

HERA-FEDERATION MONTHLY ENVIRONMENTAL
MONITORING SUMMARY SEPTEMBER 2025



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Version	1.0
Date Created	October 2025
Review Date	October 2025

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 September 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 dissolved 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 (includes Cyanide species liberated at moderate pH of 4.5)
TSS	Total Suspended Solids

4. Maps

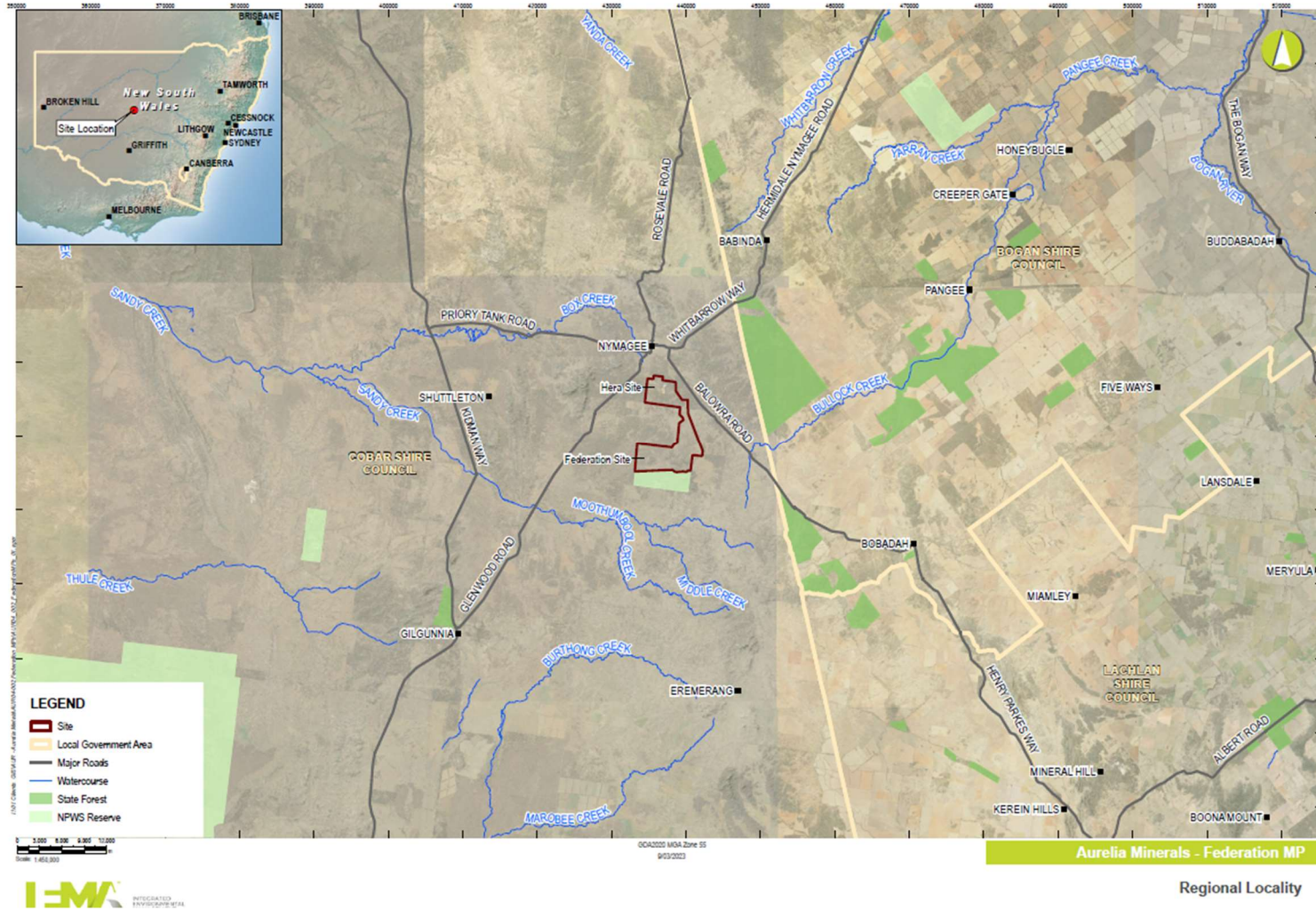


Figure 1 - Hera-Federation regional locality



Figure 2 – Hera Surface Water Monitoring Locations



Figure 3 – Federation Surface Water Monitoring Locations



Hera Mine - EPL Groundwater Monitoring

Figure 4 – Hera Groundwater Monitoring Locations



