

TECHNICAL  
REPORT

PEAK MONTHLY ENVIRONMENTAL MONITORING  
SUMMARY JANUARY 2025



## Table of Contents

1. Intent .....3

2. Scope.....3

3. Definitions .....3

4. Monitoring Results.....4

4.1 Weather .....4

4.2 Surface Water.....6

4.3 Noise Monitoring .....6

4.4 Air Quality .....8

4.5 Blast Monitoring.....10

4.6 Haulage Movements.....12

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Version	3.0
Date Created	1 <sup>st</sup> March 2025

JANUARY 2025

## 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 January 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

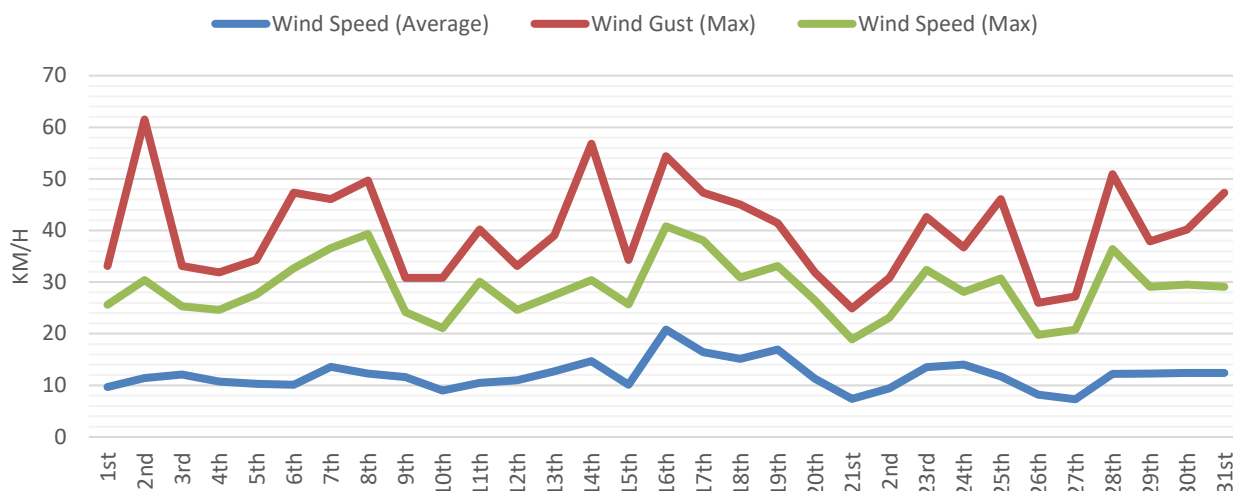
## 4. Monitoring Results

### 4.1 Weather

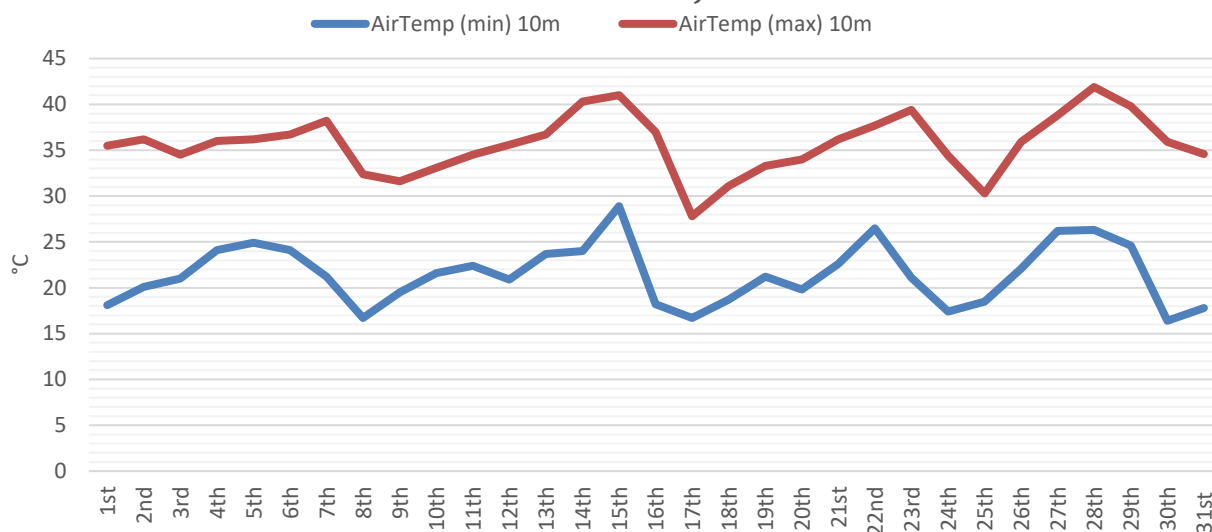
The meteorology monitoring data is acquired through PGM's weather station located 2km South of Cobar.

