

HERA-FEDERATION MONTHLY ENVIRONMENTAL  
MONITORING SUMMARY OCTOBER 2025



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Version	1.0
Date Created	November 2025
Review Date	December 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 October 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 <sub>eq</sub> (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

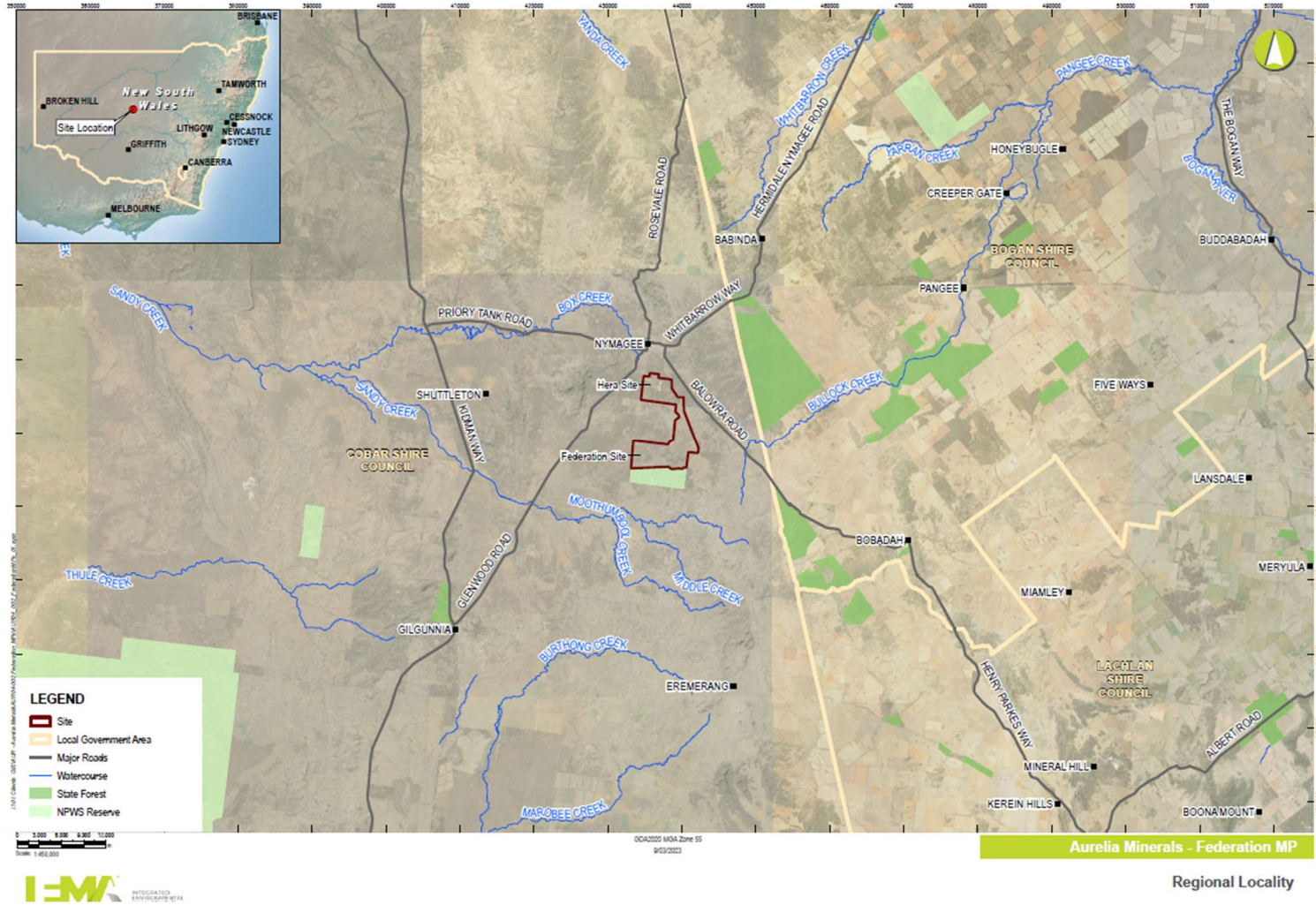


Figure 1 - Hera-Federation regional locality



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

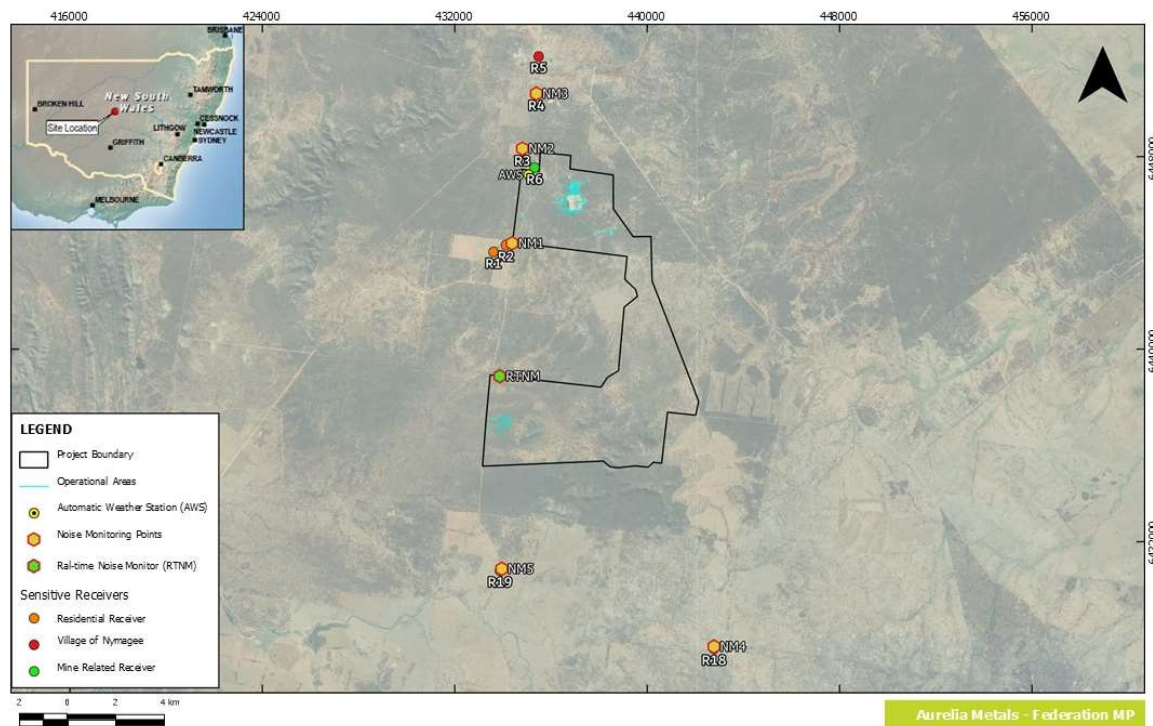


Figure 7 - Hera-Federation Noise Monitoring Locations



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. During the month the temperature sensor on the weather station failed for a short period of time, recording a -20 degree result. The sensor and cabling will be replaced when maintenance checks are next undertaken on the station. **Figure 9** is the wind rose for the month of October 2025.

TABLE 1: Summary of meteorological data for October 2025

Parameter	No. of measurements for the month	Minimum Value	Mean Value	Median Value	Maximum value	Total
Air Temperature (°C)	Continuous	-20.00	18.79	19.41	37.74	-
Wind Speed (m/s)	Continuous	0.00	7.22	6.41	34.14	-
Sigma Theta (°)	Continuous	2.74	25.36	20.31	100.58	-
Rainfall (mm)	Continuous	0.00	0.00	0.00	2.20	15.20
Relative Humidity (%)	Continuous	10.88	46.57	41.65	99.63	-

