HERA ANNUAL REVIEW
REPORTING PERIOD 1 JULY 2022 TO 30 JUNE 2023

Name of Operation	HERA MINE
Name of Operator	Hera Resources Pty Ltd
Development Consent / Project Approval #	PA 10_0191
Name of holder of development consent / project approval	Hera Resources Pty Ltd
Mining Lease #	MINING LEASE 1686 MINING LEASE 1746
Name of Mining Lease Holder:	Hera Resources Pty Ltd
Water Licence #	WAL 43173
Name of holder of water licence	Aurelia Metals Ltd
Annual Review Commencement Date:	1 July 2022
Annual Review Completion Date:	30 June 2023

I, Mark Williams, certify that this audit report is a true and accurate record of the compliance status of Hera Mine for the period 1 July 2022 to 30 June 2023 and that I am authorised to make this statement on behalf of Hera Resources Pty Ltd.

Note.

a) *The Annual Review is an 'environmental audit' for the purposes of clause 9.39(2) of the Environmental Planning and Assessment Act 1979. Clause 9.42 provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, $1 million and for an individual, $250,000.*

b) *The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud or misleading statement – maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents – maximum penalty 2 years imprisonment or $22,000, or both).*

Name of Authorised Reporting Officer:	Mark Williams
Title of Authorised Reporting Officer:	Environment Superintendent – Hera - Environment
Signature of Authorised Reporting Officer:	
Date:	31 August 2023

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Abbreviations

Term	Definition
µg	Micrograms
µm	Micrometer
BCS	Biodiversity, Conservation and Science Directorate
BSA	Biodiversity Stewardship Agreement
CCC	Community Consultative Committeee
dB	Decibel
DDG	Dust deposition gauge
DPE	Department of Planning and Environment
EA	Environmental Assessment
EPA	Environmental Protection Authority
EPL	Environment Protection Licence
$g/m^2/month$	Grams per square meter per month
ha	Hectare
HVAS	High Volume Air Sampler
Insoluble Solids	The insoluble portion of the dust deposited in dust deposition gauge
m^3	Cubic metre
ML	Mining Lease
mm/s	The peak of the vibration in millimeters per second
MOP	Mining Operations Plan
MP	Monitoring Point
NRAR	Natural Resources Access Regulator
NSW	New South Wales
Oz	Ounce
PA	Project Approval
PM_{10}	Particulate Matter less than 10µm
PPE	Personnel Protective Equipment
RMP	Rehabilitation Management Plan
RR	Resources Regulator
SDS	Safety Data Sheet
SWL	Standing Water Level
t	Tonne
tpa	Tonnes Per Annum
TSF	Tailings storage facility
TSP	Total Suspended Particulates
WAL	Water Access Licence
WLL	Western Lands Lease
WRE	Wate Rock Emplacement
WAD	Weak Acid Dissociable Cyanide

1. STATEMENT OF COMPLIANCE

A summary of compliance at Hera Mine during 1 July 2022 to 30 June 2023 is provided in **Table 1**.

Table 1: Statement of Compliance

Were all conditions of the relevant approval(s) complied with?	
PA 10_0191	no
EPL 20179	no
Mining Lease 1686	no
Mining Lease 1746	yes
Water Access Licence 43173	yes

A summary of the non-compliances during the reporting period have been summarised in **Table 2.** The non-compliances during the FY2023 reporting period are discussed further in **Section 11**. The non-compliance categories are described in **Table 3**.

Table 2: Non-compliances during the reporting period

Relevant Approval	Condition No.	Condition description summary	Compliance Status	Comments	Where Addressed
PA 10_0191	18	Water discharges - s.120 POEO ACt	Non-Compliant	Pipe burst caused slurry from thickner to overflow into drain area within contaminated catchment.	6.4.3
EPL 20179	L1.1	Water discharges - s.120 POEO ACt	Non-Compliant	Pipe burst caused slurry from thickner to overflow into drain area within contaminated catchment.	6.4.3
EPL 20179	P1.1	Gold room stack monitoring	Non-Compliant	Gold room stack monitoring was not carried out as the site moved into care and maintenance; it was not possible to schedule.	7.2.2
EPL 20179	M2.3	Water and/ or Land Monitoring Requirements	Non-Compliant	Groundwater unable to be sampled during to access issues.	8.3.3

Table 3: Compliance status categories

Risk Level	Colour Code	Description
High	Non-Compliant	Non-compliance with potential for significant environmental consequences, regardless of the liklihood of occurrence.
Medium	Non-Compliant	Non-compliance with the potential for serious environmental consequences but is unlikely to occur; or potential for moderate environmental consequences but is likely to occur.
Low	Non-Compliant	Non-compliance with potential for moderate environmental consequences but is unlikely to occur; or potential for low environmental consequence but is likely to occur.
Administrative non-compliance	Non-Compliant	Non-compliance whichh does not result in any risk of environmental harm.

2. INTRODUCTION

2.1. SUMMARY

Hera Mine (Hera) is an underground metalliferous mine owned by Hera Resources Pty Ltd (Hera Resources), a wholly owned subsidiary of Aurelia Metals Limited (Aurelia). The mine is located approximately 100km southeast of Cobar and approximately 4km south of Nymagee in the central west of New South Wales (NSW) (refer **Figure 1**). The site consists of an underground mine, a run-of-mine (ROM) pad, temporary waste rock emplacement (WRE), processing plant, tailings storage facility (TSF), and associated infrastructure and ancillary activities (refer **Figure 2**).

The Hera site transitioned into care and maintenance during April 2023 with all mining and processing operations ceasing during May 2023.

The site operates in accordance with Project Approval (PA) 10_0191 which was issued by the Department of Planning and Environment (DPE) on 31 July 2012 under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). In August 2018, Hera Mine was transitioned to a State Significant Development under Part 4, Division 4.7 of the EP&A Act by a noticed published in the NSW Government Gazette. PA 10_0191 has since been modified six times with the sixth modification (MOD 6) approved on the 18 June 2021.

In addition, several local development consents have been issued relating to Hera. Development Consent 2012/LD-00004 was granted by Cobar Shire Council on 14 March 2012 for the mine camp, including accommodation facilities, ablution facilities, a wastewater treatment facility, communal facilities and a communal car park. Development Consent 2019/LD-00027 was granted by Cobar Shire Council on 13 December 2019 for the installation of the Nymagee Pipeline allowing for the pumping of water from the historic Nymagee Copper Mine to the Hera Mine for use in operations. Furthermore, during the previous reporting period, Development Consent 2021/LD-00010 was granted by Cobar Shire Council on 13 July 2021 for the expansion of the Hera Village auxiliary facilities.

On 2 March 2023 State Significant Development (SSD-24319456) for the Federation Project was approved by DPE subject to conditions. Within 12 months of the date of physical commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must surrender development consent MP10_0191 for the Hera Gold Mine, the operation of the Hera site will transition over to thIs new consent. As of the date of publishing this Annual Review, the Federation Project has not physically commenced.

The site also operates in accordance with Mining Lease (ML) 1686 (issued 16 May 2013) and ML 1746 (issued 7 December 2016) issued under the *Mining Act 1992* (Mining Act), as well as Environment Protection Licence (EPL) 20179.

This Annual Review has been prepared for the period from 1 July 2022 to 30 June 2023 (herein referred to as the reporting period), and has been prepared in accordance with the following:

- Schedule 5, Condition 4 of PA 10_0191.

Copies of this Annual Review are distributed to DPE, Resources Regulator (RR), Natural Resources Access Regulator (NRAR), Environment Protection Authority (EPA), NSW Environment, Biodiversity Conservation and Science Directorate, Crown Lands, Cobar Shire Council, and Bogan Shire Council. Additionally, a copy will be made available on the Aurelia Metals website for the public.

2.2. MINE CONTACTS

Table 4 lists the site contacts for Hera.

Table 4: Mine Contacts

Name	Role	Phone Number	Email address
Michelle Tracey	Project Director	0438 738 706	michelle.tracey@aureliametals.com.au
Mark Williams	Environment Superintendent	0447 257 312	mark.williams@aureliametals.com.au
Jonathon Thompson	Group Manager - Environment and Community	0488 065 144	jonathon.thompson@aureliametals.com.au
General Enquiries /Complaints	-	1800 437 264	hera.community@aureliametals.com.au

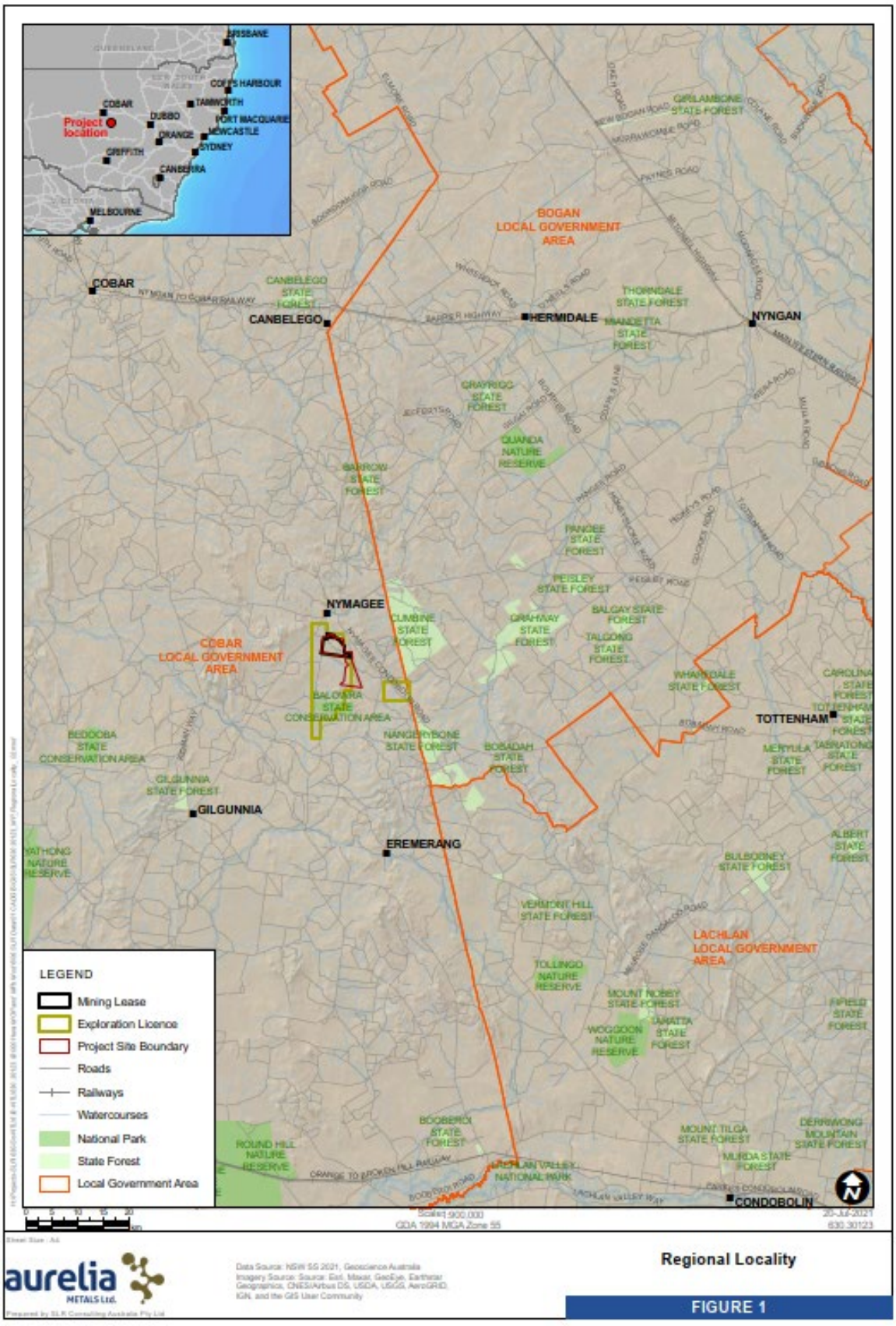

Figure 1 - Regional locality

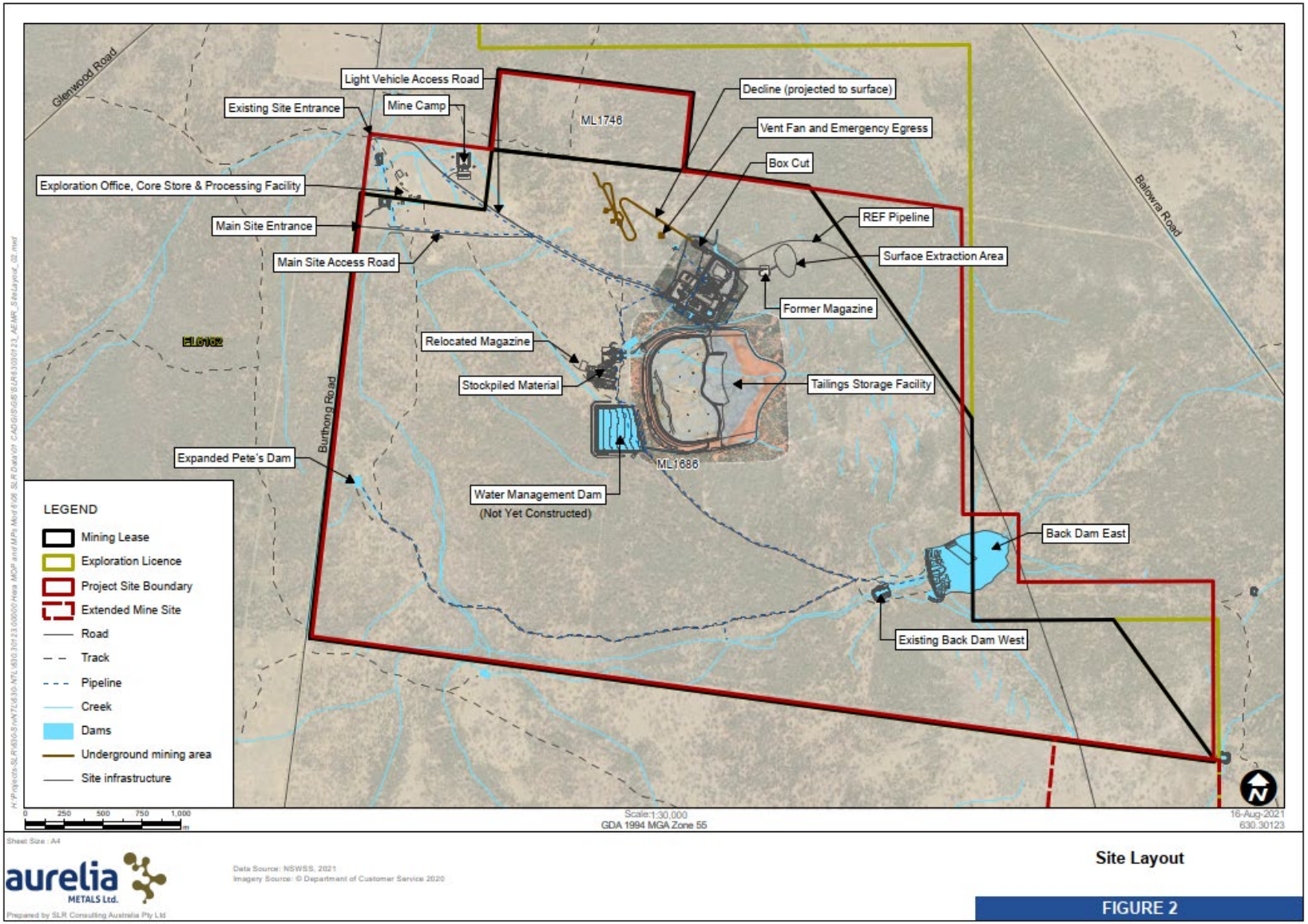

Figure 2 - Hera Mine layout

3. APPROVALS

3.1. OVERVIEW

Table 5 lists the relevant consents, leases and licences associated with Hera Mine. These are discussed in further detail in the following sections.