Federation Mine - EPL Groundwater Monitoring

Figure 5 – Federation Groundwater Monitoring Locations



Figure 6 – Federation Groundwater Monitoring bores

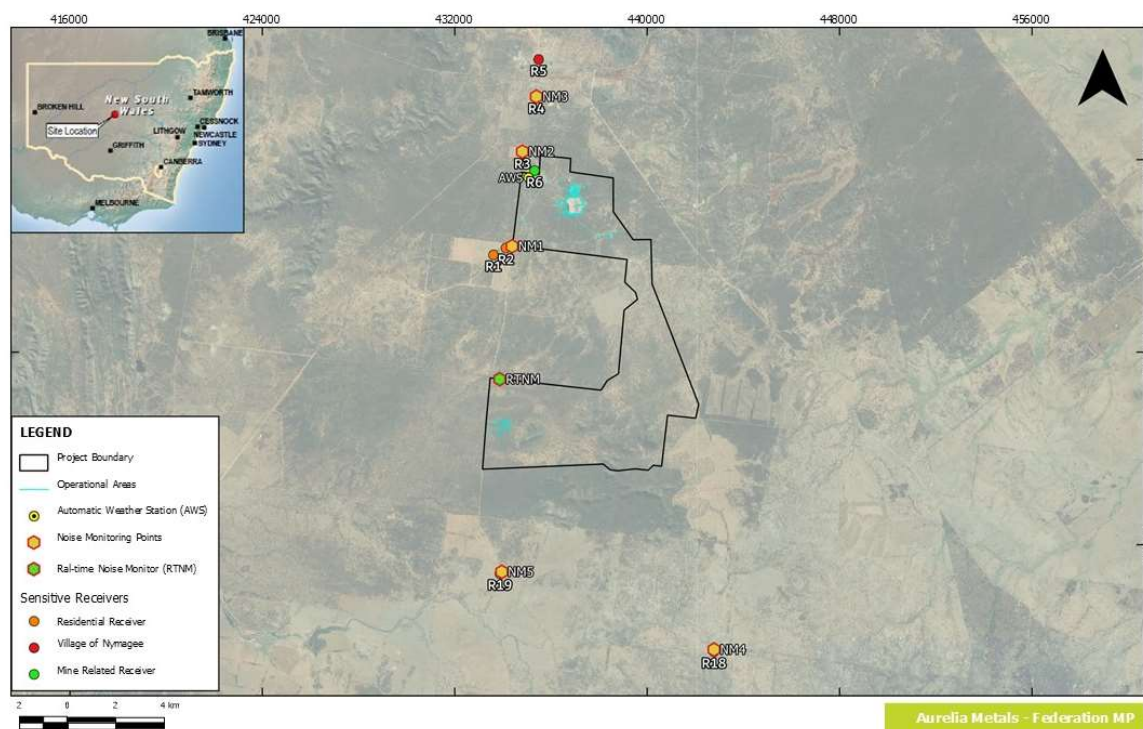


Figure 7 – Hera-Federation Noise Monitoring Locations



Figure 8 – Hera-Federation Air Quality Monitoring Locations

5. Monitoring Results

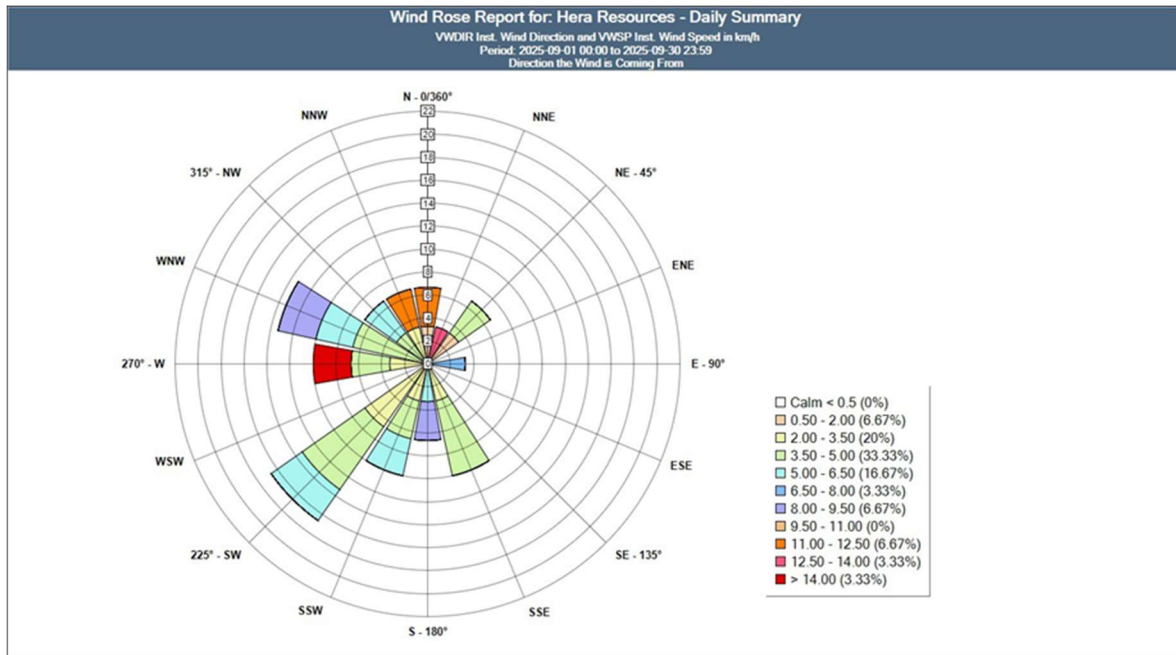
5.1. Weather

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 September 2025.

TABLE 1: Summary of meteorological data for September 2025

Parameter	No. of measurements for the month	Minimum Value	Mean Value	Median Value	Maximum value	Total
Air Temperature (°C)	Continuous	-2.15	14.12	15.22	32.82	-
Wind Speed (m/s)	Continuous	0.00	7.81	7.09	41.08	-
Sigma Theta (°)	Continuous	0.00	23.04	19.48	102.39	-
Rainfall (mm)	Continuous	0.00	0.01	0.00	3.60	37.40
Relative Humidity (%)	Continuous	12.26	58.49	54.57	98.03	-



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 Maintenance phase no processing was completed during September 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 September 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 the June website report as well as the Hera-Federation Annual Review. Quarterly SWL monitoring was completed in September, and results are presented in **Figure 10**.

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 September 2025 and results are presented in **Figure 11** and **Table 2** and **3**. Please note that FMB7-10 were not constructed prior to March 2025.

