

TECHNICAL  
REPORT

PEAK MONTHLY ENVIRONMENTAL MONITORING  
SUMMARY FEBRUARY 2025



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Review Date	

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## 1. Intent

This monthly environmental summary 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 Peak Gold Mine's (PGM's) environmental performance and to maintain a transparent and accountable reporting system.

## 2. Scope

This report covers all PGMs environmental monitoring conditions covered for February 2025. These conditions, where applicable, are measured against PGMs Environment Protection Licence (EPL 3596), development consent conditions and Australian Standard to determine PGMs compliance.

These conditions include:

- Weather Conditions
- Surface Water Monitoring results
- Noise Monitoring results
- Air Quality Monitoring results
- Blasting monitoring results
- Haulage Movements

## 3. Definitions

Term	Definition
mm/s	The peak of the vibration in millimetres 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 <sup>2</sup> /month	Grams per square metre per month
dB (L)	Decibel (linear maximum)
dB LAeq (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

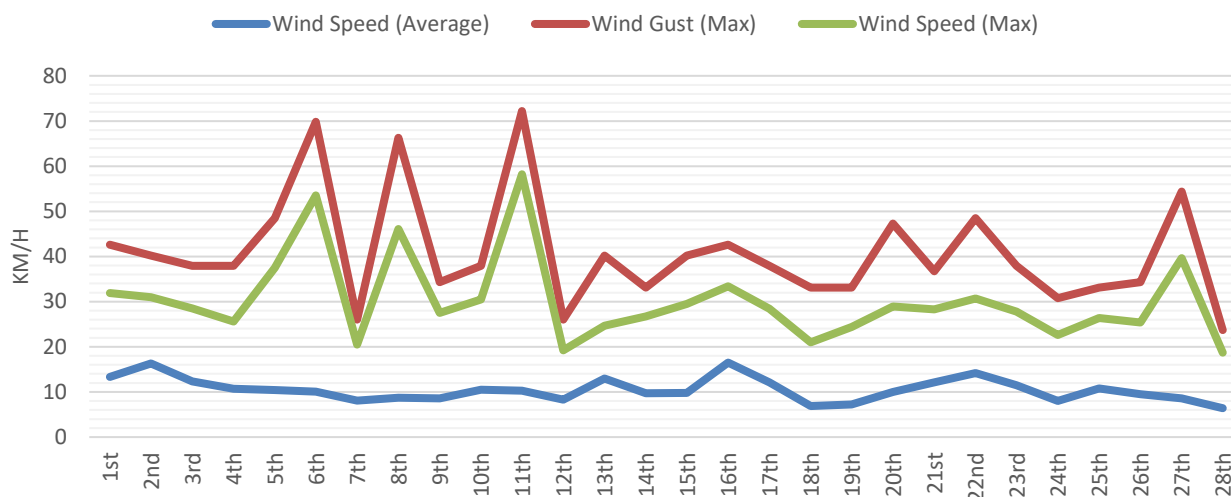
## 4. Monitoring Results

### 4.1 Weather

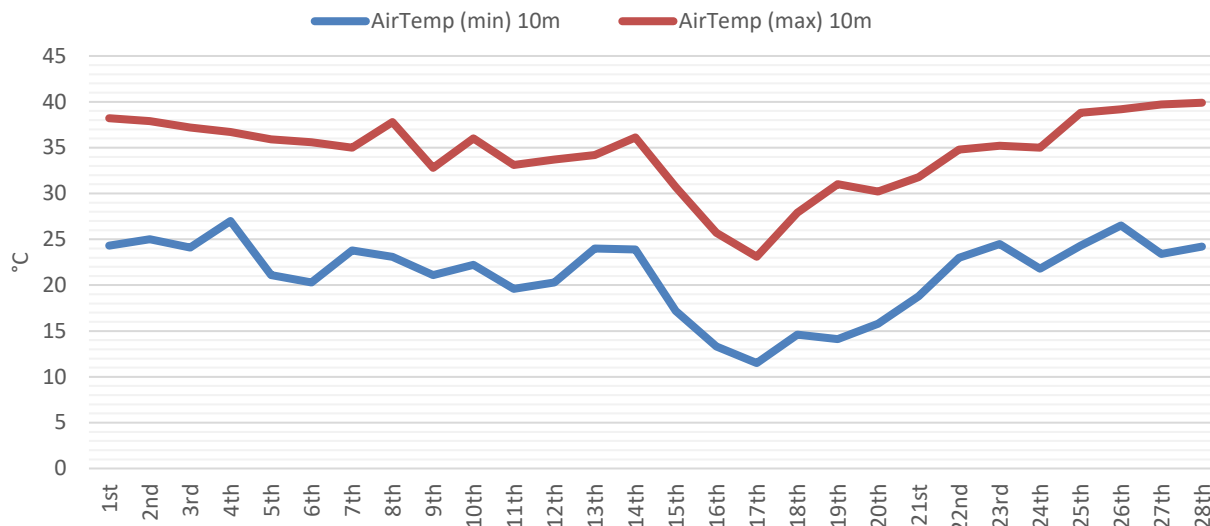
The meteorology monitoring data is acquired through PGM's weather station located 2km South of Cobar.