Table 5: Consents, leases and licences

Consent/Lease/Licence	Licence Number	Date of Issue	Expiry	Relevant Authority
Project Approval	10_0191	31 July 2012	31 December 2025	DPE
Development Consent	2012/LD-00004	14 March 2012	N/A	Cobar Shire Council
Development Consent	2019/LD-00027	13 December 2019	N/A	Cobar Shire Council
Development Consent	2021/LD-00010	13 July 2021	N/A	Cobar Shire Council
Mining Lease	ML 1686	16 May 2013	16 May 2034	Resources Regulator
Mining Lease	ML 1746	7 December 2016	7 December 2037	Resources Regulator
Exploration Lease	EL 6162	26 November 2003	26 November 2024	Resources Regulator
Environment Protection Licence	20179	18 March 2013	N/A - Anniversary date 18 March	EPA
Water Access Licence (WAL)	WAL 43173	6 March 2020	N/A	NRAR
Western Land Lease	WLL 2455	4 April 1911	Perpetual Lease	Crown Lands
Western Land Lease	WLL 5379	8 November 1943	Perpetual Lease	Crown Lands
Dangerous Goods Licence	35/038197	22 November 2011	Expires: N/A	SafeWork NSW
Explosives Licence	XSTR200011	2012	6 June 2027	SafeWork NSW
Explosives Licence	XSTR200131	18 November 2022	22 August 2027	SafeWork NSW
Radiation Licence	5066818	16 April 2019	N/A - Anniversary date 30 July	EPA

3.2. PROJECT APPROVAL

3.2.1. PA 10_0191

PA 10_0191 (as modified) allows for the processing of up to 505,000 tonnes of ore, and transportation of up to 60,000 tonnes of concentrate from the site per calendar year, until 31 December 2025. Six modifications to PA 10_0191 have been approved, as summarised below:

- MOD 1 – Extension of onsite powerlines from the surface ventilation fan to the mine camp (determined 11 July 2013);
- MOD 2 – Modification to the approved haulage route along Nymagee-Hermidale Road (determined 21 November 2014);
- MOD 3 – Increase to the ore production rate and construction of supporting infrastructure (determined 25 February 2016);
- MOD 4 – Extension to the approved project boundary to extract and process an additional 62,000 t of gold-zinc-lead ore (determined 21 September 2016);
- MOD 5 - Increasing the rate of transportation of concentrate from Hera to the Hermidale rail siding to 60,000 t per calendar year, installation of a Water Management Dam and increasing the height of the Southern WRE; and

- MOD 6 – Transportation of up to 100,000tpa from the Hera Mine to the Peak Mine, with backloading of a similar amount of waste rock, paste plant, surface extraction area, amendment of point source weak Acid Dissociable (WAD) cyanide limits, extension of operations to 31 December 2025, extension of the site boundary and importation and batch processing of a bulk sample and importation of waste rock and water from the Federation Exploration Decline Program (determined 18 June 2021).

The conditions of PA 10_0191 as relevant to this Annual Review, and where they have been addressed in this document, are provided in **Table 6** below.

Table 6: PA 10_0191 Annual Review Conditions

Condition	Where addressed
Monitoring of Concentrate Transport 37. The Proponent shall: (a) keep accurate records of the: (i) amount of lead and zinc concentrate transported from the site (on a monthly basis); (ii) amount of ore transported from the site to Peak Mine (on a monthly basis); (iii) amount of waste rock transported to the site (on a monthly basis); (iv) the date and time of loaded truck movements from the site; and (b) provide the Secretary with a summary of these truck movements in the Annual Review.	Section 6.9
Annual Review **Schedule 5** 4. By the end of December each year (or other such timing as agreed by the Secretary), the Proponent shall review the environmental performance of the project to the satisfaction of the Secretary. This review must: (a) describe the development (including any rehabilitation) that was carried out in the past year, and the development that is proposed to be carried out over the next year;	Section 4
(b) linclude a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the: (i) the relevant statutory requirements, limits or performance measures/criteria; (ii) requirements of any plan or program required under this approval; (iii) the monitoring results of previous years; and (iv) the relevant predictions in the EA;	Section 6
(c) identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance;	Sections 1 and 11
(d) identify any trends in the monitoring data over the life of the project;	Section 6
(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and	Section 6
(f) describe what measures will be implemented over the next year to improve the environmental performance of the project.	Section 6
(g) report on water extracted from the site each year (direct and indirect) including water taken under each water licence.	Section 7
ACCESS TO INFORMATION 11. Prior to the commencement of construction on the site, the Proponent shall: (a) make copies of the following publicly available on its website: (vii) the annual reviews required under this approval; and (b) keep this information up-to-date.	Section 9.2

3.2.2. DA 2012/LD00004

Development consent 2012/LD-00004 was granted by Cobar Shire Council on 14 March 2012 for the construction and use of a mine camp, including accommodation facilities, ablution facilities, a water treatment facility, communal facilities and a communal car park.

3.2.3. DA 2019/LD-00027

Development consent 2019/LD-00027 was granted by Cobar Shire Council on 13 December 2019 for the construction of the Nymagee pipeline. The Nymagee pipeline is connected to the historic Nymagee Copper Mine and water is transferred to Hera for use in operations.

3.2.4. DA 2021/LD-00010

Development consent DA 2021/LD00010 was granted by Cobar Shire Council on 13 July 2021 for the expansion of the Hera Mine Camp.

3.3. Leases

Hera Resources currently holds two mining leases ML 1686 and ML 1746.

3.4. Licences

3.4.1. EPL 20179

Hera operates under EPL 20179, with an anniversary date of 18 March. Monitoring results are reported to the EPA as part of the EPL Annual Return. The EPL was reviewed as part of the EPA 5 Yearly review process. During the reporting period, no Section 58 Licence Variations were sought, and no Section 91 Clean Up Notices were received from the EPA.

The environmental reporting and monitoring activities undertaken at Hera as required under EPL 20179, are discussed in Section 6 and Section 7.

3.4.2. Water Access Licence

Hera currently holds WAL 43173 which permits extraction of up to 543 ML per year.

3.4.3. Other Licences

Hera currently holds explosives licence XSTR200011 and XSTR200131, Dangerous Goods Licence 35/038197 and Radiation Licence 5066818.

3.5. Other Approvals

3.5.1. REHABILITATION MANAGEMENT PLAN

Hera operates in accordance with the approved Mining Operations Plan (MOP) which covers the period from 1 January 2020 to 2 August 2022. During the reporting period mining activities were taken in accordance with the MOP (1 January 2020 to 2 August2022). Following the expiry of the existing MOP, Hera began the process of transitioning to the new complaince reporting requirements for rehabilitation as set out by the RR. The MOP was replaced by a Rehabilitation Management Plan (RMP) which was submitted on 1st August 2022 as required by the RR.

3.5.2. Western Land Lease 2455

The Hera Mine is located on land held by Hera Resources under Western Lands Lease No. (WLL) 2455, granted under the *Western Lands Act 1901* and managed by Crown Lands.

3.5.3. Western Land Lease 5379

The Hera Mine extension to the south (approved via MOD6) is located on land held Hera Resources under WLL 5379, granted under the *Western Lands Act 1901* and managed by Crown Lands.

4. OPERATIONS SUMMARY

4.1. MINING OPERATIONS

4.1.1. Exploration

Hera conducts exploration activities within ML 1686 and ML 1746 in accordance with the RMP.

During the reporting period only 6m of exploration drilling was completed.

No exploration boreholes were grouted during the period. Site tracks have been closed where it has been deemed no further exploration activities will be undertaken.

4.1.2. Land Preparation

No Land preparation was undertaken.

4.1.3. Mining

Mining for the period was undertaken using conventional bench stoping mining techniques. **Figure 3** presents a schematic overview of this mining method. Stope voids are backfilled with waste rock material from concurrent underground development and, if required, additional waste rock material is transported from the WRE on the surface or the approved onsite borrow pit.

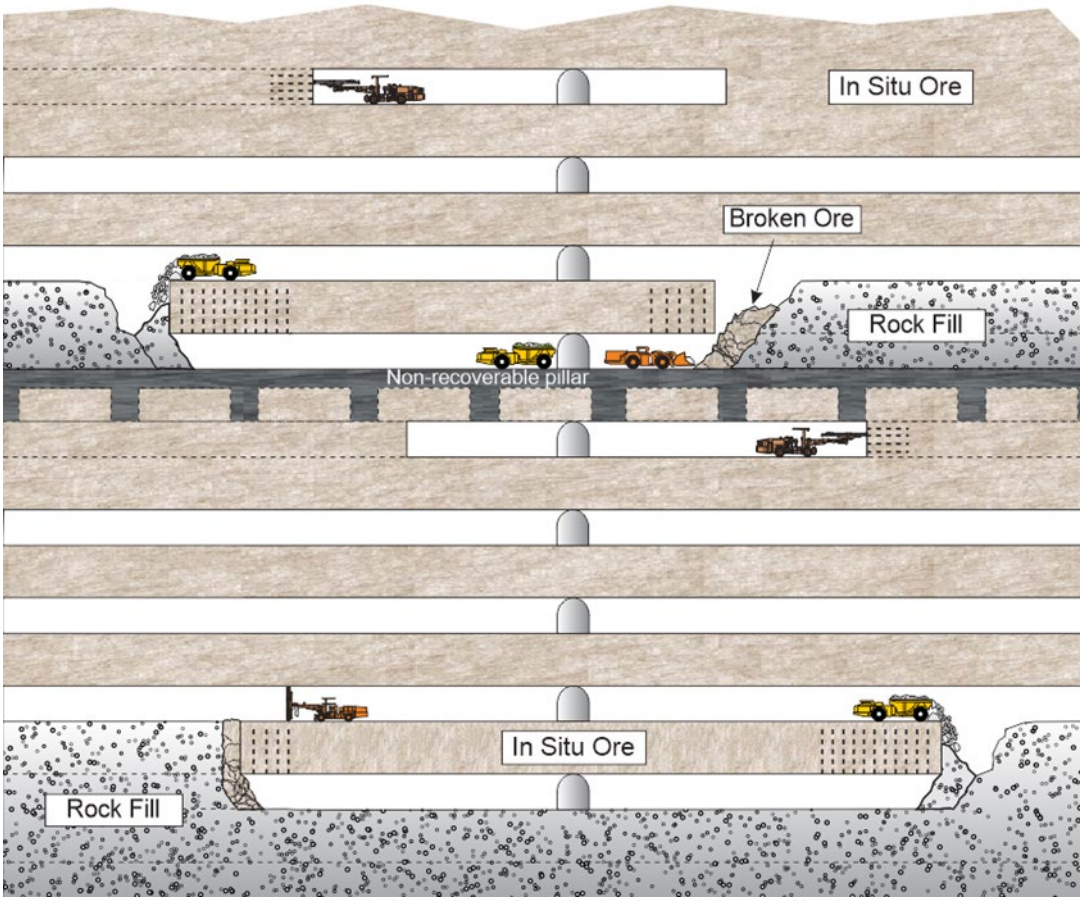

Figure 3 - Schematic of bench stoping mining method

Mining activities conducted during the financial year period (1 July 2022 to 30 June 2023) are summarised in **Table 7.**

Table 7: Production summary for the FY2023 period

Material	Approved Limit (PA 10_0191)	FY 2023 MOP Prediction	FY 2021 (Actual)	FY 2022 (Actual)	FY 2023 (Actual)	FY 2024 (Forecast)
Waste Rock	N/A	-68,000 t	0 t	0 t	0 t	0 t
ROM Ore	505,000 t	486,000 t	445,828	335,102 t	378,913 t	0 t
Tailings (Solids)	N/A	400,000 t	402,436 t	285,242 t	260, 161 t	0 t
Saleable Product (Gold)	N/A	22,500 oz	31,369 oz	16,478 oz	13, 486 oz	0 oz
Saleable Product (Lead / Zinc Bulk Concentrate)*	N/A	51,500 t	45,596 t	50,713 t	22,352 t	0 t

* No annual production limit for concentrate however can only transport up to 60,000tpa (calendar year).

In addition to the financial year values presented in **Table 7**, Hera Mine also reports against development consent requirements per calendar year. The volume of ROM ore produced during the 2022 calendar year (327,732 t) was within the approved 505,000 t limit stipulated in PA 10_0191.

No waste rock was brought to the surface during the reporting period, as described in **Table 7.** Waste rock will be brought to the surface as part of the Fedaration Project box cut and exploration decline development. NAF material will be stockpiled for road constrction and future rehabiliation activities. PAF material will be stockpiled for future stope backfilling in accordance with the conditions of approval.

4.1.4. Mineral Processing and Transport

During FY2023, approximately 260,161 t of tailings (solids), 13,486 oz of gold ore (unrefined bars), and 22,352 t of lead/zinc bulk concentrate were produced from the processing plant. All tailings were disposed of in the TSF.

Gold ore is transported offsite by security van and zinc/lead concentrate is transported by road-train to the Hermidale rail siding.

During the 2022 calendar year, Hera Mine transported 38,651.51 t of concentrate from the site, which is within the 60,000t limit stipulated within PA 10_0191.

4.1.5. Stockpiled Materials

Ore is not stockpiled at the site and is processed without delay. Waste rock from the underground is temporarily stockpiled in the WRE when required, and soil is stockpiled around the site. Waste rock and soil stockpile activities in the reporting period are summarised in Table 8.

Table 8: Stockpile details for the FY2023 reporting period.

Material	Approved Limit (PA 10_0191)	Stockpiles Previous Reporting Period (Actual)	Stockpiles FY2023 Reporting Period (Actual)	Next Reporting Period (Forecast)
Waste Rock stockpiled in WRE	n/a	0 m^3	0 m^3	0 m^3
Soil Stockpiled	n/a	181,361 m^3	181,361 m^3	181,361 m^3
Soil Used	n/a	0 m^3	0 m^3	0 m^3

No soil was used during the reporting period or is planned to be used during the next reporting period.

4.1.6. Construction

During the reporting period, works commenced on the construction of the box cut and associated infrastructure such as administration buildings, workshop, explosives magazine for the Federation project.

4.1.7. Hours of Operation

During the reporting period, all activities were undertaken in accordance with the approved hours of operation.

The approved hours of operation are:

- Vegetation clearing and topsoil stripping - 7am to 6pm, 7 days per week;
- Construction - 24 hours, 7 days per week;
- Construction of the Water Management Dam – daylight hours, 7 days per week;
- Mining, maintenance and processing operations – 24 hours, 7 days per week;
- Rehabilitation - Day / Evening;
- Transportation of lead and zinc concentrate and gold ore from the site – daylight hours, 7 days per week;
- Transportation of ore from the site – daylight hours, 7 days per week; and
- Transportation of waste rock to the site – daylight hours, 7 days per week.

4.1.8. Waste Management

Waste materials are recycled where possible. All waste materials removed from site are done so by licensed contractors. A summary of waste disposal during the reporting period is summarised in **Table 9.**

Table 9: Waste Mangement during the FY2023 reporting period.

Waste Stream	Description	Quantity (t)
General waste	General waste for disposal.	163.06
General recyclables	General mixed recyclables.	228.64
Hazardous waste disposal	Oily Rags/absorbents, absorbent contaminated waste, chemicals, pond liners.	11.57
Hazardous waste recycled	Oil filters, waste grease, solvents	52.02

4.1.9. Hazardous Materials Management

Hazardous materials are managed according to the *Hazardous Materials Management Plan*. The *Hazardous Materials Management Plan* has been revised and updated as part of the MOD 6 review. It has been submitted to the relevant government agencies for consultation and approval.

Hazardous Materials management during the reporting period has included the following:

- Regular area-specific environmental inspections to ensure all hazardous materials are stored in accordance with relevant legislation and regulations;
- Purchase of bunds suitable for storage of integrated bulk containers (IBCs) and drums;
- Explosives are stored in a fit-for-purpose magazine;
- Updating of the hazardous materials register as required;
- Updating of Safety Data Sheets (SDS) as required;
- Training of staff and contractors during inductions or as required;
- Maintaining the licence to store hazardous and explosive materials during the period;
- The cyanide storage system has been purged and remains and empty of product.

4.2. NEXT REPORTING PERIOD

Development of the exploration decline at Federation will continue during the next reporting period including raise bores for ventilation, service and escape shafts.

Upgrade works to bitumen Burthong Road and upgrade the Priory Tank Road intersections are scheduled to start in September 2023.

5. ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEWS

The 2021 - 2022 Annual Review was submitted to the DPE, RR, EPA, Cobar Shire Council and Bogan Shire Council. An approval letter was received from DPE noting that the document was satisfactory. Commitments made by Hera Resources in the previous Annual Review, and their status, are provided in **Table 10**.

Table 10: Actions required from 2021-2022 Annual Review

Actions Required from Previous Annual Review	Action Taken by Operator	Where discussed
Comments from DPE		
This document is satisfactory	N/A	-
Comments from Resources Regulator		
No comment received	N/A	-
Comments from DPE Biodiversity, Conservation and Sciences Directorate (BCS)		
• Section 6.5.2 indicates that no environmental surveys were conducted for the 2021-2022 financial year due to Covid-19 restrictions. BCS notes that Hera mine has scheduled environmenal monitoring for the second quarter of the 2022-2023 financial year. • BCS notes that a Biodiversity Stewardship Agreement (BSA) for the the Chelsea Property has been submitted to the Biodiversity Conservation Trust for determination, and that Hera mine anticipates an outcomes during the 2022-2023 reporting period.	N/A	The BSA was approved in December 2021. -
Commitments made by Hera in previous Annual Review		
Hera-Federation Pipeline	Pipeline commenced	-

6. ENVIRONMENTAL PERFORMANCE

This section outlines the environmental performance of the mine during the reporting period. Environmental management, monitoring and key issues have been outlined for the relevant environmental aspects. It should be noted that as the mine is a hard rock metalliferous mine, issues such as subsidence, spontaneous combustion, and methane drainage/ventilation (requirements of the Annual Review Guideline) are not applicable.

6.1. METEOROLOGY

In accordance with Schedule 3, Condition 16 of PA 10_0191, and Condition M4 of EPL 20179, Hera continued to operate the meteorological station throughout the reporting period. The meteorological station is located in the north-west of the site (refer **Figure 5**), and monitors rainfall, wind speed, wind direction, temperature, sigma theta, solar radiation and relative humidity.

