HERA-FEDERATION MONTHLY ENVIRONMENTAL MONITORING SUMMARY JUNE 2025

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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-Federation mine's environmental performance and to maintain a transparent and accountable reporting system.

2. Scope

This report covers all of Hera-Federation's environmental monitoring conditions for June 2025. These conditions, where applicable, are measured against Hera-Federation's Environmental Protection Licence (EPL), development consent conditions and Australian Standards to determine Hera-Federation'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
- Ore transport
- 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 disslved lead in the liquid portion and the lead particulates in the filter paper following laboratory analysis
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 (includees Cyanide species liberated at moderate pH of 4.5)
TSS	Total Suspended Solids

4. Maps

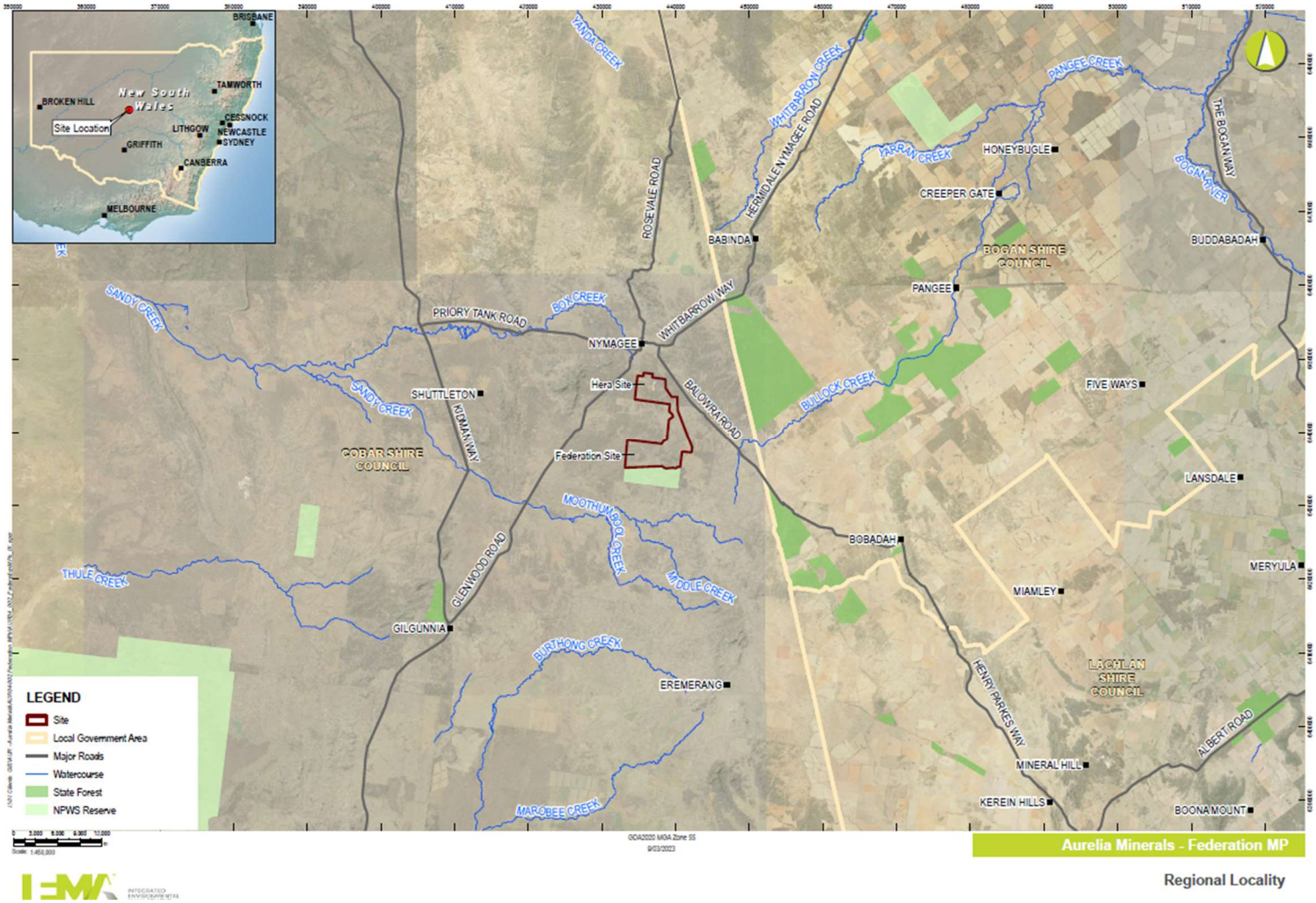

Figure 1 – Hera-Federation regional locality

Figure 2 – Hera Surface Water Monitoring Locations

Figure 3 – Federation Surface Water Monitoring Locations

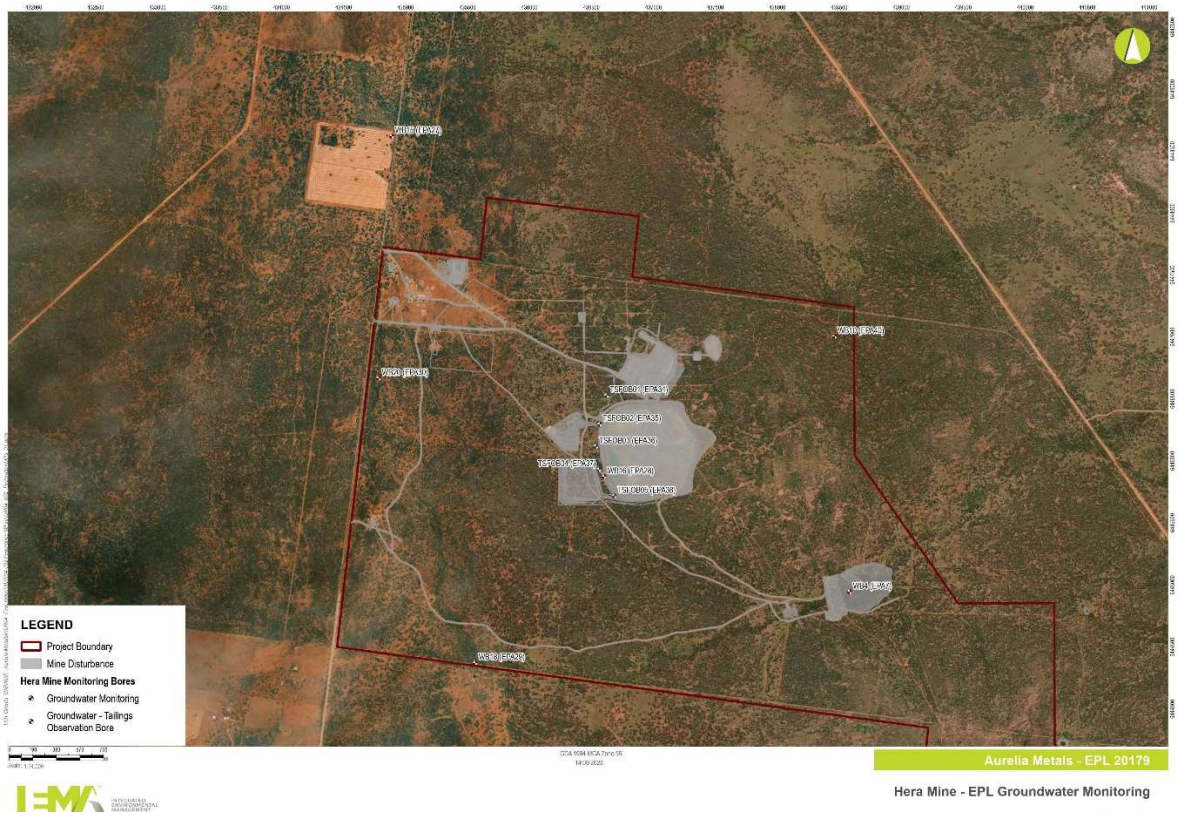

Figure 4 – Hera Groundwater Monitoring Locations

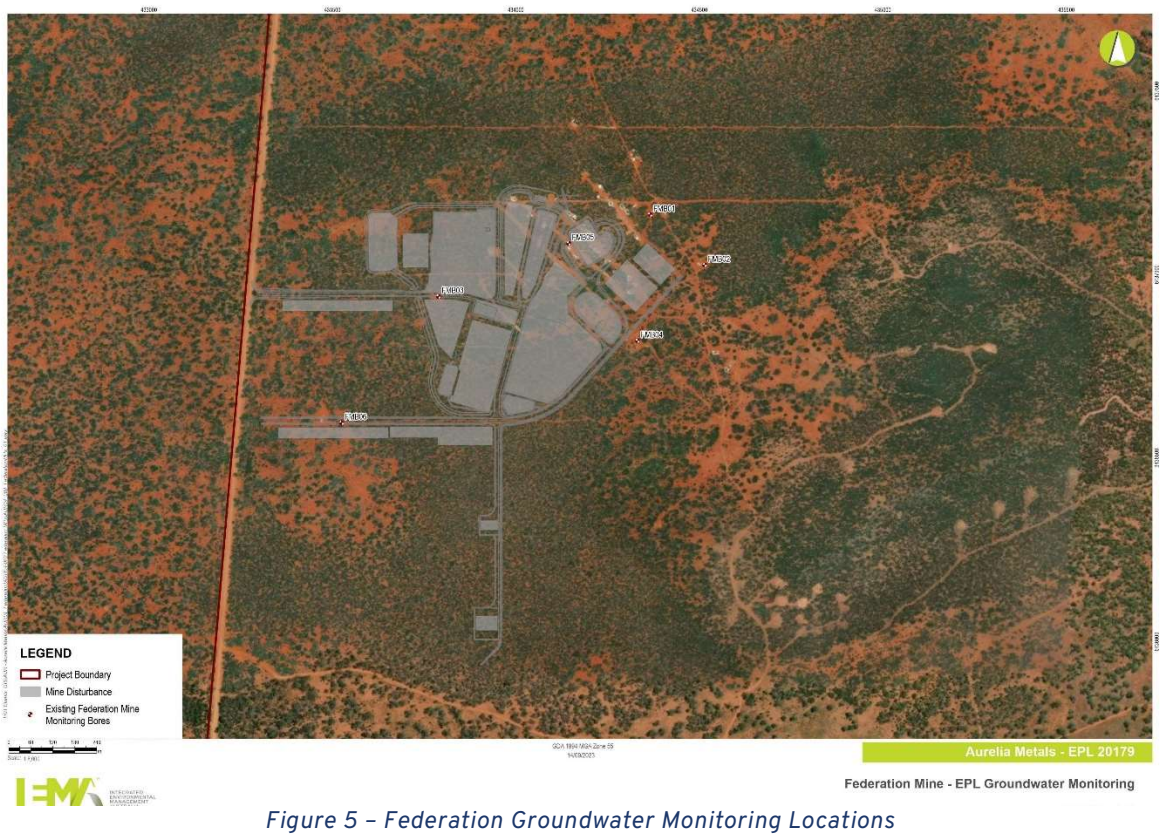

Figure 5 – Federation Groundwater Monitoring Locations

Figure 6 – Federation Groundwater Monitoring bores

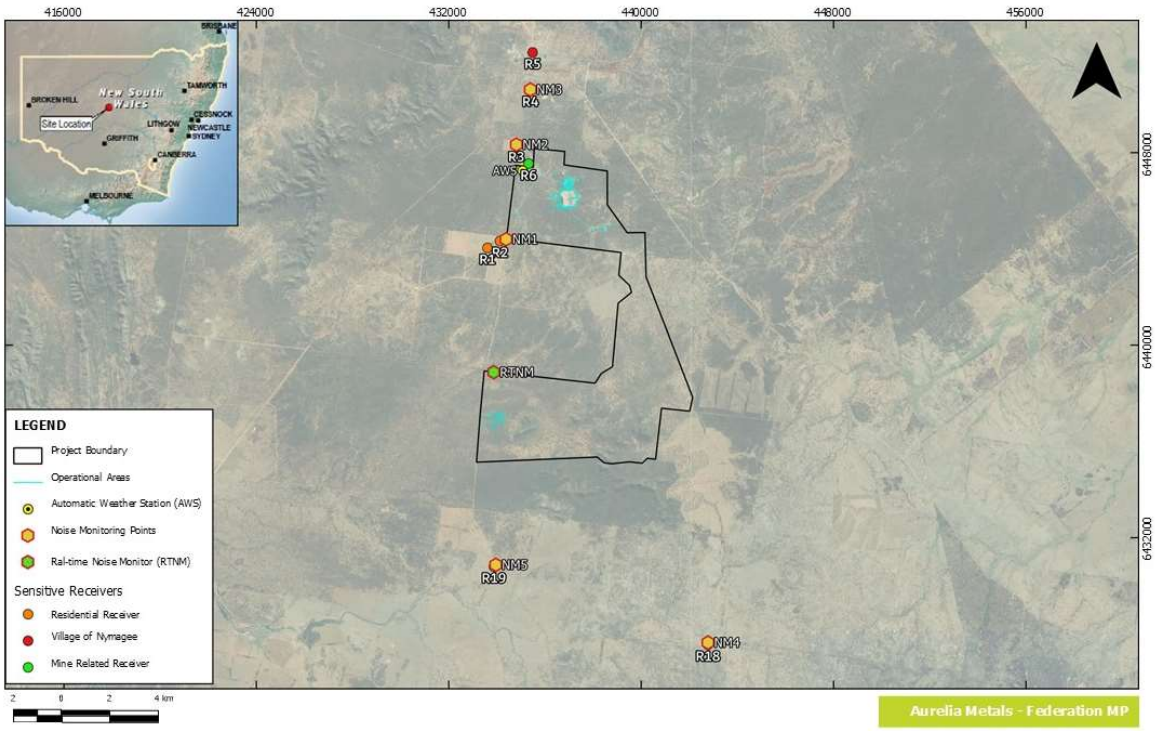

Figure 7 – Hera-Federation Noise Monitoring locations

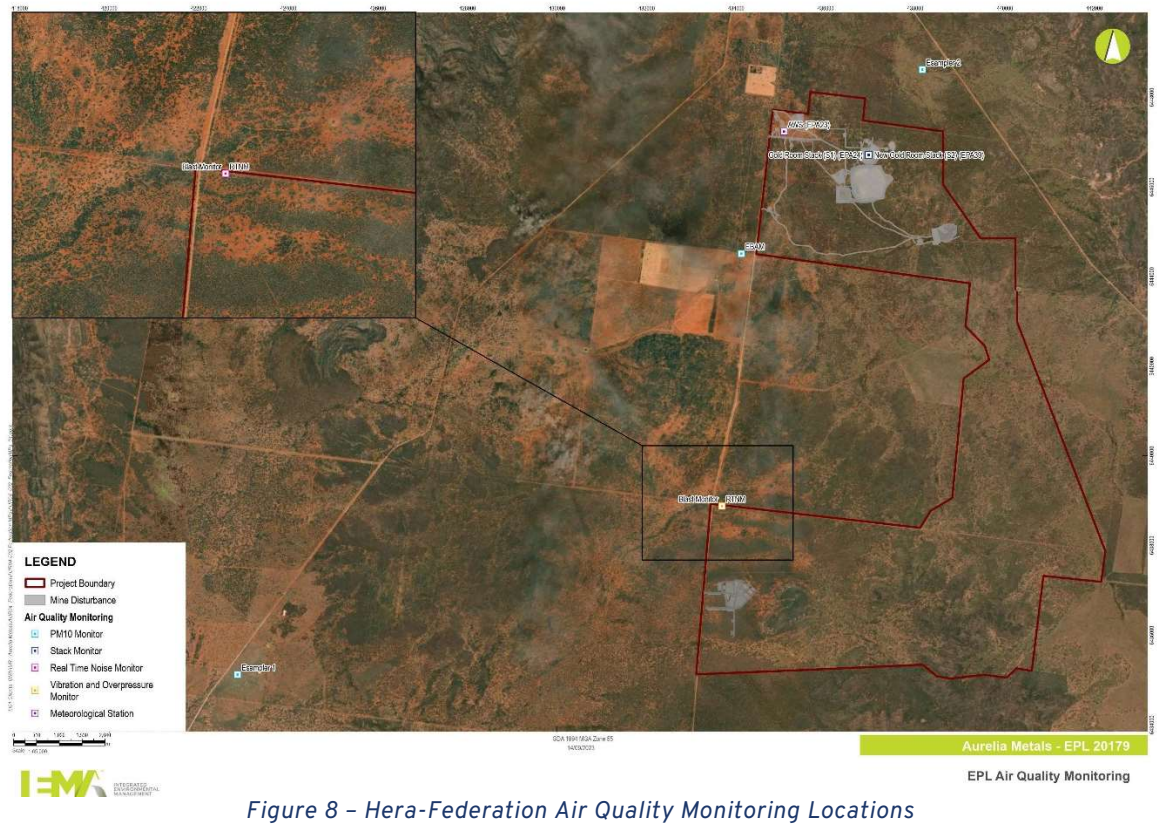

Figure 8 – Hera-Federation Air Quality Monitoring Locations

