

HERA MINE ANNUAL REVIEW

PROJECT APPROVAL 10_0191 MINING LEASE 1686 MINING LEASE 1746

For the period 1 July 2021 to 30 June 2022







HERA MINE
Hera Resources Pty Ltd
PA 10_0191
Hera Resources Pty Ltd
MINING LEASE 1686
MINING LEASE 1746
Hera Resources Pty Ltd
WAL 43173
Aurelia Metals Ltd
1 January 2020
31 December 2022 (Rehabilitation Reforms have
removed requirement for MOP)
1 July 2021
30 June 2022

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 2020 to 30 June 2021 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 section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E 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:	Ň
Date:	18 August 2022



Hera Annual Review 2021-2022	
Author	K Sammons (SLR) and M. Williams (Hera)
Reporting period	1 July 2021 to 30 June 2022

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Water Quality Monitoring Results Blast Monitoring Results

Appendix B



ABBREVIATIONS

μg	Micrograms
μm	Micrometre
CCC	Community Consultative Committee
dB	Decibels
DDG	Dust Deposition Gauges
Dol Water	Department of Industry - Water (former)
DPE	Department of Planning and Environment
EA	Environmental Assessment
EPA	Environment Protection Authority
EPL	Environment Protection Licence
ha	Hectare
HVAS	High Volume Air Sampler
IA	Inaudible
m ³	Cubic Metre
ML	Mining Lease
mm/s	Millimetre per second
MOP	Mining Operations Plan
NRAR	Natural Resources Access Regulator (formally Dol Water)
NR	No result
NSW	New South Wales
NSW EES	NSW Environment, Energy and Science (formally OEH)
OEH	Former Office of Environment and Heritage
Oz	Ounces
PA	Project Approval
PM ₁₀	Particulate Matter less than 10µm
RMP	Rehabilitation Management Plan
RR	Resources Regulator
SDS	Safety Data Sheet
t	Tonnes
tpa	Tonnes per annum
TSF	Tailings Storage Facility
TSP	Total Suspended Particulate
WAD Cn	Weak Acid Dissociable Cyanide
WAL	Water Access Licence
WLL	Western Lands Lease
WRFA	Waste Rock Emplacement Area

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1 Statement of Compliance

A summary of compliance at Hera Mine during the 2021-2022 (herein referred to as FY2022) reporting period 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	No	
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 FY2022 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
EPL 20179	M 2.3	EPA ID 40 (WB10), EPA ID 27 (HWB015), EPA ID 9 (GWB8), EPA ID 19 (Housebore), EPA ID 32 (WB24),Not sampled in accordance with M2.3	Non- compliant	Bore was out of service and access to bore was not available on the day of sampling	Section 7.3.3
EPL 20179	M 2.3	EPA ID 29 (WB18) not sampled in accordance with M2.3	Non- compliant	Bore was blocked at 61m below collar on the day of sampling	Section 7.3.3
EPL 20179	M 2.3	EPA ID 28 (WB16) not sampled in accordance with M2.3)	Non- Compliant	Bore was blocked at 76.79m on 09/06/2022 and 94.91m on 08/12/2022	Section 7.3.3
PA10_0191 EPL 20179 Mining Lease 1686	Sch 5 7a L1.1	Potential for material harm to the environment	Non- Compliant	Suspected leak from process water pond	Section 7.2.6

Table 3 Compliances Status Categories

Risk Lovel	Colour Code	Description
MISK LEVEI	colour coue	Description
High	Non-Compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium	Non-Compliant	Non-compliance with potential for serious environmental consequences, but is unlikely to occur; or potential for moderate environmental consequences, but is likely to occur

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Risk Level	Colour Code	Description
Low	Non-Compliant	Non-compliance with potential for moderate environmental consequences, but is unlikely to occur; or potential for low environmental consequences, but is likely to occur
Administrative non-compliance	Non-Compliant	Non-compliance which 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 site operates in accordance with Project Approval (PA) 10_0191 which was issued by the Department of Planning and Infrastructure (DPE) on 31 July 2012 under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). 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.

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 2021 to 30 June 2022 (herein referred to as the reporting period), and has been prepared in accordance with the following:

- Schedule 5, Condition 4 of PA 10_0191;
- Condition 4 of ML 1686;
- Condition 3 of ML 1746; and
- The NSW Government Guideline, Annual Review Guideline (October 2015).

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

Mine ContactsTable 4 lists the site contacts for Hera.



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Table 4 Mine Contacts

Name	Role	Phone	Email Address
		number	
Robert	General	02 6837 3006	robert.walker@aureliametals.com.au
Walker	Manager		
Mark	Environment	0447 257 312	mark.williams@aureliametals.com.au
Williams	Superintendent		
Jonathon	Group Manager	0488 065 144	Jonathon.Thompson@aureliametals.co
Thompson	- Environment		m.au
General	-	1800 437 264	complaints@aureliametals.com.au
Enquiries/			
Complaints			





Figure 1 Regional Locality

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Figure 2 Site Layout



Hera 2021-2022 Annual Review		
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3 Approvals

3.1 Overview

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

Table 5 Consents, Leases and Licences

Consent/Lease/Licence	Licence	Date of Issue	Expiry	Relevant Authority
	Number			
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
Mining Operations Plan	N/A	1 January 2020	3 August December 2022	Resources Regulator
Water Access Licence (WAL)	WAL 43173	6 March 2020	N/A	NRAR
Western Land Lease	WLL 2455	4 April 1911	Perpetual Lease	Dol – Crown Lands
Western Land Lease	WLL 5379	8 November 1943	Perpetual Lease	Dol – Crown Lands
Dangerous Goods Licence	35/038197	22 November 2011	Expires: N/A	SafeWork NSW
Explosives Licence	XSTR200011	2012	6 June 2023*	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);

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- MOD 4 Extension to the approved project boundary to extract and process an additional 62,000 t of goldzinc-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 PA10_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);	Section 6.9
(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.	
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:	Section 4
(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;	
(b) include a comprehensive review of the monitoring results and complaints records of the	Section 6
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;	
(c) identify any non-compliance over the past year, and describe what actions were (or are	Sections 1
being) taken to ensure compliance;	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	Section 6
analyse the potential cause of any significant discrepancies; and	
(f) describe what measures will be implemented over the next year to improve the	Section 6
environmental performance of the project.	
(g) report on water extracted from the site each year (direct and indirect) including water	Section 7
taken under each water licence.	
ACCESS TO INFORMATION	Section 9.2
11. Prior to the commencement of construction on the site, the Proponent shall:	
(a) make copies of the following publicly available on its website:	



Condition	Where Addressed
(vii) the annual reviews required under this approval; and(b) keep this information up-to-date.	

3.2.2 DA 2012/LD-00004

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/LD00010

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 Licenses

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. 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 Licences

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, Dangerous Goods Licence 35/038197 and Radiation Licence 5066818.

3.5 Other Approvals

3.5.1 MOP

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). On the 1 of July 2022 the NSW Resources Regulator Reforms commenced and on the 1 August 2022 the MOP was replaced by the Rehabilitation Management Plan (RMP).



3.5.2 WLL 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 Dol Crown Lands.

3.5.3 WLL 5379

The Hera Mine extension to the south (approved via MOD6) is located on land held by a private landholder under Western Lands Lease No. WLL 5379, granted under the *Western Lands Act 1901* and managed by Dol Crown Lands. Hera Resources has a land access agreement in place and is in negotiations with the landholder to purchase the Western Lands Lease.



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 approved MOP.

During the reporting period, the following exploration activities were undertaken:

• A total of 9 RC holes, 58 diamond drill holes and 65 wedge holes were drilled within EL6162 during the period. No other exploration drilling was completed on other EL's or ML's.

No exploration boreholes were rehabilitated during the reporting period. Rehabilitation works have been undertaken on sites and tracks where it has been deemed no further exploration activities will be undertaken. Further rehabilitation works are ongoing as areas are sterilised for exploration purposes.

4.1.2 Land Preparation

Land preparation was undertaken in accordance with ESG5 for the majority of surface exploration drilling, unless drilling activities were designed and completed within pre-disturbed areas. Land preparation included clearing of access tracks and drill sites (described above) to allow access and safe operation of drilling equipment and the construction of inground sumps for the containment of drilling fluids used and produced during the drilling process.

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.



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Figure 3 Schematic of bench stoping mining method

Mining activities conducted during the financial year period (1 July 2021 to 30 June 2022) are summarised in **Table 7.**

Table 7 Producti	on Summary fo	or the FY2022 Period

Material	Approved Limit (PA 10_0191)	FY 2022 MOP Prediction	FY 2020 (Actual)	FY 2021 (Actual)	FY 2022 (actual)	FY2023 (Forecast)
Waste Rock	N/A	-68,000 t	-98,856 t	0 t	0 t	0 t
ROM Ore	505,000 t	486,000 t	410,495 t	445,828	335,102 t	463,165 t
Tailings (Solids)	N/A	400,000 t	369,391 t	402,436 t	285,242 t	418,334 t
Saleable Product (Gold)	N/A	22,500 oz	45,031 oz	31,369 oz	16,478 oz	16,877 oz
Saleable Product (Lead / Zinc Bulk Concentrate)*	N/A	51,500 t	41,859 t	45,596 t	50,713 t	44,831 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 2021 calendar year (383,470 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**. No waste rock is planned to be brought to surface in the next reporting period, as all waste will be used in backfilling stopes. The Surface Extraction Area approved in PA 10_0191 MOD6 will provide waste rock for underground backfilling operations where there are deficiencies.

4.2 Other Operations

4.2.1 Mineral Processing and Transport

During FY2022, approximately 285,242 t of tailings (solids), 16,478 oz of gold ore (unrefined bars), and 50,713 t of lead/zinc bulk concentrate were produced from the processing plant. All tailings were disposed of in the Tailings Storage Facility (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 2021 calendar year, Hera Mine transported 44,913 t of concentrate from the site, which is within the 60,000t limit stipulated within PA 10_0191.

4.2.2 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**.

Material	Approved Limit (PA 10_0191)	Stockpiles Previous Reporting Period (Actual)	Stockpiles this 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	180,941 m ³	181,361 m ³	181,361 m ³
Soil Used	n/a	0 m ³	0 m ³	0 m ³

Table 8 Stockpile details for the reporting period

No waste rock is planned to be brought to the surface during the next reporting period. No soil was used during the reporting period or is planned to be used during the next reporting period.

4.2.3 Construction

During the reporting period, construction included:

- Magazine relocation (MOD 6) construction was completed in November 2021.
- Surface Extraction Area (MOD 6) construction was completed in November 2021.

4.2.4 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;

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- 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.

