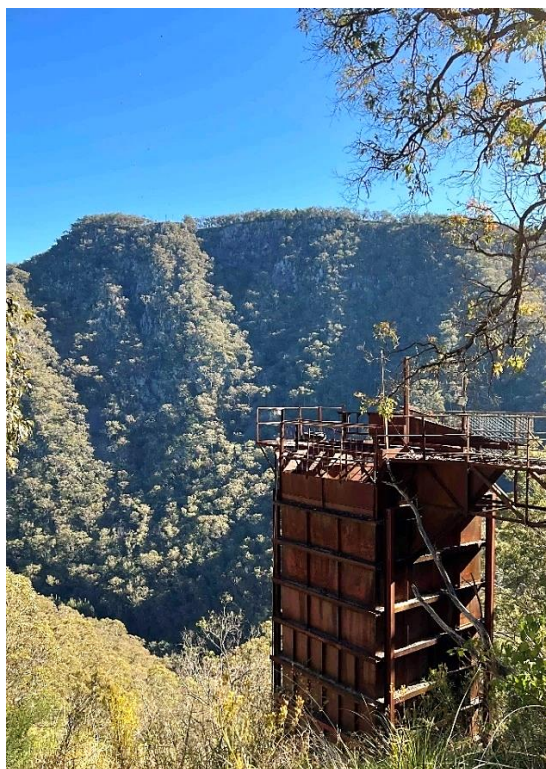


## Report:

# Annual Environmental Management (AEMR)

2024-25



Document Title		Report: Annual Environmental Management (AEMR) 2024-25			
Document ID		Version	Issue Date	Review Time	Review Date
HGM-ENV-REP-001		2	26 Mar 2025	-	-
Approver Role	Approver Name	Approver Signature		Doc. Owner	Owner Name
GM Hillgrove	Matt Varvari			HSEC Sup't	K.Bryant

A review of this document will be conducted within the review timeframe, or if any of the following occur:


- Annually

### Document History

Version No.	Revision Date	Change Notes
1	March 2024	Annual report created
2	March 2025	Annual Report Reviewed and Created



## COMPLIANCE REPORT DECLARATION FORM

Project Name:	Hillgrove Mine
Project Application Number:	DA/98/35
Description of Project:	
Project Address:	130 Bracken Street, Hillgrove NSW 2350
Proponent:	Hillgrove Mines Pty Ltd, a wholly owned subsidiary of Larvotto Resources Limited
Title of Compliance Report:	<b>Annual Environmental Management Report 2024-25</b>
Date:	26 March 2025
<p>I declare that I have reviewed the contents of the attached Compliance Report and to the best of my knowledge:</p> <ol style="list-style-type: none"><li>The Compliance Report has been prepared in accordance with all relevant conditions of consent.</li><li>The Compliance Report has been prepared in accordance with the Compliance Reporting Requirements.</li><li>The findings of the Compliance Report are reported truthfully, accurately and completely.</li><li>Due diligence and professional judgement have been exercised in preparing the Compliance Report.</li><li>The Compliance Report is an accurate summary of the compliance status of the development.</li></ol> <p>Notes:</p> <ul style="list-style-type: none"><li>Under section 10.6 of the Environmental Planning and Assessment Act 1979 a person must not include false or misleading information (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is false or misleading in a material respect. The proponent of an approved project must not fail to include information in (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is materially relevant to the monitoring or audit. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000;</li><li>The Crimes Act 1900 contains other offences relating to false and misleading information: section 307B (giving false or misleading information – maximum penalty 2 years' imprisonment or 200 penalty units, or both).</li></ul>	
Name of Authorised Reporting Officer:	Katie Bryant
Title:	HSEC Superintendent (Environmental Officer)
Signature:	
Qualification:	BA Archaeology, MHS (WHS)
Company:	Hillgrove Mines Pty Ltd
Company Address:	130 Brackin Street, Hillgrove NSW 2350



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## 1. STATEMENT OF COMPLIANCE

Table 1 below provides the compliance status of the operation against all relevant approval documents, as at the end of the reporting period.

During the 2024-25 reporting year Hillgrove Mines Pty Ltd made available via the website the 2023-24 AEMR, it was not requested by any members of the public directly.

*Table 1: Statement of Compliance*

Were all the conditions of the relevant approvals complied with?	Yes / No
Development Consent (DC) S98/00802 Development Approval (DA) 98/35	No
Rehabilitation Management Plan	Yes
Mining Leases # (as per Table 3)	Yes
Water Access Licence (WAL) 40217, WAL39495, WAL39497, WAL39500, WAL39498	Yes
Environment Protection Licence (EPL) 921	Yes

Table 2 shows Non-Compliance items:

- All were identified during the 2023 Independent Environmental Audit (IEA) and confirmed by breach notice from DPHI.
- During the 2024-25 AEMR reporting year:
  - 10 NC's remained outstanding at the commencement of the year;
  - 7 NC's were brought into compliance during the year; and
  - 5 remain outstanding at the completion of the year.

No other breaches were found.

A summary of each NC that is detailed along with an update status and Hillgrove Mine's response. The Development Consent is assessed in its entirety to ensure there is no further non compliances over the previous 12mths non-Compliance.

Of the 3 remaining NC's at year end, 2 are open at the request of the DPHI until Hillgrove mines receive approval for the Standard Control Plans, and there remains on NC remains open at the time of reporting.

*Table 2: Details of Non-Compliances*

Relevant Approval	Cond. #	Source	Condition Desc. (Summary)	Compliance Status (at year end)	Comment	Where addressed in AEMR
DA98/35	13	Feb23 IEA NC5	The TSF shall be designed, constructed, operated, monitored and maintained such that all water received in the facility is evaporated, retained or reused and there is no discharge of tailings water to the environment. The Applicant shall comply with all requirements of the EPA, DRG,	Compliant	Compliance achieved on Jan 2025.	11.3 - Non-Compliances



Relevant Approval	Cond. #	Source	Condition Desc. (Summary)	Compliance Status (at year end)	Comment	Where addressed in AEMR
			and the NSW Dam Safety Committee to ensure that there is no seepage, leakage or overflow from the TSF.			
DA98/35	31A	Feb23 IEA NC6	By end of Dec-2020, the Applicant shall commission an independent road safety audit of the intersection of Waterfall Way and Stockton Road	Compliant	Compliance achieved on 30 July 2024.	11.3 - Non-Compliances
DA98/35	32	Feb23 IEA NC7	Applicant shall prepare a Noise and Vibration Management Plan in consultation with and approval of EPA. Plan shall define noise management procedures, monitoring protocols and measures for mitigating impacts.	Compliant	Compliance achieved on 30 July 2024.	11.3 - Non-Compliances
DA98/35	34	Feb23 IEA NC8	Applicant shall ensure that the LA <sub>10(15 min)</sub> noise levels due to the normal operation of the mine, when measured or computed at any residence (other than Applicant owned), shall not exceed a noise level of 35 dB(A) or 30 dB(A) where the noise source is tonal.	Non-Compliant for 2024-25 reporting year.	Hillgrove Mine was in Care & Maintenance for entirety of 2024-25 year, not in normal operation.  Routine noise levels are compliant, and testing has been undertaken quarterly  However, remains non-compliant until management plans are approved by the secretary	6.2 - Noise and Blasting 11.3 - Non-Compliances
DA98/35	35	Feb23 IEA NC9	Noise measurement shall be undertaken under prevailing weather conditions, in absence of temperature inversions and over a period sufficient to be representative of the noise levels being emitted from the mine.	Non-Compliant for 2024-25 reporting year.	Hillgrove Mine was in Care & Maintenance for entirety of 2024-25 year, not in normal operation.  Routine noise levels are compliant, and testing has been undertaken quarterly  However, remains non-compliant until management plans are approved by the secretary	6.2 - Noise and Blasting 11.3 - Non-Compliances
DA98/35	41	Feb23 IEA NC10	Applicant shall implement, in consultation with EPA, dust control measures aimed at	Non-Compliant for 2024-25 reporting year.	Dust Management Plan is drafted, pending approval.	6.3 - Air Quality 11.3 - Non-Compliances



Relevant Approval	Cond. #	Source	Condition Desc. (Summary)	Compliance Status (at year end)	Comment	Where addressed in AEMR
			achieving relevant EPA dust deposition standard		EPA advised they will not review or approve management plans. However, remains non-compliant until management plans are approved by the secretary	
DA98/35	43	Feb23 IEA NC11	Applicant shall prepare a Dust Management Plan which is to have regard to the tailing's dams, ore stockpiles, internal haul roads and processing facilities.	Compliant	Compliance achieved on 30 July 2024.	11.3 - Non-Compliances
DA98/35	47	Feb23 IEA NC12	12 months after commencement of operations applicant shall carry out a comprehensive hazard audit and within one month of the audit submit a report to the Secretary. Further audits shall be carried out every three years.	Not Compliant	Hazard Audit has not been carried out. No Progress	11.3 - Non-Compliances
DA98/35	50	Feb23 IEA NC13	Applicant shall carry out rehabilitation of the site progressively, that is, as soon as reasonably practicable following disturbance.	Compliant	Compliance achieved on 30 January 2025.	8.1 - Rehabilitation Performance 11.3 - Non-Compliances
DA98/35	53	Feb23 IEA NC14	Within 3 months of: (a) an AEMR under condition 8; (b) an audit under condition 10; or (c) Modification to the conditions of this consent; Applicant shall review, and if necessary, revise plans required under this consent to the satisfaction of the Secretary. Where revisions are required, within 4 weeks of the review, revised document must be submitted to Secretary for approval.	Not Compliant	The Environmental Management Plan, including Control Standards for each impact are drafted. These will be reviewed following submission of this AEMR and submitted to the Secretary for approval.	11.3 - Non-Compliances

## 2. INTRODUCTION

This Annual Report has been developed in accordance with the NSW Department of Planning Housing and Infrastructure (DPHI) Integrated Mining Policy – Compliance Reporting – Post Approval Requirements May 2020.

This document has been prepared to satisfy the following requirements:

- The Annual Environmental Management Plan requirements under Condition 8 of DA (Development Approval) 98/35
- Routine reporting requirements of DPI associated with WALs (Water Access Licence)
- Environmental Management Report requirements of the Division of Resources and Energy.

The report is based on the EPL (Environment Protection Licence) 921 reporting period from 28 January 2024 to 27 January 2025. The reporting period will be referred to as 2024-25 in this report.

### 2.1 Project Background

Mining at Hillgrove commenced in Bakers Creek in 1877.

The Hillgrove mineral field was one of the major goldfields in the state with a long history of mining activities. Mining commenced in Bakers Creek gorge in 1877 and hosts over 200 deposits by underground methods. At its peak in 1898, the population of Hillgrove was approximately 4,000 persons.

During the early phase of mining until a suspension in the 1920's mining activities caused significant impacts to the environment with processing facilities constructed adjacent to the creek at the base of the gorge:

- An estimated 7 Mt of contaminated waste rock and tailings were deposited into and adjacent to Bakers Creek (Ashley and Graham 2001, Ashley *et al.* 2003, Ashley *et al.* 2007); and
- Vegetation was almost entirely cleared from the gorge for use as boiler fuel and underground support.

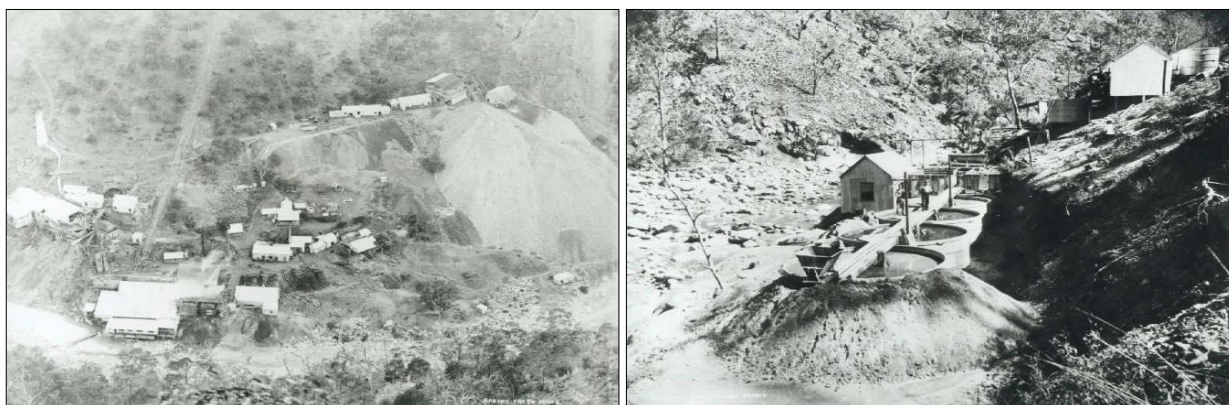


Figure 1: Bakers Creek Mine above Bakers Ck in 1905 (left) and processing adjacent to Bakers Creek (right)

Since that time, there have been three four broad phases of operation:

- In 1969 an antimony and gold concentrator were built atop the Hillgrove side of the gorge and nine mining areas were extracted from underground, plus two small open pits.
- In 1998 the current operating permit (DA98/35) was approved for New England Antimony Mines (NEAM) to continue operations and construct a pressure oxidation (POX) plant to produce gold ore from the concentrate. NEAM was placed in receivership in 2002 and the operations were suspended.

- Straits Resources purchased the project in 2004 and in 2007 commenced construction of a new processing plant, antimony leaching and smelting facilities, and tailings storage facility (TSF2) but operations were suspended in 2009 due to under-performance of the antimony circuit.
- Hillgrove Mines Pty Ltd (wholly owned subsidiary of Bracken Resources), purchased the project in 2013, upgraded the plant to produce both gold and antimony concentrates, then recommenced operations in April 2014. The site was again suspended in 2016 due to low antimony prices.
- Red River Resources purchased Hillgrove Mines in August 2019. Exploration drilling was carried out and processing restarted in December 2020 treating remnant stockpiles from the early (c.1900) workings at Bakers Creek, and leach residues from the Straits Resources era. Processing was suspended in September 2022 and in November 2022, Red River and its subsidiaries entered Administration.
- Larvotto Resources Limited are the current owners of Hillgrove Mines Pty Ltd, acquiring the project out of Administration in December 2023. Under Larvotto ownership, the site has moved from full Care & Maintenance to Exploration & Assessment. Larvotto are actively advancing the project towards development and re-commencement of operations.

## 2.2 Location

The Hillgrove Mine is located 23 km east of Armidale in the New England region of New South Wales. The project area is approximately 8x6 km and is topographically dominated by the Bakers Creek gorge. The gorge dissects the surrounding plateau with a drop-in elevation of approximately 450 meters. Processing and surface facilities are located on the eastern plateau near Hillgrove village.

## 2.3 Contacts for Key Personnel at Hillgrove Mine:

Mr Matthew Varvari	General Manager Hillgrove	0427 579 896 ( <a href="mailto:mvarvari@larvottoresources.com">mvarvari@larvottoresources.com</a> )
Ms Katie Bryant	Superintendent HSEC (Enviro. Officer)	0488 204 160 ( <a href="mailto:kbryant@larvottoresources.com">kbryant@larvottoresources.com</a> )

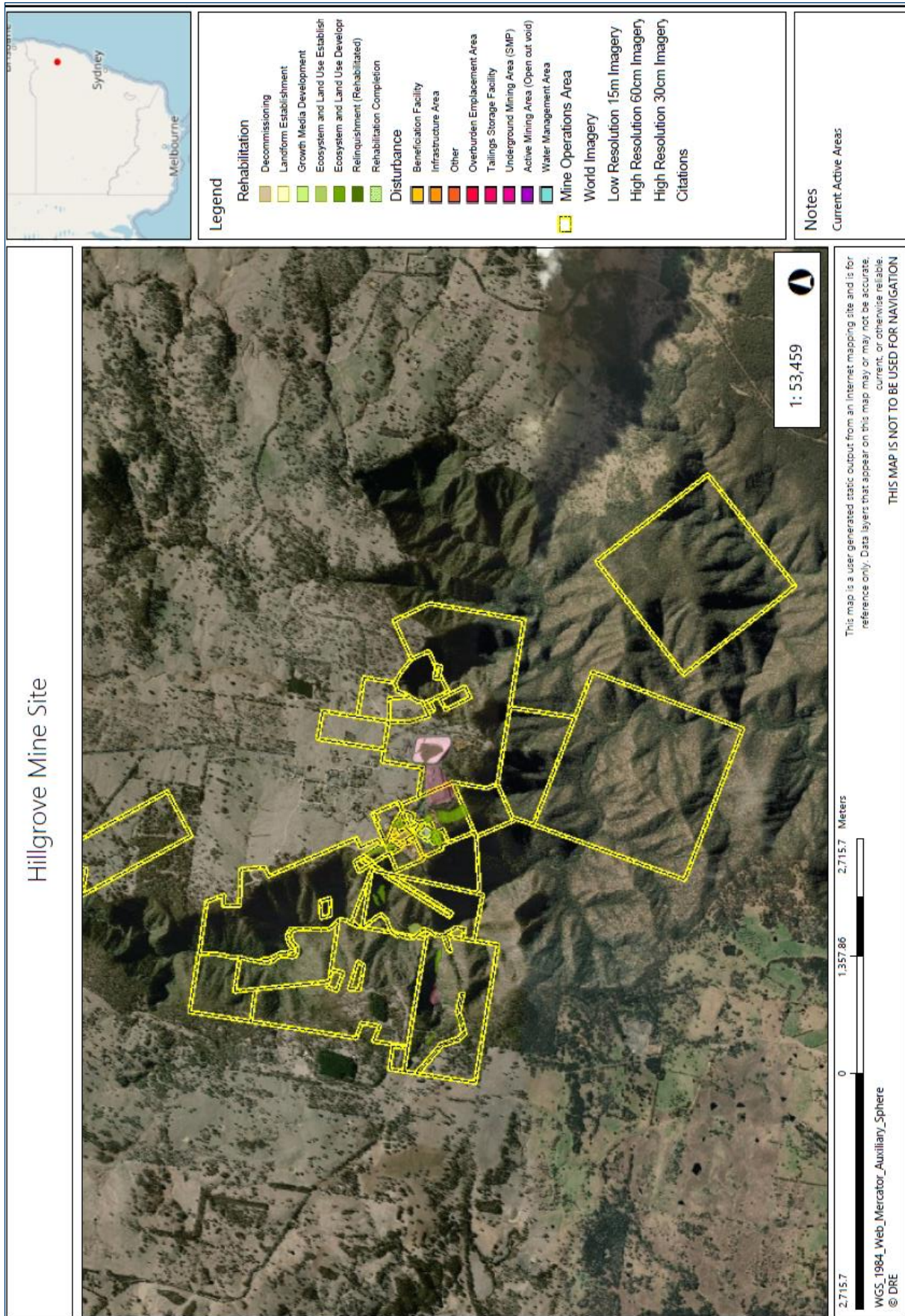


Figure 2: Hillgrove Mine Location Plan and Tenements

### 3. APPROVALS

Table 3 provides a summary of the key approvals for the Hillgrove Mine.

*Table 3: Development Consents and Licences*

Authority	Approval Type	Number	Issued	Expires	Comment
DPHI	Development Consent	DA-98/35, DC S98/ Mod.4	18 Nov 1998	Continuing	Consent for Mine Expansion, POX plant, Brackins Spur and Lower Cooney Haul Roads, TSF2 and Brackins Spur mining area.  Production permission expires 31 Dec-23 but all other conditions continue.
EPA	Environment Protection Licence	EPL 921	8 May 2001	No expiry	EPL for Hillgrove Mine
	Radiation Licence to Sell/Possess	5060782	2007	21 Jan 2025	For processing plant density gauges. Annual licence.
DPI	Water Access Licence	WAL 39495	12 Aug 2023	Continuing	Bakers Creek
	Water Access Licence	WAL 39497	20 Oct 2016	Continuing	Hillgrove Station
	Water Access Licence	WAL 39498	28 Mar 2013	Continuing	Town Reservoir, Industrial Use
	Water Access Licence	WAL 39500	27 Feb 2005	Specific Purpose	Town Reservoir, Domestic Use
	Water Access Licence	WAL 40217	18 Mar 2015	Continuing	Mine Adits, Groundwater Capture
	Water Supply Works	30WA 308489	1 Jul 2016	30 Jun 2029	Mine Adits, Groundwater (permitted as bores)
	Bore Water Supply Works	30WA 314503	1 Jul 2016	17 Mar 2030	Baker Creek, Bywash Dam
ARC, including antecedents	Development Consent	22/81	23 Jun 1981	Perpetuity	Building Approval for Surface Workshop
	Development Consent	DA-19-2000/C	29 Mar 2001	Perpetuity	Processing plant
	Construction Certificate for Modified DA DA-19-200/C	CC-75-2020	9 Nov 2020	Continuing	Modification to Processing plant
	Development Consent	42/82	22 Jul 1982	Perpetuity	Mining in Metz/Sunlight Gorge
	Development Consent	95/26	8 Mar 2004	Perpetuity	Consent under SEPP37 for continuing use of pre-1979 Mining Leases.
	Development Consent	26/2005/A	21 Sep 2006	Perpetuity	Sunlight haul road from Metz 7L to Bakers Creek.
	Conditional Deferred Commencement Consent	DA-174- 2015/A	18 Feb 2020	Lapsed	Clarks Gully underground Mine



*Table 4: Mineral Tenements*

Authority	Approval Type	Number	Issued	Expires
DRNSW	Exploration Licence	EL 3326	23 Aug 1989	23 Aug 2026
	Exploration Licence	EL 5973	19 Aug 2002	19 Aug 2025
	Exploration Licence	EL 5997	27 Sep 2002	27 Sep 2025
	Exploration Licence	EL 6419	17 May 2005	17 Aug 2027
	Gold Lease	GL 3959	8 Feb 1933	8 Feb 2043
	Gold Lease	GL 3980	29 Mar 1933	29 Mar 2041
	Gold Lease	GL 5845	16 Feb 1968	16 Feb 2030
	Mining Lease	ML 205	21 May 1976	21 Mar 2042
	Mining Lease	ML 219	16 Jun 1976	16 Jun 2042
	Mining Lease	ML 231	21 Jul 1976	21 Jul 2042
	Mining Lease	ML 391	16 Feb 1977	16 Feb 2043
	Mining Lease	ML 392	16 Feb 1977	16 Feb 2043
	Mining Lease	ML 592	3 May 1978	3 May 2042
	Mining Lease	ML 600	10 May 1978	10 May 2042
	Mining Lease	ML 649	4 Oct 1978	4 Oct 2042
	Mining Lease	ML 655	4 Oct 1978	4 Oct 2042
	Mining Lease	ML 714	21 Mar 1979	21 Mar 2043
	Mining Lease	ML 749	4 Jul 1979	4 Jul 2042
	Mining Lease	ML 772	5 Sep 1979	5 Sep 2042
	Mining Lease	ML 810	5 Mar 1980	5 Mar 2043
	Mining Lease	ML 945	8 Jul 1981	8 Jul 2042
	Mining Lease	ML 961	9 Dec 1981	9 Dec 2042
	Mining Lease	ML 972	6 Jan 1982	6 Jan 2043
	Mining Lease	ML 1020	3 Nov 1982	11 Feb 2041
	Mining Lease	ML 1026	8 Dec 1982	8 Dec 2042
	Mining Lease	ML 1100	9 Nov 1983	9 Nov 2042
	Mining Lease	ML 1101	9 Nov 1983	9 Nov 2042
	Mining Lease	ML 1332	7 Oct 1993	11 Feb 2041
	Mining Lease	ML 1440	12 Feb 1999	12 Feb 2043
	Mining Lease	ML 1441	12 Feb 1999	12 Feb 2043
	Mining Lease	ML 1442	12 Feb 1999	12 Feb 2043
	Mining Lease	ML 1598	4 Dec 2007	4 Dec 2043
	Mining Lease	ML 1599	4 Dec 2007	4 Dec 2043



Authority	Approval Type	Number	Issued	Expires
DRNSW	Mining Lease	ML 1600	4 Dec 2007	4 Dec 2043
	Mining Lease	ML 1601	4 Dec 2007	4 Dec 2043
	Mining Lease	ML 1602	4 Dec 2007	4 Dec 2043
	Mining Lease	ML 1603	4 Dec 2007	4 Dec 2043
	Mining Lease	ML 1604	4 Dec 2007	4 Dec 2043
	Mining Lease	ML 5643	4 Nov 1958	14 Nov 2042
	Mining Lease	ML 6282	12 Mar 1971	12 Mar 2042
	Mining Purpose Lease	MPL 146	9 Aug 1978	9 Aug 2042
	Mining Purpose Lease	MPL 220	7 Dec 1983	7 Dec 2042
	Mining Purpose Lease	MPL 745	29 Mar 1933	11 Feb 2040
	Mining Purpose Lease	MPL 919	31 Aug 1938	11 Feb 2041
	Mining Purpose Lease	MPL 1427	6 Jul 1973	6 Jul 2043
	Private Lands Lease	PLL 350	28 May 1932	28 May 2043
	Private Lands Lease	PLL 416	20 Dec 1935	20 Dec 2042
	Private Lands Lease	PLL 661	27 Jul 1943	27 Jul 2042
	Private Lands Lease	PLL 804	22 Jul 1949	22 Jul 2032
	Private Lands Lease	PLL 1252	23 Dec 1969	23 Dec 2043
	Private Lands Lease	PLL 3827	21 Jul 1973	21 Aug 2041

## 4. OPERATIONS SUMMARY

### 4.1 Mining Operations

There have been no mining operations in the 2024-25 reporting period. The operating status changes to Exploration and Assessment on 25 Jan 2024, when exploration diamond drilling commenced.