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 9** is the wind rose for the month of June 2025.

TABLE 1: Summary of meteorological data for June 2025

Parameter	No. of measurements for the month	Minimum Value	Mean Value	Median Value	Maximum value	Total
Air Temperature (^{0}C)	Continuous	-5.77	7.64	8.75	20.53	-
Wind Speed (m/s)	Continuous	0.00	5.64	3.83	23.67	-
Sigma Theta (^{0})	Continuous	1.21	23.01	18.97	101.96	-
Rainfall (mm)	Continuous	0.00	0.01	0.00	3.20	21.80
Relative Humidity (%)	Continuous	30.83	75.01	79.21	98.19	-

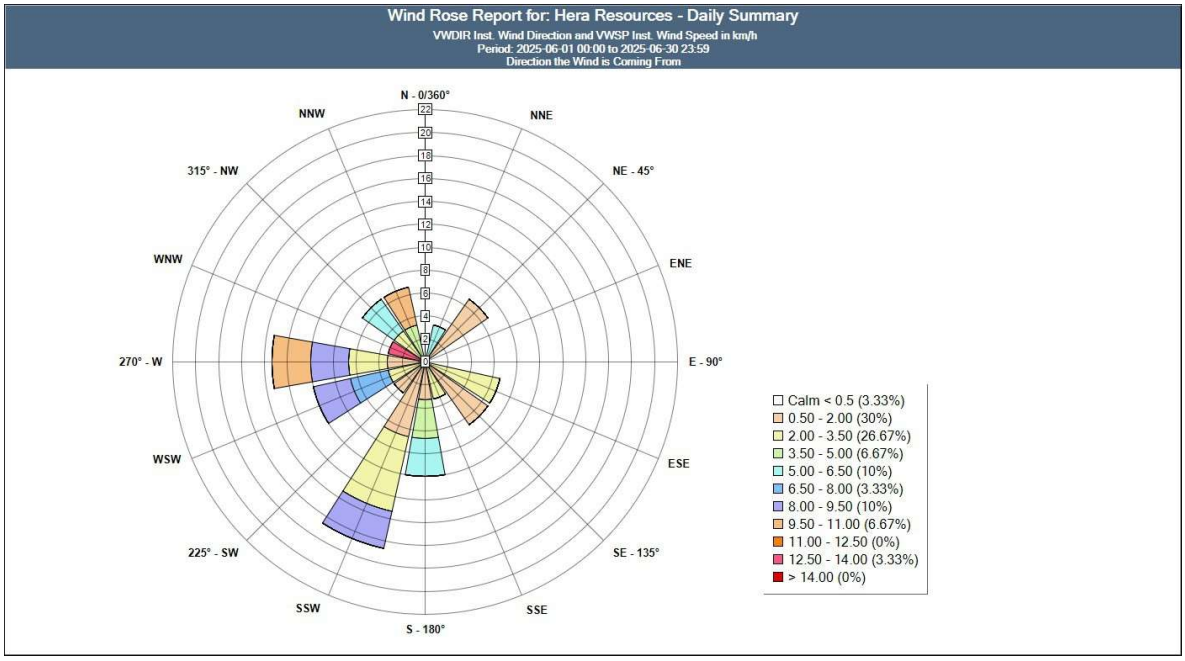

Figure 9 - Wind Rose for June 2025

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**. Due to the Hera site being in a Care and Mainenance phase no processing was completed during June 2025. As a result, there were no surface water quality results for licence points.

Federation has 3 surface monitoring points (refer to **Figure 3**), all of which are triggered upon discharge. No discharge occurred during June 2025

Groundwater

Hera has 11 licence points associated with groundwater. These points are located around the Project Area, (refer **Figure 4**) and are a combination of observation bores, productions bores and piezometers. Monitoring is conducted quarterly for SWL and water chemistry is completed annually. Annual sampling was completed in June 2025 and results are presented in **Figure 10**, **Table 2** and **Table 3.**

Federation has 16 licence points associated with groundwater (Refer to **Figure 5** and **Figure 6**). Monitoring is conducted quarterly for SWL and water chemistry and was completed in June 2025 and results are presented in **Figure 11** and **Table 4** and **5**.