4.2.5 Waste Management

Waste management for the period was undertaken in accordance with the commitments made in the MOP. 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 Management during the reporting period

Waste Stream Description		Quantity (t)
General waste	General waste for disposal.	117.49
General recyclables	recyclables General mixed recyclables.	
Hazardous waste disposal	Oily Rags/absorbents, absorbent contaminated	7.92
···	waste, chemicals, pond liners.	
Hazardous waste recycled Oil Filters, waste grease, solvents		87.83

4.2.6 Hazardous Material 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; and
- The classification of some materials was reviewed, and redundant materials removed from the system.

4.3 Next Reporting Period

Mining and exploration activities are expected to continue during the next reporting period.

It is noted that Aurelia has submitted the Federation Project environmental impact statement for determination. Mining at Hera Mine is currently approved for operations until December 2025. If approved, mining of the Federation Project will allow for a transition of mining operations from the Hera Mine to the Federation Project, as ore from the Federation Project replaces ore from the Hera Mine. Processing operations will continue at the Hera Mine. Further details are available on the DPE Major Projects Website.

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5 Actions Required from Previous Annual Reviews

The 2020-2021 Annual Review was submitted to the DPE, Resources Regulator, 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 2020-2021 Annual Review

Action Required from Previous Annual Review	Action Taken by Operator	Where
		discussed
Comments from DPE		
The document is satisfactory	N/A	-
Comments from Resources Regulator		
No comment received	N/A	-
Comments from DPE Biodiversity, Conservation and	d Science Directorate	
Section 6.5.2 indicates that only six of the seven monitoring points on the Chelsea property were assessed during the survey undertaken in October 2020. All monitoring points identified in the Biodiversity Management Plan should be assessed, where this is not possible justification should be provided in the annual review. Section 6.5.3 makes reference to the Biodiversity Assessment Method (BAM) 2017. It should be noted that the BAM 2020 was introduced on 22 October 2020 and that the transition arrangements end on 22 October 2021.	Monitoring in FY 22 was cancelled due to COVID	-
Commitments made by Hera in previous Annual Review	N	•
Magazine relocation (MOD 6)	Completed November 2021	4.2.3
Surface Extraction Area (MOD 6)	Commenced November 2021	4.2.3
Hera-Federation Pipeline Not Commenced	Pipeline not commenced	-
Production Bore Improvement works	Works were completed January 2021	-



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 FY2022 reporting period was wetter when compared to the previous reporting period due to consistent rainfall throughout the reporting period. Total annual rainfall was 639.2 mm, compared to 470.6 mm during the previous reporting period. The daily minimum and maximum 2m temperatures ranged from -4.8°C to 37.9°C respectively, with an average daily maximum of 29.31°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 has been summarised in **Figure 6**, and wind direction data has been summarised in **Figure 7**. The meteorological monitoring results provide context for the environmental monitoring and management discussed further in this document.



Figure 4 Summary of the Rainfall and Windspeed conditions for the reporting period



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Figure 5 Environmental Monitoring Locations and Receptors

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Figure 6 Temperature Summary for the Reporting Period



Figure 7 Wind Rose Report for Hera (1 July 2022 to 30 June 2022



1 July 2021 to 30 June 2022

6.2 Air Quality and Greenhouse 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;

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- 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 (PM₁₀). 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 (PM₁₀). 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 (PM₁₀). 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 (PM₁₀) 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/m³) and in accordance with *Protection of the Environment (Clean Air) Regulation 2010*.
- S3 Stack monitoring locations, used to monitor particulate emissions from the exhaust ventilation stack.

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 PM₁₀ 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 12**. 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	² 90 μg/m³	
Particulate matter,10 μ m (PM ₁₀)	24-hour	^а 50 µg/m ³	
	Annual	² 25 μg/m³	
^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 are 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

6.2.2.1 Monitoring During the Reporting Period

Nitric Oxide

Standard of concentration Group 6 – *Protection of the Environment Operations (Clean Air) Regulation 2010* limits and stack monitoring results for the pollutant Nitric Oxide completed by Ektimo Pty Ltd on 30 January 2022 are shown in **Table 12**. Detected values are below limits.

Table 12 Stack Nit	ic Oxide Monitoring	criteria and Results
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Emission Point	Units	Standard of Concentration (Group 6)	Detected values
EPA ID 24 - Gold Room Scrubber Stack	mg/m3	250	7.8
EPA ID 39 - New Gold Room Baghouse Stack	mg/m3	550	<4



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Depositional Dust Monitoring

Depositional dust monitoring results for the reporting period are shown in Figure 8.



Figure 8 Dust deposition gauge results for the reporting period

Figure 8 shows the 12-month rolling annual average for DDG1 and 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 FY2022 Depositiona	l Dust Monitoring Data
-----------------------------	------------------------

Monitor	Minimum (g/m²/month)	Maximum (g/m²/month)	Average (g/m²/month)
DDG1	0.40	3.68	2.14
DDG2	0.48	4.62	2.69
DDG3	0.05	2.96	1.01
DDG4	0.33	5.47	2.73
DDG5	0.07	2.96	1.21
DDG6	0.14	1.21	0.69
DDG7	0.06	1.49	0.75
DDG8	0.16	1.42	0.78
DDG9	0.11	1.06	0.49
DDG10	0.16	1.13	0.53

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DDG11	0.53	7.50	2.72

As shown in **Table 13**, the Annual Review reporting period average depositional dust results were below the $4 \text{ g/m}^2/\text{month}$ PA criteria at both compliance monitors and all investigative monitors.

HVAS Monitoring

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

Table 14 FY2022 HVAS Monitoring Data

Monitor	Minimum (μg/m³)	Max (µg/m³)	Average (μg/m³)
TSP	0.5	108	35.7
PM ₁₀	<0.1	42.0	13.0

 PM_{10} never exceeded the 50 µg/m³ 24hr criteria throughout the reporting period. Additionally, the annual average PM_{10} result (13.02 µg/m³) was well below the 25 µg/m³ criteria.

The annual average TSP result (35.7 μ g/m³) was within the 90 μ g/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 9**.



Figure 9 HVAS 24hr PM_{10} Results for the Reporting Period

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6.2.2.2 Long Term Monitoring

Depositional Dust Monitoring

Figure 10 presents the annual average depositional dust results from the FY2015 to the FY2022 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 2022

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 last four reporting periods (FY2019, FY2020, FY2021 and FY2022). The ongoing reducing trend is continuing (refer **Section 6.1**). This level is as a result of road traffic and not mining activities.

HVAS Monitoring

Figure 11 presents the TSP annual averages from FY2015 to FY2022, 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).

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Figure 11 TSP Long Term Annual Averages

As shown in **Figure 11**, 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 and FY2022 has reduced to a level not seen since prior to FY2018. All results have been below the annual average PA TSP criteria.



Figure 12 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 12 PM₁₀ Long Term Annual Averages

As shown in **Figure 12**, PM_{10} results had been generally increasing since the FY2014 reporting period and exceeded the EA prediction in 2FY2018, FY2019 and FY2020. The PM_{10} result for FY2021 decreased and the FY2022 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.

Greenhouse Gas Emissions

A summary of greenhouse gas emission data against the EA predictions has been presented in **Table 15**. As the FY22 National Greenhouse and Energy Reporting (NGER) has not yet been completed, the FY21 data has been included.

Table 15 FY2021 NGERs Data

Data	Scope 1 ^a (t CO2-e)	Scope 2 ^b (t C)2-e)	Total (Scope 1 and 2)
EA Predictions	19,158	0	19,158
FY21 Data	23,130	0	23,130

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 FY21 data was 18.79% higher than the predictions made in the EA. The original EA assumed Hera Resources would process approximately 350,000t of ore. In FY21, 463,343 t of ore were processed or 27.87% more ore than the predictions used in the EA. This indicates that Hera's greenhouse gas emissions are in accordance with predictions.

6.2.3 Performance Issues and Proposed Improvements

During the reporting period there were no exceedances of the PA 10_0191 24-hour criteria at the HVAS (PM₁₀).

On 30 January 2022, the EPA ID 24 – Gold Room Scrubber Stack recorded a Mercury result of 0.041 mg/m3 (0.2 mg/m3 limit) further confirming that the performance of the stack has improved since recording an elevated result of 0.26 mg/m³ on 1 September 2020. This indicates that the preventative maintenance plan implemented by Hera Resources to address the elevated Mercury result in 2020 has proved successful within the reporting year.

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 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:

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- 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, wellventilated 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 of land causing actual or potential material harm to the environment are reported to the relevant external regulators; and
- Establishment of a bioremediation bay in the TSF containment in consultation with the EPA and DPE.

6.4.2 Environmental Monitoring Results

No monitoring was required during the reporting period.

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6.4.3 Performance Issues and Proposed Improvements

No hazardous materials incidents were reported in the reporting period. No changes to contaminated and/or polluted land management at Hera are proposed for the following reporting period.

6.5 Biodiversity

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6.5.1 Environmental Management

Threatened flora and fauna at the 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 Stewardship Agreement (BSA) (previously known as Biodiversity Offset Strategies) for 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 reporting period. Hera Resources is anticipating this will be determined in the next reporting period.

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Biodiversity monitoring is undertaken annually across 13 locations within the Project Approval area, and at seven locations at the Chelsea Property. The ecological monitoring locations within the Project Approval area are shown on **Figure 5**.

6.5.2 Environmental Monitoring Results

There were no biodiversity monitoring surveys undertaken during the FY22 reporting period due to COVID - 19.

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

The FY 2022 was cancelled due to COVID - 19. Monitoring is scheduled to occur 2nd quarter of FY 2023.

6.6.3 Performance Issues and Proposed Improvements

Bathurst Burr control was carried out around site, particularly on topsoil stockpiles. Goat mustering will recommence in the next period as numbers start to build up following the drought.

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 minimized 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.



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Table 16 Blast Criteria

Location	Time Period	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (mm/s)	Allowable Exceedance
Residence on	Any time	120	10	0%
privately- owned land	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

6.7.2.1 Monitoring During the Reporting Period

294 blasts were initiated during the reporting period. No blasts exceeded the vibration criteria. All 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 Monitoring Results Summary

Parameter	Min	Max	Non-Permitted Exceedances
Blast Vibration	0.01 mm/s	3.23 mm/s	0
Blast Overpressure	71.00 dB	111.9 dB	0

The blast overpressure and vibration results for the reporting period, against the applicable criteria, are presented in **Figure 13**, **Figure 14**, **Figure 15** and **Figure 16**.