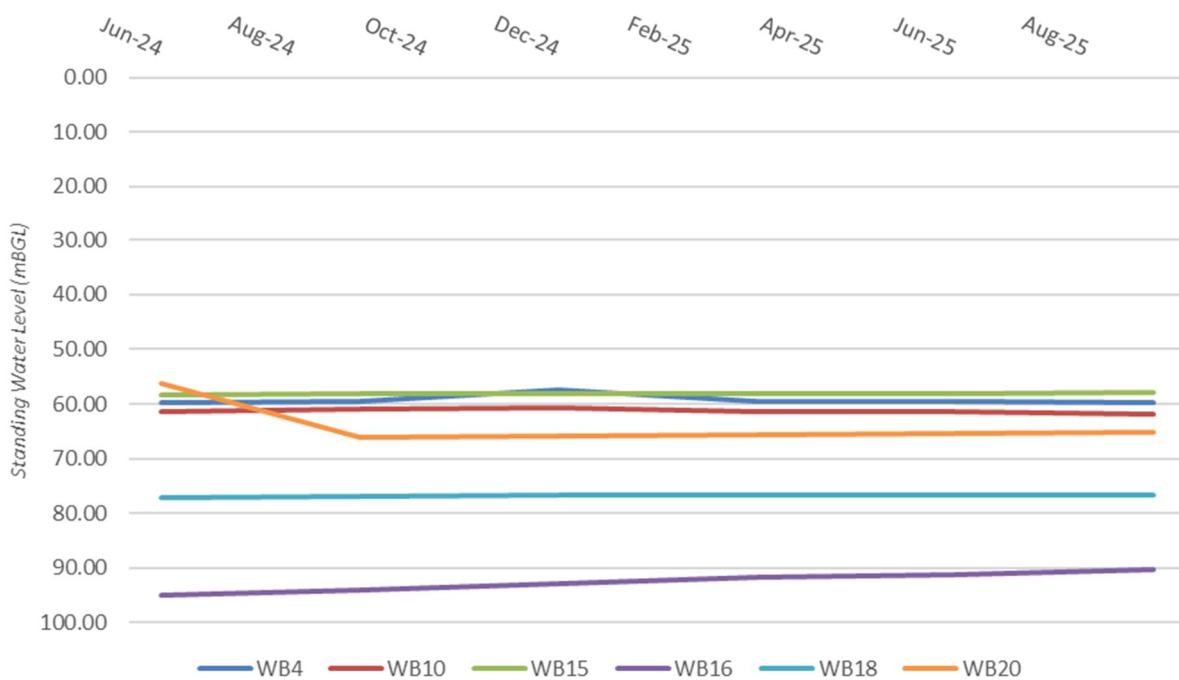


Figure 10 - Standing Water Levels - Hera Groundwater - September 2025

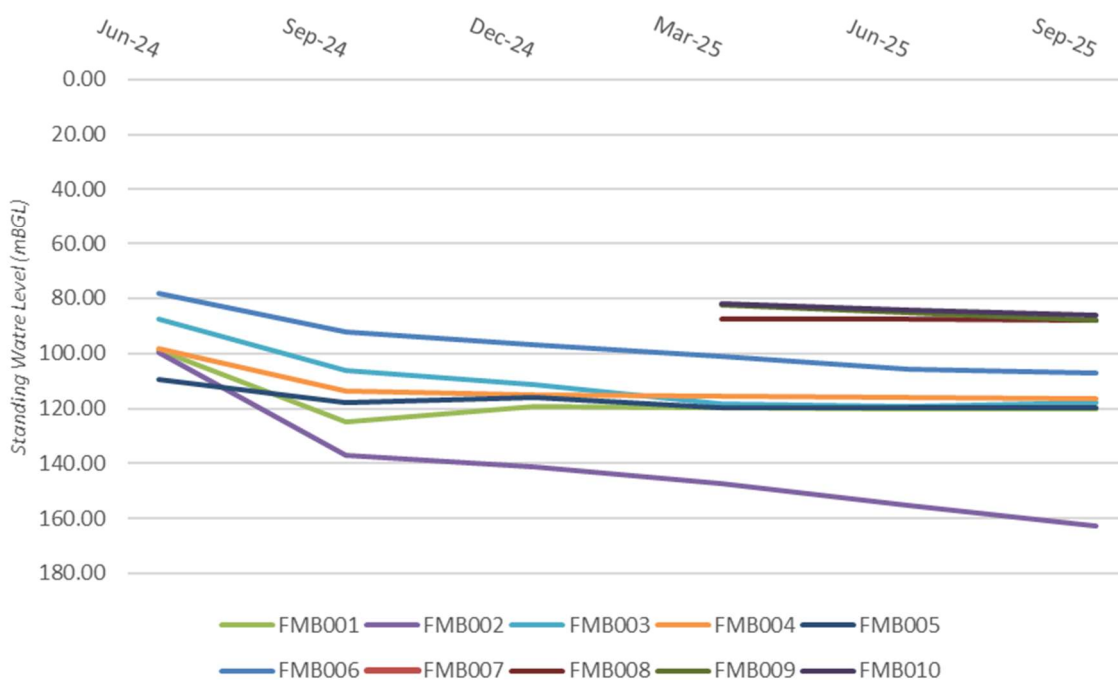


Figure 11 - Standing Water Levels - Federation Groundwater - September 2025

TABLE 2: Summary of Federation groundwater monitoring results for September 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	0.002	0.002	374	0.37	<0.0001	88	<1	1200	<0.001	<0.001	<0.004	<0.004	<0.004	4.35
FMB003	Field sample only – too low to sample													
FMB004	0.006	0.003	366	0.29	0.0011	131	<1	866	<0.001	0.002	<0.004	<0.004	<0.004	3.4
FMB005	Too low to sample													
FMB006	<0.001	<0.001	242	0.47	<0.0001	465	<1	4350	<0.001	<0.001	<0.004	<0.004	<0.004	10.9
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 3: Summary of Federation groundwater monitoring results for September 2025

Licence Point	Analyte (mg/L)													SWL (m)
	Fe	Pb	Mg	Hg	Mo	Ni	pH	K	Ag	Na	Sn*	TDS	Zn	
FMB001	Too low to sample													120.25
FMB002	0.68	<0.001	123	<0.0001	<0.001	0.003	7.23	16	<0.001	718	<0.001	2660	0.025	162.79
FMB003	Field sample only - Too low to sample													
FMB004	<0.05	<0.001	147	<0.0001	0.002	0.045	7.99	27	<0.001	437	<0.001	2270	0.066	116.40
FMB005	Too low to sample													119.96
FMB006	1.05	<0.001	569	<0.0001	<0.001	<0.001	7.13	41	<0.001	1390	<0.001	8030	0.013	107.09
FMB007	Mud at 73.3m													
FMB008	1.29	<0.001	160	<0.0001	<0.001	0.004	7.34	18	<0.001	664	<0.001	2760	0.009	87.86
FMB009	0.29	<0.001	161	<0.0001	<0.001	0.003	7.19	19	<0.001	520	<0.001	2500	0.008	88.17
FMB010	0.72	<0.001	173	<0.0001	<0.001	<0.001	7.4	28	<0.001	850	<0.001	3380	0.011	86.26
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 were presented in the June website report as well as the Hera-Federation Annual Review.

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).

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.

Blasting is scheduled to be undertaken at 6.30am and 6.30pm however there may be instances of blasting outside these times.

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 76 blasts were completed during the month. There was one exceedance of blast overpressure criteria on 9th September with an overpressure result of 121.4dB (Lin peak) recorded. A non-compliance notification has been provided to the relevant authorities. Investigations into the exceedance indicate that the result could be attributed to weather conditions at the time of the blast with high wind gusts triggering the blast monitor. Blast monitoring results are presented in **TABLE 4**.