### 4.2 Next Reporting Period

Activity at Hillgrove Mine in the coming reporting period will focus on three main areas:

- **Assessment & Permitting:**

New planning consent applications are being assessed and prepared. The consenting strategy has been agreed with DPHI and ARC as follows:

- Stage 1A – Modification of DA98/35 (DPHI) to include:
  - Carrying out of operations for 5-7 years;
  - Increasing processing capacity to 500 ktpa;
  - Mining from Metz UG, Eleanora-Garibaldi UG and Brackins Spur UG; and
  - Establish of a Dry Tailings Landform, for placement of tailings material.

The proposal to modify DA98-35 has been submitted to DPHI, has been accepted, and is currently available of the DPHI Major Projects Portal. Technical assessments for the modification report have commenced.
- Stage 1B – New consent for upgrade of the Metals Processing Facility buildings (ARC).
- Stage 2 – New SSD for expansion of Hillgrove mining operations:
  - Carrying out of operations for additional c.10 years;
  - Increasing processing capacity to c.800 ktpa (550 ktpa ore, plus 250 ktpa TSF1 re-treatment);
  - Mining from Clarks Gully from OP and UG; and
  - Establishment of sufficient tailings capacity for all tailings to be placed in Dry Tailings Landforms at Hillgrove.

It is anticipated that timing of new consent approvals will be:

- Stage 1A (Mod5) – 2025-Q4
- Stage 1B (new ARC) – 2025-Q3/4
- Stage 2 (new SSD) – 2026-H2

- **Exploration:**

Exploration activities expected include:

- Diamond Drilling at Bakers Creek, Garibaldi and Clarks Gully;
- Reverse Circulation drilling at Clarks Gully and other regional targets;
- Soil sampling on Hillgrove Station and other regional targets.

- **Project Development/Construction:**

Prior to receiving anticipated new consent approvals, activity during 2025 is planned to be:

- Carrying out of maintenance and upgrade work on the processing plant and infrastructure, where activities are permitted under existing consents, or do not require consent.
- Carrying out of construction work that is permitted under existing consents.
- Earthworks to improve safety (traffic management) of various site areas (eg: roads and infrastructure).
- Earthworks to upgrade the Eleanora Dam embankment.
- Commencement of underground mining operations at Metz under consent DA24/82, with waste placement to areas permitted under existing consents.
- Construction of buildings that do not require additional consent (either approved under existing consent, or exempt from requiring consent).

Assuming receipt of the new consent approvals occurs as planned, full redevelopment of the project will commence in 2025-Q4, including:

- Construction at processing plant to increase capacity to 500 ktpa.
- Construction of tailings filters for Dry Tailings process.
- Construction of Dry Tailings Landform, including production of waste rock for embankments from the Garibaldi Pit.
- Increased underground mining activity at Metz, with ore haulage from Metz to Hillgrove.
- Construction of buildings that cannot commence without existing consent.



## 5. ACTIONS REQUIRED FROM THE PREVIOUS REPORT

There were no actions required from the previous report. Hillgrove Mines have kept all previous actions required within this report.

## 6. ENVIROMENTAL PERFORMANCE

During the 2024-25 reporting year the Environmental Management Plan was reviewed along with the control standards that sit within the EMP. These were updated with improvement actions identified from the Independent Environmental Audit. They were sent to the various departments required by the Development Consent and are in the process of being updated and will be submitted after the report.

The Environmental Monitoring Procedure was reviewed against the updated EMP and staff carrying out monitoring work were re-trained in the updated procedures.

All monitoring requirements defined by the Environmental Protection Licence have been met. EPL-921 Annual Return was submitted to EPA on 28 Mar 2025

Monitoring results have been consistent with the previous year, as the project has remained Exportation. A number of dust samples were identified that they were unable to sample heavy metals as there were too minimal to register.

Table 5: Environmental Performance

Impact	Approval Criteria / EIS Pred.	Performance during reporting period	Trend / Key Management Implications	Implemented /Proposed Management Actions
Noise & Blasting	None in EIS Adopted in EMP Refer 6.2	One (1) complaints received. Routine ambient noise monitoring was conducted confirming noise emissions were within limits. Approval criteria has been met.	Noise generation was low with the project on Exploration.	Addition of noise to the routine monitoring program is an improvement to the EMP.
Air Quality	None in EIS Adopted in EMP Refer 6.3	Sampling results averaged 0.6 vs guideline of 4.0 g/m2/mth. Seven (6) complaints received. Approval criteria has been met.	Results lower than prior year (0.1 in 2024-25) but below guideline.	Continued operation of water sprinklers on TSF2 to reduce dust. Actions resulted in low dust levels being maintained. Water truck reinstated for dust suppression due to increased activity Modification of EMP.
Biodiversity	EIS predicted direct losses in footprint. Refer 6.4	No additional losses in addition to predictions in EIS have been identified as no clearing was carried out during the reporting year. Approval criteria has been met.	None identified	None implemented.  None proposed.
Heritage	EIS predicts no impact on indigenous heritage and no impact on European heritage. Refer 6.5	Approval criteria has been met.	None identified	None implemented.  None proposed.

## 6.1 Environmental Monitoring

The environmental monitoring program carried out during the reporting yet met the requirements of all conditions in the consent.

Table 6: Environmental Monitoring Summary

Station	EPL ID No.	Type	Location	Number of Samples		Missed Samples		Req'd No. Taken	Comment
				Req'd	Taken	Valid	Invalid		
QW06	1	Water, Ground	Hopetoun Adit	4	4	-	-	Yes	Dec 24 Dry
QW05	2	Water, Ground	Cosmopolitan Adit	4	1	3	-	Yes	DRY excluding September
QW03	3	Water, Ground	Eleanora Adit, Lvl 9	4	4	-	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation.
QW04	4	Water, Ground	Golden Gate Adit, Lvl 6	4	-	4	-	Yes	Dry
QW02	5	Water, Ground	Lower Cooney Tunnel Adit	4	3	1	-	Yes	June 24 Dry
QW01	6	Water, Ground	Sunlight Adit, Lvl 5	4	-	4	-	Yes	Adit collapsed; sample point unable to be accessed safely.
QW09	7	Water, Ground	Blacklode Adit, Lvl 5	4	-	4	-	Yes	Dry
QW010	8	Water, Ground	Blacklode Adit, Lvl 6	4	-	4	-	Yes	Dry
QW011	9	Water, Ground	Blacklode Adit, Lvl 7	4	4	-	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation.
-	10	Water, Ground	Freehold Adit, Lvl 10	4	-	4	-	Yes	Road to Smiths/Silver Valley failed and inaccessible
-	11	Water, Ground	Smiths Mine, Lvl 4	4	-	4	-	Yes	Road to Smiths/Silver Valley failed and inaccessible
HD01	12	Dust	150m north of Essential Energy sub-station	12	12	-	-	Yes	Anomaly Metals reading in Nov 24. All others months were unable to be detected.
HD02	13	Dust	Paddock north of Core Yard	12	12	-	-	Yes	Analyte values for Metals were only detected 3 times during the year.
HD03	14	Dust	Between Core Yard & Car Park	12	12	-	-	Yes	Analyte values only detected in Jan 24 all others were below detectable levels.



Station	EPL ID No.	Type	Location	Number of Samples		Missed Samples		Req'd No. Taken	Comment
				Req'd	Taken	Valid	Invalid		
HD04	15	Dust	Embankment between Eleanora & Fresh Water Dams	12	12	-	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation.
HD05	16	Dust	Between Eleanora & Sunlight Dams	12	12	-	-	Yes	Analyte values only detected in Jan and November 24 all others were below detectable levels.
HD06	17	Dust	SE of Processing Plant	12	11	1	-	Yes	Analyte values for Metals were only detected 3 times during the year. December test was destroyed in the field.
HD07	18	Dust	Top of Metz Gully Area	12	12	-	-	Yes	Analyte values only detected in Jan and November 24 all others were below detectable levels.
HD10	19	Dust	Hillgrove Village South, Brackin St near Brereton St	12	12	-	-	Yes	Analyte values only detected in Jan and November 24 all others were below detectable levels.
HD11	20	Dust	Hillgrove Village North, Brackin St at north town limit	12	12	-	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation.
HD12	21	Dust	North of TSF1	12	12	-	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation.
HD13	22	Dust	North of TSF2	12	12	-	-	Yes	Analyte values only detected in Jan and November 24 all others were below detectable levels.
DW01	23	Water, Surface	ES3 Spillway Discharge	-	-	-	-	Yes	No discharge flows in reporting period
PW01	24	Water, Surface	Tailings Water to TSF2	4		4	-	Yes	No Pumping of slurry occurred during the reporting period.
MW01	25	Water, Surface	Eleanora Dam	12	12	-	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation.
MW02	26	Water, Surface	ES3	12	12	-	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation.



Station	EPL ID No.	Type	Location	Number of Samples		Missed Samples		Req'd No. Taken	Comment
				Req'd	Taken	Valid	Invalid		
MW03	27	Water, Surface	Upper Bakers Creek	12	10	2	-	Yes	Unable to get access due to construction March and April 24.
MW04	28	Water, Surface	Downstream Bakers Creek	12	12	-	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation.
MW05	29	Water, Surface	Point in Creek Downstream of TSF1	12	11	1	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation. Creek not flowing Sep 24
QW07	30	Water, Surface	4 Mile Creek, Upstream of Swamp Creek	4	2	2	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation. March, Sep Dry 2024
QW08	31	Water, Surface	4 Mile Creek, Downstream of Swamp Creek	4	3	1	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation. Dec 24 Dry
BH01	32	Water, Ground	TSF2 Monitoring Bore 1	4	3	1	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation. Sep 23 Dry
BH02	33	Water, Ground	TSF2 Monitoring Bore 2	4	-	4	-	Yes	Dry or insufficient sample volume when tested. Standing water only able to measure once no water at other times.
BH03	34	Water, Ground	TSF2 Monitoring Bore 3	4	3	1	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation. Sep-24 Dry
FW Bypass Up	35	Water, Surface	Fresh Water Bypass, Upstream	-	5	-	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation. Bypass flowed 5 times during the year.
FW Bypass Down	36	Water, Surface	Fresh Water Bypass, Upstream	-	5	-	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation. Bypass flowed 5 times during the year.
Lower Cooney Pump	43	Water, Surface	Lower Cooney Pump	-	-	-	-	Yes	No pumping has occurred during the reporting period



Station	EPL ID No.	Type	Location	Number of Samples		Missed Samples		Req'd No. Taken	Comment
				Req'd	Taken	Valid	Invalid		
RO Perm.	44	Water, Surface	RO Permeate Discharging	-	-	-	-	Yes	Analyte values below detection limit assumed 50% of LDL in Mean calculation. RO did not run during the reporting period.

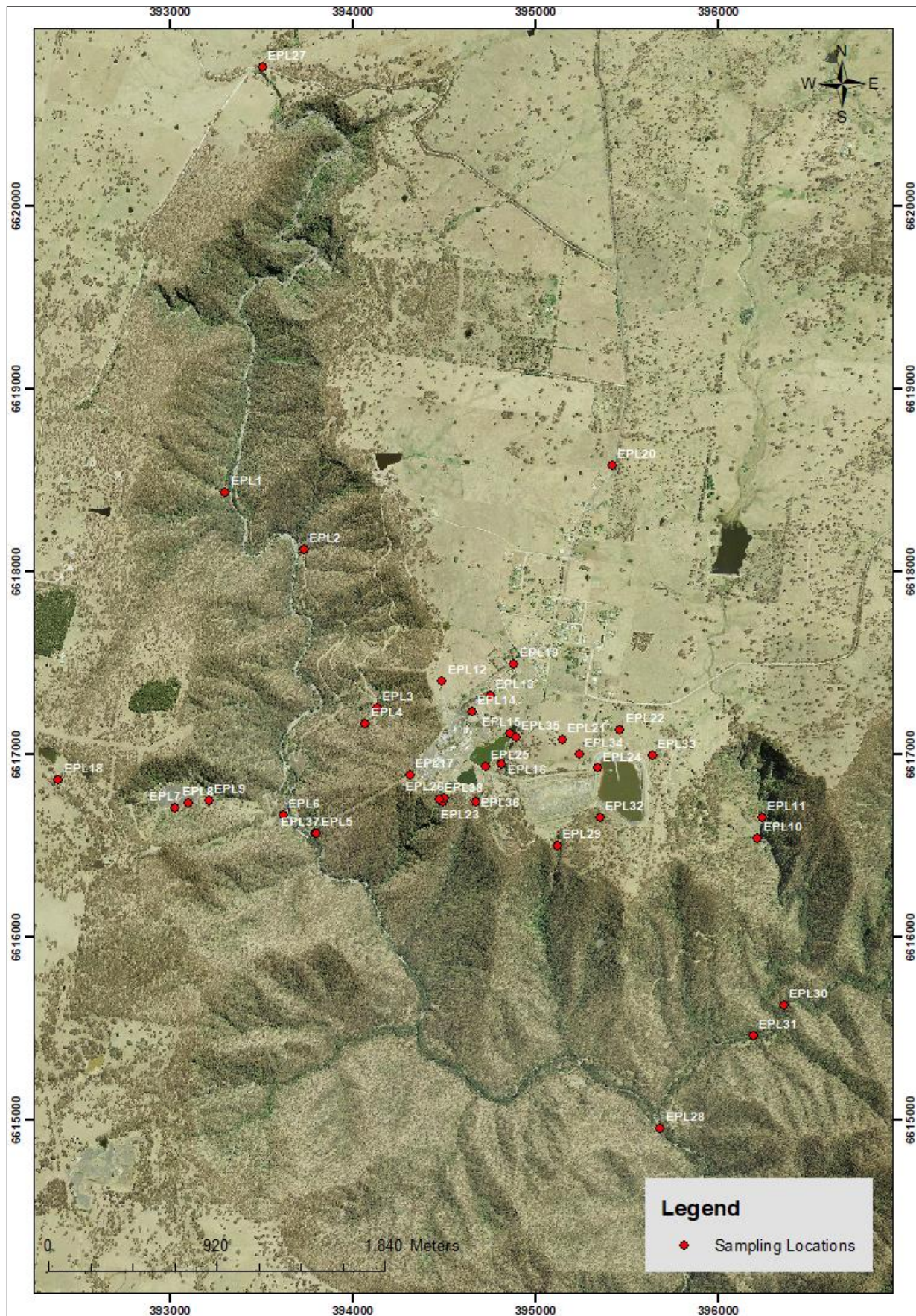


Figure 3: Monitoring locations (north orientated)

## 6.2 Noise and Blasting

Noise monitoring occurred during the reporting period as per the site EMP under the Control Standard Noise and Vibration Impact. There was one (1) Noise complaint received during this period. The complaint was investigated and identified to be caused by earthworks at the core yard, that were located close to the property from which the complaint originated. Earthworks activities were a short-duration event (1-2 weeks) and were coincidentally completed on the day the complaint was received.

No blasting occurred during the reporting period.

### 6.2.1 Issues

The commencement of routine noise monitoring during the year highlighted that background noise levels in Hillgrove Village are close to, or at, the noise limits set in the consent conditions.

Noise surveys were conducted whilst no noise generating activity was occurring at the mine, which presented a  $L_{eq(15\text{ avg})}$  of 35.7 dB(A) and exceeded the condition limit of 35 dB(A). A follow-up survey was able to be conducted which proved compliance, but the test did show that background noise levels at certain times present difficulty for achieving the condition defined noise levels. All quarterly noise assessments were similar with town background noise above or close to  $L_{eq(15\text{ avg})}$  of 35 dB(A).

There was one noise complaint which was made in conjunction with the dust around the Core Farm works 2 weeks leading up to Christmas. The work was halted the day Hillgrove Received the complaint.

### 6.2.2 Implementation of Controls

During the reporting year, routine noise monitoring was established is now compliant with consent conditions. Due to issues encountered the time duration of noise sampling was extended to ensure that the correct data could be collected.

### 6.2.3 Proposed Improvements

Hillgrove Mine are in communication with EPA to request review of the noise levels applied to the project, this will be readdressed in updated conditions of the anticipated future consent modification. Notification to town residents when any construction work will be occurring on site will be implemented should any construction take place this year.

Control Standard will be updated during the next reporting period.

## 6.3 Air Quality

Air quality impacts at are largely related to generation of dust from site activity and facilities. In accordance with Condition P1 and M2 of EPL 921, Hillgrove Mine operates a depositional dust monitoring network to monitor dust (refer to Table 7 and Figure 3 for locations). This monitoring continued throughout the period in accordance with the requirements of EPL 921.

Dust generation is mostly associated with heavy vehicle movement and large exposed areas, specifically TSF's. A range of control measures are deployed to reduce the volume of dust generated on site, including:

- Vehicle speed limits in exposed areas (eg: on the plateau);
- Water spraying of roads and laydown areas with water cart;
- Capping of TSF1 with sheeting material to cover tailings; and
- Sprays and water circulation on TSF2 to moisten exposed tailings.

### 6.3.1 Issues

Below are the issues identified with dust monitoring during the year:

- Tampering of dust monitoring gauge at HD06 (South of the Plant) in December 2024 – the dust collection glass funnel was broken, so no sample could be collected.
- Metals were measured in some monitoring samples through the year. No locations measured metals throughout all months – all metal readings were measured in Jan-24, Jun-24 and Nov-24.
  - No rain or wind anomalies were identified during these months.
  - Nov-2024 data shows the month generally produced higher quantities of dust, which is likely related to increased earthworks at the core yard (located close to site boundary).

Jan-24 and Jun-24 dust quantities were similar to all other months, with no change identified that could explain the metals in the assays.

  - HD-01 (North of the Plant, near Haul Road) November 2024
  - HD- 02 (NNE of the Plant, between core yard and houses) January, June & November 202
  - HD- 03 (NNE of the Plant, between core yard and plant),
  - HD-05 (east of the plant, near Elenora Dam), HD07 (West of Plant at Metz), HD-10 (South of Hillgrove Village), HD-13 (North of TFS2) January and November 2024:
  - HD- 06 (South of Plant) January, March and November 2024
  - One potential explanation for more readings of metals in dust samples in a change to treatment of the sample bottles, to prevent mould growth in the bottles, which was identified as a potential issue at the end of the prior reporting year.
- There were five (5) dust complaints around the work at Clarks Gully, these were all addressed at the time. Most were minor dispersals of dust with two which resulted in a change to work practices to reduce dust. Additional monitoring that was implemented around the exploration drilling programme identified no change to dust levels at property around the drilling activity.
- There was one (1) Dust complaint that was around the core yard earthworks that were carried out in Nov/Dec2024, the complaint was received during the final stages of the works and activity was completed the same day.

### 6.3.2 Implementation of Controls

Dust monitoring results during the year show a mild increase from the prior year although consistent with the longer-term average.

