TECHNICAL
REPORT

PEAK MONTHLY ENVIRONMENTAL MONITORING SUMMARY JANUARY 2024

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Author	Sara Waak
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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 January 2024. 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

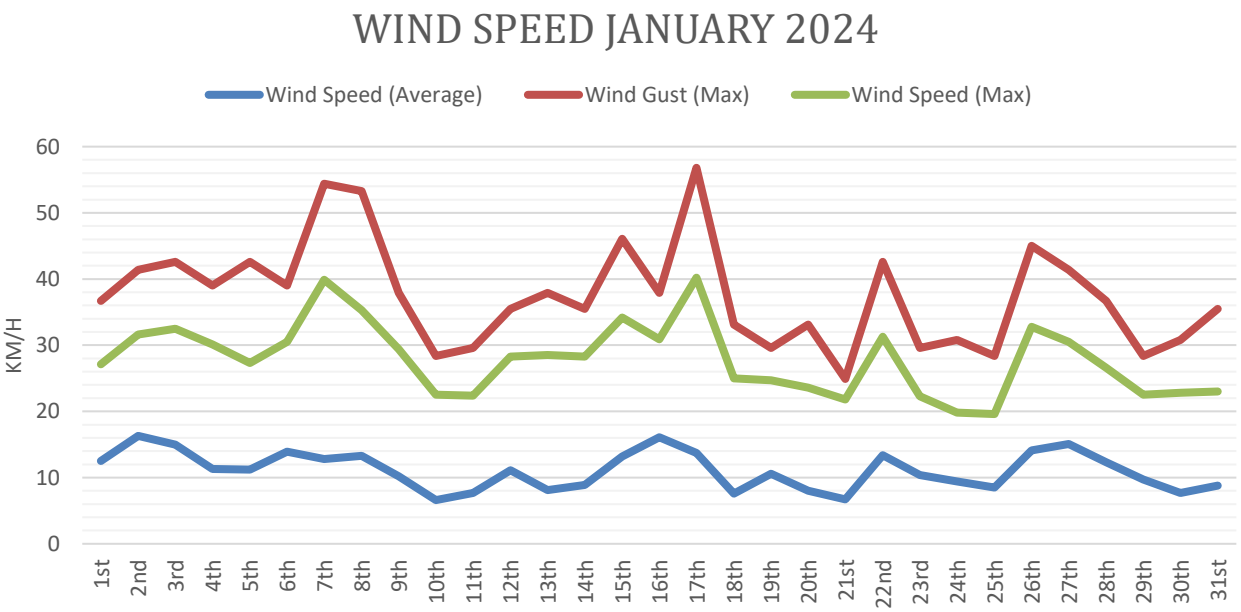
3. Definitions

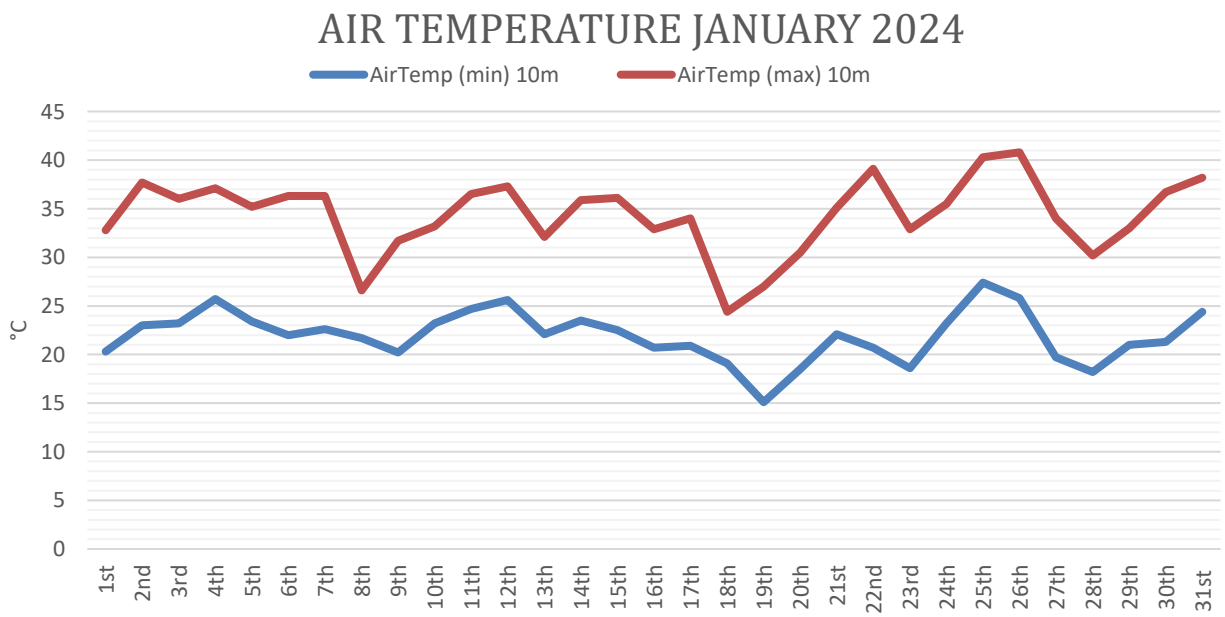
Term	Definition
mm/s	The peak of the vibration in millimetres per second
Insoluble Solids	The insoluble portion of the dust deposited in dust deposition gauge
Total Lead	Including dissolved lead in the liquid portion and the lead particulates in the filter paper following laboratory analysis
g/m2/month	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

