ripping, topsoil handling, seeding and fertiliser application on vegetation growth and development;
- resilience of vegetation to disease, insect attack, drought and fire;
- vegetation water use and effects on ground water levels and catchment yields.

"affected building"

- for noise means any building or any part of a building, for example the building from which the noise is made, at which the noise can be heard.
- for vibration means any building or any part of a building, for example the activity from which the vibration is made, at which the vibration can be felt.

"ambient (or total) noise" at a place, means the level of noise at the place from all sources (near and far), measured as the Leq for an appropriate time interval.

"appropriately qualified person" means any person who conforms to the EPA operational policy for an "appropriately qualified person (analyst)" in accordance with Section 490(7) of the *Environmental Protection Act 1994*.

"ARD" means acid rock drainage and refers to the low pH, high heavy metal pollutant typical of sulphidic mine wastes, and most commonly associated with the production of ferrous iron and sulphuric acid through the oxidation of sulphide minerals.

"authority" means environmental authority (mining activities) under the *Environmental Protection Act 1994*.

"blasting" means the use of explosive materials to fracture-

(a) rock, coal and other minerals for later recovery; or
(b) structural components or other items to facilitate removal from a site or for reuse.

"building" includes a structure of any type and part of a building or structure.

"commercial place" means a work place used as an office or for business or commercial purposes, which is not part of the mining activity and does not include employees accommodation or public roads.

"competent person" means a person with the demonstrated skill and knowledge required to carry out the task to a standard necessary for the reliance upon collected data or protection of the environment.

"dam" means a containment or proposed containment whether permanent or temporary, which is designed to contain, divert or control flowable substances. However this does not include a fabricated or manufactured tank or container designed to a recognised standard.

"design plan" in the context of a dam design is the documentation required under the Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste to describe the physical dimensions of the dam, the materials and standards to be used for construction of the dam, the procedures and criteria to be used for operating the dam and the decommissioning and rehabilitation objectives in terms of procedures, works and outcomes at the end of dam life. The documents can include design and investigation reports, drawings, specifications and certifications.

"environmental authority holder" means the holder of this environmental authority.

"flow event" means a flow event producing sufficient water to permit a monitoring creek bed flow of 30cm or more at the sampling station.

"flowable substance" means matter or mixture of materials which can be forced to or otherwise flow under any conditions possible in a situation. It includes water, other liquids or a mixture that includes water or any other liquid or suspended solids.

RTI DL RELEASE - DNRM

cm 5/10/07

Released

"hazardous waste" means any substance, whether liquid, solid or gaseous, derived by or resulting from, the processing of minerals that tends to destroy life or impair or endanger health.

"infrastructure" means water storage dams, roads and tracks, buildings and other structures built for the purpose of mining activities but does not include facilities required for the long term management of mining impacts or the protection of potential resources. Such facilities include dams containing hazardous waste, waste rock dumps, voids, or ore stockpiles and buildings or other structures whose ownership can be transferred and which have a residual beneficial use for the next owner of the operational land or the background land owner.

"$L_{A\ 10,\ adj,\ 10\ mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 10-minute measurement period, using Fast response.

"$L_{A\ 1,\ adj,\ 10\ mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10-minute measurement period, using Fast response.

"$L_{A,\ max\ adj,\ T}$" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.

"land capability" as defined in the DME 1995 Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland.

"land suitability" as defined in the DME 1995 Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland.

"land use" term to describe the selected post mining use of the land, which is planned to occur after the cessation of mining operations.

"leachate" means a liquid that has passed through or emerged from, or is likely to have passed through or emerged from, a material stored, processed or disposed of at the operational land which contains soluble, suspended or miscible contaminants likely to have been derived from the said material.

"mandatory reporting level" means the volume below the spillway crest, equivalent to the lower of the AEP, 72 hour storm or the AEP wave allowance (AEP is the annual exceedence probability).

"mineral" means a substance which normally occurs naturally as part of the earth's crust or is dissolved or suspended in water within or upon the earth's crust and includes a substance which may be extracted from such a substance, and includes—

(a) clay if mined for use for its ceramic properties, kaolin and bentonite;
(b) foundry sand;
(c) hydrocarbons and other substances or matter occurring in association with shale or coal and necessarily mined, extracted, produced or released by or in connection with mining for shale or coal or for the purpose of enhancing the safety of current or future mining operations for coal or the extraction or production of mineral oil therefrom;
(d) limestone if mined for use for its chemical properties;
(e) marble;
(f) mineral oil or gas extracted or produced from shale or coal by in situ processes;
(g) peat;
(h) salt including brine;
(i) shale from which mineral oil may be extracted or produced;
(j) silica, including silica sand, if mined for use for its chemical properties;
(k) rock mined in block or slab form for building or monumental purposes;

but does not include—

(l) living matter;
(m) petroleum within the meaning of the *Petroleum Act 1923*;
(n) soil, sand, gravel or rock (other than rock mined in block or slab form for building or monumental purposes) to be used or to be supplied for use as such, whether intact or in broken form;
(o) water.

"noxious" means harmful or injurious to health or physical well being, other than trivial harm.

"offensive" means causing reasonable offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive, other than trivial harm.

PUBLIC RELEASE DNRM

5/10/07

Released

"peak particle velocity (ppv)" means a measure of ground vibration magnitude which is the maximum rate of change of ground displacement with time, usually measured in millimetres/second (mms^{-1}).

"protected area" means - a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

"progressive rehabilitation" means rehabilitation (defined below) undertaken progressively or a staged approach to rehabilitation as mining operations are ongoing.

"reference site" (or analogue site) may reflect the original location, adjacent area or another area where rehabilitation success has been completed for a similar biodiversity. Details of the reference site may be as photographs, computer generated images and vegetation models etc.

"rehabilitation" the process of reshaping and revegetating land to restore it to a stable landform and in accordance with the acceptance criteria set out in this environmental authority and, where relevant, includes remediation of contaminated land.

"representative" means a sample set which covers the variance in monitoring or other data either due to natural changes or operational phases of the mining activities.

"residual void" means an open pit resulting from the removal of ore and/or waste rock which will remain following the cessation of all mining activities and completion of rehabilitation processes.

"self sustaining" means an area of land which has been rehabilitated and has maintained the required acceptance criteria without human intervention for a period nominated by the administering authority.

"sensitive place" means;
- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- an educational institution; or
- a medical center or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public park or gardens.

"significant disturbance" – includes land
(a) if it is contaminated land; or
(b) it has been disturbed and human intervention is needed to rehabilitate it.
   i. to a state required under the relevant environmental authority; or
   ii. if the environmental authority does not require the land to be rehabilitated to a particular state – to its state immediately before the disturbance.

Some examples of disturbed land include:
- areas where soil has been compacted, removed, covered, exposed or stockpiled;
- areas where vegetation has been removed or destroyed to an extent where the land has been made susceptible to erosion; (vegetation & topsoil)
- areas where land use suitability or capability has been diminished;
- areas within a watercourse, waterway, wetland or lake where mining activities occur;
- areas submerged by tailings or hazardous contaminant storage and dam walls in all cases;
- areas under temporary infrastructure. Temporary infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be removed after mining activities have ceased; or
- areas where land has been contaminated and a suitability statement has not been issued.

However, the following areas are not included:
- areas off lease (e.g. roads or tracks which provide access to the mining lease);
- areas previously significantly disturbed which have achieved the rehabilitation outcomes;
- by agreement with the EPA, areas previously significantly disturbed which have not achieved the rehabilitation objective(s) due to circumstances beyond the control of the mine operator (such as climatic conditions);
- areas under permanent infrastructure. Permanent infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be left by agreement with the landowner. The agreement to leave permanent infrastructure must be recorded in the Landowner Agreement and lodged with the EPA;
- disturbances that pre-existed the grant of the tenure unless those areas are disturbed during the term of the tenure.

PUBLIC RELEASE DNRM

Released

"spillway" means passage or outlet from the dam through which surplus water flows.

"stable" means land form dimensions are or will be stable within tolerable limits now and in the foreseeable future. Stability includes consideration of geotechnical stability, settlement and consolidation allowances, bearing capacity (traffic ability), erosion resistance and geochemical stability with respect to seepage and contaminant generation.

"suitably qualified and experienced person" means a person who is a Registered Professional Engineer of Queensland under the provisions of the *Professional Engineers Act 1988* or a Corporate Member of the Institution of Engineers Australia or holds equivalent professional qualifications and has the following:

(a) knowledge of engineering principles related to the structures, geomechanics, hydrology, hydraulics, chemistry and environmental impact of dams; and

(b) at least a total of five years of suitable experience and demonstrated expertise in at least four of the following areas:

- investigation, design or construction of dams;
- operation and maintenance of dams;
- geomechanics with particular emphasis stability, geology and geochemistry;
- hydrology with particular reference to flooding, estimation of extreme storms, water management or meteorology;
- hydraulics with particular reference to sediment transport and deposition, erosion control, beach processes;
- hydrogeology with particular reference to seepage, groundwater,
- solute transport processes and monitoring thereof; or
- dam safety.

"tolerable limits" means that a range of values could be accepted to achieve an overall environmental management objective (eg a range of settlement of a tailing capping could still meet the objective of draining the cap quickly, preventing pondage and limiting infiltration and percolation).

"trivial harm" means environmental harm which is not material or serious environmental harm and will not cause actual or potential loss or damage to property of an amount of, or amounts totalling more than $5,000.

"watercourse" - Means a river, creek or stream in which water flows permanently or intermittently in a visibly defined channel (natural, artificial or artificially improved) with:

(a) continuous bed and banks;
(b) an extended period of flow for some months after rain ceases, and
(c) an adequacy of flow that sustains basic ecological processes and maintains biodiversity.

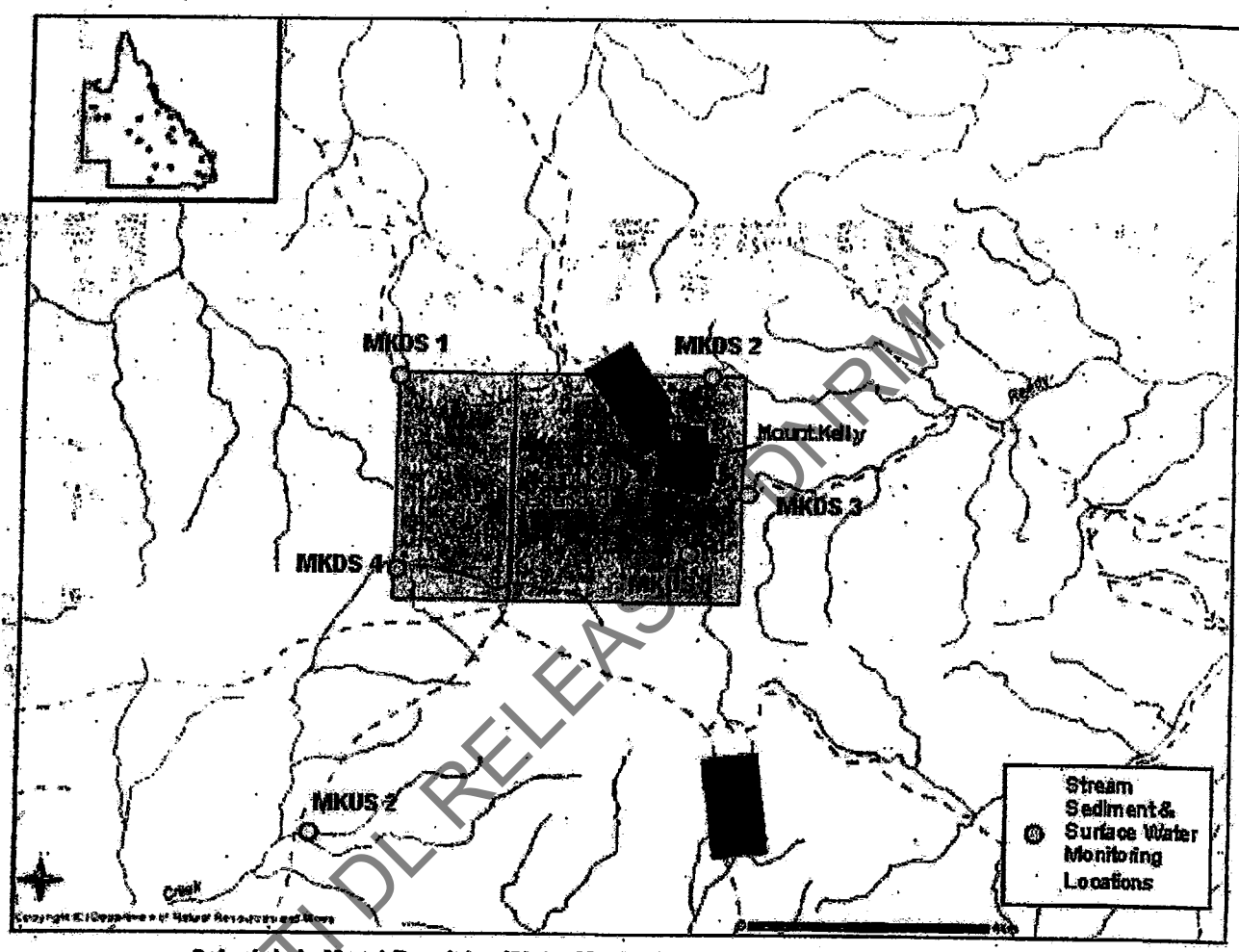
"waters" includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea) or any part thereof.

END CONDITIONS FOR SCHEDULE H

RTI DE-RELEASE - DNRM

Released

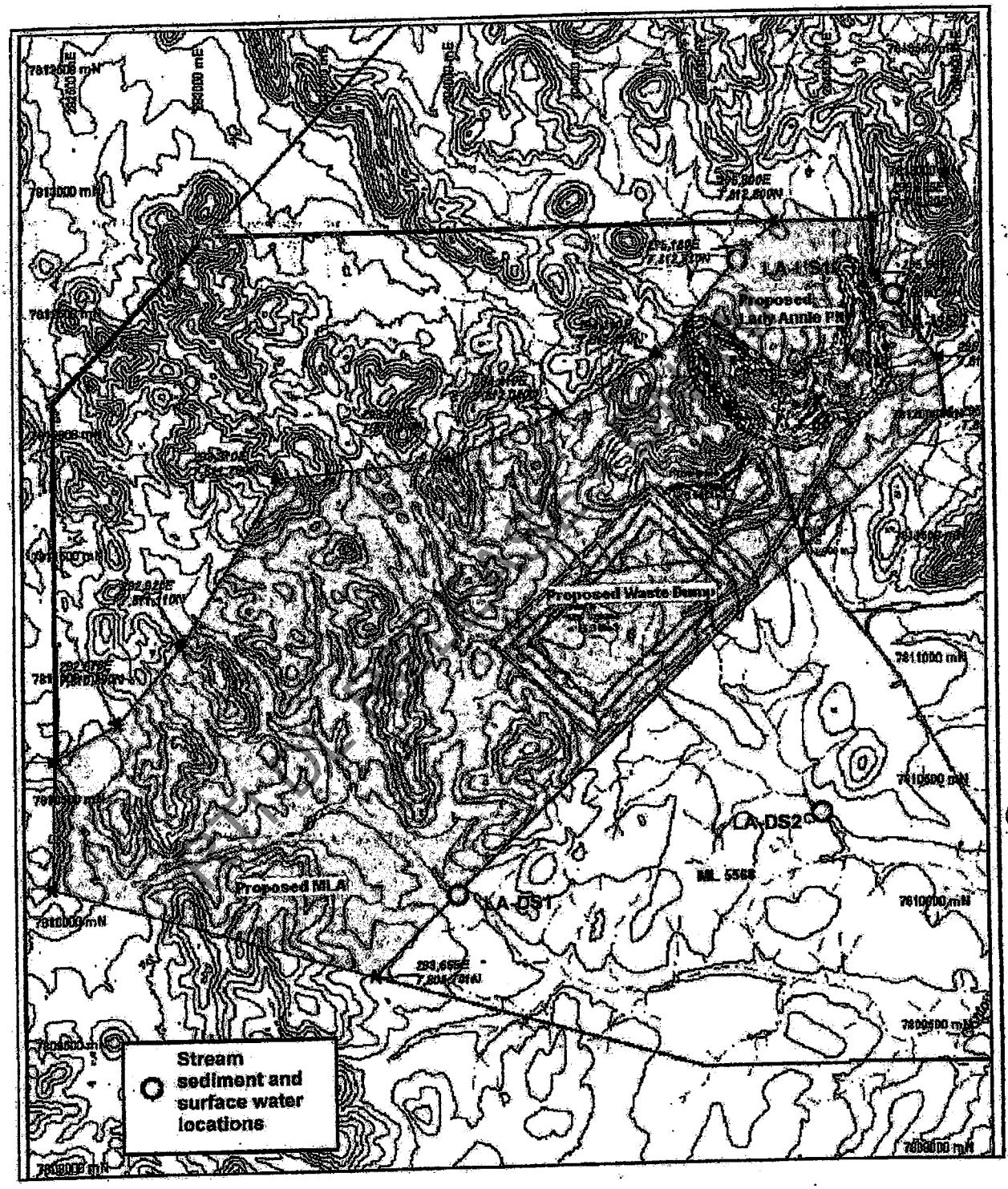
Schedule I - Maps / Plans



Schedule I - Map 1 Receiving Water Monitoring Locations (Mount Kelly Leases)

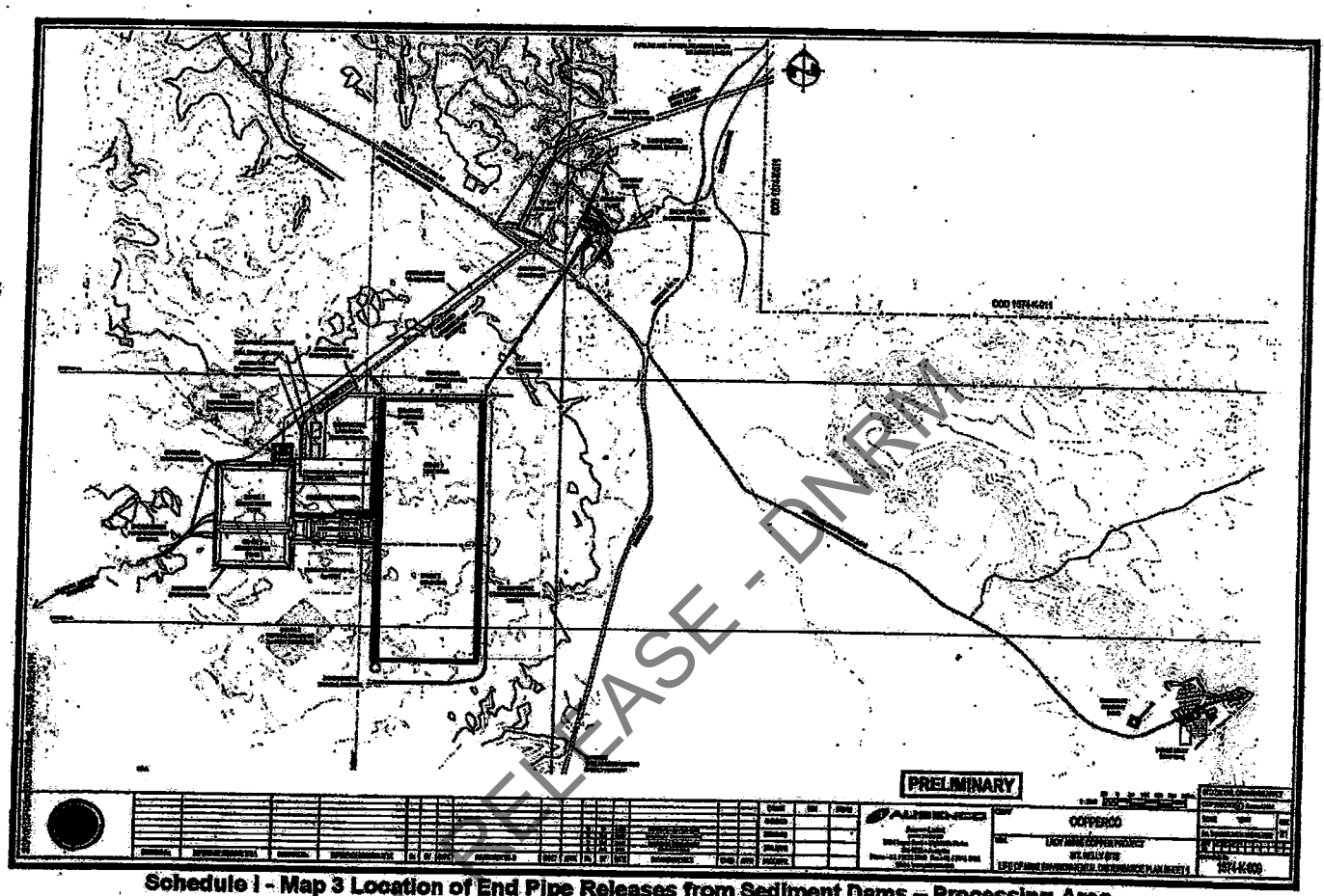
RTI DL RELEASED DNRM

Released



Schedule I - Map 2 Receiving Water Monitoring Locations (Lady Annie)

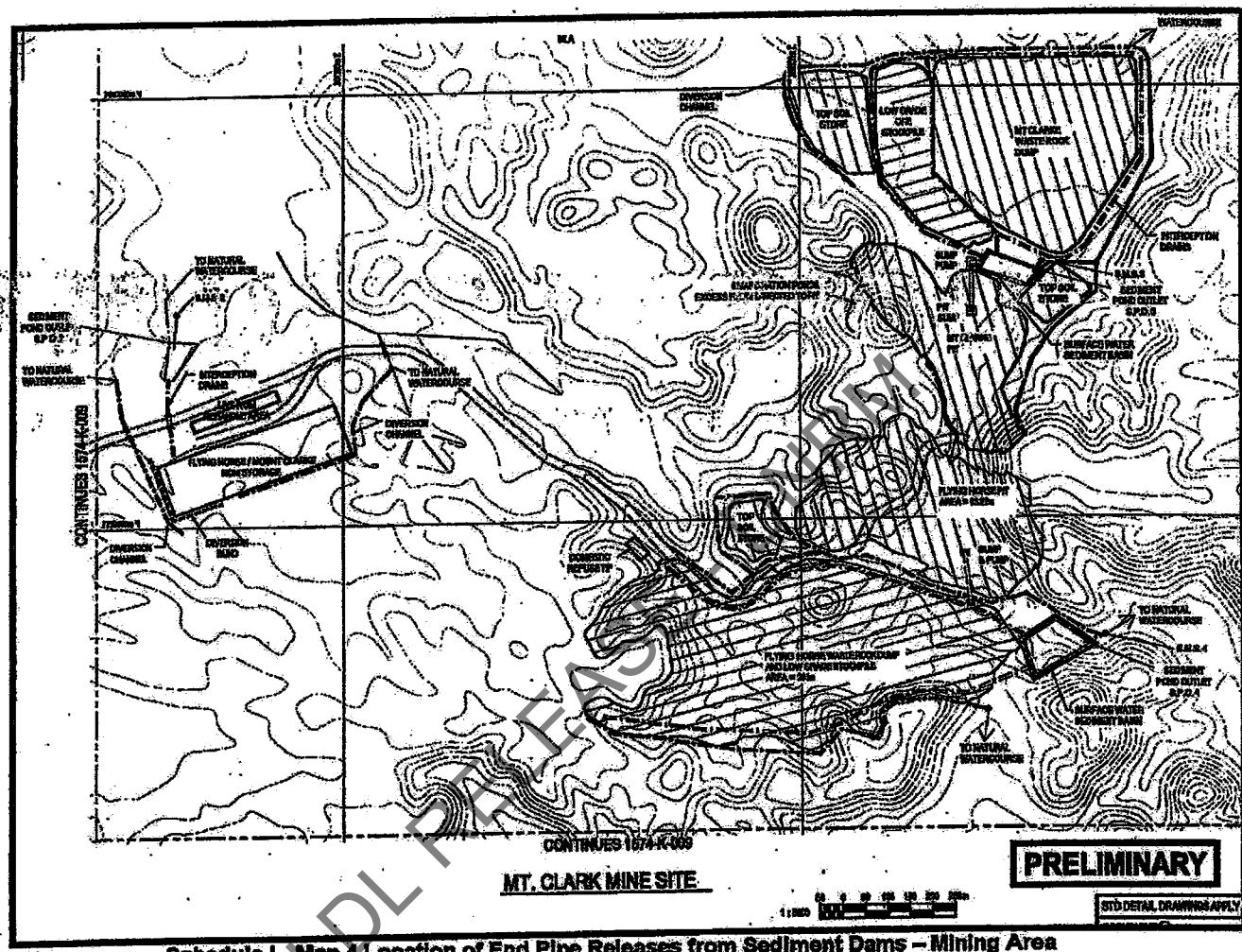
Released



Schedule I - Map 3 Location of End Pipe Releases from Sediment Dams – Processing Area

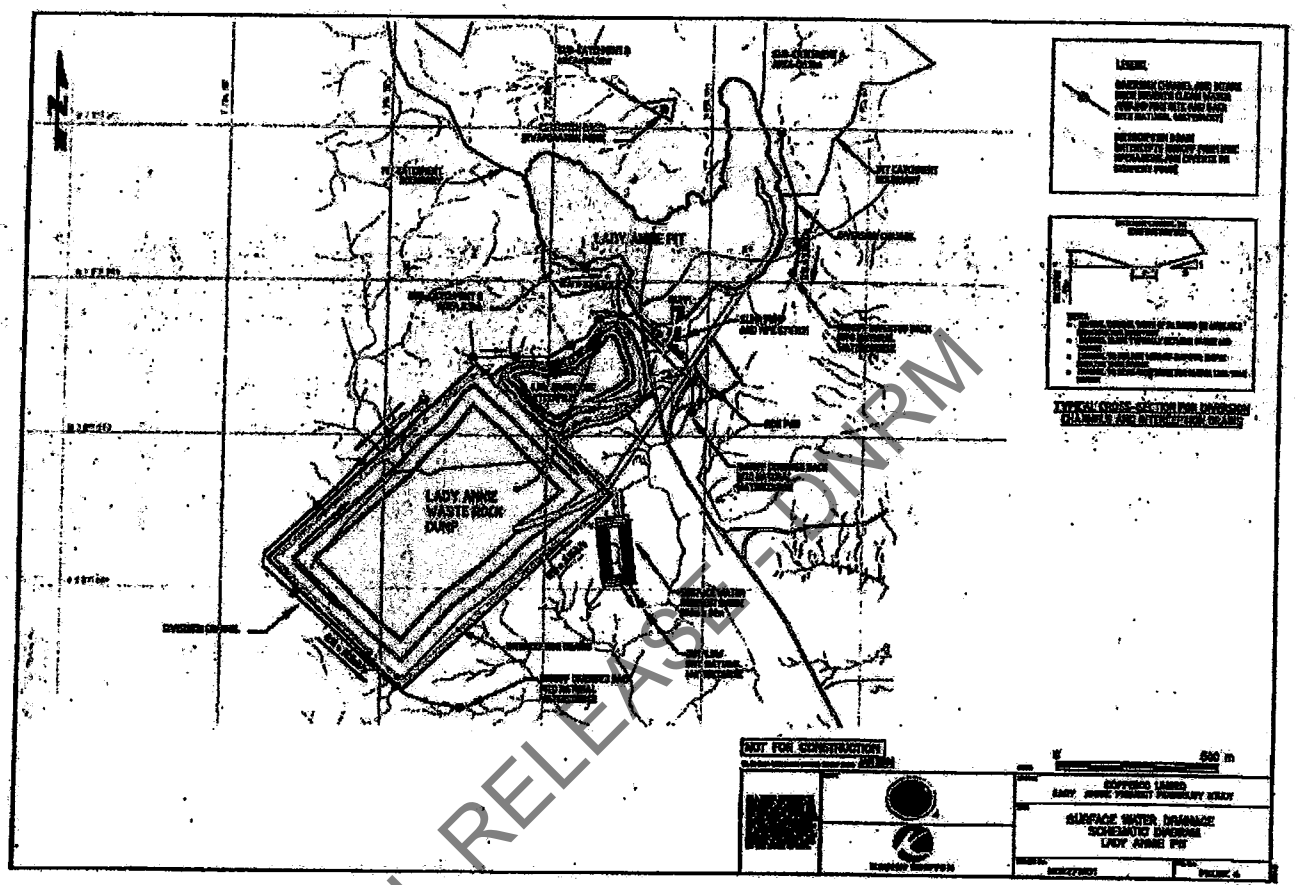
RTI DLP RELEASE - DNRM

Released



Schedule I - Map 4 Location of End Pipe Releases from Sediment Dams – Mining Area

RTI DL RELEASE

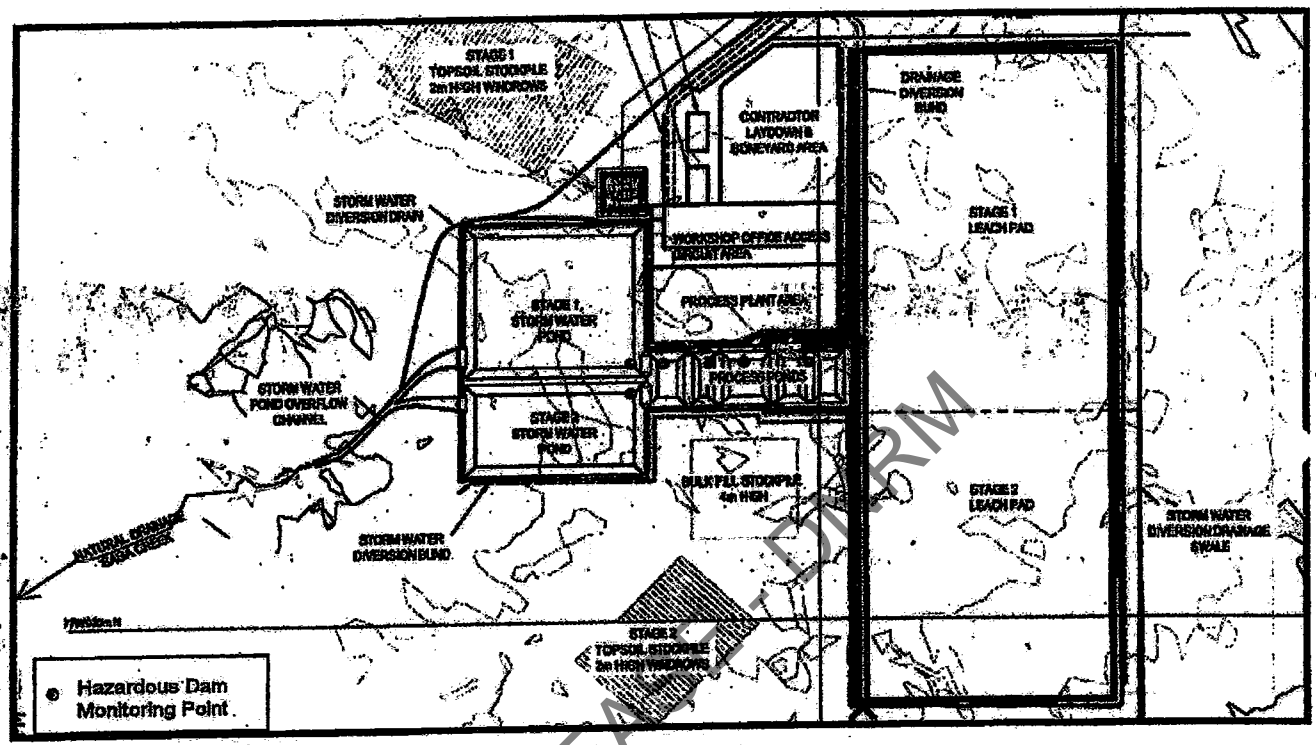


RTI DL RELEASE - DNRM

Schedule I - Map 5 Location of End Pipe Releases from Sediment Dams – Lady Annie

Con 5/10/07

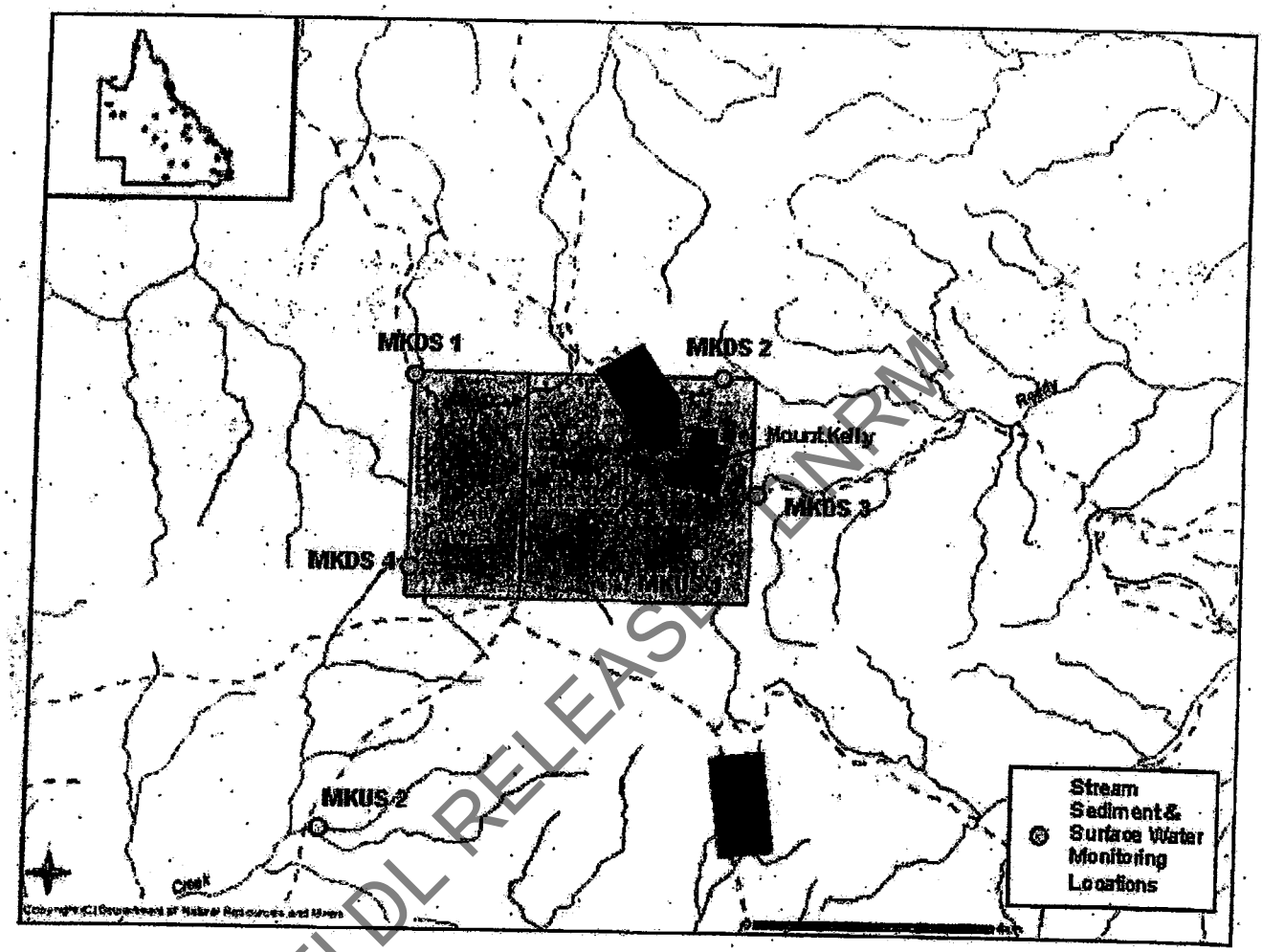
Released



RTI DL RELEASE - TERM

Schedule I - Map 6 Location of Hazardous Dams

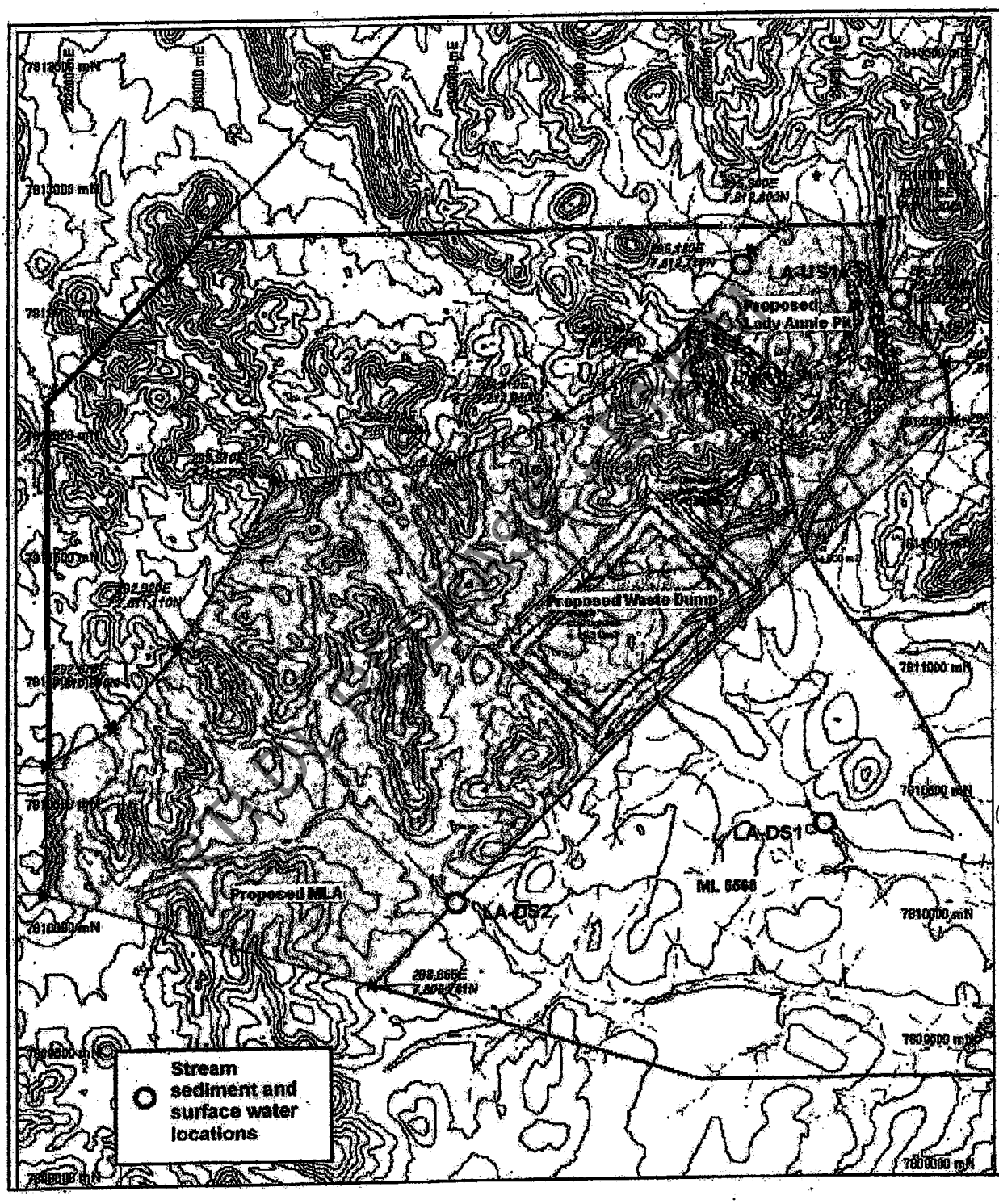
Released



RTI DL RELEASED DNRM

Schedule I - Map 7 Stream Sediments Monitoring Locations (Mount Kelly)

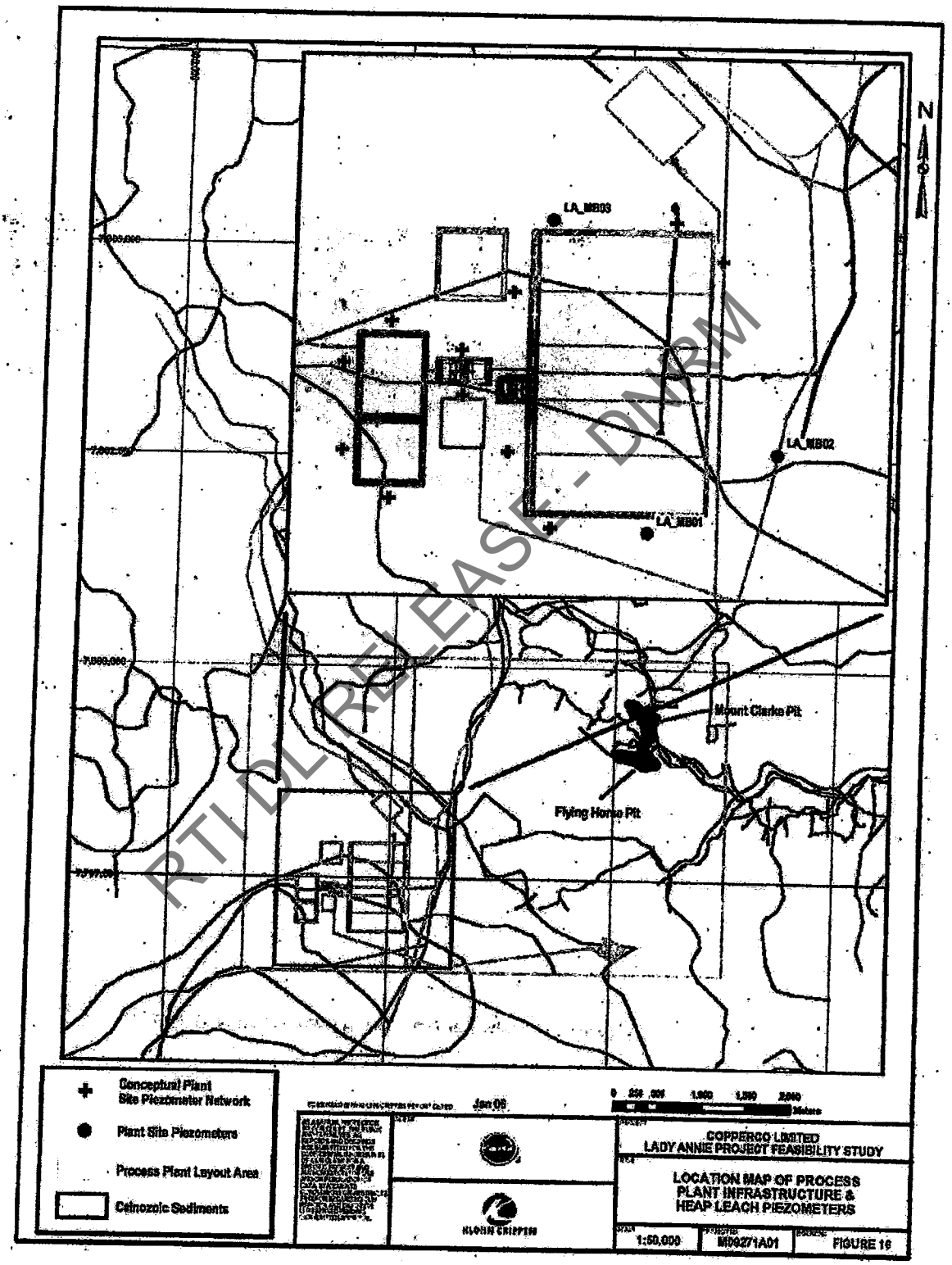
Released



Schedule I - Map 8 Stream Sediments Monitoring Locations (Lady Annie)

am 5/10/17

Released



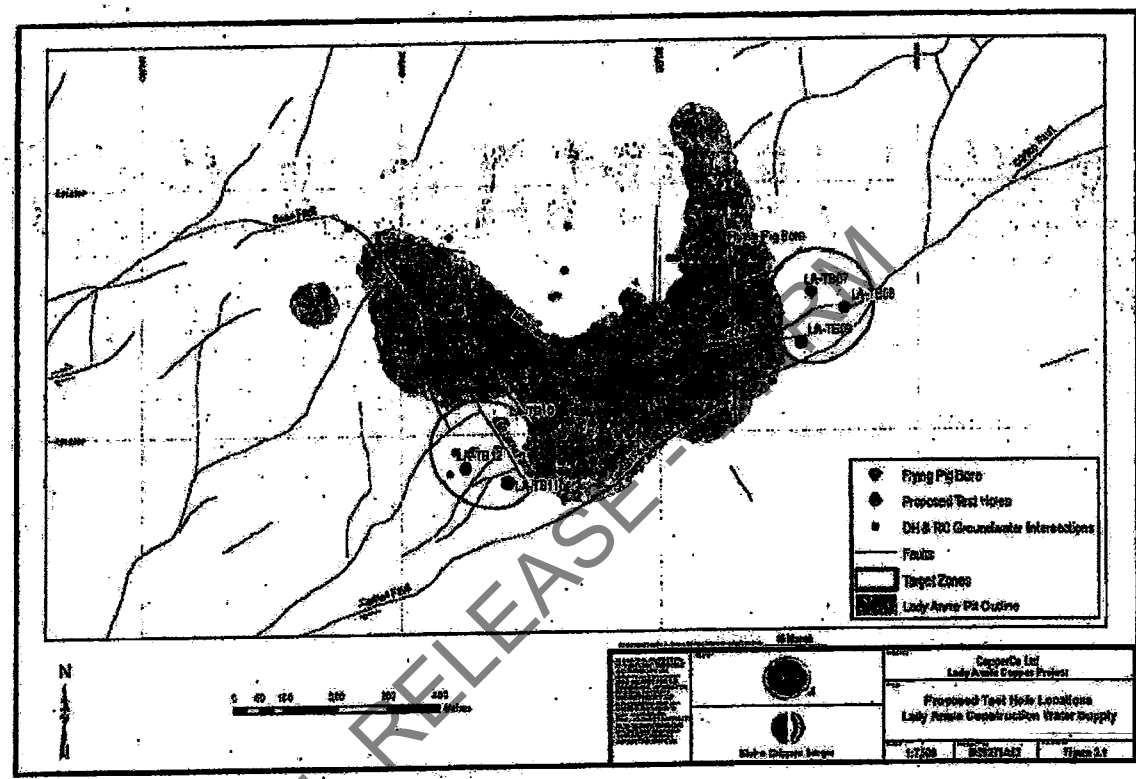
RTI DL RELEASE - DNRM

Schedule I - Map 9 Groundwater Monitoring Locations (Mount Kelly)

Cm 5/10/07

Page 37 of 38 - 0009 This Environmental Authority effect 5 October 2007 Environmental Protection Agency

Released



RTI DL RELEASE - 2014

Schedule I - Map 10 Groundwater Monitoring Locations (Lady Annie)

END CONDITIONS FOR SCHEDULE I

END OF EVIRONMENTAL AUTHORITY

RECEIVED
5297
9 OCT 2007
DEPARTMENT OF
MINES AND ENERGY
MOUNT ISA

Queensland Government

Environmental Protection Agency
Incorporating the
Queensland Parks and Wildlife Servi

Enquiries	Chantel Mackenzie
Telephone	(07) 4744 7820
Your reference	MIN100401006
Our reference	ISA658

5 October 2007

Reefway Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

CC/ Savannah Resources Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

Dear Sir/Madam

Re: Amendment of Environmental Authority MIN100401006.