*Table 7: Dust Deposition Monitoring Locations*

Station	EPL ID No.	Location
HD1	12	300 m NNW of mill
HD2	13	NNE of mill (just south of Hillgrove Village in core shed paddock)
HD3	14	NNE of mill
HD4	15	NE of mill between Eleanora Dam and freshwater dam
HD5	16	E of mill (between Eleanora and Sunlight Dam)
HD6	17	SSW of mill near old winder shed



HD7	18	West of mill located at Metz Mining Area
HD10	19	Southern Hillgrove Village
HD11	20	Northern Hillgrove Village
HD12	21	North of TSF1
HD13	22	North of TSF2

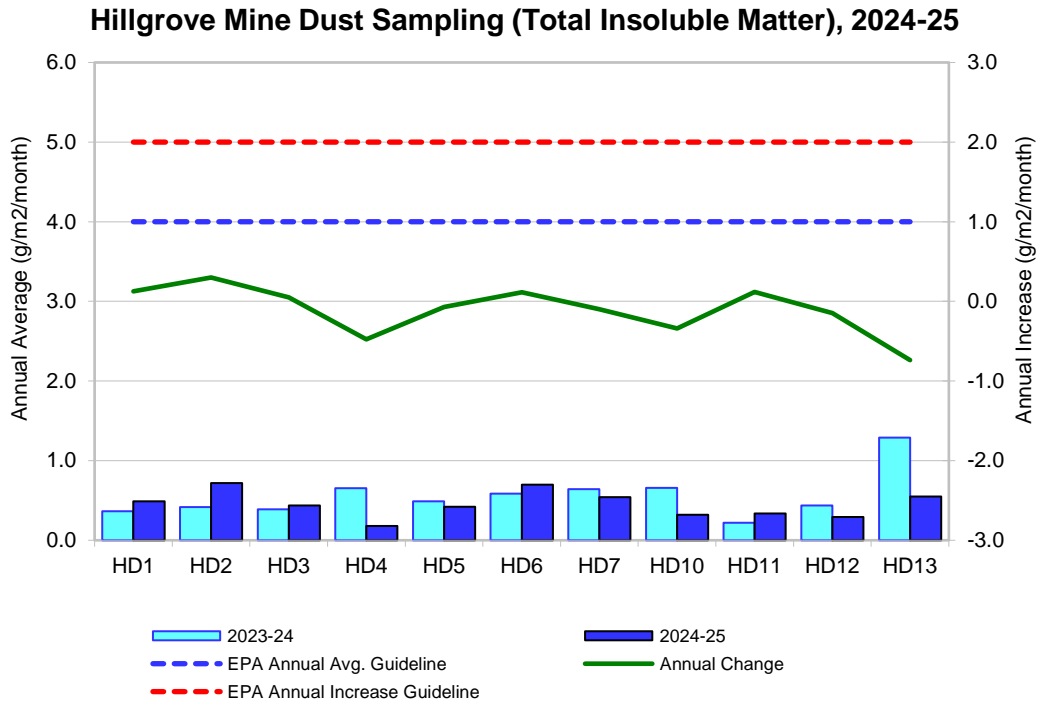


Figure 4: Dust Monitoring, Deposition – Annual average and increase

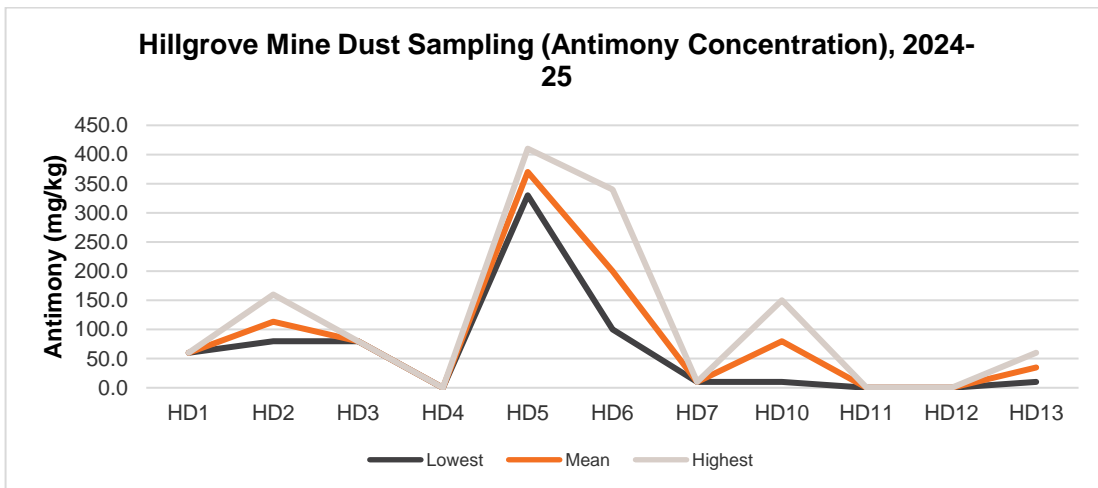


Figure 5: Dust Monitoring, Concentration – Antimony

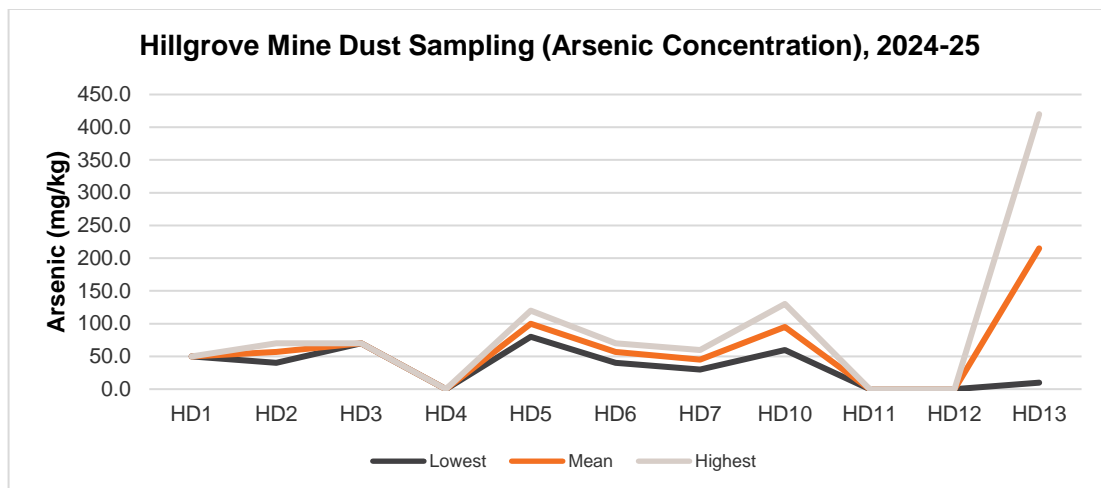


Figure 6: Dust Monitoring, Concentration – Arsenic

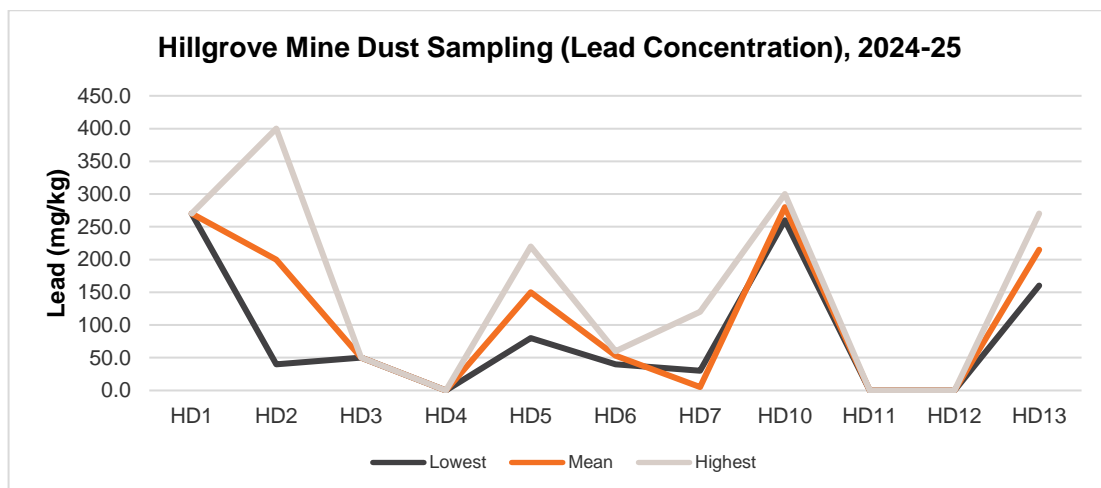


Figure 7: Dust Monitoring, Concentration – Lead

### 6.3.3 Proposed Improvements

Moving into the 2025/26 reporting year, dust management improvements will focus on:

- Updating EMP to embed positive practices (e.g: administrative tracking of dust mitigation works, proactive training for key roles).
- Should activities increase, dust mitigation is ramped up accordingly. Look for other Dust suppression alternatives that will work within the conditions of the Hillgrove Site.
- Control Standard will be updated during the next reporting period.

## 6.4 Biodiversity

Hillgrove Mine is not required to have any biodiversity offsets and as such management of biodiversity relates mainly to impacts from operations and specific management criteria in DC S98/00802.

A clearance permit system is used to authorise impacts on biodiversity (e.g. removal of dangerous trees directly affecting operations) as a control to ensure certain aspects are not impacted (e.g. hollow bearing trees or listed species).

Weeds inspections are done as required to target noxious weeds that have an historical presence on site. These include Tiger Pear, Bathurst Burr, and Blackberry. Weed control activities are undertaken as weed occurrences are identified.

Monitoring of biodiversity is undertaken annually at Hillgrove Mine and is primarily focused on rehabilitation management and progress to fulfil the requirements of Condition 49 of DC S98/00802. The 2025 inspection is arranged to occur in April 2025 and proposes a more detailed look into the soils of the rehabilitation sites.

### 6.4.1 Issues

A site weed spraying program was conducted during the reporting period, refer to Figure 5 below.

An annual comprehensive weed spraying program was carried out in Autumn 2024 around the RRWS, TSF1 and TSF2, as well as a smaller follow up spraying program during Summer 2024/25. The results from the summer inspection will provide the basis for planning a more rigorous spray program for the coming year.

Blackberry and African Boxthorn were the primary weeds targeted during the reporting period with some smaller areas of Bathurst Burr and Milk Thistle around the site.

### 6.4.2 Implementation of Controls

Sprayed weed areas for 2024-25 are shown in Figure 8:

- Blue areas were sprayed for Blackberry (woody weed);
- Yellow was sprayed for other leafy weeds (Glyphosate 450).

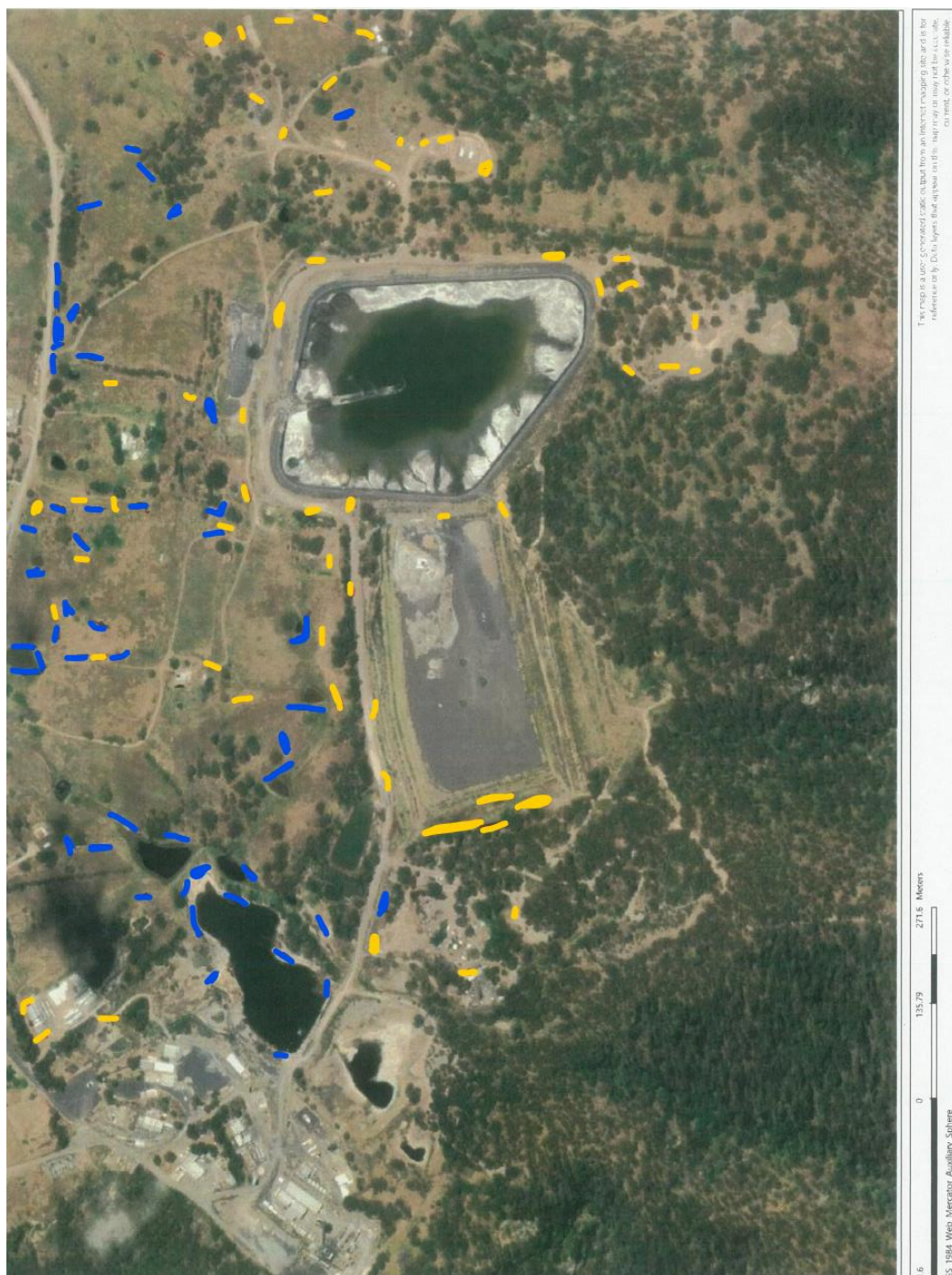


Figure 8: Map of Weed spraying undertaken during reporting year

### 6.4.3 Proposed Improvements

Follow up spraying will occur throughout 2025, based on the results from the April 2024 inspection.

An external contractor is planned to be engaged for weed spraying which will increase the scope of the weed management program on the Hillgrove Site. This will improve the timing of spraying and elimination of weeds.

Control Standard will be updated during the next reporting period.

## 6.5 Heritage

Archaeological studies undertaken on the Hillgrove Mine site have concluded that due to extensive disturbance from previous mining operations and steep terrain, the indigenous archaeological potential of the area is low.

There are no registered sites within the current operational footprint.

There has been a long history of mining in the Hillgrove area. Five European heritage items remain have been listed under the Armidale Dumaesq Local Environmental Plan. The items include:

- Garibaldi chimney;
- Eleanora chimney;
- Bakers Creek chimney;
- Bakers Creek winder; and
- Bakers Creek surface buildings (Figure 9).

A clearance permit system remains in place as a control for potential impacts to heritage items (artefacts), vegetation (scar trees) and European heritage (vibration, collision).



Figure 9: Heritage Item – Bakers Creek Mine steam boiler and tramway winder

### 6.5.1 Issues

There were no issues relating to heritage that occurred during the reporting period.

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## 6.5.2 Implementation of Controls

Existing controls adequately managed heritage during the period. APO conditions were also implemented during this period and required AHIMS reports. And investigation around the old Bakers Creek Processing Plant for Heritage both European and Indigenous.

## 6.5.3 Proposed Improvements

A historic heritage assessment and the SOHI will be conducted around the Bakers Creek mining area ahead of proposed exploration activity. Control Standard will be updated during the next reporting period.

## 7. WATER MANAGEMENT

### 7.1 Water Take

Table 8 shows entitlement and water take for the reporting year.

Note: no meter readings were recorded for WAL39500 therefore, an estimate has been given based on usage from previous years.

Water was taken for use in exploration drilling under WAL 39495 (from Bakers Creek at Bakers Creek gorge). All water collected was recorded and logged as required by the water licence, with photographic evidence collected for each event to confirm the required creek flow conditions were in place. The process worked effectively, as water take by the drilling contractor was suspended when they identified the flow conditions to permit taking water had stopped (later recommenced after rainfall which returned the required flow to the creek).

*Table 8: Hillgrove Water Licences, Entitlements and Take*

Water Licence Number	Water Sharing Plan	Water Source	Entitlement (MI)	Passive Take / Inflows (MI)	Active Pumping (MI)	Total (MI)
WAL39495	Macleay River Unregulated and Alluvial Water Sources 2016	Bakers Creek Water Source (Bakers Creek)	10	N/A	0.33	0.33
WAL39497	Macleay River Unregulated and Alluvial Water Sources 2016	Bakers Creek Water Source (Bakers Creek on Hillgrove Station)	10	N/A	nil	nil
WAL39500	Macleay River Unregulated and Alluvial Water Sources 2016	Bakers Creek Water Source (Town Res Domestic)	5	N/A	0	~1.2
WAL39498	Macleay River Unregulated and Alluvial Water Sources 2016	Bakers Creek Water Source (Town Res Industrial)	740	N/A	nil	nil
WAL40217	Macleay River Unregulated and Alluvial Water Sources 2016	New England Fold Belt Coast Groundwater Source (Adit water)	250	N/A	nil	nil

## 7.2 Adit Water

### 7.2.1 Adits

Historic mining activity at Hillgrove has left large numbers of old adits and shafts in the Bakers Creek gorge. A survey undertaken in 1999 identified 194 workings (including adits and other types) in the Hillgrove area that may contribute antimony and arsenic to the Bakers Creek system. Most of these are historical and pre-date modern (post 1970) operations on the site.

Natural groundwater seeps into these workings, percolates through and discharges via adits into the Bakers Creek catchment. Water discharging from these adits generally contains dissolved antimony and arsenic. Natural seepage through mineralised fault systems also has the potential to contribute these analytes to catchment.

During the reporting period, a number of the adits were dry and not able to be tested. The ones that met the criteria for testing were taken (refer to Table 6 for samples which were missed due to 'no flow').

### 7.2.2 Performance

All adit water sampling for discharge to waters, discharge quality monitoring and volume monitoring required by Condition P1.3 of EPL 921 was undertaken (refer to Figure 3 & Table 10 for locations) during the reporting period.

*Table 9: Adit Water Monitoring Locations (Condition P1.3 of EPL 921)*

EPL Identification No.	Monitoring Point	Coordinates (AMG Zone 56)	
		E	N
1	Hopetoun 5 Level	393,200	6,618,247
2	Cosmopolitan 6 Level	Not monitored due to adit collapse	
3	Eleanora Mine 9 Level	394,032	661,7064
4	Golden Gate Mine 6 Level	393,967	6,616,980
5	Lower Cooney Tunnel	393,500	6,616,500
6	Sunlight 5 Level	Not monitored due to adit collapse	
7	Blacklode 5 Level	392,990	6,616,491
8	Blacklode 6 Level	393,000	6,616,525
9	Blacklode 7 Level	393,117	6,616,552
10	Freehold 10 Level	Not monitored due to limited and unsafe access	
11	Smiths Mine 4 Level		

### 7.2.2.1 Water Discharge

Condition L3.1 of EPL 921 limits discharge to 50,000 l/day from each of the monitored adits. All monitored adits remained below this limit during the reporting period (Figure 10).

Blacklode Lv7 (Point 9) and Elenora Lv9/1745 (Point 4) had the highest flows for the year. This is attributed the periods of high rainfall.

- Adits which are dry as reported as zero flow.
- Adits at Sunlight (EPL06) and Cosmopolitan (EPL02) are no longer monitored as the adits have collapsed and there is no safe access to the sampling points. Hillgrove is still reviewing these points to potentially identify an effective monitoring point. Two new point have been trialled, but accessibility is being risk assessed
- Adits at Freehold (EPL10) and Smith Mine (EPL11) have not been monitored as the road to these locations has collapsed and they are no longer accessible. A request has been made to remove these points from EPL-921 in March 2024 there is no feedback on these points until the modification is assessed.

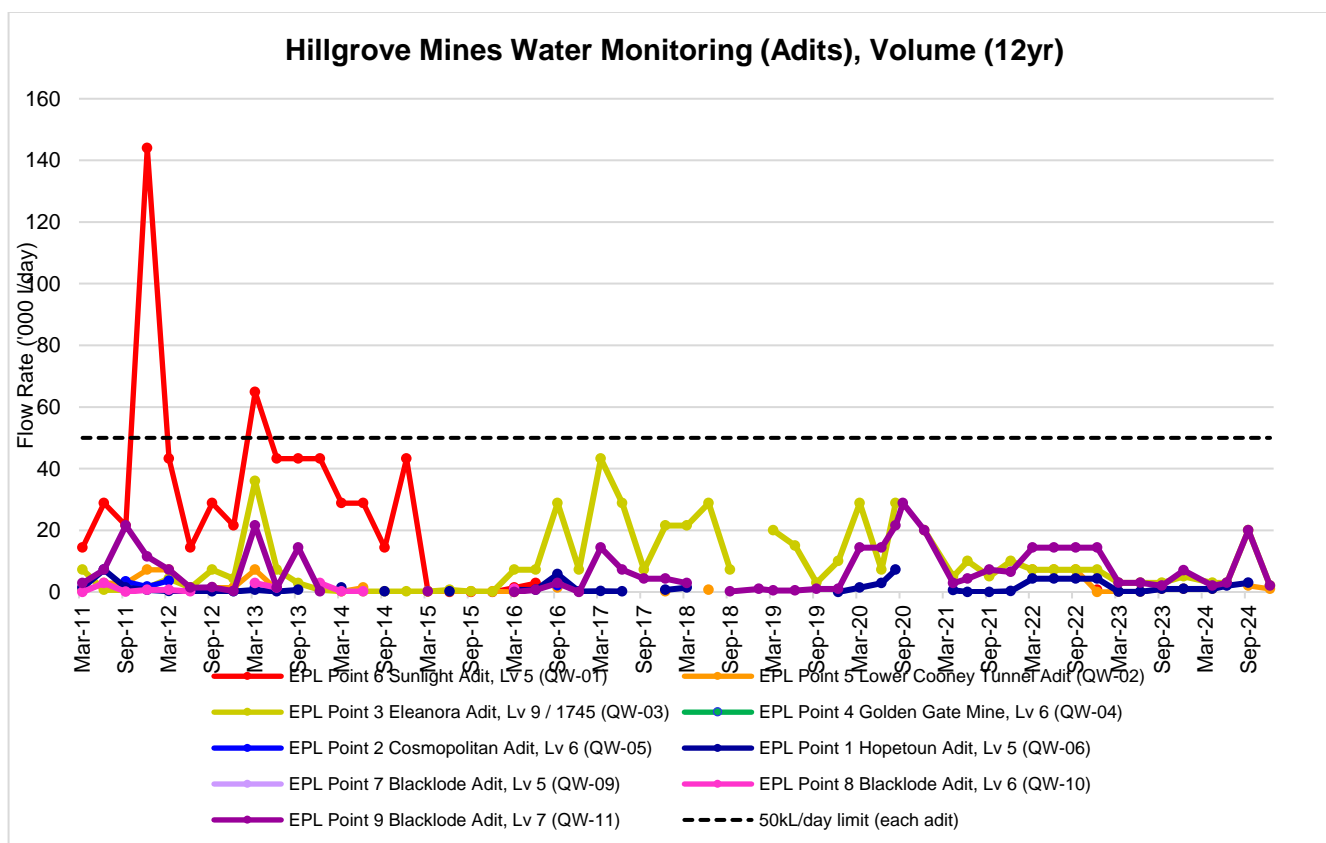


Figure 10: Groundwater monitoring, Adits – Discharge volumes

## 7.2.2.2 Water Quality

### 7.2.2.2.1 Antimony:

The trends across all adits were consistent with those of previous monitoring periods.

- EPL09/QW11 (Blacklode Lv7) shows elevated antimony concentration which has been consistent since late 2020.
- The slight increases at Eleanora 1745 (EPL03) in the prior year, has reverted to previous norms and is well below levels recorded a decade earlier, again this can be attributed to the periods of rainfall that have occurred over the site.
- Elevated concentrations at Hopetoun (EPL01) in the prior year have returned consistent levels in 2024-25 after an increased identified in the previous year.