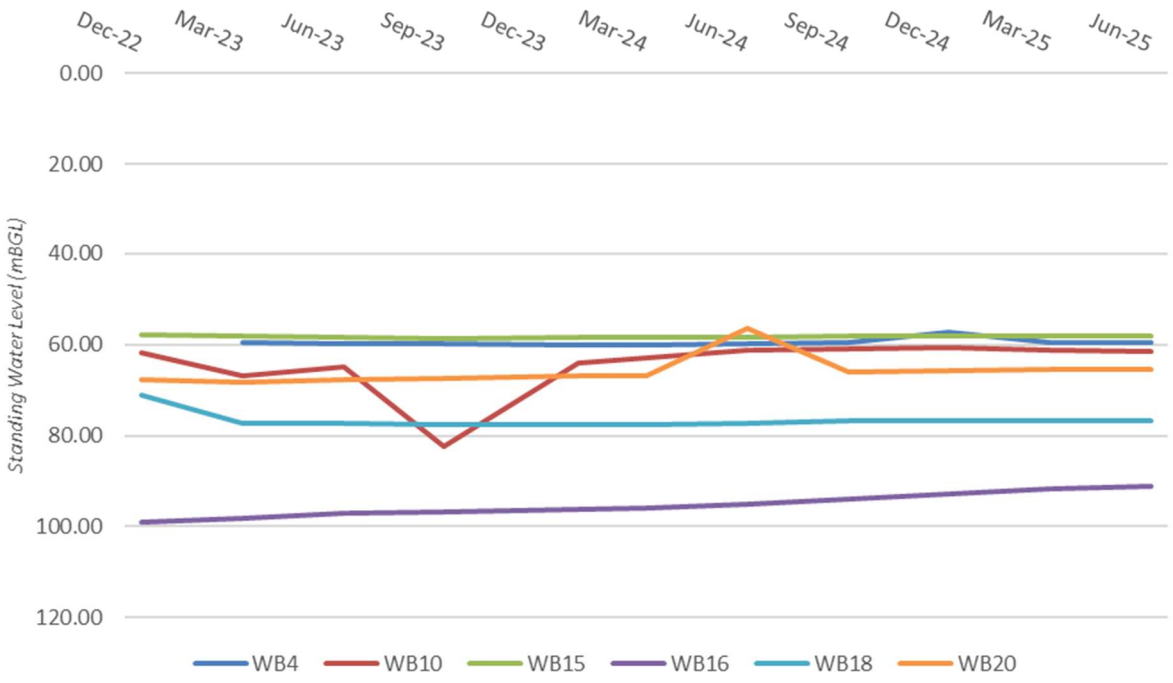

Figure 10 – Standing Water Levels – Hera Groundwater – June 2025

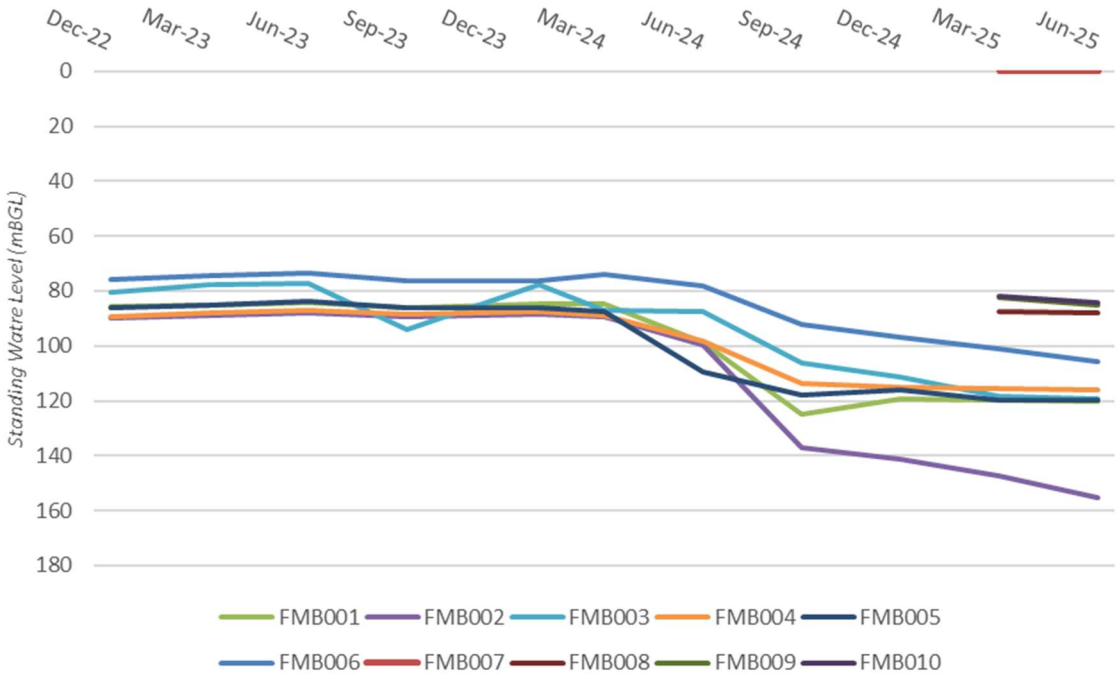

Figure 11 – Standing Water Levels – Federation Groundwater – June 2025

TABLE 2: Summary of Hera groundwater monitoring results for June 2025

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)
WB4	0.001	0.002	684	0.48	<0.0001	253	<1	1300	<0.001	<0.001	<0.004	<0.004	<0.004	5.85
WB10	<0.001	<0.001	642	0.54	<0.0001	221	<1	1180	<0.001	<0.001	<0.004	<0.004	<0.004	5.40
WB15	<0.001	<0.001	483	1.34	<0.0001	74	<1	1190	<0.001	<0.001	<0.004	<0.004	<0.004	5.72
WB16	0.001	0.004	1650	0.76	<0.0001	349	<1	1370	<0.001	0.001	<0.004	<0.004	<0.004	6.80
WB18	0.005	0.001	343	0.55	<0.0001	61	<1	401	<0.001	<0.001	<0.004	<0.004	<0.004	2.43
WB20	<0.001	0.004	570	1.89	<0.0001	79	<1	1420	<0.001	<0.001	<0.004	<0.004	<0.004	7.19
TSFOB01	Dry at 15.05m													
TSFOB02	Dry at 14.60m													
TSFOB03	Dry at 14.20m													
TSFOB04	Dry at 14.85m													
TSFOB05	Dry at 14.96m													

TABLE 3: Summary of Hera groundwater monitoring results for June 2025

	Analyte (mg/L)													
Licence Point	Fe	Pb	Mg	Hg	Mo	Ni	pH	K	Ag	Na	Sn*	TDS	Zn	SWL (m)
WB4	<0.05	<0.001	248	<0.0001	0.002	0.002	6.84	22	<0.001	695	<0.001	3560	<0.005	59.60
WB10	<0.05	<0.001	215	<0.0001	<0.001	<0.001	7.20	16	<0.001	685	<0.001	3550	0.008	61.49
WB15	0.36	<0.001	149	<0.0001	<0.001	<0.001	7.17	34	<0.001	993	<0.001	3690	<0.005	58.11
WB16	<0.05	<0.001	389	<0.0001	<0.001	0.002	6.98	33	<0.001	723	<0.001	4660	<0.005	91.11
WB18	0.17	<0.001	75	<0.0001	0.001	<0.001	7.13	16	<0.001	382	<0.001	1420	<0.005	76.72
WB20	<0.05	0.005	111	<0.0001	<0.001	0.002	7.05	34	<0.001	1460	<0.001	4410	0.006	65.36
TSFOB01	Dry at 15.05m													
TSFOB02	Dry at 14.60m													
TSFOB03	Dry at 14.20m													
TSFOB04	Dry at 14.85m													
TSFOB05	Dry at 14.96m													

TABLE 4: Summary of Federation groundwater monitoring results for June 2025

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)
FMB001	Too low to sample													
FMB002	Too deep to sample (>150m)													
FMB003	Field sample only – too low to sample													