I refer to the application for amendment of Environmental Authority (Mining Activities) MIN100401006 received at this office on 14 May 2007.

Please find attached the amended Environmental Authority (EA) MIN100401006. This EA takes effect from 5 October 2007 and the anniversary date of this authority is 24 July of each year.

If you have any inquiries in relation to the above details please contact Chantel Mackenzie on (07) 4744 7820.

Yours faithfully

s.49 - Signature

Geoff Metcalfe
District Manager
Environmental Operations
Mount Isa District, Northern Region

C/c Mining Registrar

RTI DL RELEASE - DNRM

Cnr Camooweal & Mary Streets Mount Isa
Queensland 4825 Australia
PO Box 2316 Mount Isa
Queensland 4825 Australia
Telephone (07) 4744 7888
Facsimile (07) 4744 7800
Website www.epa.qld.gov.au
ABN 87 221 158 786

Printed on 100% recycled paper

ENVIRONMENTAL PROTECTION ACT 1994

Queensland Government
Environmental Protection Agency
Queensland **Parks and Wildlife Service**

Environmental Authority No. MIN100401006 (mining activities)

Section 258 *Environmental Protection Act 1994*

This environmental authority is granted under the *Environmental Protection Act 1994* and includes conditions to minimise environmental harm caused, or likely to be caused, by the authorised mining activities. An environmental authority (mining activities) may be for mining activities authorised (under the *Mineral Resources Act 1989*) to occur under one of the following mining tenements: a prospecting permit; mining claim; exploration permit; mineral development licence; or mining lease. In general, a mining activity means: prospecting, exploring, mining; or processing minerals; remediation; rehabilitation; and includes facilitation and supporting activities and any action taken to prevent environmental harm.

Under the provisions of the *Environmental Protection Act 1994* this Environmental Authority is issued to:

Lady Annie Operations Pty Ltd
Level 22 Allendale Square
77 St Georges Terrace
Perth WA 6000

Savannah Resources Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

In respect of carrying out activities as part of the following mining project:

Type of Environmental Authority (mining activities)	Authorised mining tenements	Location
Mining Leases	ML5426, ML5435, ML5446, ML5447, ML5448, ML 5474, ML5476, ML5478, ML90168 ML90169, ML90170, ML90178, ML90179, ML90184	100km north of Mount Isa

RTIDL RELEASE - DNRM

The mining activities are authorized to the extent defined in Schedule 6 Section 14(c) of the *Environmental Protection Regulation 1998*.

This Environmental Authority is subject to the conditions set out in the attached schedules.

The anniversary date of this Environmental Authority is **24 July** each year.

This Environmental Authority takes effect from **5 October 2007** for granted tenements and will take effect for ML90184 upon date of grant under the *Mineral Resources Act 1989*.

s.49 - Signature

5/10/07

Geoff Metcalfe
District Manager
Mount Isa District, Northern Region
Delegate of Administering Authority
Environmental Protection Act 1994

This **Environmental Authority** incorporates the following schedules:

- Schedule A - General
- Schedule B - Air
- Schedule C - Water
- Schedule D - Noise and Vibration
- Schedule E - Waste
- Schedule F - Land
- Schedule G - Community
- Schedule H - Definitions
- Schedule I - Maps / Plans

Schedule A - General

Financial Assurance

(A1-1) Provide a financial assurance in the amount and form required by the administering authority prior to the commencement of activities proposed under this environmental authority.

NOTE: The calculation of financial assurance for condition (A1-1) must be in accordance with Guideline 17 and may include a performance discount. The amount is defined as the maximum total rehabilitation cost for complete rehabilitation of all disturbed areas, which may vary on an annual basis due to progressive rehabilitation. The amount required for the financial assurance must be the highest Total Rehabilitation Cost calculated for any year of the Plan of Operations and calculated using the formula: (Financial Assurance = Highest Total Annual Rehabilitation Cost x Percentage Required).

(A1-2) The financial assurance is to remain in force until the administering authority is satisfied that no claim on the assurance is likely.

NOTE: Where progressive rehabilitation is completed and acceptable to the administering authority, progressive reductions to the amount of financial assurance will be applicable where rehabilitation has been completed in accordance with the acceptance criteria defined within this environmental authority.

Maintenance of Measures, Plant and Equipment

(A2-1) The environmental authority holder must ensure:

- that all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority are installed;
- that such measures, plant and equipment are maintained in a proper condition; and
- that such measures, plant and equipment are operated in a proper manner.

Monitoring

(A3-1) Record, compile and keep for a minimum of five years all monitoring results required by this environmental authority and make available for inspection all or any of these records upon request by the administering authority.

(A3-2) Where monitoring is a requirement of this environmental authority, ensure that a competent person(s) conducts all monitoring.

Storage and Handling of Flammable, Combustible and Corrosive Liquids

(A4-1) Spillage of all flammable and combustible liquids must be contained within an on-site containment system and controlled in a manner that prevents environmental harm (other than trivial harm) and maintained in accordance with Section 5.8 of AS 1940 - Storage and Handling of Flammable and Combustible Liquids of 2004.

(A4-2) The on-site storage of corrosive liquids must be in accordance with Section 5.7 of AS 3780 - Storage and Handling of Corrosive Substances 1994.

FINAL RELEASE - DERM

Released

Definitions

(A5-1) Words and phrases used throughout this environmental authority are defined in Schedule H – Definitions. Where a definition for a term used in this environmental authority is sought and the term is not defined within this environmental authority, the definitions in the *Environmental Protection Act 1994*, its Regulations and Environmental Protection Policies must be used.

END CONTIONS FOR SCHEDULE A

Schedule B - Air

Dust Nuisance

(B1-1) Subject to Conditions (B1-2) and (B1-3) the release of dust or particulate matter or both resulting from the mining activity must not cause an environmental nuisance at any sensitive or commercial place.

(B1-2) When requested by the administering authority, dust and particulate monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(B1-3) If the environmental authority holder can provide evidence through monitoring that the following limits are not being exceeded then the holder is not in breach of (B1-1):

a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with AS 3580.10.1 Methods for sampling and analysis of ambient air - Determination of particulates - Deposited matter - Gravimetric method of 1991.

(B1-4) If monitoring indicates exceedence of the relevant limits in Condition (B1-3), then the environmental authority holder must:

a) address the complaint including the use of appropriate dispute resolution if required; or
b) immediately implement dust abatement measures so that emissions of dust from the activity do not result in further environmental nuisance.

Odour Nuisance

(B2-1) Subject to condition (B2-2), the release of noxious or offensive odour(s) or any other noxious or offensive airborne contaminant(s) resulting from the mining activity must not cause an environmental nuisance at any sensitive or commercial place.

(B2-2) When requested by the administering authority, odour monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(B2-3) If monitoring indicates Condition (B2-1) is not being met then the environmental authority holder must:

a) address the complaint including the use of appropriate dispute resolution if required; or
b) immediately implement odour abatement measures so that emissions of odour from the activity do not result in further environmental nuisance.

END CONDITIONS FOR SCHEDULE B

RTI DL RELEASE - DERM

Released

Schedule C - Water

Release to Waters

(C1-1) Receiving waters affected by the release of process water or storm water contaminated by the mining activities or both must be monitored at the locations and frequencies defined in Schedule C - Table 1 and Schedule I – Map 1 & 2, and the results of the test sites comply with the contaminant limits defined in Schedule C - Table 3.

Schedule C - Table 1 (Receiving Water Monitoring Locations and Frequency)

Monitoring point	Easting (AMG 84 Zone 54)	Northing (AMG 84 Zone 54)	Monitoring frequency
MKUS 1- reference site*	305625	7797450	Each flow event
MKUS 2- reference site*	300451	7793920	Each flow event
MKDS 1- test site	301160	7800135	Each flow event
MKDS 2- test site	306046	7800375	Each flow event
MKDS 3- test site	306370	7798363	Each flow event
MKDS 4- test site	301300	7797255	Each flow event
LA- US1- reference site*	295150	7812680	Each flow event
LA- US2- reference site*	295750	7812480	Each flow event
LA- DS1- test site	294000	7810100	Each flow event
LA- DS2- test site	295500	7810400	Each flow event

NOTE: This does not apply to dams containing hazardous waste
**Reference sites must:*

a) be from the same biogeographical and climatic region;
b) have similar geology, soil types and topography
c) contain a range of habitats similar to those at the test site
d) be of similar flow regime; and
e) not be so close to the test sites that any disturbances at the test site also result in a change at the reference site.

C1-2 Subject to Condition (C1-1), if the receiving water contaminant trigger levels defined in Schedule C - Table 2 are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within **3 months** of receiving the analysis results.

RTI DISCLOSE - DNRM

GM 5/10/07

Released

Schedule C - Table 2 (Receiving Water Trigger Limits)

Parameter	Units	Minimum	Maximum	Trigger Type
pH [1]	pH	6	8.5	Range
EC [1]	µS/cm	N/A	250	Maximum
Sulphate [2]	mg/L	N/A	500	Maximum
Aluminium [4]	mg/L	N/A	2.5	Maximum
Aluminium [5]	mg/L	N/A	11.5	Maximum
Arsenic [2]	mg/L	N/A	0.25	Maximum
Boron [2]	mg/L	N/A	0.37	Maximum
Cadmium [2]	mg/L	N/A	0.005	Maximum
Chromium [2]	mg/L	N/A	0.5	Maximum
Cobalt [2]	mg/L	N/A	0.5	Maximum
Copper [4]	mg/L	N/A	0.5	Maximum
Copper [5]	mg/L	N/A	0.83	Maximum
Fluoride [2]	mg/L	N/A	1	Maximum
Lead [4]	mg/L	N/A	0.05	Maximum
Lead [5]	mg/L	N/A	0.065	Maximum
Manganese [3]	mg/L	N/A	1.9	Maximum
Mercury [2]	mg/L	N/A	0.001	Maximum
Molybdenum [2]	mg/L	N/A	0.075	Maximum
Nickel [2]	mg/L	N/A	0.5	Maximum
Selenium [2]	mg/L	N/A	0.01	Maximum
Zinc [2]	mg/L	N/A	10	Maximum

[1] Contaminant triggers limits are based on Table 3.3.4 and 3.3.5 of Aquatic Ecosystems ANZECC (2000).
[2] Contaminant trigger limits are based on 50% of the contaminant limits defined in the ANZECC (2000) Livestock Drinking Water and are to be analysed as total metals (unfiltered).
[3] Contaminant trigger limits based on ANZECC (2000) trigger levels for aquatic ecosystems of slightly - moderately disturbed systems – table 3.4.1 level of protection 95% / Table 3.3.4 / 3.3.5 – Tropical Australia upland rivers.
[4] Contaminant trigger limits are based on 50% of the contaminant limits defined in the ANZECC (2000) Livestock Drinking Water and are to be analysed as total metals (unfiltered). These limits are set for the Mount Kelly Leases only (ML 5426, ML 5478, ML90168, ML90169, ML90170, ML90178, ML 5435, ML 5446, ML 5447, ML 5448, ML 5474 and ML 5476.)
[5] Contaminant trigger limits are based on site specific background data and are to be analysed as total metals (unfiltered). These trigger limits are set for the Lady Annie Lease only (ML90179).

PUBLIC RELEASE - DNRM

Released

Schedule C - Table 3 (Receiving Water Contaminant Limits)

Parameter	Units	Minimum	Maximum	Trigger Type
pH	pH	6	9	Range
TDS[2]	mg/L	N/A	4000	Maximum
Sulphate [1]	mg/L	N/A	1000	Maximum
Aluminium[5]	mg/L	N/A	5	Maximum
Aluminium[6]	mg/L	N/A	23	Maximum
Arsenic[1]	mg/L	N/A	0.5	Maximum
Boron[1]	mg/L	N/A	5	Maximum
Cadmium[1]	mg/L	N/A	0.01	Maximum
Chromium[1]	mg/L	N/A	1	Maximum
Cobalt[1]	mg/L	N/A	1	Maximum
Copper[5]	mg/L	N/A	1	Maximum
Copper[6]	mg/L	N/A	1.66	Maximum
Fluoride[1]	mg/L	N/A	2	Maximum
Lead[5]	mg/L	N/A	0.1	Maximum
Lead[6]	mg/L	N/A	0.13	Maximum
Manganese[3]	mg/L	N/A	2.5	Maximum
Mercury[1]	mg/L	N/A	0.002	Maximum
Molybdenum[1]	mg/L	N/A	0.15	Maximum
Nickel[1]	mg/L	N/A	1	Maximum
Selenium[1]	mg/L	N/A	0.02	Maximum
Zinc[1]	mg/L	N/A	20	Maximum

[1] Contaminant limits based on table 4.3.2 ANZECC (2000) Livestock drinking water quality and are analysed as Total metals (unfiltered)
[2] Contaminant limits are based on Table 4.3.1 Livestock drinking water quality and are analysed as Total metals (unfiltered)
[3] Contaminant limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) 80% and are to be analysed as filtered metals.
[4] Contaminant limits based on Table 3.3.4 of Aquatic Ecosystems ANZECC (2000)
[5] Contaminant limits are based on table 4.3.2 ANZECC (2000) Livestock drinking water quality and are analysed as Total metals (unfiltered). This limit is set for the Mount Kelly Leases only (ML 5426, ML 5478, ML90168, ML90169, ML90170, ML90178, ML 5435, ML 5446, ML 5447, ML 5448, ML 5474 and ML 5476.)
[6] Contaminant limits are based on site specific background data and are to be analysed as total metals (unfiltered). These trigger limits are set for the Lady Annie Lease only (ML90179).

PUBLIC RELEASE - DNRM

End of Pipe Release

(C1-3) End of pipe release limits for storm water contaminated by mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 4 and Schedule I – Map 3, 4 and 5 and comply with the contaminant limits defined in Schedule C - Table 5.

Released

Schedule C - Table 4 (End of pipe monitoring locations and frequency)

Monitoring point	Easting (AMG 84, Zone 54)	Northing (AMG 84, Zone 54)	Monitoring frequency
Mount Clarke ROM Area Sediment Dam	303834	7799496	Each flow event
Mount Clarke Pit Area Sediment Dam	305336	7799592	Each flow event
Mount Clarke/Flying Horse Sediment Dam	305887	7798726	Each flow event
Process Plant ROM Pad Sediment Dam 1	303040	7798856	Each flow event
Process Plant ROM Pad Sediment Dam 2	302905	7798900	Each flow event
Process Plant ROM Pad Sediment Dam 3	302771	7799010	Each flow event
Lady Annie Sediment Dam	295307	7811464	Each flow event

NOTE: This does not apply to dams containing hazardous waste.

Schedule C - Table 5 (End of pipe contaminant release limits)

Parameter	Units	Minimum	Maximum	Limit Type
pH	pH	6	9	Range
TDS	mg/L	N/A	4000	Maximum
Sulphate	mg/L	N/A	1000	Maximum
Arsenic	mg/L	N/A	5	Maximum
Cadmium	mg/L	N/A	0.01	Maximum
Chromium	mg/L	N/A	1	Maximum
Cobalt	mg/L	N/A	1	Maximum
Copper	mg/L	N/A	1	Maximum
Lead	mg/L	N/A	0.1	Maximum
Mercury	mg/L	N/A	0.002	Maximum
Zinc	mg/L	N/A	20	Maximum

Contaminant limits based on ANZECC (2000) Livestock drinking water quality and are analysed as Total metals (unfiltered)
NOTE: This does not apply to dams containing hazardous waste.

FOR DL RELEASE DNRM

Dams Containing Hazardous Waste

(C1-4) Water storages containing process water and storm water contaminated by mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 6 and Schedule I - Map 6 and samples analysed for the parameters defined in Schedule C - Table 7.

GM 5/10/07

Released

Schedule C - Table 6 (Water Storage Monitoring Locations of Hazardous Dams)

Monitoring point	Easting (Zone 54, AMG 84)	Northing (Zone 54, AMG 84)	Monitoring frequency
PLS Ponds	302000	7797450	Annually, March
ILS Pond	301900	7797450	Annually, March
Raffinate Pond Pre-Settler	301850	7797450	Annually, March
Raffinate Pond	301800	7797450	Annually, March
Storm water Pond 1	301750	7797450	Annually, March
Storm water Pond 2	301750	7797350	Annually, March

(C1-5) In the event that the water quality within any dam containing hazardous waste does not comply with the contaminant limits defined in Schedule C - Table 7, implement measures to prevent access by all livestock and minimise access by fauna to the dam.

Schedule C - Table 7 (Water Quality Limits for Dams Containing Hazardous Waste)

Parameter	Units	Contaminant Limit	Limit Type
pH	pH	4-9	Range
TDS	mg/L	5,000	Maximum
Boron	mg/L	5	Maximum
Sulphate	mg/L	1000	Maximum
Aluminum	mg/L	5	Maximum
Arsenic	mg/L	0.5	Maximum
Cobalt	mg/L	1	Maximum
Copper	mg/L	1	Maximum
Lead	mg/L	0.1	Maximum
Nickel	mg/L	1	Maximum
Zinc	mg/L	20	Maximum

Contaminant limits based on ANZECC (2000 Livestock drinking water quality and are analysed as total metals (unfiltered).)

(C1-6) The design storage allowance on 1 November of each year for any dam containing hazardous w constructed or operated within the operational land must comply with Schedule C - Table 8.

Schedule C - Table 8 (Storage Design for Dams Containing Hazardous Waste)

Storage Type	Design Storage Allowance (1)	Spillway Critical Design Storm (2)	Mandatory Reporting Level (3)
Stormwater Pond 1	1: 100 Year ARI 2 month wet season plus process inputs for the 2 month wet season	1: 1000 Year ARI	1: 100 year ARI
Stormwater Pond 2	1: 100 Year ARI 2 month wet season plus process inputs for the 2 month wet season	1: 1000 Year ARI	1: 100 year ARI

Note (1): The design storage allowance on 1 November of each year for any dam containing hazardous waste constructed within the operational land must be equivalent to the run-off from a 1 in 100 ARI 2 month wet season plus process inputs for the equivalent wet season. Process inputs refers to hazardous mineral process waste and water, which is being disposed of in the storage facility.

Note (2): The critical design storm has a duration that produces the peak discharge for the catchments.

Note (3): The mandatory reporting level refers to the volume below the spillway crest, either the 1: 100 ARI 72 hour storm or the 1:100 ARI wave allowance, whichever is lower.

(C1-7) The spillway for any dam containing hazardous waste, constructed or operated within the operational land must be designed and maintained to withstand the peak flow from the spillway critical design storm defined in Schedule C - Table 8.

GM 5/10/07

RTI DE RELEASE - DNRM

Released

(C1-8) The holder of the environmental authority must mark the mandatory reporting level defined in Schedule C - Table 8 on the spillway of all dams containing hazardous waste within the operational land.

(C1-9) The holder of the environmental authority must notify the administering authority when the pondage level of the dam containing hazardous waste, reaches the mandatory reporting level defined in Schedule C - Table 8.

Stream Sediment Contaminant Levels

(C2-1) All reasonable and practicable erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.

(C2-2) The bed of the receiving waters, affected by the release of process water and storm water contaminated by the mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 9 and Schedule I – Map 7 & 8.

Schedule C - Table 9 (Receiving Stream Sediment Monitoring Locations and Frequency)

Monitoring point	Easting (AGD 84 Zone 54)	Northing (AGD 84 Zone 54)	Monitoring frequency
MKUS 1- reference site *	305625	7797450	May each year
MKUS 2- reference site*	300451	7793920	May each year
MKDS 1- test site	301160	7800135	May each year
MKDS 2- test site	306046	7800375	May each year
MKDS 3- test site	306370	7798363	May each year
MKDS 4- test site	301300	7797255	May each year
LA- US1- reference site*	295150	7812680	May each year
LA- US2- reference site*	295750	7812480	May each year
LA- DS1- test site	294000	7810100	May each year
LA- DS2- test site	295500	7810400	May each year

NOTE: This does not apply to dams containing hazardous waste
**Reference sites must:*

a) *be from the same biogeographical and climatic region;*
b) *have similar geology, soil types and topography*
c) *contain a range of habitats similar to those at the test site*
d) *be of similar flow regime; and*
e) *not be so close to the test sites that any disturbances at the test site also result in a change at the reference site.*

(C2-3) Subject to Condition (C2-2), if the stream sediment contaminant trigger levels defined in Schedule C - Table 10 are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within 3 months of receiving the analysis results.

RTI RELEASE - DNRM

Gm 5/10/07

Released

Schedule C - Table 10 (Receiving Stream Sediment Contaminant Trigger Levels)

Parameter	Units	Contaminant trigger levels	Trigger Type
Antimony[1]	mg/kg dry wt	2	Maximum
Arsenic[1]	mg/kg dry wt	20	Maximum
Cadmium[1]	mg/kg dry wt	1.5	Maximum
Chromium[1]	mg/kg dry wt	80	Maximum
Copper[2]	mg/kg dry wt	100	Maximum
Copper[3]	mg/kg dry wt	400	Maximum
Lead[1]	mg/kg dry wt	50	Maximum
Nickel[1]	mg/kg dry wt	21	Maximum
Silver[1]	mg/kg dry wt	1	Maximum
Mercury[1]	mg/kg dry wt	0.15	Maximum
Zinc[1]	mg/kg dry wt	200	Maximum

[1] ANZECC (2000): ISQG Low trigger values, Sediment Quality Guidelines, Aquatic Ecosystems, Table 3.5.1.
[2] Site specific trigger value as calculated in section 3.7 of EM Plan September 2006 is for the Mount Kelly Leases only. (ML 5426, ML 5478, ML90168, ML90169, ML90170, ML90178, ML 5435, ML 5446, ML 5447, ML 5448, ML 5474 and ML 5476.)
[3] This limit is set for the Lady Annie Lease only (ML90179).

(C2-4) Subject to Condition (C2-2), stream sediment contaminant limits must not exceed the contaminant limits defined in Schedule C - Table 11.

Schedule C - Table 11 (Receiving Stream Sediment Contaminant Limits)

Parameter	Units	Contaminant limits	Limit Type
Antimony[1]	mg/kg dry wt	25	Maximum
Arsenic[1]	mg/kg dry wt	70	Maximum
Cadmium[1]	mg/kg dry wt	10	Maximum
Chromium[1]	mg/kg dry wt	370	Maximum
Copper[2]	mg/kg dry wt	120	Maximum
Copper[3]	mg/kg dry wt	500	Maximum
Lead[1]	mg/kg dry wt	220	Maximum
Nickel[1]	mg/kg dry wt	52	Maximum
Silver[1]	mg/kg dry wt	3.7	Maximum
Mercury[1]	mg/kg dry wt	1	Maximum
Zinc[1]	mg/kg dry wt	410	Maximum

[1] ANZECC (2000): ISQG High trigger values, Sediment Quality Guidelines, Aquatic Ecosystems, Table 3.5.1.
[2] Site specific trigger value as calculated in section 3.6 of EM Plan July 2006 is for the Mount Kelly Leases only. (ML 5426, ML 5478, ML90168, ML90169, ML90170, ML90178, ML 5435, ML 5446, ML 5447, ML 5448, ML 5474 and ML 5476.)
[3] This limit is set for the Lady Annie Lease only (ML90179).

(C2-5) All stream sediment sampling must be undertaken in accordance with AS 5667.1 Guidance on Sampling of Bottom Sediments of 1998

RTI DI RELEASE - DNRM

GM 5/10/07

Released

Sewage effluent

(C3-1) All effluent released from the treatment plant must be monitored at the frequency and for the parameters specified in Schedule C - Table 12.

(C3-2) Sewage effluent used for dust suppression must not exceed sewage effluent release limits defined in Schedule C - Table 12.

(C3-3) Sewage Effluent used for dust suppression must not cause spray drift or over spray to any sensitive or commercial place, and must not be applied at a rate that causes pooling, ponding and/or runoff of any effluent irrigated.

(C3-4) Subject to Conditions (C3-1) to (C3-3) inclusive, sewage effluent from sewage treatment facilities must be reused or evaporated and must not be directly released from the sewage treatment plant to any water way or drainage line other than in accordance with Schedule C - Table 12.

Schedule C - Table 12 (Sewage effluent quality targets for dust suppression)

	Release Limit [3]			Monitoring Frequency
Quality characteristics	Minimum	Median	Maximum	
pH (pH Units)	6[2]		8.5[2]	Quarterly
Faecal Coliforms (organisms/100mL)		1000[1]		Quarterly

[1] A minimum of five samples must be collected at not less than a weekly interval for the quarterly sampling
[2] A minimum of five samples must be collected at not less than a weekly interval for the quarterly sampling with four out of five samples must be less than the maximum
[3] A minimum of five samples must be collected at not less than a weekly interval for the quarterly sampling with four out of five samples must be higher than the minimum but lower than the maximum limit.
Release limits sourced from Queensland Water Recycling Guidelines December 2005 Table 6:2b

RTI DL RELEASE DNRM

Released

Groundwater

(C4-1) Groundwater, affected by the mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 13 and Schedule I – Map 9 & 10.

Schedule C - Table 13 (Groundwater Monitoring Locations and Frequency)

Monitoring point	Easting (AGD 84 Zone 54)	Northings (AGD 84 Zone 54)	Surface RL	Monitoring frequency
LA MB01 (Process Plant) - reference site	302484	7796800	TBD	Monthly
LA MB02 (Process Plant) - reference site	302891	7797385	TBD	Monthly
LA MB03 (Process Plant) - reference site	302128	7797950	TBD	Monthly
LA MB04 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB05 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB06 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB07 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB08 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB09 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB010 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB011 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB012 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB013 (Process Plant)	TBD	TBD	TBD	Monthly
LA MB014 (Process Plant)	TBD	TBD	TBD	Monthly
MK MB01 (Mount Kelly pit area)	305360	7799013	315.467	Quarterly
MK PB01 (Mount Kelly pit area)	305356	7799019	315.424	Quarterly
LA - TB07 (Lady Annie pit area)	295790	7812280	TBD	Quarterly
LA - TB08 (Lady Annie pit area)	295855	7812247	TBD	Quarterly
LA - TB09 (Lady Annie pit area)	295770	7812179	TBD	Quarterly
LA - TB010 (Lady Annie pit area)	295194	7812022	TBD	Quarterly
LA - TB011 (Lady Annie pit area)	295205	7811904	TBD	Quarterly
LA - TB012 (Lady Annie pit area)	295124	7811933	TBD	Quarterly

PUBL RELEASE - DNRM

NOTE: This does not apply to dams containing hazardous waste
TBD- To be determined
Reference sites must:

a) *be from the same biogeographical and climatic region;*
b) *have similar geology, soil types and topography*
c) *contain a range of habitats similar to those at the test site*
d) *be of similar flow regime; and not be so close to the test sites that any disturbances at the test site also result in a change at the reference site.*

(C4-2) Subject to Condition (C4-1), if the groundwater contaminant trigger levels defined in Schedule C - Table 14 are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within 3 **months** of receiving the analysis results.

cm 5/10/07

Released

Schedule C - Table 14 (Groundwater Contaminant Trigger Levels)

Parameter	Units	Minimum	Maximum	Trigger type
pH[1]	pH	6	8	Range
TDS[2]	mg/L	N/A	2000	Maximum
Sulphate [2]	mg/L	N/A	500	Maximum
Aluminium[2]	mg/L	N/A	2.5	Maximum
Arsenic[2]	mg/L	N/A	0.25	Maximum
Boron[2]	mg/L	N/A	0.37	Maximum
Cadmium[2]	mg/L	N/A	0.005	Maximum
Chromium[2]	mg/L	N/A	0.5	Maximum
Cobalt[2]	mg/L	N/A	0.5	Maximum
Copper[2]	mg/L	N/A	0.5	Maximum
Fluoride[2]	mg/L	N/A	1	Maximum
Lead[2]	mg/L	N/A	0.05	Maximum
Manganese[3]	mg/L	N/A	1.9	Maximum
Mercury[2]	mg/L	N/A	0.001	Maximum
Molybdenum[2]	mg/L	N/A	0.075	Maximum
Nickel[2]	mg/L	N/A	0.5	Maximum
Selenium[2]	mg/L	N/A	0.01	Maximum
Zinc[2]	mg/L	N/A	10	Maximum

[1] Contaminant triggers limits are based on Table 3.3.4 and 3.3.5 of Aquatic Ecosystems ANZECC (2000)
[2] Contaminant trigger limits are based on 50% of the contaminant limits defined in the ANZECC (2000) Livestock Drinking Water and are to be analysed as total metals (unfiltered).
[3] Contaminant trigger limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) and are analysed as Filtered Metals

(C4-3) Subject to Condition (C4-1), groundwater contaminant limits must not exceed the contaminant limits defined in Schedule C – Table 15.

RTI DL RELEASE - DNRM

Released

Schedule C – Table 15 (Groundwater Contaminant Limits)

Parameter	Units	Minimum	Maximum	Limit Type
pH[1]	pH	6	9	Range
TDS[1]	mg/L	N/A	4000	Maximum
Sulphate[1]	mg/L	N/A	1000	Maximum
Aluminum[1]	mg/L	N/A	5	Maximum
Arsenic[1]	mg/L	N/A	0.5	Maximum
Boron[1]	mg/L	N/A	5	Maximum
Cadmium[1]	mg/L	N/A	0.01	Maximum
Chromium[1]	mg/L	N/A	1	Maximum
Cobalt[1]	mg/L	N/A	1	Maximum
Copper[1]	mg/L	N/A	1	Maximum
Fluoride[1]	mg/L	N/A	2	Maximum
Lead[1]	mg/L	N/A	0.1	Maximum
Manganese[2]	mg/L	N/A	2.5	Maximum
Mercury[1]	mg/L	N/A	0.002	Maximum
Molybdenum[1]	mg/L	N/A	0.15	Maximum
Nickel[1]	mg/L	N/A	1	Maximum
Selenium[1]	mg/L	N/A	0.02	Maximum
Zinc[1]	mg/L	N/A	20	Maximum

[1] Contaminant limits based on ANZECC (2000) Livestock drinking water quality and are analysed as Total Metals (unfiltered)
[2] Contaminant limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) and are analysed as Filtered Metals.

(C4-4) The method of water sampling required by this environmental authority must comply with that set out in the latest edition of the Environmental Protection Agency's Water Quality Sampling Manual.

Voids

(C5-1) Water quality in mining voids and final voids must be monitored at the locations and frequencies defined in Schedule C - Table 16 and for the parameters detailed in Schedule C – Table 17.

(C5-2) In the event that water quality within the mining voids or final voids does not comply with the contaminant limits defined in Schedule C – Table 17, implement measures to prevent access by all livestock and minimise access by fauna to the void.

Schedule C - Table 16 (Voids Monitoring Locations and Frequency)

Monitoring point	Monitoring frequency
Mount Kelly/Flying Horse Pit	Annually
Mount Clarke Pit	Annually
Lady Annie Pit	Annually

FINAL RELEASE - DNRM

Released

Schedule C - Table 17 (Void Water Quality Limits)

Parameter	Units	Limit	Limit Type
pH	pH	6-9	Range
TDS	mg/L	4000	Maximum
Sulphate	mg/L	1000	Maximum
Arsenic	mg/L	0.5	Maximum
Cadmium	mg/L	0.01	Maximum
Chromium	mg/L	1	Maximum
Copper	mg/L	1	Maximum
Lead	mg/L	0.1	Maximum
Mercury	mg/L	0.002	Maximum
Zinc	mg/L	20	Maximum

Contaminant limits are based on ANZECC (2000 Livestock drinking water quality and analysed for total metals (unfiltered))

Acid Rock Drainage and Leachate Management

(C6-1) Subject to limits defined in Schedule C all reasonable and practicable measures must be implemented to prevent hazardous leachate being directly or indirectly released or likely to be released as a result of the activity to any groundwater, watercourse and waters.

END CONDITIONS FOR SCHEDULE C

RTI DL RELEASE - DNRM

Released

Schedule D - Noise and Vibration

Noise Nuisance

(D1-1) Subject to Conditions (D1-2) and (D1-3) noise from the mining activity must not cause an environmental nuisance to an affected building.

(D1-2) When requested by the administering authority, noise monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(D1-3) The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual.

Vibration nuisance

(D2-1) Subject to Conditions (D2-2) and (D2-3) vibration from the mining activity must not cause an environmental nuisance to an affected building.

(D2-2) When requested by the administering authority, vibration monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

END CONDITIONS FOR SCHEDULE D

Schedule E - Waste

Storage of Tyres

(E1-1) Tyres stored awaiting disposal or transport for take-back and, recycling, or waste-to-energy options - should be stockpiled in volumes less than 3m in height and 200m^2 in area and at least 10m from any other tyre storage area.

(E1-2) All reasonable and practicable fire prevention measures must be implemented, including removal of grass and other materials within a 10m radius of the scrap tyre storage area.

Disposal of Tyres

(E2-1) Disposing of scrap tyres resulting from the mining activities in spoil emplacements is acceptable, provided tyres are placed as deep in the spoil as reasonably practicable.

(E2-2) Scrap tyres resulting from the mining activities disposed within the operational land must not impede saturated aquifers or compromise the stability of the consolidated landform.

Waste Management

(E3-1) A Waste Management Program, in accordance with the Environmental Protection (Waste Management) Policy 2000, must be included in the Plan of Operations.

RELEASED DNRM

GM 5/10/07

Released

Regulated Waste

(E 4-1) All regulated waste received and removed from the site that is over 250kg in weight, must be transported by a person who holds a current authority to transport such waste under the provisions of the *Environmental Protection Act 1994.*

(E4-2) Except as otherwise provided by the conditions of this authority, all waste removed from the site must be taken to a facility that is lawfully allowed to accept such waste under the provisions of the *Environmental Protection Act 1994.*

(E4-3) Where regulated waste is removed from the Project (other than by a release as permitted under another schedule of this environmental authority), records must be kept of the following:

a) the date, quantity and type of waste removed; and
b) name of the waste transporter that removed the waste; and
c) the intended treatment/disposal destination of the waste.

Note: Records of documents maintained in compliance with a waste tracking system established under the Environmental Protection Act 1994 or any other law for regulated waste will be deemed to satisfy this condition.

Waste Rock Characterisation

(E5-1) All areas to be mined must undergo a waste rock characterisation survey (where waste rock is to be disposed of on the surface) and a report submitted to the administering authority prior to mining where this survey has not previously been carried out.

END CONDITIONS FOR SCHEDULE E

RTI DL RELEASE - DNRM

Released

12-513
File D Part 1
Page 152 of 249
Released

Schedule F - Land

Rehabilitation Landform Criteria

(F1-1) All areas significantly disturbed by mining activities must be rehabilitated to a stable landform with a self-sustaining vegetation cover in accordance with Schedule F – Table 1 and 2.