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Figure 13 FY2022Blast Overpressure Monitoring Results



Figure 14 FY2022 Blast Vibration Monitoring Results (Day)


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Figure 15 FY2022 Blast Vibration Monitoring Results (Evening)





Figure 16 FY2022 Blast Vibration Monitoring Results (Night/Sunday/PH)

6.7.2.2 Long Term Monitoring

Figure 17 presents a summary of the average annual blast vibration for the life of the mine (i.e., since 2013). The FY2022 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 FY2022 reporting 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 17 Summary of the Average Blast Vibration for the Life of the Hera Mine

6.7.3 Performance Issues and Proposed Improvements

No performance issues were identified during the reporting period.

No changes to blast management at Hera 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:
 - o 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;
 - o 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.

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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**.

Table 18 Noise Criteria

Location	Day	Evening	Night	
	(LAeq(15-minute))	(LAeq(15-minute))	(LAeq(15-minute)) (LA1(1 minute)	
All residential receivers	35 dB	35 dB	35 dB	45 dB

6.8.2 Environmental Monitoring Results

Attended noise monitoring is scheduled to occur in the second quarter of 2023 as a part of the program to ensure monitoring is occurring in different seasonal conditions. Last attended monitoring occurred in May 2021. 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. 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 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 in **Table 19** below. The records in **Table 19** align with calendar year as per requirements of PA 10_0191.



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Table 19 Monthly Volumes of Concentrate Transported

Month	Tonnes of Concentrate Transported	Average Vehicle Movements Per Day
January 2021	3,298.77	4.39
February 2021	2,188.13	3.21
March 2021	3,065.73	4.06
April 2021	3,211.25	4.4
May 2021	4,261.05	4.87
June 2021	3,527.79	4.87
July 2021	3,511.49	4.65
August 2021	3,260.99	4.32
September 2021	3,699.34	5.07
October 2021	5,219.58	7.13
November 2021	5,073.31	6.39
December 2021	4,595.64	6.33
Total	44,913.07	-

The transport of concentrate in the 2021 calendar year reporting period (44,913.07 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

No heritage monitoring was required during the reporting period. 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 in any risk assessment for new disturbance works. Visual, Stray Light

6.10.4 Environmental Management

Visual, stray light at the 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.

6.10.5 Environmental Monitoring Results

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

6.10.6 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.

6.11 Bushfire

6.11.1 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 (JHA) 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 Site Emergency Response Team;
- Established links and protocols with nearby Cobar emergency response teams; and

6.11.2 Environmental Monitoring Results

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

6.11.3 Performance Issues and Proposed Improvements

There were no bushfire related incidents during the reporting period. In the next reporting period, the relationship with the New South Wales Rural Fire Service (RFS) will be enhanced as the site becomes the custodian of a dedicated RFS road crash rescue vehicle to service the local community, with Emergency Rescue Team (ERT) members continuing to participate in training provided by the RFS.



6.12 Public Safety

6.12.1 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 is manned 24 hours a day, seven days a week; and
- Induction procedures are required for visitors to site.

6.12.2 Environmental Monitoring Results

No safety related monitoring was required during the reporting period.

6.12.3 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 20**.

Table 20 \	Nator Managor	nont Dotails f	or the Re	norting Period
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		Volumes held (ML)				
Water Type	Storage	Start of Reporting Period 1 July 2021	End of Reporting Period 30 June 2022	Storage Capacity (ML)	Usage	
Clean Water	Pete's Dam	3.0	1.5	3.2		
	Back Dam East	100.0	0	108	Transferred to Process Water Dam as	
	Back Dam	5.8	3.2	6.5	required.	
	Three Gates Dam	3.3	0	3.6		
	Total	112.1	4.7	121.3		
Raw Water	Back Tank	0.1	0	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	Storage point from House Bore for use in exploration drilling.	
	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	0.52	0.42	0.62		
Contaminated water	Process Water Dam	5.1	5.1	5.3	Central source for Process Plant.	
	Tailings Decant Pond	20.0	15	134.0	Decant water back into process system.	
	Tailings Seepage Pond	0.0	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	0.2	0.0	0.8	Protection of environment, seepage back into process system	
	Expanded Sediment Basin	1.0	0.5	9.0	Captures dirty water runoff from Hera disturbance footprint.	
	Total	26.3	20.6	150.85		

As shown in **Table 20**, the clean water dams are all close to capacity, which is attributed to the wetter than average recent conditions (refer **Section 6.1**). Importantly, contaminated water dams remain below capacity.



7.2 Surface Water Pollution

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 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;
- Visual inspections of upstream and downstream waterways are undertaken at a number of locations in association with surface water quality monitoring to identify any instabilities that have formed as a result of the operations; and

Hera undertakes surface water quality monitoring at several locations within the site (refer **Figure 18** and **Table 21**). EPL 20179 requires surface water quality sampling 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 21 Surface Water Monitoring Points

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



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Figure 18 Water Monitoring Locations

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7.2.2 Environmental Monitoring Results

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

Table 22 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 22 Surface Water Monitoring Results

Monitoring Point	Minimum (mg/L)	Average (mg/L)	Maximum (mg/L)	EPL Maximum Criteria (mg/L)	Development consent criteria - 90 th percentile (mg/L)	Development consent criteria – Maximum (mg/L)
TSF Thickener Discharge (EPA Point 1)	0	0.04	8	10	20	30
Process Water Dam (EPA Point 2)	0	0.07	8	30	20	30

As shown in **Table 22**, 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 Pollution

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 23**.

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

Table 23 Groundwater Monitoring Program

7.3.2 Environmental Monitoring Results

7.3.2.1 Monitoring During the Reporting Period

Groundwater Monitoring

Quarterly standing water levels, pH and Electrical Conductivity (EC) results for the reporting period are summarised in **Table 24** below. TSFOB01, TSFOB02, TSFOB03, TSFOB04 and TSFOB05 were dry at every monitoring period.



Table 24 Groundwater Monitoring Results

Monitoring Point	Month	SWL Limit (m)	Depth to Water (m)	рН	EC (mS)
	September 2021		56.40	6.8	5.64
	December 2021	62	56.77	2.3	6.10
VV B4	March 2022	03	57.12	6.8	5.66
	June 2022	57.43	6.9	5.54	
	September 2021		58.61	7.0	6.96
	December 2021	50	58.68	6.4	6.31
WB12	March 2022	58	58.73	6.9	6.56
	June 2022		58.82	7.0	5.76
	September 2021		74.27	7.3	1.82
\A/D10	December 2021	65	75.17	7.1	2.06
VVB18	March 2022	20	76.19	6.8	2.10
	June 2022		77.07	7.1	1.79
	September 2021		67.28	7.2	9.07
	December 2021		67.57	6.6	7.38
WB20	March 2022	69	68.20	6.1	6.92
	June 2022]	68.43	7.0	7.22

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 during the previous water year (i.e., 1 July 2021 – 30 June 2022) is provided in **Table 25**.

Table 25 Water Take

Water Licence	Water sharing plan, source and management zone	Entitlement	Passive take/ inflows	Active pumping	TOTAL
WAL 43173	Lachlan Fold Belt Murray Darling Basin Groundwater Source (Aquifer)	543 ML/year	107.81ML	138.1ML	245.91ML

A total of 245.91 ML of groundwater was extracted from the bores and underground decline dewatering, which was well within the 543 ML limit. A summary of water extraction per bore during the reporting period is provided in **Table 26.**

Table 26 Groundwater Extraction Per Bore

Bore	Volume (ML)	Pumped/Passive
Back Bore	19.85	Pumped
House Bore	0	Pumped
Nymagee Bore	0.21	Pumped
WB8	10.6	Pumped
WB10	0.4	Pumped
WB17	5.23	Pumped



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Bore	Volume (ML)	Pumped/Passive
WB21	10.61	Pumped
WB24	3.35	Pumped
WB25	9.53	Pumped
WB26	34.29	Pumped
WB27	21.19	Pumped
WB28	26.46	Pumped
Decline	107.81	Passive
Petes Bore	40.03	Pumped
Federation Bore (used for	2 17	Rumpod
exploration activities)	5.17	Fullped
Total	266.27	-

Table 27 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 reused 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).



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Table 27 Summary of Water Flows Onsite and Comparison to the Water Balance

	Rainfa	ll (mm)	Underground Make Up Water Demand (ML)		Underground Make Up Water Underground Mine Water Excess Demand (ML) (ML)		ine Water Excess 1L)	Ablutions Demand (ML)	
Date	Actual	Water Balance Prediction	Actual	Water Balance Prediction	Actual	Water Balance Prediction	Actual	Water Balance Prediction	
July - 21	39.2	30	7.39	1.4	10.51	6.4	2.13	0.5	
Aug – 21	7.6	30	6.94	1.4	10.36	6.4	1.97	0.5	
Sep – 21	42.6	30	7.07	1.4	10.71	6.4	2.26	0.5	
Oct – 21	30.8	30	6.17	1.4	11.91	6.4	2.01	0.5	
Nov – 21	108	30	6.12	1.4	11.30	6.4	1.78	0.5	
Dec – 21	36.2	30	5.98	1.4	0.72	6.4	1.44	0.5	
Jan – 22	109.2	30	6.61	1.4	10.48	6.4	1.34	0.5	
Feb – 22	4.4	30	6.61	1.4	8.53	6.4	11.46	0.5	
Mar – 22	58.8	30	6.61	1.4	7.98	6.4	1.73	0.5	
Apr – 22	78.6	30	6.61	1.4	7.63	6.4	2.07	0.5	
May – 22	121	30	6.61	1.4	9.94	6.4	1.98	0.5	
Jun - 22	2.8	30	6.61	1.4	7.54	6.4	2.04	0.5	
Total	639.2	360	79.33	16.80	107.61	76.80	32.19	6.00	
Difference (%)	17	8%	47	2%	15	0%	53	7%	

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7.3.2.2 Long Term Monitoring

Figure 19 presents a summary of the standing water level results for the life of mine at Hera, which shows that standing water levels at WB4 and WB15 have remained relatively stable and only increased slightly over the last four years. WB18 and WB20 have increased at a slightly higher rate since FY18 and FY 19 reporting years.



Figure 19 Summary of standing water levels for the life of mine at Hera Mine

Figure 20 and Figure 21 present the groundwater pH and EC for the life of mine at Hera Mine. The results are variable over the period of time.





Figure 20 Summary of the groundwater pH for the life of mine at Hera Mine





Figure 21 Summary of the Groundwater Electrical Conductivity for the life of mine at Hera Mine



Figure 22 presents a summary of the groundwater production for the last seven financial (water) years. Groundwater production monitoring prior to this time was deficient and insufficient data is available to present.