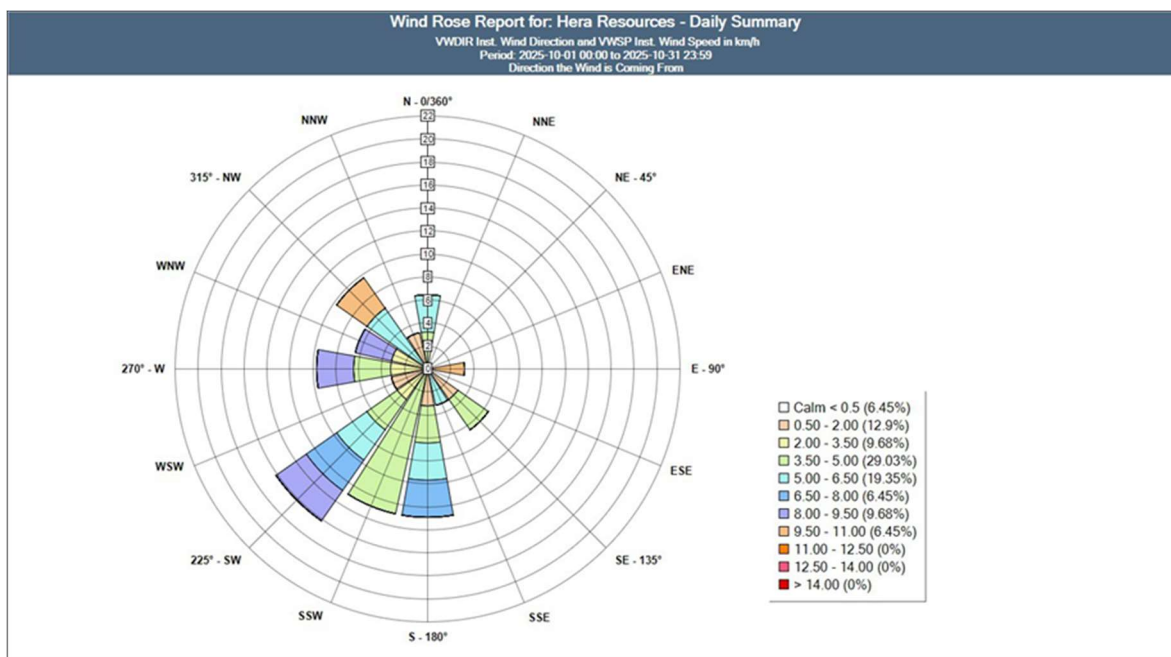


Figure 9 - Wind Rose for October 2025

## 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 Maintenance phase no processing was completed during August 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 October 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 reported in June website report and the 2025 Annual Review. Quarterly SWL monitoring was completed in September and reported in the September monthly report.

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 reported in the September website report.

### 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 in June 2025. Results were presented in the June 2025 monthly website report and the 2025 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.

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 71 blasts were completed during the month with no exceedances of blasting criteria. Blast monitoring results are presented in **Table 2**.

TABLE 2: Blast monitoring results for October 2025

Date	Time	Vibration (mm/s)	Overpressure (dB)
1/10/2025	5:00	0.02	84.2
1/10/2025	18:30	0.02	82.1
2/10/2025	6:40	0.02	86.4
2/10/2025	18:30	0.02	80.2
3/10/2025	6:30	0.02	85.0
3/10/2025	18:32	0.01	81.9
4/10/2025	6:10	0.03	86.1
4/10/2025	6:45	0.17	84.8
4/10/2025	18:30	0.02	78.6
5/10/2025	1:00	0.01	83.2
5/10/2025	6:30	0.02	86.4
5/10/2025	18:30	0.02	88.9
6/10/2025	6:30	0.02	83.7
6/10/2025	17:00	0.01	86.3
6/10/2025	18:30	0.01	83.0
7/10/2025	6:35	0.02	81.6
7/10/2025	18:30	0.02	79.6
8/10/2025	5:20	0.02	83.7
8/10/2025	18:45	0.02	85.5
8/10/2025	20:30	0.02	73.3
9/10/2025	6:15	0.02	101.1

Date	Time	Vibration (mm/s)	Overpressure (dB)
9/10/2025	13:00	0.02	78.2
9/10/2025	18:45	0.02	75.6
10/10/2025	6:30	0.02	84.1
10/10/2025	13:15	0.02	79.9
10/10/2025	18:45	0.04	80.5
11/10/2025	2:00	0.01	87.3
11/10/2025	17:00	0.02	92.1
11/10/2025	18:45	0.11	84.1
12/10/2025	6:30	0.02	86.0
12/10/2025	18:45	0.02	71.8
13/10/2025	3:50	0.02	73.9
13/10/2025	6:30	0.02	75.6
14/10/2025	0:15	0.02	79.0
14/10/2025	6:30	0.03	86.7
15/10/2025	2:20	0.02	81.4
15/10/2025	18:30	0.04	74.5
16/10/2025	6:30	0.02	79.0
16/10/2025	18:30	0.02	86.0
17/10/2025	6:45	0.09	82.1
17/10/2025	18:30	0.02	88.1
18/10/2025	6:45	0.02	82.8
18/10/2025	18:30	0.02	83.2
19/10/2025	6:45	0.01	83.5
19/10/2025	18:30	0.02	72.6
20/10/2025	6:30	0.02	80.2
20/10/2025	18:30	0.02	72.6
21/10/2025	6:30	0.02	76.6
21/10/2025	18:30	0.02	87.0
22/10/2025	2:00	0.02	82.1
22/10/2025	5:30	0.02	80.2
22/10/2025	18:40	0.02	84.2
23/10/2025	5:30	0.02	82.8
24/10/2025	6:30	0.02	80.8
24/10/2025	18:30	0.02	75.6
25/10/2025	6:30	0.02	82.6
25/10/2025	18:30	0.02	80.2
26/10/2025	6:30	0.02	80.2
26/10/2025	18:30	0.02	100.4
27/10/2025	19:30	0.01	79.6

Date	Time	Vibration (mm/s)	Overpressure (dB)
28/10/2025	6:30	0.02	107.2
28/10/2025	18:35	0.02	94.0
29/10/2025	5:00	0.03	76.1
29/10/2025	13:00	0.02	85.6
29/10/2025	18:30	0.02	77.4
30/10/2025	3:15	0.02	84.1
30/10/2025	7:00	0.02	86.1
30/10/2025	21:45	0.04	83.2
31/10/2025	6:30	0.02	81.9
31/10/2025	13:15	0.04	101.6
31/10/2025	18:20	0.02	90.2

## 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 October 2025 have been summarised in **Table 3**. No exceedances of criteria occurred during October. The filter for 15/10/25 had an issue with the pre-weight and was unable to be analysed.