TABLE 4: Blast monitoring results for September 2025

Date	Time	Vibration (mm/s)	Overpressure (dB)
01/09/2025	06:25	0.02	88.5
01/09/2025	21:59	0.01	81.9
02/09/2025	06:30	0.02	86.0
02/09/2025	18:37	0.03	79.0
03/09/2025	05:03	0.01	84.1
03/09/2025	19:43	0.06	77.8
04/09/2025	02:02	0.02	86.6
04/09/2025	06:28	0.02	85.1
04/09/2025	12:54	0.02	103.2
04/09/2025	18:25	0.04	81.4
05/09/2025	06:35	0.02	81.4
05/09/2025	18:20	0.02	82.1
06/09/2025	06:26	0.02	97.6
06/09/2025	18:27	0.02	79.3
07/09/2025	03:00	0.02	103.1

Date	Time	Vibration (mm/s)	Overpressure (dB)
07/09/2025	06:33	0.02	78.6
07/09/2025	18:25	0.02	87.9
08/09/2025	06:31	0.02	77.0
08/09/2025	18:26	0.01	79.6
08/09/2025	19:33	0.02	80.5
09/09/2025	06:31	0.02	81.9
09/09/2025	18:29	0.33	121.4
10/09/2025	01:47	0.03	108.3
10/09/2025	18:40	0.03	104.2
11/09/2025	03:36	0.02	105.1
11/09/2025	06:28	0.03	95.8
11/09/2025	18:31	0.02	72.6
11/09/2025	23:03	0.02	72.6
12/09/2025	06:20	0.02	79.0
12/09/2025	18:33	0.02	74.5
13/09/2025	01:50	0.02	80.8
13/09/2025	06:29	0.02	81.4
13/09/2025	18:37	0.05	76.6
14/09/2025	01:30	0.01	83.2
14/09/2025	06:39	0.01	84.8
14/09/2025	18:32	0.02	77.0
15/09/2025	06:46	0.03	87.9
16/09/2025	03:01	0.03	79.3
16/09/2025	06:28	0.02	92.1
16/09/2025	18:24	0.02	96.3
17/09/2025	03:00	0.01	74.5
17/09/2025	18:53	0.03	76.1
17/09/2025	21:53	0.01	81.6
18/09/2025	11:23	0.09	92.9
18/09/2025	18:50	0.02	78.2
18/09/2025	21:55	0.02	81.6
19/09/2025	06:28	0.03	81.1
19/09/2025	13:30	0.03	76.6
19/09/2025	18:32	0.01	76.6
20/09/2025	06:27	0.02	77.4
20/09/2025	07:40	0.15	83.7
20/09/2025	18:38	0.03	78.2
21/09/2025	06:33	0.03	87.9
21/09/2025	18:32	0.02	82.4

Date	Time	Vibration (mm/s)	Overpressure (dB)
22/09/2025	05:59	0.04	86.4
22/09/2025	15:09	0.02	103.9
22/09/2025	18:25	0.05	79.3
23/09/2025	06:29	0.02	82.1
23/09/2025	18:36	0.02	81.1
24/09/2025	06:34	0.01	79.3
24/09/2025	18:41	0.02	79.6
25/09/2025	06:42	0.02	83.0
25/09/2025	18:36	0.02	81.4
26/09/2025	06:37	0.02	81.4
26/09/2025	14:40	0.02	111.1
26/09/2025	18:36	0.02	78.6
27/09/2025	06:35	0.02	81.1
27/09/2025	18:35	0.02	80.5
28/09/2025	02:21	0.02	82.1
28/09/2025	11:36	0.02	88.1
28/09/2025	21:27	0.01	81.9
29/09/2025	06:24	0.04	84.2
29/09/2025	18:29	0.01	80.2
29/09/2025	19:20	0.03	80.2
30/09/2025	06:25	0.02	85.1
30/09/2025	11:45	0.03	100.8
30/09/2025	18:30	0.02	89.8

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 September 2025 have been summarised in **TABLE 5**. No exceedances were recorded.