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

#### WIND SPEED JANUARY 2025

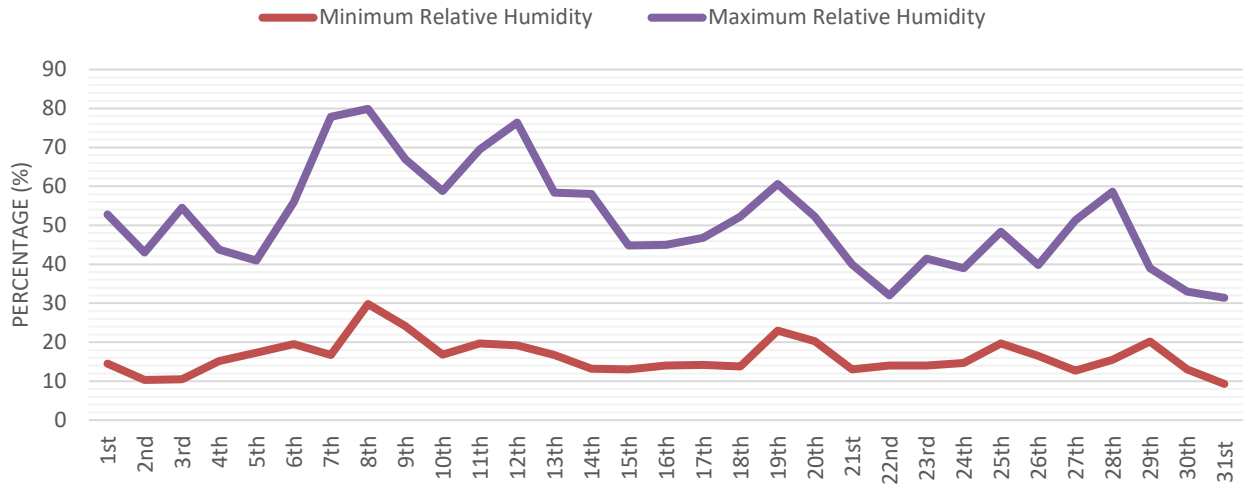


#### AIR TEMPERATURE JANUARY 2025

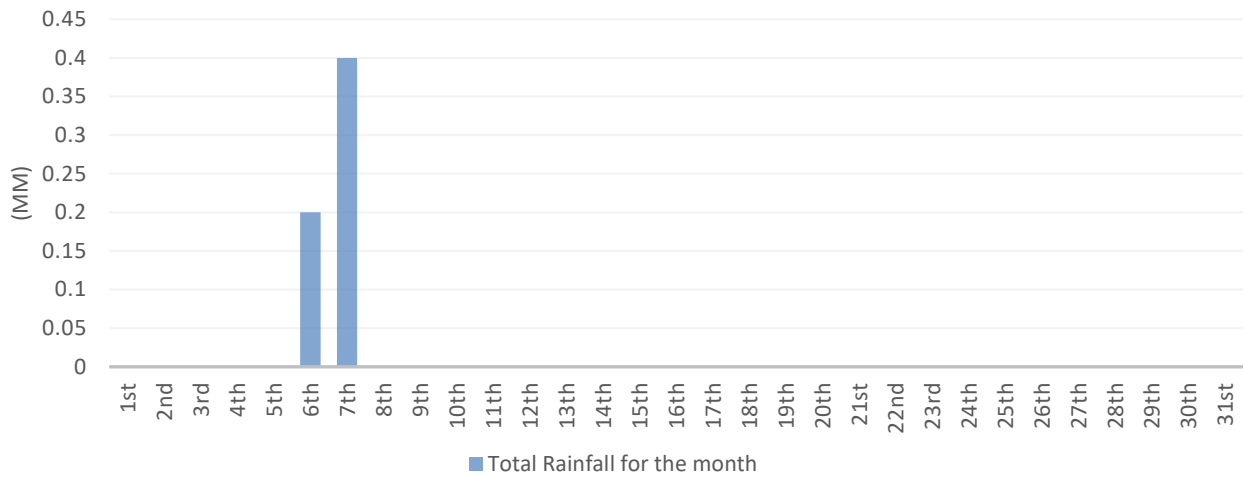


JANUARY 2025

### RELATIVE HUMIDITY JANUARY 2025



### TOTAL RAINFALL JANUARY 2025



Graphs 1-4: Summary of meteorological data for January 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	20 / 0 / 2 5	4/02/25	15/02/25	No Limit	***	***	*	*
5	TSF feed	20 / 01/2 5	4/02/25	15/02/25	No Limit	256	188	*	*
6	Young Australia Complex				No Limit	*	*	**	**
7	Spain's Dam				No Limit	*	*	**	**

\*No monitoring required

\*\*No discharge

\*\*\*No water in dam

Surface Water monitoring results have not been received yet. The document will be updated once the results have come in.

## 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	25/01/2025	01/0 2/2025	15:45	35	94	35.5	Birds	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



JANUARY 2025

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	2.01.2025 – 31.01.2025	19.02.2025	1.03.2025	4	2	0.000277	Yes
9	DM2	2.01.2025 – 31.01.2025	19.02.2025	1.03.2025	4	1.9	0.000650	Yes
10	DM3	2.01.2025 – 31.01.2025	19.02.2025	1.03.2025	4	2.1	0.00721	Yes
11	DM4	2.01.2025 – 31.01.2025	19.02.2025	1.03.2025	4	1.3	0.00192	Yes
4	Dellavale	2.01.2025 – 31.01.2025	19.02.2025	1.03.2025	4	1	0.000108	Yes
3	Bimbimbie	2.01.2025 – 31.01.2025	19.02.2025	1.03.2025	4	2.8	0.000169	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

JANUARY 2025

Table 6: Vibration Results