FMB004	0.006	0.003	343	0.35	0.0006	116	<1	822	<0.001	0.001	<0.004	<0.004	<0.004	3.23
FMB005	Too low to sample													
FMB006	<0.001	<0.001	240	0.49	<0.0001	504	<1	4170	<0.001	<0.001	<0.004	<0.004	<0.004	11.5
FMB007	Mud at 73.33m													
FMB008	<0.001	0.014	664	0.45	<0.0001	129	<1	845	<0.001	<0.001	<0.004	<0.004	<0.004	4.19
FMB009	<0.001	0.001	543	0.37	<0.0001	149	<1	872	<0.001	<0.001	<0.004	<0.004	<0.004	3.80
FMB010	<0.001	<0.001	463	0.60	<0.0001	144	<1	1410	<0.001	<0.001	<0.004	<0.004	<0.004	5.62
FMDD1	Dry at 7.95m													
FMDD2	Dry at 8.09m													
FMDD3	Dry at 8.38m													
FLLP01	Dry at 7.87m													
FLLP02	Dry at 8.06m													
FLLP03	Dry at 8.05m													
FLLP04	Dry at 7.52m													

TABLE 5: Summary of Federation groundwater monitoring results for June 2025

	Analyte (mg/L)													
Licence Point	Fe	Pb	Mg	Hg	Mo	Ni	pH	K	Ag	Na	Sn*	TDS	Zn	SWL (m)
FMB001	Too low to sample													120.30
FMB002	Too deep to sample (>150m)													155.51
FMB003	Field sample only – too low to sample													119.14
FMB004	0.63	116.08	129	<0.0001	0.002	0.036	7.81	24	<0.001	440	<0.001	2120	0.054	116.08
FMB005	Too low to sample													119.96
FMB006	2.56	<0.001	582	<0.0001	<0.001	<0.001	7.09	37	<0.001	1420	<0.001	8150	<0.005	105.77
FMB007	Mud at 73.33m													
FMB008	0.68	<0.001	164	<0.0001	<0.001	0.005	7.37	18	<0.001	692	<0.001	2700	<0.005	87.68
FMB009	<0.05	<0.001	168	<0.0001	<0.001	0.004	7.15	18	<0.001	552	<0.001	2400	<0.005	85.36
FMB010	0.74	<0.001	180	<0.0001	<0.001	<0.001	7.22	26	<0.001	868	<0.001	3960	<0.005	84.03
FMDD1	Dry at 7.95m													
FMDD2	Dry at 8.09m													
FMDD3	Dry at 8.38m													
FLLP01	Dry at 7.87m													
FLLP02	Dry at 8.05m													
FLLP03	Dry at 8.06m													
FLLP04	Dry at 7.52m													

5.3. Noise

The Company has six licenced monitoring points (R1, R2, R3, R4 and R18, R19) located along the Burthong and Balowra Road (**Figure 7**). The locations are strategically placed near the Hera-Federation'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 3rd and 4th of June 2025. Results are presented below in **Table 6**.