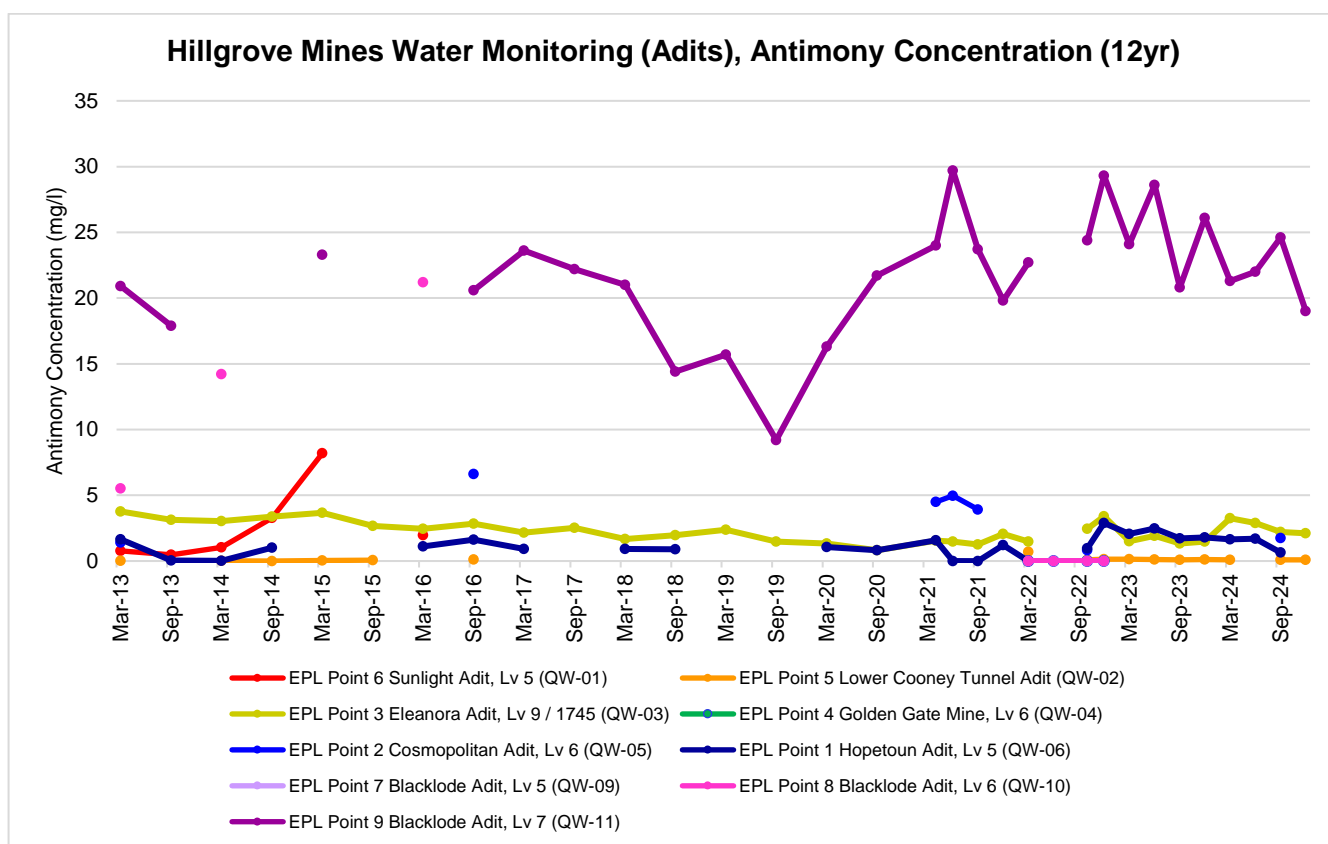


Figure 11: Groundwater monitoring, Adits – Antimony concentration

#### 7.2.2.2.2 Arsenic:

Arsenic concentrations are somewhat erratic, but present the following trends:

- EPL09/QW11 (Blacklode Lv7) shows elevated arsenic concentration which have been consistent since late 2020 and is consistent with the antimony results.
- Increases at Eleanora 1745 (EPL03) in the prior year, have continued with the exception of a low measure in March 2023. This emerging trend will continue to be monitored during 2025-26.
- Sporadic elevated concentrations at Hopetoun (EPL01) in the prior year have continued but with a decreased in Sep-2024.

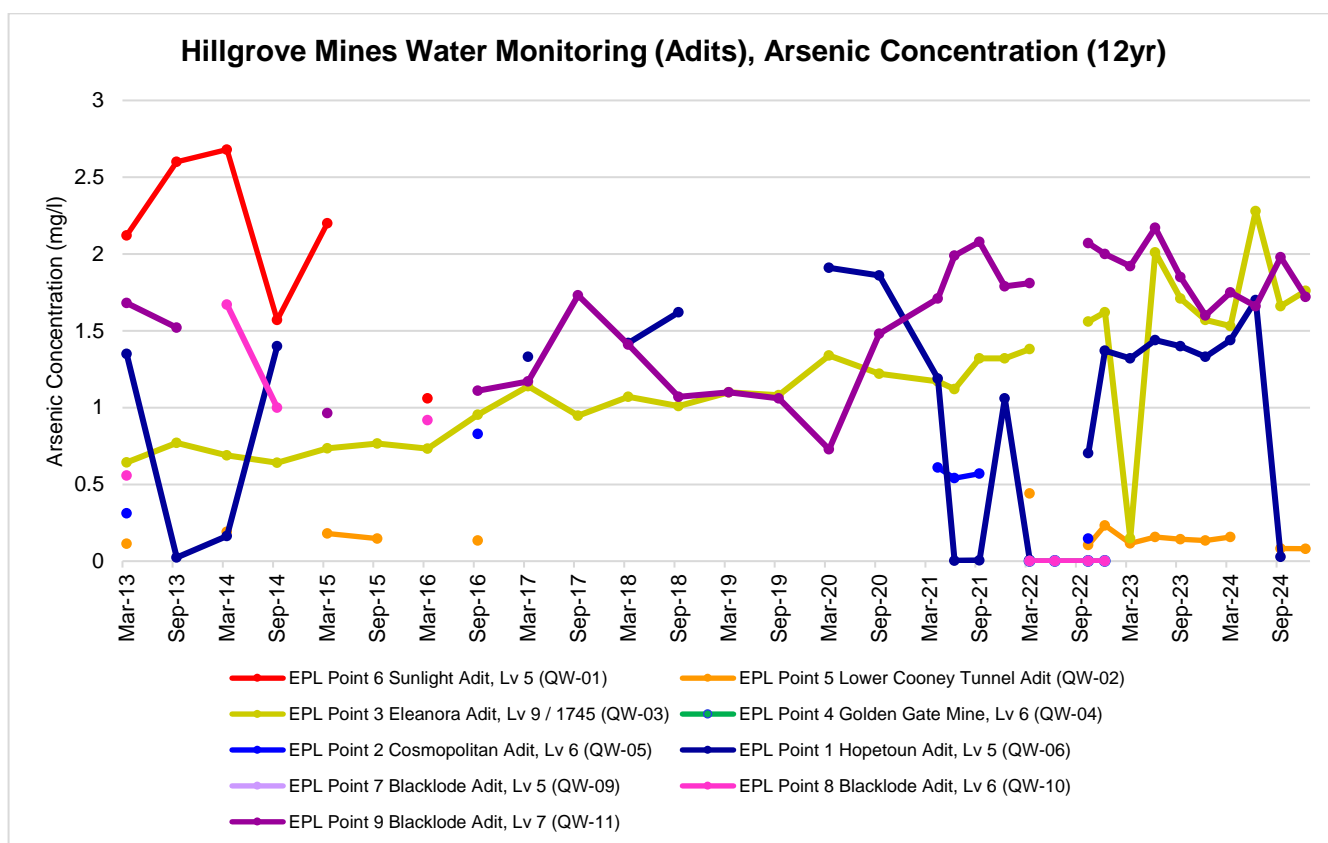


Figure 12: Groundwater monitoring, Adits – Arsenic concentration

## 7.3 Surface Water

Bakers Creek drops from the New England escarpment at Baker's Creek Falls approximately 2.5 km NNW of Hillgrove village. The creek intersects the mining leases as it meanders its way through the gorge. Four Mile Creek (a smaller catchment) flows from the north-east and confluences with Bakers Creek at the southern end of the project area. 17km south from this point, Bakers Creek joins the Macleay River. All of the drainage lines in the Bakers Creek catchment are intermittent.

Sediment and water quality in Bakers Creek have been affected by historic mining activities resulting in, sediment and waters which demonstrate elevated levels of antimony and arsenic at all times. This is also contributed to by the natural geology and the minerals present.

### 7.3.1 Volume Management

Hillgrove Mine manages water and aims to mitigate any additional impacts by operating a system to segregate clean and contaminated water which utilises the Recycled Water Storage System (RWSS) which comprises several dams around the processing and infrastructure area with a combined capacity in excess of 104 ML, namely:

- Eleanora Dam;
- Emergency Storages 1, 2 and 3; and
- Sunlight and Sunlight Transfer.

Surface water storages at Hillgrove Mine are managed to a compliance level of having capacity to store a 1:100 ARI 72hr duration event (1% AEP, 72 hr event). At Hillgrove, this is a 256 mm rainfall event.

Following the previous reporting year (2023-24), where storage capacity was well above licence requirements, stored water volumes have increased through 2024-25. Despite this, water volumes in TSF2 and the RWSS were maintained in compliance with the required storage capacity at all times.

- TSF2: started the year with 376 mm rainfall capacity and ended the year with 379 m capacity.
- RWSS: started the year with 714 mm rainfall capacity and ended the year with 406 mm capacity.

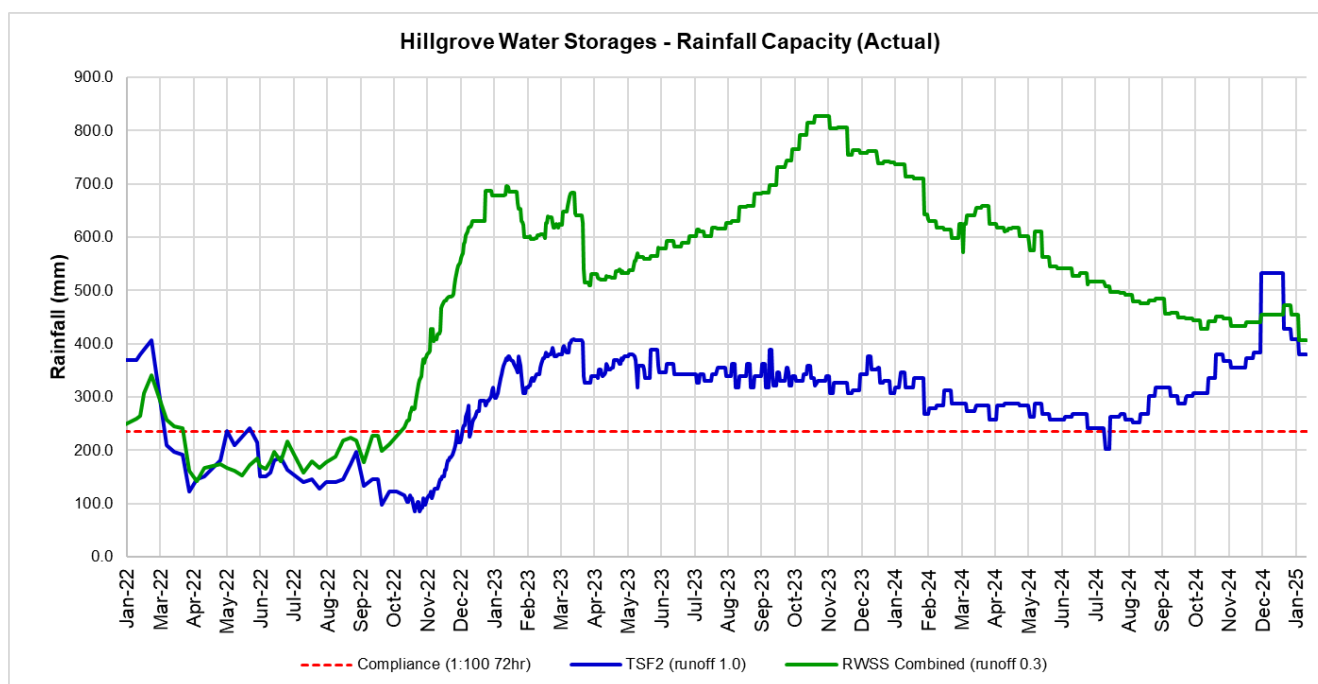


Figure 13: Hillgrove Mine Water Storages – Rainfall Capacity

Water was removed from the site storages by:

- Evaporation:
  - Natural evaporation from the ponds and catchments.
  - Mechanical evaporators ('spinners') – one at Eleanora and two at TSF2.
  - Transfer of water to TSF2 from Eleanora – for three purposes:
    - In summer, shallow pond volume on TSF2 realised high evaporation efficiency.
    - Moving water from Eleanora to TSF2 for evaporation so that the evaporation residue would be contained in TSF2, rather than Eleanora, thereby preventing increasing contaminant concentration in Eleanora.
    - Maintain a water pond on TSF2, to use for dust suppression on tailings beach.
- No water treatment (by MF/RO) occurred during 2024/25.

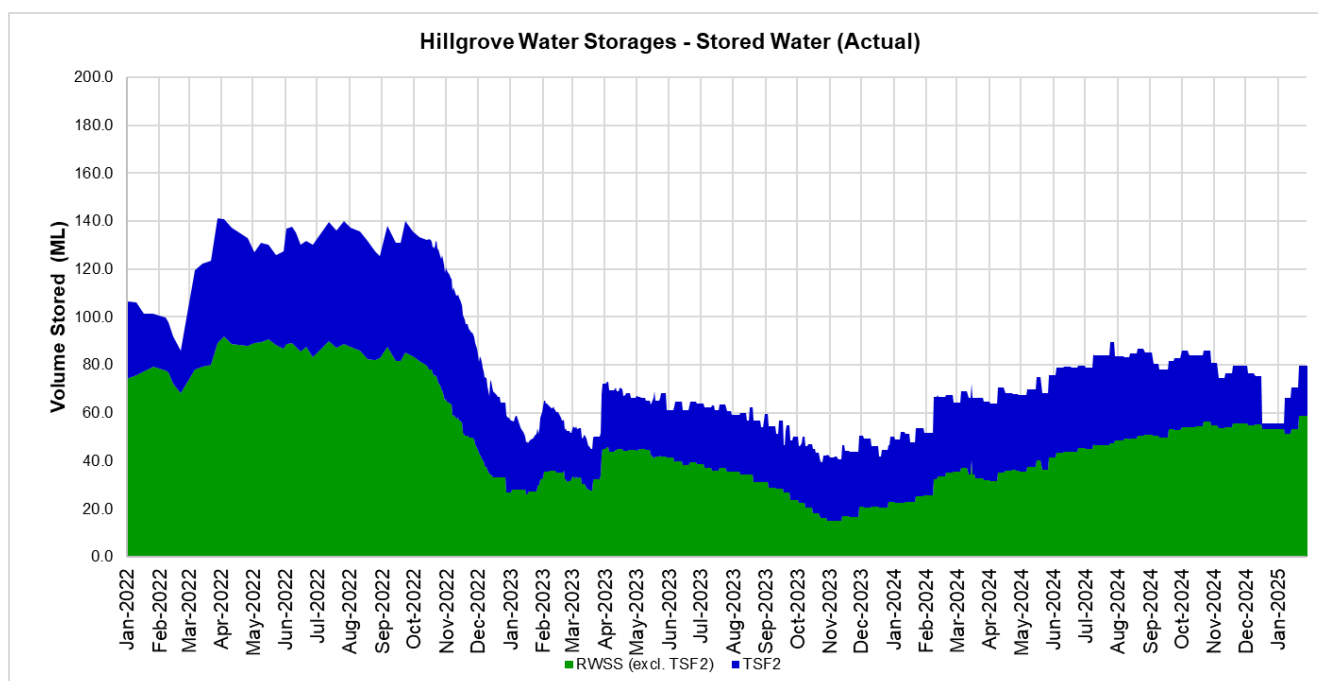


Figure 14: Hillgrove Mine Water Storages – Stored Water Volume

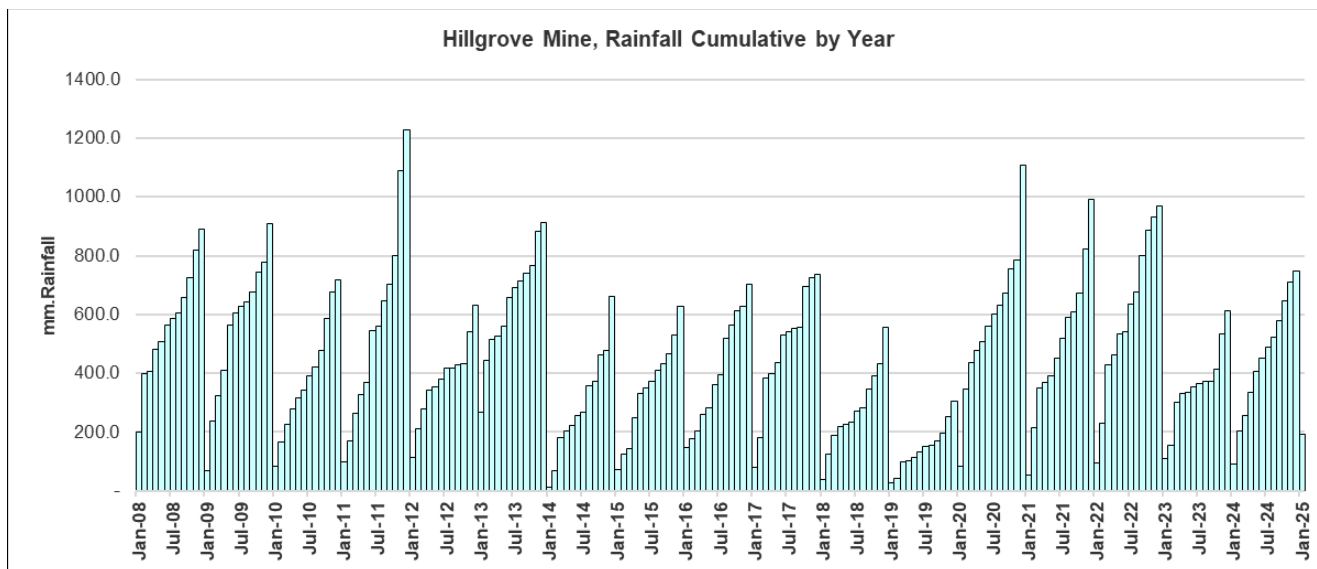


Figure 15: Hillgrove Mine Rainfall – Cumulative by Year

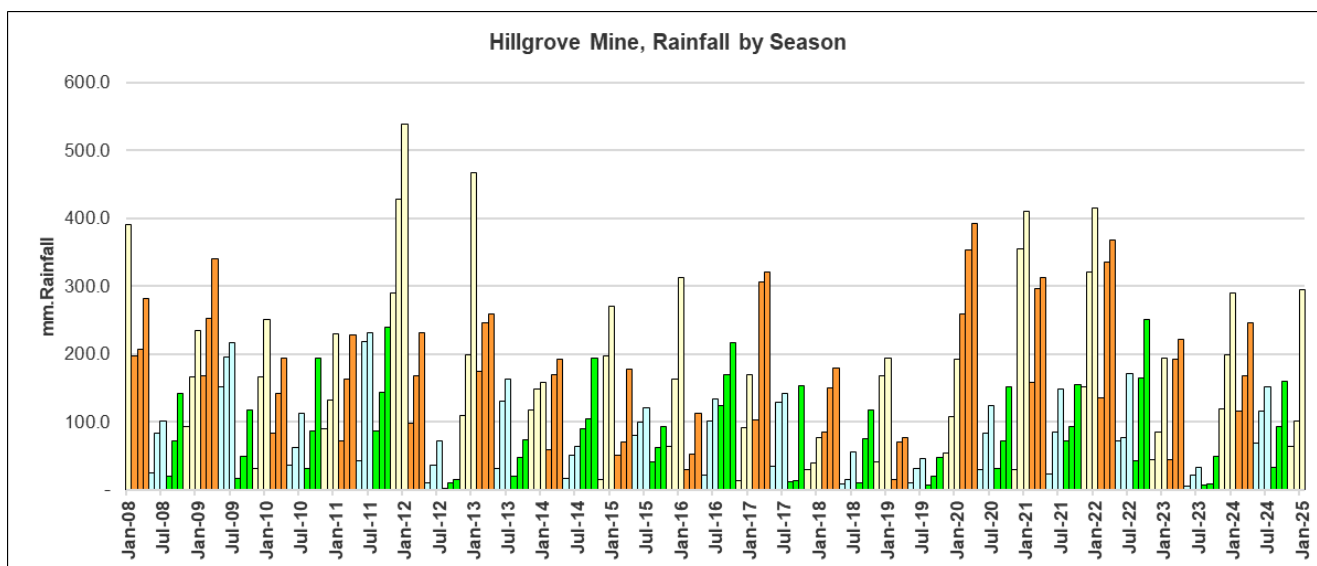


Figure 16: Hillgrove Mine Rainfall – Cumulative by Season

### 7.3.2 Issues

Issues during the year have been:

- Water transferred to Metz UG in 2022 has not been returned to the surface RWSS during 2023-24, due to failure of the site main transformer in January 2023. No power has meant no pumping can occur from Metz UG to the Hillgrove side and the RWSS.

Keeping the water in Metz UG has not caused any risk for water emissions, as all water has been retained in the Metz UG at levels well below where there is potential for overflow to be released.

### 7.3.3 Implementation of Controls

The improved controls implemented in the prior reporting year continued and were enhanced during 2023-24:

- Water Balance Model: was updated quarterly and calibration proved good with predicted and realised storage levels aligning well, based on actual rainfalls.
- Water Storage Tracker: continued use without issue.

### 7.3.4 Proposed Improvements

Water volume management is proposed to be improved by:

- Re-commission the WTP to reduce stored water volumes on site.
  - As noted above, the WTP has become fully operational during Mar-2025 and is planned to be utilised throughout the year to:
    - Reduce stored water volumes in RWSS
    - Treat water recovered from Metz UG
- Progress permitting to make water storage at Metz UG part of the RWSS.

### 7.3.5 Contaminant Monitoring and Management

Surface waters are sampled as per the EMP and as presented in Table 10 and Figure 3. Seven of these locations are in addition to the EPL requirements. Antimony and Arsenic are the most abundant metals that are tested for.

*Table 10: Surface Water Monitoring Locations*

Monitoring Point	EPL Identification No.	Station	E	N	Frequency
Process water discharge to TSF2	24	EPL24	TSF2		Monthly / weekly during discharge
Eleanora Dam	25	MW01	394,626	6,616,742	Monthly
3rd emergency storage of the RWSS	26	MW02	394,405	6,616,547	Monthly
Bakers Creek upstream of the mining area	27	MW03	393,404	6,620,572	Monthly
Bakers Creek downstream of the mining area	28	MW04	395,610	6,614,729	Monthly
Gully below TSF1	29	MW05	395,031	6,616,315	Monthly
Four Mile Creek upstream of Swamp Ck confluence	30	QW07	396,200	6,615,250	Quarterly
Four Mile Creek downstream of Swamp Ck confluence	31	QW08	396,100	6,615,200	Quarterly
Downstream Lower Cooney Road	NA	MW06	393,544	6,616,470	Monthly
Metz Gully	NA	MW07	393,538	6,616,624	Monthly

Cosmopolitan Causeway Upstream	NA	MW08	393,348	6,617,912	Monthly
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### 7.3.5.1 Eleanora Dam

Contaminant concentrations in Eleanora Dam were:

- Antimony levels decreased after a significant spike in November 2023, decreased materially until April 2024, then continued to decrease at a less aggressive rate to end-2024.
  - Variability of antimony concentration appears to be linked to rainfall.
- Consistent levels of Arsenic through the year, with a reduction in arsenic concentration through summer period (2024-25).
  - Arsenic levels spiked in early 2023 with high volumes of WTP/RO being returned to Eleanora
  - Levels have decreased since then (likely du to increased rainfall reporting), but remain higher than prior to discharge of brine to Eleanora.