Location	Sampled & Received	ID	New Occidental (mm/s)	Fort Bourke (mm/s)	Dellavale (mm/s)	Complies
New Cobar	5/01/2025	CRS_9490_765_540/560	no trigger	no trigger	no trigger	Yes
New Cobar	11/01/2025	JUB_17_Nth_425	0.08	5.41	0.15	Yes
New Cobar	12/01/2025	CRS_9560_790_460	no trigger	no trigger	no trigger	Yes
New Cobar	16/01/2025	CHS_10070_RAD_02	0.04	0.14	triggered	Yes
New Cobar	17/01/2025	CHS_10005_STH_365	0.09	0.3	0.39	Yes
New Cobar	22/01/2025	NCB_30_170_930	0.04	1.1	0.27	Yes
New Cobar	27/01/2025	CRS_9490_765_540	no trigger	no trigger	no trigger	Yes
Peak	29/01/2025	KRS_930_ACC	0.32	0	0	Yes

JANUARY 2025

## 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. In the month of January, 775 truckloads were permitted to be delivered to Peak Gold Mine. In total, 262 truckloads were completed. Table 7 shows a summary of the trucking for the month.

Table 7: Haulage Summary

Date	Truck Loads
1/01/2025	0
2/01/2025	26
3/01/2025	14
4/01/2025	0
5/01/2025	0
6/01/2025	0
7/01/2025	0
8/01/2025	0
9/01/2025	0
10/01/2025	0
11/01/2025	0
12/01/2025	0
13/01/2025	26
14/01/2025	9
15/01/2025	0
16/01/2025	24
17/01/2025	3
18/01/2025	0
19/01/2025	0
20/01/2025	24
21/01/2025	0
22/01/2025	12
23/01/2025	26
24/01/2025	25
25/01/2025	0
26/01/2025	0
27/01/2025	0
28/01/2025	25
29/01/2025	25
30/01/2025	23
31/01/2025	0
<b>Average</b>	<b>8.45</b>

JANUARY 2025

Table 8: Document Revision

Revision	Date	Change Details	Change Approved By
V1	1/02/2025	Available data entered	Sara Waak
V2	15/02/2025	Additional data entered	Sara Waak
V3	1/03/2025	Additional data entered and document revision table added	Sara Waak