

HERA MONTHLY
ENVIRONMENTAL MONITORING
SUMMARY JUNE 2024



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1. Intent

This monthly environmental monitoring report is a requirement under section 66(6) of the NSW Protection of the Environment Operations Act 1997 (POEO Act), in which holders of an environment protection licence make their pollution monitoring data publicly available. This report is intended to keep the community, stakeholders, and regulators informed of the Hera mine's environmental performance and to maintain a transparent and accountable reporting system.

2. Scope

This report covers all of Hera's environmental monitoring conditions for June 2024. These conditions, where applicable, are measured against Hera's Environmental Protection Licence (EPL), development consent conditions and Australian Standards to determine Hera's compliance.

These conditions include;

- Weather Conditions
- Surface Water Monitoring results
- Ground Water Monitoring results
- Noise Monitoring results
- Blasting monitoring results
- Air Quality Monitoring results
- Gold Room Stack Monitoring
- Concentrate Transport
- Complaints

3. Definitions

Term	Definition
mm/s	The peak of the vibration in millimeters per second
Insoluble Solids	The insoluble portion of the dust deposited in dust deposition gauge
Total Lead	Including dissolved lead in the liquid portion and the lead particulates in the filter paper following laboratory analysis
g/m ² /month	Grams per square meter per month
dB (L)	Decibel (linear maximum)
dB LA _{eq} (15 minute)	Decibel (linear weighted average over 15 minutes)
CN Free	Free Cyanide (Hydrogen Cyanide and Cyanide ions in solution)
CN WAD	Weak Acid Dissociable Cyanide (includes Cyanide species liberated at moderate pH of 4.5)
TSS	Total Suspended Solids