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Groundwater production has significantly decreased from the previous water year (353.7 ML). This is a result of a number of factors, including the increased rainfall captured within the TSF decant which has enabled greater recovery of process water from the TSF, lower ore production has resulted in less water requirements and this has enabled bores to be rested.





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 on 5 May 2022. A GW consultant has been engaged to review the GW monitoring program for the site and this work will be completed 2^{nd} quarter FY 23.

It is proposed that a new bore known as PHWB02 will be commissioned along the rookery fault within the Hera Mine ML. The proposed location of the bore has been pump tested and assessed by hydrologists from EMM and it is estimated that it could supply water with a sustainable yield of 3 L/s (10.8 kL/hr).



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 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 Rehabilitation Management Plan submitted to the Resource Regulator includes 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 has been engaged to prepare a Closure Design for the TSF including Landform Evolution Modelling. The purpose of this work is to develop a Hera TSF closure design that has modelled long term (e.g., over 1,000 years) stability with acceptable erosion rates. Works include:

- Material characterisation (site base sampling, field parameters, laboratory analysis):
 - \circ soil (from the stockpiles that were surveyed in 2021);
 - \circ $\$ clay (from the back tank east dam borrow); and
 - o 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

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- A two-dimensional, hillslope model that has been validated for Australian mine sites
- A SIBERIA model will be developed for the rehabilitated TSF landform using a digital elevation model (DEM).

8.4 Further Development of the Final Rehabilitation Plan

Hera Resources is in the process of developing an EIS for the proposed Federation Project. As part of this proposal, the existing infrastructure at Hera Mine is proposed to be utilised wherever possible. This will extend the use of the site footprints, TSF and process plant at Hera.

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8.5 Actions for next reporting period

Table 28 Summary of Rehabilitation Activities

		Area Affected/Rehabilitated (ha)				
	Mine Area Type	Previous Reporting Period (Reported)	This Reporting Period (Actual)	Next Reporting Period (Forecast)		
Α	Total Mine Footprint ¹	116.44	118.54			
В	Total Active Disturbance ²					
B1	Infrastructure	34.5	34.5	To be reported in the		
B2	Tailings Storage Facility	46.65	46.65	Hera Mine Forward		
B3	Water Management Areas	21.46	21.46	Program and Annual		
B4	Waste Rock Emplacement	1.69	1.69	Rehabilitation Report.		
B5	Stockpiled Material (soil)	11.65	11.86			
B6	Void	0.49	0.49			
	TOTAL	116.44	118.75			
С	Land Being Prepared For	0	0			
	Rehabilitation ³					
D	Land Under Active Rehabilitation ⁴	0	0			
E	Completed Rehabilitation ⁵	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 two complaints were received:

- Dust from vehicles travelling between the Federation Project and Hera Mine along the Burthong Road. Hera Resources has since implemented a 60km speed limit for all mine related vehicles travelling along Burthong Road for the gravel section adjacent to the residential premises
- Poor condition of Burthong Road following rain exacerbated by vehicles travelling to the Federation Project. Discussion have been held with Cobar Shire Council in relation to the condition of the road.

Figure 23 presents a summary of the complaints received at Hera since 2011-2012. Complaints peaked in the 2019-2020 reporting period when nine complaints were received.



Figure 23 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 29**.



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Table 29 Summary of Community Consultation During the 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	Financial contributions made during the reporting period included:	
donations	 Royal Flying Doctor Service for new Nymagee Clinic; 	
	 Nymagee Christmas Tree; 	
	Nymagee CWA;	
	 Nymagee Cricket Club; 	
	Nymagee Gymkhanna	
	Hermidale Public School Future Farmers program	
Community Consultative	Hera held three CCC meetings during the reporting period. Meetings were held	
Committee (CCC) Meetings	in, October 2021, March 2022 and June 2022. It is usual four meetings to be held	
	during the reporting period however the meeting cycle was interrupted by Covid-	
	19. The CCC meetings are chaired by an Independent Chairperson approved by	
	DPIE and attended by community representatives approved by the Department	
	to discuss the environmental and operational progress of the mine and provide	
	an opportunity to discuss any concerns the Community may have.	
Company website	The Company 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 every three years with the last one being conducted in late 2019. All actions identified during the audit that **are not currently completed** have been summarised in **Table 30** below with an update on progress. A copy of the full IEA has been attached as **Appendix E**.

Table 30 Summary of Actions Identified during the IEA that are not yet completed

Condition	Assessment	Recommendation	Hera Resources Action Plan	Hera Action Due Date	Hera Action
PA 10_0191 S3.40	The September 2016 IER found that a Final Hazards Analysis (FHA) had not been completed. The recommendation to complete a final hazard analysis has not been actioned. A Preliminary Hazard Analysis (PHA) was completed by RW Corkery & Co as part of the EA (Nov. 2011) (sighted). Section 5.1 of the Hazardous Materials Management Plan states that "As there are no changes to the design of the Mine, the PHA is considered by Hera Resources to be sufficient to satisfy the requirement of Condition 3(40) of Project Approval whereby a Final Hazards Analysis was to be prepared". The previous audit in July 2013 noted: "As the Hazardous Materials Management Plan has been approved by the Director-General, YTC Hera is compliant with this condition." However, the 2013 audit was conducted prior to the construction and operation of the processing plant; an area where the majority of the hazardous materials are stored or used. At the time of the audit in September 2016, it was observed that there are hazardous goods (e.g., LNG Class 2.1) and processes (e.g., Meta Foundries – gold room) that were not identified in the original PHA.	Conduct a Final Hazard Analysis in accordance with Hazardous Industry Planning Advisory Paper No. 5 – Hazard Audit Guidelines	Conduct a Final Hazard Analysis in accordance with Hazardous Industry Planning Advisory Paper No. 5 – Hazard Audit Guidelines.	30 September 2020.	Complete and submitted to DPE November 2021
EPL 20179 M2.1	Refer to Conditions M2.2 and M2.3 below.	Refer to Condition M2.3 below.	Prepare a document that details all environmental monitoring required (for compliance purposes) include details of sampling location, sample type, identify person	4 April 2021.	Complete all sampling requirements are detailed in the Water



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Condition	Assessment	Recommendation	Hera Resources Action Plan	Hera Action Due Date	Hera Action Update
			(or organisation) responsible for sampling and analysis. Set up a system to automatically notify the Environmental Manager of up-coming sampling events.		Management Plan.
EPL 20179 M2.3	2018/19: On 5 occasions testing for Weak Acid Dissociable (WAD) Cyanide within the detox circuit when discharging to the tailing's storage facility, was not undertaken. 2017/18: Licence Points 1 and 2 were not sampled during daily discharge. Sample Point 27 were not tested quarterly for electrical conductivity	Prepare a document that details all environmental monitoring required (for compliance purposes) include details of sampling location, sample type, identify person (or organisation) responsible for sampling and analysis. Set up a system to automatically notify the Environmental Manager of up-coming sampling events.	Prepare a document that details all environmental monitoring required (for compliance purposes) include details of sampling location, sample type, identify person (or organisation) responsible for sampling and analysis. Set up a system to automatically notify the Environmental Manager of up-coming sampling events.	4 April 2021.	Complete all sampling requirements are detailed in the Water Management Plan.



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11 Incidents and Non-Compliances During the Reporting Period

A summary of incidents and non-compliances have been provided in **Table 31** below. Further detail is provided in the relevant sub-sections of **Section 6** and **Section 7**.

Table 31 Summary	v of Incidents and	d Non-Compliance	s during the Annu	al Review Period

Date	Category	Summary of Incident/Non-Compliance	Reported to:	Section Addressed
03/12/22	Contaminated Water Leak	Suspected Leak from process pond. Pond emptied small hole identified in base of pond. Cause not determined. No evidence of leakage reporting beyond base of the pond.	EPA, DPE, RR, CSC, BSC.	7.2.6
31/03/2021 10/06/2021 09/12/2021 03/2021 06/2021 09/2021 12/2021 01/04/2022 10/06/2022	Monitoring not in accordance with EPL Condition M2.3	EPA ID 40 (WB10), EPA ID 27 (HWB015), EPA ID 9 (GWB8), EPA ID 19 (Housebore), EPA ID 32 (WB24),Not sampled in accordance with M2.3	Bore was out of service and access to bore was not available on the day of sampling	7.3.3
01/04/2021	Monitoring not in accordance with EPL Condition M2.3	EPA ID 29 (WB18) not sampled in accordance with M2.3	Bore was blocked at 61m below collar on the day of sampling	7.3.3
08/12/2021	Monitoring not in accordance with EPL Condition M2 3	EPA ID 28 (WB16) not sampled in accordance with M2.3)	Bore was blocked at 76.79m on 09/06/2022 and 94.91m on 08/12/2021	7.3.3



12 Activities to be Completed in the Next Reporting Period

During the next reporting period, mining activities and operations at the site will continue as per current operations outlined in **Section 4**. In accordance with the approved MOP, no rehabilitation is planned for the following reporting period.

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

Table 32 Activities Proposed for the Next Annual Review Reporting Period

Proposed activity	Timing
Commissioning of groundwater bore PHWB02	November 2022
Installation of the Federation-Hera Water Pipeline	December 2022
Completion of TSF capping erosion modelling	December 2022
Review of the Hera groundwater monitoring program	February 2022