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 Housing and Infrastructure (DPHI).

TABLE 6: Noise monitoring results – June 2025

Noise Monitoring							
Time period	Receiver	Date	Time	LA_{eq} Limit (dB)	$LA_{1(1\ min)}$ Limit (dB)	LA_{eq} Site Contibution (dB)	$LA_{1(1\ min)}$ Site Contribution (dB)
Day	R1-R2	4/06/2025	9:53	35	n/a	<30	n/a
	R3	4/06/2025	9:27	35	n/a	<30	n/a
	R4	4/06/2025	8:59	35	n/a	<30	n/a
	R18	3/06/2025	16:07	35	n/a	<20*	n/a
	R19	4/06/2025	10:19	35	n/a	<30	n/a
Evening	R1-R2	3/06/2025	19:35	35	n/a	<25	n/a
	R3	3/06/2025	19:13	35	n/a	<25	n/a
	R4	3/06/2025	18:54	35	n/a	<25	n/a
	R18	3/06/2025	21:42	35	n/a	<20*	n/a
	R19	3/06/2025	20:01	35	n/a	<25	n/a
Night	R1-R2	3/06/2025	22:54	35	45	<25	<40
	R3	3/06/2025	22:33	35	45	<25	<40
	R4	3/06/2025	23:15	35	45	<25	<40
	R18	3/06/2025	22:00	35	45	<20*	<30
	R19	3/06/2025	22:27	35	45	<25	<40

**calculated loss for distance to reciever*

5.4. Blast Monitoring

The blast monitor is located between the mining operations and the nearest residential receiver (**Figure 7**).

During November 2024 DPHI was notified that Hera-Federation had commenced mining with associated blasting.

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

A total of 72 blasts were completed during the month with no exceedances of blasting criteria. Blast monitoring results are presented in **Table 7.**

TABLE 7: Blast monitoring results for June 2025

Date	Time	Vibration (mm/s)	Overpressure (dB)
1/06/2025	6:30	0.02	76.6
1/06/2025	15:00	0.06	87.5
1/06/2025	18:00	0.02	71.8
2/06/2025	6:30	0.02	75.6
2/06/2025	15:45	0.03	73.3
2/06/2025	18:30	0.02	75.6
3/06/2025	6:30	0.02	76.6
3/06/2025	12:15	0.03	95.7
3/06/2025	18:40	0.02	75.1
3/06/2025	23:20	0.03	73.9
4/06/2025	5:30	0.02	96.2
4/06/2025	18:30	0.02	73.9
5/06/2025	6:30	0.02	81.6
5/06/2025	18:49	0.02	73.9
6/06/2025	1:00	0.09	73.3
6/06/2025	6:45	0.02	81.1
6/06/2025	18:30	0.01	71.0
6/06/2025	20:30	0.02	72.6
7/06/2025	6:30	0.02	80.8
7/06/2025	19:05	0.02	71.8
8/06/2025	6:50	0.25	86.0
8/06/2025	18:40	0.03	73.3
9/06/2025	6:40	0.02	92.6
9/06/2025	18:30	0.03	92.2
10/06/2025	5:58	0.02	78.6
10/06/2025	6:20	0.20	78.6
10/06/2025	18:30	0.02	71.8
11/06/2025	5:30	0.03	79.3
12/06/2025	6:40	0.03	77.0
13/06/2025	6:45	0.03	75.6
13/06/2025	18:30	0.03	79.3
14/06/2025	6:30	0.02	75.6
14/06/2025	18:30	0.02	75.1
15/06/2025	2:45	0.02	78.2
15/06/2025	7:35	0.25	73.9
15/06/2025	8:00	0.02	71.0
15/06/2025	18:30	0.02	75.6
16/06/2028	6:40	0.02	73.9

Date	Time	Vibration (mm/s)	Overpressure (dB)
16/06/2025	18:40	0.02	73.9
17/06/2025	0:15	0.25	76.6
17/06/2025	6:47	0.03	80.2
17/06/2025	18:22	0.04	75.6
18/06/2025	5:30	0.03	79.3
18/06/2025	18:30	0.02	73.9
19/06/2025	6:30	0.03	73.9
20/06/2025	3:00	0.01	71.8
20/06/2025	18:30	0.02	72.6
21/06/2025	2:30	0.01	71.8
21/06/2025	17:15	0.02	71.8
21/06/2025	18:30	0.02	72.6
22/06/2025	2:00	0.01	72.6
22/06/2025	6:30	0.02	79.6
22/06/2025	18:30	0.02	71.8
23/06/2025	2:00	0.01	71.8
23/06/2025	6:30	0.01	74.5
23/06/2025	18:30	0.09	72.6
24/06/2025	1:45	0.03	85.3
24/06/2025	6:30	0.02	82.8
24/06/2025	18:30	0.02	95.0
25/06/2025	3:00	0.04	94.1
25/06/2025	18:30	0.01	93.7
26/06/2025	2:30	0.03	76.1
26/06/2025	6:30	0.02	75.1
26/06/2025	18:45	0.03	77.4
27/06/2025	6:30	0.03	80.5
27/06/2025	18:50	0.02	75.1
28/06/2025	6:30	0.02	84.4
28/06/2025	18:30	0.03	75.1
29/06/2025	6:30	0.02	85.8
29/06/2025	12:30	0.01	73.9
30/06/2025	6:30	0.02	83.7
30/06/2025	18:35	0.02	73.9

5.5. Air Quality

Two High Volume Air Samplers (HVAS), designed to sample Particulate matter less than 10 µm (PM10) or Total Suspended Particulate (TSP) matter an EBAM and two E-samplers form the Hera-Federation air quality monitoring network (refer to **Figure 8**).