The Bureau of Meteorology (BOM) website can also be used as an alternate source for this monitoring data.

#### WIND SPEED FEBRUARY 2025

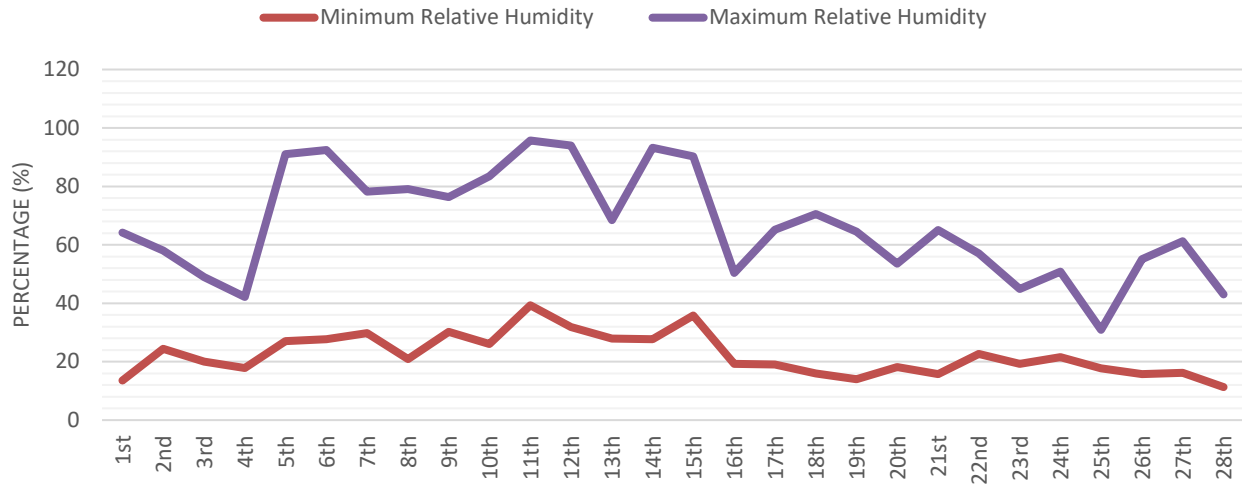


#### AIR TEMPERATURE FEBRUARY 2025

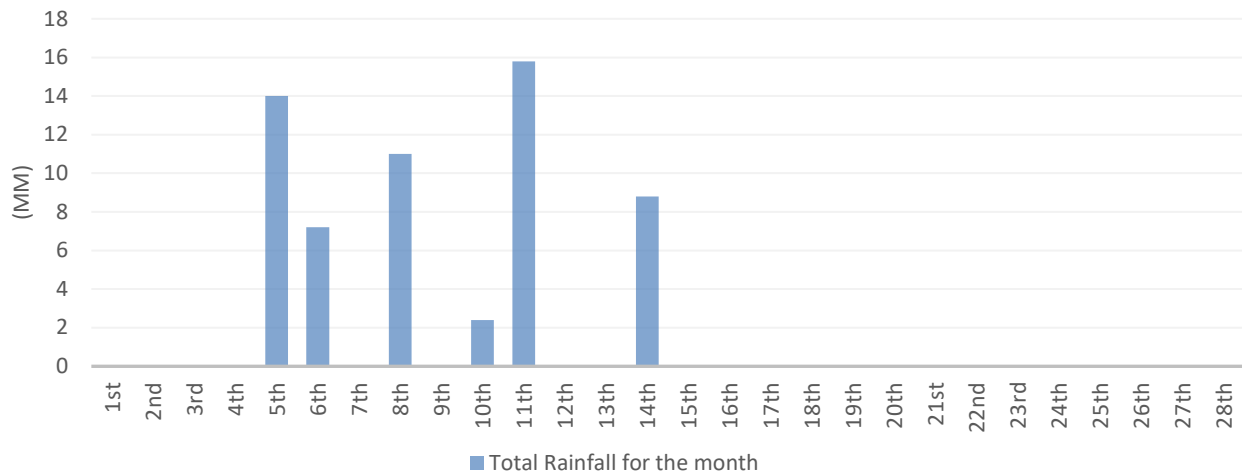


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### RELATIVE HUMIDITY FEBRUARY 2025



### TOTAL RAINFALL FEBRUARY 2025



Graphs 1-4: Summary of meteorological data for February 2025

## 4.2 Surface Water

Surface 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. Table 1 gives the results as per the PGM EPL requirements.