RTI DISCLOSURE - UNRM

Schedule F - Table 1 (Final Land Use and Rehabilitation Approval Schedule)

Disturbance Category	Max. Area (ha)	Land Use		Land Capability		Reference Site	
		PRE DISTURBANCE	POST DISTURBANCE	PRE DISTURBANCE	POST DISTURBANCE	Longitude	Latitude
Mount Kelly Mining Lease & Infrastructure							
Mount Kelly/Flying Horse Pit	13.2	Habitat	Water Storage	Class 5	Water Storage		
Mount Kelly/Flying Horse Waste Rock Dump	28	Habitat	Habitat	Class 5	Class 5	Hilltop	
						304745	7799087
						Mid Slope	
						304800	7798974
						Bottom Slope	
						304851	7798977
Mount Kelly/Flying Horse Topsoil Stockpile	1.1	Habitat	Habitat	Class 5	Class 5	304851	7798977
Mount Kelly/Flying Horse Sediment Dams	1.3	Habitat	Water Storage	Class 5	Water Storage		
Mount Kelly/Flying Horse Diversion Drains	1.3	Habitat	LIG or diversion Habitat	Class 5	Class 5	304851	7798977
Mount Clarke Pit	9.5	Habitat	Water Storage	Class 5	Water Storage		
Mount Clarke Waste Rock Dump	16.3	Habitat/LIG	Habitat/LIG	Class 4 - 5	Class 4 -5	Hilltop	
						305806	7799695
						Mid Slope	
						305760	7799718
						Bottom Slope	
						305741	7799750
Mount Clarke Low Grade Stockpile	5.4	Habitat/LIG	Habitat/LIG	Class 4 - 5	Class 4 - 5	305741	7799750
Mount Clarke/Flying Horse/Mount Kelly ROM Storage & Live Rehandle	5.5	Habitat	Habitat/LIG	Class 4 - 5	Class 4 - 5	302766	7799144

12-513

File D Part 1

Page 153 of 249

Disturbance Category	Max. Area	Land Use		Land Capability		Reference Site	
Mount Clarke Topsoil Stockpile	4.5	Habitat/LIG	Habitat/LIG	Class 4 - 5	Class 4 - 5	305741	7799750
Mount Clarke Pit Area Sediment Dam	0.6	Habitat	Water Storage	Class 4 - 5	Water Storage		
Mount Clarke ROM Area Sediment Dam	0.4	Habitat	Water Storage	Class 4 - 5	Water Storage		
Mount Clarke – Diversion/Interception/Sediment Dam Drains	3.2	Habitat	LIG or diversion Habitat	Class 4 - 5	Class 4 - 5	305741	7799750
Roads/Tracks	18.8	Existing tracks or LIG	Tracks for grazier or LIG	Class 4 - 5	Class 4 - 5	303422	7797704
Accommodation Camp and Facilities	5	LIG	LIG	Class 4	Class 4	303422	7797704
Sewage Plant and Pond	0.2	LIG	LIG	Class 4	Class 4	303422	7797704
ROM Pad – at process plant	7.8	LIG	LIG	Class 4 - 5	Class 4 -5	302766	7799144
Process plant and associated buildings	3.3	LIG	LIG	Class 4	Class 4	302766	7799144
Overland Conveyor	1.8					303422	7797704
Workshop/Office Access Circuit Area	2.9	LIG	LIG	Class 4	Class 4	302659	7797575
Heap Leach Pads – Stage 1 and 2	43.2	LIG	Habitat/LIG	Class 4	Class 4- 5	302659	7797575
Process Water Ponds – PLS, ILS and Raffinate	3.4	LIG	Water storages	Class 4	Water storages		
Stormwater Ponds 1 and 2	11.4	LIG	Water storages	Class 4	Water storages		
Stormwater Pond spillway channel	0.7	LIG	LIG or diversion	Class 4	Class 4 -5	302659	7797575
Raw Water Pond	0.6	LIG	LIG/Water storage	Class 4	Class 4 or water storage	302659	7797575
Process Area Topsoil Stockpiles	9.7	LIG	LIG	Class 4	Class 4	302659	7797575
Process Plant Drainage Diversions	2.7	LIG	LIG or diversion	Class 4	Class 4 - 5	302659	7797575
Process Plant Sediment Ponds	1	LIG	LIG or ponds	Class 4 - 5	Class 4 - 5		
Bulk Fill Stockpile	2.6	LIG	LIG	Class 4	Class 4	302659	7797575
Pipelines and Powerlines (on Mt Kelly MLs)	1	LIG/Habitat	Permanent infrastructure	Class 4 - 5	Permanent infrastructure		
Pipelines and Power lines on ML90178	83	LIG/Habitat	Permanent infrastructure	Class 4 - 5	Permanent infrastructure		

RTI RELEASE DNRM

Released

Disturbance Category	Max. Area	Land Use		Land Capability		Reference Site	
Pipeline and Power line on Birla MLT	9	LIG/Habitat	Permanent Infrastructure	Class 4 - 5	Permanent Infrastructure		
Rubbish Dumps	0.2	LIG	LIG	Class 4 - 5	Class 4 - 5	303422	7797704
Concrete Batch Plant	0.3	LIG	LIG	Class 4	Class 4	302659	7797575
Fuel Storage Area	0.3	LIG	LIG	Class 4	Class 4	302659	7797575
Contractor Laydown Area	4.3	LIG	LIG	Class 4	Class 4	302659	7797575
Exploration	5	LIG	LIG/Habitat	Class 4 - 5	Class 4 - 5	303422	7797704
Construction Access (net of specific areas)	59.9	LIG	LIG/Habitat	Class 4 - 5	Class 4 - 5	303422	7797704
Gravel Borrow Pits (on and off ML)	6.7	LIG/Habitat	LIG/Habitat	Class 4 - 5	Class 4 - 5	303422	7797704
Upgrade to Access Road (off ML)	2.0	LIG/Habitat	Permanent access road for landholder	Class 4 - 5	Permanent access road for landholder		
Total	**377.1**						
Lady Annie Mining Lease							
Lady Annie Pit	36.1	Disturbed	Water Storage	Class 5	Water Storage		
ROM pad	1.5	LIG	LIG/Habitat	Class 4	Class 4	295496	7810802
Waste Rock Dump	61.8	LIG	LIG/Habitat	Class 4 - 5	Class 4	295496	7810802
Top Soil Stores	12.1	LIG	LIG/Habitat	Class 4 - 5	Class 4	295496	7810802
Low Grade Ore Stockpile	9.5	LIG	LIG/Habitat	Class 4	Class 4	295496	7810802
Sediment Pond	1.9	LIG	LIG/Habitat	Class 4	Water Storage		
Retention Basin	0.4	LIG/Habitat	LIG/Habitat	Class 4-5	Water Storage		
Pit Haul Road	1.3	LIG/Habitat	LIG/Habitat	Class 4-5	Class 4-5	295496	7810802
Diversion Channels	1.7	LIG/Habitat	LIG/Habitat	Class 4-5	Permanent Diversion		
Lady Annie Mine Construction Area (net of specific areas)	22.3	LIG/Habitat	LIG/Habitat	Class 4-5	Class 4-5	295496	7810802
Upgrade to Haul / Access Road (off ML)	14.0	LIG/Habitat	Permanent access road for landholder	Class 4-5	Permanent access road for landholder		
Old Open Cut and Sanderson's Shaft	0.3	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Old Tailings Areas	1.0	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802

RTI DL RELEASED DPM

12-513
File D Part 1
Page 154 of 249
Released

12-513
File D Part 1
Page 155 of 249
Released

Disturbance Category	Max. Area	Land Use		Land Capability		Reference Site	
Exploration Tracks and Drill Pads	12.4	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Rubbish Tip	0.4	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Core Shed	0.3	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Exploration Sample Yard	0.6	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Total	**177.6**						

LIG- Low Intensity Grazing
Classes are derived from the Department of Minerals and Energy's Land Suitability Assessment Techniques (1995)

(F1-2) Progressive rehabilitation must commence when areas become available within the operational land.

(F1-3) Complete an investigation into rehabilitation of disturbed areas and submit a report to the administering authority proposing acceptance criteria to meet the outcomes in Schedule F - Table 1 and landform design criteria in Schedule F - Table 2 by **30 June 2007**

(F1-4) The holder of this environmental authority must rehabilitate all existing land disturbances located within the boundary leases of ML90179 (Lady Annie) as identified in Table 1. The holder of this environmental authority must ensure these areas of existing land disturbance, where not otherwise disturbed and rehabilitated under this authority, are rehabilitated to the final land descriptions identified in Tables 1 and 2.

FINAL RELEASE DNRM

Schedule F - Table 2 (Landform Design)

Disturbance type	Slope range (%)	Projective surface area (ha)
Waste Rock Dumps	33%-76% (1:3 to angle of repose)	121
Heap Leach Pads	<33% or 1:3	43.2
ROM Pads	33%-76% (1:3 to angle of repose)	14.8

Residual Void Outcome

(F2-1) Residual voids must not cause any serious environmental harm to land, surface waters or any recognised groundwater aquifer, other than the environmental harm constituted by the existence of the residual void itself and subject to any other condition within this environmental authority.

Dams Containing Hazardous Waste

Description of Dam

(F3-1) The construction or operation of any dam containing hazardous waste within the operational land must comply with Schedule F - Table 3.

Schedule F — Table 3 (Size and Purpose of Dams Containing Hazardous Waste)

Name of dam containing hazardous waste [1]	Maximum surface area of dam (ha)	Maximum volume of dam (m^3)	Maximum depth of dam (m) [2]	Purpose of dam [3]
Process Water Ponds (Raffinate Pre-Settler, Raffinate, ILS and PLS)	3.4	53,475	4.5	Storage of Process Solutions
Heap Leach Pads	43.2	N/A	N/A	Storage of Process Solutions
Stormwater Pond 1 (Stage 1 only)	6.47	303,625	6.35	Storage of storm water runoff from processing area
Stormwater Pond 1 & 2 (Stage 2)	10.4	467,720	6.35	Storage of storm water runoff from processing area

Note [1]: The name of the dam containing hazardous waste should refer to the name of the dam e.g. process residue facility and decant dam.

Note [2]: For dams that do not require a dam wall, input the maximum void depth e.g. where dams are formed by excavating below the land surface or backfilling a residual void.

Note [3]: Purpose of the dam should outline the designed function, e.g. "the permanent containment of tailings resu[illegible] from the extraction of nickel, cobalt and other metals at the XYZ Refinery".

RTI RELEASED - DNRM

Released

Location of Dam

(F3-2) The location of any dam containing hazardous waste within the licensed place must be located within the polygonal area defined by the co-ordinates defined in Schedule C- Table 4 –Map 4.

Schedule F — Table 4 (Location of Dams Containing Hazardous Waste)

Name of dam containing hazardous waste	Easting(AMG 84, Zone 54) [3]	Northing (AMG 84, Zone 54) [3]
PLS Ponds, ILS, Raffinate Pre-settler and Raffinate Pond	301760 302065 302035 301760	7797640 7797640 7797310 7797310
Stormwater Pond 1 and 2	301470 301760 301760 301470	7797640 7797640 7797110 7797110
Heap Leach Pads	302065 302720 302720 302065	7797945 7797945 7796825 7796825

Note [1]: A minimum of 3 control points is required to constrain the location of all activities associated with the dam containing hazardous waste. Additional infrastructure which forms part of any dam containing hazardous waste may include appurtenant works consisting of tailings discharge pipelines, seepage collection systems, runoff diversion bunds, containment systems, pressure relief wells, decant and recycle water systems.

Standards and Criteria

(F3-3) The holder of the environmental authority must design, construct, repair, maintain, operate and decommission the dams defined in Schedule F – Table 3 and 4 in accordance with an acknowledged design plan that must comply with the standard environmental conditions in the "Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste".

(F3-4) The holder of the environmental authority must design, construct, and operate all low hazardous dams containing hazardous waste and non-hazardous dams in accordance with the criteria outlined in Appendix B of the Code of Environmental Compliance for Mining Activities.

Inspection of Dams

(F3-5) High hazard dams containing hazardous waste shall be inspected by a Registered Professional Engineer Queensland (RPEQ) prior to 1 November each year or at any time if alarming, unusual or otherwise unsatisfactory conditions are observed.

(F3-6) For each inspection, the engineer shall assess the condition of the dam and its foundations, determine the hydraulic adequacy of the dam and assess the adequacy of the works with respect to dam safety.

(F3-7) For each inspection, two copies of the engineer's report and any recommendations as to measures to be taken to ensure the integrity of the dam shall be furnished to the administering authority within 28 days of the inspection.

Decommissioning of Dam – Objective

(F3-8) Dams containing hazardous waste must not be abandoned and must be decommissioned to a situation where water can no longer be stored in the dams. The dams and their contained waste(s) must be stable, whereafter the dams are no longer dams and they become landforms on the operational land and must comply with the rehabilitation requirements of this environmental authority.

Decommissioning of Dam – Documentation and Compliance

(F3-9) Decommissioning activities for dams must be documented in detail in the plan of operations under which the activities are to occur. Where the detailed documentation is not already contained in the Design Plan for the

Lan 5/10/07

RTNL RELEASE - DNRM

Released

dam, the detailed documentation is considered to be an amendment to the design plan and must be submitted as an amendment to the design plan required by the "Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste".

Infrastructure

(F4-1) All infrastructure, constructed by or for the environmental authority holder during the mining activities including water storage structures, must be removed from the site prior to mining lease surrender, except where agreed in writing by the post mining landowner / holder.

NOTE: This is not applicable where the landowner / holder is also the environmental authority holder.

Contaminated Lands

(F5-1) A register and map of all potentially contaminated sites and any remediation details, must be kept on site, updated regularly, and included in each Plan of Operations.

(F5-2) A Spillage Management Plan and an Emergency Plan for all hazardous materials stored on-site, together wi. description of suitable equipment and training must be updated and included with each Plan of Operations.

END CONDITIONS FOR SCHEDULE F

Schedule G - Community

Complaint Response

(G1-1) All complaints received must be recorded including details of complainant, reasons for the complaint, investigations undertaken, conclusions formed and actions taken. This information must be made available for inspection by the administering authority on request.

END CONDITIONS FOR SCHEDULE G

RTI DL RELEASE - DNRM

Grm 3/10/07

Released

Schedule H – Definitions

"acceptance criteria" means the measures by which the actions implemented to rehabilitate the land are deemed to be complete. The acceptance criteria indicate the success of the rehabilitation outcome or remediation of areas which have been significantly been disturbed by the mining activities. Acceptance criteria may include information regarding:

- vegetation establishment, survival and succession;
- vegetation productivity, sustained growth and structure development;
- fauna colonisation and habitat development;
- ecosystem processes such as soil development and nutrient cycling, and the recolonisation of specific fauna groups such as collembola, mites and termites which are involved in these processes;
- microbiological studies including recolonisation by mycorrhizal fungi, microbial biomass and respiration;
- effects of various establishment treatments such as deep ripping, topsoil handling, seeding and fertiliser application on vegetation growth and development;
- resilience of vegetation to disease, insect attack, drought and fire;
- vegetation water use and effects on ground water levels and catchment yields.

"affected building"

- for noise means any building or any part of a building, for example the building from which the noise is made, at which the noise can be heard.
- for vibration means any building or any part of a building, for example the activity from which the vibration is made, at which the vibration can be felt.

"ambient (or total) noise" at a place, means the level of noise at the place from all sources (near and far), measured as the Leq for an appropriate time interval.

"appropriately qualified person" means any person who conforms to the EPA operational policy for an "appropriately qualified person (analyst)" in accordance with Section 490(7) of the *Environmental Protection Act 1994*.

"ARD" means acid rock drainage and refers to the low pH, high heavy metal pollutant typical of sulphidic mine wastes, and most commonly associated with the production of ferrous iron and sulphuric acid through the oxidation of sulphide minerals.

"authority" means environmental authority (mining activities) under the *Environmental Protection Act 1994*.

"blasting" means the use of explosive materials to fracture-

(a) rock, coal and other minerals for later recovery; or
(b) structural components or other items to facilitate removal from a site or for reuse.

"building" includes a structure of any type and part of a building or structure.

"commercial place" means a work place used as an office or for business or commercial purposes, which is not part of the mining activity and does not include employees accommodation or public roads.

"competent person" means a person with the demonstrated skill and knowledge required to carry out the task to a standard necessary for the reliance upon collected data or protection of the environment.

"dam" means a containment or proposed containment whether permanent or temporary, which is designed to contain, divert or control flowable substances. However this does not include a fabricated or manufactured tank or container designed to a recognised standard.

"design plan" in the context of a dam design is the documentation required under the Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste to describe the physical dimensions of the dam, the materials and standards to be used for construction of the dam, the procedures and criteria to be used for operating the dam and the decommissioning and rehabilitation objectives in terms of procedures, works and outcomes at the end of dam life. The documents can include design and investigation reports, drawings, specifications and certifications.

"environmental authority holder" means the holder of this environmental authority.

"flow event" means a flow event producing sufficient water to permit a monitoring creek bed flow of 30cm or more at the sampling station.

"flowable substance" means matter or mixture of materials which can be forced to or otherwise flow under any conditions possible in a situation. It includes water, other liquids or a mixture that includes water or any other liquid or suspended solids.

RTI DISCLOSURE - DNRM

Cm 5/10/07

Released

"hazardous waste" means any substance, whether liquid, solid or gaseous, derived by or resulting from, the processing of minerals that tends to destroy life or impair or endanger health.

"infrastructure" means water storage dams, roads and tracks, buildings and other structures built for the purpose of mining activities but does not include facilities required for the long term management of mining impacts or the protection of potential resources. Such facilities include dams containing hazardous waste, waste rock dumps, voids, or ore stockpiles and buildings or other structures whose ownership can be transferred and which have a residual beneficial use for the next owner of the operational land or the background land owner.

"$L_{A\ 10,\ adj,\ 10\ mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 10-minute measurement period, using Fast response.

"$L_{A\ 1,\ adj,\ 10\ mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10-minute measurement period, using Fast response.

"$L_{A,\ max\ adj,\ T}$" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.

"land capability" as defined in the DME 1995 Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland.

"land suitability" as defined in the DME 1995 Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland.

"land use" term to describe the selected post mining use of the land, which is planned to occur after the cessation of mining operations.

"leachate" means a liquid that has passed through or emerged from, or is likely to have passed through or emerged from, a material stored, processed or disposed of at the operational land which contains soluble, suspended or miscible contaminants likely to have been derived from the said material.

"mandatory reporting level" means the volume below the spillway crest, equivalent to the lower of the AEP, 72 hour storm or the AEP wave allowance (AEP is the annual exceedence probability).

"mineral" means a substance which normally occurs naturally as part of the earth's crust or is dissolved or suspended in water within or upon the earth's crust and includes a substance which may be extracted from such a substance, and includes—

(a) clay if mined for use for its ceramic properties, kaolin and bentonite;
(b) foundry sand;
(c) hydrocarbons and other substances or matter occurring in association with shale or coal and necessarily mined, extracted, produced or released by or in connection with mining for shale or coal or for the purpose of enhancing the safety of current or future mining operations for coal or the extraction or production of mineral oil therefrom;
(d) limestone if mined for use for its chemical properties;
(e) marble;
(f) mineral oil or gas extracted or produced from shale or coal by in situ processes;
(g) peat;
(h) salt including brine;
(i) shale from which mineral oil may be extracted or produced;
(j) silica, including silica sand, if mined for use for its chemical properties;
(k) rock mined in block or slab form for building or monumental purposes;

but does not include—

(l) living matter;
(m) petroleum within the meaning of the *Petroleum Act 1923*;
(n) soil, sand, gravel or rock (other than rock mined in block or slab form for building or monumental purposes) to be used or to be supplied for use as such, whether intact or in broken form;
(o) water.

"noxious" means harmful or injurious to health or physical well being, other than trivial harm.

"offensive" means causing reasonable offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive, other than trivial harm.

5/10/07

FIELD RELEASE - DNRM

Released

"peak particle velocity (ppv)" means a measure of ground vibration magnitude which is the maximum rate of change of ground displacement with time, usually measured in millimetres/second (mms^{-1}).

"protected area" means - a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

"progressive rehabilitation" means rehabilitation (defined below) undertaken progressively or a staged approach to rehabilitation as mining operations are ongoing.

"reference site" (or analogue site) may reflect the original location, adjacent area or another area where rehabilitation success has been completed for a similar biodiversity. Details of the reference site may be as photographs, computer generated images and vegetation models etc.

"rehabilitation" the process of reshaping and revegetating land to restore it to a stable landform and in accordance with the acceptance criteria set out in this environmental authority and, where relevant, includes remediation of contaminated land.

"representative" means a sample set which covers the variance in monitoring or other data either due to natural changes or operational phases of the mining activities.

"residual void" means an open pit resulting from the removal of ore and/or waste rock which will remain following the cessation of all mining activities and completion of rehabilitation processes.

"self sustaining" means an area of land which has been rehabilitated and has maintained the required acceptance criteria without human intervention for a period nominated by the administering authority.

"sensitive place" means;
- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- an educational institution; or
- a medical center or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public park or gardens.

"significant disturbance" – includes land
(a) if it is contaminated land; or
(b) it has been disturbed and human intervention is needed to rehabilitate it.
   i. to a state required under the relevant environmental authority; or
   ii. if the environmental authority does not require the land to be rehabilitated to a particular state – to its state immediately before the disturbance.

Some examples of disturbed land include:
- areas where soil has been compacted, removed, covered, exposed or stockpiled;
- areas where vegetation has been removed or destroyed to an extent where the land has been made susceptible to erosion; (vegetation & topsoil)
- areas where land use suitability or capability has been diminished;
- areas within a watercourse, waterway, wetland or lake where mining activities occur;
- areas submerged by tailings or hazardous contaminant storage and dam walls in all cases;
- areas under temporary infrastructure. Temporary infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be removed after mining activities have ceased; or
- areas where land has been contaminated and a suitability statement has not been issued.

However, the following areas are not included:
- areas off lease (e.g. roads or tracks which provide access to the mining lease);
- areas previously significantly disturbed which have achieved the rehabilitation outcomes;
- by agreement with the EPA, areas previously significantly disturbed which have not achieved the rehabilitation objective(s) due to circumstances beyond the control of the mine operator (such as climatic conditions);
- areas under permanent infrastructure. Permanent infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be left by agreement with the landowner. The agreement to leave permanent infrastructure must be recorded in the Landowner Agreement and lodged with the EPA;
- disturbances that pre-existed the grant of the tenure unless those areas are disturbed during the term of the tenure.

PRIOR RELEASE - DNRM

Released

"spillway" means passage or outlet from the dam through which surplus water flows.

"stable" means land form dimensions are or will be stable within tolerable limits now and in the foreseeable future. Stability includes consideration of geotechnical stability, settlement and consolidation allowances, bearing capacity (traffic ability), erosion resistance and geochemical stability with respect to seepage and contaminant generation.

"suitably qualified and experienced person" means a person who is a Registered Professional Engineer of Queensland under the provisions of the *Professional Engineers Act 1988* or a Corporate Member of the Institution of Engineers Australia or holds equivalent professional qualifications and has the following:

(a) knowledge of engineering principles related to the structures, geomechanics, hydrology, hydraulics, chemistry and environmental impact of dams; and

(b) at least a total of five years of suitable experience and demonstrated expertise in at least four of the following areas:

- investigation, design of construction of dams;
- operation and maintenance of dams;
- geomechanics with particular emphasis stability, geology and geochemistry;
- hydrology with particular reference to flooding, estimation of extreme storms, water management or meteorology;
- hydraulics with particular reference to sediment transport and deposition, erosion control, beach processes;
- hydrogeology with particular reference to seepage, groundwater,
- solute transport processes and monitoring thereof; or
- dam safety.

"tolerable limits" means that a range of values could be accepted to achieve an overall environmental management objective (eg a range of settlement of a tailing capping could still meet the objective of draining the cap quickly, preventing pondage and limiting infiltration and percolation).

"trivial harm" means environmental harm which is not material or serious environmental harm and will not cause actual or potential loss or damage to property of an amount of, or amounts totalling more than $5,000.

"watercourse" - Means a river, creek or stream in which water flows permanently or intermittently in a visibly defined channel (natural, artificial or artificially improved) with:

(a) continuous bed and banks;
(b) an extended period of flow for some months after rain ceases, and
(c) an adequacy of flow that sustains basic ecological processes and maintains biodiversity.

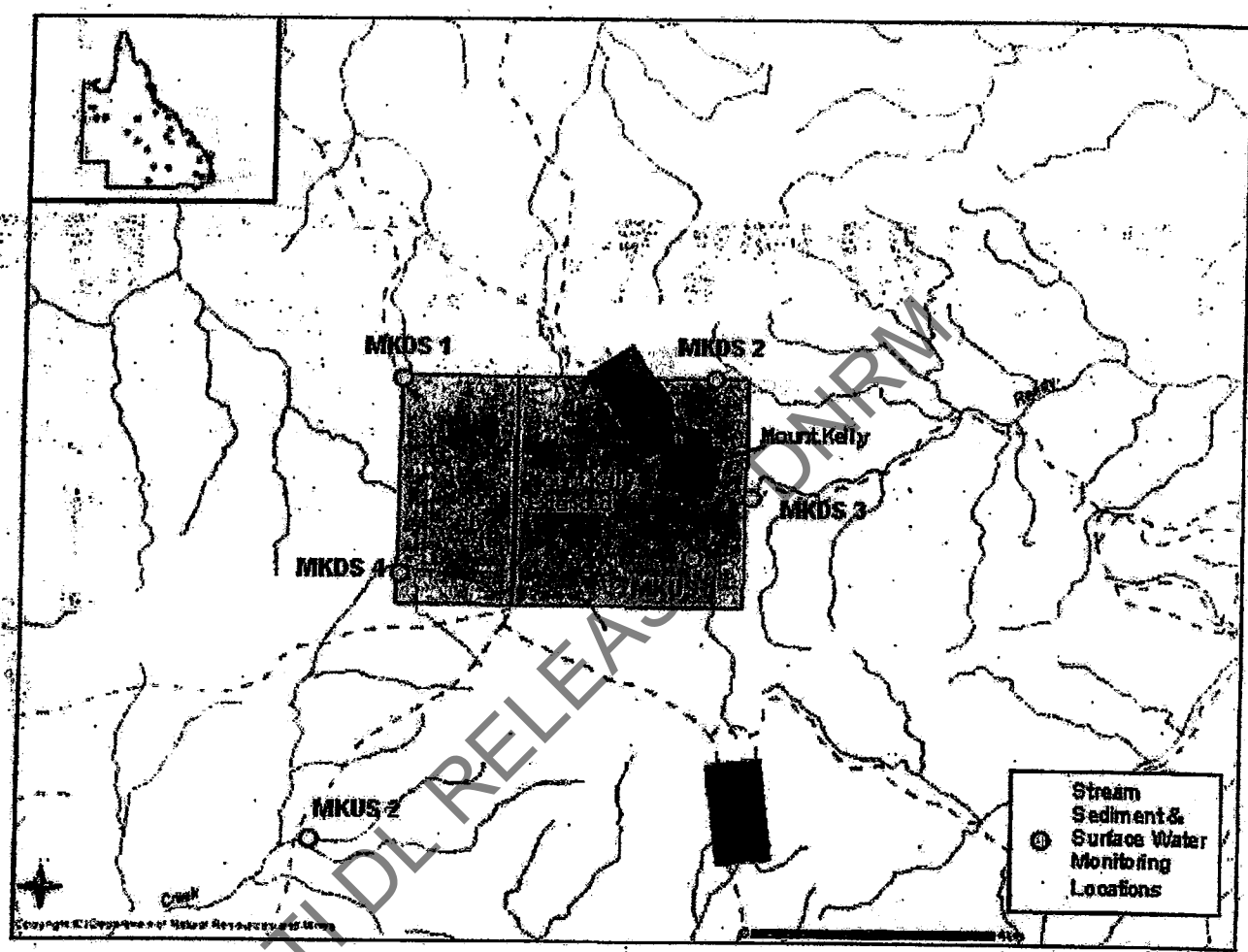
"waters" includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea) or any part-thereof.

END CONDITIONS FOR SCHEDULE H

RTI DE RELEASE DNRM

Released

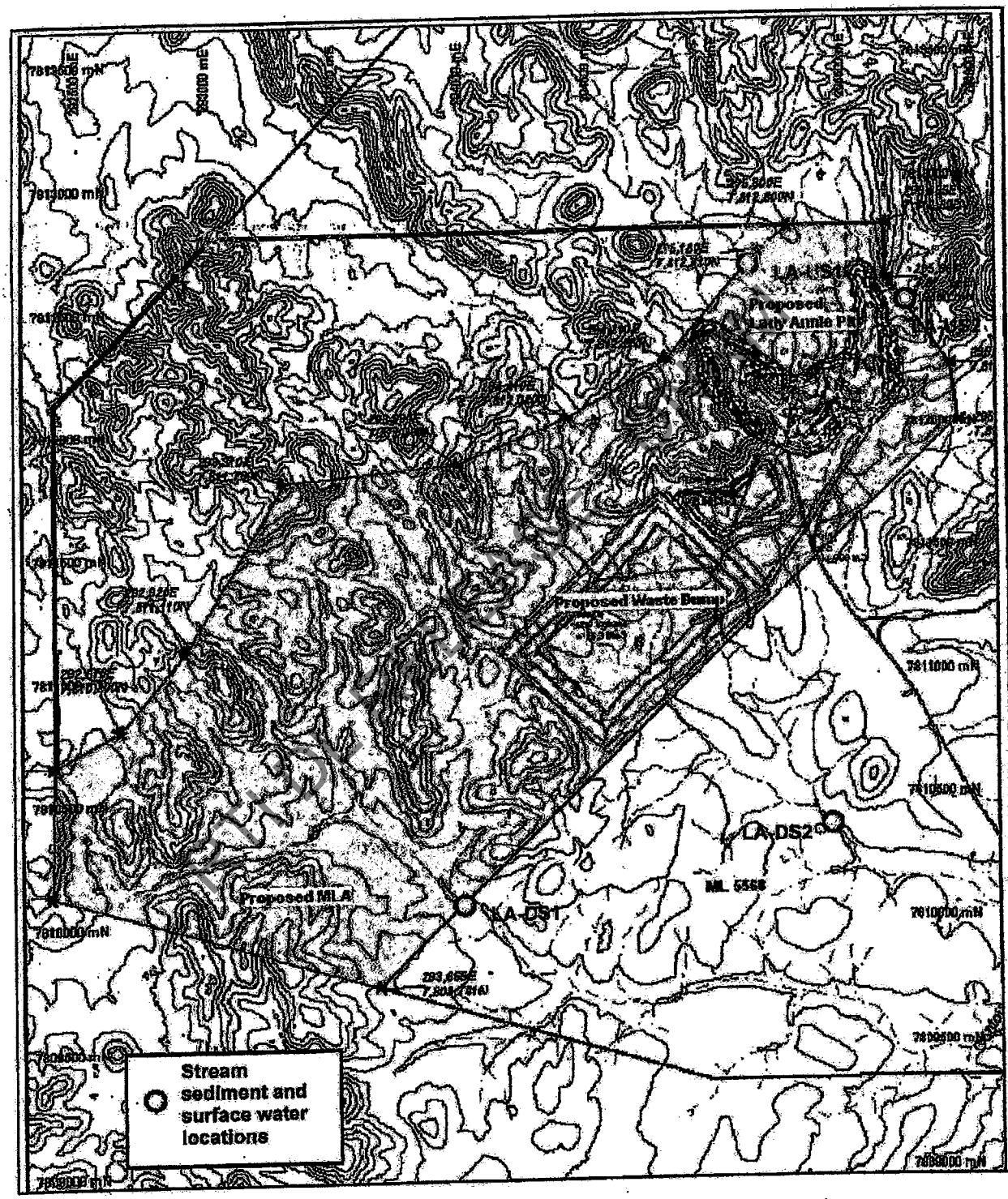
Schedule I - Maps / Plans



Schedule I - Map 1 Receiving Water Monitoring Locations (Mount Kelly Leases)

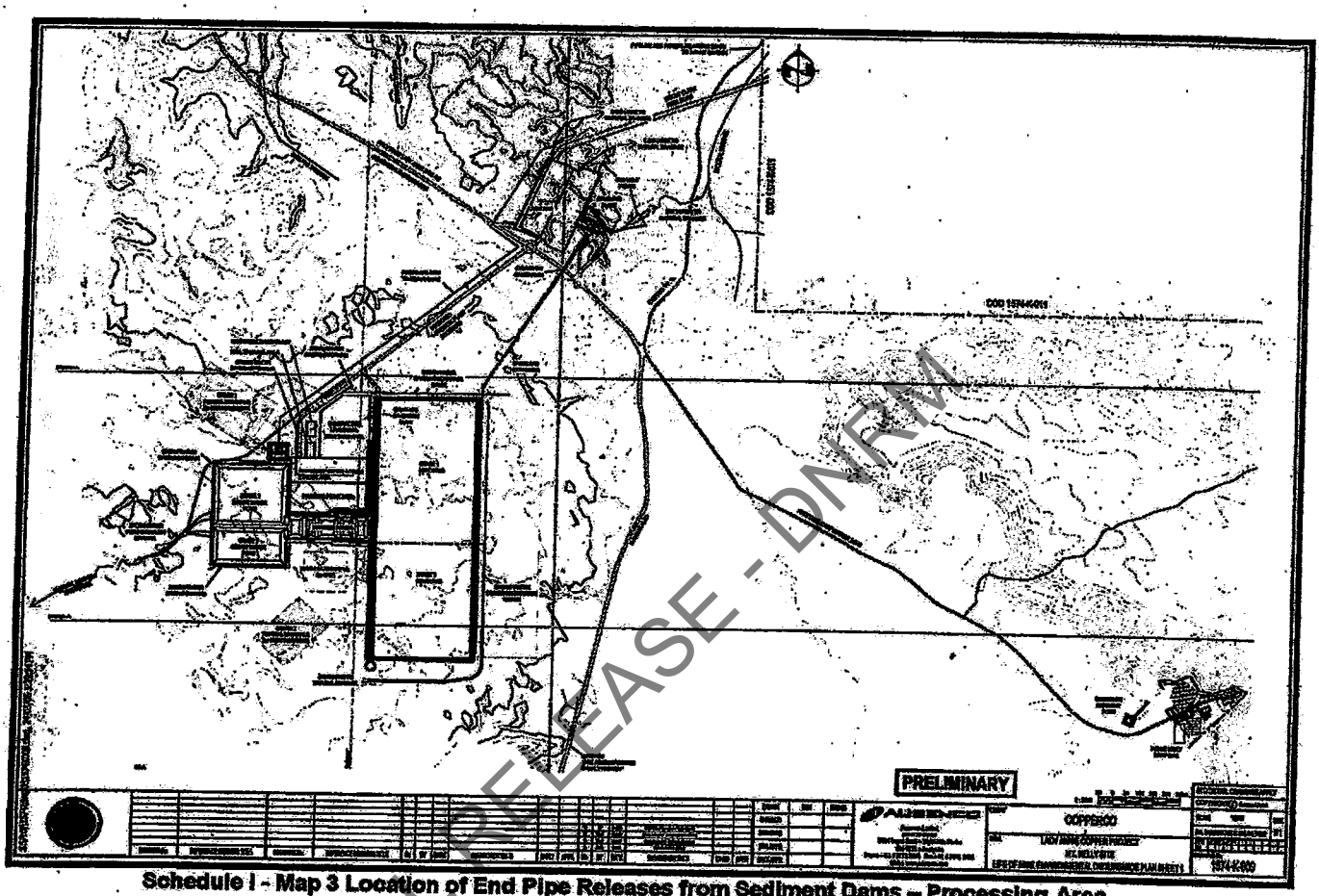
RTI DL RELEASE DNRM

Released



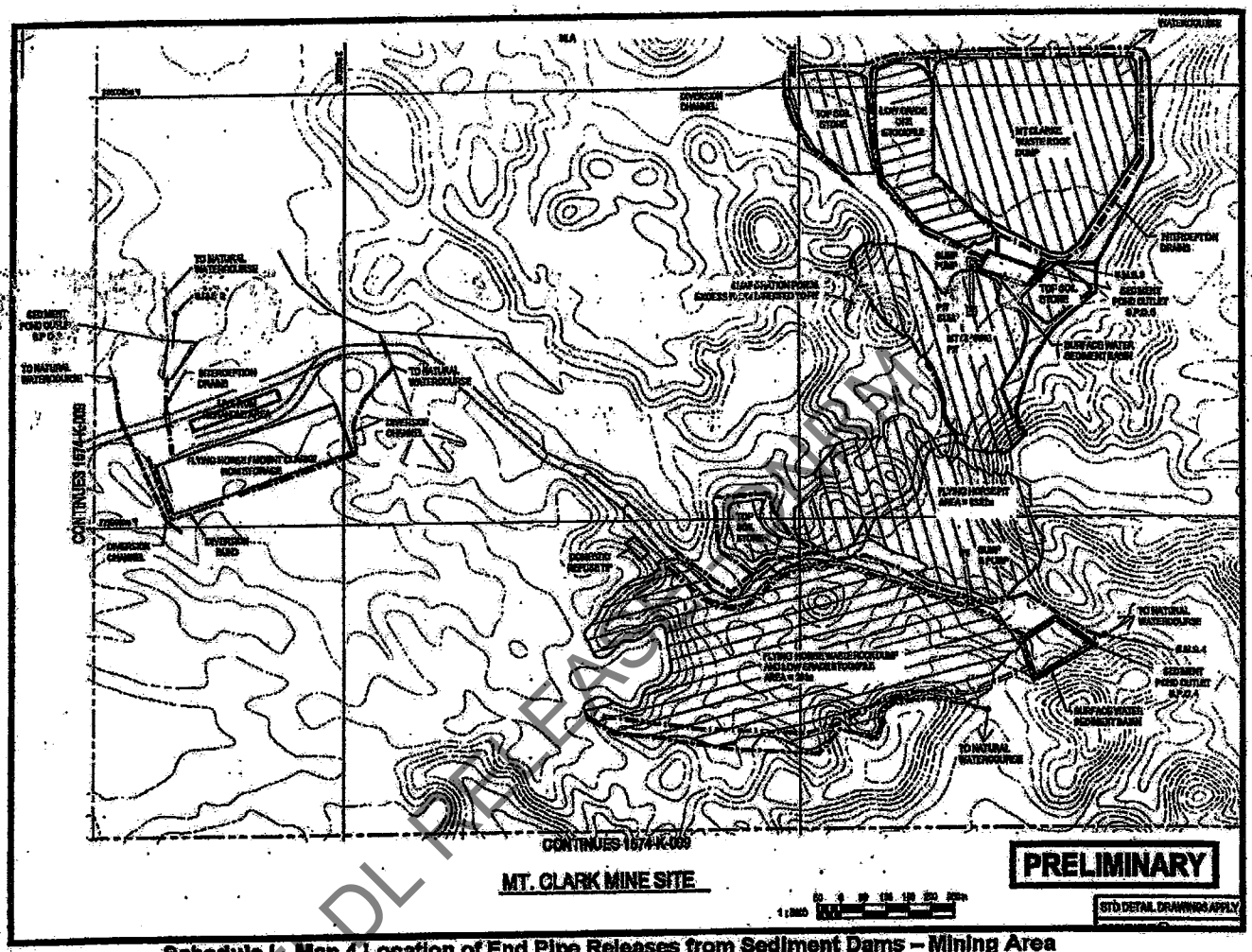
Schedule I - Map 2 Receiving Water Monitoring Locations (Lady Annie)

Released



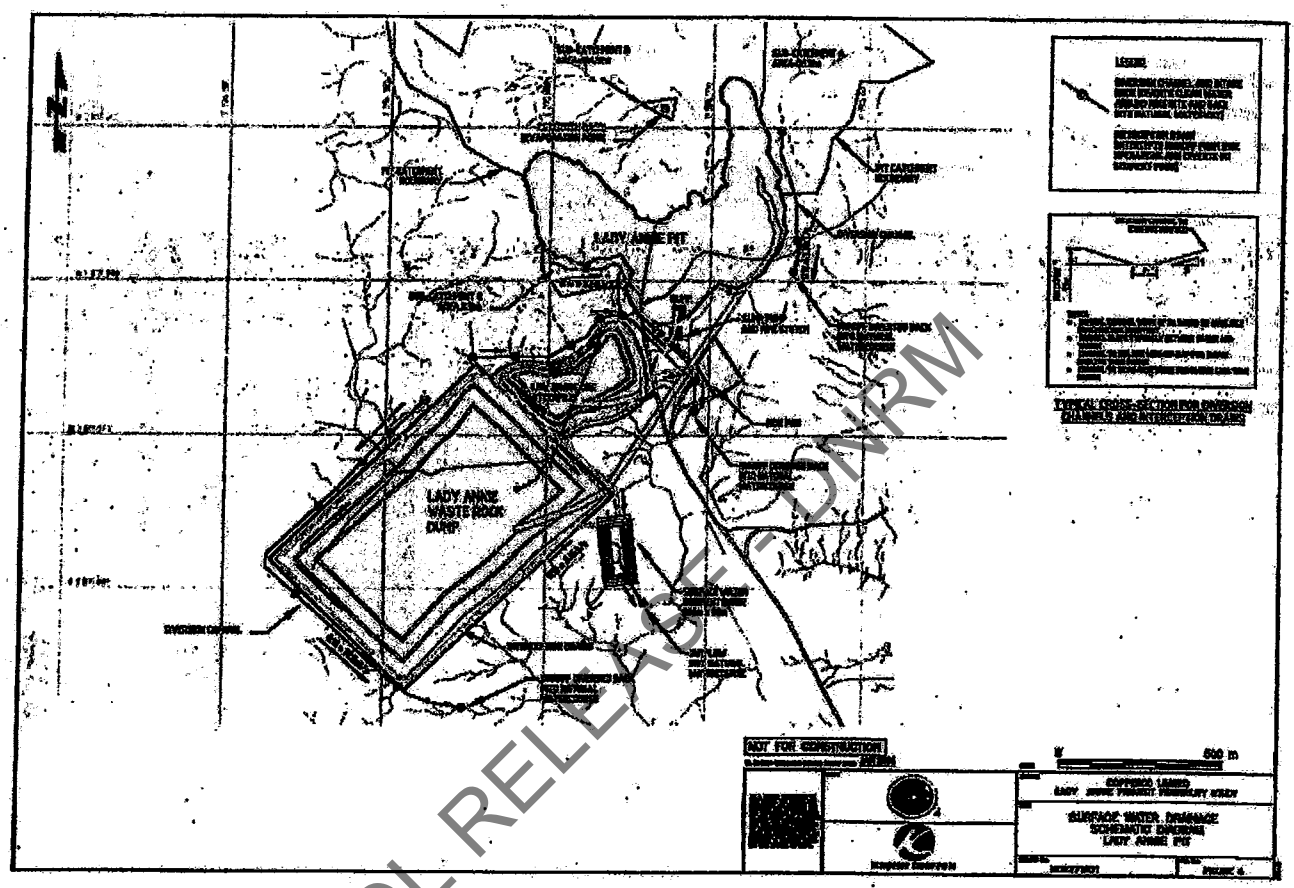
Schedule I - Map 3 Location of End Pipe Releases from Sediment Dams – Processing Area