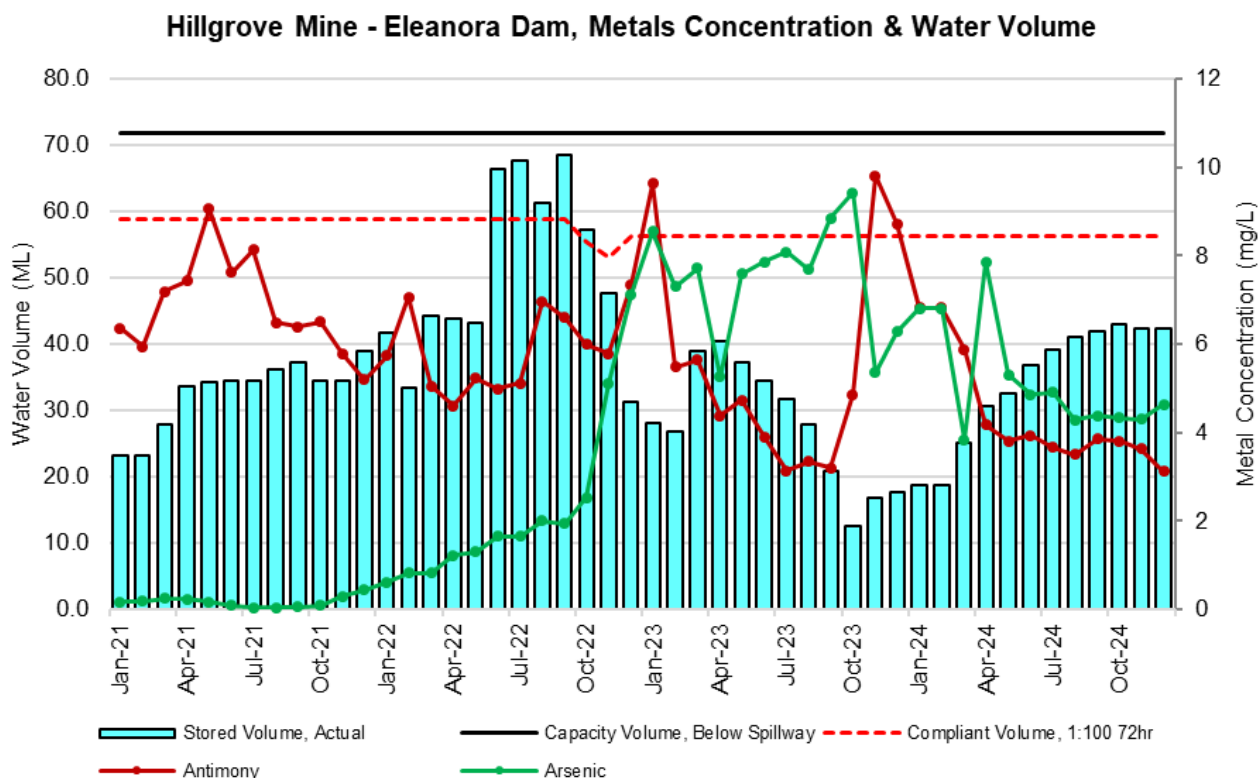


Figure 17: Eleanora Dam, Stored water volume and Contaminant concentration

### 7.3.5.2 Water Treatment (MF/RO)

For the full reporting year, the water treatment plant (WTP) which uses microfiltration (MF) and reverse osmosis (RO), did not operate.

#### 7.3.5.2.1 Issues

Work to re-commission the Water Treatment Plant (WTP) commenced in Aug-2024 and took much longer than expected. Work involved:

- Upgrade control systems, piping and pumps;
- After re-commissioning, procurement and replacing of RO membranes.

The plant was not brought into service during the 2024-25 reporting year but has since become fully operational in Mar-2025.

#### 7.3.5.2.2 Implementation Controls

Not applicable – did not operate.

#### 7.3.5.2.3 Proposed Improvements

Improvements proposed for water treatment quality management during the coming year are:

- Complete re-commissioning of the site WTP:
  - Since completion of the reporting year, the WTP has completed re-commissioning and became fully operational in March 2025..

#### 7.3.5.3 **Surrounding waterways**

Monitoring of surface waters is carried out for Bakers Creek:

- Upstream (EPL27/ME03): atop the plateau and approximately 300 metres north of Bakers Creek Falls, to provide water quality data prior to entering the area.
- Downstream (EPL28/MW04): below the confluence of Four Mile Creek and Bakers Creek, below all active and historic disturbances from the Hillgrove Mine area.
- There have been significant periods where there has been no flow but static water sources throughout the 2024-25 monitoring period.

Results from these sites indicate the following:

- Antimony concentration (Figure 18 and Figure 19):
  - Increases in Bakers Creek from upstream to downstream (c.0.5 mg/l downstream versus negligible upstream) – but increased levels are consistent with all previous monitoring data. During 2024, Sb levels appear to have reduced as a trend, although this trend will need to continue in the coming year to determine confidently.
  - Decreased in ES3, with reason unknown. ES3 did not discharge so does not impacts Bakers Creek concentrations.

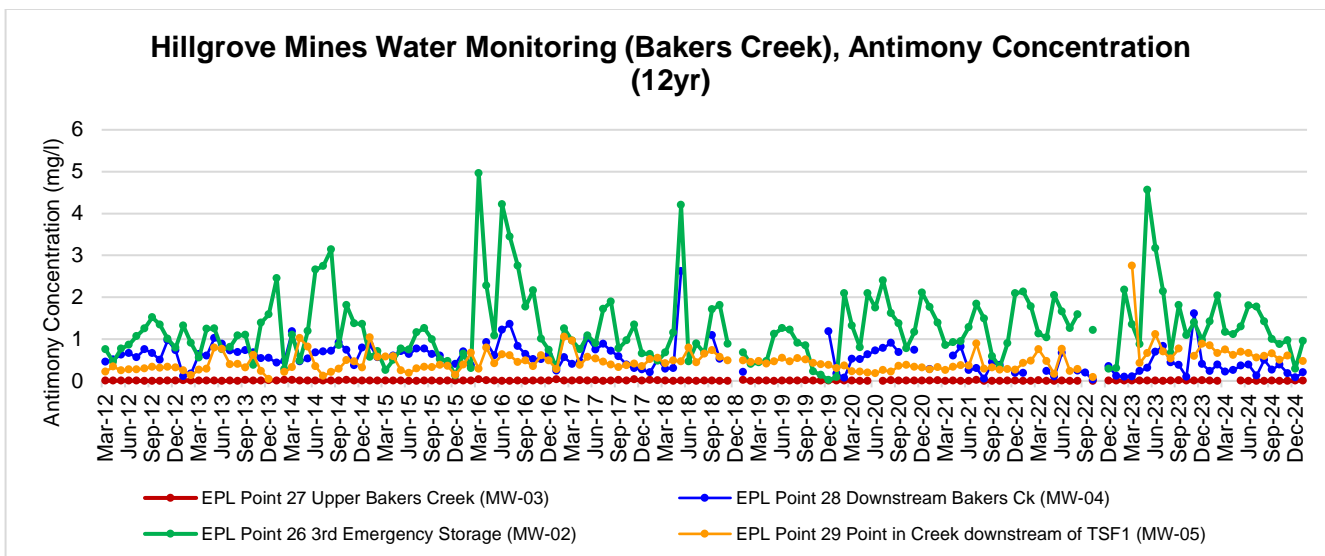


Figure 18: Antimony Concentration in RWSS and Bakers Creek

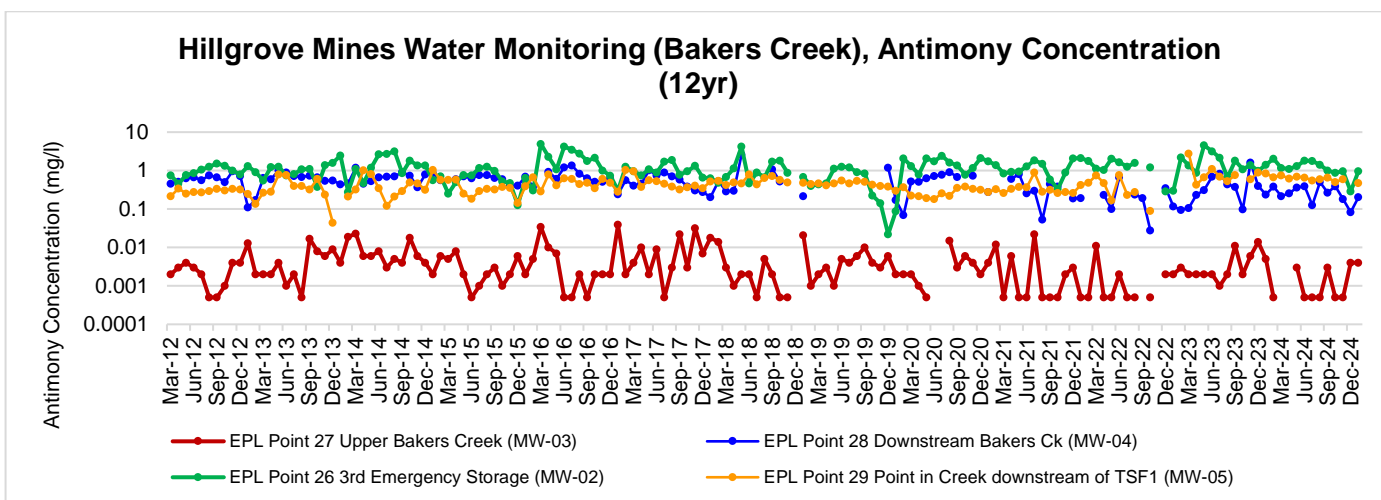


Figure 19: Antimony Concentration in RWSS and Bakers Creek (log Y-axis)

- Arsenic concentration (Figure 20 and Figure 21):
  - Increases slightly in Bakers Creek from upstream to downstream but is consistent with all previous monitoring data.
  - Elevated concentrations in EPL29/MW05 (below TSF1 Toe Dam), with an increasing trend.

Review of the increasing arsenic concentrations shows that the samples with elevated concentration were all collected in periods where the stream had very low volume flow (1 or 2 l/min, where 1 is the minimum measurable flow rate).

The low flow conditions suggest the increased concentrations are a result of low volumes resulting in concentrated arsenic in the stream, with the low volume presenting low potential for downstream impact, which is supported by the arsenic concentrations at EPL28/MW04 remaining consistent through the reporting year, compared to previous years.

- Concentrations for Total Dissolved Solids (TDS), Cyanide and Zinc (Figure 22 to Figure 25) show results for the 2024-25 reporting year are consistent with previous years.

A single high result for suspended solids at Upper Bakers Creek (EPL27) is reported in Sep & Oct-2024 and is likely due to construction to replace the Bakers Creek bridge and is not related to Hillgrove Mine activity.

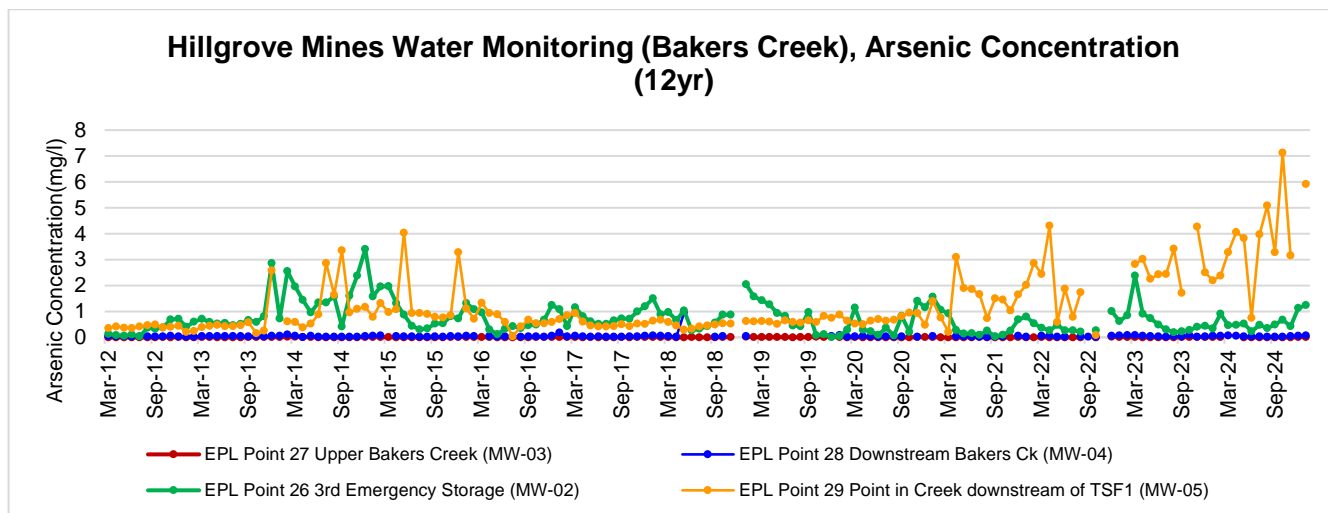


Figure 20: Arsenic Concentration in RWSS and Bakers Creek

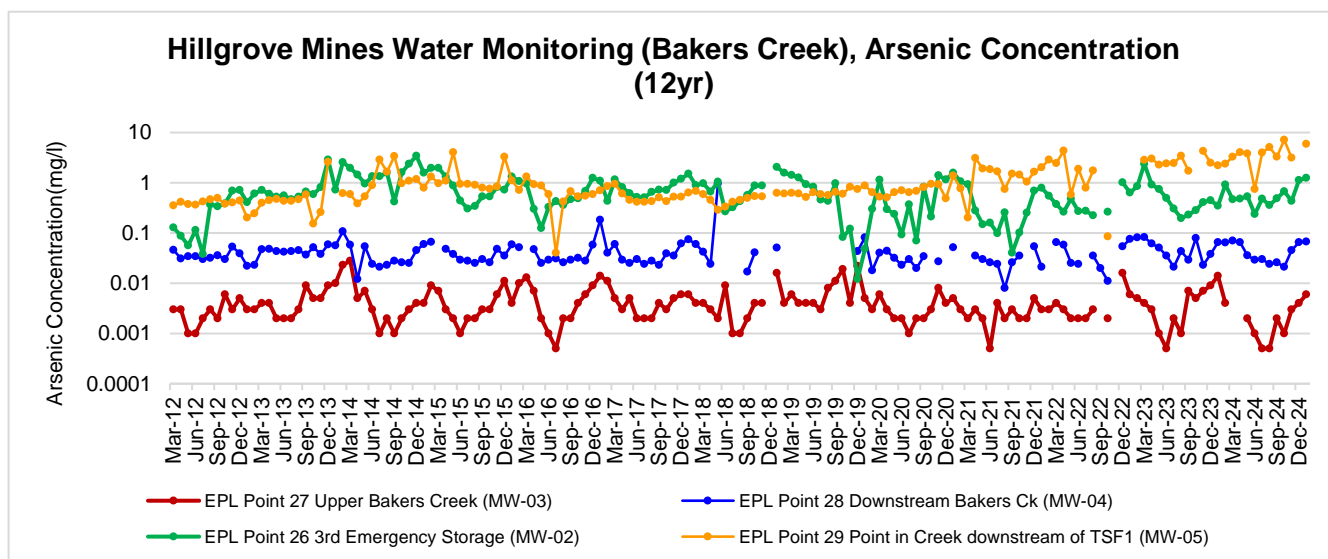


Figure 21: Arsenic Concentration in RWSS and Bakers Creek (log Y-axis)

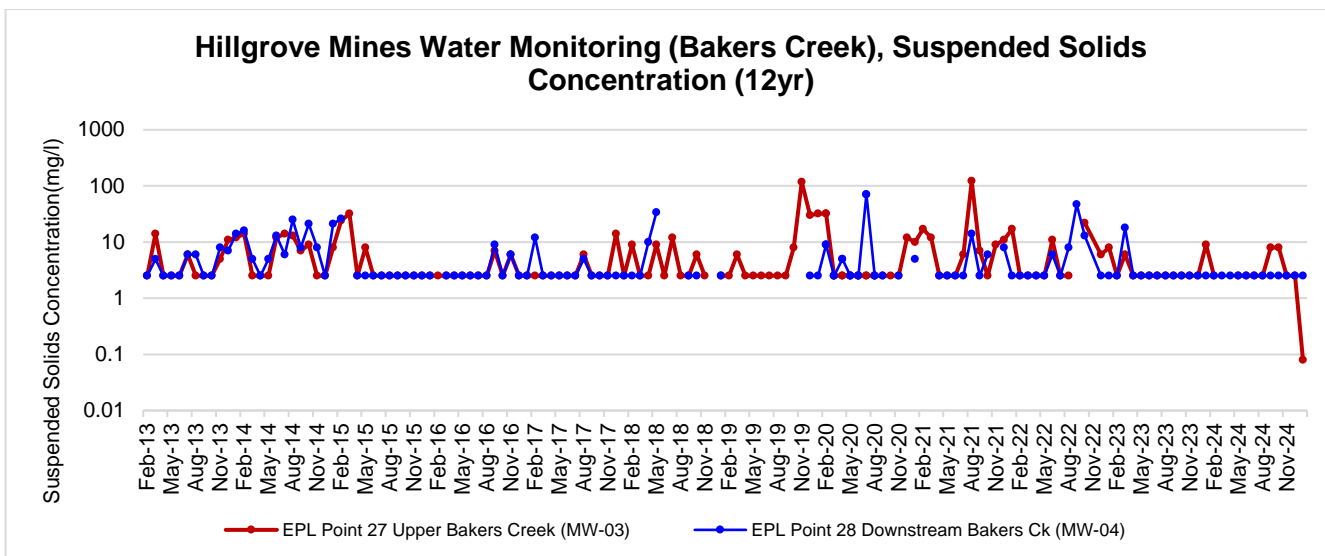


Figure 22: Suspended Solids Concentration in Bakers Creek, Upstream and Downstream

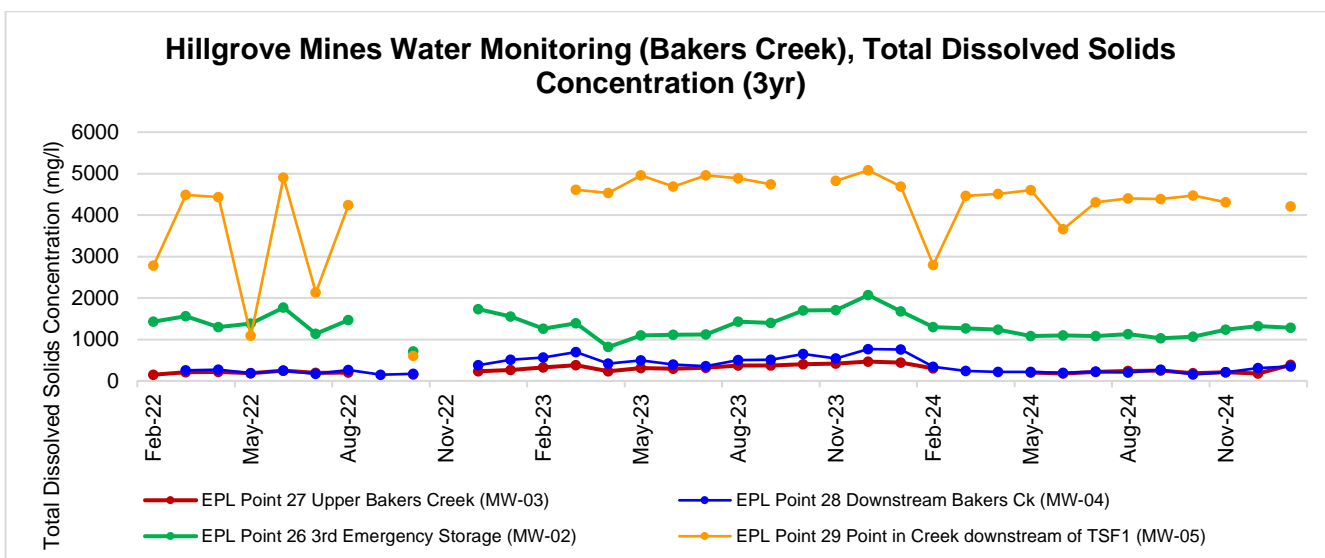


Figure 23: Total Dissolved Solids (TDS) in RWSS and Bakers Creek (log Y-axis)

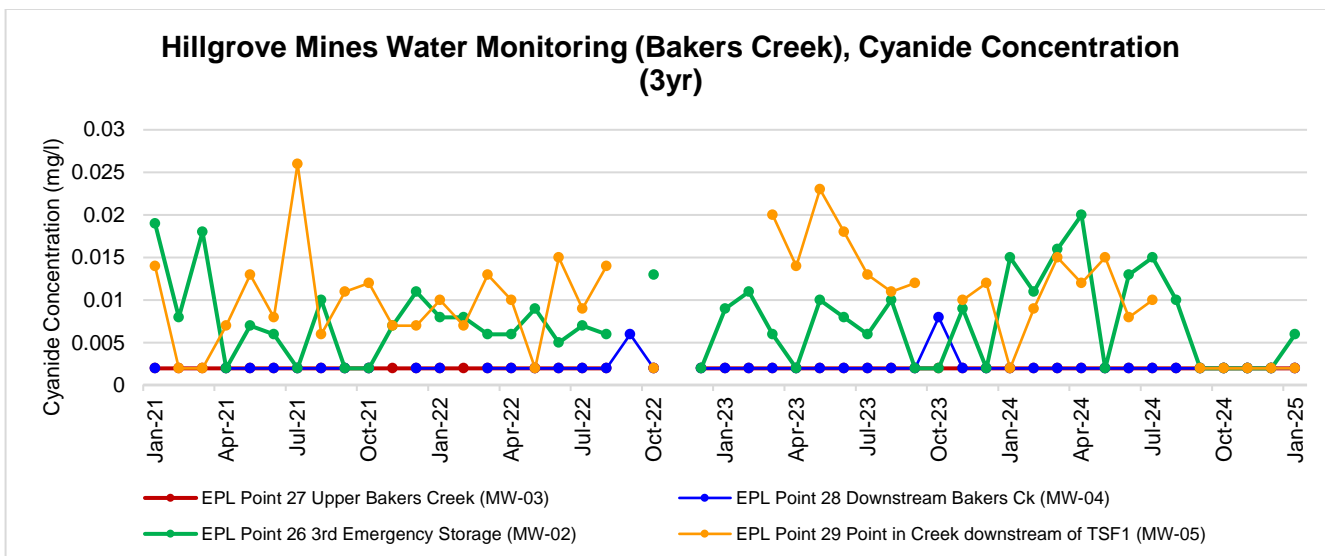


Figure 24: Cyanide Concentration in RWSS and Bakers Creek

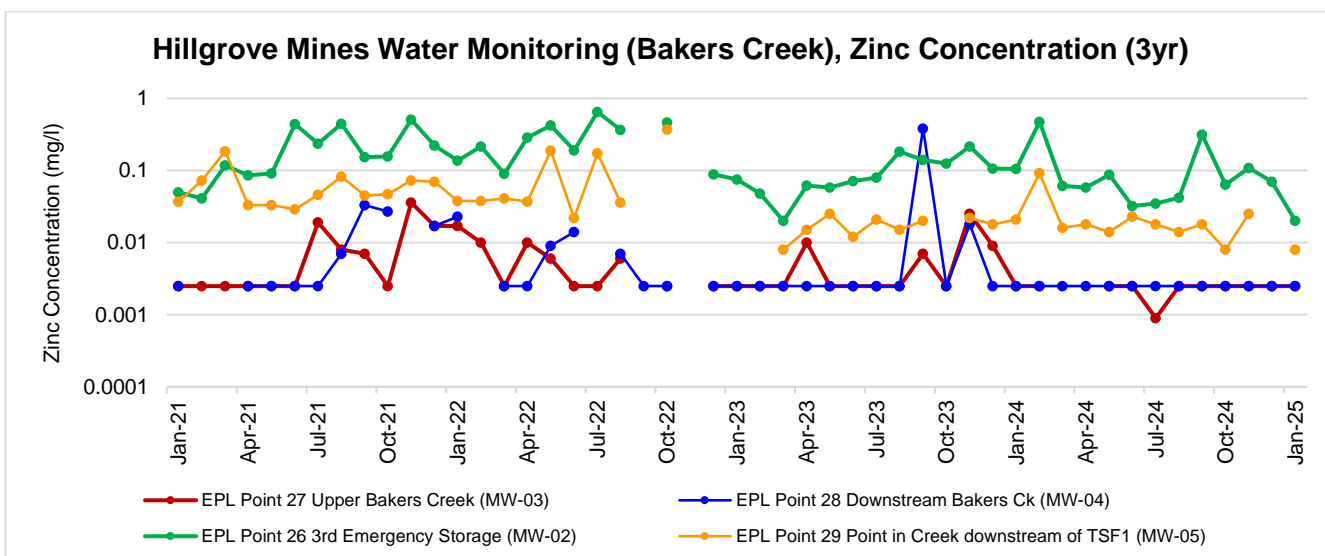


Figure 25: Zinc Concentration in RWSS and Bakers Creek

Monitoring of surface waters is carried out on 4 Mile Creek, either side of Swamp Creek. Swamp Creek gorge contains the historic and Freehold and Smiths mines which were operated in the 1970's and 1980's.