In general, the reporting period was drier when compared to the previous reporting period. Total annual rainfall was 543.4 mm, compared to 639.2 mm during 2021/22. The daily minimum and maximum temperature as measured at 10m ranged from -5.92°C to 39.83°C respectively, with an average daily maximum of 29.40°C. Average daily wind speeds ranged from 6.5 to 10.3 km/h, with a maximum wind gust of 47.6 km/h.

Rainfall and wind speed data has been summarised in **Figure 4,** temperature data in **Figure 6**, wind direction data in **Figure 7** and Sigma Theta and relative humidity data in **Figure 8**. The meteorological

monitoring results provide context for the environmental monitoring and management discussed further in this document.

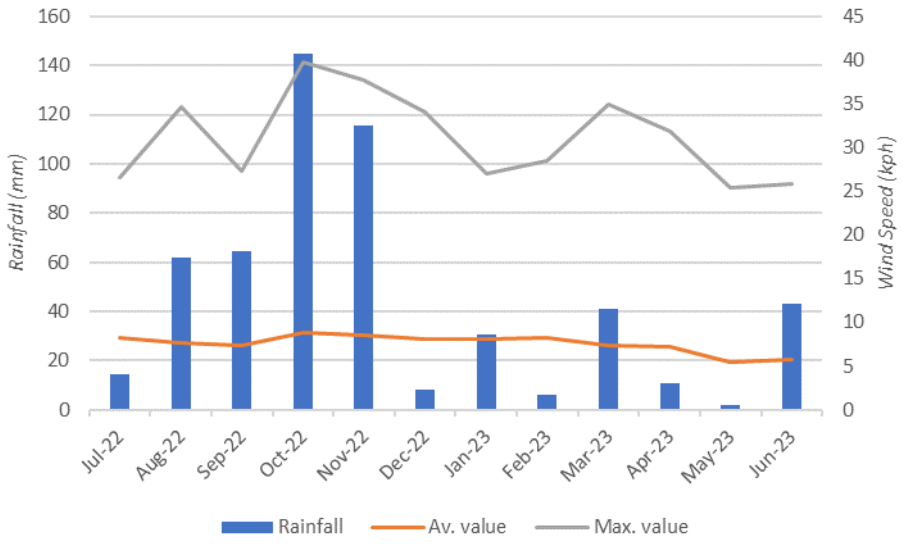

Figure 4 - Summary of meteorological conditions for the FY2023 reporting period.

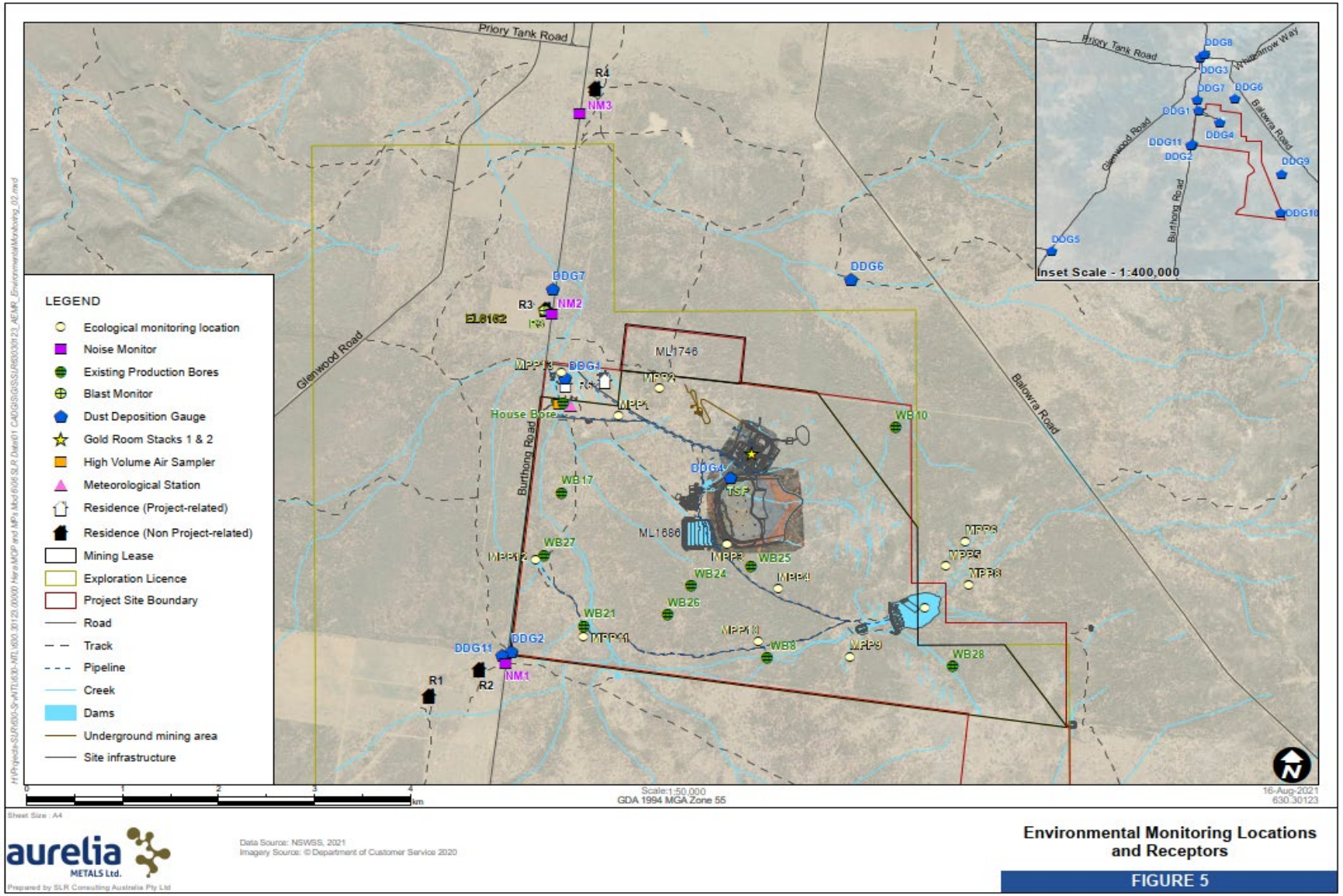

Figure 5 - Environmental Monitoring locations and receptors

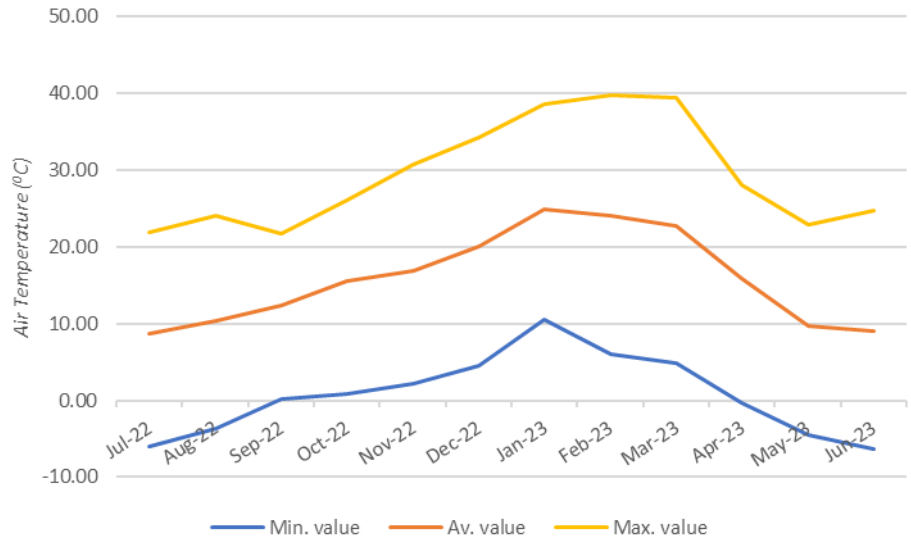

Figure 6 - Temperature Summary for the Reporting Period

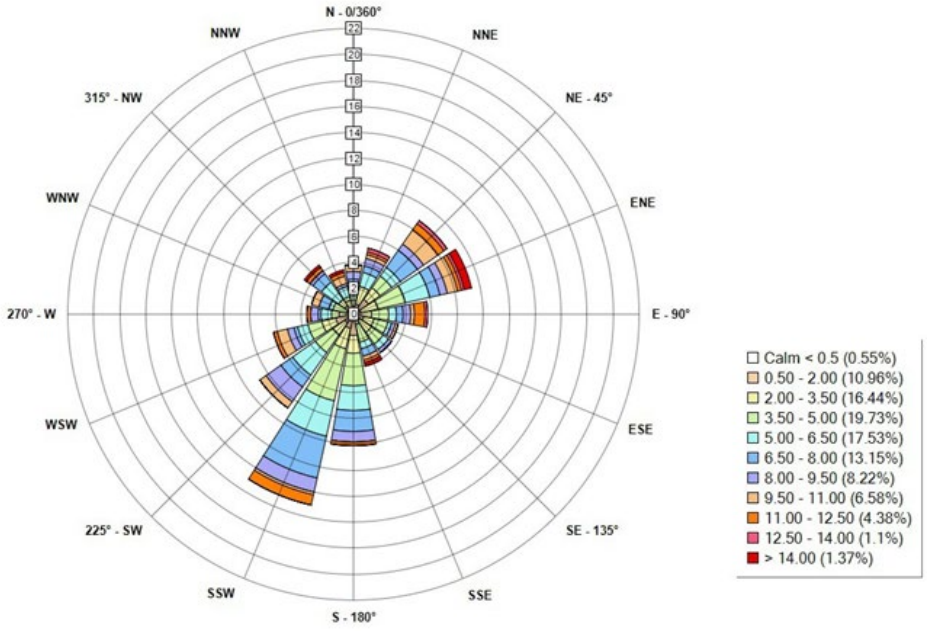

Figure 7 - Wind Rose for Hera (1 July 2022 to 30 June 2023) - Direction wind coming from.

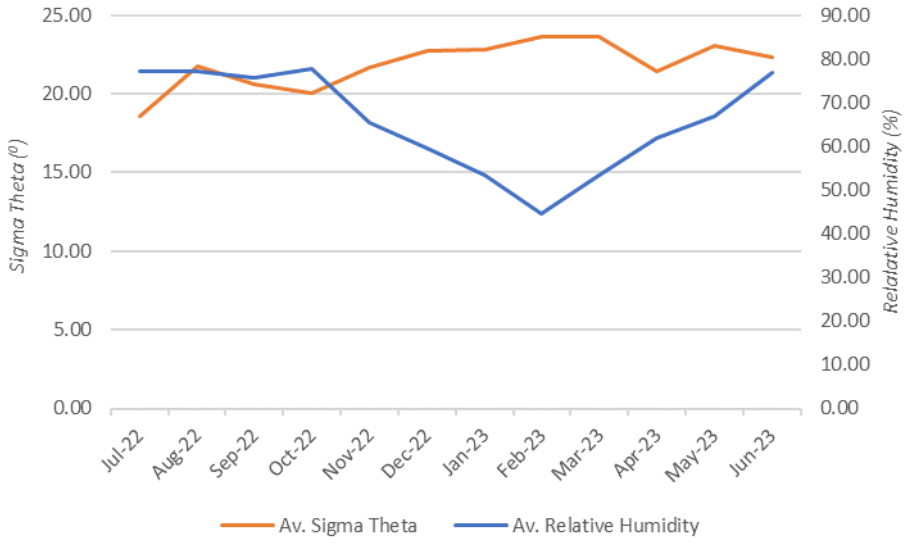

Figure 8 - Sigma Theta and Relative Humidity.

6.2. AIR QUALITY AND GREEN HOUSE GAS

6.2.1. Environmental Management

Management of air quality and greenhouse gas is undertaken in accordance with the *Air Quality and Greenhouse Gas Management Plan*. Hera operates the following air quality monitors:

- DDG1 – Depositional dust gauge monitoring deposited dust at the nearest receptor (R3). Dust is monitored continuously and reset on a 30 ± 2 day cycle;
- DDG2 - Depositional dust gauge monitoring deposited dust at the nearest receptors (R1/R2). Dust is monitored continuously and reset on a 30 ± 2 day cycle;
- DDG3 – Deposition dust gauge monitoring deposited dust on the Nymagee Mining Lease. Dust is monitored continuously and reset on a 30 ± 2 day cycle;
- DDG4 – Deposition dust gauge monitoring deposited dust impacts close to the source. Dust is monitored continuously and reset on a 30 ± 2 day cycle;
- DDG5 – Deposition dust gauge monitoring deposited dust south-west of the mine site (background). Dust is monitored continuously and reset on a 30 ± 2 day cycle;
- DDG6 – Deposition dust gauge monitoring deposited dust north-east of the mine site (background). Dust is monitored continuously and reset on a 30 ± 2 day cycle;
- DDG7 – Deposition dust gauge monitoring deposited dust north of the mine on Tar Road. Dust is monitored continuously and reset on a 30 ± 2 day cycle;
- DDG8 – Deposition dust gauge monitoring deposited dust in the Nymagee village. Dust is monitored continuously and reset on a 30 ± 2 day cycle;
- DDG9 – Deposition dust gauge monitoring deposited dust east of the mine site (background). Dust is monitored continuously and reset on a 30 ± 2 day cycle;
- DDG10 – Deposition dust gauge monitoring deposited dust south-east of the mine site (background). Dust is monitored continuously and reset on a 30 ± 2 day cycle;
- DDG11 – Deposition dust gauge monitoring deposited dust west of Tar Road near DDG2. Dust is monitored continuously and reset on a 30 ± 2 day cycle;
- BAM Trailer – Beta Attenuation Monitor (BAM) used to monitor particulate matter less than 10 microns in diameter (PM_{10}). Located adjacent to DDG11 and operates in real time);
- Dust Sentry 1 – Sentry monitor is used to monitor particulate matter less than 10 microns in diameter (PM_{10}). Located adjacent to DDG5 and operates in real time;
- Dust Sentry 2 – Sentry monitor is used to monitor particulate matter less than 10 microns in diameter (PM_{10}). Located adjacent to DDG6 and operates in real time);

- HVAS – High Volume Air Sampler (HVAS) used to monitor particulate matter less than 10 microns in diameter (PM_{10}) and Total Suspended Particulates (TSP). Located adjacent to the mine camp and operates over a 24-hour period, every sixth day; and
- S1 and S2 – Stack monitoring locations, used to monitor gas emissions from the two gold room furnace stacks (EPL Points 24 and 39). Emissions are monitored annually for nitric oxide concentrations (mg/m^3) and in accordance with *Protection of the Environment (Clean Air) Regulation 2010*.

The location of some of the air quality monitoring locations and surrounding receptors are shown on **Figure 5**. The criteria for deposited dust, TSP and PM_{10} are provided in **Table 11.** Standard of concentration Group 6 – *Protection of the Environment Operations (Clean Air) Regulation 2010* limits for the pollutant Nitric Oxide are shown in **Table 11**. Monitoring of greenhouse gas emissions is undertaken in accordance with National Greenhouse and Energy Reporting (NGERs) monitoring and reporting requirements.

Table 11: Air Quality Monitoring Criteria

Pollutant	Averaging Period	[d]Criterion
Total Suspended Particulate (TSP) matter	Annual	[a] 90 µg/m^3
Particulate matter,10 µm (PM_{10})	24-hour	[a] 50 µg/m^3
	Annual	[a] 25 µg/m^3
[c] Deposited dust	Annual	[b]2 g/m^2/month (maximum increase in deposited dust level)
	Annual	[a]4 g/m^2/month (maximum total deposited dust level)

Notes
a Total impact (i.e., incremental increase in concentrations due to the operation plus background concentrations due to all other sources);
b Incremental impact (i.e., incremental increase in concentrations due to the operation on its own);
c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air – Determination of Particulate Matter – Deposited Matter – Gravimetric Method; and
d Excludes extraordinary events such as bushfires, prescribed burning, dust storms sea fog, fire incidents or any other activity agreed by the Secretary.

Environmental management activities undertaken during the reporting period in relation to air quality included the following:

- Water trucks were operated on an average of twice per day (much more frequently during the drier periods) on unsealed roads and laydown areas to assist with dust control;
- Molasses has successfully been applied to most surface roads as a dust suppressant. Results have been extremely positive, and this will continue into the future;
- Water sprays are operated continuously throughout the processing plant to ensure that the required level of dust suppression is achieved;
- Vehicles are washed upon returning to the surface from the decline or before leaving site;
- Loaded vehicles are covered before leaving site;
- Disturbance is limited to the minimum area necessary for mining and associated activities;
- Disturbance areas are stabilised as soon as practicable after they are no longer required for mining-related purposes;
- All dust control equipment must be operable at all times with the exception of shutdowns required for maintenance;
- Regularly maintain and service equipment as per the manufacturer's specification to maximise efficiency;
- Speed limits are restricted to 40 km/hr on all internal access roads to minimise dust generation;
- Progressively review and implement energy efficiency measures throughout the life of the mine; and

- Utilising energy efficient equipment and implementing energy saving measures over the life of the mine.