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

TABLE 5: Summary of HVAS monitoring results for September 2025

Pollutant	Unit	Limit	Averaging Period	Result
TSP	µg/m ³	90	Annual	35.06
PM-10	µg/m ³	25	Annual	13.18
High Volume Air Sampler (PM₁₀)				
3/09/2025	µg/m ³	50	24 Hour	19.3
9/09/2025	µg/m ³	50	24 Hour	8.4
15/09/2025	µg/m ³	50	24 Hour	7.3
21/09/2025	µg/m ³	50	24 Hour	8.7
27/09/2025	µg/m ³	50	24 Hour	29.4

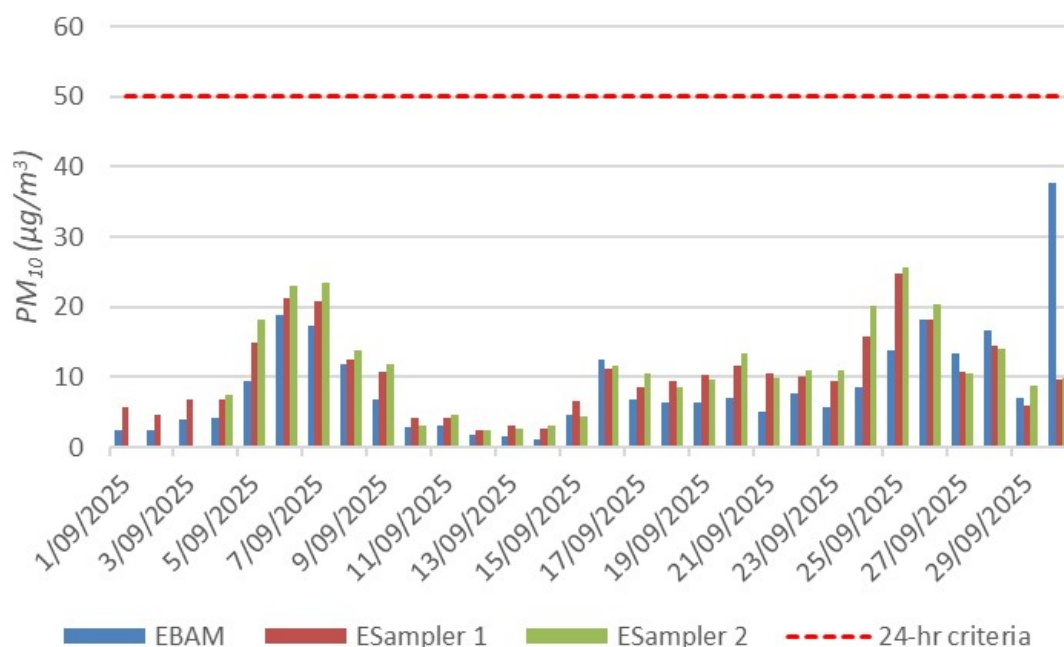


Figure 12 – EBAM plus, E-Sampler 1 and E-Sampler 2 PM₁₀ Daily Average Concentration – September 2025

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 6**.

TABLE 6: Truck movements and quantity trucked to Peak Mine for September 2025

Date	No. truck movements*/day	Quantity (Dry tonnes)
1-Sep	8	262.35
2-Sep	30	1111.55
3-Sep	30	1113.2
4-Sep	24	880.45
5-Sep	20	739.9
6-Sep	18	695.85
7-Sep	16	618.5
8-Sep	0	0
9-Sep	0	0
10-Sep	0	0
11-Sep	28	1052.7
12-Sep	30	1110.7
13-Sep	20	738.65
14-Sep	24	880.9
15-Sep	6	231.25
16-Sep	18	697.25
17-Sep	6	231.3
18-Sep	12	463.65
19-Sep	10	354.9
20-Sep	24	879.9
21-Sep	12	465.85
22-Sep	8	294.6
23-Sep	14	543.6
24-Sep	22	821.8
25-Sep	22	815.7
26-Sep	30	1060.7
27-Sep	30	1102.35
28-Sep	12	463.35
29-Sep	18	645.1
30-Sep	24	874.75
TOTAL		19 150.80

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

5.8. Concentrate 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 September 2025

5.9. Complaints

No complaints were received this month.