- Upstream (EPL31/QW08): upstream of Swamp Creek confluence.
- Downstream (EPL28/MW04): upstream of Swamp Creek confluence.

Results from these sites indicates the following:

- Concentrations of antimony, arsenic and TSDS (Figure 26 to Figure 28Figure 25) show no noticeable difference between the upstream and downstream concentrations for the 2024-25 reporting year there is a once off in June and September 2025 this was when there is no flow but stagnant water, that was able to tested.

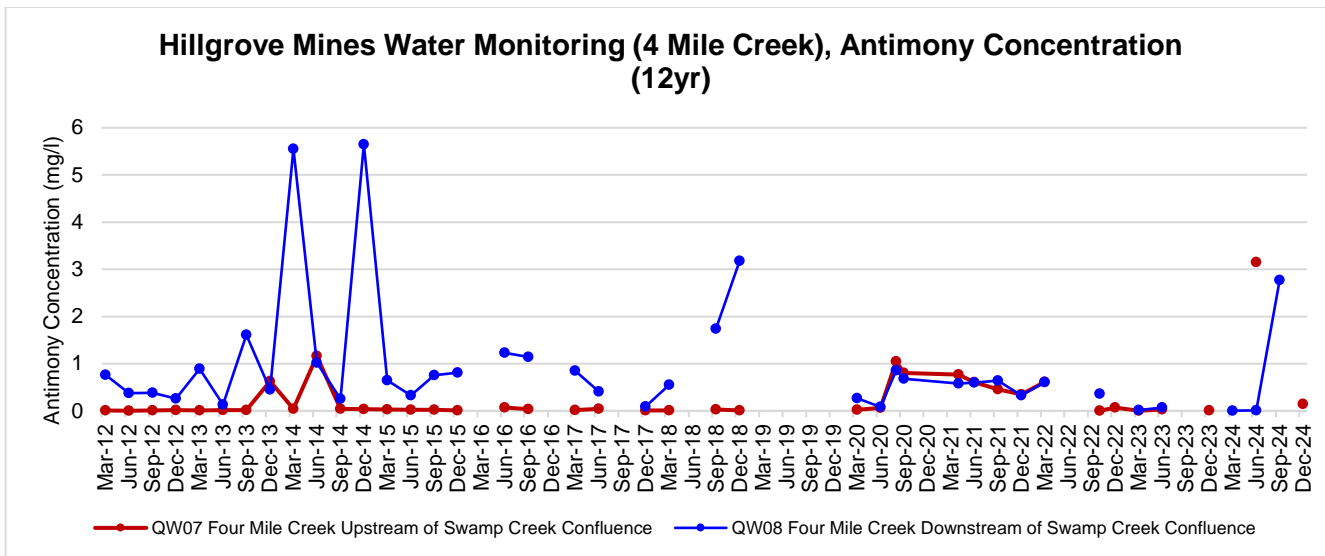


Figure 26: Antimony Concentration in 4 Mile Creek, above and below Swamp Creek Junction

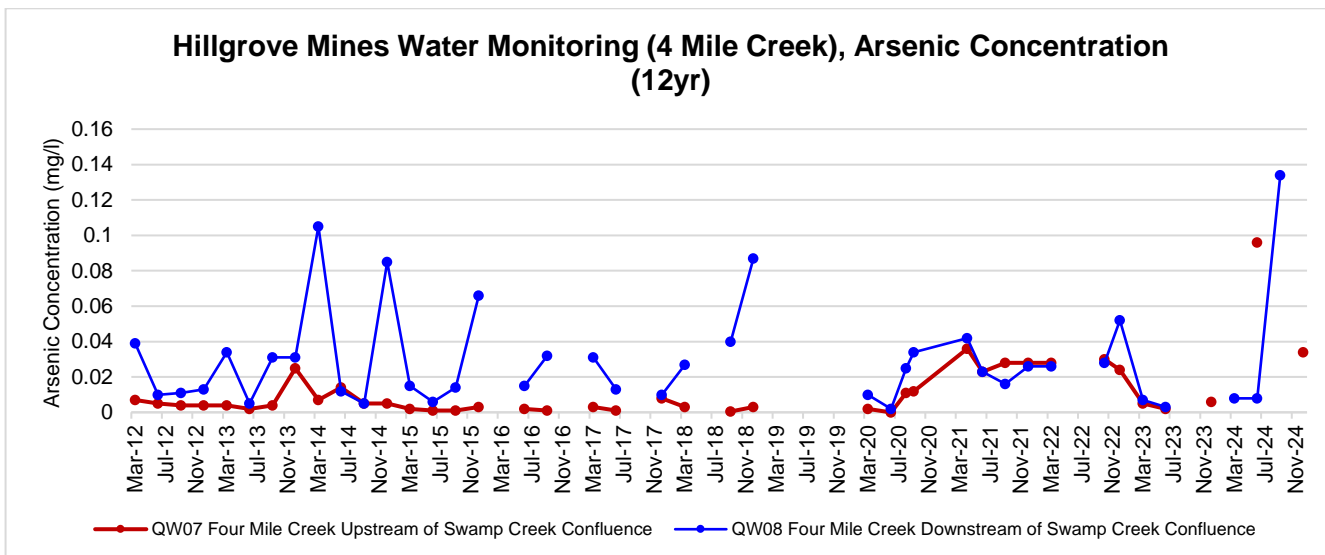


Figure 27: Arsenic Concentration in 4 Mile Creek, above and below Swamp Creek Junction

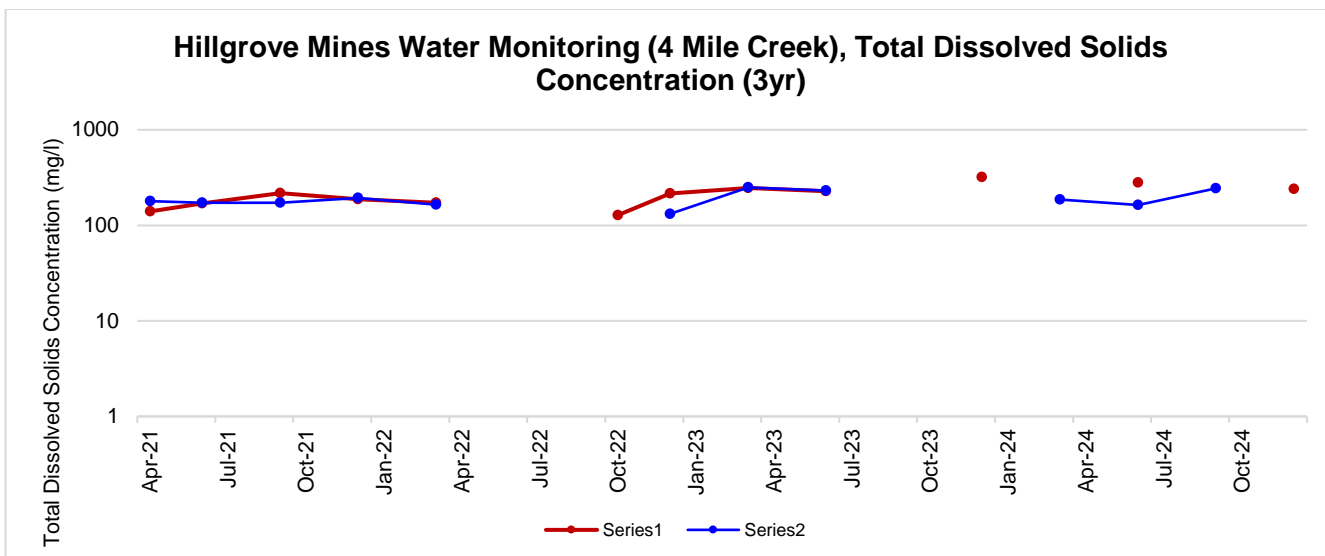


Figure 28: Total Dissolved Solids (TDS) in 4 Mile Creek, above and below Swamp Creek Junction

An intermittent drainage line flows through Metz Gully (Metz mining area) and into Bakers Creek south of the Lower Cooney Road crossing. Monthly samples are collected from this stream as it enters Bakers Creek, at MW07 (not a registered monitoring point in EPL 921):

Results from this site indicates the following:

- Concentrations of antimony and arsenic (Figure 29 Figure 25) show the elevated arsenic concentration from the end of 2023 reduced down to levels consistent with prior years, after which no samples were collected between July 23 to Jan 24 then March 2024 through to the new year as the stream had no flow. Antimony concentrations were consistent with the prior year results.

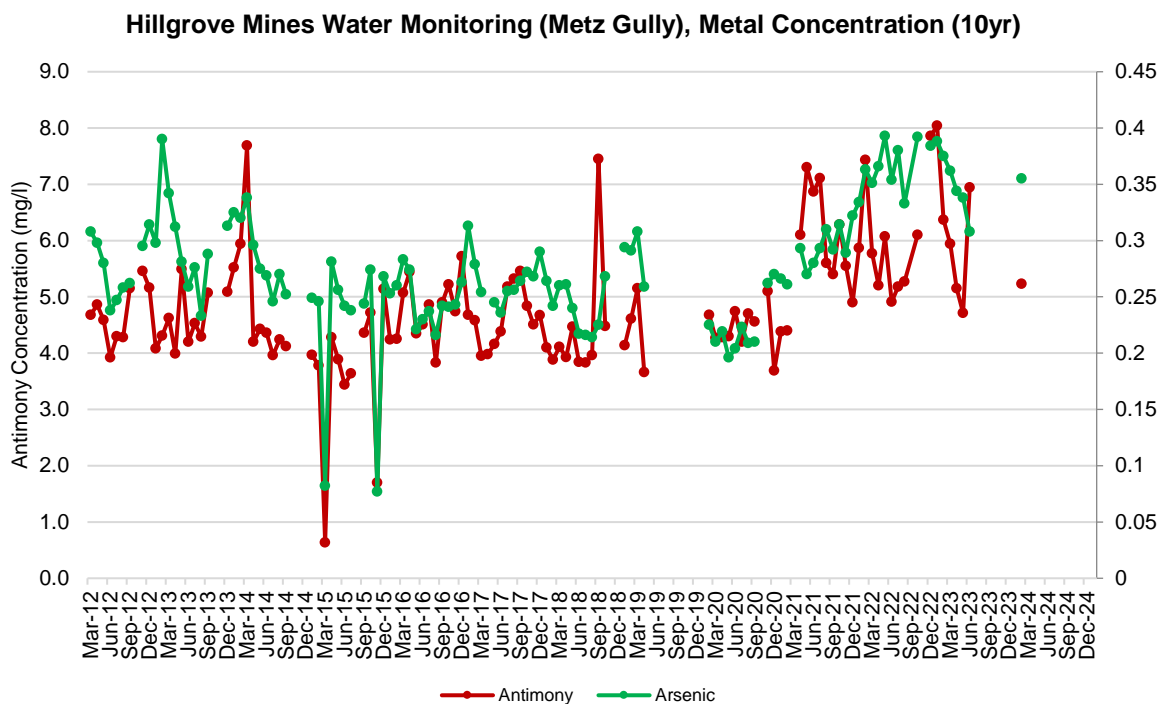


Figure 29: Antimony and Arsenic Concentrations in Metz Gully (MW07)

## 8. REHABILITATION

The requirements and objectives for rehabilitation and closure are outlined in Section 4 of the Rehabilitation Management Plan and summarised in Table 11 below.

*Table 11: Rehabilitation Objectives (Condition 49, Table 1 DA 98/35)*

Feature	Objective
Mine site (as a whole)	<ul style="list-style-type: none"> <li>Safe, stable and non-polluting.</li> <li>Final land use compatible with surrounding land uses.</li> <li>Site to be revegetated with suitable plant species.</li> </ul>
Surface Infrastructure	<ul style="list-style-type: none"> <li>To be decommissioned and removed, unless DRG agrees otherwise.</li> </ul>
Community	<ul style="list-style-type: none"> <li>Ensure public safety and minimise the adverse socio-economic effects associated with mine closure.</li> </ul>

Hillgrove Mine proposes a post mining land use that provides a beneficial future of rehabilitated land, which can be sustained in view of a range of limiting factors. Therefore, to meet the rehabilitation objectives the final closure design will maintain and integrate the mining history and natural beauty of the area into the final land use. This will be done by developing the closure plan around allowing safe access to the remaining historical and natural features as a tourism feature for Hillgrove. This will:

- Ensure that the socio-economic impacts of mine closure on the township of Hillgrove will be minimised by providing a post-mining tourist destination to keep the village 'on the map'; and will
- Integrate within the overarching tourism theme of the Waterfall Way by providing safe access to Brereton Falls, normally not accessible to the public.

It is planned that any tourist facility developed will involve safe walking access to various features including:

- Eleanora and Garibaldi historic chimneys
- Eleanora winder
- Smith tramway headframe
- Brereton Falls (not visible to the public but fits with Waterfall Way tourist attraction)
- Bakers Creek historic winder and steam engine.

A walking trail would include story boards providing an insight into the history or the area and specific features. These would be consistent with those that already erected in Hillgrove Village, Metz Lookout and Bakers Creek Falls.

Any land not affected by the tourist facility will include a combination of pasture, woodland and water management areas. The composition of these rehabilitated areas will be consistent with local needs and adjacent vegetation communities.

DRE, EPA and Armidale Regional Council have all be consulted in determining the overarching post land use units. The Hillgrove Progress Association (community representative group) were also consulted and support the approach.

Specific rehabilitation objectives by domains are shown in Table 12.



*Table 12: Domain Rehabilitation Objectives*

Primary Domain	Secondary Domain	Rehabilitation Objective
1 - Infrastructure	1A	<ul style="list-style-type: none"> <li>Infrastructure removed that is not identified to remain as part of final land use</li> <li>Vegetation appropriate</li> <li>Domain safe and free from hazardous materials</li> <li>Free draining, stable landform established</li> <li>Non-polluting</li> <li>Compatible with surrounding land use</li> </ul>
	1E	<ul style="list-style-type: none"> <li>Infrastructure removed that is not identified to remain as part of final land use</li> <li>Vegetation appropriate</li> <li>Domain safe and free from hazardous materials</li> <li>Free draining, stable landform established</li> <li>Non-polluting</li> <li>Compatible with surrounding land use</li> </ul>
2 - Tailings Storage Facility	2D	<ul style="list-style-type: none"> <li>Infrastructure removed and domain made safe</li> <li>Vegetation appropriate (shallow rooted pasture species)</li> <li>Free draining, stable landform established</li> <li>Non-polluting</li> </ul>
3 - Water Management Area	3B	<ul style="list-style-type: none"> <li>Stable and non-polluting</li> <li>Infrastructure removed (ES1-3 and pumps etc.)</li> <li>Safe and stable landform</li> </ul>
	3E	<ul style="list-style-type: none"> <li>Stable and non-polluting</li> <li>Infrastructure removed (ES1-3 and pumps etc.)</li> <li>Vegetation appropriate</li> <li>Safe and stable landform</li> </ul>
4 - UG mining area	8F	<ul style="list-style-type: none"> <li>Infrastructure removed (TBD which roads to remain if any) and domain made safe</li> <li>Vegetation appropriate e.g. Forest consistent with surrounding gorge ecosystem</li> <li>Free draining, stable landform established</li> <li>Non-polluting</li> <li>Compatible with surrounding land use</li> </ul>
	8(N/A) (Bakers Creek Waste Dump)	<ul style="list-style-type: none"> <li>Waste rock removed and returned to original landform</li> <li>Domain made stable with erosion and sediment control measures in place</li> <li>Vegetation appropriate and consistent with surrounding gorge ecosystem</li> </ul>

## 8.1 Rehabilitation Performance

### 8.1.1 Studies

The RMP notes that, DA 98/35 does not contain detailed completion/relinquishment criteria or a requirement to undertake rehabilitation monitoring.

However, a commitment is provided within the RMP to undertake additional studies to develop performance indicators and completion criteria/relinquishment criteria. Consultants Eco Logical Australia (ELA) were engaged to complete vegetation surveys to development ecosystem metrics and to establish analogue sites for each post mining vegetation community. This is an annual study that is undertaken, to allow us to have a consistent and evolving rehabilitation plan while the mine is still active.

The Annual Floristic Survey conducted by ELA was delayed during this reporting period due to the site going into Care and Maintenance then into new Ownership it will be undertaken at the end of April 2024. The results of the analogue monitoring will be used to determine performance indicators and completion criteria for rehabilitation areas. Table 14 summarises the analysis methods that will be used.

*Table 13: Summary of rehabilitation survey methods completed by Eco Logical Australia*

Site	Method	Easting	Northing	Comments
Metz Timber Laydown	Full floristic plot Soil survey	392769	6616551	
Metz Gully Scree Slope	Photo point	393409	6616697	Rehabilitation undertaken on a very steep slope (c. 40°) and area was inaccessible due to safety concerns. Permanent photo point established along a bearing of 10°.
Passing Bay 3 Scree Slopes (two areas)	Photo point	394060	6617345	Rehabilitation undertaken on a very steep slope (c. 45°) and area was inaccessible due to safety concerns. Permanent photo point established along a bearing of 180°. Photo point covers two rehabilitation areas (HMR3 and HMR4) and in consultation with HML, it was decided to combine the areas into a single site for monitoring purposes.
Waste Disposal Area ROM2	Full floristic plot Soil survey	394467	6617330	
Historic Laydown Yard	Photo point	394496	6617200	Rehabilitation undertaken on a moderately steep slope and area was inaccessible due to safety concerns. Permanent photo point established along a bearing of 310°.
Arsenic Ponds	Full floristic plot Soil survey	394764	6617120	
Halls Peak Ore Stockpile	Photo point	394769	6616878	Rehabilitation consists mainly of bare earth. Permanent photo point established along a bearing of 150°. Plans discussed for additional rehabilitation works at this site.
Historic Eleonora Plant	Full floristic plot Soil survey	394636	6616800	
Garibaldi Pit	Full floristic plot Soil survey	394825	6616503	

## 8.1.2 Activities

The Hillgrove Mine site has a number of rehabilitation areas. Each of these areas are at different stages of rehabilitation (Table 15).

*Table 14: Rehabilitation areas and rehabilitation stage.*

Rehabilitation areas 2019-2000	Rehabilitation Stage
Arsenic Ponds	Ecosystem and land use establishment
Passing Bay 3 Scree Slopes (two areas)	Ecosystem and land use establishment
Historic Laydown Yard	Ecosystem and land use establishment
Metz Gully Scree Slope	Ecosystem and land use establishment
Waste Disposal Area ROM 2	Ecosystem and land use establishment
Halls Peak Ore Stockpile	Growth Media Development
Metz Timber Laydown	Ecosystem and land use establishment
Garibaldi pit	Ecosystem and land use establishment
Historic Eleonora Plant	Ecosystem and land use establishment
ROM 3	Ecosystem and land use establishment
Garibaldi/TSF1 Road	Ecosystem and land use establishment

Clean up around the site continued during the reporting period, other sites that are marked for rehab will be included for the next reporting period.

*Table 15: Rehabilitation Status*

Mine Area Type <sup>1</sup>	Previous Reporting Period 2023 (Actual)	This Reporting Period 2024 (Actual)	Next Reporting Period 2025 (F/C)
	(ha)	(ha)	(ha)
A. Total mine footprint	71.96	67.65	67.65
B. Total active disturbance	46.44	57.35	57.35
C. Land being prepared for rehabilitation	0	0	0
D. Land under active rehabilitation	8.88	9.08	9.08
E. Completed rehabilitation	0	0	0

Note: due to the reporting changes that are required through the NSW Resource Regulator Rehab portal the numbers shown for 2024 are calculated from the spatial data submitted in the Rehab portal.

No areas have been requested for relinquishment signoff from the Resources Regulator during the reporting period.

#### 8.1.2.1 Bakers Creek Waste Dump

First pass rehabilitation occurred in the Bakers Creek dump in January 2022 when approximately 1,000 seed bombs were made and distributed over the area. Bunding and signage was placed across the site to prevent access over the rehabilitated areas. The site is included in the Rehabilitation reporting undertaken yearly as well as in the quarterly rehabilitation site monitoring program.

Over the previous reporting period the NSW Resource Regulator Rehab inspected the Bakers Creek rehab area, suggestions were made of how to address the steeper areas of the rehab area, as the rehabilitation objectives are broadly not being met for the Bakers Creek dump due to the steep slopes which are not permitting vegetation to take hold it has improved since last year with some gum saplings taking root on the stepper slopes

The Bakers Creek dump rehabilitation has been identified as a Non-Compliance from the 2023 IEA. But was closed in the 2025 January update with information provided by the Resource Regulator Rehabilitation Department.

Under the New State Development application that is currently being developed the reassessment and rehabilitation of this area has been added tot the scope.

This area is going to take more than one round of rehabilitation and will take more than 18mths to correct.



Figure 30: The Bakers Creek Waste Dump prior to the removal of waste materials for reprocessing.