Appendix A Water Quality Monitoring Results

	WAD Cyanide		Comments	
	Process Water		(NP= No result)	
Date	Dam (mg/L)	TSF (mg/L)		
01-07-2021	2.00	0		
02-07-2021	4.00	0		
03-07-2021	1.00	0		
04-07-2021	1.00	0		
05-07-2021	0	0		
06-07-2021	0	0		
07-07-2021	8.00	0		
08-07-2021	0	0		
09-07-2021	0	0		
10-07-2021	0	0		
11-07-2021	0	0		
12-07-2021	0	0		
13-07-2021	0	0		
14-07-2021	0	0		
15-07-2021	0	0		
16-07-2021	0	0		
17-07-2021	0	0		
18-07-2021	0	0		
19-07-2021	0	0		
20-07-2021	0	0		
21-07-2021	0	0		
22-07-2021	0	0		
23-07-2021	0	0		
24-07-2021	0	0		
25-07-2021	0	0		
26-07-2021	0	0		
27-07-2021	0	0		
28-07-2021	0	0		
29-07-2021	0	0		
30-07-2021	0	0		
31-07-2021	0	0		
01-08-2021	0	0		
02-08-2021	0	0		
03-08-2021	0	0		
04-08-2021	0	0		
05-08-2021	0	0		
06-08-2021	0	0		
07-08-2021	0	0		
08-08-2021	0	0		
09-08-2021	0	0		
10-08-2021	0	0		
11-08-2021	0	0		
12-08-2021	0	0		

aurel	ia METALS	3-	safe metals
	METALS	0	

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	WAD Cyanide		Comments
	Process Water		(NR= No result)
Date	Dam (mg/L)	TSF (mg/L)	(III - No result)
13-08-2021	0	0	
14-08-2021	0	0	
15-08-2021	0	0	
16-08-2021	0	0	
17-08-2021	0	0	
18-08-2021	0	0	
19-08-2021	0	0	
20-08-2021	0	0	
21-08-2021	0	0	
22-08-2021	0	0	
23-08-2021	0	0	
24-08-2021	0	0	
25-08-2021	0	0	
26-08-2021	0	0	
27-08-2021	0	0	
28-08-2021	0	0	
29-08-2021	0	0	
30-08-2021	0	0	
31-08-2021	0	0	
01-09-2021	0	0	
02-09-2021	0	0	
03-09-2021	0	0	
04-09-2021	0	0	
05-09-2021	0	0	
06-09-2021	0	0	
07-09-2021	0	0	
08-09-2021	0	0	
09-09-2021	0	0	
10-09-2021	0	0	
11-09-2021	0	0	
12-09-2021	0	0	
13-09-2021	0	0	
14-09-2021	0	0	
15-09-2021	0	0	
16-09-2021	0	0	
17-09-2021	0	0	
18-09-2021	0	0	
19-09-2021	0	0	
20-09-2021	0	0	
21-09-2021	0	0	
22-09-2021	0	0	
23-09-2021	0	0	
24-09-2021	0	0	
25-09-2021	0	0	
26-09-2021	0	0	
27-09-2021	0	0	

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	METALS	0	

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	Process Water		(NR= No result)
Date	Dam (mg/L)	TSF (mg/L)	
28-09-2021	0	0	
29-09-2021	0	0	
30-09-2021	0	0	
01-10-2021	0	0	
02-10-2021	0	0	
03-10-2021	0	0	
04-10-2021	0	0	
05-10-2021	0	0	
06-10-2021	0	0	
07-10-2021	0	0	
08-10-2021	0	0	
09-10-2021	0	0	
10-10-2021	0	0	
11-10-2021	0	0	
12-10-2021	0	0	
13-10-2021	0	0	
14-10-2021	0	0	
15-10-2021	0	0	
16-10-2021	0	0	
17-10-2021	0	0	
18-10-2021	0	0	
19-10-2021	0	0	
20-10-2021	0	0	
21-10-2021	0	0	
22-10-2021	0	0	
23-10-2021	0	0	
24-10-2021	0	0	
25-10-2021	0	0	
26-10-2021	0	0	
27-10-2021	0	0	
28-10-2021	0	0	
29-10-2021	0	0	
30-10-2021	0	0	
31-10-2021	0	0	
01-11-2021	0	0	
02-11-2021	0	0	
03-11-2021	0	0	
04-11-2021	0	0	
05-11-2021	0	0	
06-11-2021	0	0	
07-11-2021	0	0	
08-11-2021	0	0	
09-11-2021	0	0	
10-11-2021	0	0	
11-11-2021	0	0	
12-11-2021	6	0	

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WAD Cyanide		nide	Comments
	Process Water		(NR= No result)
Date	Dam (mg/L)	TSF (mg/L)	
13-11-2021	0	0	
14-11-2021	0	0	
15-11-2021	0	0	
16-11-2021	0	0	
17-11-2021	0	0	
18-11-2021	0	0	
19-11-2021	0	0	
20-11-2021	0	0	
21-11-2021	0	0	
22-11-2021	0	0	
23-11-2021	0	0	
24-11-2021	0	0	
25-11-2021	0	0	
26-11-2021	0	0	
27-11-2021	0	0	
28-11-2021	0	0	
29-11-2021	0	0	
30-11-2021	0	0	
01-12-2021	0	0	
02-12-2021	0	0	
03-12-2021	0	0	
04-12-2021	0	0	
05-12-2021	0	0	
06-12-2021	0	0	
07-12-2021	0	0	
08-12-2021	0	0	
09-12-2021	0	0	
10-12-2021	0	0	
11-12-2021	0	0	
12-12-2021	0	0	
13-12-2021	0	0	
14-12-2021	1.00	0	
15-12-2021	0	0	
16-12-2021	0	0	
17-12-2021	0	0	
18-12-2021	0	0	
19-12-2021	0	0	
20-12-2021	0	0	
21-12-2021	0	0	
22-12-2021	0	0	
23-12-2021	0	0	
24-12-2021	0	0	
25-12-2021	0	0	
26-12-2021	0	0	
27-12-2021	0	0	
28-12-2021	0	0	

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METALS	-	IIIErara

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	Process Water		(NR= No result)
Date	Dam (mg/L)	TSF (mg/L)	
29-12-2021	0	0	
30-12-2021	0	0	
31-12-2021	0	0	
01-01-2022	0	0	
02-01-2022	0	0	
03-01-2022	0	0	
04-01-2022	0	0	
05-01-2022	0	0	
06-01-2022	0	0	
07-01-2022	0	0	
08-01-2022	0	0	
09-01-2022	0	0	
10-01-2022	0	0	
11-01-2022	0	0	
12-01-2022	0	0	
13-01-2022	0	0	
14-01-2022	0	0	
15-01-2022	0	0	
16-01-2022	0	0	
17-01-2022	0	0	
18-01-2022	0	0	
19-01-2022	0	0	
20-01-2022	0	0	
21-01-2022	0	0	
22-01-2022	0	0	
23-01-2022	0	0	
24-01-2022	0	0	
25-01-2022	0	0	
26-01-2022	0	0	
27-01-2022	0	0	
28-01-2022	0	0	
29-01-2022	0	0	
30-01-2022	0	0	
31-01-2022	0	0	
01-02-2022	0	0	
02-02-2022	0	0	
03-02-2022	0	0	
04-02-2022	0	0	
05-02-2022	0	0	
06-02-2022	1	0	
07-02-2022	0	0	
08-02-2022	0	0	
09-02-2022	0	0	
10-02-2022	0	0	
11-02-2022	0	0	
12-02-2022	0	0	

aurel	ia METALS	3-	safe metals
	METALS	0	

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	Process Water		(NR= No result)		
Date	Dam (mg/L)	TSF (mg/L)			
13-02-2022	0	0			
14-02-2022	0	0			
15-02-2022	0	0			
16-02-2022	0	0			
17-02-2022	0	0			
18-02-2022	0	0			
19-02-2022	0	0			
20-02-2022	0	0			
21-02-2022	0	0			
22-02-2022	0	0			
23-02-2022	0	0			
24-02-2022	0	0			
25-02-2022	0	0			
26-02-2022	0	0			
27-02-2022	0	0			
28-02-2022	0	0			
01-03-2022	0	0			
02-03-2022	0	0			
03-03-2022	0	0			
04-03-2022	0	0			
05-03-2022	0	0			
06-03-2022	1.00	0			
07-03-2022	0	0			
08-03-2022	0	0			
09-03-2022	1.00	0			
10-03-2022	0	0			
11-03-2022	0	0			
12-03-2022	0	0			
13-03-2022	0	0			
14-03-2022	0	0			
15-03-2022	0	0			
16-03-2022	0	0			
17-03-2022	0	0			
18-03-2022	0	0			
19-03-2022	0	0			
20-03-2022	0	0			
21-03-2022	0	0			
22-03-2022	0	0			
23-03-2022	0	0			
24-03-2022	0	0			
25-03-2022	0	0			
26-03-2022	0	0			
27-03-2022	0	0			
28-03-2022	0	0			
29-03-2022	0	0			
30-03-2022	0	0			

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	WAD Cyanide		Comments		
	Process Water		(NP= No result)		
Date	Dam (mg/L)	TSF (mg/L)			
31-03-2022	0	0			
01-04-2022	0	0			
02-04-2022	0	0			
03-04-2022	0	0			
04-04-2022	0	0			
05-04-2022	0	0			
06-04-2022	0	0			
07-04-2022	0	0			
08-04-2022	0	0			
09-04-2022	0	0			
10-04-2022	0	0			
11-04-2022	0	0			
12-04-2022	0	0			
13-04-2022	0	0			
14-04-2022	0	0			
15-04-2022	0	0			
16-04-2022	0	0			
17-04-2022	0	0			
18-04-2022	0	0			
19-04-2022	0	0			
20-04-2022	0	0			
21-04-2022	0	0			
22-04-2022	0	0			
23-04-2022	0	0			
24-04-2022	0	0			
25-04-2022	0	0			
26-04-2022	0	0			
27-04-2022	0	0			
28-04-2022	0	0			
29-04-2022	0	0			
30-04-2022	0	0			
01-05-2022	0	0			
02-05-2022	0	0			
03-05-2022	0	0			
04-05-2022	0	0			
05-05-2022	0	0			
06-05-2022	0	0			
07-05-2022	0	0			
08-05-2022	0	0			
09-05-2022	0	0			
10-05-2022	0.01	0.15			
11-05-2022	0.22	4.92			
12-05-2022	0	0			
13-05-2022	0	0			
14-05-2022	0	0			
15-05-2022	0	0			

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Process Water			(NR= No result)		
Date	Dam (mg/L)	TSF (mg/L)			
16-05-2022	0	0			
17-05-2022	0	0			
18-05-2022	0	0			
19-05-2022	0	0			
20-05-2022	0	0			
21-05-2022	0	0			
22-05-2022	0	0			
23-05-2022	0	0			
24-05-2022	0	0			
25-05-2022	0	0			
26-05-2022	0	8			
27-05-2022	0	0			
28-05-2022	0	0			
29-05-2022	0	0			
30-05-2022	0	0			
31-05-2022	0	0			
01-06-2022	0	0			
02-06-2022	0	0			
03-06-2022	0	0			
04-06-2022	0	0			
05-06-2022	0	0			
06-06-2022	0	0			
07-06-2022	0	NR 0	NR (ISF)		
00.06.2022	0	0			
10.06.2022	0	0			
11-06-2022	0	0			
12-06-2022	0	0			
12-00-2022	0	0			
14-06-2022	0	0			
15-06-2022	0	0			
16-06-2022	0	0			
17-06-2022	0	0			
18-06-2022	0	0			
19-06-2022	0	0			
20-06-2022	0	0			
21-06-2022	1	0			
22-06-2022	0	0			
23-06-2022	0	0			
24-06-2022	0	0			
25-06-2022	0	0			
26-06-2022	0	0			
27-06-2022	0	0			
28-06-2022	0	0			
29-06-2022	0	0			
30-06-2022	0	0			



Hera 2021-2022 Annual Review					
Author	K Sammons (SLR) and M. Williams(Hera)				
Reporting period	1 July 2021 to 30 June 2022				