4. Maps

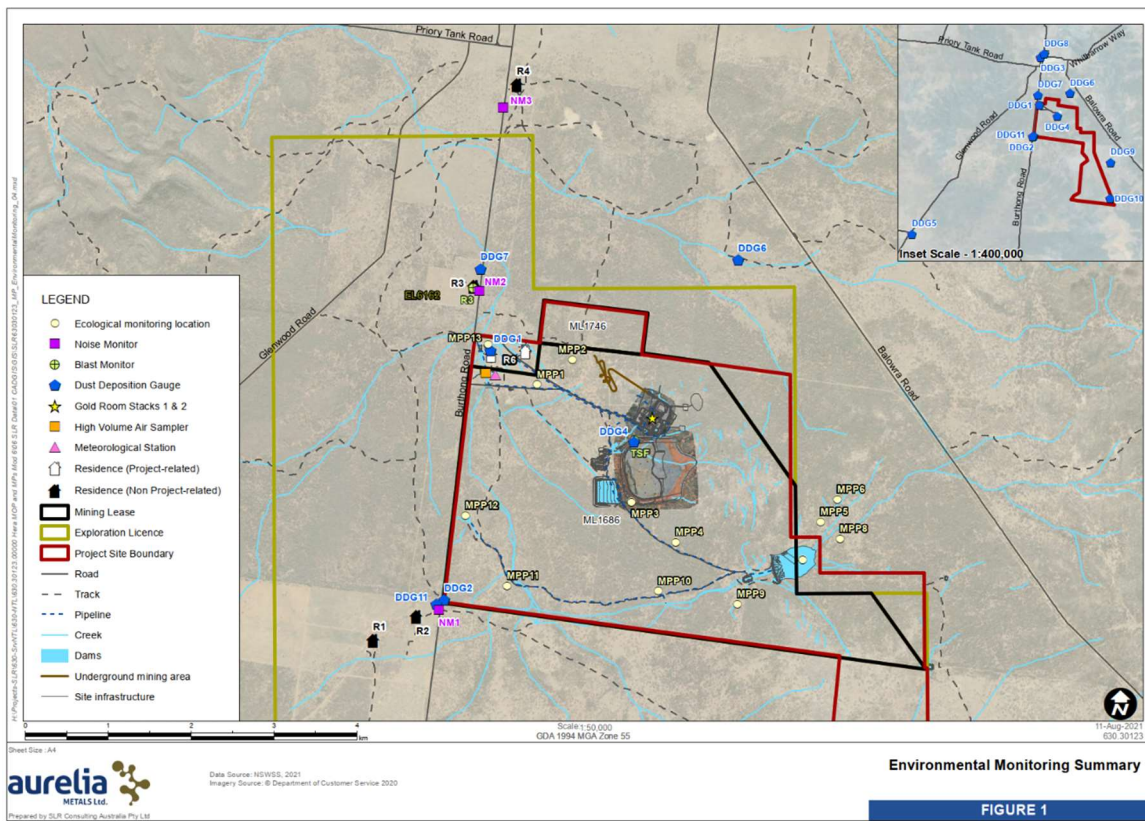


Figure 1 - Hera Environmental Monitoring Locations

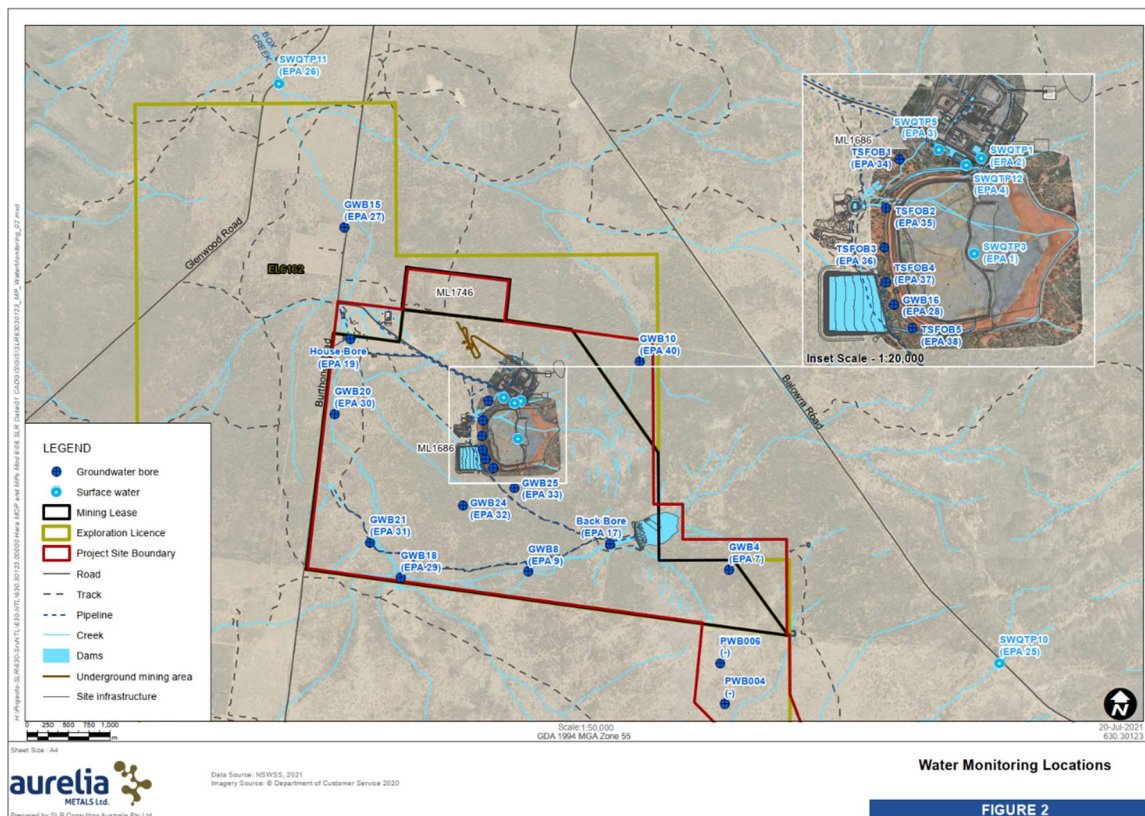


Figure 2 - Hera Water Monitoring Locations

5. Monitoring Results

5.1. Weather

The meteorology monitoring data is acquired through Hera’s weather station located on the Hera Mine site, approximately 4km south of the town of Nymagee, NSW, Refer Figure 1.

Meteorological monitoring is conducted on a continuous basis. Table 1 shows a summary of the data collected by the weather station this month. Figure 3 is the wind rose for the month of June 2024.

TABLE 1: Summary of meteorological data for June 2024

Parameter	No. of measurements for the month	Minimum Value	Mean Value	Median Value	Maximum value	Total
Air Temperature (°C)	Continuous	-3.52	7.87	8.20	19.50	-
Wind Speed (m/s)	Continuous	0.00	4.76	3.32	22.55	-
Sigma Theta (°)	Continuous	1.85	23.58	18.78	100.99	-
Rainfall (mm)	Continuous	0.00	0.01	0.00	1.80	28.20
Relative Humidity (%)	Continuous	32.83	83.65	92.66	99.90	-