*Figure 31: The Bakers Creek Waste Dump at the final stage, with the permanent road in place - January 2022.*

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*Figure 32: The Bakers Creek Waste Dump upper area, fair vegetation take-up on flatter slopes – January 2025.*



*Figure 331-42: The Bakers Creek Waste Dump middle and lower areas, vegetation take-up some of the steeper slope has been varied – January 2025.*



*Figure 44: The Bakers Creek Waste Dump lower area, very poor vegetation take-up on steeper slopes but has improved since last year - January 2024*

#### 8.1.2.2 Lower Core Yard Area

An area between the administration buildings and the core yard (formerly used for ore stockpiling) was poor in vegetation cover and developing deep erosion rills on the slope (Figure 24). The area was initially cleared of scattered pieces of scrap wire and poly pipe. During October 2021, the ground was deep ripped with a D6 dozer and small contours formed across slope. A silt mesh fence was erected to prevent further erosion until vegetation was established. The area was seeded with a native grass and wildflower seed mix.

At the time of writing this report vegetation is well established and considerable progress is noticeable in the two years since the site was rehabilitated. This was planned for sign-off during 2024, but has not been advanced with potential for further disturbance under proposed development under the new modification application.



Figure 34: Lower Core Yard area in October 2021, with poor vegetation cover and deep erosion rills.



Figure 35: Lower Core Yard area in January 2022, after being ripped and vegetation beginning to establish.



Figure 36: Lower Core Yard area in March 2025, with vegetation well established.

## 8.2 Actions for Next Reporting Period

- The existing rehabilitation areas will be monitored on a quarterly basis during the reporting period.
- The weeding program will continue with close attention being paid to the areas Hillgrove Mine wishes to achieve sign off during the next reporting year.
- Rehabilitation of Bakers Creek Waste Dump will be progress, likely with re-seeding on the flatter slopes and development of earthworks plans to facilitate revegetation on the steeper slopes.

## 8.3 Key Issues to Achieving Successful Rehabilitation

Longer term growth media, or the lack of suitable growth media is a key issue that impacts upon successful rehabilitation moving forward.

The current stocks of topsoil (growth media) fall short of the required amount to achieve full coverage of the mines disturbed footprint. The most practical solution to overcome this shortfall is to source topsoil/subsoil material from within the Hillgrove Mine site.

To increase stock of growth media and improve recycling at HMPL, a growth media pit was installed during the reporting period. A load of timber mulch was sourced and delivered from an uncontaminated site in the Thora area to begin the mulch pile. A program has been implemented to collect all paper, cardboard and uncontaminated organic material from around the mine site and deposited into the growth media pit. Further efforts will be invested in sourcing clean growth media from external sources in the coming years.

Weed infestations are a continuous obstruction to successful rehabilitation of sites. The quarterly inspections and the management of weeds will continue in identifying invasive species and eradication through a regular spraying program. Several African Boxthorn plants were identified toward the end of the last reporting period, which were eradicated during this reporting period.

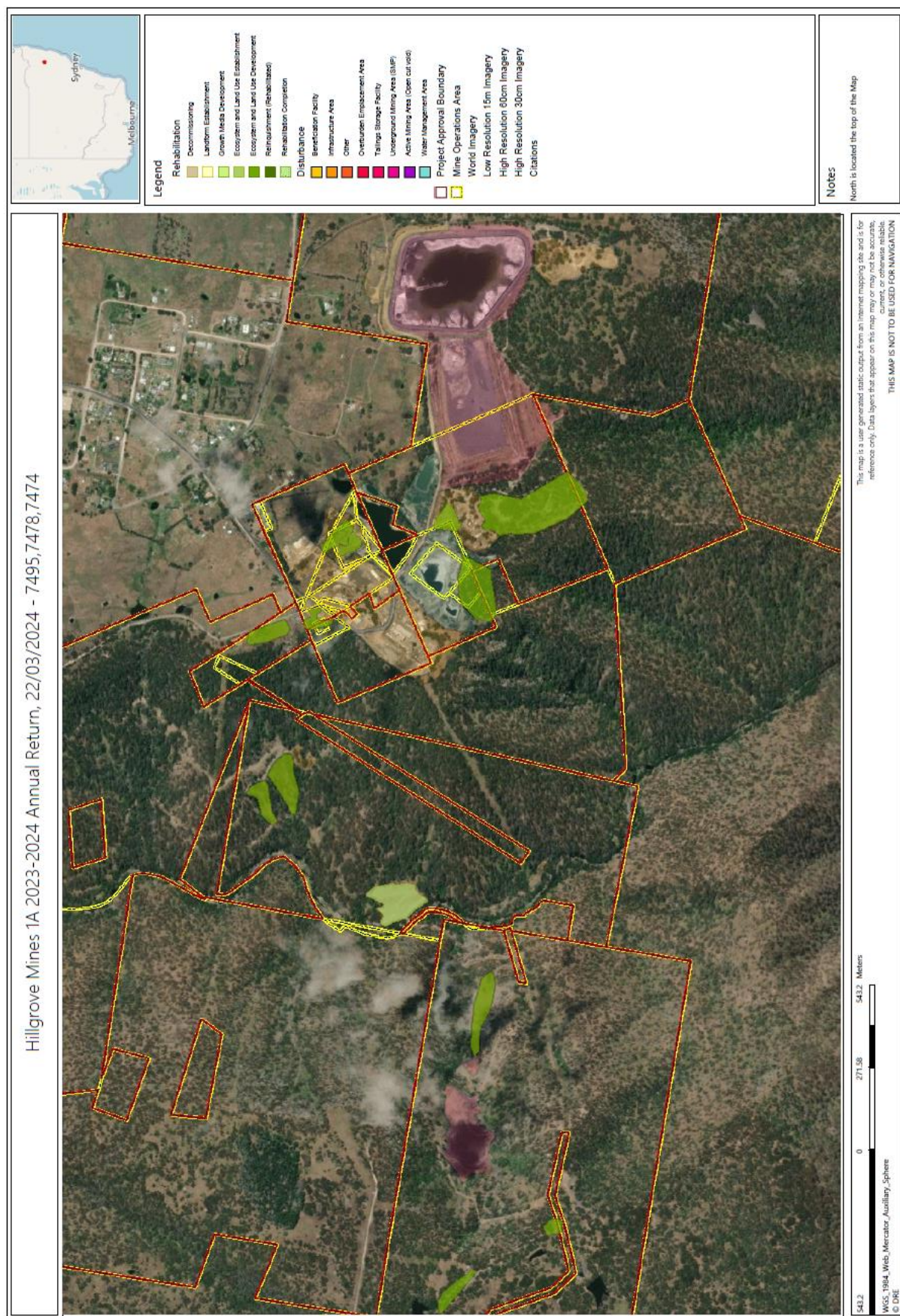


Figure 37: Hillgrove Mine Rehabilitation and Disturbed areas. 2024

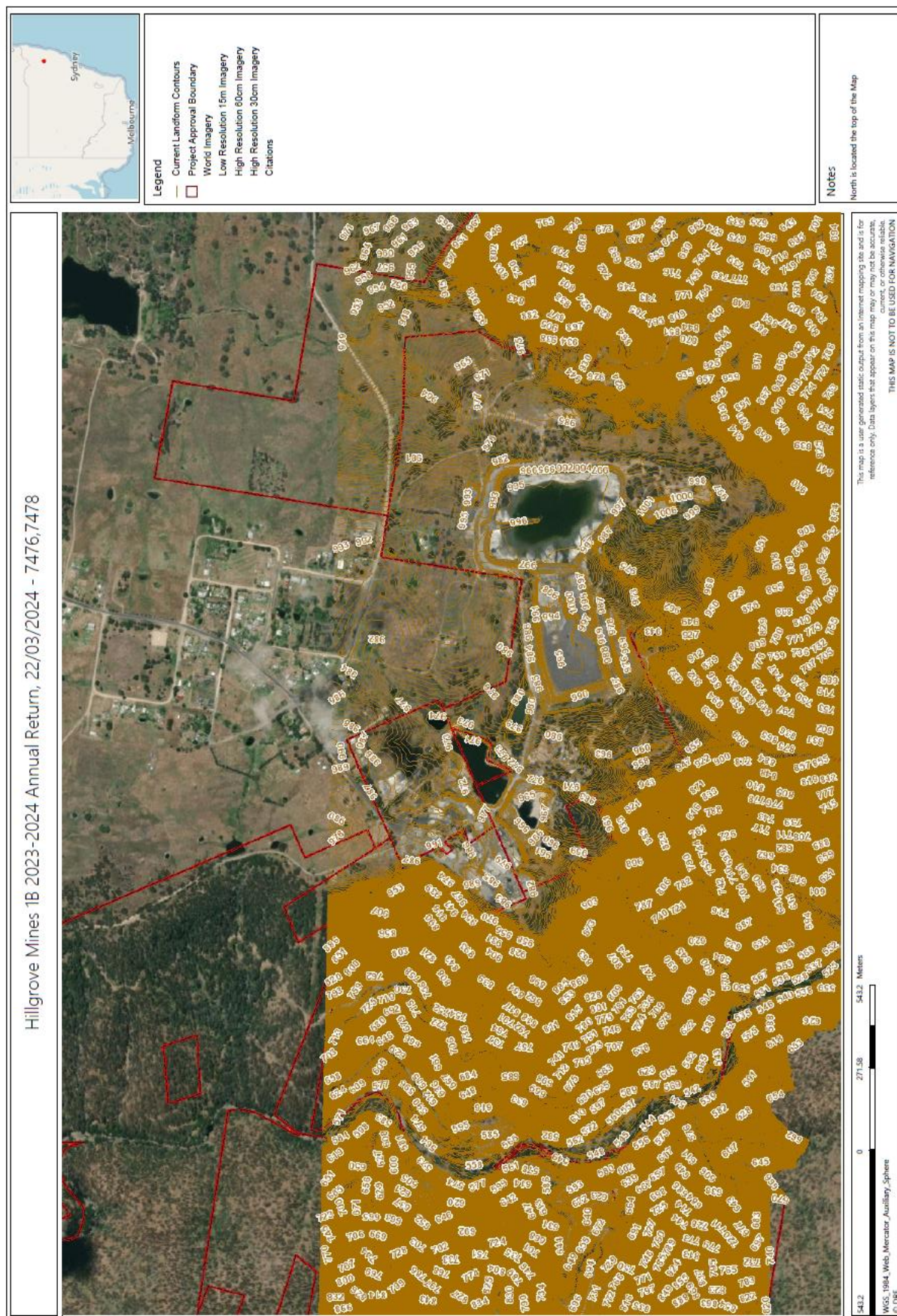


Figure 38: Hillgrove Mine current contours. 2024



## 9. COMMUNITY

HMPL undertook the following community consultation activities during the reporting period:

- Provided support to Cooney Creek Wild Dog Association and local landowners with conducting baiting programs targeting wild dogs and foxes.
- Communication with the nearest residents to Hillgrove Mines during Care and Maintenance at the mine and provided the opportunity for residents to discuss any concerns.
- Attended several Hillgrove Progress Association Meetings
- Working in conjunction with UNE for study purposes.
- There were Six (6) community complaints from two parties.

## 10. INDEPENDENT AUDIT

The Independent Audit was undertaken in March 2023 and undertaken by 3E Environmental. Against the 58 consent conditions, the audit assessed:

- 14 Compliant;
- 14 Not Compliant; and
- 30 Not Triggered.

Review of the audit by DPHI recognised 12 non-compliances, which are detailed in Sections 1 and 11.3.

It should be noted that there is only 5 non-compliances from this still outstanding as of Feb 2025.

The next independent audit is due before 24 February 2026.

## 11. INCIDENTS AND NON-COMPLIANCES DURING REPORTING PERIOD

### 11.1 Incidents

There have been no incidents that occurred onsite during the reporting period.

### 11.2 Complaints

Table 16 shows the summary of complaints received during the reporting year.

Six (6) complaints were received during the 2024-25 reporting year.

*Table 16: Complaints received during 2024-25 Reporting Year*

<b>Total Number of Complaints Received:</b>	6
<b>Number of Complainants:</b>	2
<b>Location of Complainants:</b>	Clarks Gully and Core Yard at Hillgrove Mines
<b>Nature of Complainants:</b>	Noise and Dust

### 11.3 Non-Compliances

The IEA from February 2023 assessed 14 matters as non-compliances, however with review completed by the DPHI it was found to only be 12 matters as non-compliances which are outlined in Section 1 (Statement of Compliance). As of this report there are only 5 non compliances left outstanding.

Causal factors, proposed actions and status are outlined below. In addition, there are four matters assessed as non-compliant in the audit which HMPL disagree with and are described in Section 1.

As mentioned in section one all of D/A has been assessed and the ones listed below are still the outstanding non-compliances



Condition of Consent number	Compliance Requirement	Development Phase	Evidence and comments	Compliance Status
34	<p><b>NOISE</b></p> <p>The Applicant shall ensure that the LA10(15 minute) noise levels due to the normal operation of the mine, when measured or computed at any residence (other than one owned by the Applicant), shall not exceed a noise level of 35 dB(A) or 30 dB(A) where the noise source is tonal in nature and shall comply with the requirements of the Environmental Noise Control Manual and the Noise Control Act 1975.</p> <p>Should a noise complaint be received from any nearby residence, the Applicant shall investigate the complaint and implement appropriate mitigation measures as required. Any such complaints and subsequent actions undertaken by the Applicant shall be addressed in the Annual Environmental Management Plan Report (Condition 8).</p>	Annually	<p>Comments:</p> <p>Monitoring Manual has corrected.</p> <p>Monitoring has taken place over the 2023 reporting period quarterly.</p> <p>Hillgrove Mine considers this consent completed and compliant</p>	Non-Compliant
35	<p>Schedule 2, Condition 35 "Noise measurement shall be undertaken under prevailing weather conditions, in the absence of temperature inversions and over a period of time sufficient to be representative of the noise levels being emitted from the mine."</p>	At all times	<p>Comments:</p> <p>Monitoring Manual has corrected.</p> <p>Monitoring has taken place over the 2023 reporting period quarterly.</p> <p>Hillgrove Mine considers this consent completed and compliant</p>	Non-Compliant
41	<p><b>AIR QUALITY</b></p> <p>The Applicant shall implement, in consultation with the EPA, dust control measures aimed at achieving relevant EPA dust deposition standards.</p>	At all times	<p>HGM has Air and vibration control management plans and reporting triggers in place for this section.</p> <p>Hillgrove Mine received a reply on the 12/10/2023 they no longer review or approve Management plans, and we are to write plans that fit our EPL 921 which has been done throughout the reporting period.</p>	Non-Compliant



Condition of Consent number	Compliance Requirement	Development Phase	Evidence and comments	Compliance Status
			Hillgrove Mine considers this consent completed and compliant.	
47	<p><b>HAZARD AUDIT</b> Twelve (12) months after the commencement of operations of the proposed development or within such further period as the Secretary may agree, the applicant shall carry out a comprehensive hazard audit of the proposed development and within one (1) month of the audit submit a report to the Secretary. The audit shall be carried out at the applicant's expense by a duly qualified independent person or team approved by the Secretary prior to commencement of the audit. Further audits shall be carried out every three (3) years or as determined by the Secretary and a report of each audit shall within one (1) month of the audit be submitted to the Secretary. Hazard audits shall be carried out in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 5, "Hazard Audit Guidelines". The audit shall include a review of the site safety management system and a review of all entries made in the incident register since the previous audit.</p>	When Required	<p>Comment: Hillgrove Mine has not actioned this at this point</p> <p>Non-compliance No. 13 – HGM was not able to provide evidence that the required three (3) yearly hazard audits have been carried out as required by condition 47 or as determined by the Secretary.</p>	Non-Compliant



Condition of Consent number	Compliance Requirement	Development Phase	Evidence and comments	Compliance Status
53	<p>Within 3 months of:</p> <p>(a) an annual environmental management plan report under condition 8;</p> <p>(b) an audit under condition 10; or</p> <p>(c) any modification to the conditions of this consent (except Modification 3);</p> <p>the Applicant shall review, and if necessary revise the plans required under this consent to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review, the revised document must be submitted to the Secretary for approval.</p> <p>Note: This is to ensure the plans are updated on a regular basis and incorporate any recommended measures to improve the environmental performance of the development.</p>	Annually	<p>The Environmental Management Plan, including Control Standards for each impact are drafted.</p> <p>These will be reviewed following submission of this AEMR and submitted to the Secretary for approval.</p>	Non-Compliant

## 12. ACTIVITIES TO BE COMPLETED THE NEXT REPORTING PERIOD

As part of Larvotto Resources HMPL will progress the project towards re-development in the coming year. The expectation of current management is that the key activities in 2024/25 will be:

- Completing actions arising from IEA non-compliances:
  - Resolution actions will continue to be reported quarterly to DPHI;
  - The remaining NC's that have not been addressed will be completed during the year.

Continue the defined permitting strategy, as agreed with ARC and DPHI:

- Modification 5 of DA98/38:
  - Modification proposal has been accepted by DPHI;
  - Technical Assessments currently underway;
  - Expect submission of Modification Report in 2025-Q2;
  - Anticipate approval in 2025-Q4.
- New consent application to ARC for upgrades to the MPF (Processing Plant):
  - Concurrent with Mod.5 of DA98/35.
- New SSD application:
  - Scoping report submitted 2025-Q1
  - Anticipate approval in 2026-H2.

Physical work at Hillgrove during the coming reporting period will be:

- Exploration:
  - Exploration activities expected include:
    - Diamond Drilling at Bakers Creek, Garibaldi and Clarks Gully;
    - Reverse Circulation drilling at Clarks Gully and other regional targets;
    - Soil sampling on Hillgrove Station and other regional targets.
- Project Development/Construction:
  - Prior to receiving anticipated new consent approvals, activity during 2025 is planned to be:
    - Carrying out of maintenance and upgrade work on the processing plant and infrastructure, where activities are permitted under existing consents, or do not require consent.
    - Carrying out of construction work that is permitted under existing consents.
    - Earthworks to improve safety (traffic management) of various site areas (eg: roads and infrastructure).
    - Earthworks to upgrade the Eleanora Dam embankment.
    - Commencement of underground mining operations at Metz under consent DA24/82, with waste placement to areas permitted under existing consents.

- Construction of buildings that do not require additional consent (either approved under existing consent, or exempt from requiring consent).
- Assuming receipt of the new consent approvals occurs as planned, full redevelopment of the project will commence in 2025-Q4, including:
  - Construction at processing plant to increase capacity to 500 ktpa.
  - Construction of tailings filters for Dry Tailings process.
  - Construction of Dry Tailings Landform, including production of waste rock for embankments from the Garibaldi Pit.
  - Increased underground mining activity at Metz, with ore haulage from Metz to Hillgrove.
  - Construction of buildings that cannot commence without existing consent.

## 13. DEFINITIONS

ARC	Armidale Regional Council
Relevant Approval	Relevant Approval includes the following approvals where they are material to the conduct of the operation: a development consent, project approval, mining lease or water access licence.
WAL	Water Access Licence
DPHI	Department of Planning, Housing and Infrastructure
DPI	Department of Primary Industry - Water
DRE	Planning and Environment – Division of Resources and Energy
HMPL	Hillgrove Mines Pty Ltd
RO	Reverse Osmosis
WTP	Water Treatment Plant
IEA	Independent Environmental Audit
EO	Environmental Officer

## 14. COMPLETE CONSENT TABLE FOR DA98/35

Condition of Consent	Consent Requirement	Compliance status
1	<p><b>GENERAL</b></p> <p>The Applicant shall carry out the development generally in accordance with the:</p> <p>development application DA 98/35, dated 30 June 1998, lodged with Dumaresq Shire Council and the accompanying Environmental Impact Statement (EIS), dated June 1998, and prepared by Martin and Associates Pty Ltd;</p> <p>modification application DIA No. 08/99, dated 17 August 1999, and accompanying Statement of Environmental Effects (SEE), dated August 1999, and prepared by Martin and Associates Pty Ltd;</p> <p>modification application DA 98/35 M2, dated 10 November 2000 and accompanying SEE, dated November 2000, and prepared by E.A. Systems Pty Limited;</p> <p>Environmental Assessment titled Hillgrove Environmental Assessment, dated 28 November 2014;</p> <p>Environmental Assessment titled Hillgrove Mines Environmental Assessment, dated 11 January 2018, and Hillgrove Mines Pty Ltd.'s letter to the Department, dated 4 April 2018; and</p> <p>conditions of this consent.</p> <p>if there is any inconsistency between the above, the conditions of this consent, or then the most recent document, shall prevail to the extent of any inconsistency.</p>	Compliant
2	<p><b>STATUTORY AND OTHER REQUIREMENTS</b></p> <p>The Applicant shall meet the statutory requirements of all public authorities having responsibilities for environmental protection, pollution control, and land and water conservation approvals and licences in respect of the mine extension and associated works encompassed by DA No. 98/35 and the re-alignment of the haul road to Brackins Spur and associated works encompassed in DIA No. 08/99.</p>	Compliant
3	<p>The Applicant shall comply with all reasonable requirements of the Secretary in respect of the implementation of any measures arising from reports submitted in accordance with the conditions of this consent, within such time as the Secretary may agree.</p>	Compliant
4	<p><b>DURATION AND SCOPE OF CONSENT</b></p> <p>The Applicant may carry out mining operations and process up to 250,000 tonnes of ore per annum to produce Antimony and Gold concentrates on site until the end of December 2023.</p> <p><i>Note: This consent will continue to apply to all other aspects – other than the right to conduct mining operations – until the rehabilitation of the site and any additional undertakings have been carried out satisfactorily.</i></p>	Compliant
5.	<p>This consent does not apply to the construction and operation of the Antimony Trioxide Plant or the construction and operation of a water supply pipeline to the mine from the Gara River. These works require a separate development consent.</p>	Not Triggered
6.	<p><b>ENVIRONMENTAL OFFICER</b></p> <p>The Applicant shall employ an Environmental Officer whose qualifications are acceptable to the Secretary in consultation with Council and the Department of Mineral Resources. The Environmental Officer shall be responsible for ensuring that all environmental safeguards proposed for the development and as required by this consent and other statutory approvals are monitored and enforced from the commencement of construction.</p>	Compliant
7.	<p><b>ENVIRONMENTAL MANAGEMENT PLAN</b></p>	Not Triggered