Appendix B Blast Monitoring Summary

		Compliance			Histograms		
		Vibration Air Blact			Harris Pesidoneo		
Date	Time	Day of Week	Time Period	mm/s	dB(L)	mm/s	dB(L)
02-07-2021	7:07:25 PM	Friday	EVENING	2.00	115.0	0.10	75.6
02-07-2021	7:07:25 PM	, Friday	EVENING	2.00	115.0	0.10	75.6
03-07-2021	7:48:59 PM	, Saturdav	EVENING	2.00	115.0	0.35	78.1
03-07-2021	8:10:00 PM	, Saturday	EVENING	2.00	115.0	0.09	75.6
04-07-2021	6:26:15 AM	Sunday	SUNDAY	1.00	115.0	0.31	78.6
04-07-2021	6:55:00 PM	, Sunday	SUNDAY	1.00	115.0	0.06	75.6
04-07-2021	6:55:20 PM	Sunday	SUNDAY	1.00	115.0	0.06	75.6
05-07-2021	6:45:00 PM	Monday	EVENING	2.00	115.0	0.05	74.8
06-07-2021	1:16:00 PM	Tuesday	DAY	5.00	115.0	0.05	84.3
06-07-2021	6:37:47 PM	Tuesday	EVENING	2.00	115.0	0.09	82.3
08-07-2021	6:49:20 AM	Thursday	NIGHT	1.00	115.0	0.25	81.2
08-07-2021	12:17:10 PM	Thursday	DAY	5.00	115.0	0.07	78.6
09-07-2021	7:20:00 AM	Friday	DAY	5.00	115.0	0.13	79.6
09-07-2021	8:21:26 PM	Friday	EVENING	2.00	115.0	0.49	81.9
10-07-2021	6:37:20 AM	Saturday	NIGHT	1.00	115.0	0.25	96.3
10-07-2021	6:50:00 AM	Saturday	NIGHT	1.00	115.0	0.24	75.6
11-07-2021	6:58:40 PM	Sunday	SUNDAY	1.00	115.0	0.09	75.6
11-07-2021	6:58:40 PM	Sunday	SUNDAY	1.00	115.0	0.09	75.6
11-07-2021	6:58:40 PM	Sunday	SUNDAY	1.00	115.0	0.09	75.6
12-07-2021	6:34:00 AM	Monday	NIGHT	1.00	115.0	0.22	75.6
13-07-2021	7:04:00 AM	Tuesday	DAY	5.00	115.0	0.21	74.8
13-07-2021	7:10:30 AM	Tuesday	DAY	5.00	115.0	0.24	93.9
14-07-2021	6:36:25 AM	Wednesday	NIGHT	1.00	115.0	0.09	75.6
15-07-2021	6:45:00 PM	Thursday	EVENING	2.00	115.0	0.15	74.8
16-07-2021	7:30:41 AM	Friday	DAY	5.00	115.0	0.29	74.8
16-07-2021	6:42:37 PM	Friday	EVENING	2.00	115.0	0.10	81.9
17-07-2021	6:59:20 AM	Saturday	NIGHT	1.00	115.0	0.08	95.2
17-07-2021	6:45:00 PM	Saturday	EVENING	2.00	115.0	0.05	91.0
18-07-2021	6:56:40 AM	Sunday	SUNDAY	1.00	115.0	0.10	88.0
18-07-2021	6:56:40 AM	Sunday	SUNDAY	1.00	115.0	0.10	88.0
19-07-2021	6:53:25 AM	Monday	NIGHT	1.00	115.0	0.08	73.1
19-07-2021	6:46:30 PM	Monday	EVENING	2.00	115.0	0.06	74.8
20-07-2021	6:44:45 AM	Tuesday	NIGHT	1.00	115.0	0.17	73.1
21-07-2021	6:45:00 AM	Wednesday	NIGHT	1.00	115.0	0.15	81.9
22-07-2021	6:54:20 AM	Thursday	NIGHT	1.00	115.0	0.26	75.6
24-07-2021	7:02:35 AM	Saturday	DAY	5.00	115.0	0.42	90.9
27-07-2021	7:16:30 AM	Tuesday	DAY	5.00	115.0	0.18	74.8
27-07-2021	7:17:50 AM	Tuesday	DAY	5.00	115.0	0.19	75.6
28-07-2021	6:45:00 AM	Wednesday	NIGHT	1.00	115.0	0.11	83.8
28-07-2021	6:45:00 AM	Wednesday	NIGHT	1.00	115.0	0.11	83.8
28-07-2021	6:45:00 AM	Wednesday	NIGHT	1.00	115.0	0.11	83.8


Hera Annual Review 2021-2022	
Author	K Sammons (SLR) and M. Williams (Hera)
Reporting period	1 July 2021 to 30 June 2022

		Compliance		Histograms			
				Vibration	Air Blast	Harris F	Residence
Date	Time	Day of Week	Time Period	mm/s	dB(L)	mm/s	dB(L)
28-07-2021	7:03:43 AM	Wednesday	DAY	5.00	115.0	0.70	83.2
29-07-2021	6:45:00 AM	Thursday	NIGHT	1.00	115.0	0.16	74.8
29-07-2021	6:50:00 PM	Thursday	EVENING	2.00	115.0	0.08	74.8
29-07-2021	6:50:00 PM	Thursday	EVENING	2.00	115.0	0.08	74.8
30-07-2021	7:12:40 PM	Friday	EVENING	2.00	115.0	0.11	74.8
30-07-2021	7:17:00 PM	Friday	EVENING	2.00	115.0	0.11	75.6
01-08-2021	2:30:00 AM	Sunday	SUNDAY	1.00	115.0	0.07	74.8
01-08-2021	6:55:25 PM	Sunday	SUNDAY	1.00	115.0	0.06	74.8
02-08-2021	6:55:10 AM	Monday	NIGHT	1.00	115.0	0.20	84.3
02-08-2021	6:45:00 PM	Monday	EVENING	2.00	115.0	0.15	74.8
02-08-2021	6:45:00 PM	Monday	EVENING	2.00	115.0	0.15	74.8
03-08-2021	6:45:00 PM	Tuesday	EVENING	2.00	115.0	0.06	75.6
04-08-2021	2:00:00 AM	Wednesday	NIGHT	1.00	115.0	0.08	80.0
05-08-2021	6:39:30 AM	Thursday	NIGHT	1.00	115.0	0.06	85.3
06-08-2021	6:45:00 AM	Friday	NIGHT	1.00	115.0	0.06	74.8
06-08-2021	6:45:00 AM	Friday	NIGHT	1.00	115.0	0.06	74.8
06-08-2021	6:45:00 AM	Friday	NIGHT	1.00	115.0	0.06	74.8
06-08-2021	1:34:53 PM	Friday	DAY	5.00	115.0	0.45	78.1
07-08-2021	6:56:00 AM	Saturday	NIGHT	1.00	115.0	0.05	74.8
07-08-2021	7:13:00 PM	Saturday	EVENING	2.00	115.0	0.08	87.4
08-08-2021	6:47:55 AM	Sunday	SUNDAY	1.00	115.0	0.16	75.6
09-08-2021	6:48:41 AM	Monday	NIGHT	1.00	115.0	0.18	91.8
10-08-2021	6:46:40 AM	Tuesday	NIGHT	1.00	115.0	0.78	80.8
10-08-2021	6:46:40 AM	Tuesday	NIGHT	1.00	115.0	0.78	80.8
10-08-2021	6:45:00 PM	Tuesday	EVENING	2.00	115.0	0.20	74.8
12-08-2021	6:43:20 AM	Thursday	NIGHT	1.00	115.0	0.06	75.6
12-08-2021	6:50:00 PM	Thursday	EVENING	2.00	115.0	0.11	75.6
14-08-2021	12:00:15 AM	Saturday	NIGHT	1.00	115.0	0.27	85.1
14-08-2021	6:35:00 PM	Saturday	EVENING	2.00	115.0	0.14	74.8
16-08-2021	3:07:45 PM	Monday	DAY	5.00	115.0	0.19	93.9
17-08-2021	12:49:50 AM	Tuesday	NIGHT	1.00	115.0	0.13	73.1
17-08-2021	6:51:38 AM	Tuesday	NIGHT	1.00	115.0	0.19	76.9
18-08-2021	6:54:00 AM	Wednesday	NIGHT	1.00	115.0	0.18	74.8
19-08-2021	6:41:30 AM	Thursday	NIGHT	1.00	115.0	0.20	75.6
19-08-2021	6:41:30 AM	Thursday	NIGHT	1.00	115.0	0.20	75.6
20-08-2021	12:37:49 PM	Friday	DAY	5.00	115.0	0.89	83.8
21-08-2021	1:03:10 PM	Saturday	DAY	5.00	115.0	0.38	91.2
21-08-2021	7:05:00 PM	Saturday	EVENING	2.00	115.0	0.22	74.8
22-08-2021	6:35:00 PM	Sunday	SUNDAY	1.00	115.0	0.26	74.8
23-08-2021	12:31:22 PM	Monday	DAY	5.00	115.0	0.40	79.6
24-08-2021	6:40:00 PM	Tuesday	EVENING	2.00	115.0	0.06	74.8
26-08-2021	6:45:00 PM	Thursday	EVENING	2.00	115.0	0.10	75.6
27-08-2021	12:49:40 PM	Friday	DAY	5.00	115.0	0.45	80.0
28-08-2021	6:45:00 PM	Saturday	EVENING	2.00	115.0	0.19	75.6
28-08-2021	6:45:00 PM	Saturday	EVENING	2.00	115.0	0.19	75.6