Results for air quality monitoring conducted in June 2025 have been summarised in **Table 8**. No exceedances were recorded.

EBAM and E-Sampler results are presented in **Figure 12.**

TABLE 8: Summary of HVAS monitoring results for June 2025

Pollutant	Unit	Limit	Averaging Period	Result
TSP	µg/m³	90	Annual	39.18
PM-10	µg/m³	25	Annual	14.05
High Volume Air Sampler (PM_{10})				
05/06/2025	µg/m³	50	24 Hour	21.2
11/06/2025	µg/m³	50	24 Hour	2.6
17/06/2025	µg/m³	50	24 Hour	7.6
23/06/2025	µg/m³	50	24 Hour	5.1
29/06/2025	µg/m³	50	24 Hour	4.7

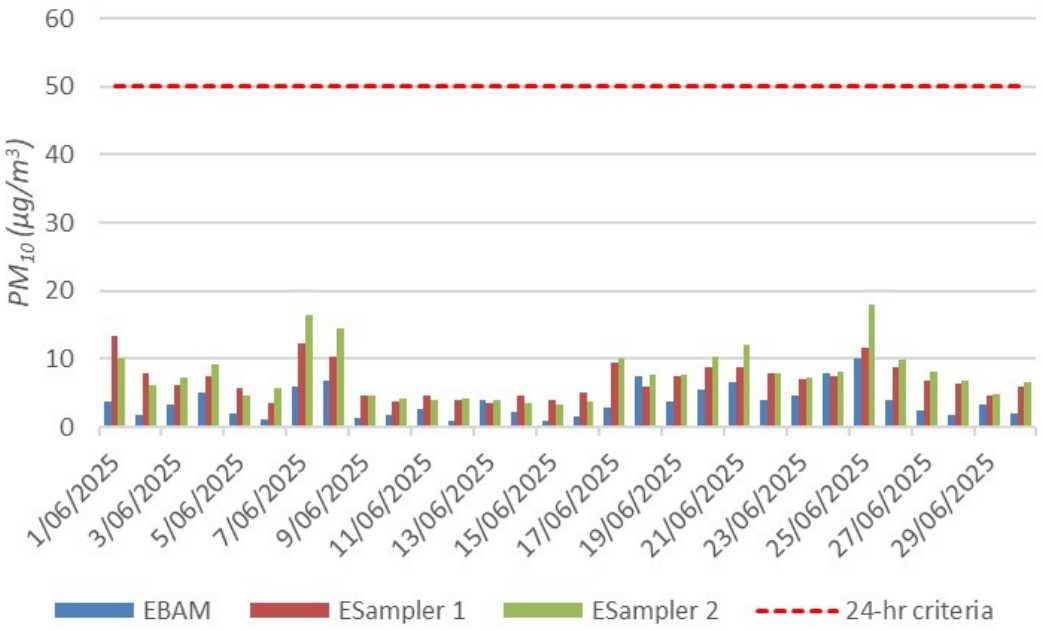

Figure 12 – EBAM plus, E-Sampler 1 and E-Sampler 2 PM_{10} Daily Average Concentration – June 2025

5.6. Gold Room Stack Monitoring

Hera-Federation has two licenced gold room stack monitoring points (Refer to **Figure 8**).

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

5.7. Ore and Waste Rock Transport

The Company is licenced to transport 600,000 tonnes annually (FY) of ore from the Hera-Federation site to The Peak mine between 7am to 10pm daily.

During November 2024 DPHI was notified that Hera-Federation had commenced mining and trucking of ore to The Peak Mine.

Truck movements per day and quantity of ore transported is presented in **Table 9**

TABLE 9: Truck movements and quantity trucked to Peak Mine for June 2025

Date	No. truck movements*/day	Quantity (Dry tonnes)
1-June	18	693.7
2-June	0	0
3-June	12	461.4
4-June	12	462.80
5-June	12	463.35
6-June	18	693.9
7-June	24	923.95
8-June	0	0
9-June	24	925.1
10-June	24	924.25
11-June	12	461.55
12-June	12	463
13-June	12	462.35
14-June	10	384.55
15-June	0	0
16-June	8	308.95
17-June	14	503.75
18-June	18	643
19-June	18	644.55
20-June	12	414.8
21-June	24	878.55
22-June	0	0
23-June	28	1031.9
24-June	30	1108.95
25-June	28	131.75
26-June	30	1109.15
27-June	24	876.4
28-June	32	1233.9
29-June	0	0
30-June	30	1108.5
31-May	18	693.7
TOTAL		**21 235.25**

** Note: A return trip from Federation to Peak Mine and back is considered to be 2 movements.*

5.8. Concentate Transport

The Company is licenced to transport 155,000 tonnes of lead/zinc concentrate from the Hera site to Hermidale rail siding from 7am to 7pm daily.

The Federation site does not produce concentrate.

The Hera site is on Care and Maintenance and no concentrate movements have occurred during June 2025

5.9. Complaints

No complaints were received this month.