6.2.2. Environmental Monitoring Results

Gold Room Stack Monitorng - Nitric Oxide

Monitoring of the Gold Room Scrubber Stack and the New Gold Room Baghouse stack are undertaken annually. Due to the site entering Care and Mainenance in March 2023 annual stack monitoring was not undertaken. Monitoring locations and Standard of concentration Group 6 – *Protection of the Environment Operations (Clean Air) Regulation 2010* are shown in **Table 12**.

Table 12: Stack Nitric Oxide Monitoring Criteria and Results

Emission Point	Units	Standard of Concentration (Group A)	Detected values
EPA ID 24 - Gold Room Scrubber Stack	mg/m3	350	Due to site entering care and maintenance monitoring was not undertaken during this reporting period.
EPA ID 39 - New Gold Room Baghouse Stack	mg/m3		

Depositional Dust Monitoring

Depositional dust monitoring results for the reporting period are shown in **Figure 9**.

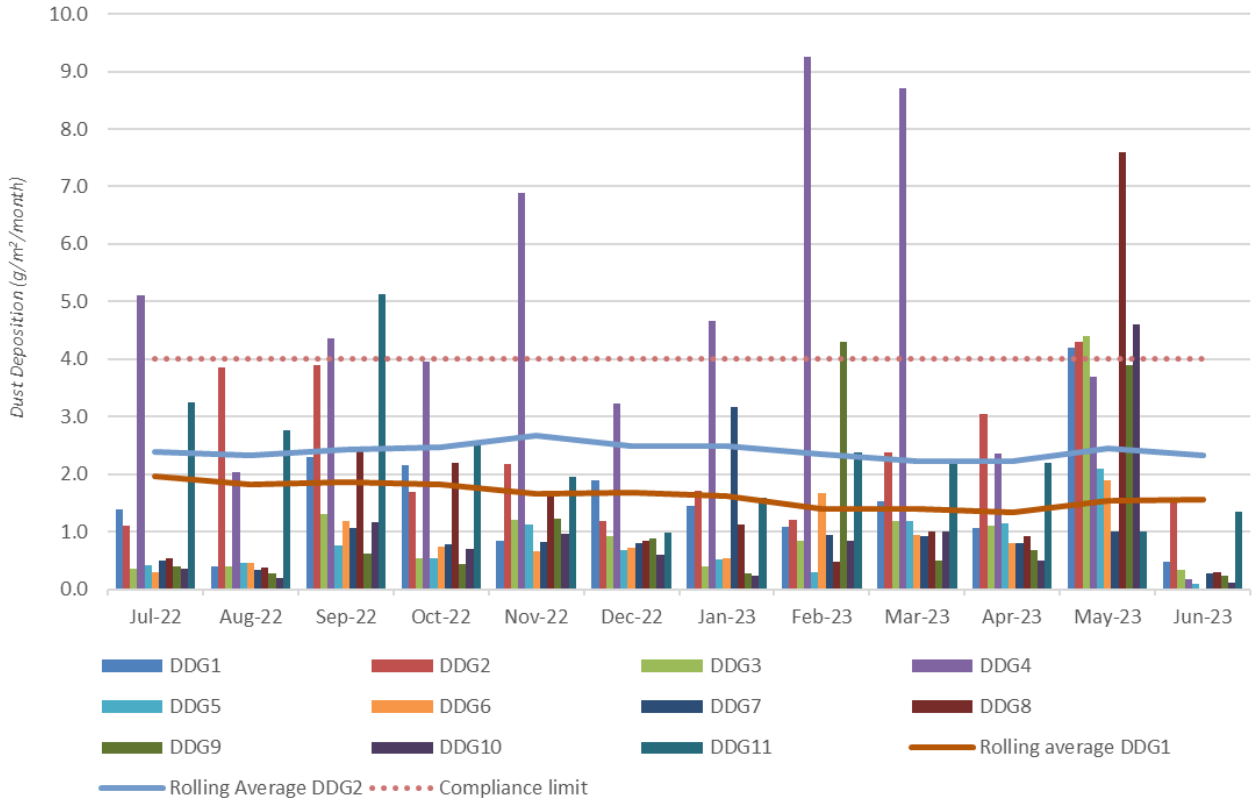

Figure 9 - Dust deposition gauge results for the reporting period

Figure 9 shows the 12-month rolling annual average for DDG1, DDG2 was below the compliance criteria for the entire reporting period. A summary of the depositional dust monitoring results for the reporting period are provided in **Table 13.**

Table 13: FY2023 Depositional Dust Monitoring Results

Monitor	Minimum (g/m²/month)	Maximum (g/m²/month)	Average (g/m²/month)
DDG1	0.4	4.2	1.6
DDG2	1.1	4.3	2.3
DDG3	0.3	4.4	1.1
DDG4	0.2	9.3	4.5
DDG5	0.1	2.1	0.8
DDG6	0.1	1.9	0.9
DDG7	0.3	3.2	0.9
DDG8	0.3	7.6	1.6
DDG9	0.2	4.3	1.1
DDG10	0.1	4.6	0.9
DDG11	1.0	5.1	2.3

As shown in Table **13** the reporting period average depositional dust results were below the 4 g/m²/month PA criteria at both compliance monitors and all investigative monitors with the exception of DDG4 which recorded an averge result of 4.5 g/m²/month. DDG4 recorded a maximum deposition rate of 9.3 in February 2023. DDG is a gauge internal to the site adjacent to the TSF and is not an indicator of dust leaving the site. DDG 2 and 7 are closest to the nearset senstive receivers and are below the compliance criteria level.

Long Term Depositional Dust Monitoring

Figure 10 presents the annual average depositional dust results from the FY2014 to the FY2023 Annual Review period. The EA predictions for the Hera Mine have also been included in this figure, with the prediction for DDG1 corresponding to R6 and the prediction for DDG2 corresponding to R1 / R2.

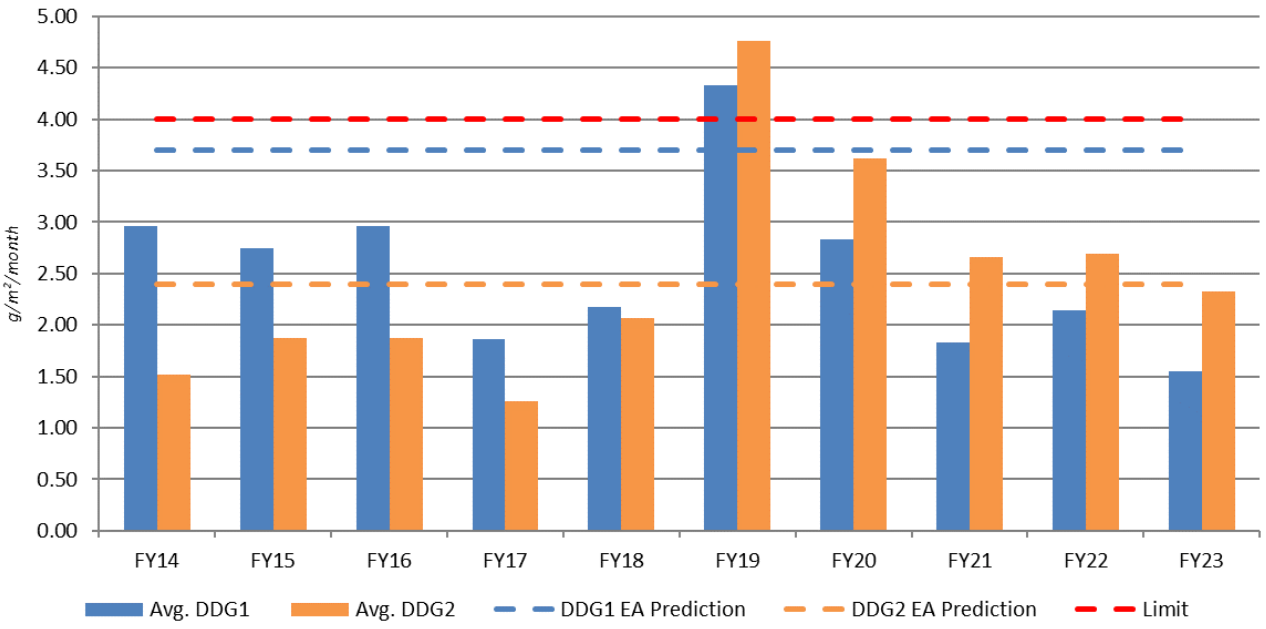

Figure 10 - Average Dust Deposition Results 2014 to 2023

As shown in **Figure 10**, depositional dust results have generally been within the PA10_0191 limit, with the exception of the 2018-2019 reporting period for both DDG1 and DDG2. DDG2 has been above the level predicted in the EA during the previous four reporting periods (FY2019, FY2020, FY2021 and FY2022) and was below the predicted level in FY2023. The ongoing reducing trend is continuing (refer **Section 6.1**). The trend is most likely link to meterological conditions with far west NSW experiencing serve drought during 2018-2021.

HVAS Monitoring

A summary of the HVAS monitoring results for the reporting period is included in Table **14**.

Table 14: FY2023 HVAS Monitoring data

Monitor	Minimum (µg/m³)	Maximum (µg/m³)	Average (µg/m³)
TSP	2.3	112.0	34.7
PM_{10}	0.6	43.0	12.32

PM_{10} never exceeded the 50 µg/m³ 24hr criteria throughout the reporting period. Additionally, the annual average PM_{10} result (12.32 µg/m³) was well below the 25 µg/m³ criteria.

The annual average TSP result (34.7 µg/m³) was within the 90 µg/m³ criteria. There is no 24hr criteria for TSP.

The 24hr PM_{10} results for the reporting period, as well as the EA prediction (for receptor R6), the 24hr PM_{10} limit (PA 10_0191 Schedule 3, Condition 12), rolling annual averages for PM_{10} and TSP are presented in **Figure 11**.

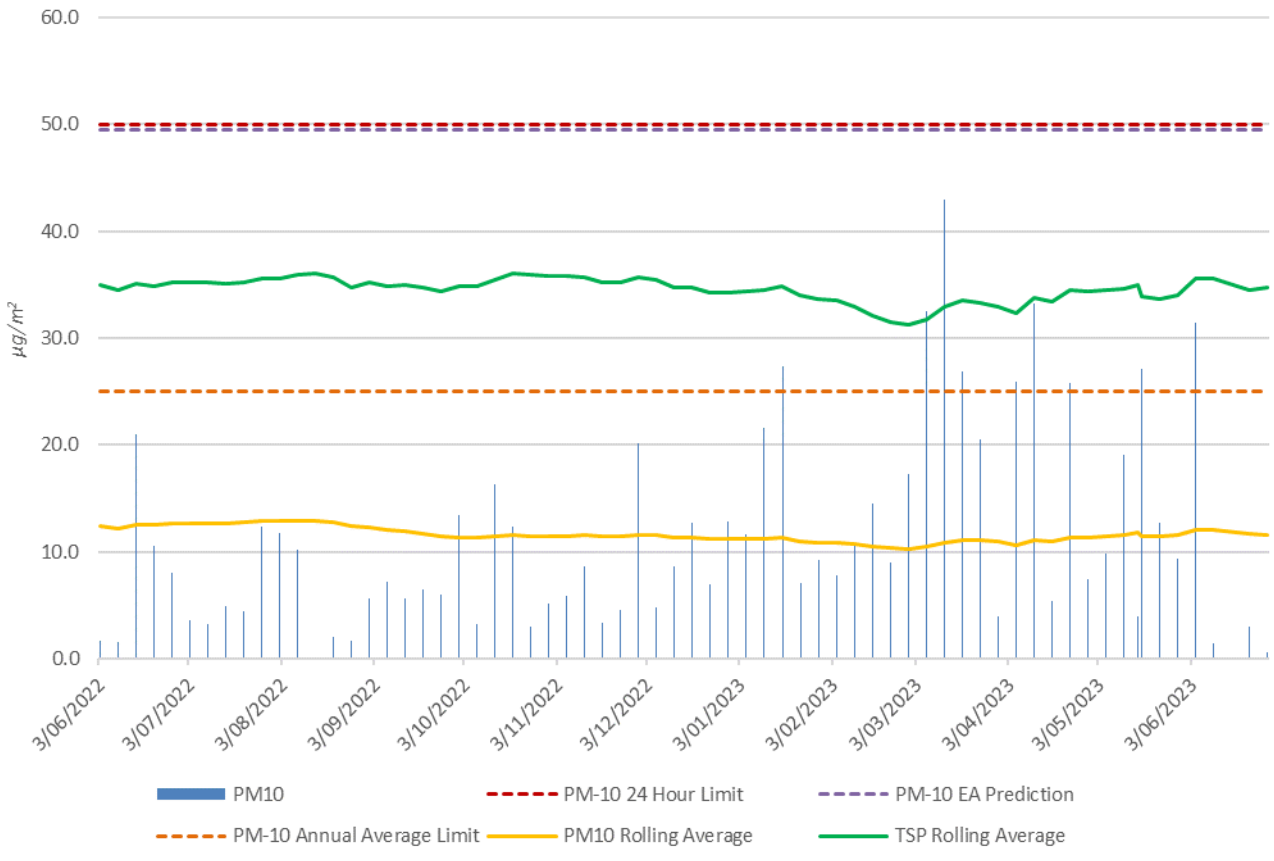

Figure 11 - HVAS 24hr PM_{10} Results for the Reporting Period

Long Term HVAS Monitoring

Figure 12 presents the TSP annual averages from FY2014 to FY2023, as well as the EA annual average TSP prediction (for receptor R6) and PA annual average TSP criteria (PA 10_0191 Schedule 3, Condition 12).

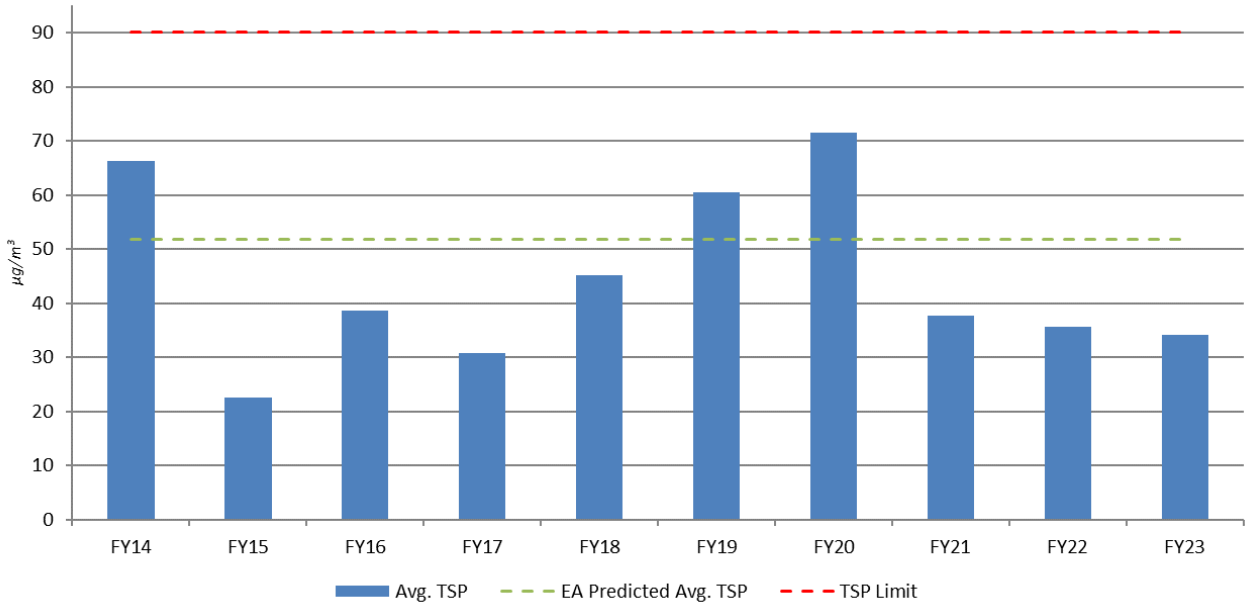

Figure 12 - TSP Long Term Annual Averages

As shown in **Figure 12**, TSP results had been generally increasing since the FY2015 reporting period and exceeded the EA prediction in both the FY2019 and FY2020 reporting periods. The TSP results for FY2021 to 2023 has reduced to a level not seen since prior to FY2018. All results have been below the annual average PA TSP criteria. The trend is most likely link to meterological conditions with far west NSW experiencing serve drought during 2018-2021.

Figure 13 presents the PM_{10} annual averages from FY2014 to FY2021, as well as the EA annual average PM_{10} prediction (for receptor R6) and PA annual average PM_{10} criteria (PA 10_0191 Schedule 3, Condition 12).