Table 1: Surface Water monitoring results

EPA identification no.	Location	Sampled	Received	Published	Limit	WAD CN (mg/L)	CN Free (mg/L)	TSS (mg/L)	Oil & Grease
1	Netted Dam overflow to Recycled Water Dam				No Limit	**	**	*	*
2	Decant Dam				No Limit	****	****	*	*
5	TSF feed				No Limit	****	****	*	*
6	Young Australia Complex				No Limit	*	*	**	**
7	Spain's Dam				No Limit	*	*	**	**

\*No monitoring required

\*\*No discharge

\*\*\*No water in dam

\*\*\*\* Samples were not required to be collected during the month

## 4.3 Noise Monitoring

A hand-held monitor is used by PGM employees to monitor noise levels at times set out by the EPL and development consent conditions. Noise monitoring is conducted at the closest residence (Figure 1) and sporadically depending on operational requirements. PGM's closest monitoring point is located at the Dellavale boundary, approximately 400m closer to the mine noise than the residence. To determine the noise level (dB) experienced at the residence, sound intensity I and the inverse square law  $1/r^2$  is calculated based on the residences distance from mine noise source.

Noise monitoring results are below in Table 3. Licensed noise limits set by the EPL and development consent conditions are given in Table 2.

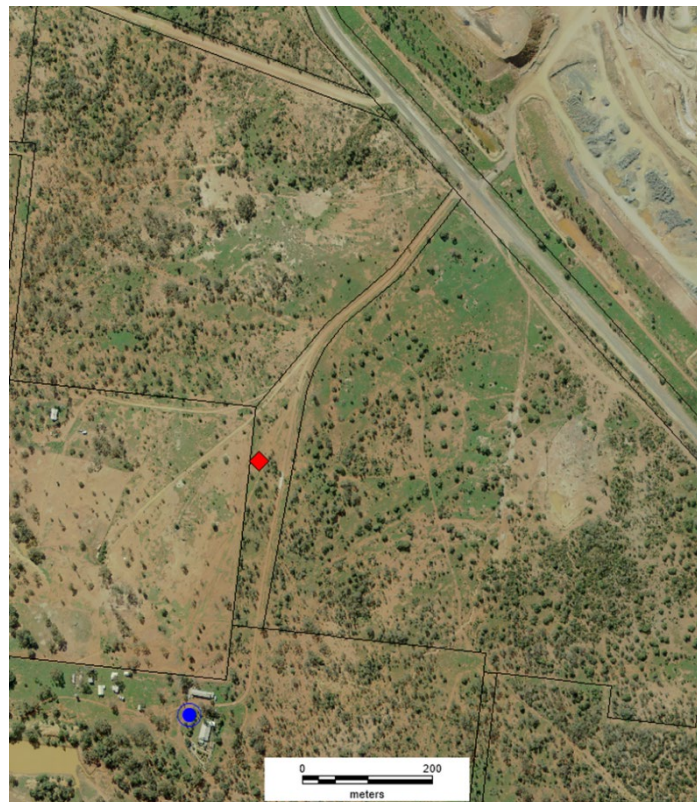


Figure 1: Location of the "Dellavale" properties house (blue circle) and noise monitoring location (red diamond).

Table 2: Noise Monitoring levels

Time Band	Day	Noise Level (dB)
7:00am – 6:00pm	Mon – Fri	45
6:00pm – 10:00pm	Mon – Fri	40
10:00pm – 7:00am	Mon – Fri	35
7:00am – 1:00pm	Sat	45
1.00pm – 7:00am	Sat	35
12:00am – 12:00pm	Sun	35

Table 3: Attended Noise Monitoring Results

Location	Sampled & Obtained	Published	Time	LA 10 (dB) Limit	LA 10 (dB) Monitoring Result at Monitor Location	LA 10 (dB) Calculated Monitoring Result at Residence	Key Noise Source	Complies
Dellavale	05/0 2/2025	1/ 03/2025	04 :00	35	36.8	32.82	Birds , highway traffic	Yes

\* Data Invalid due to high wind speed i.e. 3.28 -3.55 m/s. This is higher than allowable EPL limit of 3m/s.

\*\* It complies due to noise not being emitted by PGM

\*\*\* None conducted during the time .

## 4.4 Air Quality

Fall out dust deposition bottles are currently used to monitor air quality. The bottles are positioned in the field (Figure 2) for a period of  $30 \pm 2$  days. Monitoring is required to be undertaken quarterly; however, we conduct monthly monitoring. The bottles are then sent to Australian Laboratory Services (ALS) for external analysis.