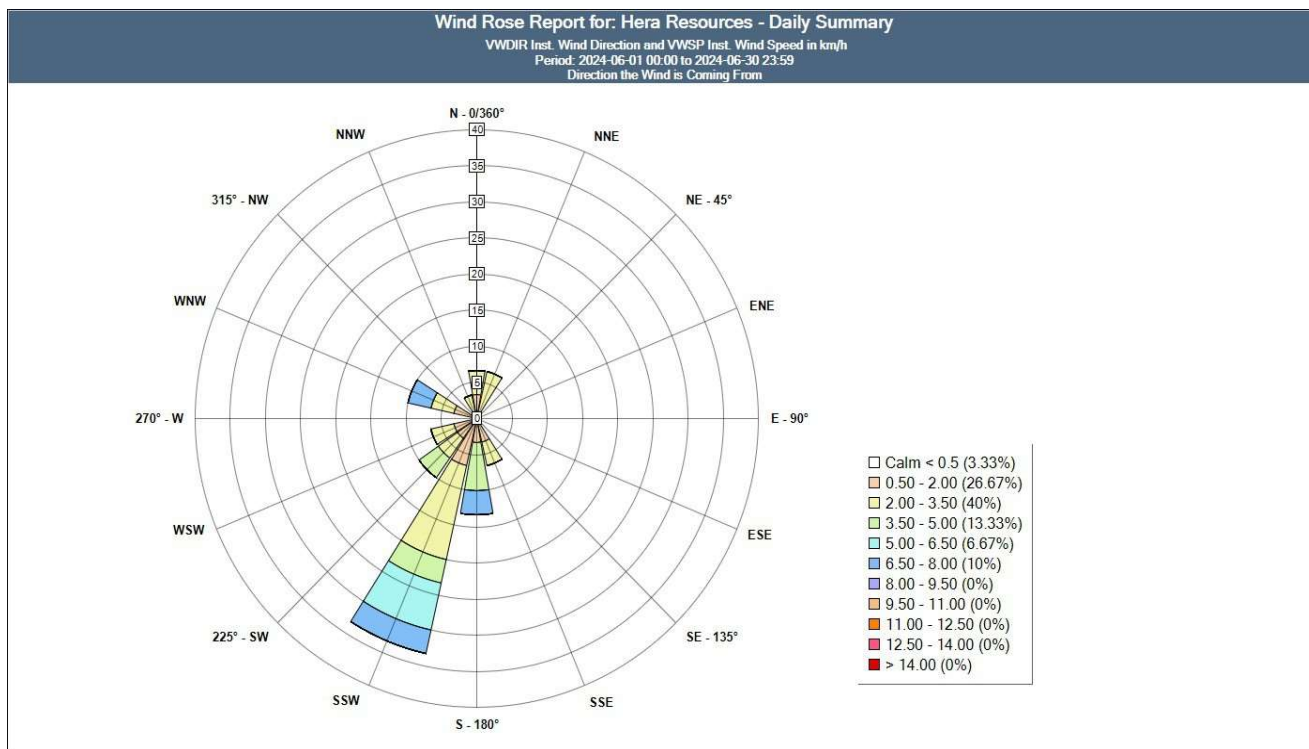


Figure 3 - Wind Rose for June 2024

5.2. Water

Water monitoring involves collecting water samples from several locations around site. The water samples are submitted to a NATA accredited laboratory for physical and chemical analysis. Analysis of pH and electrical conductivity are obtained in the field using a handheld monitor.

Surface Water

Hera has 6 licence points associated with surface water. Four of these points are located within the mining lease and two are located off the mining lease, with one upstream and another downstream of the lease, refer **Figure 2**.

Hera site is in Care and Maintenance and no processing was completed during June 2024. As a result, there were no surface water quality results for licence points.

Groundwater

Hera has 17 licence points associated with groundwater. These points are located around the Project Area, (refer **Figure 2**) and are a combination of observation bores, production bores and piezometers. Monitoring is conducted quarterly and was completed in June 2024. Sampling results are presented in **Table 2** and **Table 3**.

TABLE 2: Summary of groundwater monitoring results for June 2024

Licence Point	Analyte (mg/L)													
	Sb	As	HCO3-	B	Cd	Ca	CO3-2	Cl	Cr	Cu	CN-(Free)	CN-(Total)	CN-(WAD)	EC (mS/cm)
7	<0.001	0.001	723	0.48	<0.0001	246	<1	1220	<0.001	<0.001	*	<0.004	*	5.59
9	<0.001	<0.001	525	0.59	<0.0001	204	<1	981	0.002	<0.001	*	<0.004	*	5.42
17	Dry													
19	Dry													
27	<0.001	<0.001	490	1.21	<0.0001	75	<1	1140	<0.001	<0.001	*	<0.004	*	5.51
28	Too low to sample													
29	0.004	<0.001	351	0.46	<0.0001	58	<1	378	<0.001	<0.001	*	<0.004	*	2.26
30	<0.001	0.004	603	1.79	<0.0001	79	<1	1340	<0.001	0.002	*	<0.004	*	6.79
31	Dry													
32	Dry													
33	Dry													
34														Dry
35														Dry
36														Dry
37														Dry
38														Dry
40	<0.001	<0.001	673	0.5	<0.0001	219	<1	1120	<0.001	<0.001	*	<0.004	*	5.16

Note: * laboratory analysis error. Free CN and WAD CN not analysed. No cyanide is currently stored or used on Hera site.