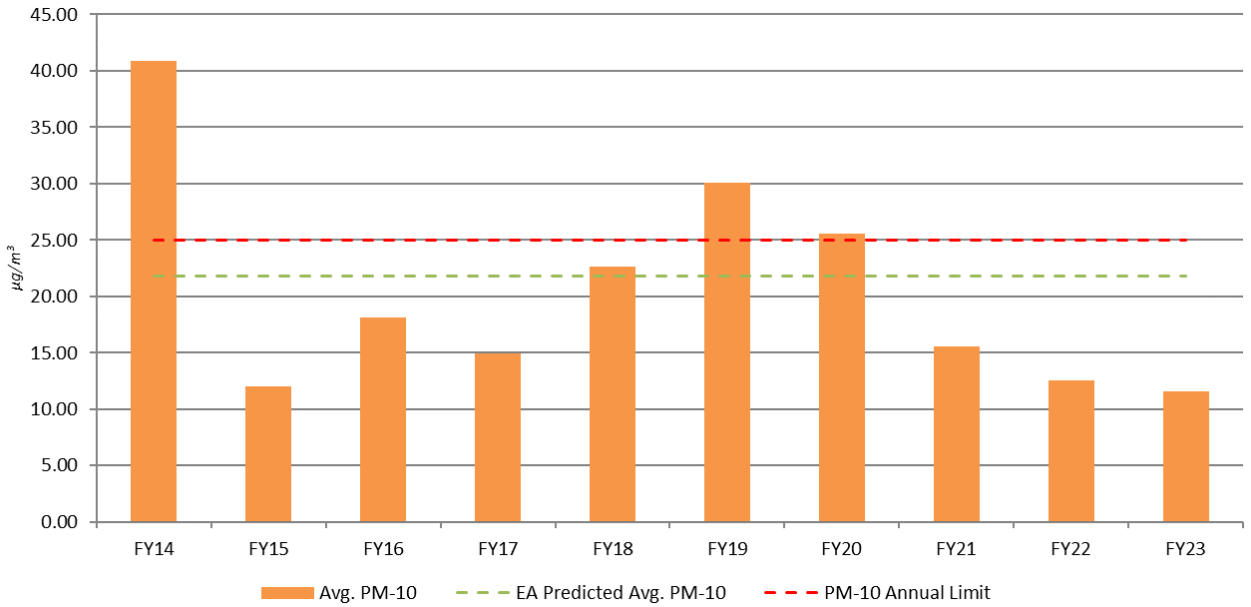

Figure 13 - PM_{10} Long Term Annual Averages

As shown in **Figure 13**, PM_{10} results had been generally increasing since the FY2014 reporting period and exceeded the EA prediction in FY2018, FY2019 and FY2020. The PM_{10} result for FY2021 decreased and the FY2023 was the lowest recorded since FY2017. However, all results have been below the annual average PA PM_{10} criteria, with the exception of the FY2019 and FY2020 reporting period. The trend is most likely link to meterological conditions with far west NSW experiencing serve drought during 2018-2021.

Greenhouse Gas Emissions

A summary of greenhouse gas emission data against the EA predictions has been presented in **Table 15**. As the FY2023 National Greenhouse and Energy Reporting (NGER) has not yet been completed, the FY2022 data has been included.

Table 15: FY2022 NGERs Data

Data	Scope 1[a] (t CO_2-e)	Scope 2[b] (t CO_2-e)	Total (Scope 1 and 2)
EA Predictions	19,158	0	19,158
FY22 Data	20,241	0	20,241

a. Scope 1 emissions are the emissions released to the atmosphere from activities on site, e.g., fuel consumption (gas, diesel, etc.).

b. Scope 2 emissions are the emissions released from the indirect consumption of energy e.g., electricity purchased from the grid.

As shown in **Table 15**, the FY2022 data was 5.65% higher than the predictions made in the EA but reasonably aligned to predictions made.

6.2.3. Performance Issues and Proposed Improvements

During the reporting period there were no exceedances of the PA 10_0191 air quality criteria.

6.3. EROSION AND SEDIMENT

6.3.1. Environmental Management

Erosion and sediment control for the reporting period was undertaken in accordance with the *Hera Mine Water Management Plan*. Management measures implemented during the reporting period included the following:

- Dig permits are required before any ground is broken;
- Disturbance areas are stabilised following disturbance;
- Stockpiles are shaped to reduce batter slope and length;
- Inspections of all site water storages and drainage lines are conducted once per quarter or after heavy rainfall events (> 25 mm in 24-hours); and
- All contaminated and dirty water storages are desilted as required.

6.3.2. Environmental Monitoring Results

Inspections of all mine water storages and drainage lines occurs after receiving > 25 mm in 24-hours. No further action was required after inspections were undertaken.

6.3.3. Performance Issues and Proposed Improvements

There were no erosion and sediment incidents during the reporting period. No changes to erosion and sediment control at Hera Mine are proposed for the following reporting period.

6.4. CONTAMINATED POLLUTED LAND AND HAZARDOUS MATERIALS

6.4.1. Environmental Management

Contaminated and/or polluted land at Hera Mine is managed in accordance with the *Hazardous Materials Management Plan*. Management measures implemented during the reporting period included the following:

- Hazardous, non-combustible and contaminated waste material is temporarily stored in the Workshop Waste Management Area, in sealed steel or plastic drums and shipped off-site for appropriate disposal or recycling;
- Any hazardous materials are stored and handled in accordance with the relevant guidelines. Storage facilities are clearly labelled, and are regularly inspected and maintained;
- Hydrocarbon storages are bunded, any runoff from wash bays is captured and treated, and storages are regularly inspected;
- Any chemicals that are spontaneously combustible are stored tightly in containers in cool, dry, well-ventilated areas, removed from oxidising agents, acids, direct sunlight, heat or ignition sources;
- SDS are located with any substance posing a risk to people and/or the environment;
- All relevant personnel are trained in the handling of hazardous materials and the use of appropriate personal protective equipment (PPE);
- Appropriate PPE, spill kits and SDS are made available to personnel responsible for the transportation, handling, storage, use and disposal of hazardous materials;
- Transportation of hazardous materials is undertaken by contractors who are certified and licenced to carry dangerous goods;
- Incidents leading to the potential contamination of land onsite are reported under Hera Resources' incident reporting framework. All incidents are investigated to determine the root cause and facilitate process improvements;
- Pollution incidents to land causing actual or potential material harm to the environment are reported to the relevant external regulators; and
-

6.4.2. Environmental Monitoring Results

No monitoring was required during the reporting period.

6.4.3. Performance Issues and Proposed Improvements

- No hazardous materials incidents were reported in the reporting period.
- All discharge pipework associated with the underground thickner was replaced as a result of the incident reported in August 2022.
- No changes to contaminated and/or polluted land management at Hera Mine are proposed for the following reporting period.

6.5. BIODIVERSITY

6.5.1. Environmental Management

Threatened flora and fauna at the Hera Mine are managed in accordance with the *Biodiversity Management Plan*. Management measures undertaken included:

- Pre-clearance surveys are undertaken prior to any vegetation clearing;
- Vegetation clearing is undertaken in accordance with the protocols outlined in the Biodiversity Management Plan;
- Enhancement of fauna habitat at suitable locations on the Mine Site;
- Completion of routine monitoring;
- Feral goat management;
- Bushfire management; and

- Hera has progressed with updates to the Biodiversity Management Plan including a Biodiversity Offset Strategy which incorporates the BSA at the Chelsea Property. The Biodiversity Management Plan was approved in December 2020. The BSA was submitted to the Biodiversity Conservation Trust (BCT) for determination during the 2021/22 reporting period and subsequently approved in December 2021. Retirement of offsets was finalised on 15 July 2022. Proposed disturbance associated with MOD5 (TSF Water Management Dam) have been carried over to the Federaton Project and will be offset once clearing occurs (currently not planned until 2026).

Biodiversity monitoring is undertaken annually across 13 locations within the Hera Mine project area, and at seven locations at the BSA site. The ecological monitoring locations within the Project Approval area are shown on **Figure 5**.

6.5.2. Environmental Monitoring Results

Biodiversity monitoring surveys were completed in December 2022. See Appendix 1 for the monitoring report.

6.5.3. Performance Issues and Proposed Improvements

No perfomanace issues were Identified and no proposed improvements are proposed.

6.6. WEED AND PEST MANAGEMENT

6.6.1. Environmental Management

Weed and pest management at the Hera Mine is undertaken in accordance with the *Biodiversity Management Plan*. Management measures undertaken included:

- Feral animal management undertaken as required, including goat removal, cat trapping, fox baiting, and rabbit baiting and/or warren ripping;
- Vehicles are washed down on a regular basis to prevent weed spread; and
- Weed spraying is conducted as required with a primary focus on industrial areas. Weeds targeted during the reporting period included Scotch Thistle, Variegated Thistle and Tobacco Bush.

6.6.2. Environmental Monitoring Results

Seasonal inspections were carried out for weeds. Bathurst Burr has been identified in several locations across the Hera Mine particulalry around the TSF and magazine. A new area was identiifed along the boundary fence between the Four Corners property and Mountain Paddock boundary.

6.6.3. Performance Issues and Proposed Improvements

- Bathurst Burr controls will be increased particularly around the TSF and Hera Magazine additional equipment has been purchased to enable more frequent control by employees rather than relying entirely on external contractors.
- Goat mustering will be deferred to after summer 2023 in an effort to utilise their grazing to reduce the grass load across the property.

6.7. BLASTING

6.7.1. Environmental Management

Blast activities at the Hera Mine are managed in accordance with the *Blast Management Plan*. Management measures undertaken included:

- Surface blasting will be undertaken only between the hours of 9:00am to 5:00pm, Monday to Saturday except for emergency or safety-related reasons. No surface blasting was undertaken during the period;

- Above ground blasting operations will not exceed three blasts per day, unless an additional blast is required following a blast misfire, with no more than five blasts per week, averaged over a calendar year;
- Appropriate signage and notification of blasts will be provided to the public in the event of surface blasting;
- All blasts will be designed by a suitably qualified and experienced person/s to achieve compliance with criteria and to minimise the potential for fly-rock;
- Surface blasting will be avoided in strong wind conditions;
- The time between drilling and loading will be minimised to reduce blast hole deterioration; and
- Moisture content will be minimised within blast holes to reduce potential fumes.

Blast vibration and overpressure are recorded for all blasts. The blast vibration and overpressure criteria from PA10_0191 and EPL 20179 are provided in **Table 16**.

It is anticipated that surface blasting will be required as part of developing the Surface Extraction Area. This will be undertaken in accordance with management plans, relevant legislation and consents. No surface blasting occurred during the reporting period.

Table 16: Blast Criteria

Location	Time Period	Airblast Overpressure (dB(Lin peak)	Ground Vibration (mm/s)	Allowable Exceedance
Residence on privately-owned land	Any time	120	10	0%
	Day[1]	115	5	5% of total blasts over a period of 12 months
	Evening[2]	-	2	5% of total blasts over a period of 12 months
	Night[3] and all day on Sundays and public holidays	-	1	0%

1. Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays.
2. Evening is defined as the period from 6pm to 10pm.
3. Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.

6.7.2. Environmental Monitoring Results

Blast Monitoring results for the reporting period.

276 blasts were initiated during the reporting period. 2 blasts exceeded the vibration criteria however, the company has an agreement in place at this location In accordance with Scdule3 - condtion 4 of the PA 10_0191. All other blasts were within PA 10_0191 (Schedule 3, Condition 4) and EPL 20179 (Condition L5.1) limits. A summary of results is provided in **Table 17.**

Table 17: Blast Montioring Results Summary

Parameter	Minimum	Maximum	Non-Permitted Exceedances
Blast Vibration	0.01 mm/s	1.42 mm/s	0
Blast Overpressure	70.1 dB	107.5 dB	0

The blast overpressure and vibration results for the reporting period, against the applicable criteria, are presented in **Figure 14**, **Figure 15**, **Figure 16** and **Figure 17**.

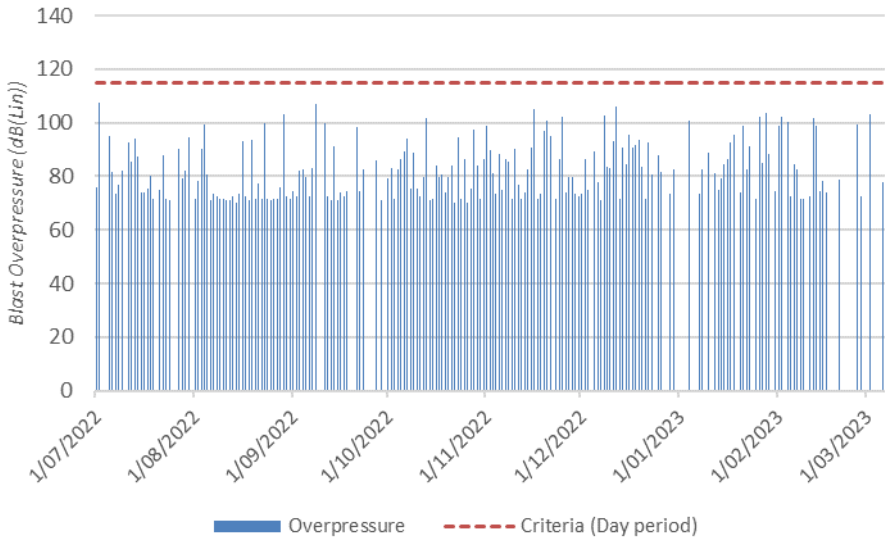

Figure 14 - FY2023 Blast Overpressure Monitoring Results

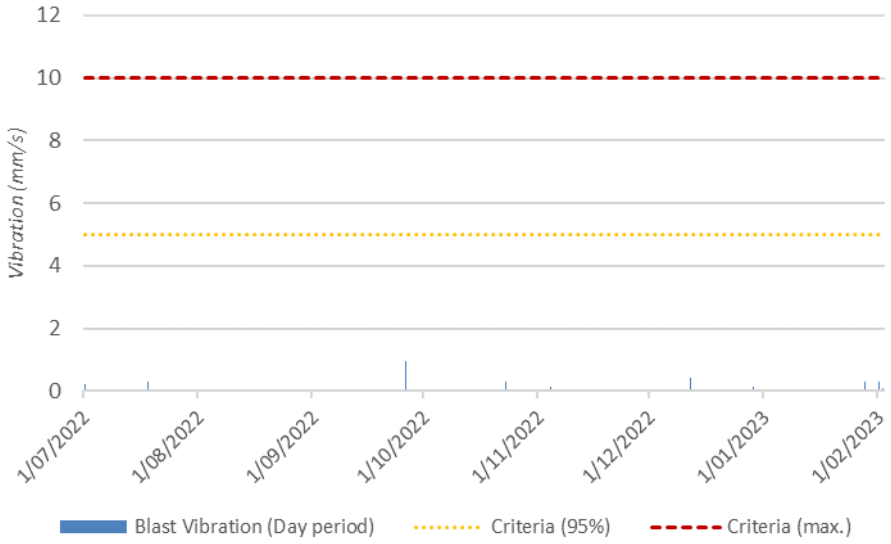

Figure 15 - FY2023 Blast Vibration Monitoring Results (Day)

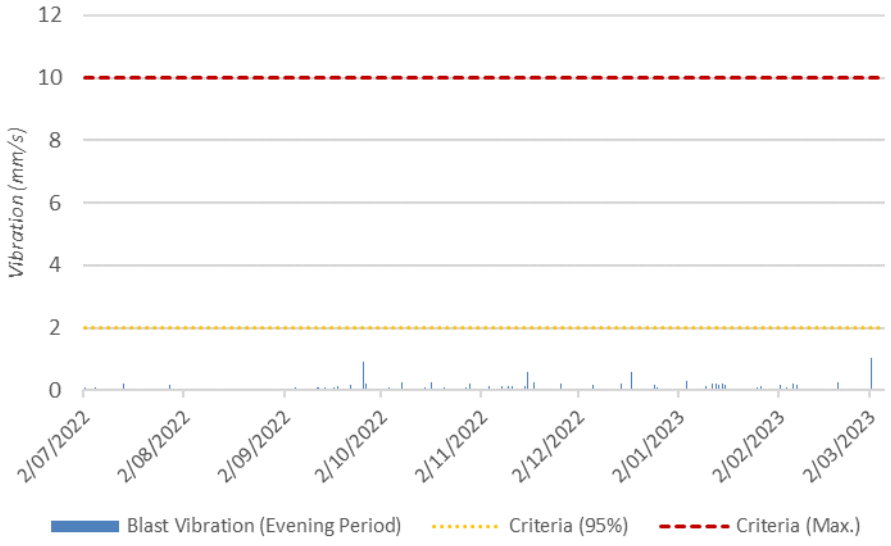

Figure 16 – FY2023 Blast Vibration Monitoring Results (Evening)

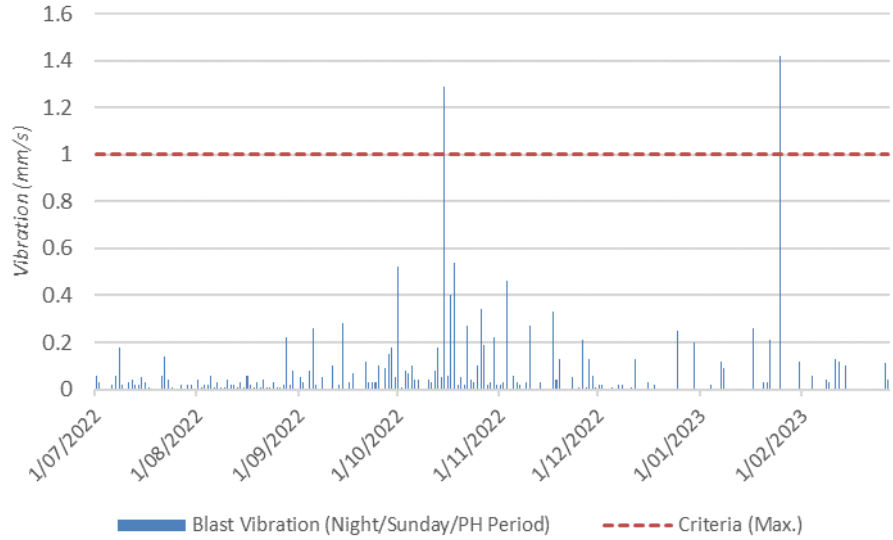

Figure 17 - FY2023 Blast Vibration Monitoring Results (Night/Sunday/PH)

Long Term Blast Monitoring results

Figure 18 presents a summary of the average annual blast vibration for the life of the mine (i.e., since 2013). The FY2023 reporting year has seen a continuation of a steady decrease in average blast vibration levels.