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Author	K Sammons (SLR) and M. Williams (Hera)
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		Compliance		Histograms			
				Vibration	Air Blast	Harris F	Residence
Date	Time	Day of Week	Time Period	mm/s	dB(L)	mm/s	dB(L)
29-08-2021	6:51:06 PM	Sunday	SUNDAY	1.00	115.0	0.35	78.1
30-08-2021	9:33:10 AM	Monday	DAY	5.00	115.0	0.09	73.1
30-08-2021	9:35:05 AM	Monday	DAY	5.00	115.0	0.09	74.8
31-08-2021	10:08:00 AM	Tuesday	DAY	5.00	115.0	0.11	74.8
31-08-2021	10:08:10 AM	Tuesday	DAY	5.00	115.0	0.12	73.1
02-09-2021	7:04:50 AM	Thursday	DAY	5.00	115.0	0.12	74.7
02-09-2021	7:04:50 AM	Thursday	DAY	5.00	115.0	0.12	74.7
03-09-2021	6:52:00 AM	Friday	NIGHT	1.00	115.0	0.16	94.8
03-09-2021	7:03:25 PM	Friday	EVENING	2.00	115.0	0.26	97.3
04-09-2021	6:45:00 PM	Saturday	EVENING	2.00	115.0	0.07	83.8
04-09-2021	11:00:00 PM	Saturday	NIGHT	1.00	115.0	0.05	81.9
05-09-2021	7:02:15 AM	Sunday	SUNDAY	1.00	115.0	0.08	92.9
05-09-2021	1:50:00 PM	Sunday	SUNDAY	1.00	115.0	0.12	101.7
05-09-2021	6:43:23 PM	Sunday	SUNDAY	1.00	115.0	0.09	80.0
06-09-2021	6:45:30 AM	Monday	NIGHT	1.00	115.0	0.18	74.8
06-09-2021	5:15:00 PM	Monday	DAY	5.00	115.0	0.17	94.1
07-09-2021	6:47:20 AM	Tuesday	NIGHT	1.00	115.0	0.20	74.8
07-09-2021	6:47:20 AM	Tuesday	NIGHT	1.00	115.0	0.20	74.8
07-09-2021	6:45:00 PM	Tuesday	EVENING	2.00	115.0	0.16	74.8
07-09-2021	6:45:00 PM	, Tuesdav	EVENING	2.00	115.0	0.16	74.8
08-09-2021	6:51:50 AM	Wednesday	NIGHT	1.00	115.0	0.19	75.6
08-09-2021	6:51:50 AM	Wednesday	NIGHT	1.00	115.0	0.19	75.6
09-09-2021	1:35:46 PM	, Thursday	DAY	5.00	115.0	0.51	87.6
10-09-2021	7:35:00 PM	Friday	EVENING	2.00	115.0	0.27	74.8
11-09-2021	12:26:48 PM	, Saturday	DAY	5.00	115.0	0.46	86.6
11-09-2021	6:50:25 PM	, Saturday	EVENING	2.00	115.0	0.32	73.1
13-09-2021	6:45:00 AM	, Monday	NIGHT	1.00	115.0	0.08	89.8
13-09-2021	7:10:00 PM	, Mondav	EVENING	2.00	115.0	0.06	74.7
13-09-2021	7:10:00 PM	Monday	EVENING	2.00	115.0	0.06	74.7
14-09-2021	6:54:45 PM	Tuesday	EVENING	2.00	115.0	0.17	81.3
15-09-2021	6:45:00 AM	Wednesday	NIGHT	1.00	115.0	0.19	74.8
16-09-2021	7:56:00 AM	Thursday	DAY	5.00	115.0	0.14	74.8
16-09-2021	7:50:45 PM	, Thursday	EVENING	2.00	115.0	0.39	78.1
17-09-2021	6:27:05 PM	Friday	EVENING	2.00	115.0	0.79	75.8
18-09-2021	6:46:40 AM	Saturday	NIGHT	1.00	115.0	0.12	74.7
18-09-2021	6:46:40 AM	Saturday	NIGHT	1.00	115.0	0.12	74.7
19-09-2021	6:45:00 AM	Sunday	SUNDAY	1.00	115.0	0.18	74.7
19-09-2021	7:10:00 AM	Sunday	SUNDAY	1.00	115.0	0.17	74.7
19-09-2021	7:10:00 AM	Sundav	SUNDAY	1.00	115.0	0.17	74.7
21-09-2021	6:35:00 AM	Tuesday	NIGHT	1.00	115.0	0.11	86.0
21-09-2021	6:35:05 AM	Tuesday	NIGHT	1.00	115.0	0.11	85.3
22-09-2021	6:35:00 AM	Wednesday	NIGHT	1.00	115.0	0.20	75.6
23-09-2021	2:08:45 PM	Thursday	DAY	5.00	115.0	0.42	83.2
24-09-2021	1:57:45 PM	Friday	DAY	5.00	115.0	0.31	100.8
24-09-2021	1:57:45 PM	Fridav	DAY	5.00	115.0	0.31	100.8



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		Compliance		Histograms			
				Vibration	Air Blast	Harris F	Residence
Date	Time	Day of Week	Time Period	mm/s	dB(L)	mm/s	dB(L)
25-09-2021	6:40:00 AM	Saturday	NIGHT	1.00	115.0	0.06	78.1
30-09-2021	2:02:55 PM	Thursday	DAY	5.00	115.0	0.30	88.1
01-10-2021	6:53:25 PM	Friday	EVENING	2.00	115.0	0.19	85.1
02-10-2021	6:45:00 AM	Saturday	NIGHT	1.00	115.0	0.11	74.8
02-10-2021	6:45:00 AM	Saturday	NIGHT	1.00	115.0	0.11	74.8
02-10-2021	7:35:00 PM	Saturday	EVENING	2.00	115.0	0.16	73.1
03-10-2021	12:23:00 AM	Sunday	SUNDAY	1.00	115.0	0.06	74.8
03-10-2021	6:45:00 AM	Sunday	SUNDAY	1.00	115.0	0.08	73.1
03-10-2021	6:45:00 AM	Sunday	SUNDAY	1.00	115.0	0.08	73.1
03-10-2021	6:45:00 AM	Sunday	SUNDAY	1.00	115.0	0.08	73.1
04-10-2021	7:05:00 AM	Monday	PUBLIC HOLIDAY	1.00	115.0	0.10	86.4
05-10-2021	7:00:07 AM	Tuesday	DAY	5.00	115.0	0.08	97.6
05-10-2021	7:00:07 AM	Tuesday	DAY	5.00	115.0	0.08	97.6
05-10-2021	6:45:00 PM	Tuesday	EVENING	2.00	115.0	0.20	75.6
06-10-2021	6:45:00 AM	Wednesday	NIGHT	1.00	115.0	0.15	75.6
07-10-2021	6:54:25 AM	Thursday	NIGHT	1.00	115.0	0.14	96.3
07-10-2021	6:45:00 PM	Thursday	EVENING	2.00	115.0	0.24	74.8
08-10-2021	6:45:00 AM	Friday	NIGHT	1.00	115.0	0.13	74.8
08-10-2021	6:50:10 PM	Friday	EVENING	2.00	115.0	0.31	74.8
09-10-2021	12:59:00 AM	Saturday	NIGHT	1.00	115.0	0.07	99.6
09-10-2021	6:53:10 AM	Saturday	NIGHT	1.00	115.0	0.06	95.0
10-10-2021	6:40:50 AM	Sunday	SUNDAY	1.00	115.0	0.17	91.0
10-10-2021	6:40:50 AM	Sunday	SUNDAY	1.00	115.0	0.17	91.0
11-10-2021	1:45:00 AM	Monday	NIGHT	1.00	115.0	0.09	73.1
11-10-2021	7:00:00 AM	Monday	DAY	5.00	115.0	0.06	74.8
12-10-2021	6:45:00 AM	Tuesday	NIGHT	1.00	115.0	0.05	83.2
12-10-2021	6:45:33 AM	Tuesday	NIGHT	1.00	115.0	0.06	84.3
12-10-2021	6:47:00 PM	Tuesday	EVENING	2.00	115.0	0.13	78.1
13-10-2021	6:45:00 PM	Wednesday	EVENING	2.00	115.0	0.25	74.8
15-10-2021	6:45:00 AM	Friday	NIGHT	1.00	115.0	0.06	83.2
16-10-2021	6:31:10 AM	Saturday	NIGHT	1.00	115.0	0.08	93.3
17-10-2021	6:30:00 AM	Sunday	SUNDAY	1.00	115.0	0.14	86.6
17-10-2021	6:44:50 AM	Sunday	SUNDAY	1.00	115.0	0.13	74.8
17-10-2021	11:39:20 PM	Sunday	SUNDAY	1.00	115.0	0.14	74.8
20-10-2021	6:48:45 AM	Wednesday	NIGHT	1.00	115.0	0.11	96.3
20-10-2021	3:45:00 PM	Wednesday	DAY	5.00	115.0	0.32	82.3
21-10-2021	6:41:45 AM	Thursday	NIGHT	1.00	115.0	0.11	95.5
21-10-2021	2:00:00 PM	Thursday	DAY	5.00	115.0	0.31	76.9
21-10-2021	2:22:20 PM	Thursday	DAY	5.00	115.0	0.32	81.2
22-10-2021	6:37:50 AM	Friday	NIGHT	1.00	115.0	0.12	75.6
22-10-2021	7:00:00 PM	Friday	EVENING	2.00	115.0	0.40	74.8
23-10-2021	1:36:28 PM	Saturday	DAY	5.00	115.0	0.40	103.9
23-10-2021	1:36:28 PM	Saturday	DAY	5.00	115.0	0.40	103.9
23-10-2021	6:47:30 PM	Saturday	EVENING	2.00	115.0	0.33	100.5
23-10-2021	6:47:30 PM	Saturday	EVENING	2.00	115.0	0.33	100.5