RTI DISCLOSURE - DNRM



Schedule I - Map 4 Location of End Pipe Releases from Sediment Dams – Mining Area

RTI DL RELEASE

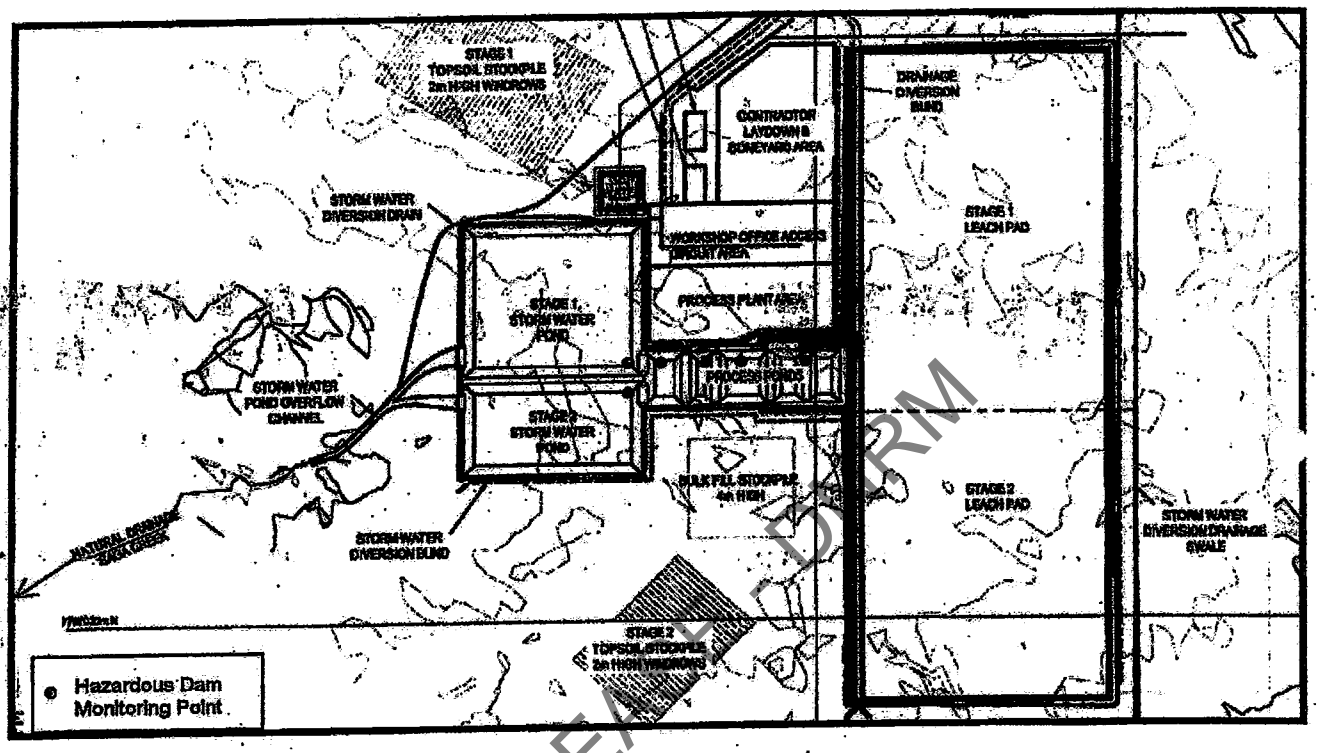


RTI DL RELEASE - DNRM

Schedule I – Map 5 Location of End Pipe Releases from Sediment Dams – Lady Annie

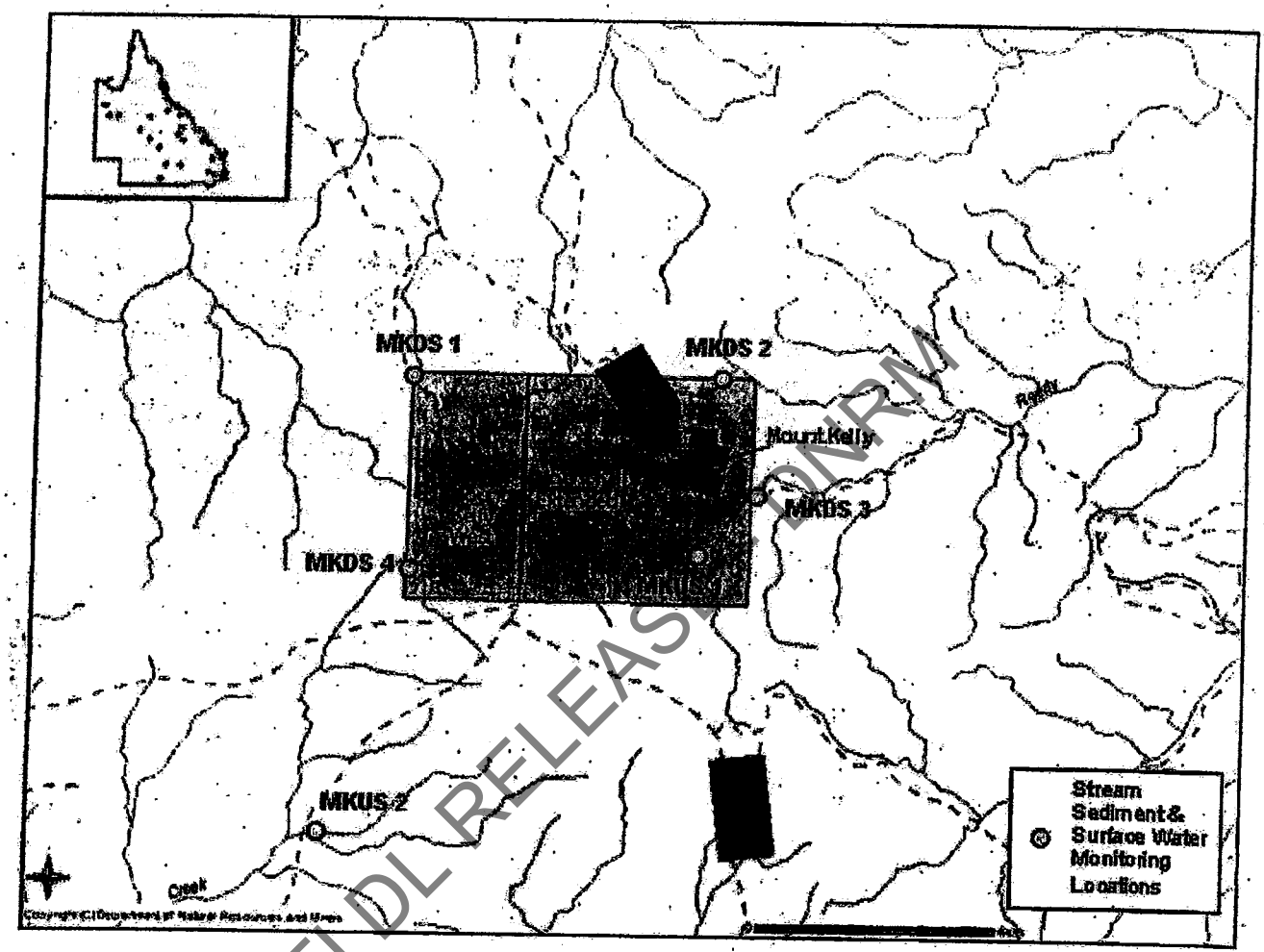
Con 5/10/07

Released



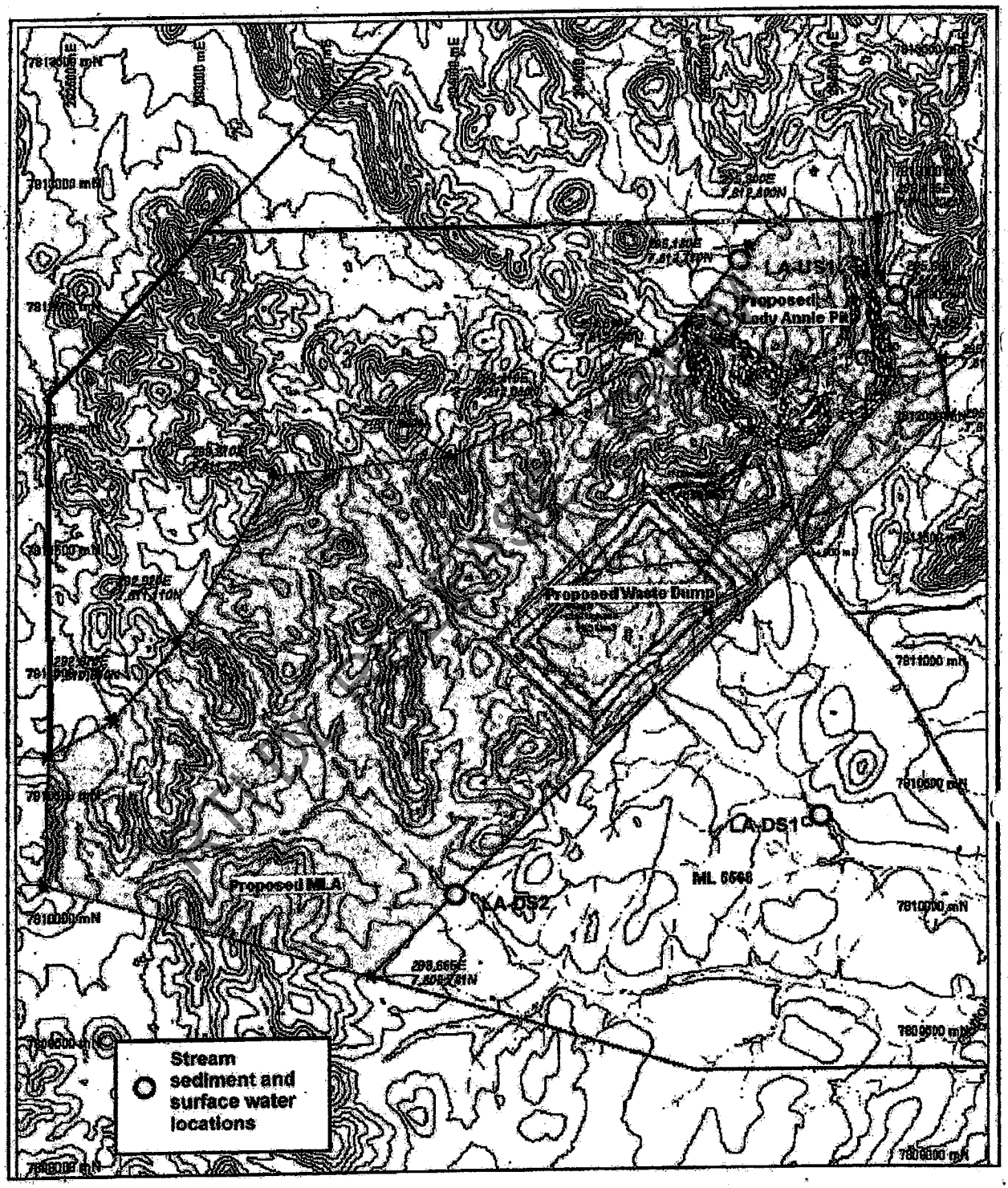
RTI DL RELEASED FORM

Schedule I - Map 6 Location of Hazardous Dams



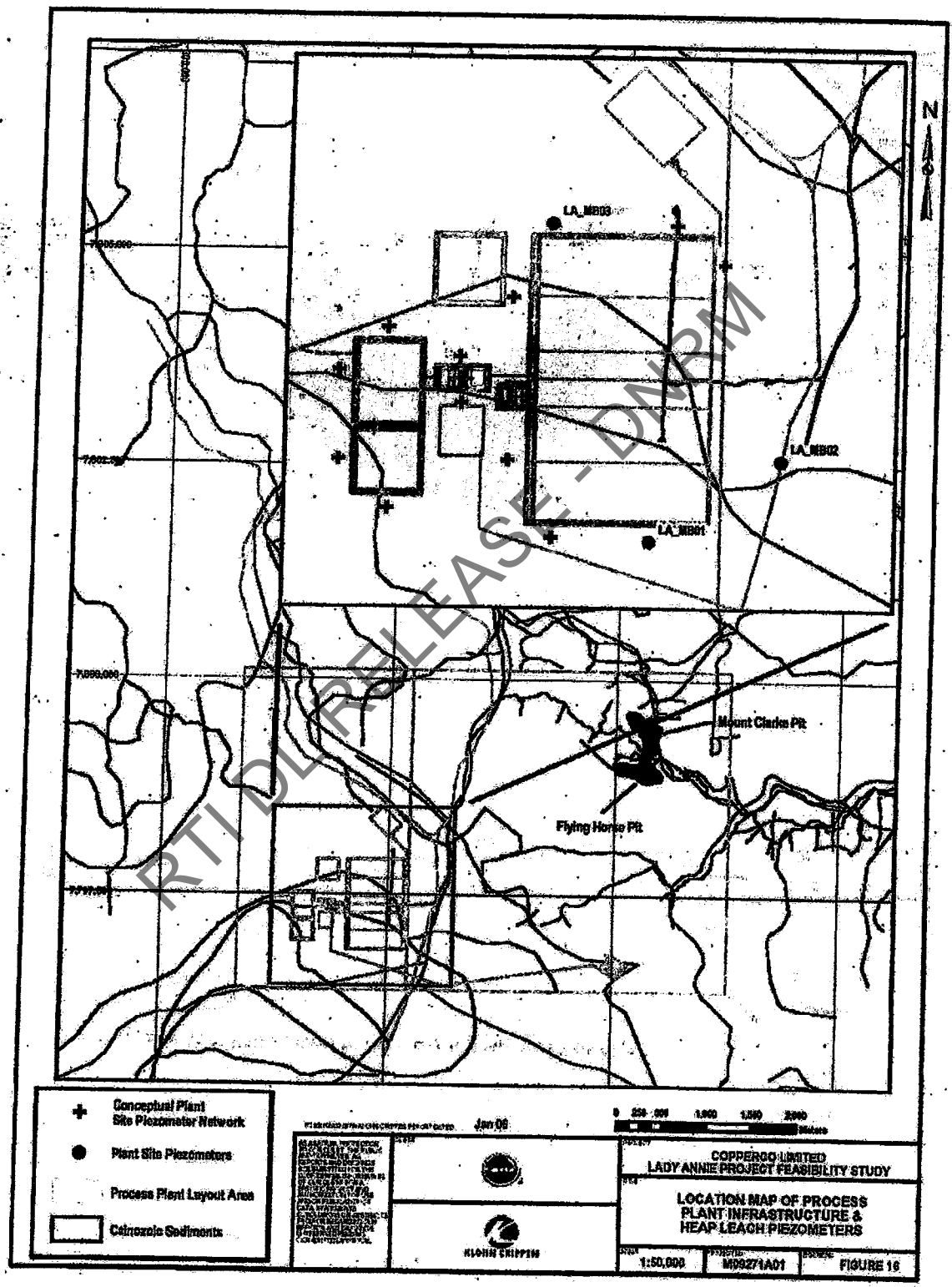
RTI DL RELEASE DNRM

Schedule I - Map 7 Stream Sediments Monitoring Locations (Mount Kelly)



Schedule I - Map 8 Stream Sediments Monitoring Locations (Lady Annie)

Released



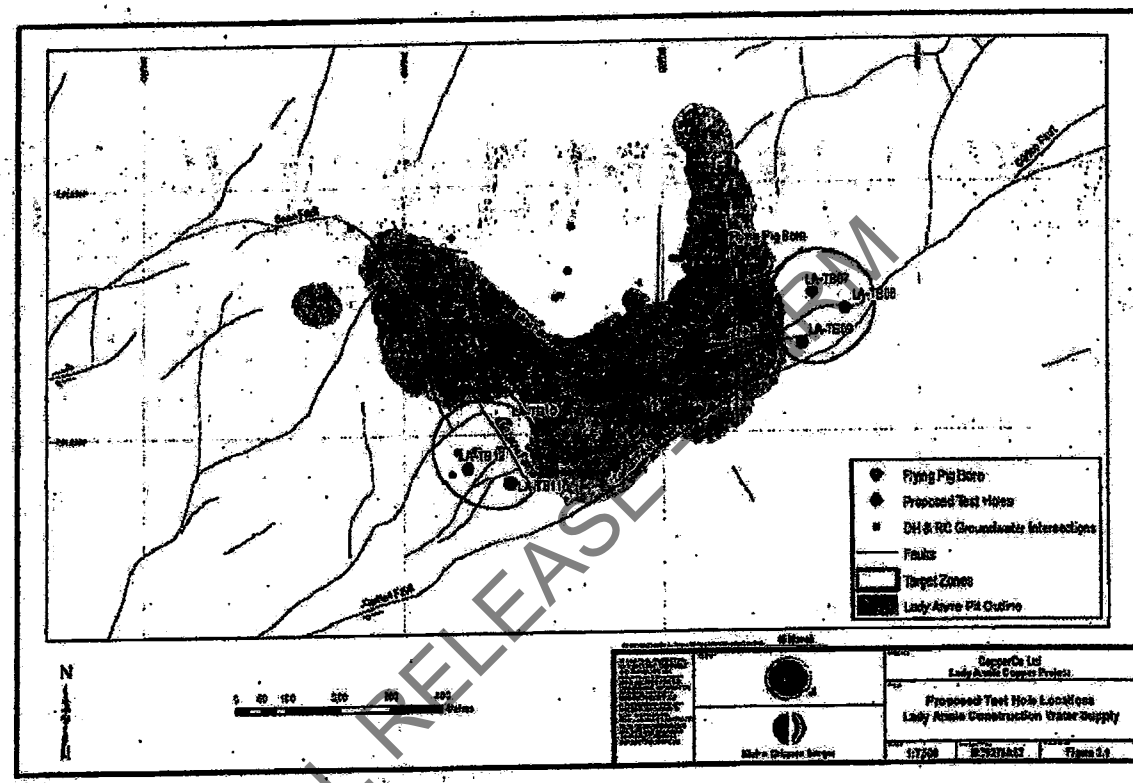
RTI DLR RELEASE - DNRM

Schedule I - Map 9 Groundwater Monitoring Locations (Mount Kelly)

Cm 5/10/07

Page 27 of 28 - 5000 This Environmental Authority takes effect 5 October 2007 Environmental Protection Agency

Released



RTI DL RELEASE - FORM

Schedule I - Map 10 Groundwater Monitoring Locations (Lady Annie)

END CONDITIONS FOR SCHEDULE I

END OF EVIRONMENTAL AUTHORITY

ML 5426

(41)

RECEIVED
5701
8 JAN 2008
DEPARTMENT OF
MINES AND ENERGY
MOUNT ISA

Queensland Government

Environmental Protection Agency
Incorporating the
Queensland Parks and Wildlife Service

Enquiries	Chantel Mackenzie
Telephone	(07) 4744 7820
Your reference	MIN100401006
Our reference	ISA658

7 January 2008

Reefway Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

CC/ Savannah Resources Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

Dear Sir/Madam

Re: Amendment of Environmental Authority MIN100401006.

I refer to the application for amendment of Environmental Authority (Mining Activities) MIN100401006 received by the EPA for assessment on 2 August 2007.

Please find attached the amended Environmental Authority (EA) MIN100401006. This EA takes effect from 7 January 2008 and the anniversary date of this authority is 24 July of each year.

If you have any inquiries in relation to the above details please contact Chantel Mackenzie on (07) 4744 7820.

Yours faithfully

s.49 - Signature

Geoff Metcalfe
District Manager
Environmental Operations
Mount Isa District, Northern Region

C/c Mining Registrar

RTI DL RELEASE DNRM

Cnr Camooweal & Mary Streets Mount Isa
Queensland 4825 Australia
PO Box 2316 Mount Isa
Queensland 4825 Australia
Telephone (07) 4744 7888
Facsimile (07) 4744 7800
Website www.epa.qld.gov.au
ABN 87 221 158 786

Printed on 100% recycled paper

ENVIRONMENTAL PROTECTION ACT 1994

Queensland Government
Environmental Protection Agency
Queensland Parks and Wildlife Service

Environmental Authority No. MIN100401006 (mining activities)

Section 228 *Environmental Protection Act 1994*

This environmental authority is granted under the *Environmental Protection Act 1994* and includes conditions to minimise environmental harm caused, or likely to be caused, by the authorised mining activities. An environmental authority (mining activities) may be for mining activities authorised (under the *Mineral Resources Act 1989*) to occur under one of the following mining tenements: a prospecting permit; mining claim; exploration permit; mineral development licence; or mining lease. In general, a mining activity means: prospecting, exploring, mining; or processing minerals; remediation; rehabilitation; and includes facilitation and supporting activities and any action taken to prevent environmental harm.

Under the provisions of the *Environmental Protection Act 1994* this Environmental Authority is issued to:

Lady Annie Operations Pty Ltd
Level 22 Allendale Square
77 St Georges Terrace
Perth WA 6000

Savannah Resources Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

In respect of carrying out activities as part of the following mining project:

Type of Environmental Authority (mining activities)	Authorised mining tenements	Location
Mining Leases	ML5426, ML5435, ML5446, ML5447, ML5448, ML 5474, ML5476, ML5478, ML90168 ML90169, ML90170, ML90178, ML90179, ML90184	100km north of Mount Isa

The mining activities are authorized to the extent defined in Schedule 6 Section 14(c) of the *Environmental Protection Regulation 1998*.

This Environmental Authority is subject to the conditions set out in the attached schedules.

The anniversary date of this Environmental Authority is **24 July** each year.

This Environmental Authority takes effect from 7 January 2008.

s.49 - Signature

7/1/08

Geoff Metcalfe
District Manager
Mount Isa District, Northern Region
Delegate of Administering Authority
Environmental Protection Act 1994

RTI DL RELEASE - DNRM

This **Environmental Authority** incorporates the following schedules:

- Schedule A - General
- Schedule B - Air
- Schedule C - Water
- Schedule D - Noise and Vibration
- Schedule E - Waste
- Schedule F - Land
- Schedule G - Community
- Schedule H - Definitions
- Schedule I - Maps / Plans

Schedule A - General

Financial Assurance

(A1-1) Provide a financial assurance in the amount and form required by the administering authority prior to the commencement of activities proposed under this environmental authority.

NOTE: The calculation of financial assurance for condition (A1-1) must be in accordance with Guideline 17 and may include a performance discount. The amount is defined as the maximum total rehabilitation cost for complete rehabilitation of all disturbed areas, which may vary on an annual basis due to progressive rehabilitation. The amount required for the financial assurance must be the highest Total Rehabilitation Cost calculated for any year of the Plan of Operations and calculated using the formula: (Financial Assurance = Highest Total Annual Rehabilitation Cost x Percentage Required).

(A1-2) The financial assurance is to remain in force until the administering authority is satisfied that no claim on the assurance is likely.

NOTE: Where progressive rehabilitation is completed and acceptable to the administering authority, progressive reductions to the amount of financial assurance will be applicable where rehabilitation has been completed in accordance with the acceptance criteria defined within this environmental authority.

Maintenance of Measures, Plant and Equipment

(A2-1) The environmental authority holder must ensure:

- that all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority are installed;
- that such measures, plant and equipment are maintained in a proper condition; and
- that such measures, plant and equipment are operated in a proper manner.

Monitoring

(A3-1) Record, compile and keep for a minimum of five years all monitoring results required by this environmental authority; and make available for inspection all or any of these records upon request by the administering authority.

(A3-2) Where monitoring is a requirement of this environmental authority, ensure that a competent person(s) conducts all monitoring.

Storage and Handling of Flammable, Combustible and Corrosive Liquids

(A4-1) Spillage of all flammable and combustible liquids must be contained within an on-site containment system and controlled in a manner that prevents environmental harm (other than trivial harm) and maintained in accordance with Section 5.8 and/or 5.9 of AS 1940 - Storage and Handling of Flammable and Combustible Liquids of 2004.

(A4-2) The on-site storage of corrosive liquids must be in accordance with Section 5.7 of AS 3780 - Storage and Handling of Corrosive Substances 1994.

RTI/IP RELEASE - DERM

Released

Definitions

(A5-1) Words and phrases used throughout this environmental authority are defined in Schedule H – Definitions. Where a definition for a term used in this environmental authority is sought and the term is not defined within this environmental authority, the definitions in the *Environmental Protection Act 1994*, its Regulations and Environmental Protection Policies must be used.

END CONTIONS FOR SCHEDULE A

Schedule B - Air

Dust Nuisance

(B1-1) Subject to Conditions (B1-2) and (B1-3) the release of dust or particulate matter or both resulting from the mining activity must not cause an environmental nuisance at any sensitive or commercial place.

(B1-2) When requested by the administering authority, dust and particulate monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(B1-3) If the environmental authority holder can provide evidence through monitoring that the following limits are not being exceeded then the holder is not in breach of (B1-1):

a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with AS 3580.10.1 Methods for sampling and analysis of ambient air - Determination of particulates - Deposited matter - Gravimetric method of 1991.

(B1-4) If monitoring indicates exceedence of the relevant limits in Condition (B1-3), then the environmental authority holder must:

a) address the complaint including the use of appropriate dispute resolution if required; or
b) immediately implement dust abatement measures so that emissions of dust from the activity do not result in further environmental nuisance.

Odour Nuisance

(B2-1) Subject to condition (B2-2), the release of noxious or offensive odour(s) or any other noxious or offensive airborne contaminant(s) resulting from the mining activity must not cause an environmental nuisance at any sensitive or commercial place.

(B2-2) When requested by the administering authority, odour monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(B2-3) If monitoring indicates Condition (B2-1) is not being met then the environmental authority holder must:

a) address the complaint including the use of appropriate dispute resolution if required; or
b) immediately implement odour abatement measures so that emissions of odour from the activity do not result in further environmental nuisance.

END CONDITIONS FOR SCHEDULE B

RTI DE RELEASE - DNRM

Am 7/1/08

Released

Schedule C - Water

Release to Waters

(C1-1) Receiving waters affected by the release of process water or storm water contaminated by the mining activities or both must be monitored at the locations and frequencies defined in Schedule C - Table 1 and Schedule I – Map 1 & 2, and the results of the test sites comply with the contaminant limits defined in Schedule C - Table 3.

Schedule C - Table 1 (Receiving Water Monitoring Locations and Frequency)

Monitoring point	Easting (AMG 84 Zone 54)	Northing (AMG 84 Zone 54)	Monitoring frequency
MKUS 1- reference site *	305625	7797450	Each flow event
MKUS 2- reference site*	300451	7793920	Each flow event
MKDS 1- test site	301160	7800135	Each flow event
MKDS 2- test site	306046	7800375	Each flow event
MKDS 3- test site	306370	7798363	Each flow event
MKDS 4- test site	301300	7797255	Each flow event
LA- US1- reference site*	295150	7812680	Each flow event
LA- US2- reference site*	295750	7812480	Each flow event
LA- DS1- test site	294000	7810100	Each flow event
LA- DS2- test site	295500	7810400	Each flow event

NOTE: This does not apply to dams containing hazardous waste
**Reference sites must:*

a) *be from the same biogeographical and climatic region;*
b) *have similar geology, soil types and topography*
c) *contain a range of habitats similar to those at the test site*
d) *be of similar flow regime; and*
e) *not be so close to the test sites that any disturbances at the test site also result in a change at the reference site.*

RTI DL RELEASE - DNRM

C1-2 Subject to Condition (C1-1), if the receiving water contaminant trigger levels defined in Schedule C - Table 2 are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within **3 months** of receiving the analysis results.

Schedule C - Table 2 (Receiving Water Trigger Levels)

Parameter	Units	Minimum	Maximum	Trigger Type
pH [1]	pH	6	8.5	Range
EC[1]	µS/cm	N/A	250	Maximum
Sulphate [2]	mg/L	N/A	500	Maximum
Aluminium[4]	mg/L	N/A	2.5	Maximum
Aluminium[5]	mg/L	N/A	11.5	Maximum
Arsenic[2]	mg/L	N/A	0.25	Maximum
Boron[2]	mg/L	N/A	0.37	Maximum
Cadmium[2]	mg/L	N/A	0.005	Maximum
Chromium[2]	mg/L	N/A	0.5	Maximum
Cobalt[2]	mg/L	N/A	0.5	Maximum
Copper[4]	mg/L	N/A	0.5	Maximum
Copper[5]	mg/L	N/A	0.83	Maximum
Fluoride[2]	mg/L	N/A	1	Maximum
Lead[4]	mg/L	N/A	0.05	Maximum
Lead[5]	mg/L	N/A	0.065	Maximum
Manganese[3]	mg/L	N/A	1.9	Maximum
Mercury[2]	mg/L	N/A	0.001	Maximum
Molybdenum[2]	mg/L	N/A	0.075	Maximum
Nickel[2]	mg/L	N/A	0.5	Maximum
Selenium[2]	mg/L	N/A	0.01	Maximum
Zinc[2]	mg/L	N/A	10	Maximum

[1] Contaminant triggers limits are based on Table 3.3.4 and 3.3.5 of Aquatic Ecosystems ANZECC (2000).
[2] Contaminant trigger limits are based on 50% of the contaminant limits defined in the ANZECC (2000) Livestock Drinking Water and are to be analysed as total metals (unfiltered).
[3] Contaminant trigger limits based on ANZECC (2000) trigger levels for aquatic ecosystems of slightly - moderately disturbed systems – table 3.4.1 level of protection 95% / Table 3.3.4 / 3.3.5 – Tropical Australia upland rivers.
[4] Contaminant trigger limits are based on 50% of the contaminant limits defined in the ANZECC (2000) Livestock Drinking Water and are to be analysed as total metals (unfiltered). These limits are set for the Mount Kelly Leases only (ML 5426, ML 5478, ML90168, ML90169, ML90170, ML90178, ML 5435, ML 5446, ML 5447, ML 5448, ML 5474 and ML 5476.)
[5] Contaminant trigger limits are based on site specific background data and are to be analysed as total metals (unfiltered). These trigger limits are set for the Lady Annie Lease only (ML90179).

FINAL RELEASE - DNRM

Schedule C - Table 3 (Receiving Water Contaminant Limits)

Parameter	Units	Minimum	Maximum	Trigger Type
pH	pH	6	9	Range
TDS[2]	mg/L	N/A	4000	Maximum
Sulphate [1]	mg/L	N/A	1000	Maximum
Aluminium[5]	mg/L	N/A	5	Maximum
Aluminium[6]	mg/L	N/A	23	Maximum
Arsenic[1]	mg/L	N/A	0.5	Maximum
Boron[1]	mg/L	N/A	5	Maximum
Cadmium[1]	mg/L	N/A	0.01	Maximum
Chromium[1]	mg/L	N/A	1	Maximum
Cobalt[1]	mg/L	N/A	1	Maximum
Copper[5]	mg/L	N/A	1	Maximum
Copper[6]	mg/L	N/A	1.66	Maximum
Fluoride[1]	mg/L	N/A	2	Maximum
Lead[5]	mg/L	N/A	0.1	Maximum
Lead[6]	mg/L	N/A	0.13	Maximum
Manganese[3]	mg/L	N/A	2.5	Maximum
Mercury[1]	mg/L	N/A	0.002	Maximum
Molybdenum[1]	mg/L	N/A	0.15	Maximum
Nickel[1]	mg/L	N/A	1	Maximum
Selenium[1]	mg/L	N/A	0.02	Maximum
Zinc[1]	mg/L	N/A	20	Maximum

[1] Contaminant limits based on table 4.3.2 ANZECC (2000) Livestock drinking water quality and are analysed as Total metals (unfiltered)
[2] Contaminant limits are based on Table 4.3.1 Livestock drinking water quality and are analysed as Total metals (unfiltered)
[3] Contaminant limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) 80% and are to be analysed as filtered metals.
[4] Contaminant limits based on Table 3.3.4 of Aquatic Ecosystems ANZECC (2000)
[5] Contaminant limits are based on table 4.3.2 ANZECC (2000) Livestock drinking water quality and are analysed as Total metals (unfiltered). This limit is set for the Mount Kelly Leases only (ML 5426, ML 5478, ML90168, ML90169, ML90170, ML90178, ML 5435, ML 5446, ML 5447, ML 5448, ML 5474 and ML 5476.)
[6] Contaminant limits are based on site specific background data and are to be analysed as total metals (unfiltered). These trigger limits are set for the Lady Annie Lease only (ML90179).

FOR RELEASE - DNRM

End of Pipe Release

(C1-3) End of pipe release limits for storm water contaminated by mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 4 and Schedule I – Map 3, 4 and 5 and comply with the contaminant limits defined in Schedule C - Table 5.

Schedule C - Table 4 (End of pipe monitoring locations and frequency)

Monitoring point	Easting (AMG 84, Zone 54)	Northing (AMG 84, Zone 54)	Monitoring frequency
Mining Intermediate ROM area Sediment Dam	TBD	TBD	Each flow event
Mount Clarke Waste Rock Dump Sediment Dam	306060	7800370	Each flow event
Mount Kelly/Flying Horse Sediment Dam	TBD	TBD	Each flow event
Flying Horse Waste Rock Dump 2 Sediment Dam	TBD	TBD	Each flow event
Process Plant ROM Pad Sediment Dam 1	302870	7799040	Each flow event
Process Plant ROM Pad Sediment Dam 2	303170	7798700	Each flow event
Lady Annie Sediment Dam	TBD	TBD	Each flow event

TBD – To Be Determined after construction of relevant Sediment Dam and installation of Rising Stage Samplers at overflow point.
Monitoring only required for constructed Sediment Dams. Each Sediment Dam is required to be constructed prior to land disturbance upstream.
NOTE: This does not apply to dams containing hazardous waste.

Schedule C - Table 5 (End of pipe contaminant release limits)

Parameter	Units	Minimum	Maximum	Limit Type
pH	pH	6	9	Range
TDS	mg/L	N/A	4000	Maximum
Sulphate	mg/L	N/A	1000	Maximum
Arsenic	mg/L	N/A	5	Maximum
Cadmium	mg/L	N/A	0.01	Maximum
Chromium	mg/L	N/A	1	Maximum
Cobalt	mg/L	N/A	1	Maximum
Copper	mg/L	N/A	1	Maximum
Lead	mg/L	N/A	0.1	Maximum
Mercury	mg/L	N/A	0.002	Maximum
Zinc	mg/L	N/A	20	Maximum

Contaminant limits based on ANZECC (2000) Livestock drinking water quality and are analysed as Total metals (unfiltered)
NOTE: This does not apply to dams containing hazardous waste.

RTI DL RELEASE - DNRM

Dams Containing Hazardous Waste

(C1-4) Water storages containing process water and storm water contaminated by mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 6 and Schedule I - Map 6 and samples analysed for the parameters defined in Schedule C - Table 7.

Schedule C - Table 6 (Water Storage Monitoring Locations of Hazardous Dams)

Monitoring point	Easting (Zone 54, AMG 84)	Northing (Zone 54, AMG 84)	Monitoring frequency
Stage 1 and 2 - PLS Ponds	302000	7797430	Annually, March
Stage 1 and 2 - ILS Pond	301865	7797430	Annually, March
Stage 1 and 2 - Raffinate Pond Pre-Settler	301820	7797430	Annually, March
Stage 1 and 2 - Raffinate Pond	301750	7797430	Annually, March
Stage 3 - PLS Pond	TBD	TBD	Annually, March
Stage 3 - ILS Pond	TBD	TBD	Annually, March
Storm water Pond 1	301650	7797400	Annually, March
Storm water Pond 2	TBD	TBD	Annually, March
Storm water Pond 3	TBD	TBD	Annually, March

TBD – To Be Determined on first sampling occurrence and coordinates submitted to QEPA.
NOTE: Monitoring only required for constructed ponds

(C1-5) In the event that the water quality within any dam containing hazardous waste does not comply with the contaminant limits defined in Schedule C - Table 7, implement measures to prevent access by all livestock and minimise access by fauna to the dam.

Schedule C - Table 7 (Water Quality Limits for Dams Containing Hazardous Waste)

Parameter	Units	Contaminant Limit	Limit Type
pH	pH	4-9	Range
TDS	mg/L	5,000	Maximum
Boron	mg/L	5	Maximum
Sulphate	mg/L	1000	Maximum
Aluminum	mg/L	5	Maximum
Arsenic	mg/L	0.5	Maximum
Cobalt	mg/L	1	Maximum
Copper	mg/L	1	Maximum
Lead	mg/L	0.1	Maximum
Nickel	mg/L	1	Maximum
Zinc	mg/L	20	Maximum

Contaminant limits based on ANZECC (2000 Livestock drinking water quality and are analysed as total metals (unfiltered).)

RTI/DL RELEASE - DNRM

(C1-6) The design storage allowance on 1 **November** of each year for any dam containing hazardous waste constructed or operated within the operational land must comply with Schedule C - Table 8.

Schedule C - Table 8 (Storage Design for Dams Containing Hazardous Waste)

Project Stage	Storage Type	Design Storage Allowance [1]	Spillway Critical Design Storm [2]	Mandatory Reporting Level [3]
Stage 1	Stormwater Pond 1 + Stage 1 and 2 Process Water Ponds (Raffinate Pre-Settler, Raffinate, ILS and PLS)	1: 100 Year ARI 2 month wet season plus process inputs for the 2 month wet season	1: 1000 Year ARI	1: 100 year ARI
Stage 2	Stormwater Pond 1 + Stage 1 and 2 Process Water Ponds (Raffinate Pre-Settler, Raffinate, ILS and PLS) + Stormwater Pond 2	1: 100 Year ARI 2 month wet season plus process inputs for the 2 month wet season	1: 1000 Year ARI	1: 100 year ARI
Stage 3	Stormwater Pond 1 + Stage 1 and 2 Process Water Ponds (Raffinate Pre-Settler, Raffinate, ILS and PLS) + Stormwater Pond 2 + Stormwater Pond 3 + Stage 3 Process Water Ponds (ILS and PLS)	1: 100 Year ARI 2 month wet season plus process inputs for the 2 month wet season	1: 1000 Year ARI	1: 100 year ARI

FOR DL RELEASE - DNRM

Note [1]: The design storage allowance on 1 November of each year for any dam containing hazardous waste constructed within the operational land must be equivalent to the run-off from a 1 in 100 ARI 2 month wet season plus process inputs for the equivalent wet season. Process inputs refers to hazardous mineral process waste and water, which is being disposed of in the storage facility.

Note [2]: The critical design storm has a duration that produces the peak discharge for the catchments.

Note [3]: The mandatory reporting level refers to the volume below the spillway crest, either the 1: 100 ARI 72 hour storm or the 1:100 ARI wave allowance, whichever is lower.

(C1-7) The spillway for any dam containing hazardous waste, constructed or operated within the operational land must be designed and maintained to withstand the peak flow from the spillway critical design storm defined in Schedule C - Table 8.

(C1-8) The holder of the environmental authority must mark the mandatory reporting level defined in Schedule C - Table 8 on the spillway of all dams containing hazardous waste within the operational land.

(C1-9) The holder of the environmental authority must notify the administering authority when the pondage level of the dam containing hazardous waste, reaches the mandatory reporting level defined in Schedule C - Table 8.

Stream Sediment Contaminant Levels

(C2-1) All reasonable and practicable erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.

(C2-2) The bed of the receiving waters, affected by the release of process water and storm water contaminated by the mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 9 and Schedule I – Map 7 & 8.

Schedule C - Table 9 (Receiving Stream Sediment Monitoring Locations and Frequency)

Monitoring point	Easting (AGD 84 Zone 54)	Northing (AGD 84 Zone 54)	Monitoring frequency
MKUS 1- reference site *	305625	7797450	May each year
MKUS 2- reference site*	300451	7793920	May each year
MKDS 1- test site	301160	7800135	May each year
MKDS 2- test site	306046	7800375	May each year
MKDS 3- test site	306370	7798363	May each year
MKDS 4- test site	301300	7797255	May each year
LA- US1- reference site*	295150	7812680	May each year
LA- US2- reference site*	295750	7812480	May each year
LA- DS1- test site	294000	7810100	May each year
LA- DS2- test site	295500	7810400	May each year

NOTE: This does not apply to dams containing hazardous waste
**Reference sites must:*

a) *be from the same biogeographical and climatic region;*
b) *have similar geology, soil types and topography*
c) *contain a range of habitats similar to those at the test site*
d) *be of similar flow regime; and*
e) *not be so close to the test sites that any disturbances at the test site also result in a change at the reference site.*

(C2-3) Subject to Condition (C2-2), if the stream sediment contaminant trigger levels defined in Schedule C - Table 10 are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within **3 months** of receiving the analysis results.