The blasting assessment undertaken as part of the EA (Spectrum Acoustics, 2011) predicted that for receptor R3 (nearest receptor to the box cut) the peak vibration would be 0.1 mm/s. 45.57% of blast vibration results were below this prediction during the FY2023reporting period. Additionally, Spectrum Acoustics (2011) predicted that for receptor R3 that the peak blast overpressure would be 105 dB. All blast overpressure results during the reporting period, except for two, were below this prediction. The company has a signed agreement with the landowner at R3 in accordance with Schedule 3, Condition 4 of the PA 10_0191 and Condition L5.5 of the EPL 20179. This agreement has been provided to DPE and EPA.

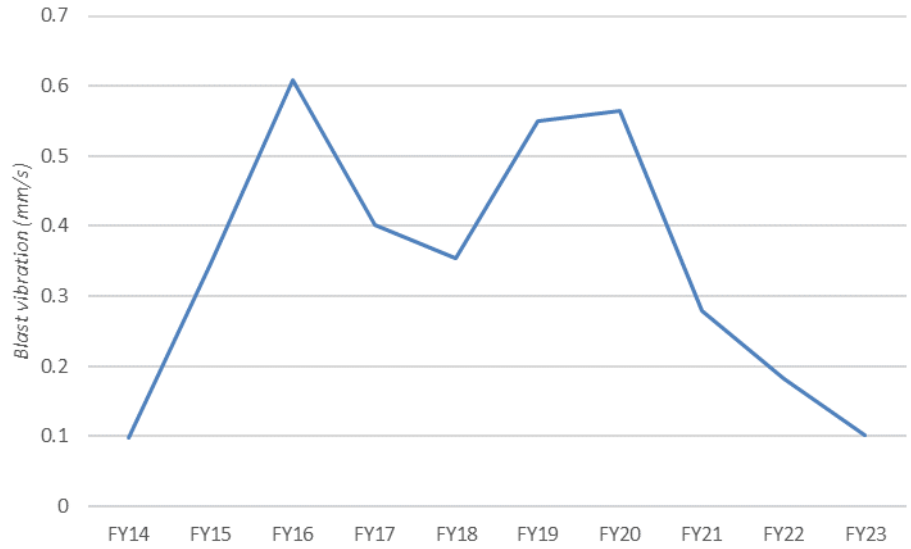

Figure 18 - Summary of the Average Blast Vibration for 2014 to 2023

6.7.3. Performance Issues and Proposed Improvements

No performance issues were identified during the reporting period.

No changes to blast management at Hera Mine are proposed for the following reporting period.

6.8. OPERATIONAL NOISE

6.8.1. Environmental Management

Operational noise at Hera is managed in accordance with the *Noise Management Plan*. Operational noise management activities during the reporting period included:

- Compliance with the approved hours of operation;
- Minimising the noise impacts of the operation during meteorological conditions when the PA 10_0191 noise limits do not apply;
- Regularly servicing all equipment on site to ensure sound power levels of each item remains at or below the default / or factory-set values;
- Reducing operational noise where possible by applying strategies such as:
    - Utilising natural and artificial noise barriers (e.g., hay bales around exploration drill rigs);
    - Operation of individual plant/equipment;
    - Planning 'noisy' operations for suitable periods of the day;
    - Fitting plant/equipment with noise abatement devices where possible; and
    - Sourcing low frequency alarms.
- Ensuring that all blasts are designed by a suitably qualified and experienced blasting engineer or shot-firer and that each is designed to achieve the relevant noise criteria at the closest residence; and
- Maintaining an open dialogue with the surrounding community and neighbours to ensure any noise or vibrations concerns are addressed.

Noise monitoring is conducted at R1/R2, R3 and R4 (refer Figure 5). Hera Resources have an active Noise Agreement in place with the resident at R3 and therefore, noise limits do not apply. The agreement has been shared with the EPA and DPE. The PA 10_0191 and EPL 20179 criteria are presented in Table 18: Noise Criteria.

Table 18: Noise Criteria

Location	Day	Evening	Night	
	($LA_{eq(15\text{-}minute)}$)	($LA_{eq(15\text{-}minute)}$)	($LA_{eq(15\text{-}minute)}$)	($LA1_{(1\text{-}minute)}$)
All residential receivers	35 dB	35 dB	35 dB	45 dB

6.8.2. Environmental Monitoring Results

Attended noise monitoring was conducted by Muller Acoustic Consultanting Pty Ltd (MAC) in April 2023. Monitoring results demonstrated compliance with all relevent criteria.

Table 19: Noise Monitoring Results

Receiver	Date	Time	LA_{eq} Limit (dB)	$LA_{1(1\ min)}$ Limit (dB)	LA_{eq} Site Contibution (dB)	$LA_{1(1\ min)}$ Site Contribution (dB)
R1-R2	19/04/2023	9:20	35	n/a	<30	n/a
R3	19/04/2023	10:02	35	n/a	<25	n/a
R4	19/04/2023	09:42	35	n/a	<25	n/a

R1-R2	18/4/2023	18:36	35	n/a	<30	n/a
R3	18//04/2023	19:31	35	n/a	28	n/a
R4	18/04/2023	19:01	35	n/a	<25	n/a
R1-R2	19/04/2023	04:59	35	45	26	<40
R3	19/04/2023	05:45	35	45	27	<40
R4	19:04/2023	05:23	35	45	<25	<40

Unattended monitoring commenced in November 2021 and is operational 24/7 with results reviewed monthly by a third-party expert, Muller Acoustic Consulting Pty Ltd (MAC). No exceedances were recorded that were attributable to the mining operations.

6.8.3. Performance Issues and Proposed Improvements

There were no noise related incidents during the reporting period. No changes to the management of noise are proposed.

6.9. TRAFFIC MANAGEMENT

6.9.1. Environmental Management

Traffic management at Hera Mine is managed in accordance with the *Traffic Management Plan.* Traffic management measures that are implemented at the site include:

- Heavy vehicles transporting concentrate use the main route when conditions allow, and the alternate route when required (e.g., during times of road closures following heavy rain or when more than eight truck movements per day averaged over a calendar month are required);
- Implementation of a Driver's Code of Conduct;
- All plant and equipment used to transport materials from the site are maintained in a proper and efficient condition, and operated in a safe manner;
- Vegetation is managed so that sight distances on the road shoulder are maintained;
- A speed limit of 40 km/hr applies to the Main Site Access Road, Light Vehicle Access Road and roads around the leases, and a speed limit of 30 km/hr applies to all areas within the mine site; and
- All vehicles travelling on public roads are required to abide by the local speed limits ensuring they slow down to 50 km/hr while travelling through the Nymagee, Cobar and Hermidale townships.

The PA 10_0191 limits for transport of concentrate are:

- Transport of no more than 60,000 t of lead/zinc concentrate per calendar year;
- Transportation of lead and zinc concentrate and gold ore from the site – daylight hours, 7 days per week; and
- No more than eight vehicle movements (entering and leaving the site) per day, averaged over a calendar month.

6.9.2. Environmental Monitoring Results

In accordance with PA 10_0191, Schedule 3, Condition 37, Hera Resources is required to maintain records of all concentrate trucks arriving and departing from the site including the date, time, amount of concentrate transported and average number of vehicle movements per day. A summary of these records is provided **Table 20** below. The records in **Table 20** align with calendar year as per requirements of PA 10_0191.

Table 20: Monthly volumes of concentrate transported.

Month	Tonnes of Concentrate Transported	Average Vehicle Movements per Day
January 2022	57.64	7.61
February 2022	3260.05	4.79
March 2022	3608.89	4.93
April 2022	3347.90	4.53
May 2022	4336.58	5.81
June 2022	3661.07	5.13
July 2022	1817.54	2.45
August 2022	2177.20	2.97
September 2022	4025.71	5.93
October 2022	1767.76	2.52
November 2022	1782.68	2.60
December 2022	3101.34	4.13
TOTAL	**38,651.51**	**-**

The transport of concentrate in the 2022 calendar year reporting period (38,651.51 t) was within the PA 10_0191 approved calendar year limit of 60,000tpa and the number of vehicle movements was less than eight per day (monthly average). Additionally, all truck movements during the reporting period were within the approved transport hours.

6.9.3. Performance Issues and Proposed Improvements

There were no traffic related incidents during the reporting period. No changes to traffic management at Hera are proposed for the following reporting period.

6.10. HERITAGE

6.10.1. Environmental Management

Aboriginal heritage at Hera is managed in accordance with the *Heritage Management Plan* (HMP), which has been updated and submitted as part of MOD 6. Non-Aboriginal heritage is managed as required. The following management measures are implemented for the management of unexpected heritage finds:

- All employees and contractors to Hera Mine must undertake heritage training during site inductions;
- Ground disturbance permits are required when breaking ground and part of this process involves inspecting the site for heritage items with a suitably qualified archaeologist and Registered Aboriginal Parties (RAPs) being present;
- Any sites identified during a pre-inspection are recorded, mapped and delineated;
- If any suspected Aboriginal or non-Aboriginal heritage sites, artefacts or spiritual places are found during ground clearing construction activities or mining, all work in the vicinity will cease immediately, and the unexpected finds procedure in the HMP will be implemented. The relevant agencies and Aboriginal stakeholders will be notified if required; and
- Activities will not recommence in the area of the find, until the relevant stakeholders have inspected the site and permission has been given to continue with the activity.

6.10.2. Environmental Monitoring Results

One due diligence assessment was carried out during the reporting period with RAPs present. No items of interest were located within the proposed works areas. Additionally, no unexpected finds were encountered during the reporting period.

6.10.3. Performance Issues and Proposed Improvements

There were no heritage related incidents during the reporting period. First Nations heritage education will be continued through the Aurelia Induction process. Consideration of First Nations heritage will continue to be considered for new disturbance works.

6.11. VISUAL, STRAY LIGHT

6.11.1. Environmental Management

Visual, stray light at the Hera Mine is managed as required. The relative isolation of the Hera Mine from surrounding residential locations and public vantage points, such as major roads, combined with the fact that topography and native vegetation limits the visibility of Hera, results in negligible visual/lighting impacts from the site. Notwithstanding, the following measures were implemented during the reporting period:

- Natural screening (e.g., trees) are not removed unless required; and
- Placement, intensity, and direction of lighting on the site are selected to reduce nuisance light.

6.11.2. Environmental Monitoring Results

No environmental monitoring for visual or lighting was required during the reporting period.

6.11.3. Performance Issues and Proposed Improvements

There were no visual or lighting related incidents during the reporting period. No changes to visual and lighting management at Hera are proposed for the following reporting period.

6.12. BUSHFIRE

6.12.1. Environmental Management

Bushfire management at the site is managed as required. The following management measures are implemented for the management of bushfires at Hera:

- Site access roads and tracks form the basis of the ire break network around the site with an asset protection zone surrounding the camp compliant with the Building Code of Australia;
- A hot work permit is required for any work involving heat and/or naked flame;
- A Job Hazard Analysis procedure is implemented to assess hazards in each step of a task, to establish suitable controls to manage identified hazards and appropriate tools, equipment, permits, PPE and reference documents required;
- Correct and safe storage of flammable and combustible fuels, chemicals and materials;
- Site-wide restriction on smoking and carrying of flame initiating devices;
- Deployment of suitably trained and experienced Hera Mine Emergency Response Team;
- Established links and protocols with nearby Cobar emergency response teams; and
- Emergency Response Team fire training.

6.12.2. Environmental Monitoring Results

No environmental monitoring for bushfires was required during the reporting period.

6.12.3. Performance Issues and Proposed Improvements

There were no bushfire related incidents during the reporting period on site.

6.13. PUBLIC SAFETY

6.13.1. Environmental Management

Public safety is managed at the Hera Mine as required. The following measures are implemented for the management of public safety at Hera:

- Perimeter fencing with gated entrances and warning signage has been installed as a barrier to prevent public access to the Mine;
- Provision of swipe card access for the main entrance to the Mine;
- Entry restrictions apply to all persons under the age of 16 years;
- The Mill Control Centre was manned 24 hours a day, seven days a weekwith the area now under video survelance during care and maintenance; and
- Induction procedures are required for visitors to site.

6.13.2. Environmental Monitoring Results

No safety related monitoring was required during the reporting period.

6.13.3. Performance Issues and Proposed Improvements

There were no public safety related incidents during the reporting period. During the next reporting period, additional security fencing and gates for site security will be installed.

7. WATER MANAGEMENT

7.1. WATER MANAGEMENT

Water management for the reporting period was undertaken in accordance with the *Hera Mine Water Management Plan.* Water management details for the reporting period are summarised in **Table 21**.

Table 21: Water Management Details for the FY2023 Reporting Period.

Water Type	Storage	Volumes Held (ML)			Usage
		Start of Reporting Period 1 July 2022	End of Reporting Period (estimate only) 30 June 2023	Storage Capacity	
Clean Water	Pete's Dam	1.5	0.5	3.2	Transferred to Process Water Dam as required
	Back Dam East	0	10	108	
	Back Dam	3.2	0	6.5	
	Three Gates Dam	0	0	3.6	
	TOTAL	4.7	10.5	121.3	
Raw Water	Back Tank	0	0.1	0.1	Receives raw water from WB8, back bore and WB21.
	Three Gates Tank	0.1	0.1	0.1	Receives raw water from WB24 and WB25.
	House Tank	0.02	0.02	0.02	Not in use.
	Feed Water Tank	0.2	0.2	0.2	Water Treatment Plant and underground Header Tank.
	Header Tank	0.1	0.1	0.1	Transfer underground.
	TOTAL	0.42	0.52	0.52	
Contaminated Water	Process Water Dam	5.1	4.0	5.3	Central source for Process Plant.
	Tailings Decant Pond	15	0	134.0	Decant water back into process system.
	Tailings Seepage Pond	0.0	0	1.8	Captures runoff from the TSF embankment, as well as providing protection of environment. Intercepted water is pumped to the TSF as required.
	WREA Leachate Dam	0.0	0	0.8	Protection of environment, seepage back into process system
	Expanded Sediment Basin	0.5	0.5	9.0	Captures dirty water runoff from Hera disturbance footprint.
	TOTAL	**20.6**	**4.5**	**150.9**	

7.2. SURFACE WATER

7.2.1. Environmental management

Surface water at Hera Mine is managed in accordance with the *Hera Mine Water Management Plan*. The surface water environment at Hera Mine consists of four main water types; clean, raw, dirty, and contaminated water:

- **Clean water** includes runoff generated within undisturbed catchment areas within and upslope of the site. Water from clean water storages is transferred to the Process Water Dam for industrial use on-site;
- **Raw water** is used for operational purposes and is generally clean. Raw water at Hera is supplied from production bores around the site;
- **Dirty water** is defined as runoff from the disturbed footprint that has not come into contact with pollutants such as arsenic or cyanide. The dirty water management systems consist of a series of dirty water drains. The dirty water storage onsite at Hera is the Sediment Basin; and
- **Contaminated Water** is categorised by the increased likelihood of elevated concentrations of cyanide and arsenic. There is no active treatment of this water with all captured volumes reused in process activities.

A summary of surface water management activities during the reporting period are summarised below:

- Fuels and oils are stored in purpose-built facilities with appropriate bunding to minimise the potential for accidental discharging of hydrocarbons into the surrounding environment. Diesel is stored in above ground self-bunded tanks from where it is transferred direct to machinery. A licenced contractor is engaged to remove and recycle and/or dispose of used oil and grease products at licensed facilities;
- Once per quarter and after significant rainfall (> 25 mm in 24-hours), a site walkover and assessment of all surface water structures is undertaken. Record of this inspection is recorded in INX.

Figure 19 and **Table 22** EPL 20179 requires surface water quality sampling to be undertaken at two locations within the contaminated water system (EPA point 1 and EPA point 2); one location within the dirty water system which is the Sediment Basin (EPA point 3 and EPA point 4); and two locations within the surrounding clean water system (EPA point 25 and EPA point 26).