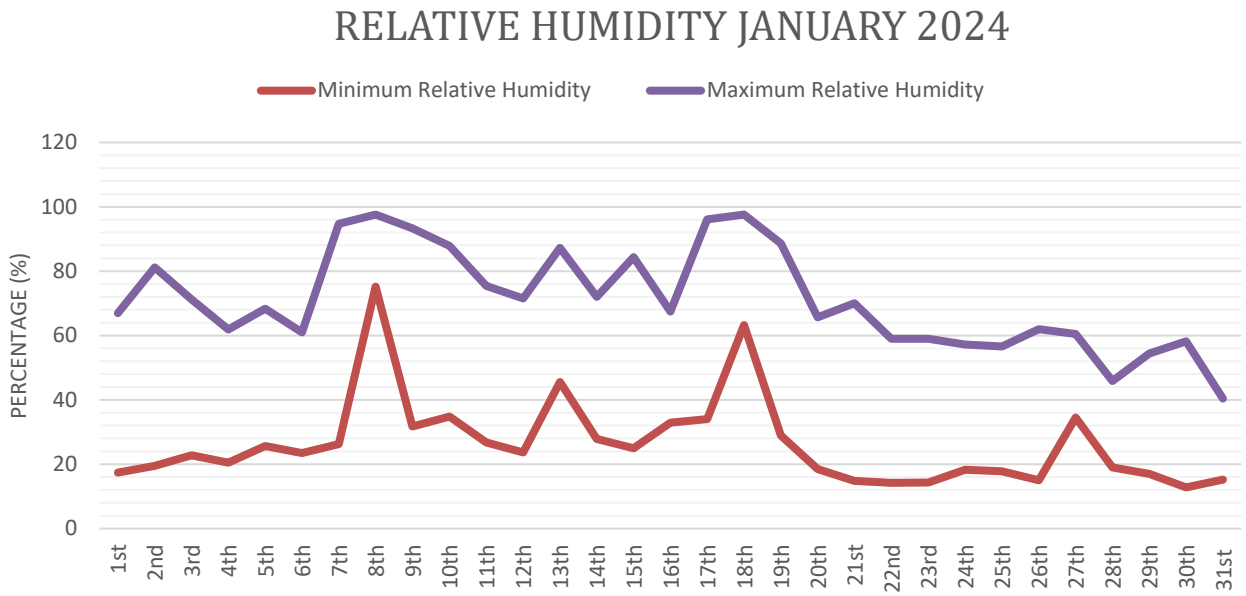
4. Monitoring Results

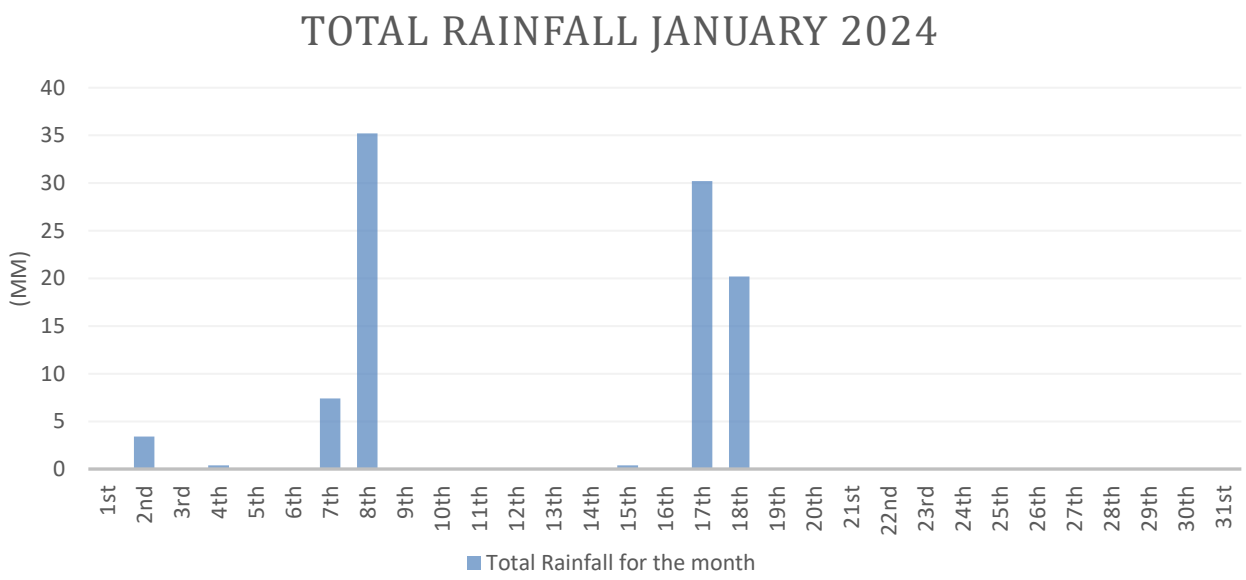
4.1 Weather

The meteorology monitoring data is acquired through PGM's weather station located 2km South of Cobar. The BOM website can also be used as an alternate source for this monitoring data.









Graphs 1-4: Summary of meteorological data for January 2024

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	3/01/24	15/01/24		No Limit	<0.2	<0.2	*	*
5	TSF feed	3/01/24	15/01/24		No Limit	308	274	*	*
6	Young Australia Complex				No Limit	*	*	**	**
7	Spain's Dam				No Limit	*	*	**	**

*No monitoring required

**No discharge

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. Licenced noise limits set by the EPL and development consent conditions are given in Table 2.