Schedule C - Table 10 (Receiving Stream Sediment Contaminant Trigger Levels)

Parameter	Units	Contaminant trigger levels	Trigger Type
Antimony[1]	mg/kg dry wt	2	Maximum
Arsenic[1]	mg/kg dry wt	20	Maximum
Cadmium[1]	mg/kg dry wt	1.5	Maximum
Chromium[1]	mg/kg dry wt	80	Maximum
Copper[2]	mg/kg dry wt	100	Maximum
Copper[3]	mg/kg dry wt	400	Maximum
Lead[1]	mg/kg dry wt	50	Maximum
Nickel[1]	mg/kg dry wt	21	Maximum
Silver[1]	mg/kg dry wt	1	Maximum
Mercury[1]	mg/kg dry wt	0.15	Maximum
Zinc[1]	mg/kg dry wt	200	Maximum

[1] *ANZECC (2000): ISQG Low trigger values, Sediment Quality Guidelines, Aquatic Ecosystems, Table 3.5.1.*
[2] *Site specific trigger value as calculated in section 3.7 of EM Plan September 2006 is for the Mount Kelly Leases only. (ML 5426, ML 5478, ML90168, ML90169, ML90170, ML90178, ML 5435, ML 5446, ML 5447, ML 5448, ML 5474 and ML 5476.)*
[3] *This limit is set for the Lady Annie Lease only (ML90179).*

RTI DA RELEASE - DIPRM

Released

(C2-4) Subject to Condition (C2-2), stream sediment contaminant limits must not exceed the contaminant limits defined in Schedule C -Table 11.

Schedule C - Table 11 (Receiving Stream Sediment Contaminant Limits)

Parameter	Units	Contaminant limits	Limit Type
Antimony[1]	mg/kg dry wt	25	Maximum
Arsenic[1]	mg/kg dry wt	70	Maximum
Cadmium[1]	mg/kg dry wt	10	Maximum
Chromium[1]	mg/kg dry wt	370	Maximum
Copper[2]	mg/kg dry wt	120	Maximum
Copper[3]	mg/kg dry wt	500	Maximum
Lead[1]	mg/kg dry wt	220	Maximum
Nickel[1]	mg/kg dry wt	52	Maximum
Silver[1]	mg/kg dry wt	3.7	Maximum
Mercury[1]	mg/kg dry wt	1	Maximum
Zinc[1]	mg/kg dry wt	410	Maximum

[1] ANZECC (2000): ISQG High trigger values, Sediment Quality Guidelines, Aquatic Ecosystems, Table 3.5.1.
[2] Site specific trigger value as calculated in section 3.6 of EM Plan July 2006 is for the Mount Kelly Leases only. (ML 5426, ML 5478, ML90168, ML90169, ML90170, ML90178, ML 5495, ML 5446, ML 5447, ML 5448, ML 5474 and ML 5476.)
[3] This limit is set for the Lady Annie Lease only (ML90179).

(C2-5) All stream sediment sampling must be undertaken in accordance with AS 5667.1 Guidance on Sampling of Bottom Sediments of 1998

Sewage effluent

(C3-1) All effluent released from the treatment plant must be monitored at the frequency and for the parameters specified in Schedule C - Table 12.

(C3-2) Sewage effluent used for dust suppression must not exceed sewage effluent release limits defined in Schedule C - Table 12.

(C3-3) Sewage Effluent used for dust suppression must not cause spray drift or over spray to any sensitive or commercial place, and must not be applied at a rate that causes pooling, ponding and/or runoff of any effluent irrigated.

(C3-4) Subject to Conditions (C3-1) to (C3-3) inclusive, sewage effluent from sewage treatment facilities must be reused or evaporated and must not be directly released from the sewage treatment plant to any water way or drainage line other than in accordance with Schedule C - Table 12.

Schedule C - Table 12 (Sewage effluent quality targets for dust suppression)

	Release Limit[3]			Monitoring Frequency
Quality characteristics	Minimum	Median	Maximum	
pH (pH Units)	6[2]		8.5[2]	Fortnightly
Faecal Coliforms (organisms/100mL)		1000[1]		Fortnightly

[1] A minimum of five samples must be collected for the quarter with four out of five samples must be less than the maximum.
[2] A minimum of five samples must be collected for the quarter with four out of five samples must be higher than the minimum but lower than the maximum limit.
Release limits sourced from Queensland Water Recycling Guidelines December 2005 Table 6.2b

RTI DL RELEASED DNRM

7/1/08

Released

Groundwater

(C4-1) Groundwater, affected by the mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 13 and Schedule I – Map 9, 10 & 11.

Schedule C - Table 13 (Groundwater Monitoring Locations and Frequency)

Monitoring point	Status*	Easting (AGD 84 Zone 54)	Northing (AGD 84 Zone 54)	Surface RL (m)	Target Depth (m)	Monitoring frequency
Process Plant Groundwater Monitoring						
PSMB01	Existing	302484	7796800	355	30	Monthly
PSMB02	Existing	302891	7797385	356	30	Monthly
LA MB03	Existing – to be decommissioned prior to construction of stage 3	302128	7797950	458.5	30	Monthly
PSMB04	Stage 2	302128	7797100	356	30	Monthly
PSMB05	Stage 2	302128	7797100	356	100	Monthly
PSMB06	Stage 2	301950	7796650	355	30	Monthly
PSMB07	Stage 2	301880	7796990	355	30	Monthly
PSMB08	Existing	301520	7796900	355.5	30	Monthly
PSMB09	Existing	301501	7796897	355.5	95	Monthly
PSMB10	Stage 2	301410	7797200	355	30	Monthly
PSMB11	Existing	301380	7797520	354	30	Monthly
PSMB12	Stage 2	301360	7797780	353	30	Monthly
PSMB13	Existing	301446	7798121	352.5	30	Monthly
PSMB14	Existing	301440	7798110	352.5	100	Monthly
PSMB15	Stage 3	301770	7798160	351.5	30	Monthly
PSMB16	Stage 3	301970	7798450	351.5	30	Monthly
PSMB17	Stage 3	302360	7798550	351	30	Monthly
PSMB18	Stage 3	302510	7798260	351	30	Monthly
PSMB19	Stage 3	302510	7798260	351	100	Monthly
PSMB20	Existing	302510	7797960	352	30	Monthly
PSMB21	Stage 2	302740	7797710	353	30	Monthly
PSMB22	Existing	302021	7798123	354.5	30	Monthly
PSMB23	Existing	301762	7797864	355.5	30	Monthly
PSMB24	Existing	302035	7797292	356	30	Monthly
PSMB25	Existing	301737	7797304	356.5	30	Monthly
Mount Kelly Groundwater Monitoring						
Mount Clarke 1	Existing – to be replaced during development of mining area	305375	7799030	-	-	Monthly
Mount Clarke 2	Existing – to be replaced during development of mining area	305250	7798960	-	-	Monthly
Mount Clarke 3	Existing – to be replaced during development of mining area	305070	7799030	-	-	Monthly
Mount Clarke 4	Existing – to be replaced during development of mining area	305180	7799625	-	-	Monthly

RTI DI RELEASE.DOCRM

Released

Mount Clarke 5	Existing – to be replaced during development of mining area	305240	7799650	-	-	Monthly
Dividend No. 2	Existing – to be replaced during development of mining area	305450	7798900	-	-	Monthly
MK1150	Existing – to be replaced during development of mining area	305000	7798937	-	-	Monthly
Lady Annie Groundwater Monitoring						
LA - TB07	Development of Lady Annie Mining Area	295790	7812280	TBD	TBD	Quarterly
LA - TB08	Development of Lady Annie Mining Area	295855	7812247	TBD	TBD	Quarterly
LA - TB09	Development of Lady Annie Mining Area	295770	7812179	TBD	TBD	Quarterly
LA - TB10	Development of Lady Annie Mining Area	295194	7812022	TBD	TBD	Quarterly
LA - TB11	Development of Lady Annie Mining Area	295205	7811904	TBD	TBD	Quarterly
LA - TB12	Development of Lady Annie Mining Area	295124	7811933	TBD	TBD	Quarterly

NOTE: This does not apply to dams containing hazardous waste
TBD- To be determined
Reference sites must:

a) *be from the same biogeographical and climatic region;*
b) *have similar geology, soil types and topography*
c) *contain a range of habitats similar to those at the test site*
d) *be of similar flow regime; and not be so close to the test sites that any disturbances at the test site also result in a change at the reference site.*

**Status refers to when the piezometers will be constructed and operational i.e. Stage 2 – Prior to the commencement of operation of that stage.*

RTI DL RELEASE - DIRM

(C4-2) Subject to Condition (C4-1), if the groundwater contaminant trigger levels defined in Schedule C - Table 14 are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within **3 months** of receiving the analysis results.

Schedule C - Table 14 (Groundwater Contaminant Trigger Levels)

Parameter	Units	Minimum	Maximum	Trigger type
pH[1]	pH	6	8	Range
TDS[2]	mg/L	N/A	2000	Maximum
Sulphate [2]	mg/L	N/A	500	Maximum
Aluminium[2]	mg/L	N/A	2.5	Maximum
Arsenic[2]	mg/L	N/A	0.25	Maximum
Boron[2]	mg/L	N/A	0.37	Maximum
Cadmium[2]	mg/L	N/A	0.005	Maximum
Chromium[2]	mg/L	N/A	0.5	Maximum
Cobalt[2]	mg/L	N/A	0.5	Maximum
Copper[2]	mg/L	N/A	0.5	Maximum
Fluoride[2]	mg/L	N/A	1	Maximum
Lead[2]	mg/L	N/A	0.05	Maximum
Manganese[3]	mg/L	N/A	1.9	Maximum
Mercury[2]	mg/L	N/A	0.001	Maximum
Molybdenum[2]	mg/L	N/A	0.075	Maximum
Nickel[2]	mg/L	N/A	0.5	Maximum
Selenium[2]	mg/L	N/A	0.01	Maximum
Zinc[2]	mg/L	N/A	10	Maximum

[1] Contaminant triggers limits are based on Table 3.3.4 and 3.3.5 of Aquatic Ecosystems ANZECC (2000)
[2] Contaminant trigger limits are based on 50% of the contaminant limits defined in the ANZECC (2000) Livestock Drinking Water and are to be analysed as total metals (unfiltered).
[3] Contaminant trigger limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) and are analysed as Filtered Metals

RTI DE RELEASE - DNRM

(C4-3) Subject to Condition (C4-1), groundwater contaminant limits must not exceed the contaminant limits defined in Schedule C –Table 15.

Schedule C – Table 15 (Groundwater Contaminant Limits)

Parameter	Units	Minimum	Maximum	Limit Type
pH[1]	pH	6	9	Range
TDS[1]	mg/L	N/A	4000	Maximum
Sulphate[1]	mg/L	N/A	1000	Maximum
Aluminum[1]	mg/L	N/A	5	Maximum
Arsenic[1]	mg/L	N/A	0.5	Maximum
Boron[1]	mg/L	N/A	5	Maximum
Cadmium[1]	mg/L	N/A	0.01	Maximum
Chromium[1]	mg/L	N/A	1	Maximum
Cobalt[1]	mg/L	N/A	1	Maximum
Copper[1]	mg/L	N/A	1	Maximum
Fluoride[1]	mg/L	N/A	2	Maximum
Lead[1]	mg/L	N/A	0.1	Maximum
Manganese[2]	mg/L	N/A	2.5	Maximum
Mercury[1]	mg/L	N/A	0.002	Maximum
Molybdenum[1]	mg/L	N/A	0.15	Maximum
Nickel[1]	mg/L	N/A	1	Maximum
Selenium[1]	mg/L	N/A	0.02	Maximum
Zinc[1]	mg/L	N/A	20	Maximum

[1] Contaminant limits based on ANZECC (2000) Livestock drinking water quality and are analysed as Total Metals (unfiltered)
[2] Contaminant limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) and are analysed as Filtered Metals.

(C4-4) The method of water sampling required by this environmental authority must comply with that set out in the latest edition of the Environmental Protection Agency's Water Quality Sampling Manual.

Voids

(C5-1) Water quality in mining voids and final voids must be monitored at the locations and frequencies defined in Schedule C - Table 16 and for the parameters detailed in Schedule C – Table 17.

(C5-2) In the event that water quality within the mining voids or final voids does not comply with the contaminant limits defined in Schedule C – Table 17, implement measures to prevent access by all livestock and minimise access by fauna to the void.

Schedule C - Table 16 (Voids Monitoring Locations and Frequency)

Monitoring point	Monitoring frequency
Flying Horse Pit	Annually
Mount Kelly Pit	Annually
Swagman Pit	Annually
Mount Clarke Pit	Annually
Lady Annie Pit	Annually

RTI DE RELEASE - DNRM

Schedule C - Table 17 (Void Water Quality Limits)

Parameter	Units	Limit	Limit Type
pH	pH	6-9	Range
TDS	mg/L	4000	Maximum
Sulphate	mg/L	1000	Maximum
Arsenic	mg/L	0.5	Maximum
Cadmium	mg/L	0.01	Maximum
Chromium	mg/L	1	Maximum
Copper	mg/L	1	Maximum
Lead	mg/L	0.1	Maximum
Mercury	mg/L	0.002	Maximum
Zinc	mg/L	20	Maximum

Contaminant limits are based on ANZECC (2000 Livestock drinking water quality and analysed for total metals (unfiltered))

Acid Rock Drainage and Leachate Management

(C6-1) Subject to limits defined in Schedule C all reasonable and practicable measures must be implemented to prevent hazardous leachate being directly or indirectly released or likely to be released as a result of the activity to any groundwater, watercourse and waters.

END CONDITIONS FOR SCHEDULE C

RTI DL RELEASE - DNRM

am 7/1/08

Schedule D - Noise and Vibration

Noise Nuisance

(D1-1) Subject to Conditions (D1-2) and (D1-3) noise from the mining activity must not cause an environmental nuisance to an affected building.

(D1-2) When requested by the administering authority, noise monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(D1-3) The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual.

Vibration nuisance

(D2-1) Subject to Conditions (D2-2) and (D2-3) vibration from the mining activity must not cause an environmental nuisance to an affected building.

(D2-2) When requested by the administering authority, vibration monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

END CONDITIONS FOR SCHEDULE D

Schedule E - Waste

Storage of Tyres

(E1-1) Tyres stored awaiting disposal or transport for take-back and, recycling, or waste-to-energy options - should be stockpiled in volumes less than 3m in height and 200m^2 in area and at least 10m from any other tyre storage area.

(E1-2) All reasonable and practicable fire prevention measures must be implemented, including removal of grass and other materials within a 10m radius of the scrap tyre storage area.

Disposal of Tyres

(E2-1) Disposing of scrap tyres resulting from the mining activities in spoil emplacements is acceptable, provided tyres are placed as deep in the spoil as reasonably practicable.

(E2-2) Scrap tyres resulting from the mining activities disposed within the operational land must not impede saturated aquifers or compromise the stability of the consolidated landform.

Waste Management

(E3-1) A Waste Management Program, in accordance with the Environmental Protection (Waste Management) Policy 2000, must be included in the Plan of Operations.

RTI DL RELEASE - DNRM

Released

Regulated Waste

(E 4-1) All regulated waste received and removed from the site that is over 250kg in weight, must be transported by a person who holds a current authority to transport such waste under the provisions of the *Environmental Protection Act 1994.*

(E4-2) Except as otherwise provided by the conditions of this authority, all waste removed from the site must be taken to a facility that is lawfully allowed to accept such waste under the provisions of the *Environmental Protection Act 1994.*

(E4-3) Where regulated waste is removed from the Project (other than by a release as permitted under another schedule of this environmental authority), records must be kept of the following:

a) the date, quantity and type of waste removed, and
b) name of the waste transporter that removed the waste; and
c) the intended treatment/disposal destination of the waste.

Note: Records of documents maintained in compliance with a waste tracking system established under the Environmental Protection Act 1994 or any other law for regulated waste will be deemed to satisfy this condition.

Waste Rock Characterisation

(E5-1) All areas to be mined must undergo a waste rock characterisation survey (where waste rock is to be disposed of on the surface) and a report submitted to the administering authority prior to mining where this survey has not previously been carried out.

END CONDITIONS FOR SCHEDULE E

RTI DL RELEASE - DNRM

12-513

File D Part 1

Page 192 of 249

Released

Schedule F - Land

Rehabilitation Landform Criteria

(F1-1) All areas significantly disturbed by mining activities must be rehabilitated to a stable landform with a self-sustaining vegetation cover in accordance with Schedule F – Table 1 and 2.

RTI DR RELEASE - DNRM

Schedule F - Table 1 (Final Land Use and Rehabilitation Approval Schedule)

Disturbance Category	Max. Area (ha)	Land Use		Land Capability		Reference Site	
		PRE DISTURBANCE	POST DISTURBANCE	PRE DISTURBANCE	POST DISTURBANCE	Longitude	Latitude
Mount Kelly Mining Lease & Infrastructure							
Flying Horse Pit	43	Habitat	Water Storage	Class 5	Water Storage		
Flying Horse Waste Rock Dump 1	9	Habitat	Habitat	Class 5	Class 5	Hilltop	
						304745	7799087
						Mid Slope	
						304800	7798974
						Bottom Slope	
						304851	7798977
Flying Horse Waste Dump 2	19	Habitat	Habitat	Class 5	Class 5	Hilltop	
						304745	304745
						Mid Slope	
						304800	304800
						Bottom Slope	
						304851	304851
Flying Horse Waste Rock Dump 3	27	Habitat	Habitat	Class 5	Class 5	Hilltop	
						304745	304745
						Mid Slope	
						304800	304800
						Bottom Slope	

Disturbance Category	Max. Area (ha)	Land Use		Land Capability		Reference Site	
		PRE DISTURBANCE	POST DISTURBANCE	PRE DISTURBANCE	POST DISTURBANCE	Longitude	Latitude
						304851	304851
Mount Clarke Pit	46	Habitat	Water Storage	Class 5	Water Storage		
Mount Clarke Waste Rock Dump	45	Habitat/LIG	Habitat/LIG	Class 4 - 5	Class 4 -5	Hilltop	
						305806	7799695
						Mid Slope	
						305760	7799718
						Bottom Slope	
						305741	7799750
Mount Kelly Workings Pit	10	Habitat	Water Storage	Class 5	Water Storage		
Mount Kelly Waste Rock Dump	6	Habitat	Habitat	Class 5	Class 5	Hilltop	
						304745	7799087
						Mid Slope	
						304800	7798974
						Bottom Slope	
						304851	7798977
Swagman Pit	12	Habitat	Water Storage	Class 5	Water Storage		
Swagman Waste Rock Dump	34	Habitat	Habitat	Class 5	Class 5	Hilltop	
						304745	7799087
						Mid Slope	
						304800	7798974
						Bottom Slope	
						304851	7798977
Mining Area ROM Storage & Live Rehandle	5.5	Habitat	Habitat/LIG	Class 4 - 5	Class 4 - 5	302768	7799144
Mining Area Sediment Dam	6	Habitat	Water Storage	Class 5	Water Storage		
Mining Area Diversion Drains	9	Habitat	LIG or diversion Habitat	Class 5	Class 5	305741	7799750
Mining Area Topsoil Stockpiles	15	Habitat	Habitat	Class 5	Class 5	305741	7799750

RTI DL RELEASE - DNRM

12-513
File D Part 1
Page 193 of 249
Released

12-513

File D Part 1

Page 194 of 249

Released

Disturbance Category	Max. Area (ha)	Land Use		Land Capability		Reference Site	
		PRE DISTURBANCE	POST DISTURBANCE	PRE DISTURBANCE	POST DISTURBANCE	Longitude	Latitude
Mining Area Workshop	3.5	Habitat	Habitat	Class 5	Class 5	305741	7799750
Mining Area Haul Roads	22.5	Habitat	Habitat	Class 5	Class 5	305741	7799750
Roads/Tracks on MLs	18.6	Existing tracks or LIG	Tracks for grazier or LIG	Class 4 - 5	Class 4 - 5	303422	7797704
Accommodation Camp and Facilities	5	LIG	LIG	Class 4	Class 4	303422	7797704
Walking Track – Plant to Camp	2	LIG	LIG	Class 4	Class 4	303422	7797704
Sewage Plant and Pond	0.2	LIG	LIG	Class 4	Class 4	303422	7797704
Sewage Plant Evaporation Area	1	LIG	LIG	Class 4	Class 4	303422	7797704
ROM Pad – at process plant	4	LIG	LIG	Class 4 - 5	Class 4 -5	302766	7799144
Crushing Area and Acid Storage	3	LIG	LIG	Class 4 - 5	Class 4 - 5	302766	7799144
ROM Pad Sediment Dams	2.75	Habitat	Water Storage	Class 5	Water Storage		
Process plant and associated buildings	7.5	LIG	LIG	Class 4	Class 4	302766	7799144
Overland Conveyor	2.5	LIG	LIG	Class 4	Class 4	303422	7797704
Transfer Conveyor	0.5	LIG	LIG	Class 4	Class 4	303422	7797704
Workshop/Office Access Circuit Area	2.9	LIG	LIG	Class 4	Class 4	302659	7797575
Heap Leach Pads – Stage 1 and 2A	43.2	LIG	Habitat/LIG	Class 4	Class 4- 5	302659	7797575
Heap Leach Pads – Stage 2B	10	LIG	Habitat/LIG	Class 4	Class 4- 5	302659	7797575
Heap Leach Pads – Stage 3	19.5	LIG	Habitat/LIG	Class 4	Class 4-5	302659	7797575
Process Water Ponds – PLS, ILS and Raffinate Stage 1 and 2	3.4	LIG	Water storages	Class 4	Water storages		
Process Water Ponds – PLS and ILS Stage 3	2	LIG	Water storage	Class 4	Water Storage		
Stormwater Pond - Stage 1	6.5	LIG	Water storages	Class 4	Water storages		
Stormwater Pond 2 – Stage 2A, 2B and 3	9.7	LIG	Water storages	Class 4	Water storages		
Stormwater Pond 3 – Stage 3	2.4	LIG	Water storages	Class 4	Water storages		
Stormwater Pond spillway channel	0.7	LIG	LIG or diversion	Class 4	Class 4 -5	302659	7797575
Raw Water Pond	0.6	LIG	LIG/Water storage	Class 4	Class 4 or water storage	302659	7797575

RTI DL RELEASE - DNRM

Disturbance Category	Max. Area (ha)	Land Use		Land Capability		Reference Site	
		PRE DISTURBANCE	POST DISTURBANCE	PRE DISTURBANCE	POST DISTURBANCE	Longitude	Latitude
Raw Water Expansion Storage	5	LIG	LIG/Water storage	Class 4	Class 4 or water storage	302659	7797575
Process Area Topsoil Stockpile – Stage 1	5.5	LIG	LIG	Class 4	Class 4	302659	7797575
Process Area Topsoil Stockpile – Stage 2A and 2B	3.5	LIG	LIG	Class 4	Class 4	302659	7797575
Process Area Topsoil Stockpile – Stage 3	5.5	LIG	LIG	Class 4	Class 4	302659	7797575
Process Plant Drainage Diversions	2.7	LIG	LIG or diversion	Class 4	Class 4 - 5	302659	7797575
Bulk Fill Stockpile	2.6	LIG	LIG	Class 4	Class 4	302659	7797575
Pipelines and Powerlines (on Mt Kelly MLs)	1	LIG/Habitat	Permanent infrastructure	Class 4 - 5	Permanent infrastructure		
Pipelines and Power lines on ML90178	83	LIG/Habitat	Permanent infrastructure	Class 4 - 5	Permanent infrastructure		
Pipeline and Power line on Birla ML90184	9	LIG/Habitat	Permanent infrastructure	Class 4 - 5	Permanent infrastructure		
Rubbish Dumps	2	LIG	LIG	Class 4 - 5	Class 4 - 5	303422	7797704
Concrete Batch Plant	0.3	LIG	LIG	Class 4	Class 4	302659	7797575
Fuel Storage Area	0.3	LIG	LIG	Class 4	Class 4	302659	7797575
Heavy Vehicle Workshop	2.5	LIG	LIG	Class 4	Class 4	302659	7797575
Contractor Laydown Area	4.3	LIG	LIG	Class 4	Class 4	302659	7797575
Plant Laydown Area	3.5	LIG	LIG	Class 4	Class 4	302659	7797575
Exploration	5	LIG	LIG/Habitat	Class 4 - 5	Class 4 - 5	303422	7797704
Construction Access (net of specific areas)	10	LIG	LIG/Habitat	Class 4 - 5	Class 4 - 5	303422	7797704
Gravel Borrow Pits (on and off ML)	6.7	LIG/Habitat	LIG/Habitat	Class 4 - 5	Class 4 - 5	303422	7797704
Upgrade to Access Road (off ML)	2.0	LIG/Habitat	Permanent access road for landholder	Class 4 - 5	Permanent access road for landholder		
Total	**615.05**						
Lady Annie Mining Lease							
Lady Annie Pit	36.1	Disturbed	Water Storage	Class 5	Water Storage		
ROM pad	1.5	LIG	LIG/Habitat	Class 4	Class 4	295496	7810802
Waste Rock Dump	61.8	LIG	LIG/Habitat	Class 4 - 5	Class 4	295496	7810802

RTI DU RELEASE - DERM

12-513
File D Part 1
Page 195 of 249
Released

12-513

File D Part 1

Page 196 of 249

Released

Disturbance Category	Max. Area	Land Use		Land Capability		Reference Site	
	(ha)	PRE DISTURBANCE	POST DISTURBANCE	PRE DISTURBANCE	POST DISTURBANCE	Longitude	Latitude
Top Soil Stores	12.1	LIG	LIG/Habitat	Class 4 - 5	Class 4	295496	7810802
Low Grade Ore Stockpile	9.5	LIG	LIG/Habitat	Class 4	Class 4	295496	7810802
Sediment Pond	1.9	LIG	LIG/Habitat	Class 4	Water Storage		
Retention Basin	0.4	LIG/Habitat	LIG/Habitat	Class 4-5	Water Storage		
Pit Haul Road	1.3	LIG/Habitat	LIG/Habitat	Class 4-5	Class 4-5	295496	7810802
Diversion Channels	1.7	LIG/Habitat	LIG/Habitat	Class 4-5	Permanent Diversion		
Lady Annie Mine Construction Area (net of specific areas)	22.3	LIG/Habitat	LIG/Habitat	Class 4-5	Class 4-5	295496	7810802
Upgrade to Haul / Access Road (off ML)	14.0	LIG/Habitat	Permanent access road for landholder	Class 4-5	Permanent access road for landholder		
Old Open Cut and Sanderson's Shaft	0.3	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Old Tailings Areas	1.0	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Exploration Tracks and Drill Pads	12.4	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Rubbish Tip	0.4	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Core Shed	0.3	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Exploration Sample Yard	0.6	Existing Disturbance	Habitat/LIG	Existing Disturbance	Class 4 -5	295496	7810802
Total	177.6						

RELEASE - DRAFT

LIG- Low Intensity Grazing
Classes are derived from the Department of Minerals and Energy's Land Suitability Assessment Techniques (1995)

(F1-2) Progressive rehabilitation must commence when areas become available within the operational land.

(F1-3) The holder of this environmental authority must rehabilitate all existing land disturbances located within the boundary leases of ML90179 (Lady Annie) as identified in Table 1. The holder of this environmental authority must ensure these areas of existing land disturbance, where not otherwise disturbed and rehabilitated under this authority, are rehabilitated to the final land descriptions identified in Tables 1 and 2.

Schedule F - Table 2 (Landform Design)

Disturbance type	Slope range (%)	Projective surface area (ha)
Waste Rock Dumps	33%-76% (1:3 to angle of repose)	211.3
Heap Leach Pads	<33% or 1:3	76.2
ROM Pads	33%-76% (1:3 to angle of repose)	11

Residual Void Outcome

(F2-1) Residual voids must not cause any serious environmental harm to land, surface waters or any recognised groundwater aquifer, other than the environmental harm constituted by the existence of the residual void itself and subject to any other condition within this environmental authority.

Dams Containing Hazardous Waste

Description of Dam

(F3-1) The construction or operation of any dam containing hazardous waste within the operational land must comply with Schedule F - Table 3.

Schedule F — Table 3 (Size and Purpose of Dams Containing Hazardous Waste)

Name of dam containing hazardous waste [1]	Maximum surface area of dam (ha)	Maximum volume of dam (m^3)	Maximum depth of dam (m) [2]	Purpose of dam [3]
Heap Leach Pads Stage 1	21.6	N/A	N/A	Storage of ore and Process Solution
Heap Leach Pads Stage 2A	21.6	N/A	N/A	Storage of ore and Process Solution
Heap Leach Pads Stage 2B	10	N/A	N/A	Storage of ore and Process Solution
Heap Leach Pads Stage 3	19.5	N/A	N/A	Storage of ore and Process Solution
Stage 1 and 2 Process Water Ponds (Raffinate Pre-Settler, Raffinate, ILS and PLS)	3.4	61,500 (to contain 43,200 of process liquor)	7.5	Storage of Process Solutions and storage of storm water runoff from processing area
Stage 3 Process Water Ponds (ILS and PLS)	2.0	32,000 (to contain 18,000 of process liquor)	7.0	Storage of Process Solutions and storage of storm water runoff from processing area
Stormwater Pond 1 (Adequate for Stage 1 only)	6.47	300,530	7.0	Storage of storm water runoff from processing area
Stormwater Pond 2 (Required for Stage 2A, 2B and part of Stage 3)	9.63	510,000	8.0	Storage of storm water runoff from processing area
Stormwater Pond 3 (Required for Stage 3)	2.4	65,000	8.0	Storage of storm water runoff from processing area

Note [1]: The name of the dam containing hazardous waste should refer to the name of the dam e.g. process residue facility and decant dam.

Note [2]: For dams that do not require a dam wall, input the maximum void depth e.g. where dams are formed by excavating below the land surface or backfilling a residual void.

Note [3]: Purpose of the dam should outline the designed function, e.g. "the permanent containment of tailings resulting from the extraction of nickel, cobalt and other metals at the XYZ Refinery".

RTI DL RELEASE DNRM

Location of Dam

(F3-2) The location of any dam containing hazardous waste within the licensed place must be located within the polygonal area defined by the co-ordinates defined in Schedule C- Table 4 and Schedule I- Map 6.

Schedule F — Table 4 (Location of Dams Containing Hazardous Waste)

Name of dam containing hazardous waste	Easting(AMG 84, Zone 54) [1]	Northing (AMG 84, Zone 54) [1]
Stage 1 and 2 - PLS Ponds, ILS, Raffinate Pre-settler and Raffinate Pond	301760 302065 302035 301760	7797640 7797640 7797310 7797310
Stage 8 PLS Ponds and ILS	302095 301890 301890 302095	7797975 7797975 7797850 7797850
Stormwater Pond 1	301470 301760 301760 301470	7797640 7797640 7797310 7797310
Stormwater Pond 2	301420 301420 301760 301760	7797410 7796960 7797410 7796960
Stormwater Pond 3	301888 302095 301888 302095	7797858 7797858 7797973 7797973
Stage 1 and 2A Heap Leach Pads	302065 302720 302720 302035	7797945 7797945 7796825 7796825
Stage 2B Heap Leach Pads	301990 301990 302495 302495	7796885 7796616 7796822 7796885
Stage 8 Heap Leach Pads	301990 301990 302490 302490	7798435 7797945 7797945 7798435

Note [1]: A minimum of 3 control points is required to constrain the location of all activities associated with the dam containing hazardous waste. Additional infrastructure which forms part of any dam containing hazardous waste may include appurtenant works consisting of tailings discharge pipelines, seepage collection systems, runoff diversion bunds, containment systems, pressure relief wells, decant and recycle water systems.

Standards and Criteria

(F3-3) The holder of the environmental authority must design, construct, repair, maintain, operate and decommission the dams defined in Schedule F – Table 3 and 4 in accordance with an acknowledged design plan that must comply with the standard environmental conditions in the "Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste".

(F3-4) The holder of the environmental authority must design, construct, and operate all low hazardous dams containing hazardous waste and non-hazardous dams in accordance with the criteria outlined in Appendix B of the Code of Environmental Compliance for Mining Activities.

RTI DL RELEASE - DNRM

Released

Inspection of Dams

(F3-5) High hazard dams containing hazardous waste shall be inspected by a Registered Professional Engineer Queensland (RPEQ) prior to 1 **November** each year or at any time if alarming, unusual or otherwise unsatisfactory conditions are observed.

(F3-6) For each inspection, the engineer shall assess the condition of the dam and its foundations, determine the hydraulic adequacy of the dam and assess the adequacy of the works with respect to dam safety.

(F3-7) For each inspection, two copies of the engineer's report and any recommendations as to measures to be taken to ensure the integrity of the dam shall be furnished to the administering authority within **28 days** of the inspection.

Decommissioning of Dam – Objective

(F3-8) Dams containing hazardous waste must not be abandoned and must be decommissioned to a situation where water can no longer be stored in the dams. The dams and their contained waste(s) must be stable, whereafter the dams are no longer dams and they become landforms on the operational land and must comply with the rehabilitation requirements of this environmental authority.

Decommissioning of Dam – Documentation and Compliance

(F3-9) Decommissioning activities for dams must be documented in detail in the plan of operations under which the activities are to occur. Where the detailed documentation is not already contained in the Design Plan for the dam, the detailed documentation is considered to be an amendment to the design plan and must be submitted as an amendment to the design plan required by the "Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste".

Infrastructure

(F4-1) All infrastructure, constructed by or for the environmental authority holder during the mining activities including water storage structures, must be removed from the site prior to mining lease surrender, except where agreed in writing by the post mining landowner / holder.

NOTE: This is not applicable where the landowner / holder is also the environmental authority holder.

Contaminated Lands

(F5-1) A register and map of all potentially contaminated sites and any remediation details, must be kept on site, updated regularly, and included in each Plan of Operations.

(F5-2) A Spillage Management Plan and an Emergency Plan for all hazardous materials stored on-site, together with a description of suitable equipment and training must be updated and included with each Plan of Operations.

END CONDITIONS FOR SCHEDULE F

Schedule G - Community

Complaint Response

(G1-1) All complaints received must be recorded including details of complainant, reasons for the complaint, investigations undertaken, conclusions formed and actions taken. This information must be made available for inspection by the administering authority on request.

END CONDITIONS FOR SCHEDULE G

RTIDL RELEASE - DNRM

Released

Schedule H – Definitions

"acceptance criteria" means the measures by which the actions implemented to rehabilitate the land are deemed to be complete. The acceptance criteria indicate the success of the rehabilitation outcome or remediation of areas which have been significantly been disturbed by the mining activities. Acceptance criteria may include information regarding:

- vegetation establishment, survival and succession;
- vegetation productivity, sustained growth and structure development;
- fauna colonisation and habitat development;
- ecosystem processes such as soil development and nutrient cycling, and the recolonisation of specific fauna groups such as collembola, mites and termites which are involved in these processes;
- microbiological studies including recolonisation by mycorrhizal fungi, microbial biomass and respiration;
- effects of various establishment treatments such as deep ripping, topsoil handling, seeding and fertiliser application on vegetation growth and development;
- resilience of vegetation to disease, insect attack, drought and fire;
- vegetation water use and effects on ground water levels and catchment yields.

"affected building"

- for noise means any building or any part of a building, for example the building from which the noise is made, at which the noise can be heard.
- for vibration means any building or any part of a building, for example the activity from which the vibration is made, at which the vibration can be felt.

"ambient (or total) noise" at a place, means the level of noise at the place from all sources (near and far), measured as the Leq for an appropriate time interval.

"appropriately qualified person" means any person who conforms to the EPA operational policy for an "appropriately qualified person (analyst)" in accordance with Section 490(7) of the *Environmental Protection Act 1994*.

"ARD" means acid rock drainage and refers to the low pH, high heavy metal pollutant typical of sulphidic mine wastes, and most commonly associated with the production of ferrous iron and sulphuric acid through the oxidation of sulphide minerals.

"authority" means environmental authority (mining activities) under the *Environmental Protection Act 1994*.

"blasting" means the use of explosive materials to fracture-

(a) rock, coal and other minerals for later recovery; or
(b) structural components or other items to facilitate removal from a site or for reuse.

"building" includes a structure of any type and part of a building or structure.

"commercial place" means a work place used as an office or for business or commercial purposes, which is not part of the mining activity and does not include employees accommodation or public roads.

"competent person" means a person with the demonstrated skill and knowledge required to carry out the task to a standard necessary for the reliance upon collected data or protection of the environment.

"dam" means a containment or proposed containment whether permanent or temporary, which is designed to contain, divert or control flowable substances. However this does not include a fabricated or manufactured tank or container designed to a recognised standard.

"design plan" in the context of a dam design is the documentation required under the Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste to describe the physical dimensions of the dam, the materials and standards to be used for construction of the dam, the procedures and criteria to be used for operating the dam and the decommissioning and rehabilitation objectives in terms of procedures, works and outcomes at the end of dam life. The documents can include design and investigation reports, drawings, specifications and certifications.

"environmental authority holder" means the holder of this environmental authority.

"flow event" means a flow event producing sufficient water to permit a monitoring creek bed flow of 30cm or more at the sampling station.

"flowable substance" means matter or mixture of materials which can be forced to or otherwise flow under any conditions possible in a situation. It includes water, other liquids or a mixture that includes water or any other liquid or suspended solids.

RTI DL RELEASE - DNRM

"hazardous waste" means any substance, whether liquid, solid or gaseous, derived by or resulting from, the processing of minerals that tends to destroy life or impair or endanger health.

"infrastructure" means water storage dams, roads and tracks, buildings and other structures built for the purpose of mining activities but does not include facilities required for the long term management of mining impacts or the protection of potential resources. Such facilities include dams containing hazardous waste, waste rock dumps, voids, or ore stockpiles and buildings or other structures whose ownership can be transferred and which have a residual beneficial use for the next owner of the operational land or the background land owner.

"$L_{A\ 10,\ adj,\ 10\ mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 10-minute measurement period, using Fast response.

"$L_{A\ 1,\ adj,\ 10\ mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10-minute measurement period, using Fast response.

"$L_{A,\ max\ adj,\ T}$" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.

"land capability" as defined in the DME 1995 Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland.

"land suitability" as defined in the DME 1995 Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland.

"land use" term to describe the selected post mining use of the land, which is planned to occur after the cessation of mining operations.

"leachate" means a liquid that has passed through or emerged from, or is likely to have passed through or emerged from, a material stored, processed or disposed of at the operational land which contains soluble, suspended or miscible contaminants likely to have been derived from the said material.

"mandatory reporting level" means the volume below the spillway crest, equivalent to the lower of the AEP, 72 hour storm or the AEP wave allowance (AEP is the annual exceedence probability).

"mineral" means a substance which normally occurs naturally as part of the earth's crust or is dissolved or suspended in water within or upon the earth's crust and includes a substance which may be extracted from such a substance, and includes—

(a) clay if mined for use for its ceramic properties, kaolin and bentonite;
(b) foundry sand;
(c) hydrocarbons and other substances or matter occurring in association with shale or coal and necessarily mined, extracted, produced or released by or in connection with mining for shale or coal or for the purpose of enhancing the safety of current or future mining operations for coal or the extraction or production of mineral oil therefrom;
(d) limestone if mined for use for its chemical properties;
(e) marble;
(f) mineral oil or gas extracted or produced from shale or coal by in situ processes;
(g) peat;
(h) salt including brine;
(i) shale from which mineral oil may be extracted or produced;
(j) silica, including silica sand, if mined for use for its chemical properties;
(k) rock mined in block or slab form for building or monumental purposes;

but does not include—

(l) living matter;
(m) petroleum within the meaning of the *Petroleum Act 1923*;
(n) soil, sand, gravel or rock (other than rock mined in block or slab form for building or monumental purposes) to be used or to be supplied for use as such, whether intact or in broken form;
(o) water.

"noxious" means harmful or injurious to health or physical well being, other than trivial harm.

"offensive" means causing reasonable offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive, other than trivial harm.

RTI DI RELEASE - DNRM

Released

"peak particle velocity (ppv)" means a measure of ground vibration magnitude which is the maximum rate of change of ground displacement with time, usually measured in millimetres/second (mms^{-1}).

"protected area" means - a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

"progressive rehabilitation" means rehabilitation (defined below) undertaken progressively or a staged approach to rehabilitation as mining operations are ongoing.

"reference site" (or analogue site) may reflect the original location, adjacent area or another area where rehabilitation success has been completed for a similar biodiversity. Details of the reference site may be as photographs, computer generated images and vegetation models etc.

"rehabilitation" the process of reshaping and revegetating land to restore it to a stable landform and in accordance with the acceptance criteria set out in this environmental authority and, where relevant, includes remediation of contaminated land.