Table 22: Surface Water Monitoring Points

EPA Point No. and Location	Frequency	Parameters
EPA 1, Discharge to TSF	Daily during any discharge	WAD Cyanide
EPA 2 Discharge to PWD		
EPA 3 Sediment Basin 1 (Expanded Sediment Basin)	During discharge	EC, pH, TSS, Cyanide (weak acid dissociable), Al, As, B, Cd, Cu, Pb, Mn, Ni, N (total), Oil and grease, Ag, Total P (filtered), Zn
EPA 4 Sediment Basin 2 (Expanded Sediment Basin)		
EPA 25 Surface Quality Monitoring Point (Upstream)	During discharge	EC, pH, TSS, Cyanide (weak acid dissociable), Al, As, B, Cd, Cu, Pb, Mn, Ni, N (total), Oil and grease, Ag, Total P (filtered), Zn
EPA 26 Surface Quality Monitoring Point (Downstream)		

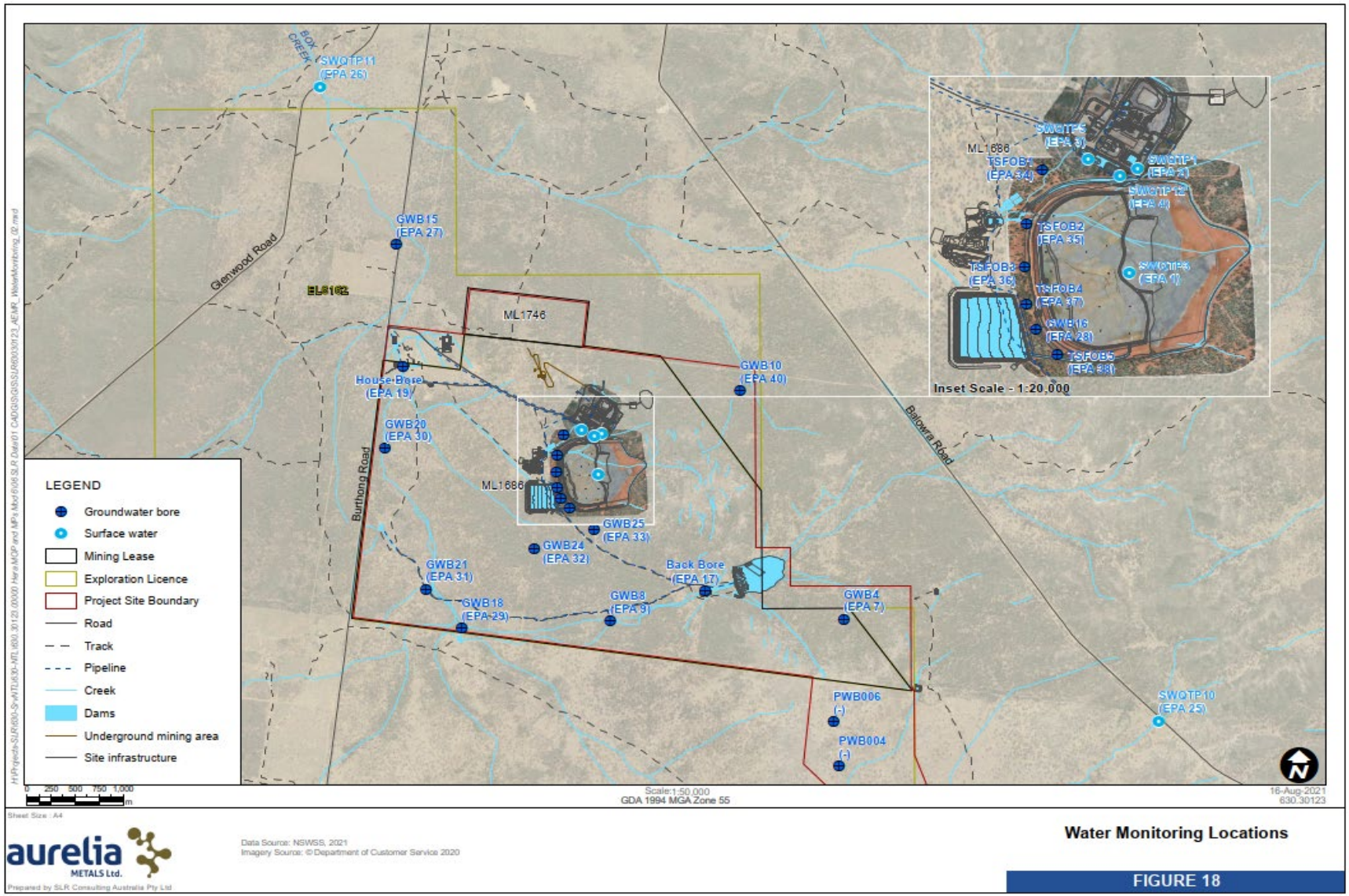

Figure 19 - Water Monitoring Locations

7.2.2. Environmental Monitoring Results

During the reporting period there were no discharges from the Expanded Sediment Basin.

Table 23 presents a summary of the monitoring results for EPA Points 1 and 2, which were monitored during the reporting period. Results are also reported to the EPA annually as part of the EPL Annual Return.

Table 23: Surface Water Monitoring Results

Monitoring Point	Minimum (mg/L)	Average (mg/L)	Maximum (mg/L)	EPL Maximum Criteria (mg/L)	Development consent criteria - 90th percentile (mg/L)	Development consent criteria - Maximum (mg/L)
TSF Thickener Discharge (EPA Point 1)	0	0.00	1	30	20	30
Process Water Dam (EPA Point 2)	0	0.04	10	30	20	30

As shown in **Table 23** there were no exceedances of the TSF Thickener Discharge Point and Process Water Dam criteria during the reporting period.

7.2.3. Performance Issues and Proposed Improvements

There were no performance issues related to surface water. No changes to surface water management are proposed.

7.3. GROUNDWATER

7.3.1. Environmental Management

Groundwater at the Hera Mine is managed in accordance with the *Hera Mine Water Management Plan*. A summary of groundwater management activities during the reporting period are summarised below:

- Managing the TSF and process plant in accordance with the *Hazardous Materials Management Plan* to ensure no leaching of acid, heavy metals, or cyanide into groundwater;
- Managing the WRE in accordance with the *Waste Rock Management Plan* to ensure no leaching of acid and heavy metals from waste rock into groundwater;
- Storing fuels and oils in purpose-built facilities with appropriate bunding to minimise the potential for accidental discharging of hydrocarbons into the surrounding environment. Diesel is stored in above ground self-bunded tanks from where it is transferred direct to machinery; and
- A Groundwater Monitoring Program is outlined in the *Water Management Plan* and includes monitoring of groundwater level and quality at the bores and frequencies listed in **Table 24.**

Table 24: Groundwater Monitoring Program

Location	Frequency	Parameter
EPL Monitoring Locations		
WB4 (EPA 7), WB10 (EPA 40), Back Bore (EPA 17)	Quarterly	Standing Water Level (SWL)
WB4 (EPA 7), WB8 (EPA 9), WB10 (EPA 10), Back Bore (EPA 17), House Bore (EPA 19)	Quarterly	EC, pH, TSS, As, HCO3, B, Cd, Ca, CO3, Cl, Cr, Cu, Cyanide (free, total & WAD), Fe, Pb, Mg, Hg, Mn, Mo, Ni, K, Ag, Na, Sb, Sn, Zn
TSF monitoring bores: TSFOB1, TSFOB2, TSFOB3, TSFOB4, TSFOB5, WB16	Quarterly (sample when water is present)	SWL, EC, pH, TSS, As, HCO3, B, Cd, Ca, CO3, Cl, Cr, Cu, Cyanide (free, total & WAD), Fe, Pb, Mg, Hg, Mn, Mo, Ni, K, Ag, Na, Sb, Sn, Zn
Additional Monitoring		
WB4, WB15, WB18, WB20	Monthly	SWL
TSF monitoring bores: TSFOB1, TSFOB2, TSFOB3, TSFOB4, TSFOB5, WB16	Monthly (sample when water is present)	SWL, EC, pH, TSS, As, HCO3, B, Cd, Ca, CO3, Cl, Cr, Cu, Cyanide (free, total & WAD), Fe, Pb, Mg, Hg, Mn, Mo, Ni, K, Ag, Na, Sb, Sn, Zn

7.3.2. Groundwater Monitoring Results

Quarterly standing water levels, pH and Electrical Conductivity (EC) results for the reporting period are summarised in **Table 25** below. TSFOB01, TSFOB02, TSFOB03, TSFOB04 and TSFOB05 were dry at every monitoring period.

Table 25: Groundwater Monitoring Results for the reporting period

Monitoring Point	Month	SWL Limit (m)	Depth to Water (m)	pH	EC (mS)
WB4	September 2022	63	Unable to sample - inaccessible		
	December 2022		Unable to sample - inaccessible		
	March 2023		59.57	6.74	4.17
	June 2023		59.84	6.7	6.20
WB15	September 2022	58	57.78	7.37	5.82
	December 2022		61.78	7.09	4.54
	March 2023		66.80	7.03	5.39
	June 2023		58.51	7.0	6.66
WB18	September 2022	65	Unable to sample - inaccessible		
	December 2022		71.04	7.20	1.78
	March 2023		77.26	7.25	1.59
	June 2023		77.41	6.5	2.24
WB20	September 2022	69	Unable to sample - inaccessible		
	December 2022		67.58	6.99	6.23
	March 2023		68.24	7.20	6.68
	June 2023		67.63	6.3	8.16

The standing water level (SWL) trigger level at WB15 and WB 18 remain at levels below the prescribed trigger levels. This trigger indicates there is potential that neighbouring bores have been impacted. Actions were implemented in accordance with the PA10_0191 and DPE were notified at the time of the initial exceedance with the offer to supply a compensatory water supply remaining in place.

To date, the impacted neighbours have not requested a compensatory supply.

Water Take

A summary of the water taken by Hera Mine during the previous water year (i.e., 1 July 2022 – 30 June 2023) is provided in **Table 26.**

Table 26: Water Take

Water Licence	Water Sharing Plan, source and management zone	Entitlements	Passive Take/ Inflows	Active Pumping	TOTAL
WAL 43173	Lachlan Fold Belt Murray Darling Basin Groundwater Source (Aquifer)	543 ML/year	55*	127	182 ML

*Note: * Decline water use is an estimate based on 2021/22 usage as water meters decomissioned when site entered Care and Maintenance*

A total of 127 ML of groundwater was extracted from the bores and underground decline dewatering, which was within the 543 ML limit. A summary of water extraction per bore during the reporting period is provided in **Table 27.**

Table 27: Groundwater Extraction Per Bore

Bore	Volume (ML)	Pumped/Passve
Back Bore	7.95	Pumped
House Bore	0	Pumped
Nymagee Bore	0	Pumped
WB8	4.85	Pumped
WB10	0	Pumped
WB17	0.83	Pumped
WB21	7.70	Pumped
WB24	0.92	Pumped
WB25	6.12	Pumped
WB26	14.56	Pumped
WB27	5.67	Pumped
WB28	13.72	Pumped
Decline	55*	Passive
PWB04	4.6	Pumped
PWB06	17.3	Pumped
Federation Bore (used for exploration activities)	0.0096	Pumped
PHWB02 (Bore 31)	42.73	Pumped
TOTAL	**182**	

Note: Decline water use is an estimate based on 2021/22 usage as water meters decomissioned when site entered Care and Maintenance

Table 28 presents a summary of water usage onsite and a comparison to the water balance. Water usage is reduced onsite where possible and bore water usage is minimised. Underground mine dewatering water is recycled and re-used underground as make-up water, excess underground mine dewatering water flows into the Process Water Dam for use in the process plant. Bore water is used for creation of potable water, dust suppression, pump gland water and underground make-up water (minimised where possible).

Table 28: Summary of Water Flows on-site and Comparison to Water Balance

Date	Rainfall (mm)		Underground Make up Water Demand (ML)		Underground Mine Water Excess (ML)		Ablutions Demand (ML)	
	Actual	Water Balance Prediction	Actual	Water Balance Prediction	Actual	Water Balance Prediction	Actual	Water Balance Prediction
July - 22	14.6	30	6.1*	1.4	6.75	6.4	2.31	0.5
August - 22	62	30	6.1*	1.4	3.38	6.4	2.20	0.5
September - 22	64.4	30	6.1*	1.4	1.75	6.4	1.71	0.5
October - 22	144.8	30	6.1*	1.4	4.27	6.4	1.72	0.5
November - 22	115.8	30	6.1*	1.4	4.04**	6.4	1.41	0.5
December - 22	84	30	6.1*	1.4	4.04**	6.4	1.59	0.5
January - 23	30.4	30	6.1*	1.4	4.04**	6.4	1.17	0.5
February - 23	6	30	-	1.4	-	6.4	-	0.5
March - 22	41	30	-	1.4	-	6.4	-	0.5
April - 22	11	30	-	1.4	-	6.4	-	0.5
May - 22	2	30	-	1.4	-	6.4	-	0.5
June - 22	43	30	-	1.4	-	6.4	-	0.5
TOTAL	543.3	360	42.7	16.80	28.27	76.8	12.11	6.00
Difference (%)	**148%**		**254%**		**-172%**		**202%**	

Notes:

** Value an estimate based on 2021/22 data as water meters decomissioned when site entered Care and Maintenance*

*** Average based on previous months data as water meters decommissioned when site entering Care and Maintanance*

Long term Groundwater Monitoring

Figure 20 presents a summary of the standing water level results for the life of mine at Hera Mine, which shows that SWL at WB4 and WB15 have remained relatively stable with a slight increase in depth below ground level commencing in 2020 but stabilising during the FY2023 reporting period. WB18 and WB20 have experienced a higher rate of increase in depth below ground level since the FY2018 and FY2019 reporting periods however these bores appear to have stabilised during the FY2023 reporting period.

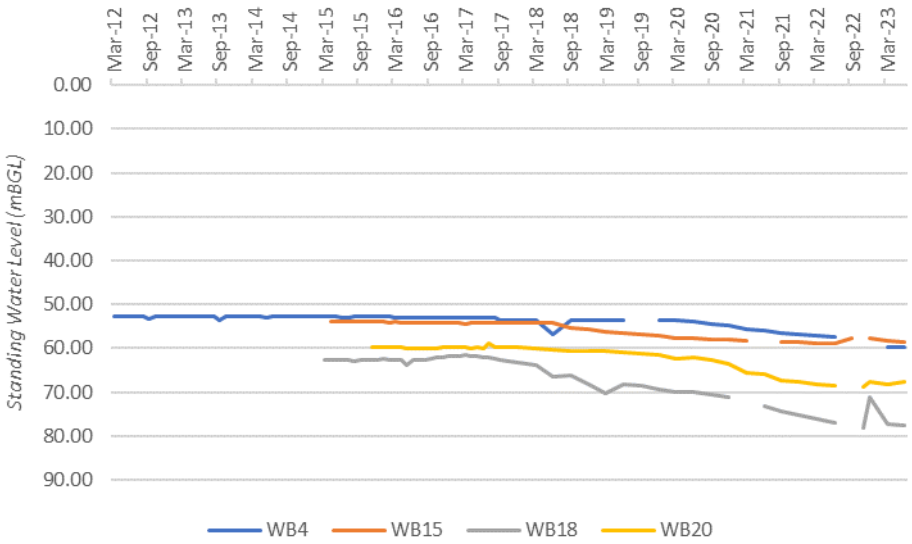

Figure 20- Summary of standing water levels for the life of mine at Hera Mine

Figure 21 and **Figure 22** present the groundwater pH and EC for the life of mine at Hera Mine. The results indicate that all four bores monitored generally have pH values over the life of mine within a range of 6-8 pH units. EC results are variable over the life of mine with WB18 consistently recording the lowest EC results.