EBAM and E-Sampler results are presented in **Figure 10**.

TABLE 3: Summary of HVAS monitoring results for October 2025

Pollutant	Unit	Limit	Averaging Period	Result
TSP	µg/m <sup>3</sup>	90	Annual	35.89
PM-10	µg/m <sup>3</sup>	25	Annual	13.23
<b>High Volume Air Sampler (PM<sub>10</sub>)</b>				
3/10/2025	µg/m <sup>3</sup>	50	24 Hour	13.8
9/10/2025	µg/m <sup>3</sup>	50	24 Hour	21.7
15/10/2025	µg/m <sup>3</sup>	50	24 Hour	-
21/10/2025	µg/m <sup>3</sup>	50	24 Hour	28.8
27/10/2025	µg/m <sup>3</sup>	50	24 Hour	9.4

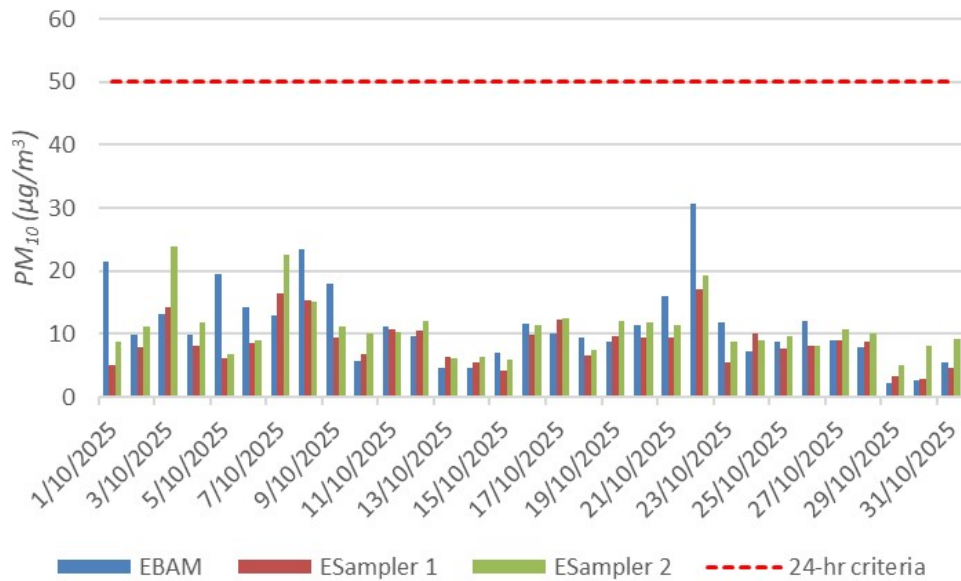


Figure 10 – EBAM plus, E-Sampler 1 and E-Sampler 2 PM<sub>10</sub> Daily Average Concentration – October 2025

### 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 4**.

TABLE 4: Truck movements and quantity trucked to Peak Mine for October 2025

Date	No. truck movements*/day	Quantity (Dry tonnes)
01/10/2025	22	802.5
02/10/2025	32	1193.7
03/10/2025	22	804.45
04/10/2025	18	646.20
05/10/2025	14	547.15
06/10/2025	12	418.7
07/10/2025	24	888.5
08/10/2025	34	1276.25
09/10/2025	12	431.7
10/10/2025	28	961.9
11/10/2025	20	780.8

Date	No. truck movements*/day	Quantity (Dry tonnes)
12/10/2025	6	234.9
13/10/2025	12	413.4
14/10/2025	32	1196.05
15/10/2025	40	1475.25
16/10/2025	28	1041.75
17/10/2025	32	1117.9
18/10/2025	38	1377.1
19/10/2025	28	1022.8
20/10/2025	20	657.55
21/10/2025	40	1424.3
22/10/2025	32	1119.7
23/10/2025	24	897.15
24/10/2025	36	1276.25
25/10/2025	30	1133.45
26/10/2025	26	937.8
27/10/2025	4	135.2
28/10/2025	40	1480.8
29/10/2025	44	1596.3
30/10/2025	40	1491.05
31/10/2025	36	1385.5
<b>TOTAL</b>		<b>30 166.05</b>

*\* 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 October 2025

## 5.9. Complaints

There were no complaints during October 2025.