"representative" means a sample set which covers the variance in monitoring or other data either due to natural changes or operational phases of the mining activities.

"residual void" means an open pit resulting from the removal of ore and/or waste rock which will remain following the cessation of all mining activities and completion of rehabilitation processes.

"self sustaining" means an area of land which has been rehabilitated and has maintained the required acceptance criteria without human intervention for a period nominated by the administering authority.

"sensitive place" means;
- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- an educational institution; or
- a medical center or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public park or gardens.

"significant disturbance" – includes land
(a) if it is contaminated land; or
(b) it has been disturbed and human intervention is needed to rehabilitate it.
   i. to a state required under the relevant environmental authority; or
   ii. if the environmental authority does not require the land to be rehabilitated to a particular state – to its state immediately before the disturbance.

Some examples of disturbed land include:
- areas where soil has been compacted, removed, covered, exposed or stockpiled;
- areas where vegetation has been removed or destroyed to an extent where the land has been made susceptible to erosion; (vegetation & topsoil)
- areas where land use suitability or capability has been diminished;
- areas within a watercourse, waterway, wetland or lake where mining activities occur;
- areas submerged by tailings or hazardous contaminant storage and dam walls in all cases;
- areas under temporary infrastructure. Temporary infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be removed after mining activities have ceased; or
- areas where land has been contaminated and a suitability statement has not been issued.

However, the following areas are not included:
- areas off lease (e.g. roads or tracks which provide access to the mining lease);
- areas previously significantly disturbed which have achieved the rehabilitation outcomes;
- by agreement with the EPA, areas previously significantly disturbed which have not achieved the rehabilitation objective(s) due to circumstances beyond the control of the mine operator (such as climatic conditions);
- areas under permanent infrastructure. Permanent infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be left by agreement with the landowner. The agreement to leave permanent infrastructure must be recorded in the Landowner Agreement and lodged with the EPA;

PART RELEASED - DNRM

Released

- disturbances that pre-existed the grant of the tenure unless those areas are disturbed during the term of the tenure.

"spillway" means passage or outlet from the dam through which surplus water flows.

"stable" means land form dimensions are or will be stable within tolerable limits now and in the foreseeable future. Stability includes consideration of geotechnical stability, settlement and consolidation allowances, bearing capacity (traffic ability), erosion resistance and geochemical stability with respect to seepage and contaminant generation.

"suitably qualified and experienced person" means a person who is a Registered Professional Engineer of Queensland under the provisions of the *Professional Engineers Act 1988* or a Corporate Member of the Institution of Engineers Australia or holds equivalent professional qualifications and has the following:

(a) knowledge of engineering principles related to the structures, geomechanics, hydrology, hydraulics, chemistry and environmental impact of dams; and

(b) at least a total of five years of suitable experience and demonstrated expertise in at least four of the following areas:

- investigation, design or construction of dams;
- operation and maintenance of dams;
- geomechanics with particular emphasis stability, geology and geochemistry;
- hydrology with particular reference to flooding, estimation of extreme storms, water management or meteorology;
- hydraulics with particular reference to sediment transport and deposition, erosion control, beach processes;
- hydrogeology with particular reference to seepage, groundwater,
- solute transport processes and monitoring thereof; or
- dam safety.

"tolerable limits" means that a range of values could be accepted to achieve an overall environmental management objective (eg a range of settlement of a tailing capping could still meet the objective of draining the cap quickly, preventing pondage and limiting infiltration and percolation).

"trivial harm" means environmental harm which is not material or serious environmental harm and will not cause actual or potential loss or damage to property of an amount of, or amounts totalling more than $5,000.

"watercourse" - Means a river, creek or stream in which water flows permanently or intermittently in a visibly defined channel (natural, artificial or artificially improved) with:

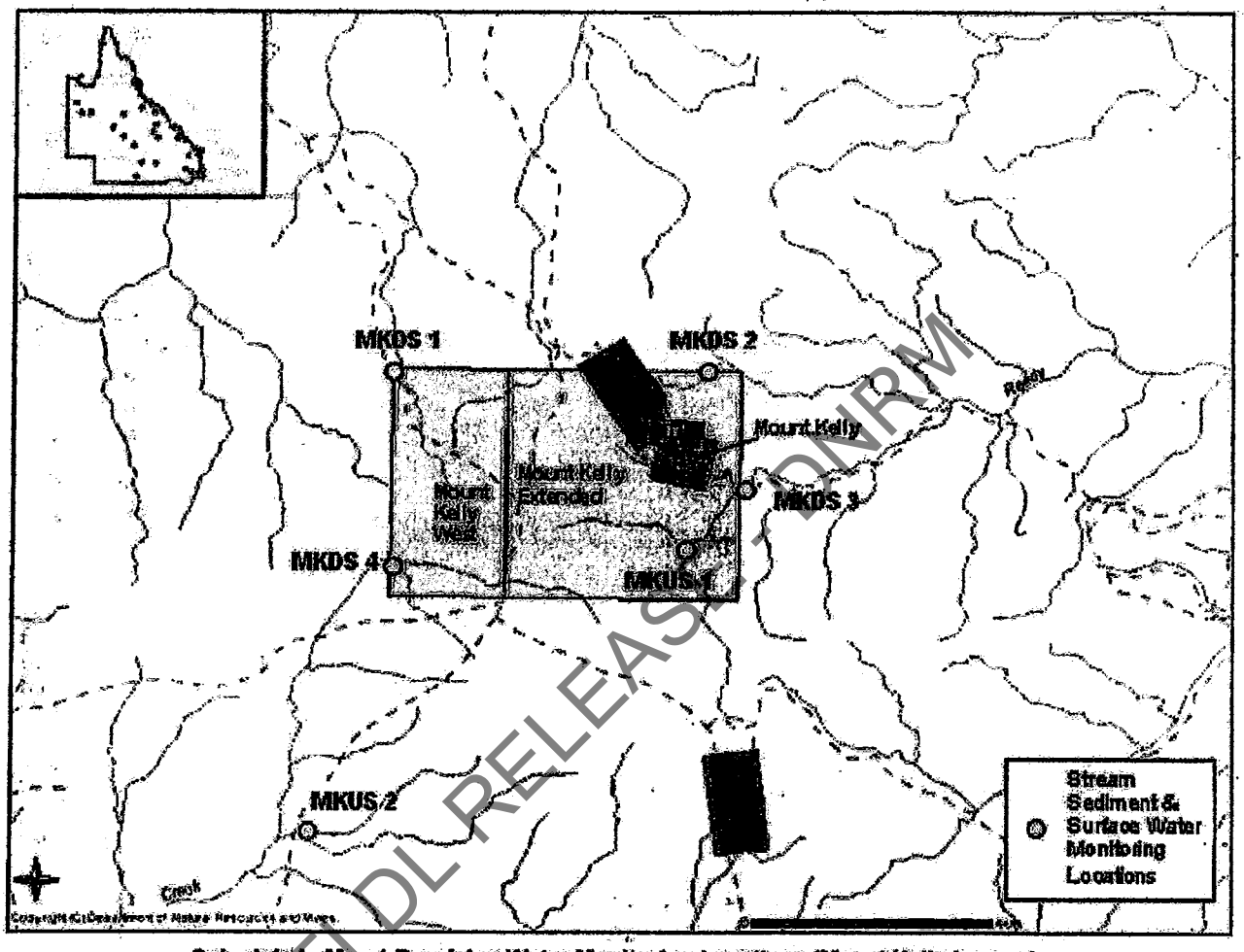
(a) continuous bed and banks;
(b) an extended period of flow for some months after rain ceases, and
(c) an adequacy of flow that sustains basic ecological processes and maintains biodiversity.

"waters" includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea) or any part-thereof.

END CONDITIONS FOR SCHEDULE H

RTI DO RELEASE - DNRM

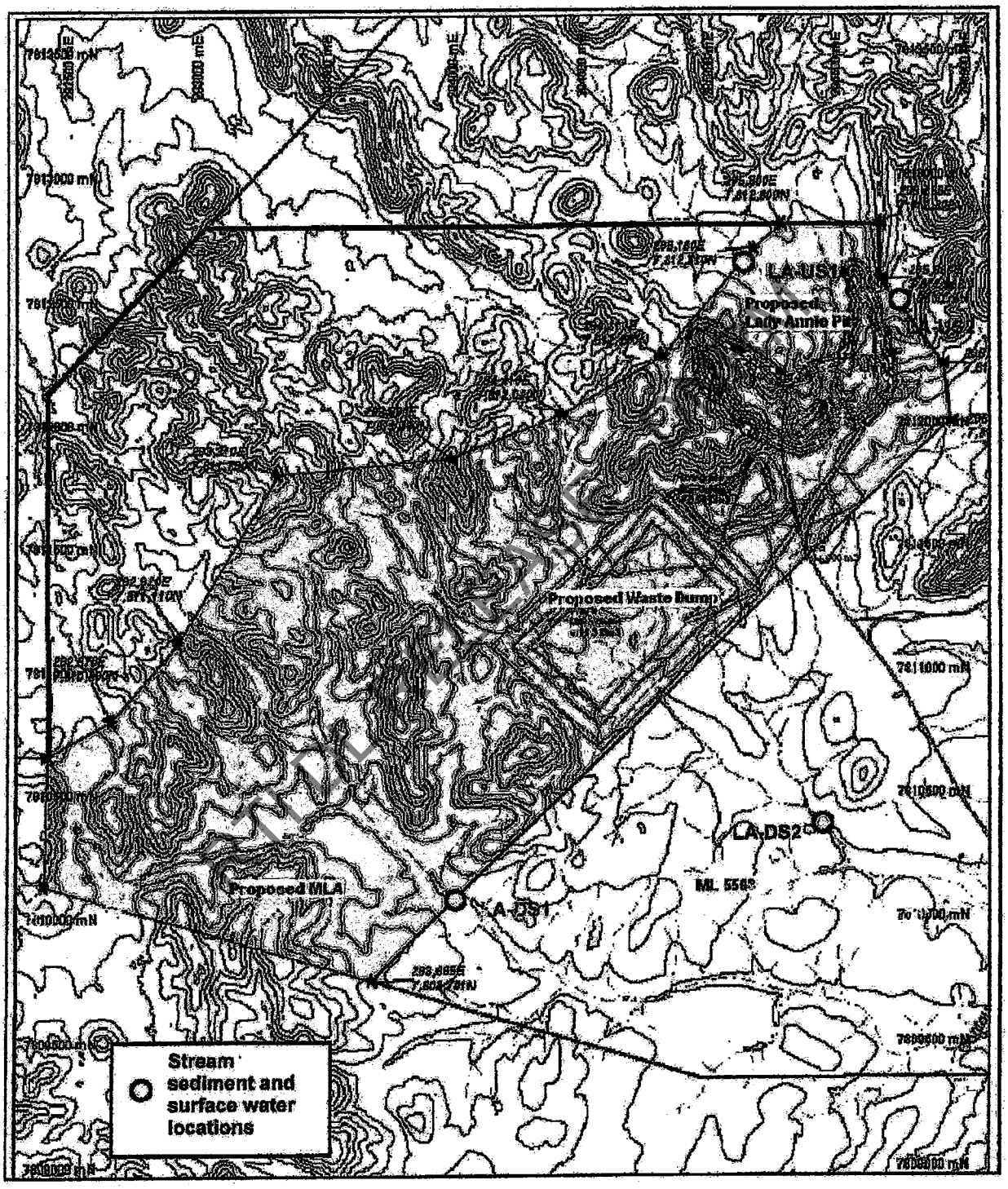
Schedule I - Maps / Plans



Schedule I - Map 1 Receiving Water Monitoring Locations (Mount Kelly Leases)

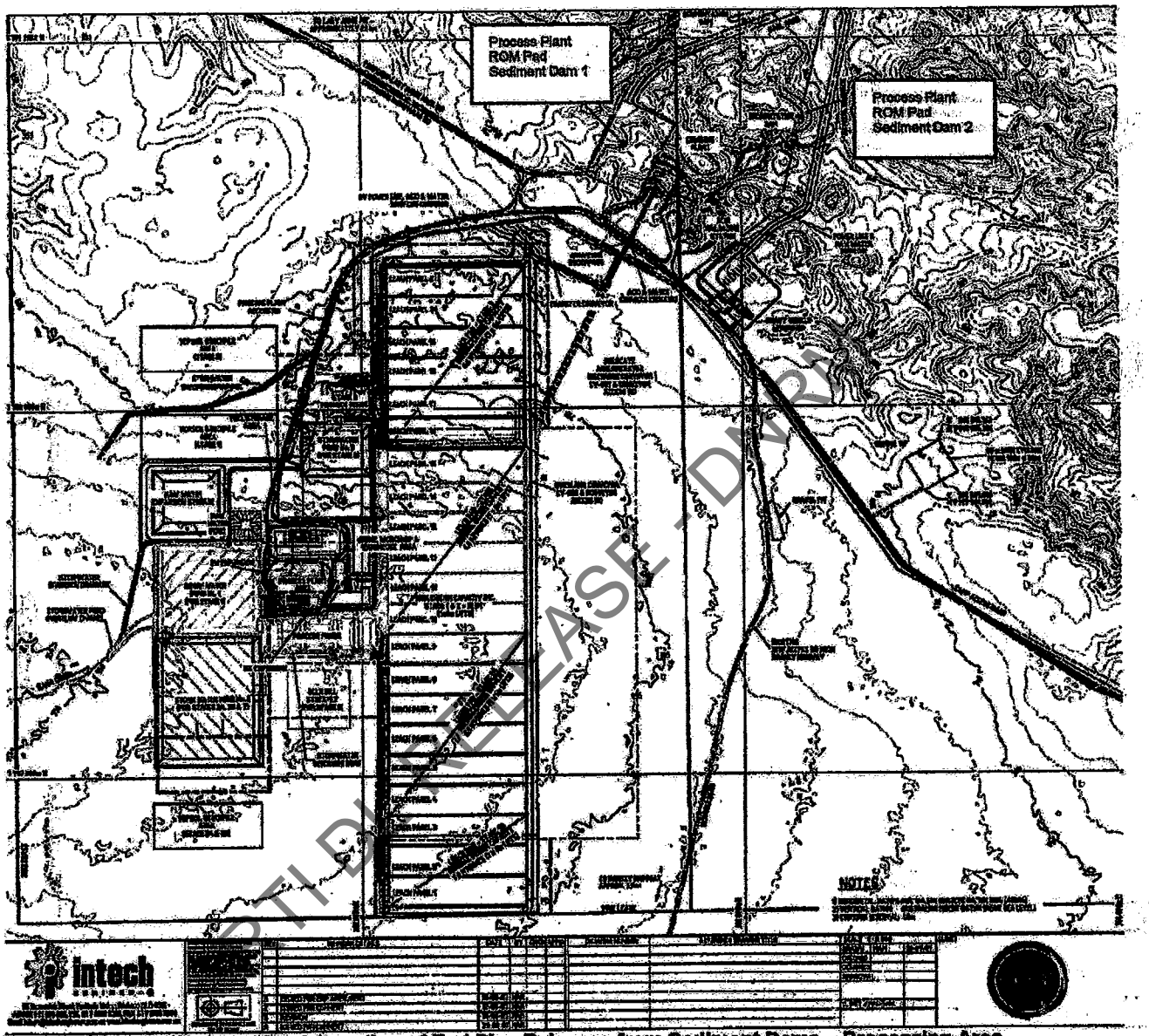
RTI DL RELEASE - DNRM

Released



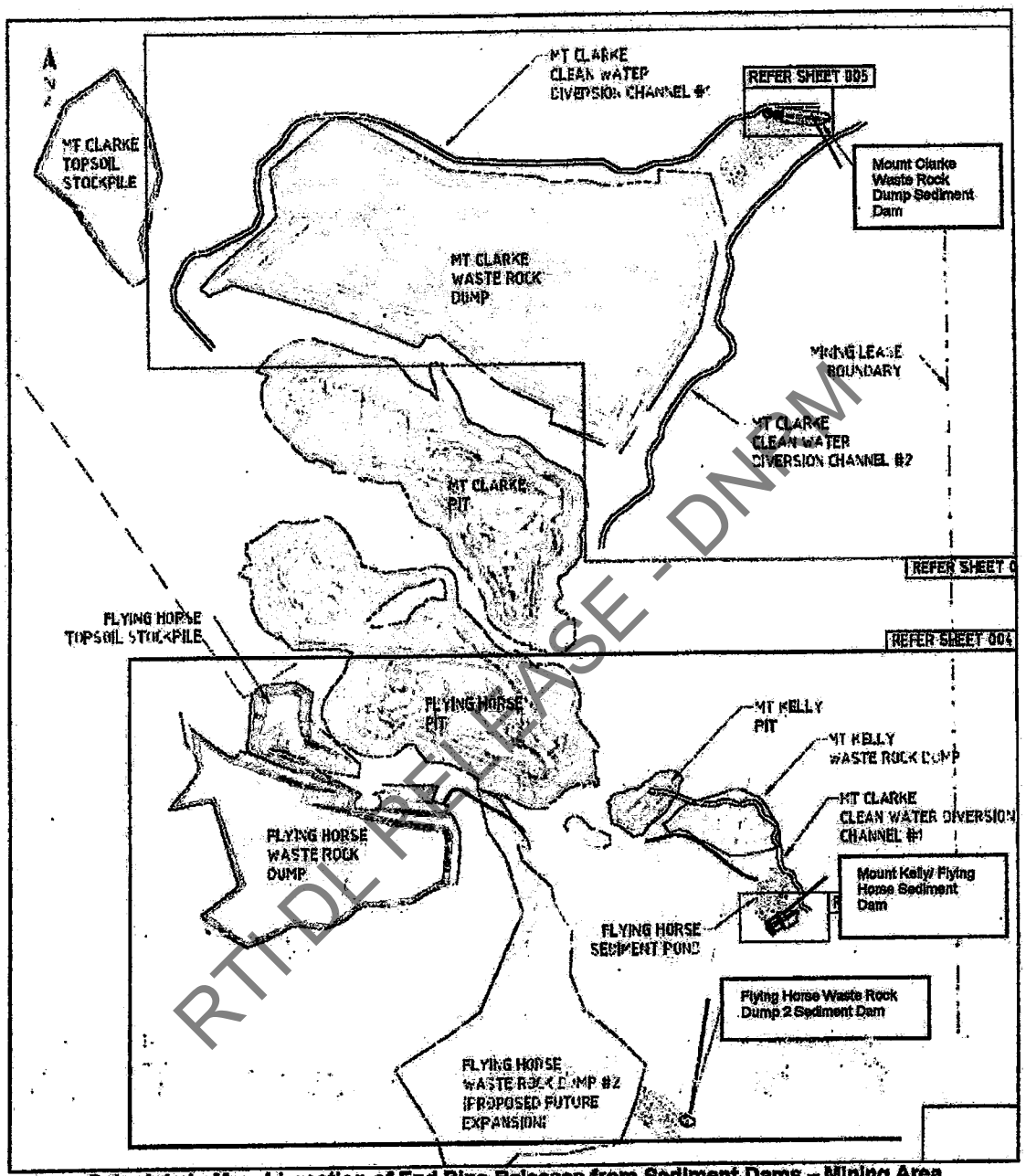
Schedule I - Map 2 Receiving Water Monitoring Locations (Lady Annie)

Released



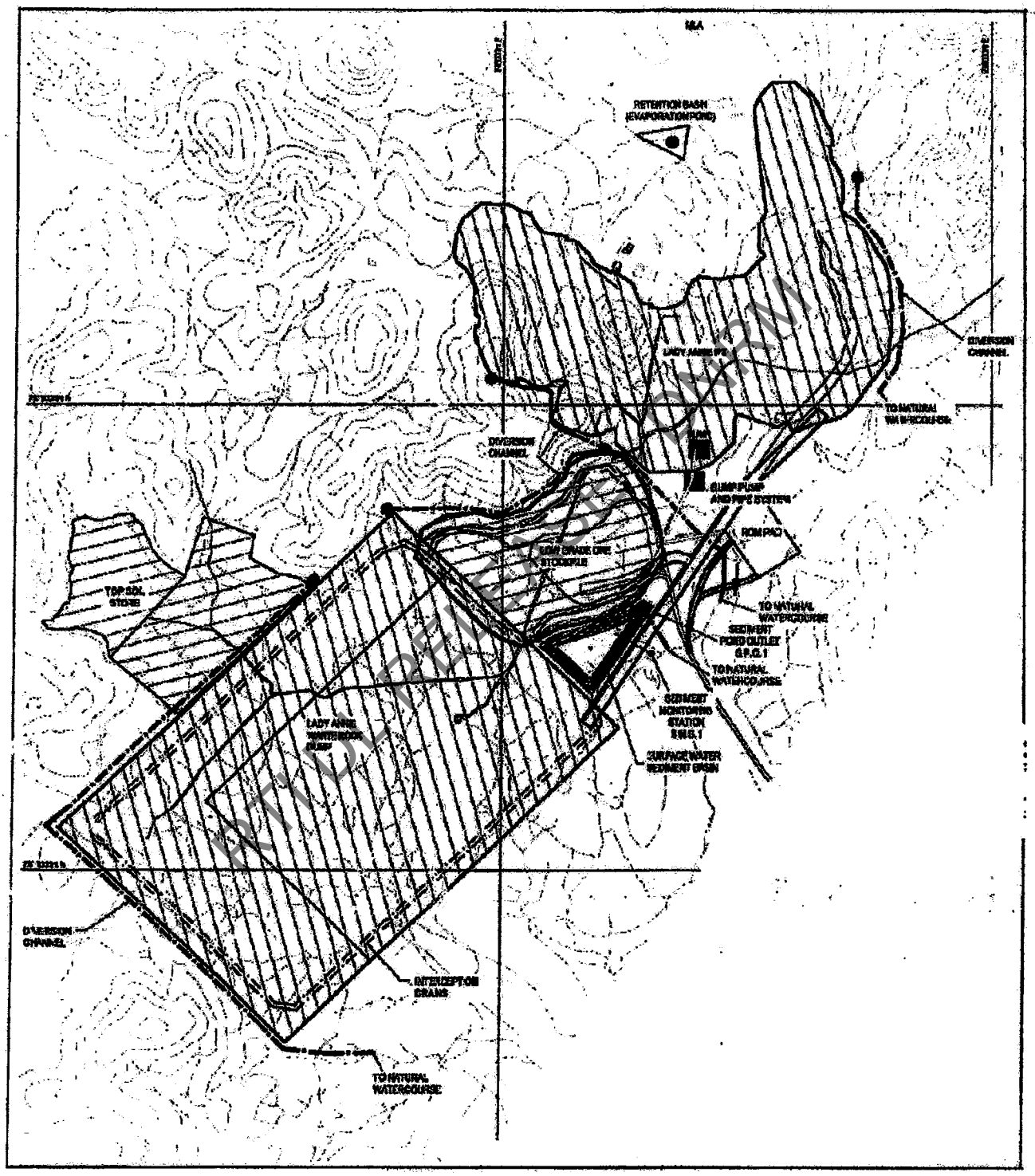
Schedule I - Map 3 Location of End Pipe Releases from Sediment Dams – Processing Area

BTI RELEASE - DNRM



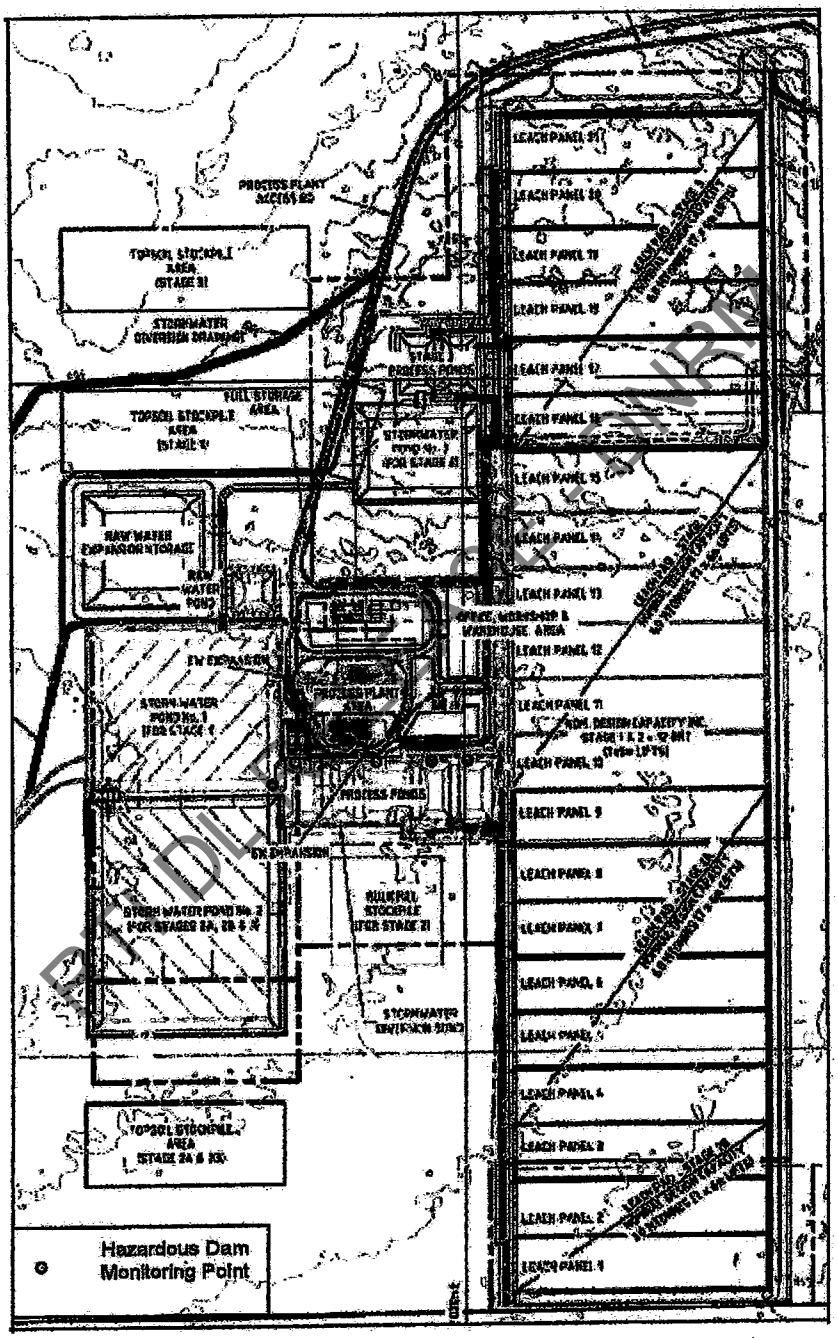
Schedule I - Map 4 Location of End Pipe Releases from Sediment Dams – Mining Area

RTI DL RELEASE - DNRM



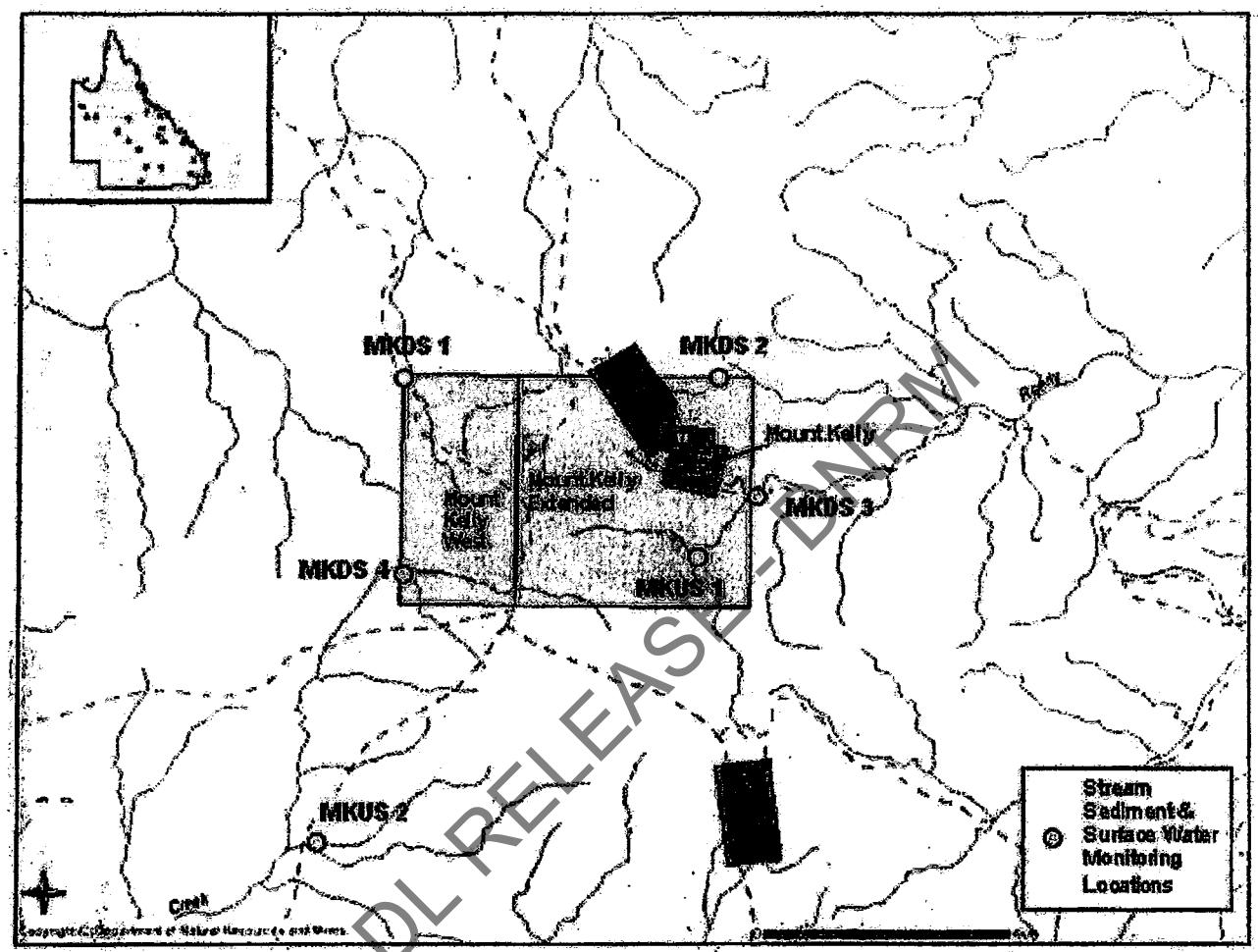
Schedule I - Map 5 Location of End Pipe Releases from Sediment Dams – Lady Annie

Released



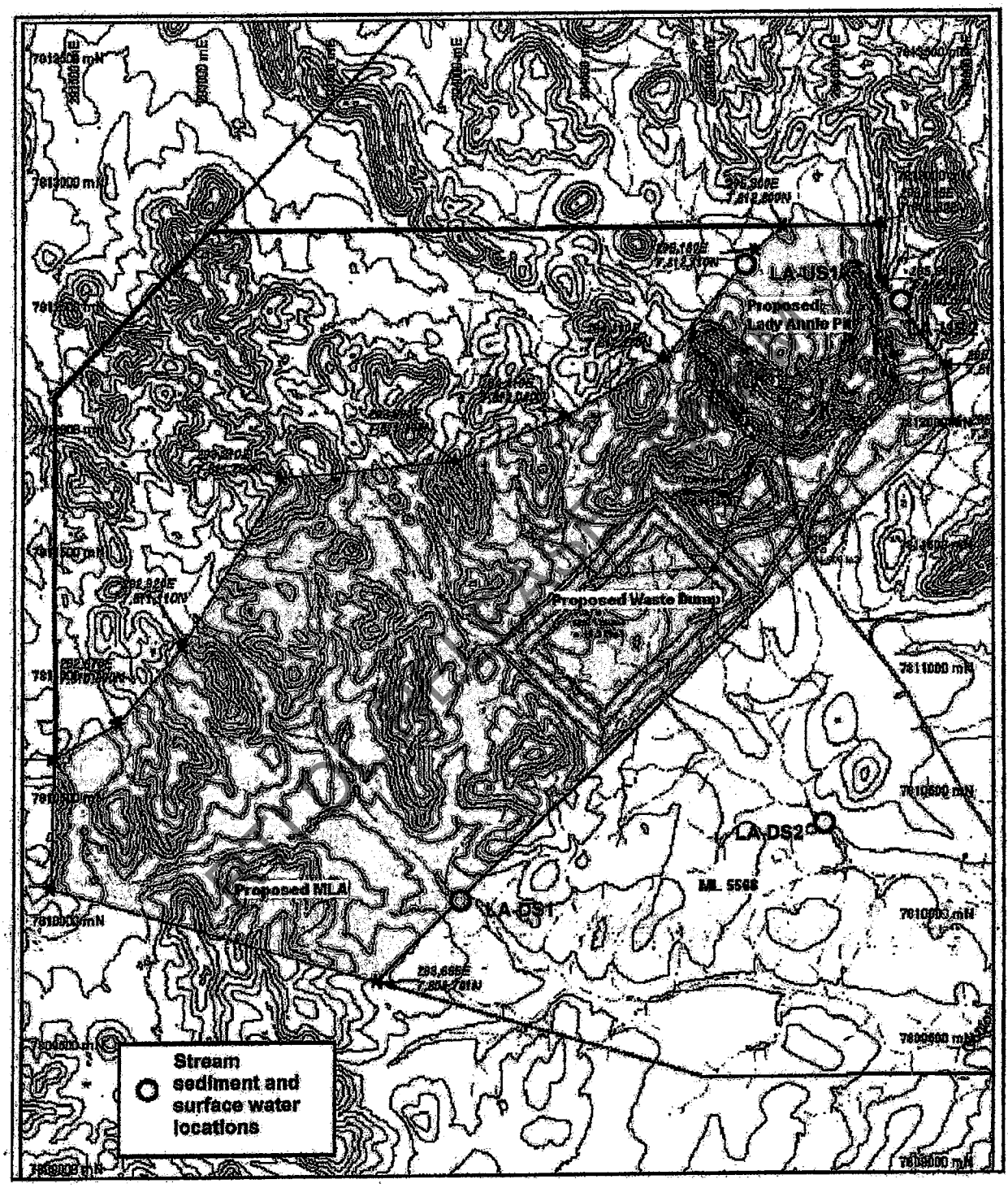
Schedule I - Map 6 Location of Hazardous Dams

Released



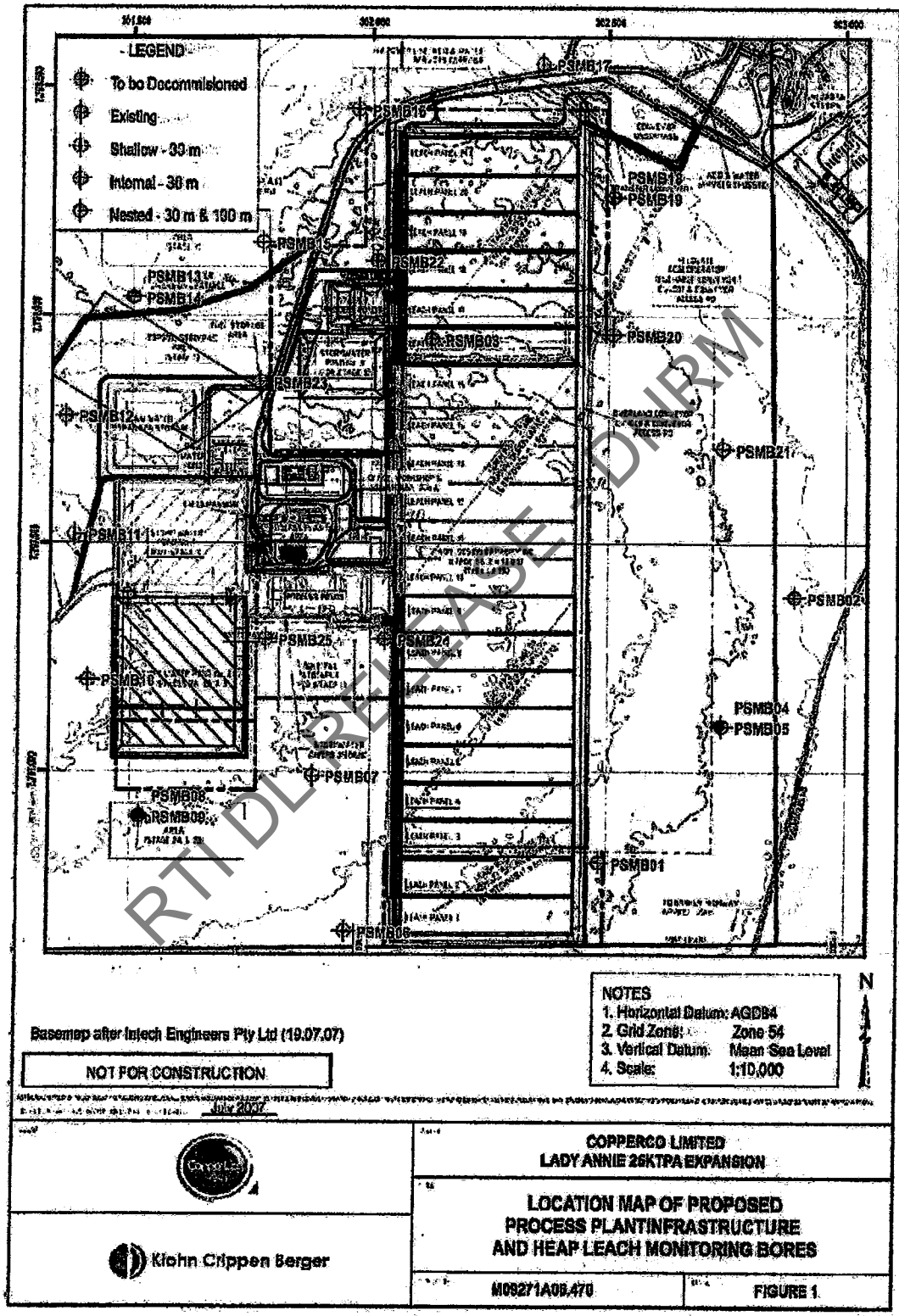
RTI DL RELEASE - DNRM

Schedule I - Map 7 Stream Sediments Monitoring Locations (Mount Kelly)



Schedule I - Map 8 Stream Sediments Monitoring Locations (Lady Annie)

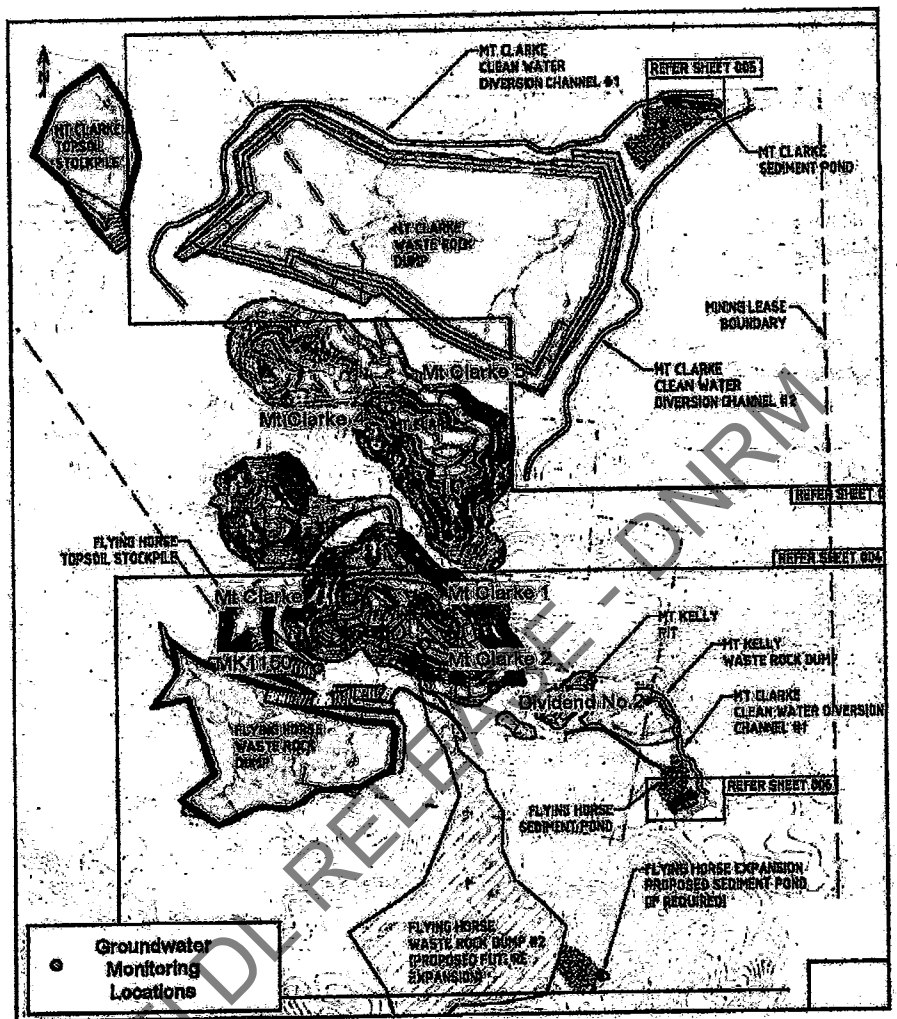
Released



RTI DL RELEASE TIDNRM

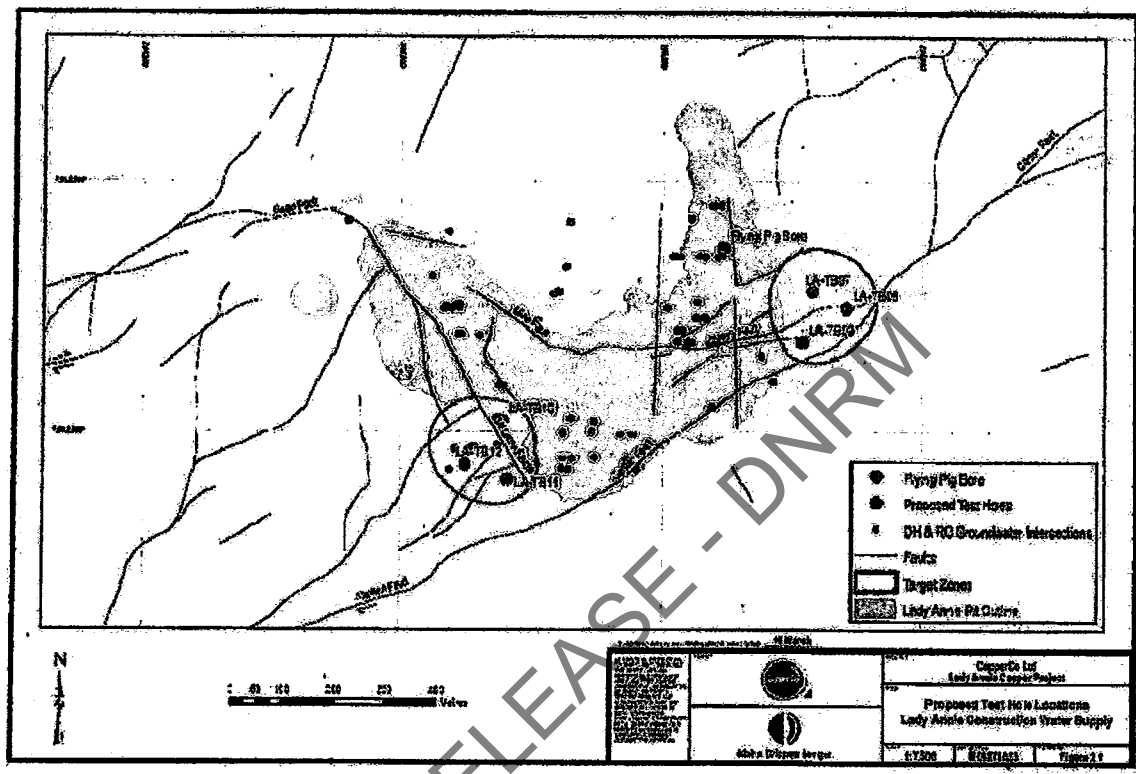
Schedule I - Map 9 Groundwater Monitoring Locations (Process Area)

7/1/08



Schedule I - Map 10 Groundwater Monitoring Locations (Mount Kelly)

RTI DL RELEASE - DNRM



Schedule I - Map 11 Groundwater Monitoring Locations (Lady Annie)

RTI DL RELEASE - DNRM

END CONDITIONS FOR SCHEDULE I

END OF EVIRONMENTAL AUTHORITY

Released

Queensland Government

Enquiries	Jodie Marlow
Telephone	07 47447820
Your reference	MIN100401006
Our reference	ISA658

Environmental Protection Agency

Incorporating the Queensland Parks and Wildlife Servic

18 August 2006

Reefway Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

CC/ Savannah Resources Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

RTI DL RELEASE - DNRM

Dear Simon,

Re: Amendment of Environmental Authority MIM100401006

Please find enclosed the amended environmental authority (EA) MIN100401006. This EA was amended due to a clerical error under section 290 of the *Environmental Protection Act 1994.*

If you have any enquiries in relation to the above details please contact Jodie Marlow on 07 4744 7820.