TABLE 3: Summary of groundwater monitoring results for June 2024

Licence Point	Analyte (mg/L)													
	Fe	Pb	Mg	Hg	Mo	Ni	pH	K	Ag	Na	Sn*	TDS	Zn	SWL (m)
7	<0.05	<0.001	243	<0.0001	<0.001	0.002	6.98	22	<0.001	722	<0.001	3750	0.005	59.8
9	<0.05	<0.001	246	<0.0001	<0.001	0.023	7.07	28	<0.001	792	<0.001	3800	0.009	TAP
17	Dry													
19	Dry													
27	0.46	<0.001	145	<0.0001	<0.001	<0.001	7.26	37	<0.001	1030	<0.001	3360	0.005	58.31
28	Too low to sample													
29	0.11	<0.001	68	<0.0001	0.002	<0.001	7.32	16	<0.001	367	<0.001	1330	<0.005	77.18
30	<0.05	0.005	107	<0.0001	0.001	0.003	7.25	35	<0.001	1510	<0.001	4300	0.007	56.31
31	Dry													
32	Dry													
33	Dry													
34														Dry
35														Dry
36														Dry
37														Dry
38														Dry
40	<0.05	<0.001	212	<0.0001	<0.001	0.004	7.23	17	<0.001	716	<0.001	3410	<0.005	61.36

5.3. Noise

The Company has four licenced monitoring points (R1, R2, R3 and R4) located along the Burthong Road (**Figure 1**). The locations are strategically placed near the Hera Mine's nearest neighbours. R1 and R2 are measured from the same point as both neighbours are in very close proximity to each other.

The annual noise assessment was carried out by Muller Accoustic Consulting on 13 to 16th May 2024. Results were presented in the May 2024 monthly website report.

Hera holds a Noise and Blast agreement with the Landholder of R3. The agreement has been provided to the EPA and the Department of Planning and Environment (DPE).

5.4. Blast Monitoring

The blast monitor is located adjacent to the dwelling on the nearest neighbour's property (**Figure 1**).

Due to the being in Care and Maintenance there was no blasting undertaken during February 2024.

Hera holds a Noise and Blast agreement with the Landholder of R3. The agreement has been provided to the EPA and DPHI.

5.5. Air Quality

The Company has two High Volume Air Samplers (HVAS), designed to sample Particulate matter less than 10 µm (PM10) or Total Suspended Particulate (TSP) matter. Refer to **Figure 1** for location of the sampling points.

Due to a revision in air quality monitoring required by the EPL, dust deposition gauge monitoring ceased at the end of May 2024. In place of the dust deposition gauges EBAM and E-samplers have been included in the air quality monitoring network to provide real-time monitoring results. Reporting of EBAM and E sampling results will commence in July 2024

Results for air quality monitoring conducted in June 2024 have been summarised in **TABLE 4** **table 4**. No exceedances were recorded.

TABLE 4: Summary of Air Quality monitoring results for June 2024

Pollutant	Unit	Limit	Averaging Period	Result
TSP	µg/m ³	90	Annual	29.82
PM-10	µg/m ³	25	Annual	13.19
High Volume Air Samplers (PM₁₀)				
4/06/2024	µg/m ³	50	24 Hour	5.4
10/06/2024	µg/m ³	50	24 Hour	4.3
16/06/2024	µg/m ³	50	24 Hour	<0.1
22/06/2024	µg/m ³	50	24 Hour	0.1
28/06/2024	µg/m ³	50	24 Hour	13.9

5.6. Gold Room Stack Monitoring

Hera has two licenced gold room stack monitoring points (Refer to **Figure 1**).

The Hera site is on Care and Maintenance and no stack monitoring will be undertaken unless the gold room operations recommence.

5.7. Concentrate Transport

The Company is licenced to transport 60,000 tonnes of lead/zinc concentrate from the Hera site to Hermidale rail siding during daylight hours only. Hera is limited to eight truck movements per day averaged over a calendar month (two truck movements to Hermidale rail is defined as entering and leaving the site).

The Hera site is on Care and Maintenance and there were no truck movements during June 2024.

5.8. Complaints

No complaints were received this month as presented in **Table 5**.

TABLE 5: Summary of complaints received in June 2024

Date	Complaint Category
-	-