	<p>The Applicant shall prepare an Environmental Management Plan/s (EMP/s) covering both the construction and operation phases of the development. The Plan/s shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>details of the mine infrastructure and facilities to be developed;</li> <li>erosion and sediment control measures (Condition 16);</li> <li>noise and vibration management procedures (Condition 32);</li> <li>results of investigations into potentially acid producing waste rock (Condition 20);</li> <li>where relevant, monitoring procedures relating to water quality, air quality, noise and vibration, and the tailings storage facility;</li> <li>management measures for any fauna and flora species listed under the Threatened Species Conservation Act 1995 that occur on the site.</li> </ul> <p>The EMP/s shall be prepared to the satisfaction of the Secretary, Council, DRG, EPA, OEH and NOW. The construction EMP (or that part of the EMP covering the construction phase) shall be submitted prior to the commencement of construction works. The operation EMP (or that part of the EMP covering the operation phase) shall be submitted before the commencement of operations on the site.</p>	
8.	<p><b>ENVIRONMENTAL MANAGEMENT PLAN REPORT</b></p> <p>The Applicant shall prepare and submit to the Secretary an Annual Environmental Management Plan (AEMP) Report. The first report shall be prepared and submitted within twelve (12) months of the substantial commencement of construction. A copy of the EMP Report should also be submitted to the Council and EPA. The report shall generally include:</p> <ul style="list-style-type: none"> <li>a review of the effectiveness of environmental management for the subject land, including all control, mitigation and management measures required in the conditions of this consent;</li> <li>a review of performance in terms of the conditions of development consent;</li> <li>results of environmental monitoring in respect of air quality, water quality, and noise and vibration; and</li> <li>a record of any complaints received in relation to the environmental performance of the mine and actions taken in response to complaints.</li> </ul> <p>(Note: Provided all requirements of this condition are met, the Applicant may prepare the above AEMP Report in conjunction with any other annual environmental report required by another regulatory authority).</p>	Compliant
9.	<p><b>COMPLIANCE REPORTS</b></p> <p>At least 2 (two) weeks prior to the commencement of substantial construction (or within such period as otherwise agreed to by the Secretary), the Applicant shall submit for the approval of the Secretary a compliance report detailing compliance with all the relevant conditions that apply at this stage.</p> <p>At least 2 (two) weeks prior to the commencement of operations associated with the development (or within such period as otherwise agreed to by the Secretary), the Applicant shall submit for the approval of the Secretary a compliance report detailing compliance with all the relevant conditions that apply at this stage.</p> <p>The compliance reports shall include:</p> <ul style="list-style-type: none"> <li>the dates of submissions of the various studies and/or requirements of various relevant conditions, and of their approvals and terms of approvals;</li> <li>action taken or proposed to implement the recommendations made in the terms of approvals and/or studies.</li> </ul>	Not Triggered
10.	<p><b>INDEPENDENT ENVIRONMENTAL AUDITING</b></p> <p>12 (twelve) months after the commencement of operations, an independent environmental audit report shall be submitted to the Secretary, Council, the DRG and the EPA.</p> <p>The audit shall be carried out at the Applicant's expense and shall be undertaken in accordance with the requirements of the Secretary in consultation with the EPA. The audit shall cover all aspects of monitoring and environmental performance, and</p>	Not Triggered

	<p>compliance with reporting requirements, conditions of this consent and all relevant approvals and licences. The audit report shall be made available to the Secretary and Council. Further independent audits shall be conducted as directed by the Secretary.</p> <p>The audit shall be carried out by a suitably qualified person as approved by the Secretary.</p> <p>The Applicant shall comply with all reasonable requirements of the Secretary in respect of any measures arising from or recommended by the audit and within such time as agreed to by the Secretary.</p>	
<b>10A.</b>	By the end of 2015 or within 3 months of receiving the EPA's environmental audit (whichever comes first), the Applicant shall commission an independent environmental audit of all aspects of the mine covered by this consent. Further independent environmental audits will be conducted every 3 years thereafter.	Compliant
<b>10B.</b>	Within 1 month of receiving the environmental audit report, or as otherwise agreed with the Secretary, the Applicant shall submit a copy of the report to the Secretary, with a detailed response to any of the recommendations contained in the report, including a timetable for the implementation of any measures proposed to address the recommendations in the report. Any works recommended in the audit must be undertaken in accordance with this timetable to the satisfaction of the relevant agencies, unless otherwise agreed with the Secretary.	Compliant
<b>11.</b>	<p><b>CONSTRUCTION HOURS</b></p> <p>Any construction activity resulting in noise emission levels greater than 5 dB(A) above background, or resulting in tonal noise or impact noise likely to cause annoyance at any residence, shall be limited to the following hours:</p> <p>7:00 am to 6:00 pm – Monday to Friday</p> <p>7:00 am to 1:00 pm – Saturday</p> <p>No construction activity on Sundays or public holidays.</p>	Compliant
<b>12.</b>	<p><b>TAILINGS STORAGE FACILITY</b></p> <p>The Applicant shall obtain approval from the NSW Dam Safety Committee for the construction of the tailings storage facility. All construction and operation works and monitoring and maintenance procedures shall be in accordance with the requirements of the NSW Dam Safety Committee. Copies of all relevant approvals from the NSW Dam Safety Committee shall be forwarded to the Secretary prior to the commencement of construction of the tailings storage facility.</p>	Compliant
<b>13.</b>	<p>The tailings storage facility shall be designed, constructed, operated, monitored and maintained such that all water received in the facility is evaporated, retained or reused and that there is no discharge of tailings water to the environment. The Applicant shall comply with all requirements of the EPA, DRG, and the NSW Dam Safety Committee to ensure that there is no seepage, leakage or overflow from the tailings storage facility.</p> <p><i>Notes:</i></p> <p><i>This condition applies to the management of water associated with rainfall events of up to 72 hours duration with a 1 in 100 year Average Return Interval; and</i></p> <p><i>The permeability target for the lining of tailings storage facility is a clay liner of 450 mm minimum thickness of 1x10<sup>-9</sup> metres/sec permeability, or equivalent.</i></p>	Compliant
<b>14.</b>	Construction of the tailings storage facility shall be supervised at all times and certified by the Applicant's dam design engineer.	Not Triggered
<b>15.</b>	<p><b>WATER QUALITY</b></p> <p>Any new effluent disposal system shall be subject to relevant approvals from the EPA and Council.</p>	Not Triggered
<b>16.</b>	Prior to the commencement of construction, the Applicant shall prepare an Erosion and Sediment Control Plan to the satisfaction of NOW, DRG and the EPA. The Plan shall provide details on all control measures to be implemented during	Not Triggered

	construction works, including haul road construction and upgrading, and include contingency measures for dealing with high rainfall events during construction. The Plan shall also cover erosion and sediment control during the operational phase of the development. The Plan shall form part of the EMPs referred to in Condition 7.	
17.	In order to prevent dust and sediment trapped in vehicle wheels from entering Bakers Creek, all vehicle crossings over Bakers Creek shall be constructed such that under normal flow conditions vehicles do not enter the water.	Compliant
18.	The Applicant shall, in accordance with the requirements of the EPA, DRG and NOW and the Secretary: monitor and report on groundwater discharges from the existing and new mine adits; and implement appropriate measures to control contaminated water discharges from existing and new adits.	Compliant
19.	Waste rock materials shall be stockpiled in controlled discharge areas such that there is no discharge of leachate to the environment.	Compliant
20.	Prior to the construction of any new adits and the commencement of mining operations at Brackins Spur, the Applicant shall conduct investigations to determine whether potentially acid producing waste rock will be extracted during construction and mining. Should these investigations reveal the existence of potentially acid producing waste rock, management measures for this material shall be included in the EMP referred to in Condition 7.	Not Triggered
21.	<b>FLORA AND FAUNA</b> Prior to the commencement of construction, the Applicant shall consult with the OEH in relation to the possible occurrence of new eucalyptus species in the <i>Eucalyptus cypellocarpa</i> group on the subject land.	Not Triggered
22.	During construction of haul roads, all practical measures shall be implemented to reduce impacts on individuals and stands of <i>Eucalyptus michaeliana</i> and <i>Acacia ingramii</i> and <i>Allocasuarina torulosa</i> . These measures shall include, but not be limited to, the fencing and flagging of individuals and stands and, where practicable, the avoidance of blasting in the vicinity of these species.	Not Triggered
23.	The Applicant shall implement all appropriate measures to avoid disturbance of all mature hollow-bearing trees on the subject land. Should disturbance of mature hollow-bearing trees be unavoidable, a suitably qualified person shall, prior to disturbance, inspect the relevant tree/s for the presence of the Black Cockatoo <i>Calyptorhynchus lathamii</i> , the Red-tailed Black Cockatoo <i>Calyptorhynchus magnificus</i> and the Greater Broad-nosed Bat <i>Scoteanax rueppellii</i> . Should any these species be detected, the Applicant shall immediately contact OEH with regard to the implementation of appropriate measures to minimise impacts on these species.	Compliant
24.	Prior to the disturbance of any tunnels, adits or mine shafts on the subject land, the Applicant shall conduct an inspection for the presence of the Large Bent-wing Bat <i>Miniopterus schreibersii</i> . Should this species be detected, the Applicant shall contact OEH with regard to the implementation of appropriate measures to minimise impacts on the species.	Not Triggered
25.	Prior to the commencing the development, the Applicant must undertake consultation with Aboriginal stakeholders, in accordance with the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i> (DECCW, 2010), or its latest version.	Not Triggered
26.	<b>VEGETATION MANAGEMENT AND LANDSCAPE PLAN</b> The Applicant shall submit a detailed Vegetation Management and Landscape Plan with the Building Application lodged with Council, or at another date as agreed to by Council. The Plan shall be prepared by a suitably qualified person and shall address, but not be limited to, the following matters: details of likely vegetation loss, means to minimise such loss and additional tree planting to offset this loss;	Not Triggered

	details on screen planting around the new tailings storage facility, with particular attention to minimising the visibility of the facility from residences to the north; and details on the proposed landscaping treatment of the mine processing area and the new office area on the Bakers Creek Flat.	
27.	All landscaping and tree planting works shall be completed to the satisfaction of Council within 12 (twelve) months of the commissioning of the development.	Not Triggered
28.	<b>EXTERNAL APPEARANCE OF BUILDINGS AND STRUCTURES</b> All buildings and structures shall be constructed using suitably coloured, non-reflective materials to the satisfaction of Council. Details shall be submitted with the Building Application lodged with Council.	Compliant
29.	<b>TRAFFIC AND PARKING</b> All heavy vehicle movements associated with the subject development shall use the Stockton Road and Waterfall Way route for site ingress and egress.	Compliant
30.	Prior to the commencement of operations, the Applicant shall consult the RMS and Council on the funding and timing for the provision of a right hand turning lane (slip lane) for eastbound traffic on Waterfall Way at its intersection with Stockton Road. The turning lane shall be provided at the Applicant's expense.	Not Triggered
31.	On-site parking arrangements shall be to the satisfaction of Council.	Not Triggered
31A.	By the end of December 2020, unless otherwise agreed with the Secretary, the Applicant shall commission an independent road safety audit of the intersection of Waterfall Way and Stockton Road. This audit must:  be prepared by a suitably qualified person whose appointment has been approved by the secretary; and  recommend measures to reduce or mitigate any adverse (or potentially adverse) impacts to ensure that the intersection and its approaches comply with any relevant road safety requirements and are providing a satisfactory level of service.	Compliant
31B.	Within 1 month of receiving the road safety audit report, or as otherwise agreed with the Secretary, the Applicant shall submit a copy of the report to the Secretary with a detailed response to any of the recommendations contained in the report, including a timetable for the implementation of any measures proposed to address the recommendations in the report. Any road works recommended in the audit must be undertaken in accordance with this timetable to the satisfaction of the relevant road authority, unless otherwise agreed with the Secretary.	Not Triggered
31C.	The Applicant shall prepare and implement a code of conduct for all drivers transporting materials to and from the site on public roads. This code of conduct must be prepared in consultation with RMS and Council and be submitted to the Secretary for approval by the end of September 2015, unless otherwise agreed with the Secretary.	Not Triggered
32.	<b>NOISE</b> The applicant shall prepare a Noise and Vibration Management Plan in consultation with and to the approval of the EPA. The plan shall define the noise management procedures, monitoring protocols and measures for mitigating impacts including potential cumulative impacts, that can be implemented where necessary throughout the life of the Project under normal meteorological conditions.	Compliant
33.	The two 175kW air compressors within the Pressure Oxidation Plant shall be enclosed in insulated cabinets and shall meet the noise level requirements referred to in Condition 34. The insulated cabinets are to be installed prior to the operation of the compressors.	Not Triggered
34.	The Applicant shall ensure that the $L_{A10(15 \text{ minute})}$ noise levels due to the normal operation of the mine, when measured or computed at any residence (other than one owned by the Applicant), shall not exceed a noise level of 35 dB(A) or 30 dB(A) where	Non-Compliant

	<p>the noise source is tonal in nature and shall comply with the requirements of the Environmental Noise Control Manual and the Noise Control Act 1975.</p> <p>Should a noise complaint be received from any nearby residence, the Applicant shall investigate the complaint and implement appropriate mitigation measures as required. Any such complaints and subsequent actions undertaken by the Applicant shall be addressed in the Annual Environmental Management Plan Report (Condition 8).</p>	
35.	Noise measurement shall be undertaken under prevailing weather conditions, in the absence of temperature inversions and over a period of time sufficient to be representative of the noise levels being emitted from the mine.	Non-Compliant
36.	All above-ground blasting shall only be carried out between 9:00am and 3:00pm Monday to Friday. Blasting shall not be allowed on public holidays unless the Council in special circumstances and in consultation with the EPA, approves other times.	Not Triggered
37.	The Applicant shall give notice of proposed above-ground blasting times to residents within two (2) kilometres of the blasting site if requested by residents	Not Triggered
38.	<p><b>HERITAGE</b></p> <p>A "Consent to Destroy" application under section 90 of the National Parks and Wildlife Act 1974 must be submitted and issued by OEH for any Aboriginal archaeological sites that are to be damaged or destroyed as a result of any development.</p> <p>The Applicant shall consult with the relevant local Aboriginal groups and to the satisfaction of the OEH prior to a "Consent to Destroy" application being submitted.</p>	Not Triggered
39.	In the event that Aboriginal artefacts are identified on the site during development through earthworks, construction or operation of the quarry, the Applicant shall contact the OEH and cease work in the relevant location pending investigation and assessment of its heritage value by OEH and the relevant local Aboriginal groups.	Not Triggered
40.	The Applicant shall consult with the NSW Heritage Council, Council, Armidale Folk Museum and Hillgrove Mining Museum if any European Heritage items, including any future item listed as an environmental heritage item in the Dumaresq LEP 1985, would be potentially affected during the life of the subject development.	Not Triggered
41.	<p><b>AIR QUALITY</b></p> <p>The Applicant shall implement, in consultation with the EPA, dust control measures aimed at achieving relevant EPA dust deposition standards.</p>	Non-Compliant
42.	Dust sampling shall occur monthly within the development site at locations determined by the EPA with the results submitted annually to the EPA or such shorter intervals as required by the EPA	Compliant
43.	As part of the EMP/s referred to in Condition 7, the Applicant shall prepare a Dust Management Plan which is to have particular regard to the tailings dams, ore stockpiles, internal haul roads and processing facilities.	Compliant
44.	The Applicant shall undertake periodic dust monitoring at any nearby property as required by the EPA following the request of a resident. The Applicant shall notify the resident/s of the general results of dust monitoring. Monitoring results shall be included in the EMP Report (Condition 8).	Not Triggered
45.	<p><b>HAZARDS AND SAFETY</b></p> <p>At least one month prior to the commencement of construction of the proposed process plant (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Secretary may agree, the Applicant shall prepare and submit for the approval of the Secretary the studies set out in paragraphs (a) to (d) (the pre-construction studies) below.</p> <p>Construction, other than of preliminary works, shall not commence until the Secretary has given approval and, with respect to the fire safety study, the Commissioner of the NSW Fire Brigades has also given approval.</p> <p><b>FIRE SAFETY STUDY</b></p> <p>A fire safety study for the proposed development. This study shall cover all aspects detailed in the Department of Urban Affairs and Planning's <i>Hazardous Industry</i></p>	Not triggered

	<p><i>Planning Advisory Paper No. 2, "Fire Safety Study Guidelines". The study shall also be submitted for approval, to the NSW Fire Brigades.</i></p> <p>In particular the study should address the fire related issues associated with the storage and use of Ammonium nitrate, AN explosive emulsion, SIBX and PAX and Cyanide</p> <p><b>HAZARD AND OPERABILITY STUDY</b></p> <p>A Hazard and Operability Study for the proposed development, chaired by an independent qualified person approved by the Secretary prior to the commencement of the study. The study shall in particular address the monitoring, control, alarm and shutdown systems associated with the cyanide and xanthate process streams and be carried out in accordance with the Department of Urban Affairs and Planning's <i>Hazardous Industry Planning Advisory Paper No. 8, "HAZOP Guidelines"</i>.</p> <p><b>FINAL HAZARD ANALYSIS</b></p> <p>A final hazard analysis of the proposed development. The analysis should be prepared in accordance with the Department of Urban Affairs and Planning's <i>Hazardous Industry Planning Advisory Paper No. 6, "Guidelines for Hazard Analysis"</i>. The FHA shall in particular address in detail of issues associated with the possible release of toxic materials from processes or the ponds due to plant upsets;</p>	
46.	<p>No later than 2 (two) months prior to the commencement of commissioning of the proposed development, or within such further period as the Secretary may agree, the Applicant shall prepare and submit for the approval of the Secretary the studies set out under paragraphs (a) to (c) (the pre-commissioning studies) below.</p> <p>Commissioning shall not commence until the Secretary has given approval.</p> <p><b>TRANSPORT OF HAZARDOUS MATERIALS</b></p> <p>Arrangements covering the transport of hazardous materials including details of routes to be used for the movement of vehicles carrying hazardous materials to or from the proposed development. The study shall be carried out in accordance with the Department of Urban Affairs and Planning's draft <i>"Route Selection" guidelines</i>. Suitable routes identified in the study shall be used except where departures are necessary for local deliveries or emergencies.</p> <p>The study should also address</p> <p>issues associated with spills, cleanup procedures, training of clean-up teams, communication and liaison with organisations such as the fire Brigade and state emergency services</p> <p>the inspection and monitoring procedures for chemicals such as explosives, xanthates and cyanides prior to commencement of a trip, to verify the integrity of the packaging;</p> <p>measures to be taken to ensure that the temperature of the materials does not rise about safe levels</p> <p><b>EMERGENCY PLAN</b></p> <p>A comprehensive emergency plan and detailed emergency procedures for the proposed development. This plan shall include detailed procedures for the safety of all people outside of the development who may be at risk from the development. The plan shall be in accordance with the Department's <i>Hazardous Industry Planning Advisory Paper No. 1, "Industry Emergency Planning Guidelines"</i>.</p> <p><b>SAFETY MANAGEMENT SYSTEM</b></p> <p>A document setting out a comprehensive safety management system, covering all operations on-site and associated transport activities involving hazardous materials. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to procedures. Records shall be kept on-site and shall be available for inspection by the Secretary upon request. The Safety Management System shall be developed in accordance with the <i>Department's Hazardous Industry Planning Advisory Paper No. 9, "Safety Management"</i>.</p> <p>The SMS shall include details of:</p> <p>the location and control of all ignition sources throughout the plant;</p> <p>safety features used in storage, transporting and usage of Xanthates including temperature and moisture control and ventilation.</p>	Not Triggered

	equipment for monitoring cyanide levels and detection of system malfunction should have adequate redundancy in order to ensure a high level of integrity;  a detailed maintenance and testing program for the detection and shutdown systems should be included in the site safety manual and other relevant manuals;									
47.	<b>HAZARD AUDIT</b>  Twelve (12) months after the commencement of operations of the proposed development or within such further period as the Secretary may agree, the applicant shall carry out a comprehensive hazard audit of the proposed development and within one (1) month of the audit submit a report to the Secretary. The audit shall be carried out at the applicant's expense by a duly qualified independent person or team approved by the Secretary prior to commencement of the audit. Further audits shall be carried out every three (3) years or as determined by the Secretary and a report of each audit shall within one (1) month of the audit be submitted to the Secretary. Hazard audits shall be carried out in accordance with the Department's <i>Hazardous Industry Planning Advisory Paper No. 5, "Hazard Audit Guidelines"</i> .  The audit shall include a review of the site safety management system and a review of all entries made in the incident register since the previous audit.	Non-Compliant								
48.	Within one (1) month of the date of this consent that Applicant shall consult with WorkCover NSW with regard to the storage and use of dangerous goods. At this time, the Applicant shall ensure that all WorkCover licences are valid.	Not Triggered								
49.	<b>REHABILITATION</b>  The Applicant shall rehabilitate the site to the satisfaction of DRG. This rehabilitation must be generally consistent with the objectives in Table 1.  <table><tr><th>Feature</th><th>Objective</th></tr><tr><td>Mine site (as a whole)</td><td><ul style="list-style-type: none"><li>Safe, stable &amp; non-polluting</li><li>Final land use compatible with surrounding land uses</li><li>Site to be revegetated with suitable plan species</li></ul></td></tr><tr><td>Surface infrastructure</td><td><ul style="list-style-type: none"><li>To be decommissioned and removed, unless DRG agrees otherwise</li></ul></td></tr><tr><td>Community</td><td><ul style="list-style-type: none"><li>Ensure public safety and minimise the adverse socio-economic effects associated with mine closure</li></ul></td></tr></table> <i>Notes:</i> <ul style="list-style-type: none"><li>These rehabilitation objectives apply to all environmental consequences cause by mining taking place after the date of this consent, and to all surface infrastructure and other disturbance which forms part of the development under this consent.</li><li>Rehabilitation of environmental impacts and consequences caused by mining which took place prior to the date of this consent may be subject to the requirements of other consents and/or applicable mining leases.</li></ul>	Feature	Objective	Mine site (as a whole)	<ul style="list-style-type: none"><li>Safe, stable &amp; non-polluting</li><li>Final land use compatible with surrounding land uses</li><li>Site to be revegetated with suitable plan species</li></ul>	Surface infrastructure	<ul style="list-style-type: none"><li>To be decommissioned and removed, unless DRG agrees otherwise</li></ul>	Community	<ul style="list-style-type: none"><li>Ensure public safety and minimise the adverse socio-economic effects associated with mine closure</li></ul>	Compliant
Feature	Objective									
Mine site (as a whole)	<ul style="list-style-type: none"><li>Safe, stable &amp; non-polluting</li><li>Final land use compatible with surrounding land uses</li><li>Site to be revegetated with suitable plan species</li></ul>									
Surface infrastructure	<ul style="list-style-type: none"><li>To be decommissioned and removed, unless DRG agrees otherwise</li></ul>									
Community	<ul style="list-style-type: none"><li>Ensure public safety and minimise the adverse socio-economic effects associated with mine closure</li></ul>									
50.	The Applicant shall carry out the rehabilitation of the site progressively, that is, as soon as reasonably practicable following disturbance.	Compliant								
51.	The Applicant shall prepare and implement a Rehabilitation Management Plan for the development, in consultation with the Department, OEH and Council, and to the satisfaction of DRG. This plan must:  be submitted to DRG for approval by the end of December 2015, unless otherwise agreed with the Secretary;  be prepared in accordance with any relevant DRG guideline and be consistent with the rehabilitation objectives in Table 1;  describe how the performance of the rehabilitation would be monitored and assessed against the objectives in Table 1; and  be integrated with the other management plans required under this consent.	Not Triggered								
52.	<b>REVISION OF STRATEGIES AND PLANS</b>  The Applicant shall review and revise all plans required under this consent and submit these revised documents to the Secretary for approval by December 2015, unless otherwise agreed with the Secretary.	Not Triggered								
53.	Within 3 months of:  an annual environmental management plan report under condition 8;  an audit under condition 10; or	Non-Compliant								



	<p>any modification to the conditions of this consent (except Modification 3).</p> <p>the Applicant shall review, and if necessary, revise the plans required under this consent to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review, the revised document must be submitted to the Secretary for approval.</p> <p><i>Note: This is to ensure the plans are updated on a regular basis and incorporate any recommended measures to improve the environmental performance of the development.</i></p>	
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