Yours sincerely

s.49 - Signature

Geoff Metcalfe
District Manager
Environmental Management Services
Environmental Protection Agency
North West District

C/c Mining Registrar

Natural Resources, Mines and Water
29323
21 AUG 2006
MOUNT ISA
RECEIVED

Cnr Camooweal & Mary Streets Mount Isa
Queensland 4825 Australia
PO Box 2316 Mount Isa
Queensland 4825 Australia
Telephone (07) 4744 7888
Facsimile (07) 4744 7800
Website www.epa.qld.gov.au
ABN 87 221 158 786

Printed on 100% recycled paper

ENVIRONMENTAL PROTECTION ACT 1994

Queensland Government
Environmental Protection Agency
Queensland Parks and Wildlife Service

Environmental Authority No. MIN100401006 (mining activities)

Section 228 *Environmental Protection Act 1994*

This environmental authority is granted under the *Environmental Protection Act 1994* and includes conditions to minimise environmental harm caused, or likely to be caused, by the authorised mining activities. An environmental authority (mining activities) may be for mining activities authorised (under the *Mineral Resources Act 1989*) to occur under one of the following mining tenements: a prospecting permit; mining claim; exploration permit; mineral development licence; or mining lease. In general, a mining activity means: prospecting, exploring, mining; or processing minerals; remediation; rehabilitation; and includes facilitation and supporting activities and any action taken to prevent environmental harm.

Under the provisions of the *Environmental Protection Act 1994* this environmental authority is issued to:

Reefway Pty Ltd
Level 22 Allendale Square
77 St Georges Terrace
Perth WA 6000

Savannah Resources Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

In respect of carrying out activities as part of the following mining project:

Type of environmental authority (mining activities)	Authorised mining tenements	Location
Mining Leases	ML 5426 ML 5435 ML 5446 ML 5447 ML 5448 ML 5474 ML 5476 ML 5478 ML90168 ML90169 ML90170	100km north of Mount Isa

The mining activities are authorized to the extent defined in Schedule 6 Section 14(c) of the *Environmental Protection Regulation 1998*.

This environmental authority is subject to the conditions set out in the attached schedules.
The anniversary date of this environmental authority is **24 July** each year.

This environmental authority takes effect from **24 July 2006** for granted tenements and will take effect for ML 90168, 90170 and 90169 upon date of grant of tenure.

s.49 - Signature

Geoff Metcalfe
District Manager
Mt Isa District, Northern Region
Delegate of Administering Authority
Environmental Protection Act 1994
18/8/06

RTI DE-RELEASE - DNRM

This **environmental authority** incorporates the following schedules:

- Schedule A - General
- Schedule B - Air
- Schedule C - Water
- Schedule D - Noise and Vibration
- Schedule E - Waste
- Schedule F - Land
- Schedule G - Community
- Schedule H - Definitions
- Schedule I - Maps / Plans

Schedule A - General

Financial Assurance

(A1-1) Provide a financial assurance in the amount and form required by the administering authority prior to the commencement of activities proposed under this environmental authority.

NOTE: The calculation of financial assurance for condition (A1-1) must be in accordance with Guideline 17 and may include a performance discount. The amount is defined as the maximum total rehabilitation cost for complete rehabilitation of all disturbed areas, which may vary on an annual basis due to progressive rehabilitation. The amount required for the financial assurance must be the highest Total Rehabilitation Cost calculated for any year of the Plan of Operations and calculated using the formula: (Financial Assurance = Highest Total Annual Rehabilitation Cost x Percentage Required).

(A1-2) The financial assurance is to remain in force until the administering authority is satisfied that no claim on the assurance is likely.

NOTE: Where progressive rehabilitation is completed and acceptable to the administering authority, progressive reductions to the amount of financial assurance will be applicable where rehabilitation has been completed in accordance with the acceptance criteria defined within this environmental authority.

Maintenance of Measures, Plant and Equipment

(A2-1) The environmental authority holder must ensure:

- that all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority are installed;
- that such measures, plant and equipment are maintained in a proper condition; and
- that such measures, plant and equipment are operated in a proper manner.

Monitoring

(A3-1) Record, compile and keep for a minimum of five years all monitoring results required by this environmental authority and make available for inspection all or any of these records upon request by the administering authority.

(A3-2) Where monitoring is a requirement of this environmental authority, ensure that a competent person(s) conducts all monitoring.

Storage and Handling of Flammable, Combustible and Corrosive Liquids

(A4-1) Spillage of all flammable and combustible liquids must be contained within an on-site containment system and controlled in a manner that prevents environmental harm (other than trivial harm) and maintained in accordance with Section 5.8 of AS 1940 - Storage and Handling of Flammable and Combustible Liquids of 2004.

(A4-2) The on-site storage of corrosive liquids must be in accordance with Section 5.7 of AS 3780 - Storage and Handling of Corrosive Substances 1994

RTI DI RELEASE - NRM

18/9/06

Released

Definitions

(A5-1) Words and phrases used throughout this environmental authority are defined in Schedule H – Definitions. Where a definition for a term used in this environmental authority is sought and the term is not defined within this environmental authority, the definitions in the *Environmental Protection Act 1994*, its Regulations and Environmental Protection Policies must be used.

END CONTIONS FOR SCHEDULE A

Schedule B - Air

Dust Nuisance

(B1-1) Subject to Conditions (B1-2) and (B1-3) the release of dust or particulate matter or both resulting from the mining activity must not cause an environmental nuisance at any sensitive or commercial place.

(B1-2) When requested by the administering authority, dust and particulate monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(B1-3) If the environmental authority holder can provide evidence through monitoring that the following limits are not being exceeded then the holder is not in breach of (B1-1):

a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with AS 3580.10.1 Methods for sampling and analysis of ambient air - Determination of particulates - Deposited matter - Gravimetric method of 1991.

(B1-4) If monitoring indicates exceedence of the relevant limits in Condition (B1-3), then the environmental authority holder must:

a) address the complaint including the use of appropriate dispute resolution if required; or
b) immediately implement dust abatement measures so that emissions of dust from the activity do not result in further environmental nuisance.

Odour Nuisance

(B2-1) Subject to condition (B2-2), the release of noxious or offensive odour(s) or any other noxious or offensive airborne contaminant(s) resulting from the mining activity must not cause an environmental nuisance at any sensitive or commercial place.

(B2-2) When requested by the administering authority, odour monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(B2-3) If monitoring indicates Condition (B2-1) is not being met then the environmental authority holder must:

a) address the complaint including the use of appropriate dispute resolution if required; or
b) immediately implement odour abatement measures so that emissions of odour from the activity do not result in further environmental nuisance.

END CONDITIONS FOR SCHEDULE B

RTI EX RELEASE - UNIRM

Released

Schedule C - Water

Release to Waters

(C1-1) Receiving waters affected by the release of process water or storm water contaminated by the mining activities or both must be monitored at the locations and frequencies defined in Schedule C - Table 1 and Schedule I – Map 1, and comply with the contaminant limits defined in Schedule C - Table 3.

Schedule C - Table 1 (Receiving Water Monitoring Locations and Frequency)

Monitoring point	Easting (AMG 84 Zone 54)	Northing (AMG 84 Zone 54)	Monitoring frequency
MKUS 1- reference site *	305625	7797450	Each flow event
MKUS 2- reference site*	TBD	TBD	Each flow event
MKDS 1- test site	301160	7800135	Each flow event
MKDS 2- test site	306366	7798356	Each flow event
MKDS 3- test site	306370	7798363	Each flow event
MKDS 4- test site	301300	7797255	Each flow event

NOTE: This does not apply to dams containing hazardous waste
Reference sites must:

a) be from the same biogeographical and climatic region;
b) have similar geology, soil types and topography
c) contain a range of habitats similar to those at the test site
d) be of similar flow regime; and
e) not be so close to the test sites that any disturbances at the test site also result in a change at the reference site.

TBD- to be determined and provided to the QEPA prior to commencement of mining.

C1-2 Subject to Condition (C1-1), if the receiving water contaminant trigger levels defined in Schedule C - Table 2 are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within **3 months** of receiving the analysis results.

RTI DL RELEASE - DNRM

Released

Schedule C - Table 2 (Receiving Water Trigger Levels)

Parameter	Units	Minimum	Maximum	Trigger Type
pH [1]	pH	6.0	8.0	Range
EC[1]	µS/cm	N/A	250	Maximum
Sulphate [2]	mg/L	N/A	500	Maximum
Aluminium[2]	mg/L	N/A	2.5	Maximum
Arsenic[2]	mg/L	N/A	0.25	Maximum
Boron[2]	mg/L	N/A	0.37	Maximum
Cadmium[2]	mg/L	N/A	0.005	Maximum
Chromium[2]	mg/L	N/A	0.5	Maximum
Cobalt[2]	mg/L	N/A	0.5	Maximum
Copper[2]	mg/L	N/A	0.5	Maximum
Fluoride[2]	mg/L	N/A	1	Maximum
Lead[2]	mg/L	N/A	0.05	Maximum
Manganese[3]	mg/L	N/A	1.9	Maximum
Mercury[2]	mg/L	N/A	0.001	Maximum
Molybdenum[2]	mg/L	N/A	0.075	Maximum
Nickel[2]	mg/L	N/A	0.5	Maximum
Selenium[2]	mg/L	N/A	0.01	Maximum
Zinc[2]	mg/L	N/A	10	Maximum

[1] Contaminant triggers limits are based on Table 3.3.4 and 3.3.5 of Aquatic Ecosystems ANZECC (2000).
[2] Contaminant trigger limits are based on 50% of the contaminant limits defined in the ANZECC (2000) Livestock Drinking Water and are to be analysed as total metals (unfiltered).
[3] Contaminant trigger limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) 95% and are to be analysed as filtered metals.

RTI DL RELEASE - DNRM

Released

Schedule C - Table 3 (Receiving Water Contaminant Limits)

Parameter	Units	Minimum	Maximum	Trigger Type
pH [4]	pH	6.0	9.0	Range
TDS[2]	mg/L	N/A	4000	Maximum
Sulphate [1]	mg/L	N/A	1000	Maximum
Aluminium[1]	mg/L	N/A	5	Maximum
Arsenic[1]	mg/L	N/A	0.5	Maximum
Boron[1]	mg/L	N/A	5	Maximum
Cadmium[1]	mg/L	N/A	0.01	Maximum
Chromium[1]	mg/L	N/A	1	Maximum
Cobalt[1]	mg/L	N/A	1	Maximum
Copper[1]	mg/L	N/A	1	Maximum
Fluoride[1]	mg/L	N/A	2	Maximum
Lead[1]	mg/L	N/A	0.1	Maximum
Manganese[3]	mg/L	N/A	2.5	Maximum
Mercury[1]	mg/L	N/A	0.002	Maximum
Molybdenum[1]	mg/L	N/A	0.15	Maximum
Nickel[1]	mg/L	N/A	1	Maximum
Selenium[1]	mg/L	N/A	0.02	Maximum
Zinc[1]	mg/L	N/A	20	Maximum

[1] Contaminant limits based on table 4.3.2 ANZECC (2000) Livestock drinking water quality and are analysed as Total metals (unfiltered)
[2] Contaminant limits are based on Table 4.3.1 Livestock drinking water quality and are analysed as Total metals (unfiltered)
[3] Contaminant limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) 80% and are to be analysed as filtered metals.
[4] Contaminant limits based on Table 3.3.4 of Aquatic Ecosystems ANZECC (2000)

End of Pipe Release

(C1-3) End of pipe release limits for storm water contaminated by mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 4 and Schedule I – Map 2 and 3 and comply with the contaminant limits defined in Schedule C - Table 5.

RTI DL RELEASE - DNRM

18/8/06

Released

Schedule C - Table 4 (End of pipe monitoring locations and frequency)

Monitoring point	Easting (AMG 84, Zone 54)	Northing (AMG 84, Zone 54)	Monitoring frequency
Mount Clarke ROM Area Sediment Dam	303834	7799496	Each flow event
Mount Clarke Pit Area Sediment Dam	305336	7799592	Each flow event
Mount Clarke/Flying Horse Sediment Dam	305887	7798726	Each flow event
Process Plant ROM Pad Sediment Dam 1	303040	7798656	Each flow event
Process Plant ROM Pad Sediment Dam 2	302905	7798900	Each flow event
Process Plant ROM Pad Sediment Dam 3	302771	7799010	Each flow event

NOTE: This does not apply to dams containing hazardous waste.

Schedule C - Table 5 (End of pipe contaminant release limits)

Parameter	Units	Minimum	Maximum	Limit Type
pH	pH	6	9	Range
TDS	mg/L	N/A	4000	Maximum
Sulphate	mg/L	N/A	1000	Maximum
Arsenic	mg/L	N/A	5	Maximum
Cadmium	mg/L	N/A	0.01	Maximum
Chromium	mg/L	N/A	1	Maximum
Cobalt	mg/L	N/A	1	Maximum
Copper	mg/L	N/A	1	Maximum
Lead	mg/L	N/A	0.1	Maximum
Mercury	mg/L	N/A	0.002	Maximum
Zinc	mg/L	N/A	20	Maximum

Contaminant limits based on ANZECC (2000) Livestock drinking water quality and are analysed as Total metals (unfiltered)
NOTE: This does not apply to dams containing hazardous waste.

RTI DL RELEASE - DNRM

Dams Containing Hazardous Waste

(C1-4) Water storages containing process water and storm water contaminated by mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 6 and Schedule I - Map 4 and samples analysed for the parameters defined in Schedule C - Table 7.

Released

Schedule C - Table 6 (Water Storage Monitoring Locations of Hazardous Dams)

Monitoring point	Easting (Zone 54, AMG 84)	Northing (Zone 54, AMG 84)	Monitoring frequency
PLS Ponds	302000	7797450	Annually, March
ILS Pond	301900	7797450	Annually, March
Raffinate Pond Pre-Settler	301850	7797450	Annually, March
Raffinate Pond	301800	7797450	Annually, March
Storm water Pond 1	301750	7797450	Annually, March
Storm water Pond 2	301750	7797350	Annually, March

(C1-5) In the event that the water quality within any dam containing hazardous waste does not comply with the contaminant limits defined in Schedule C - Table 7, implement measures to prevent access by all livestock and minimise access by fauna to the dam.

Schedule C - Table 7 (Water Quality Limits for Dams Containing Hazardous Waste)

Parameter	Units	Contaminant Limit	Limit Type
pH	pH	4-9	Range
TDS	mg/L	5,000	Maximum
Boron	mg/L	5	Maximum
Sulphate	mg/L	1000	Maximum
Aluminum	mg/L	5	Maximum
Arsenic	mg/L	0.5	Maximum
Cobalt	mg/L	1	Maximum
Copper	mg/L	1	Maximum
Lead	mg/L	0.1	Maximum
Nickel	mg/L	1	Maximum
Zinc	mg/L	20	Maximum

Contaminant limits based on ANZECC (2000 Livestock drinking water quality and are analysed as total metals (unfiltered).)

RTI DL RELEASE - DNRM

(C1-6) The design storage allowance on **1 November** of each year for any dam containing hazardous wa constructed or operated within the operational land must comply with Schedule C - Table 8.

Schedule C - Table 8 (Storage Design for Dams Containing Hazardous Waste)

Storage Type	Design Storage Allowance [1]	Spillway Critical Design Storm [2]	Mandatory Reporting Level [3]
Stormwater Pond 1	1: 100 Year ARI 2 month wet season plus process inputs for the 2 month wet season	1: 1000 Year ARI	1: 100 year ARI
Stormwater Pond 2	1: 100 Year ARI 2 month wet season plus process inputs for the 2 month wet season	1: 1000 Year ARI	1: 100 year ARI

Note [1]: The design storage allowance on 1 November of each year for any dam containing hazardous waste constructed within the operational land must be equivalent to the run-off from a 1 in 100 ARI 2 month wet season plus process inputs for the equivalent wet season. Process inputs refers to hazardous mineral process waste and water, which is being disposed of in the storage facility.

Note [2]: The critical design storm has a duration that produces the peak discharge for the catchments.

Note [3]: The mandatory reporting level refers to the volume below the spillway crest, either the 1: 100 ARI 72 hour storm or the 1:100 ARI wave allowance, whichever is lower.

(C1-7) The spillway for any dam containing hazardous waste, constructed or operated within the operational land must be designed and maintained to withstand the peak flow from the spillway critical design storm defined in Schedule C - Table 8.

Released

(C1-8) The holder of the environmental authority must mark the mandatory reporting level defined in Schedule C - Table 8 on the spillway of all dams containing hazardous waste within the operational land.

(C1-9) The holder of the environmental authority must notify the administering authority when the pondage level of the dam containing hazardous waste, reaches the mandatory reporting level defined in Schedule C - Table 8.

Stream Sediment Contaminant Levels

(C2-1) All reasonable and practicable erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.

(C2-2) The bed of the receiving waters, affected by the release of process water and storm water contaminated by the mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 9 and Schedule I – Map 5.

Schedule C - Table 9 (Receiving Stream Sediment Monitoring Locations and Frequency)

Monitoring point	Easting (AGD 84 Zone 54)	Northing (AGD 84 Zone 54)	Monitoring frequency
MKUS 1- reference site *	305625	7797450	May each year
MKUS 2- reference site*	TBD	TBD	May each year
MKDS 1- test site	301160	7800135	May each year
MKDS 2- test site	306366	7798356	May each year
MKDS 3- test site	306370	7798363	May each year
MKDS 4- test site	301300	7797255	May each year

NOTE: This does not apply to dams containing hazardous waste
Reference sites must:

a) be from the same biogeographical and climatic region;
b) have similar geology, soil types and topography
c) contain a range of habitats similar to those at the test site
d) be of similar flow regime; and
e) not be so close to the test sites that any disturbances at the test site also result in a change at the reference site.

TBD- to be determined and provided to the QEPA prior to commencement of mining.

(C2-3) Subject to Condition (C2-2), if the stream sediment contaminant trigger levels defined in Schedule C - Table 10 are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within 3 **months** of receiving the analysis results.

Schedule C - Table 10 (Receiving Stream Sediment Contaminant Trigger Levels)

Parameter	Units	Contaminant trigger levels	Trigger Type
Antimony[1]	mg/kg dry wt	2	Maximum
Arsenic[1]	mg/kg dry wt	20	Maximum
Cadmium[1]	mg/kg dry wt	1.5	Maximum
Chromium[1]	mg/kg dry wt	80	Maximum
Copper[2]	mg/kg dry wt	100	Maximum
Lead[1]	mg/kg dry wt	50	Maximum
Nickel[1]	mg/kg dry wt	21	Maximum
Silver[1]	mg/kg dry wt	1	Maximum
Mercury[1]	mg/kg dry wt	0.15	Maximum
Zinc[1]	mg/kg dry wt	200	Maximum

[1] ANZECC (2000): ISQG Low trigger values, Sediment Quality Guidelines, Aquatic Ecosystems, Table 3.5.1.
[2] Site specific trigger value as calculated in section 3.5 of EM Plan January 2006

(C2-4) Subject to Condition (C2-2), stream sediment contaminant limits must not exceed the contaminant limits defined in Schedule C -Table 11.

RTI RELEASE - DRM

Released

Schedule C - Table 11 (Receiving Stream Sediment Contaminant Limits)

Parameter	Units	Contaminant limits	Limit Type
Antimony[1]	mg/kg dry wt	25	Maximum
Arsenic[1]	mg/kg dry wt	70	Maximum
Cadmium[1]	mg/kg dry wt	10	Maximum
Chromium[1]	mg/kg dry wt	370	Maximum
Copper[2]	mg/kg dry wt	120	Maximum
Lead[1]	mg/kg dry wt	220	Maximum
Nickel[1]	mg/kg dry wt	52	Maximum
Silver[1]	mg/kg dry wt	3.7	Maximum
Mercury[1]	mg/kg dry wt	1	Maximum
Zinc[1]	mg/kg dry wt	410	Maximum

[1] *ANZECC (2000): ISQG High trigger values, Sediment Quality Guidelines, Aquatic Ecosystems, Table 3.5.1.*
[2] *Site specific trigger value as calculated in section 3.5 of EM Plan January 2006*

(C2-5) All stream sediment sampling must be undertaken in accordance with AS 5667.1 Guidance on Sampling of Bottom Sediments of 1998

Sewage effluent

(C3-1) All effluent released from the treatment plant must be monitored at the frequency and for the parameters specified in Schedule C - Table 12.

(C3-2) Sewage effluent used for dust suppression must not exceed sewage effluent release limits defined in Schedule C - Table 12.

(C3-3) Sewage Effluent used for dust suppression must not cause spray drift or over spray to any sensitive or commercial place, and must not be applied at a rate that causes pooling, ponding and/or runoff of any effluent irrigated.

(C3-4) Subject to Conditions (C3-1) to (C3-3) inclusive, sewage effluent from sewage treatment facilities must be reused or evaporated and must not be directly released from the sewage treatment plant to any water way or drainage line other than in accordance with Schedule C - Table 12.

Schedule C - Table 12 (Sewage effluent quality targets for dust suppression)

	Release Limit [4]			Monitoring Frequenc
Quality characteristics	Minimum	Median	Maximum	
pH (pH Units)	6[3]		8.5[2]	Quarterly
Faecal Coliforms (organisms/100mL)		1000[1]		Quarterly

[1] *A minimum of five samples must be collected at not less than a weekly interval for the quarterly sampling*
[2] *A minimum of five samples must be collected at not less than a weekly interval for the quarterly sampling with four out of five samples must be less than the maximum*
[3] *A minimum of five samples must be collected at not less than a weekly interval for the quarterly sampling with four out of five samples must be higher than the minimum but lower than the maximum limit.*
Release limits sourced from Queensland Water Recycling Guidelines December 2005 Table 6:2b

RTI DA RELEASE - DNRM

Released

Groundwater

(C4-1) Groundwater, affected by the mining activities must be monitored at the locations and frequencies defined in Schedule C - Table 13 and Schedule I – Map 6.

Schedule C - Table 13 (Groundwater Monitoring Locations and Frequency)

Monitoring point	Easting (AGD 84 Zone 54)	Northings (AGD 84 Zone 54)	Monitoring frequency
LA MB01 (Process Plant)- reference site	302484	7796800	Monthly
LA MB02 (Process Plant) - reference site	302891	7797385	Monthly
LA MB03 (Process Plant) - reference site	302128	7797950	Monthly
LA MB04 (Process Plant)	TBD	TBD	Monthly
LA MB05 (Process Plant)	TBD	TBD	Monthly
LA MB06 (Process Plant)	TBD	TBD	Monthly
LA MB07 (Process Plant)	TBD	TBD	Monthly
LA MB08 (Process Plant)	TBD	TBD	Monthly
LA MB09 (Process Plant)	TBD	TBD	Monthly
LA MB010 (Process Plant)	TBD	TBD	Monthly
LA MB011 (Process Plant)	TBD	TBD	Monthly
LA MB012 (Process Plant)	TBD	TBD	Monthly
LA MB013 (Process Plant)	TBD	TBD	Monthly
LA MB014 (Process Plant)	TBD	TBD	Monthly
MK MB01 (pit area)	305360	7799013	Quarterly
MK PB01 (pit area)	305356	7799019	Quarterly

NOTE: This does not apply to dams containing hazardous waste
TBD- To be determined
Reference sites must:

a) be from the same biogeographical and climatic region;
b) have similar geology, soil types and topography
c) contain a range of habitats similar to those at the test site
d) be of similar flow regime; and not be so close to the test sites that any disturbances at the test site also result in a change at the reference site.

FINAL RELEASE - DNRM

(C4-2) Subject to Condition (C4-1), iff the groundwater contaminant trigger levels defined in Schedule C - Table 14 are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within **3 months** of receiving the analysis results.

Released

Schedule C - Table 14 (Groundwater Contaminant Trigger Levels)

Parameter	Units	Minimum	Maximum	Trigger type
pH[1]	pH	6	8	Range
TDS[2]	mg/L	N/A	2000	Maximum
Sulphate [2]	mg/L	N/A	500	Maximum
Aluminium[2]	mg/L	N/A	2.5	Maximum
Arsenic[2]	mg/L	N/A	0.25	Maximum
Boron[2]	mg/L	N/A	0.37	Maximum
Cadmium[2]	mg/L	N/A	0.005	Maximum
Chromium[2]	mg/L	N/A	0.5	Maximum
Cobalt[2]	mg/L	N/A	0.5	Maximum
Copper[2]	mg/L	N/A	0.5	Maximum
Fluoride[2]	mg/L	N/A	1	Maximum
Lead[2]	mg/L	N/A	0.05	Maximum
Manganese[3]	mg/L	N/A	1.9	Maximum
Mercury[2]	mg/L	N/A	0.001	Maximum
Molybdenum[2]	mg/L	N/A	0.075	Maximum
Nickel[2]	mg/L	N/A	0.5	Maximum
Selenium[2]	mg/L	N/A	0.01	Maximum
Zinc[2]	mg/L	N/A	10	Maximum

[1] *Contaminant triggers limits are based on Table 3.3.4 and 3.3.5 of Aquatic Ecosystems ANZECC (2000)*
[2] *Contaminant trigger limits are based on 50% of the contaminant limits defined in the ANZECC (2000) Livestock Drinking Water and are to be analysed as total metals (unfiltered).*
[3] Contaminant trigger limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) *and are analysed as Filtered Metals*

(C4-3) Subject to Condition (C4-1), groundwater contaminant limits must not exceed the contaminant limits defined in Schedule C –Table 15.

RTI DLA RELEASE - DNRM

18/8/06

Released

Schedule C – Table 15 (Groundwater Contaminant Limits)

Parameter	Units	Minimum	Maximum	Limit Type
pH[1]	pH	6	9	Range
TDS[1]	mg/L	N/A	4000	Maximum
Sulphate[1]	mg/L	N/A	1000	Maximum
Aluminum[1]	mg/L	N/A	5	Maximum
Arsenic[1]	mg/L	N/A	0.5	Maximum
Boron[1]	mg/L	N/A	5	Maximum
Cadmium[1]	mg/L	N/A	0.01	Maximum
Chromium[1]	mg/L	N/A	1	Maximum
Cobalt[1]	mg/L	N/A	1	Maximum
Copper[1]	mg/L	N/A	1	Maximum
Fluoride[1]	mg/L	N/A	2	Maximum
Lead[1]	mg/L	N/A	0.1	Maximum
Manganese[2]	mg/L	N/A	2.5	Maximum
Mercury[1]	mg/L	N/A	0.002	Maximum
Molybdenum[1]	mg/L	N/A	0.15	Maximum
Nickel[1]	mg/L	N/A	1	Maximum
Selenium[1]	mg/L	N/A	0.02	Maximum
Zinc[1]	mg/L	N/A	20	Maximum

[1] *Contaminant limits based on ANZECC (2000) Livestock drinking water quality and are analysed as Total Metals (unfiltered)*
[2] Contaminant limits based on Table 3.4.1 of Aquatic Ecosystems ANZECC (2000) *and are analysed as Filtered Metals.*

(C4-4) The method of water sampling required by this environmental authority must comply with that set out in the latest edition of the Environmental Protection Agency's Water Quality Sampling Manual.

Voids

(C5-1) Water quality in mining voids and final voids must be monitored at the locations and frequencies defined in Schedule C - Table 16 and for the parameters detailed in Schedule C – Table 17.

(C5-2) In the event that water quality within the mining voids or final voids does not comply with the contaminant limits defined in Schedule C – Table 17, implement measures to prevent access by all livestock and minimise access by fauna to the void.

Schedule C - Table 16 (Voids Monitoring Locations and Frequency)

Monitoring point	Monitoring frequency
Mount Kelly/Flying Horse Pit	Annually
Mount Clarke Pit	Annually

RTI DL RELEASE - DNRM

Released

Schedule C - Table 17 (Void Water Quality Limits)

Parameter	Units	Limit	Limit Type
pH	pH	6-9	Range
TDS	mg/L	4000	Maximum
Sulphate	mg/L	1000	Maximum
Arsenic	mg/L	0.5	Maximum
Cadmium	mg/L	0.01	Maximum
Chromium	mg/L	1	Maximum
Copper	mg/L	1	Maximum
Lead	mg/L	0.1	Maximum
Mercury	mg/L	0.002	Maximum
Zinc	mg/L	20	Maximum

Contaminant limits are based on ANZECC (2000 Livestock drinking water quality and analysed for total metals (unfiltered)

Acid Rock Drainage and Leachate Management

(C6-1) Subject to limits defined in Schedule C all reasonable and practicable measures must be implemented to prevent hazardous leachate being directly or indirectly released or likely to be released as a result of the activity to any groundwater, watercourse and waters.

END CONDITIONS FOR SCHEDULE C

RTI DL RELEASE - DNRM

Released

Schedule D - Noise and Vibration

Noise Nuisance

(D1-1) Subject to Conditions (D1-2) and (D1-3) noise from the mining activity must not cause an environmental nuisance to an affected building.

(D1-2) When requested by the administering authority, noise monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(D1-3) The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual.

Vibration nuisance

(D2-1) Subject to Conditions (D2-2) and (D2-3) vibration from the mining activity must not cause an environmental nuisance to an affected building.

(D2-2) When requested by the administering authority, vibration monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

END CONDITIONS FOR SCHEDULE D

Schedule E - Waste

Storage of Tyres

(E1-1) Tyres stored awaiting disposal or transport for take-back and, recycling, or waste-to-energy options - should be stockpiled in volumes less than 3m in height and 200m^2 in area and at least 10m from any other tyre storage area.

(E1-2) All reasonable and practicable fire prevention measures must be implemented, including removal of grass and other materials within a 10m radius of the scrap tyre storage area.

Disposal of Tyres

(E2-1) Disposing of scrap tyres resulting from the mining activities in spoil emplacements is acceptable, provided tyres are placed as deep in the spoil as reasonably practicable.

(E2-2) Scrap tyres resulting from the mining activities disposed within the operational land must not impede saturated aquifers or compromise the stability of the consolidated landform.

Waste Management

(E3-1) A Waste Management Program, in accordance with the Environmental Protection (Waste Management) Policy 2000, must be included in the Plan of Operations.

RTI DL RELEASE - DNRM

GM 18/8/06

Released

Regulated Waste

(E 4-1) All regulated waste received and removed from the site, that is over 250kg in weight, must be transported by a person who holds a current authority to transport such waste under the provisions of the *Environmental Protection Act 1994.*

(E4-2) Except as otherwise provided by the conditions of this authority, all waste removed from the site must be taken to a facility that is lawfully allowed to accept such waste under the provisions of the *Environmental Protection Act 1994.*

(E4-3) Where regulated waste is removed from the Project (other than by a release as permitted under another schedule of this environmental authority), records must be kept of the following:

a) the date, quantity and type of waste removed, and
b) name of the waste transporter that removed the waste; and
c) the intended treatment/disposal destination of the waste.

Note: Records of documents maintained in compliance with a waste tracking system established under the Environmental Protection Act 1994 or any other law for regulated waste will be deemed to satisfy this conditio

Waste Rock Characterisation

(E5-1) All areas to be mined must undergo a waste rock characterisation survey (where waste rock is to be disposed of on the surface) and a report submitted to the administering authority prior to mining where this survey has not previously been carried out.

END CONDITIONS FOR SCHEDULE E

RTI DL RELEASE - DNRM

Released

12-513

Schedule F - Land

Rehabilitation Landform Criteria

(F1-1) All areas significantly disturbed by mining activities must be rehabilitated to a stable landform with a self-sustaining vegetation cover in accordance with Schedule F – Table 1 and 2.

RTI RELEASE - DNRM

Schedule F - Table 1 (Final Land Use and Rehabilitation Approval Schedule)

Disturbance Category	Max. Area (ha)	Land Use		Land Capability		Analogue Site	
		PRE DISTURBANCE	POST DISTURBANCE	PRE DISTURBANCE	POST DISTURBANCE	Longitude	Latitude
Mount Kelly/Flying Horse Pit	13.2	Habitat	Water Storage	Class 5	Water Storage		
Mount Kelly/Flying Horse Waste Rock Dump	28	Habitat	Habitat	Class 5	Class 5	TBD	TBD
Mount Kelly/Flying Horse Topsoil Stockpile	1.1	Habitat	Habitat	Class 5	Class 5	TBD	TBD
Mount Kelly/Flying Horse Sediment Dams	1.3	Habitat	Water Storage	Class 5	Water Storage		
Mount Kelly/Flying Horse Diversion Drains	1.3	Habitat	LIG or diversion Habitat	Class 5	Class 5	TBD	TBD
Mount Clarke Pit	9.5	Habitat	Water Storage	Class 5	Water Storage		
Mount Clarke Waste Rock Dump	16.3	Habitat/LIG	Habitat/LIG	Class 4 - 5	Class 4 -5	TBD	TBD
Mount Clarke Low Grade Stockpile	5.4	Habitat/LIG	Habitat/LIG	Class 4 - 5	Class 4 - 5	TBD	TBD
Mount Clarke/Flying Horse/Mount Kelly ROM Storage & Live Rehandle	5.5	Habitat	Habitat/LIG	Class 4 - 5	Class 4 - 5	TBD	TBD

File D Part 1
Page 232 of 249
Released

12-513

Disturbance Category	Max. Area	Land Use		Land Capability		Analogue Site	
Mount Clarke Topsoil Stockpile	4.5	Habitat/LIG	Habitat/LIG	Class 4 - 5	Class 4 - 5	TBD	TBD
Mount Clarke Pit Area Sediment Dam	0.6	Habitat	Water Storage	Class 4 - 5	Water Storage		
Mount Clarke ROM Area Sediment Dam	0.4	Habitat	Water Storage	Class 4 - 5	Water Storage		
Mount Clarke – Diversion/Interception /Sediment Dam Drains	3.2	Habitat	LIG or diversion Habitat	Class 4 - 5	Class 4 - 5	TBD	TBD
Roads/Tracks	18.8	Existing tracks or LIG	Tracks for grazier or LIG	Class 4 - 5	Class 4 - 5	TBD	TBD
Accommodation Camp and Facilities	5	LIG	LIG	Class 4	Class 4	TBD	TBD
Sewage Plant and Pond	0.2	LIG	LIG	Class 4	Class 4	TBD	TBD
ROM Pad – at process plant	7.8	LIG	LIG	Class 4 - 5	Class 4 -5	TBD	TBD
Process plant and associated buildings	3.3	LIG	LIG	Class 4	Class 4	TBD	TBD
Overland Conveyor	1.8					TBD	TBD
Workshop/Office Access Circuit Area	2.9	LIG	LIG	Class 4	Class 4	TBD	TBD
Heap Leach Pads – Stage 1 and 2	43.2	LIG	Habitat/LIG	Class 4	Class 4- 5	TBD	TBD
Process Water Ponds – PLS, ILS and Raffinate	3.4	LIG	Water storages	Class 4	Water storages		
Stormwater Ponds 1 and 2	11.4	LIG	Water storages	Class 4	Water storages		
Stormwater Pond spillway channel	0.7	LIG	LIG or diversion	Class 4	Class 4 -5	TBD	TBD
Raw Water Pond	0.6	LIG	LIG/Water storage	Class 4	Class 4 or water storage	TBD	TBD
Process Area Topsoil Stockpiles	9.7	LIG	LIG	Class 4	Class 4	TBD	TBD

RTI RELEASE - DNRM

File D Part 1

Page 233 of 249

Released

12-513

Disturbance Category	Max. Area	Land Use		Land Capability		Analogue Site	
Process Plant Drainage Diversions	2.7	LIG	LIG or diversion	Class 4	Class 4 - 5	TBD	TBD
Process Plant Sediment Ponds	1	LIG	LIG or ponds	Class 4 - 5	Class 4 - 5		
Bulk Fill Stockpile	2.6	LIG	LIG	Class 4	Class 4	TBD	TBD
Pipelines and Powerlines (on lease)	1	LIG	LIG	Class 4 -5	Class 4 - 5	TBD	TBD
Rubbish Dumps	0.2	LIG	LIG	Class 4 - 5	Class 4 - 5	TBD	TBD
Concrete Batch Plant	0.3	LIG	LIG	Class 4	Class 4	TBD	TBD
Fuel Storage Area	0.3	LIG	LIG	Class 4	Class 4	TBD	TBD
Contractor Laydown Area	4.3	LIG	LIG	Class 4	Class 4	TBD	TBD
Exploration	5	LIG	LIG/Habitat	Class 4 - 5	Class 4 - 5	TBD	TBD
Construction Access (net of specific areas)	59.9	LIG	LIG/Habitat	Class 4 - 5	Class 4 - 5	TBD	TBD
Total	276.4						

*Analogue sites and disturbance description are to be identified and the environmental authority holder must amend the environmental authority to include analogue sites in Schedule F – Table 1 by **30 June 2007**.*
TBD- To be determined
LIG- Low Intensity Grazing
Classes are derived from the Department of Minerals and Energy's Land Suitability Assessment Techniques (1995)

(F1-2) Progressive rehabilitation must commence when areas become available within the operational land.

(F1-3) Complete an investigation into rehabilitation of disturbed areas and submit a report to the administering authority proposing acceptance criteria to meet the outcomes in Schedule F - Table 1 and landform design criteria in Schedule F - Table 2 by **30 June 2007**

RTI DU RELEASE DNRM

File D Part 1

Page 234 of 249

GM 18/8/06

Released

Schedule F - Table 2 (Landform Design)

Disturbance type	Slope range (%)	Projective surface area (ha)
Waste Rock Dumps	33%-76% (1:3 to angle of repose)	49.7
Heap Leach Pads	<33% or 1:3	43.2
ROM Pads	33%-76% (1:3 to angle of repose)	13.3

Resjdual Void Outcome

(F2-1) Residual voids must not cause any serious environmental harm to land, surface waters or any recognised groundwater aquifer, other than the environmental harm constituted by the existence of the residual void itself and subject to any other condition within this environmental authority.