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		Compliance				Histograms	
				Vibration	Air Blast	Harris F	Residence
Date	Time	Day of Week	Time Period	mm/s	dB(L)	mm/s	dB(L)
24-10-2021	12:24:00 PM	Sunday	SUNDAY	1.00	115.0	0.22	99.2
25-10-2021	7:00:00 PM	Monday	EVENING	2.00	115.0	0.23	74.8
25-10-2021	7:00:00 PM	Monday	EVENING	2.00	115.0	0.23	74.8
26-10-2021	6:39:10 PM	Tuesday	EVENING	2.00	115.0	o/f	o/f
23-11-2021	6:45:50 PM	Tuesday	EVENING	2.00	115.0	0.30	
25-11-2021	6:33:56 PM	Thursday	EVENING	2.00	115.0	0.44	
27-11-2021	7:01:33 AM	Saturday	DAY	5.00	115.0	0.72	
7-12-2021	7:11:13 AM	Tuesday	DAY	5.00	115	0.26	0.0
10-12-2021	7:01:02 AM	Friday	DAY	5.00	115	0.17	0.9
17-12-2021	7:01:10 AM	Friday	DAY	5.00	115	0.27	0.3
7-12-2021	7:11:13 AM	Tuesday	DAY	5.00	115	0.26	0.0
10-12-2021	7:01:02 AM	Friday	DAY	5.00	115	0.17	0.9
17-12-2021	7:01:10 AM	Friday	DAY	5.00	115	0.27	0.3
12-01-2022	12:05:45 PM	Wednesday	DAY	5.00	115	0.52	81.4
16-01-2022	6:51:59 AM	Sunday	DAY	1.00	115	0.24	75.1
22-01-2022	10:07:19 PM	Saturday	NIGHT	1.00	115	0.34	80.2
30-01-2022	7:09:10 AM	Sunday	DAY	5.00	115	0.05	73.3
1-02-2022	6:58:22 AM	Tuesday	NIGHT	1.00	115	0.05	93.5
3-02-2022	6:52:37 AM	Thursday	NIGHT	1.00	115	0.03	93.2
4-02-2022	6:32:18 PM	Friday	EVENING	2.00	115	0.04	92.5
6-02-2022	6:43:18 PM	Sunday	EVENING	2.00	115	0.11	85.6
8-02-2022	7:02:15 AM	Tuesday	DAY	5.00	115	0.02	83.2
9-02-2022	6:57:47 PM	Wednesday	EVENING	2.00	115	0.08	91.7
10-02-2022	6:47:17 PM	Thursday	EVENING	2.00	115	0.03	98.7
11-02-2022	7:00:29 AM	Friday	EVENING	2.00	115	0.04	90.7
12-02-2022	8:36:11 AM	Saturday	DAY	5.00	115	0.03	77.4
12-02-2022	6:55:27 PM	Saturday	EVENING	2.00	115	0.45	81.1
14-02-2022	7:00:58 AM	Monday	DAY	5.00	115	0.01	72.6
15-02-2022	7:00:29 AM	Tuesday	DAY	5.00	115	0.02	84.4
17-02-2022	11:50:18 AM	Thursday	DAY	5.00	115	0.34	88.8
17-02-2022	11:50:18 AM	Thursday	DAY	5.00	115	0.34	88.8
19-02-2022	6:43:58 PM	Saturday	EVENING	2.00	115	0.48	80.8
20-02-2022	7:03:43 AM	Sunday	DAY	5.00	115	0.04	86.0
21-02-2022	6:52:36 PM	Monday	EVENING	2.00	115	0.02	97.1
24-02-2022	6:00:31 AM	, Thursday	NIGHT	1.00	115	0.07	93.9
28-02-2022	6:48:01 AM	, Monday	NIGHT	1.00	115	0.03	71.8
1-03-2022	7:02:21 AM	Tuesday	DAY	5.00	115	0.47	79.0
7-03-2022	8:36:23 AM	, Monday	DAY	5.00	115	0.34	98.6
10-03-2022	7:00:01 AM	Thursday	DAY	5.00	115	0.37	78.6
13-03-2022	8:18:32 PM	, Sundav	EVENING	2.00	115	0.47	87.0
24-03-2022	6:40:03 PM	Thursday	EVENING	2.00	115	0.52	87.1
25-03-2022	6:53:11 PM	Fridav	EVENING	2.00	115	0.51	100.7
29-03-2022	7:08:32 AM	Tuesdav	DAY	5.00	115	0.24	77.8
31-03-2022	12:36:16 PM	Thursday	DAY	5.00	115	0.41	83.2
4-04-2022	7:05:46 PM	Monday	EVENING	2.00	115	0.50	81.4



Hera Annual Review 2021-2022	
Author	K Sammons (SLR) and M. Williams (Hera)
Reporting period	1 July 2021 to 30 June 2022

		Compliance		Histograms			
				Vibration	Air Blast	Harris F	Residence
Date	Time	Day of Week	Time Period	mm/s	dB(L)	mm/s	dB(L)
8-04-2022	10:41:43 PM	Friday	NIGHT	1.00	115	0.42	80.2
18-04-2022	2:32:44 PM	Monday	PUBLIC HOLIDAY	1.00	115	0.35	93.1
24-04-2022	6:10:00 PM	Sunday	EVENING	2.00	115	0.81	84.4
30-04-2022	9:40:01 PM	Saturday	EVENING	2.00	115	0.34	79.9
2-05-2022	12:26:45 PM	Monday	DAY	5.00	115	0.33	79.0
3-05-2022	6:33:48 PM	Tuesday	NIGHT	1.00	115	0.02	71.8
4-05-2022	7:05:08 AM	Wednesday	NIGHT	1.00	115	0.81	83.0
5-05-2022	6:54:10 PM	Thursday	EVENING	2.00	115	0.02	72.6
7-05-2022	12:37:07 PM	Saturday	DAY	5.00	115	0.54	110.2
7-05-2022	6:33:52 PM	Saturday	EVENING	2.00	115	0.05	71.8
8-05-2022	6:55:01 PM	Sunday	EVENING	2.00	115	0.68	81.1
9-05-2022	5:57:45 AM	Monday	NIGHT	1.00	115	0.01	73.9
10-05-2022	7:02:27 PM	Tuesday	EVENING	2.00	115	0.03	83.7
11-05-2022	6:49:30 PM	Wednesday	EVENING	2.00	115	0.03	74.5
12-05-2022	6:47:38 PM	Thursday	EVENING	2.00	115	0.03	71.8
13-05-2022	7:00:31 PM	Friday	EVENING	2.00	115	0.06	71.8
15-05-2022	6:43:43 AM	Sunday	NIGHT	1.00	115	0.03	71.8
16-05-2022	6:38:32 PM	Monday	EVENING	2.00	115	0.02	71.8
17-05-2022	12:56:28 PM	Tuesday	DAY	5.00	115	0.71	84.4
19-05-2022	6:56:26 PM	Thursday	EVENING	2.00	115	0.68	82.8
20-05-2022	6:44:10 PM	Friday	EVENING	2.00	115	0.02	86.7
21-05-2022	6:57:41 AM	Saturday	NIGHT	1.00	115	0.05	98.2
22-05-2022	6:50:45 AM	Sunday	NIGHT	1.00	115	0.02	79.6
23-05-2022	6:49:36 PM	Monday	EVENING	2.00	115	0.06	71.8
24-05-2022	6:44:33 AM	Tuesday	NIGHT	1.00	115	0.01	73.3
24-05-2022	6:54:23 PM	Tuesday	EVENING	2.00	115	0.03	73.9
25-05-2022	6:40:38 AM	Wednesday	NIGHT	1.00	115	0.01	71.8
25-05-2022	6:45:44 PM	Wednesday	EVENING	2.00	115	0.05	79.6
26-05-2022	6:54:03 AM	Thursday	NIGHT	1.00	115	0.04	87.6
26-05-2022	6:40:39 PM	Thursday	EVENING	2.00	115	0.02	73.3
27-05-2022	6:43:16 AM	Friday	NIGHT	1.00	115	0.06	71.8
27-05-2022	6:44:22 PM	Friday	EVENING	2.00	115	0.60	80.8
28-05-2022	6:32:57 PM	Saturday	EVENING	2.00	115	0.03	75.6
29-05-2022	6:43:59 AM	Sunday	NIGHT	1.00	115	0.06	73.3
29-05-2022	6:19:32 PM	Sunday	EVENING	1.00	115	0.72	81.4
30-05-2022	6:44:20 AM	Monday	NIGHT	1.00	115	0.02	102.7
30-05-2022	6:44:31 PM	Monday	EVENING	2.00	115	0.02	111.9
31-05-2022	6:48:33 AM	Tuesday	NIGHT	1.00	115	0.03	91.8
01-06-2022	6:45:00 AM	Wednesday	NIGHT	1.00	115	0.01	89.7
03-06-2022	6:45:00 AM	Friday	NIGHT	1.00	115	0.01	79.9
03-06-2022	6:45:00 PM	Friday	EVENING	2.00	115	0.04	73.3
04-06-2022	6:45:00 AM	Saturday	NIGHT	1.00	115	0.83	84.6
05-06-2022	6:45:00 AM	Sunday	NIGHT	1.00	115	0.05	80.2
06-06-2022	6:45:00 AM	Monday	NIGHT	1.00	115	0.04	93.3
06-06-2022	7:00:00 PM	Monday	EVENING	2.00	115	0.01	71.0



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			Compliance	9		Histo	ograms
				Vibration	Air Blast	Harris Residence	
Date	Time	Day of Week	Time Period	mm/s	dB(L)	mm/s	dB(L)
07-06-2022	7:00:00 AM	Tuesday	NIGHT	1.00	115	0.04	82.8
07-06-2022	7:00:00 PM	Tuesday	EVENING	2.00	115	0.02	80.5
09-06-2022	7:00:00 AM	Thursday	DAY	5.00	115	0.02	78.6
10-06-2022	7:00:00 PM	Friday	EVENING	2.00	115	0.24	78.2
11-06-2022	6:45:00 AM	Saturday	NIGHT	1.00	115	0.06	80.8
12-06-2022	6:45:00 AM	Sunday	NIGHT	1.00	115	0.01	90.2
13-06-2022	6:45:00 PM	Monday	PUBLIC HOLIDAY	1.00	115	0.01	71.0
14-06-2022	6:45:00 PM	Tuesday	EVENING	2.00	115	0.01	71.8
16-06-2022	6:45:00 PM	Thursday	EVENING	2.00	115	0.04	83.5
17-06-2022	6:45:00 PM	Friday	EVENING	2.00	115	0.02	83.9
18-06-2022	6:45:00 AM	Saturday	NIGHT	1.00	115	0.04	75.6
18-06-2022	6:45:00 PM	Saturday	EVENING	2.00	115	0.01	71.8
19-06-2022	6:45:00 AM	Sunday	SUNDAY	1.00	115	0.04	72.6
20-06-2022	6:45:00 AM	Monday	NIGHT	1.00	115	0.04	72.6
21-06-2022	2:30:00 PM	Tuesday	DAY	5.00	115	0.08	95.7
21-06-2022	6:45:00 PM	Tuesday	EVENING	2.00	115	0.01	71.8
23-06-2022	6:45:00 PM	Thursday	EVENING	2.00	115	0.04	71.0
24-06-2022	7:10:00 AM	Friday	DAY	5.00	115	0.04	88.4
25-06-2022	7:10:00 AM	Saturday	DAY	5.00	115	0.04	95.4
25-06-2022	6:30:00 PM	Saturday	EVENING	2.00	115	0.04	71.8
26-06-2022	6:30:00 AM	Sunday	NIGHT	1.00	115	0.04	71.8
26-06-2022	6:30:00 PM	Sunday	EVENING	2.00	115	0.02	89.4
27-06-2022	6:00:00 PM	Monday	EVENING	2.00	115	0.02	86.7
28-06-2022	6:00:00 AM	Tuesday	NIGHT	1.00	115	0.07	96.1
28-06-2022	6:00:00 PM	Tuesday	EVENING	2.00	115	0.02	79.0
29-06-2022	6:00:00 AM	Wednesday	NIGHT	1.00	115	0.01	72.6
29-06-2022	6:45:00 PM	Wednesday	EVENING	2.00	115	0.04	71.8
30-06-2022	6:45:00 PM	Thursday	EVENING	2.00	115	0.06	82.8



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