PGM has no set limits for air quality monitoring levels. However, PGM takes on board the EPAs best practice limit of  $4 \text{ g/m}^2/\text{time}$  (limit is applicable to a 12-month averaging period). If the 12-month rolling average of a result is greater than  $4 \text{ g/m}^2/\text{time}$ , the cause will be investigated.



Figure 2: Location of dust gauges on PGM Mining Leases



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Table 4: Air Quality Results

EPA identification no.	Site	Sampled	Received	Published	Australian Standard Limit (g/m <sup>2</sup> /month)	Insoluble Solids (g/m <sup>2</sup> /month)	Total Lead (g/m <sup>2</sup> /month)	Complies
8	DM1	31.01.2025 – 4.03.2025	21.03.2025	30.03.2025	4	1.5	0.0000514	Yes
9	DM2	31.01.2025 – 4.03.2025	21.03.2025	30.03.2025	4	2.4	0.0000929	Yes
10	DM3	31.01.2025 – 4.03.2025	21.03.2025	30.03.2025	4	1.9	0.00113	Yes
11	DM4	31.01.2025 – 4.03.2025	21.03.2025	30.03.2025	4	1.5	0.000745	Yes
4	Dellavale	31.01.2025 – 4.03.2025	21.03.2025	30.03.2025	4	1	0.0000842	Yes
3	Bimbimbie	31.01.2025 – 4.03.2025	21.03.2025	30.03.2025	4	1.5	0.00130	Yes

### 4.5 Blast Monitoring

The vibration monitoring results displayed in Table 6 represents all blast vibration events that were triggered at the New Occidental, Fort Bourke and/or Dellavale monitors (Figure 3).

As seen in Table 6 blasting events for the month were below PGMs EPL limits. Vibration limits set by the NSW Environmental Protection Authority (EPA) can be viewed in Table 5.

The compliance against the overall 12-month period will be reported in the EPL Annual Return.



Figure 3: Location of Vibration Monitors on PGM's Mining Lease

Table 5: PGM EPL Limits

Peak Particle Velocity (mm/s)	Allowable Exceedance
5.00	<5% of the total number of blasts in a 12 - month period are to be above 5mm/s
10.00	NIL

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Table 6: Vibration Results

Location	Sampled & Received	ID	New Occidental (mm/s)	Fort Bourke (mm/s)	Dellavale (mm/s)	Complies
Peak	1/02/2025	S4U_9201_490_750	no trigger	no trigger	no trigger	Yes
New Cobar	3/02/2025	CHS_9660_DEC	0.07	0.08	0.23	Yes
New Cobar	6/02/2025	NCB_30_170_930	0.11	2.09	0.99	Yes
New Cobar	8/02/2025	CRS_9490_765_540	no trigger	no trigger	no trigger	Yes
New Cobar	12/02/2025	CHS_10005_STH_365	0.11	0.51	0.49	Yes
Peak	21/02/2025	KRS_1055_NTH_635 -620	no trigger	no trigger	no trigger	Yes
Peak	21/02/2025	S4U_9201_490_735	no trigger	no trigger	no trigger	Yes
New Cobar	24/02/2025	CRS_9400_ODN	0.08	0.12	0.31	Yes
Peak	24/02/2025	KRS_1055_NTH_635 -620	no trigger	no trigger	no trigger	Yes
New Cobar	26/02/2025	CHS_9660_DEC	0.18	0.69	0.83	Yes

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## 4.6 Haulage Movements

PGM is required to monitor the number of truck loads undertaken from New Cobar to the Peak site as per current consent conditions. During the month of February, 700 truckloads were permitted to be delivered to Peak Gold Mine. In total, 256 truckloads were completed. Table 7 shows a summary of the trucking for the month.

Table 7: Haulage Summary

Date	Truck Loads
1/02/2025	25
2/02/2025	0
3/02/2025	20
4/02/2025	17
5/02/2025	0
6/02/2025	0
7/02/2025	20
8/02/2025	0
9/02/2025	0
10/02/2025	0
11/02/2025	23
12/02/2025	20
13/02/2025	25
14/02/2025	18
15/02/2025	0
16/02/2025	0
17/02/2025	26
18/02/2025	26
19/02/2025	0
20/02/2025	0
21/02/2025	0
22/02/2025	0
23/02/2025	0
24/02/2025	24
25/02/2025	12
26/02/2025	0
27/02/2025	0
28/02/2025	0
<b>Average</b>	<b>9.14</b>

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Table 8: Document Revision

Revision	Date	Change Details	Change Approved By
V1	1/03/2025	Available data entered	Sara Waak
V2	30/03/2025	Additional available data entered	Sara Waak

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