Dams Containing Hazardous Waste

Description of Dam

(F3-1) The construction or operation of any dam containing hazardous waste within the operational land must comply with Schedule F - Table 3.

Schedule F — Table 3 (Size and Purpose of Dams Containing Hazardous Waste)

Name of dam containing hazardous waste [1]	Maximum surface area of dam (ha)	Maximum volume of dam (m^3)	Maximum depth of dam (m) [2]	Purpose of dam [3]
Process Water Ponds (Raffinate Pre-Settler, Raffinate, ILS and PLS)	3.4	51,100	4.5	Storage of Process Solutions
Heap Leach Pads	43.2	N/A	N/A	Storage of Process Solutions
Stormwater Pond 1 (Stage 1 only)	6.47	302,760	6.35	Storage of storm water runoff from processing area
Stormwater Pond 1 & 2 (Stage 2)	10.4	467,720	6.35	Storage of storm water runoff from processing area

Note [1]: The name of the dam containing hazardous waste should refer to the name of the dam e.g. process residue facility and decant dam.

Note [2]: For dams that do not require a dam wall, input the maximum void depth e.g. where dams are formed by excavating below the land surface or backfilling a residual void.

Note [3]: Purpose of the dam should outline the designed function, e.g. "the permanent containment of tailings resulting from the extraction of nickel, cobalt and other metals at the XYZ Refinery".

RTI DI RELEASE - DNRM

Released

Location of Dam

(F3-2) The location of any dam containing hazardous waste within the licensed place must be located within the polygonal area defined by the co-ordinates defined in Schedule C- Table 4 –Map 4.

Schedule F — Table 4 (Location of Dams Containing Hazardous Waste)

Name of dam containing hazardous waste	Easting(AMG 84, Zone 54) [1]	Northing (AMG 84, Zone 54) [1]
PLS Ponds, ILS, Raffinate Pre-settler and Raffinate Pond	301760 302065 302035 301760	7797640 7797640 7797310 7797310
Stormwater Pond 1 and 2	301470 301760 301760 301470	7797640 7797640 7797110 7797110
Heap Leach Pads	302065 302720 302720 302035	7797945 7797945 7796825 7796825

Note [1]: A minimum of 3 control points is required to constrain the location of all activities associated with the dam containing hazardous waste. Additional infrastructure which forms part of any dam containing hazardous waste may include appurtenant works consisting of tailings discharge pipelines, seepage collection systems, runoff diversion bunds, containment systems, pressure relief wells, decant and recycle water systems.

Standards and Criteria

(F3-3) The holder of the environmental authority must design, construct, repair, maintain, operate and decommission the dams defined in Schedule F – Table 3 and 4 in accordance with an acknowledged design plan that must comply with the standard environmental conditions in the "Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste".

(F3-4) The holder of the environmental authority must design, construct, and operate all low hazardous dams containing hazardous waste and non-hazardous dams in accordance with the criteria outlined in Appendix B of the Code of Environmental Compliance for Mining Activities.

Inspection of Dams

(F3-5) High hazard dams containing hazardous waste shall be inspected by a Registered Professional Engineer Queensland (RPEQ) prior to **1 November** each year or at any time if alarming, unusual or otherwise unsatisfactory conditions are observed.

(F3-6) For each inspection, the engineer shall assess the condition of the dam and its foundations, determine the hydraulic adequacy of the dam and assess the adequacy of the works with respect to dam safety.

(F3-7) For each inspection, two copies of the engineer's report and any recommendations as to measures to be taken to ensure the integrity of the dam shall be furnished to the administering authority within **28 days** of the inspection.

Decommissioning of Dam – Objective

(F3-8) Dams containing hazardous waste must not be abandoned and must be decommissioned to a situation where water can no longer be stored in the dams. The dams and their contained waste(s) must be stable, whereafter the dams are no longer dams and they become landforms on the operational land and must comply with the rehabilitation requirements of this environmental authority.

Decommissioning of Dam – Documentation and Compliance

(F3-9) Decommissioning activities for dams must be documented in detail in the plan of operations under which the activities are to occur. Where the detailed documentation is not already contained in the Design Plan for the dam, the detailed documentation is considered to be an amendment to the design plan and must be submitted

RTI DELETED - DNRM

Released

as an amendment to the design plan required by the "Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste".

Infrastructure

(F4-1) All infrastructure, constructed by or for the environmental authority holder during the mining activities including water storage structures, must be removed from the site prior to mining lease surrender, except where agreed in writing by the post mining landowner / holder.

NOTE: This is not applicable where the landowner / holder is also the environmental authority holder.

Contaminated Lands

(F5-1) A register and map of all potentially contaminated sites and any remediation details, must be kept on site, updated regularly, and included in each Plan of Operations.

(F5-2) A Spillage Management Plan and an Emergency Plan for all hazardous materials stored on-site, together with a description of suitable equipment and training must be updated and included with each Plan of Operations.

END CONDITIONS FOR SCHEDULE F

Schedule G - Community

Complaint Response

(G1-1) All complaints received must be recorded including details of complainant, reasons for the complaint, investigations undertaken, conclusions formed and actions taken. This information must be made available for inspection by the administering authority on request.

END CONDITIONS FOR SCHEDULE G

RTI DL RELEASE - DNRM

Grm 13/8/06

Released

Schedule H – Definitions

"acceptance criteria" means the measures by which the actions implemented to rehabilitate the land are deemed to be complete. The acceptance criteria indicate the success of the rehabilitation outcome or remediation of areas which have been significantly been disturbed by the mining activities. Acceptance criteria may include information regarding:

- vegetation establishment, survival and succession;
- vegetation productivity, sustained growth and structure development;
- fauna colonisation and habitat development;
- ecosystem processes such as soil development and nutrient cycling, and the recolonisation of specific fauna groups such as collembola, mites and termites which are involved in these processes;
- microbiological studies including recolonisation by mycorrhizal fungi, microbial biomass and respiration;
- effects of various establishment treatments such as deep ripping, topsoil handling, seeding and fertiliser application on vegetation growth and development;
- resilience of vegetation to disease, insect attack, drought and fire;
- vegetation water use and effects on ground water levels and catchment yields.

"affected building"

- for noise means any building or any part of a building, for example the building from which the noise is made, at which the noise can be heard.
- for vibration means any building or any part of a building, for example the activity from which the vibration is made, at which the vibration can be felt.

"ambient (or total) noise" at a place, means the level of noise at the place from all sources (near and far), measured as the Leq for an appropriate time interval.

"appropriately qualified person" means any person who conforms to the EPA operational policy for an "appropriately qualified person (analyst)" in accordance with Section 490(7) of the *Environmental Protection Act 1994.*

"ARD" means acid rock drainage and refers to the low pH, high heavy metal pollutant typical of sulphidic mine wastes, and most commonly associated with the production of ferrous iron and sulphuric acid through the oxidation of sulphide minerals.

"authority" means environmental authority (mining activities) under the *Environmental Protection Act 1994.*

"blasting" means the use of explosive materials to fracture-

(a) rock, coal and other minerals for later recovery; or
(b) structural components or other items to facilitate removal from a site or for reuse.

"building" includes a structure of any type and part of a building or structure.

"commercial place" means a work place used as an office or for business or commercial purposes, which is not part of the mining activity and does not include employees accommodation or public roads.

"competent person" means a person with the demonstrated skill and knowledge required to carry out the task to a standard necessary for the reliance upon collected data or protection of the environment.

"dam" means a containment or proposed containment whether permanent or temporary, which is designed to contain, divert or control flowable substances. However this does not include a fabricated or manufactured tank or container designed to a recognised standard.

"design plan" in the context of a dam design is the documentation required under the Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste to describe the physical dimensions of the dam, the materials and standards to be used for construction of the dam, the procedures and criteria to be used for operating the dam and the decommissioning and rehabilitation objectives in terms of procedures, works and outcomes at the end of dam life. The documents can include design and investigation reports, drawings, specifications and certifications.

"environmental authority holder" means the holder of this environmental authority.

"flow event" means a flow event producing sufficient water to permit a monitoring creek bed flow of 30cm or more at the sampling station.

"flowable substance" means matter or mixture of materials which can be forced to or otherwise flow under any conditions possible in a situation. It includes water, other liquids or a mixture that includes water or any other liquid or suspended solids.

RTI RELEASE - DNRM

GM 18/8/06

Released

"hazardous waste" means any substance, whether liquid, solid or gaseous, derived by or resulting from, the processing of minerals that tends to destroy life or impair or endanger health.

"infrastructure" means water storage dams, roads and tracks, buildings and other structures built for the purpose of mining activities but does not include facilities required for the long term management of mining impacts or the protection of potential resources. Such facilities include dams containing hazardous waste, waste rock dumps, voids, or ore stockpiles and buildings or other structures whose ownership can be transferred and which have a residual beneficial use for the next owner of the operational land or the background land owner.

"$L_{A\,10,\,adj,\,10\,mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 10-minute measurement period, using Fast response.

"$L_{A\,1,\,adj,\,10\,mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10-minute measurement period, using Fast response.

"$L_{A,\,max\,adj,\,T}$" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.

"land capability" as defined in the DME 1995 Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland.

"land suitability" as defined in the DME 1995 Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland.

"land use" term to describe the selected post mining use of the land, which is planned to occur after the cessation of mining operations.

"leachate" means a liquid that has passed through or emerged from, or is likely to have passed through or emerged from, a material stored, processed or disposed of at the operational land which contains soluble, suspended or miscible contaminants likely to have been derived from the said material.

"mandatory reporting level" means the volume below the spillway crest, equivalent to the lower of the AEP, 72 hour storm or the AEP wave allowance (AEP is the annual exceedence probability).

"mineral" means a substance which normally occurs naturally as part of the earth's crust or is dissolved or suspended in water within or upon the earth's crust and includes a substance which may be extracted from such a substance, and includes—

(a) clay if mined for use for its ceramic properties, kaolin and bentonite;
(b) foundry sand;
(c) hydrocarbons and other substances or matter occurring in association with shale or coal and necessarily mined, extracted, produced or released by or in connection with mining for shale or coal or for the purpose of enhancing the safety of current or future mining operations for coal or the extraction or production of mineral oil therefrom;
(d) limestone if mined for use for its chemical properties;
(e) marble;
(f) mineral oil or gas extracted or produced from shale or coal by in situ processes;
(g) peat;
(h) salt including brine;
(i) shale from which mineral oil may be extracted or produced;
(j) silica, including silica sand, if mined for use for its chemical properties;
(k) rock mined in block or slab form for building or monumental purposes;

but does not include—

(l) living matter;
(m) petroleum within the meaning of the *Petroleum Act 1923*;
(n) soil, sand, gravel or rock (other than rock mined in block or slab form for building or monumental purposes) to be used or to be supplied for use as such, whether intact or in broken form;
(o) water.

"noxious" means harmful or injurious to health or physical well being, other than trivial harm.

"offensive" means causing reasonable offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive, other than trivial harm.

PARTIAL RELEASE - DNRM

Released

"peak particle velocity (ppv)" means a measure of ground vibration magnitude which is the maximum rate of change of ground displacement with time, usually measured in millimetres/second (mms^{-1}).

"protected area" means - a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

"progressive rehabilitation" means rehabilitation (defined below) undertaken progressively or a staged approach to rehabilitation as mining operations are ongoing.

"reference site" (or analogue site) may reflect the original location, adjacent area or another area where rehabilitation success has been completed for a similar biodiversity. Details of the reference site may be as photographs, computer generated images and vegetation models etc.

"rehabilitation" the process of reshaping and revegetating land to restore it to a stable landform and in accordance with the acceptance criteria set out in this environmental authority and, where relevant, includes remediation of contaminated land.

"representative" means a sample set which covers the variance in monitoring or other data either due to natural changes or operational phases of the mining activities.

"residual void" means an open pit resulting from the removal of ore and/or waste rock which will remain following the cessation of all mining activities and completion of rehabilitation processes.

"self sustaining" means an area of land which has been rehabilitated and has maintained the required acceptance criteria without human intervention for a period nominated by the administering authority.

"sensitive place" means;
- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- an educational institution; or
- a medical center or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public park or gardens.

"significant disturbance" – includes land
(a) if it is contaminated land; or
(b) it has been disturbed and human intervention is needed to rehabilitate it.
   i. to a state required under the relevant environmental authority; or
   ii. if the environmental authority does not require the land to be rehabilitated to a particular state – to its state immediately before the disturbance.

Some examples of disturbed land include:
- areas where soil has been compacted, removed, covered, exposed or stockpiled;
- areas where vegetation has been removed or destroyed to an extent where the land has been made susceptible to erosion; (vegetation & topsoil)
- areas where land use suitability or capability has been diminished;
- areas within a watercourse, waterway, wetland or lake where mining activities occur;
- areas submerged by tailings or hazardous contaminant storage and dam walls in all cases;
- areas under temporary infrastructure. Temporary infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be removed after mining activities have ceased; or
- areas where land has been contaminated and a suitability statement has not been issued.

However, the following areas are not included:
- areas off lease (e.g. roads or tracks which provide access to the mining lease);
- areas previously significantly disturbed which have achieved the rehabilitation outcomes;
- by agreement with the EPA, areas previously significantly disturbed which have not achieved the rehabilitation objective(s) due to circumstances beyond the control of the mine operator (such as climatic conditions);
- areas under permanent infrastructure. Permanent infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be left by agreement with the landowner. The agreement to leave permanent infrastructure must be recorded in the Landowner Agreement and lodged with the EPA;
- disturbances that pre-existed the grant of the tenure unless those areas are disturbed during the term of the tenure.

RTI DL RELEASE - DNRM

Released

"spillway" means passage or outlet from the dam through which surplus water flows.

"stable" means land form dimensions are or will be stable within tolerable limits now and in the foreseeable future. Stability includes consideration of geotechnical stability, settlement and consolidation allowances, bearing capacity (traffic ability), erosion resistance and geochemical stability with respect to seepage and contaminant generation.

"suitably qualified and experienced person" means a person who is a Registered Professional Engineer of Queensland under the provisions of the *Professional Engineers Act 1988* or a Corporate Member of the Institution of Engineers Australia or holds equivalent professional qualifications and has the following:

(a) knowledge of engineering principles related to the structures, geomechanics, hydrology, hydraulics, chemistry and environmental impact of dams; and

(b) at least a total of five years of suitable experience and demonstrated expertise in at least four of the following areas:

- investigation, design or construction of dams;
- operation and maintenance of dams;
- geomechanics with particular emphasis stability, geology and geochemistry;
- hydrology with particular reference to flooding, estimation of extreme storms, water management or meteorology;
- hydraulics with particular reference to sediment transport and deposition, erosion control, beach processes;
- hydrogeology with particular reference to seepage, groundwater,
- solute transport processes and monitoring thereof; or
- dam safety.

"tolerable limits" means that a range of values could be accepted to achieve an overall environmental management objective (eg a range of settlement of a tailing capping could still meet the objective of draining the cap quickly, preventing pondage and limiting infiltration and percolation).

"trivial harm" means environmental harm which is not material or serious environmental harm and will not cause actual or potential loss or damage to property of an amount of, or amounts totalling more than $5,000.

"watercourse" - Means a river, creek or stream in which water flows permanently or intermittently in a visibly defined channel (natural, artificial or artificially improved) with:

(a) continuous bed and banks;
(b) an extended period of flow for some months after rain ceases, and
(c) an adequacy of flow that sustains basic ecological processes and maintains biodiversity.

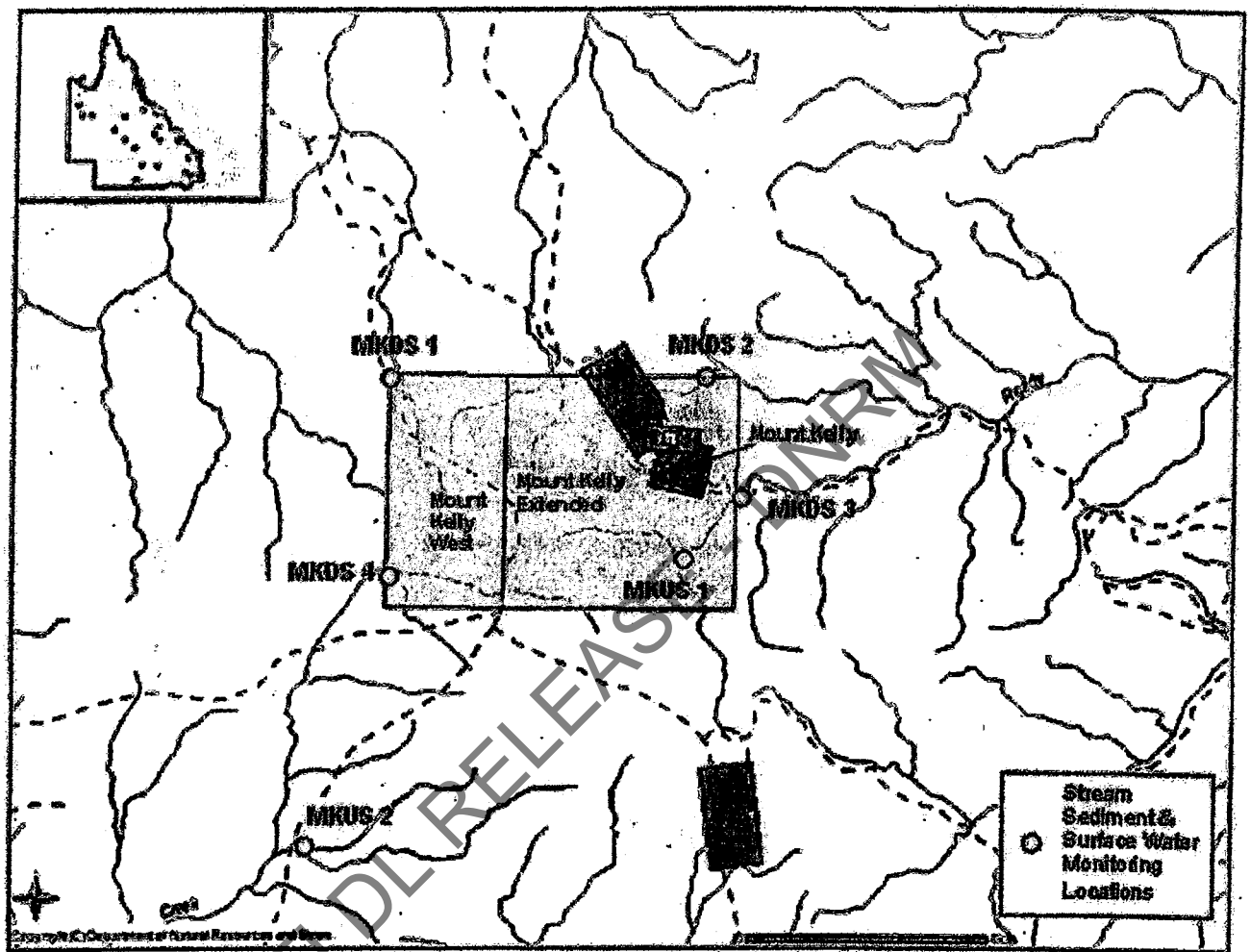
"waters" includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea) or any part-thereof.

END CONDITIONS FOR SCHEDULE H

RTI DL RELEASE - DNRM

Released

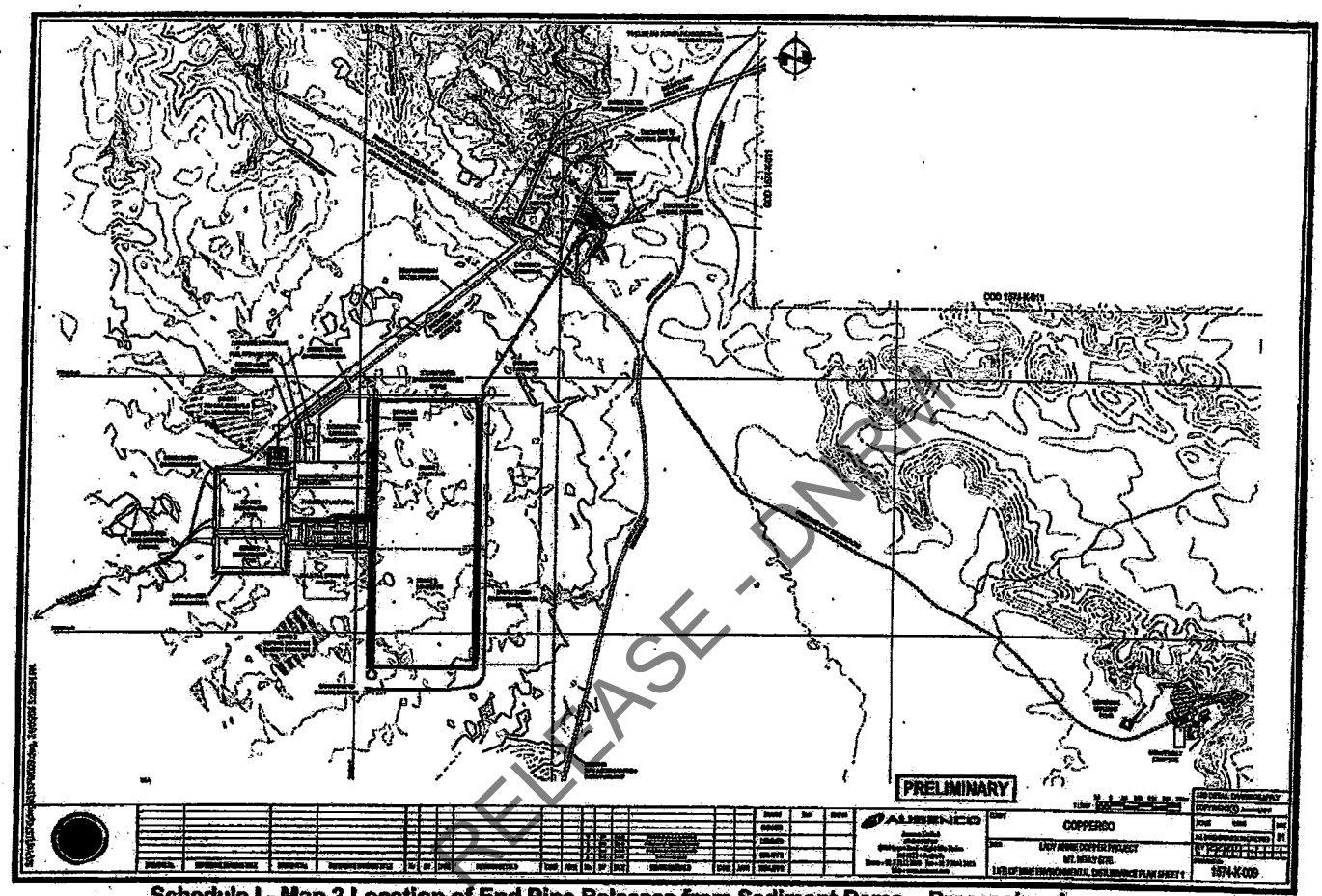
Schedule I - Maps / Plans



Schedule I - Map 1 Receiving Water Monitoring Locations

RTI DL RELEASE DNRM

Released

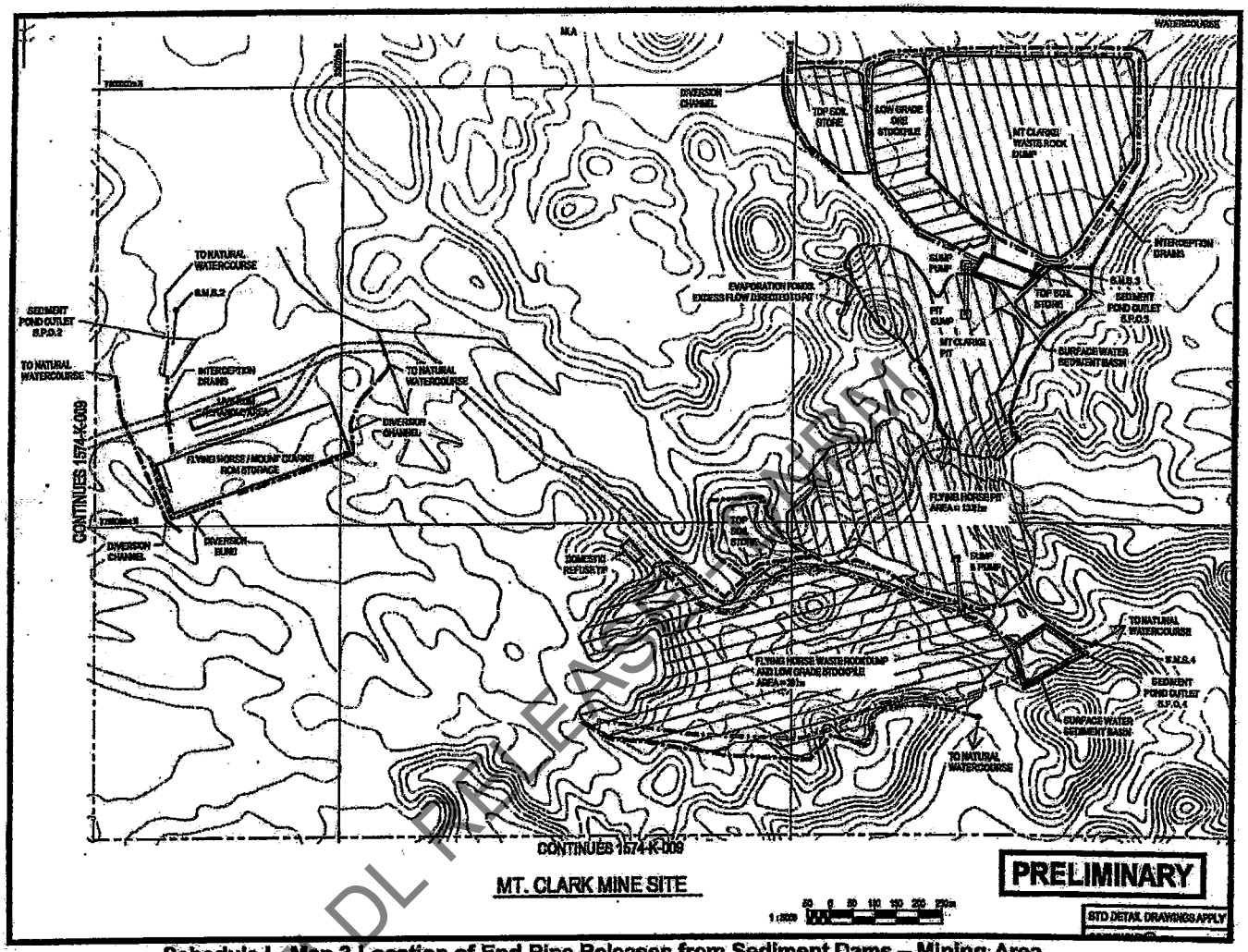


Schedule I - Map 2 Location of End Pipe Releases from Sediment Dams – Processing Area

RTI DISCLOSURE - DNRM

18/8/06

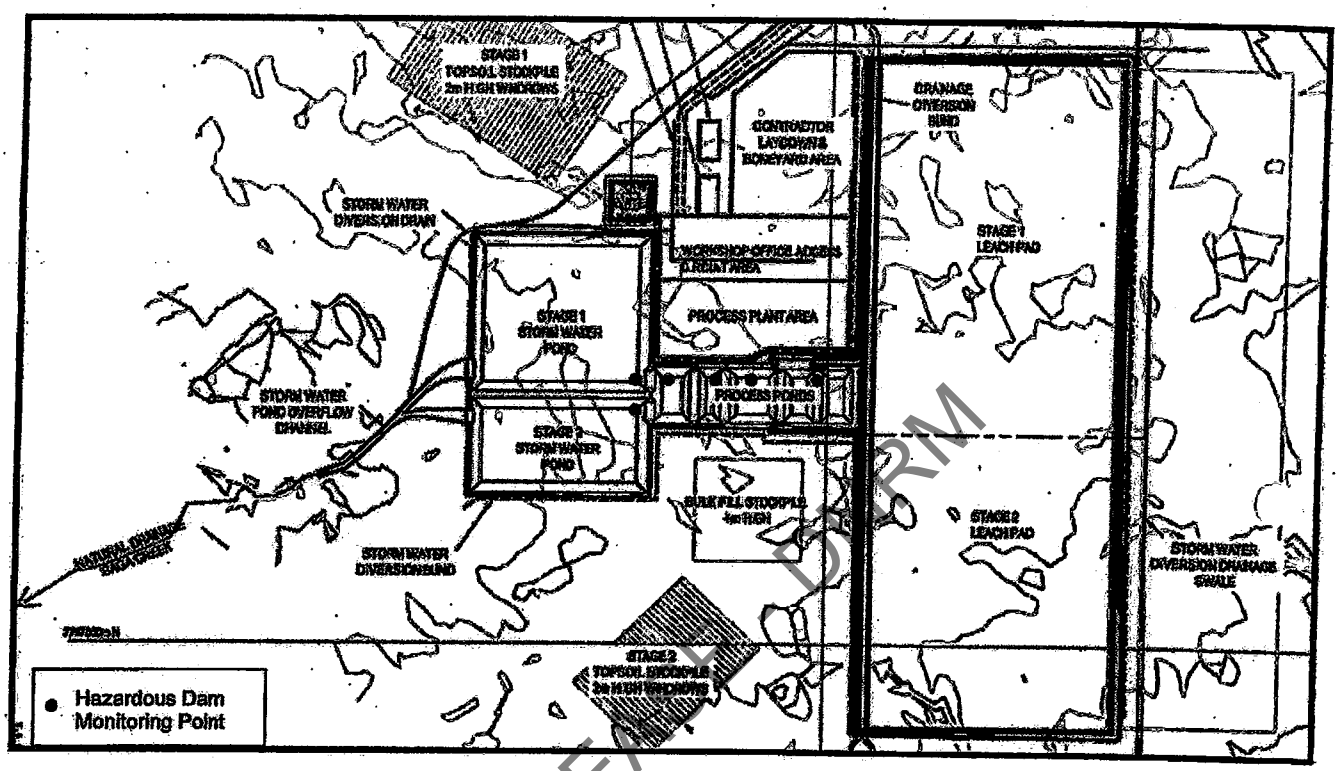
Released



Schedule I - Map 3 Location of End Pipe Releases from Sediment Dams – Mining Area

RTI DL RELEASE - JUNE 14

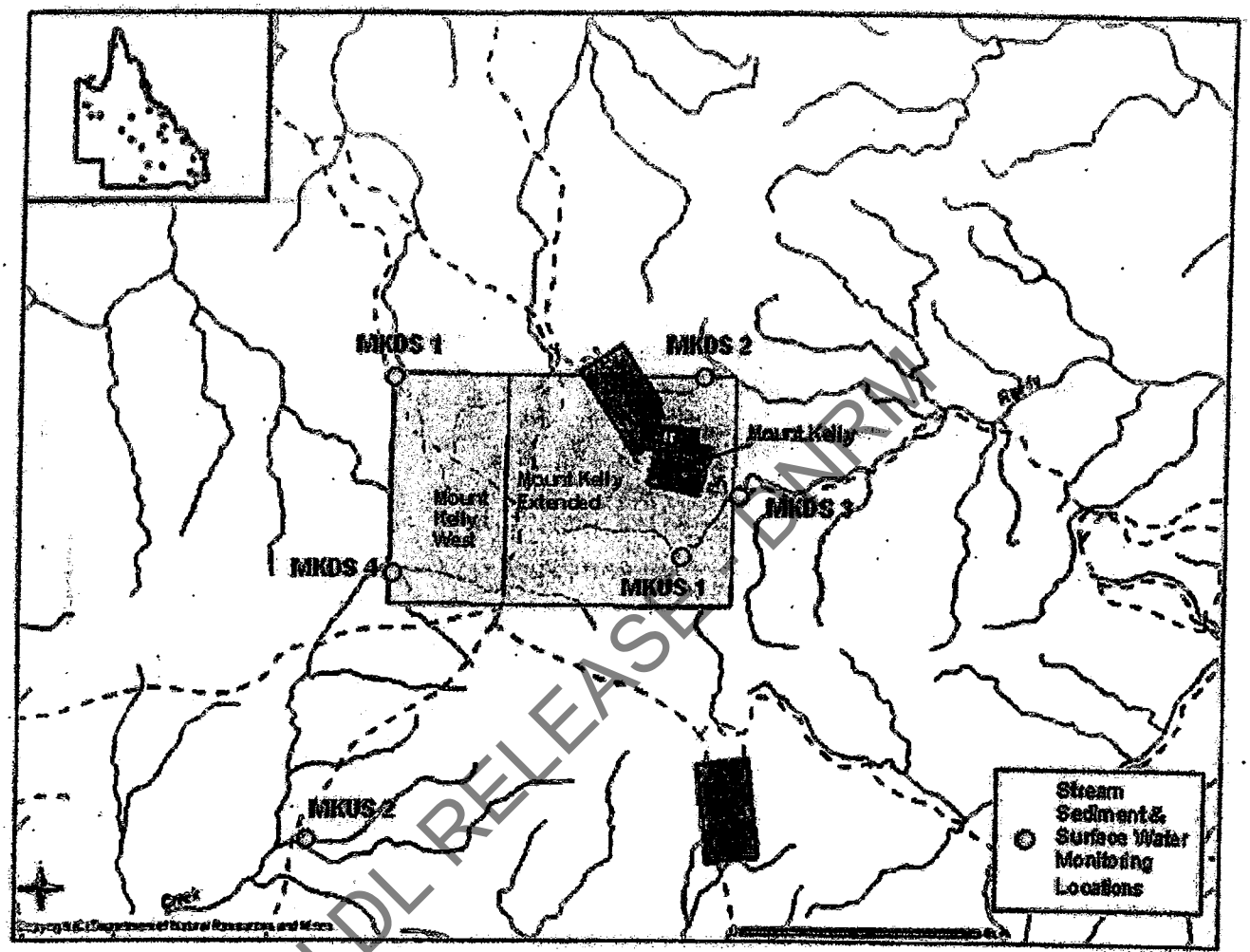
Released



Schedule I - Map 4 Location of Hazardous Dams

RTI DL RELEASE FORM

Released

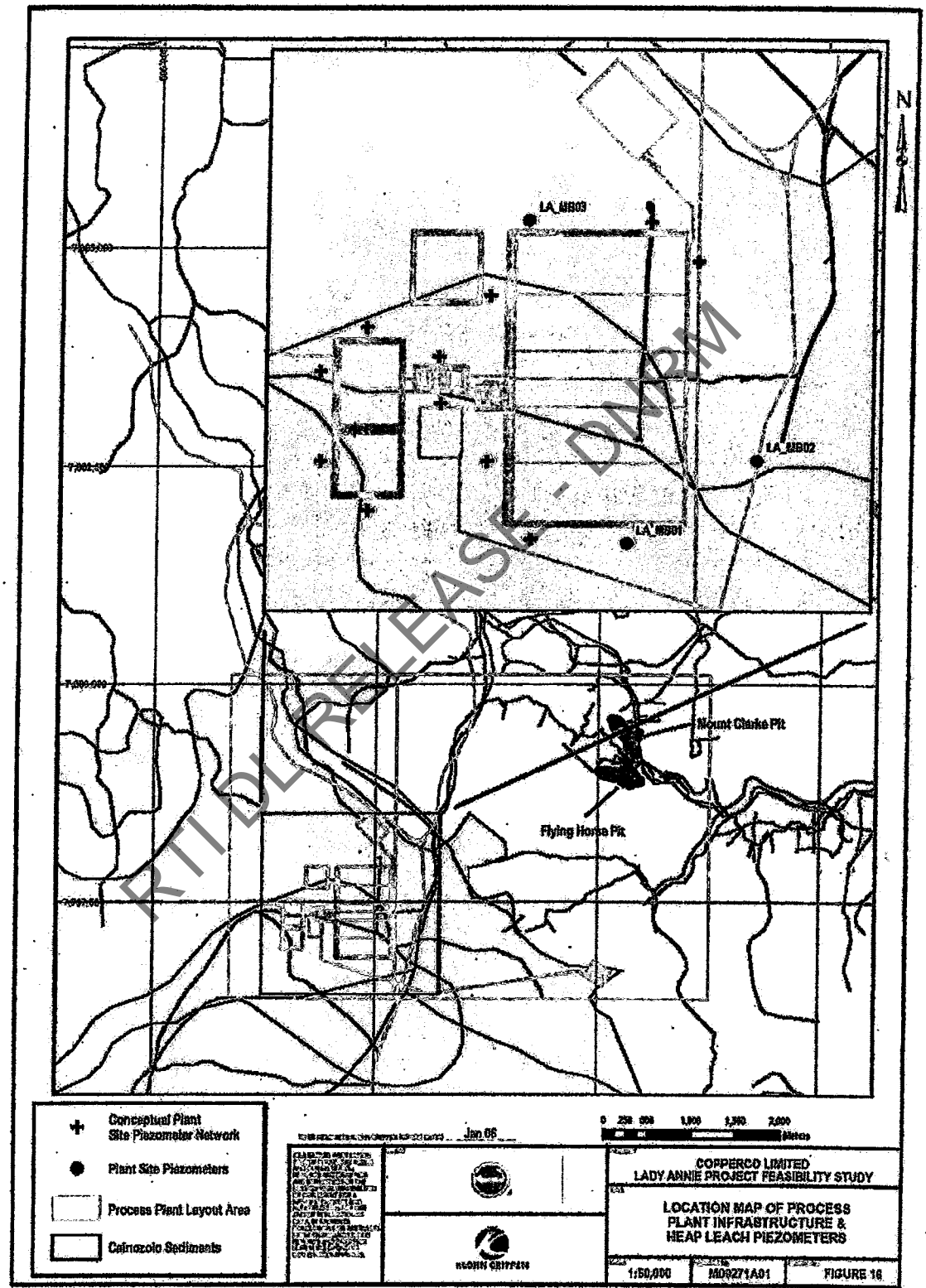


Schedule I - Map 5 Stream Sediments Monitoring Locations

RTI DL RELEASED DNRM

GM 18/8/06

Released



RTI DL RELEASE - DNRM

Schedule I - Map 6 Groundwater Monitoring Locations

END CONDITIONS FOR SCHEDULE I

END OF EVIRONMENTAL AUTHORITY

Released

Queensland Government

Environmental Protection Agency

Incorporating the Queensland Parks and Wildlife Servi

Enquiries	Jodie Marlow
Telephone	07 47447820
Your reference	MIN00401001
Our reference	ISA658

24 July 2006

Reefway Pty Ltd
14 Martin Place
Sydney NSW 2000

CC/ Savannah Resources Pty Ltd
Level 22, Allendale Square
77 St Georges Terrace
Perth WA 6000

RTI DL RELEASE - DNRM

Dear Sir/Madam

Re: Amendment of Environmental Authority M2499

I refer to the applications for amendment of Environmental Authority (Mining Activities) M2499 received at the Brisbane EPA office on 2 December 2006.

Please find attached the amended Environmental Authority MIN00401001. This Authority replaces Environmental Authority M2499. Environmental Authority MIN00401001 takes effect from 24 July 2006 and the anniversary date of this authority is 24 July of each year.

Hazardous Dams

Please be advised that before any construction works of the heap leach pad liner and hazardous dams can be done the environmental authority holder needs to comply with the conditions of the Code of Environmental Compliance for Environmental Authorities for High Hazard Dams Containing Hazardous Waste. This is a requirement of condition (F3-3) of Environmental Authority MIN00401001.

"The holder of the environmental authority must design, construct, repair, maintain, operate and decommission the dams defined in Schedule F – Table 3 and 4 in accordance with an acknowledged design plan that must comply with the standard environmental conditions in the "Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste".

Before construction of a dam containing hazardous waste, a person suitably qualified and experienced in dam engineering must:

1. prepare design plans which design the dam to an appropriate engineering standard;
2. certify that the design plans meet an appropriate engineering standard and are consistent with the dam conditions in the environmental authority, and
3. submit the certified design plans to the administering authority.

Natural Resources, Mines and Water
29109
25 JUL 2006
MOUNT ISA
RECEIVED

Cnr Camooweal & Mary Streets Mount Isa
Queensland 4825 Australia
PO Box 2916 Mount Isa
Queensland 4825 Australia
Telephone (07) 4744 7888
Facsimile (07) 4744 7800
Website www.epa.qld.gov.au
ABN 87 221 158 786

Printed on 100% recycled paper

Released

A copy of the Code of Environmental Compliance for Environmental Authorities for High Hazard Dams Containing Hazardous Waste is attached. Should you need any assistance or clarification regarding hazardous dams please contact Peter Gleeson or Russ McConnell from the Hazardous Dams Unit in Brisbane on 07 3225 1300.

Mining Lease Applications
Please be advised that works cannot commence on MLA90168, MLA90169 and MLA90170 unless the Minister of the Department of Natural Resource Mines and Water grants them.

If you have any inquiries in relation to the above details please contact Jodie Marlow on 07 4744 7820.

Yours faithfully

s.49 - Signature

Geoff Metcalfe
District Manager
Environmental Management Services
Environmental Protection Agency
North West District

C/c Mining Registrar

RTI DL RELEASE - DNRM