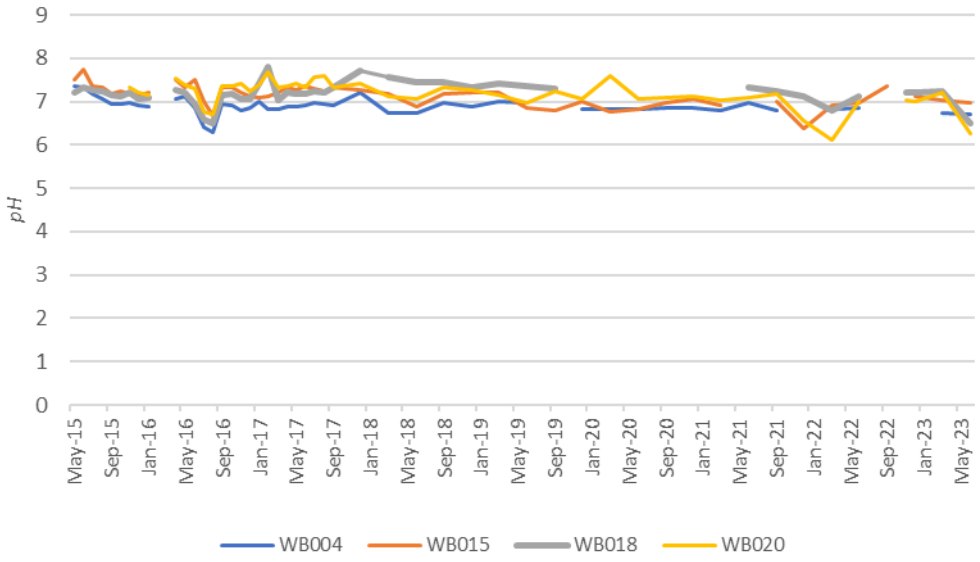

Figure 21 - Summary of the groundwater pH for the life of mine at Hera Mine

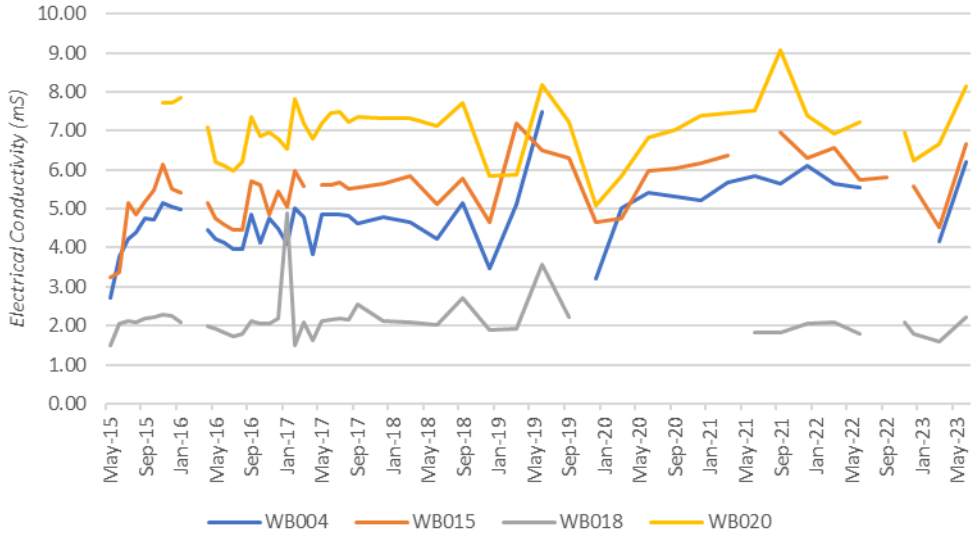

Figure 22 - Summary of the Groundwater Electrical Conductivity for the life of mine at Hera Mine

Long term Groundwater Take

Figure 23 presents a summary of the groundwater production for the last eight financial (water) years. Groundwater production monitoring prior to this time was deficient and insufficient data is available to present. Groundwater production has significantly decreased from the previous water years. This is a result of a number of factors, including lower ore production and the site entering care and maintenance has resulted in less water requirements. This has enabled bores to be rested. All bores within the Hera ML apart from PHWB02(Bore31) have been placed in care and maintenance.

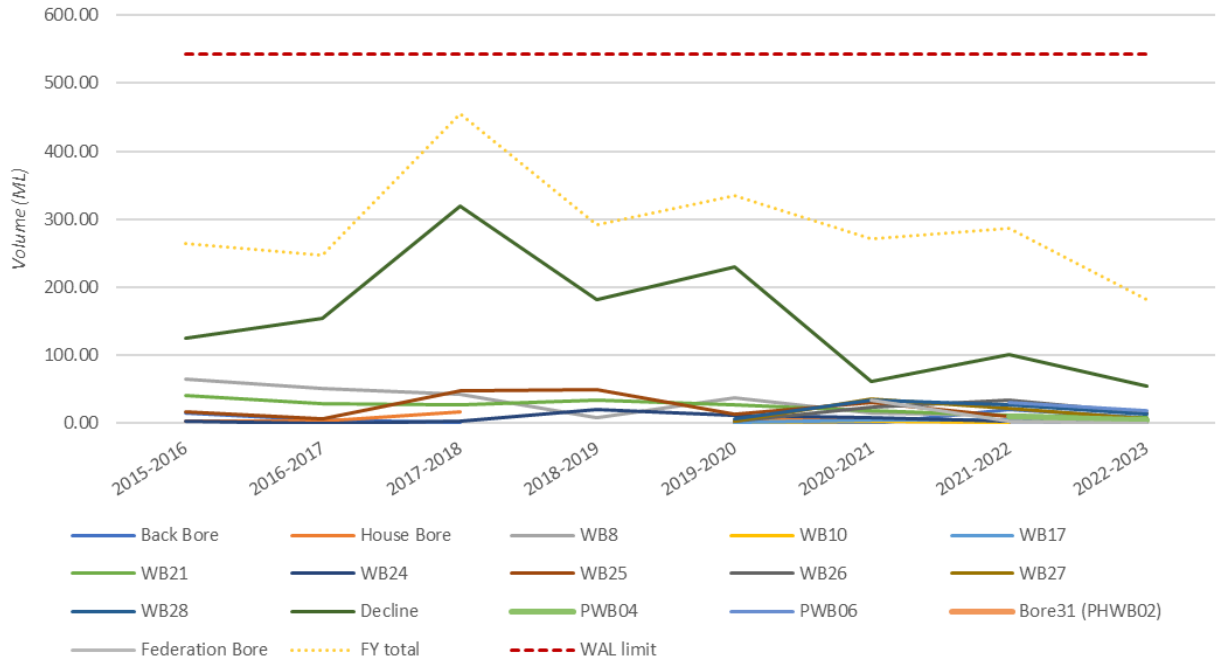

Figure 23 - Summary of Groundwater production for the life of the mine

7.3.3. Performance Issues and Proposed Improvements

One groundwater incident was recorded as listed in section 11. On 3 December 2022 it was suspected that the process water pond 2 liner was leaking. The pond was emptied, and a small tear was identified. No cause for the tear could be established. The tear was repaired and tested by qualified contractor. No water reported to external drains or monitoring points.

There were several non-compliances reported against the EPL that resulted in groundwater bores not being sampled due to various reasons:

- Two of the bores (Monitoring Point (MP) 29 and 28) were blocked downhole. A contractor was engaged to clear the blockages.
- Three of the bores (MP 9, 40 and 32) had pump breakdowns or servicing being conducted on the day of sampling. The reason this has resulted in a non-sample event is, a specialist contractor is engaged to complete the groundwater monitoring and if the pumps are not working on the scheduled day, the sample has been missed. Arrangements will be made to do follow up sampling in the event bores are unavailable.
- One of the bores (MP 27) was not accessible due to inclement weather on the scheduled sample day.
- MP 19 was not sampled at all during the period as the pump is not working.

The non-compliances were reported in the 2022 Annual Return, submitted to the EPA. A groundwater consultant was engaged to review the groundwater monitoring program for the site and this work has been submitted to the EPA and the EPL amended accordingly. See Appendix 2 for Groundwater consultant report.

8. REHABILITATION

8.1. Buildings and Infrastructure

No buildings or mine infrastructure were demolished during the reporting period.

8.2. Rehabilitation of Disturbed Land

Hera Mine has only disturbed land directly required for current mining operations. Therefore, no significant rehabilitation of disturbed land is planned until mine closure. Progressive rehabilitation will only be undertaken in sections of the mine no longer required for mining purposes, if areas become available.

The RMP submitted to the RR developes detailed design for the closure of the underground workings in FY24 and physical works commencing in FY25.

8.3. Rehabilitation Trials and Research

Utilising the data collected from the TSF cover trials previously reported on, SGM Environmental was engaged to prepare a Closure Design for the development of Landform Evolution Modelling. The purpose of this work is to develop a Hera TSF closure design that models long term (e.g., over 1,000 years) stability with acceptable erosion rates. Works include:

- Material characterisation (site base sampling, field parameters, laboratory analysis):
    - soil (from the stockpiles that were surveyed in 2021);
    - clay (from the back tank east dam borrow); and
    - rock (from the Magazine Hill quarry).
- A bulk soil and bulk clay sample for laboratory analysis
- Develop a ‘cover model’ using field and laboratory data to test infiltration potential. Modelling would be used to determine the optimal cover configuration and thickness.
- Landform design / evolution modelling comprising:
    - Rainfall simulation
    - A two-dimensional, hillslope model that has been validated for Australian mine sites
    - A SIBERIA will be developed for the rehabilitated TSF landform using a digital elevation model (DEM).

At the time of writing, the report was in final draft stage and will be provided in the next reporting period.

8.4. Further Development of the Final Rehabilitation Plan

The development of the RMP for the ongoing use of the Hera Mine processing plant and infrastructure to support the Federation Mine is ongoing and will be further developed as the Mine progresses.

Table 29: Summary of rehabilitation activities

	Mine Area Type	Area Affected/Rehabilitated (ha)		
		Previous Reporting Period (Reported)	This Reporting Period (Actual)	Next Reporting Period (Forecast)
A	**Total Mine Footprint[1]**	**116.44**	**118.54**	**118.54**
B	**Total Active Disturbance[2]**			
B1	Infrastructure	34.5	34.5	34.5
B2	Tailings Storage Facility	46.65	46.65	46.65
B3	Water Management Areas	21.46	21.46	21.46
B4	Waste Rock Emplacement	1.69	1.69	1.69
B5	Stockpiled Material (soil)	11.65	11.86	11.86
B6	Void	0.49	0.49	0.49
	TOTAL	**116.44**	**118.75**	**118.75**
C	**Land Being Prepared for Rehabilitation[3]**	0	0	0
D	**Land Under Active Rehabilitation[4]**	0	0	0
E	Completed Rehabilitation[5]	0	0	0

Notes:
1. Total mine footprint includes all areas within a mining lease that either have at some point in time or continue to pose a rehabilitation liability due to mining and associated activities.
2. Total active disturbance includes all areas ultimately requiring rehabilitation.
3. Land being prepared for rehabilitation – includes the sum of mine disturbed land that is under the following rehabilitation phases – decommissioning, landform establishment and growth medium development (as defined in DRE MOP Guidelines).
4. Land under active rehabilitation - includes areas under rehabilitation and being managed to achieve relinquishment – includes the following rehabilitation phases as described in the DRE MOP Guidelines – ecosystem and land use establishment and ecosystem and land use sustainability.
5. Completed rehabilitation – requires formal sign-off by DRE that the area has successfully met the rehabilitation land use objectives and completion criteria.

9. COMMUNITY

9.1. Environmental Complaints

During the reporting period three complaints were received:

- 2x complaints related to dust from the TSF (25/5/23, 04/06/23). The company Is proposing to apply dust suppression prior to summer to minimse dust lift. Results from dust monitoirng show that dust levels at nearest receivers remain below limits.
- 1x complaints related to dust from vehicles travelling between the Federation Project and Hera Mine along the Burthong Road 29/07/22. Upgrade works including bitumen sealing the road are planned to commence in September 2023. In the interim, the company has enagaged a contractor to water the road.

Figure 24 presents a summary of the complaints received at Hera since FY2012 to FY2023.

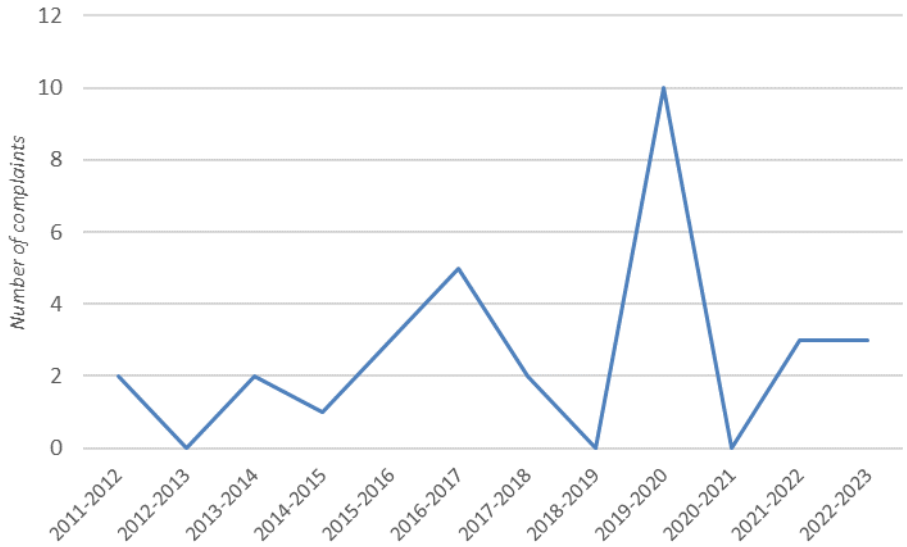

Figure 24 - Summary of complaints received for the life of the Hera Mine

9.2. Community Liaison

Hera recognises its responsibilities as a member of the Nymagee community and surrounding region and demonstrates this through a range of community contacts, provisions and interactions. A summary of this involvement is presented in **Table 30.**

Table 30: Summary of Community Consultation during the FY23 Reporting Period.

Forum	Consultation/Contribution
Nymagee and surrounds	General Community involvement including: • Hera is one of the largest employers in the local region and recognises this by employing local residents where possible and sourcing contractors from the local region; • Regular attendance to the Nymagee Progress Association which is held on a monthly basis; • Provision of waste management services to Nymagee for general and septic waste; and • Regular attendance to the Cobar Local Emergency Management Committee held on a quarterly basis.
Financial contributions and donations	Financial contributions made during the reporting period included: • Contribution to Doctors housing • Nymagee Christmas Tree; • Nymagee Cricket Club; • Nymagee Gymkhanna • Hermidale Public School Future Farmers program
Community Consultative Committee (CCC) Meetings	Hera held three CCC meetings during the reporting period. Meetings were held in September and December 2022 and March and June 2023. The CCC meetings are chaired by an Independent Chairperson approved by DPE and attended by community representatives to discuss the environmental and operational progress of the mine and provide an opportunity to discuss any concerns the community may have.
Company website	Hera Resources operate and update a website where it provides operational, environmental and cash flow reports, environmental monitoring data, management plans and independent audits

10. INDEPENDENT AUDIT

Independent Environmental Audits (IEA) occur at Hera Mine every three years with the latest audit being completed in January 2023. Actions identified during the audit have been summarised in **Table 31.**

Table 31: Independent Environmental Audit non-compliances and recommendations

Project Approval condition	Observation/Assessment	Recommendation	Hera Resources Action plan	Due Date
S2.14	Hera has consulted with Council regarding the variation of the Planning Agreement. The Agreement has not been executed at the time of this IEA	Finalise and execute the Voluntary Planning Agreement with Council.	Discussions have been held with Council and DPE. VPA to be finalised as part of Federation Project	Complete
S3.4	555 blasts were initiated during the 2019/20 reporting year. No vibration exceedances were detected at any rivately owned properties. One blast overpressure exceedance (132.0dB) was reported (2 November 2019). As the blast was 270m below surface this exceedance was likely the result of background meteorological conditions. The elevated overpressure observed would relate to the wind speed at the time of the vibration recording as it was averaging 16km/h with a peak wind gust of 30.8km/h to the North-North east. 623 blasts were initiated during the 2020/21 reporting year. No vibration exceedances were detected at any privately owned properties. 294 blasts were initiated during the 2021/22 reporting year. No vibration exceedances were detected at any provately owned properties.	The blast overpressure recorded was likely a result of weather conditions at the time of the blast. Hera have since executed a noise and blasting agreement with the impacted landowner. Therefore, no further actions are recommended.	N/A	N/A
3.12	The Air Quality and Greenhouse Gas Management Plan is being implemented. Appropriate dust controls are being used. However, dust deposition and PM10 measurements from the 2019/20 reporting period showed elevated dust levels. It is likely that these exceedances were a result of the weather conditions being experienced and are not indicative of the impact of the mine operations. During 2020/21 and 2021/22 reporting periods, dust levels were significantly lower. This coincides with higher than average rainfall.	It is recommended that Hera consider investigating the relationship between deposited dust and PM10 levels measured by the existing air monitoring program with regional air quality to ascertain whether the elevated levels of dust recorded during dry periods is representative of regional air quality or are the result of mine generated dust levels.	Engage with suitably qualified air quality specialist to provide advice and supply recommendations for amending air quality monitoring program.	Dec 2023
3.13	There are two point-source emission locations ar the Hera operation, the gold room stachs. Monitoring data reported for these stacks indicated that one exceedance of the EPL discharge limit for Mercury was detected in September 2020.	Hera investigated the exceedance, reported the findings to the EPA. No further actions are recommended.	N/A	N/A
3.17	A Penalty Notice (Breach f Section 4.2)1)(b) of the Environment Planning and Assessment Act 1979 was issued by DPE in response to self-reporting by Hera of a non-compliance against Schedule 2 Condition 2 of the Planning Approval (importation of water onto site for use in processing plant)	The importation of water to the site was ceased when Hera became aware on the non-compliance. No further action is requried.	N/A	N/A

11. INCIDENTS AND NON-COMPLIANCES DURING THE REPORTING PERIOD

Refer to **Table 2** for a summary of incidents and non-compliances.

12. ACTIVITIES TO BE COMPLETED IN NEXT REPORTING PERIOD

In accordance with the RMP, no rehabilitation is planned for the next reporting period.

Table 32 provides a summary of proposed activities fo the next Annual Review reporting period.

Table 32: Activities proposed for the next Annual Reporting Period.

Proposed activity	Timing
Installation of environmental monitoring equipment for Federation Mine	Ongoing - prior to mining commencing

APPENDIX 1 - Biodiversity Monitoring Report

APPENDIX 2 - Groundwater Consultant report.