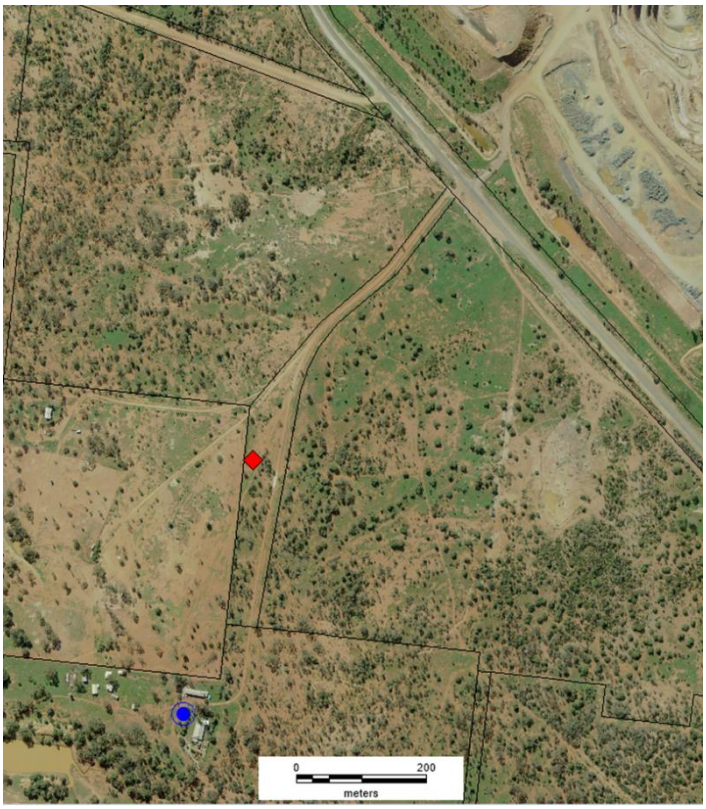


Figure 1: Location of the "Dellavale" properties house (blue circle) and noise monitoring location (red diamond).

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	9/01/24		12:35	45	34.4	30.42	Birds	Yes

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

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

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 ± 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 4g/m^2/time (limit is applicable to a 12-month averaging period). If the 12-month rolling average of a result is greater than 4g/m^2/time, the cause will be investigated.

Figure 2: Location of dust gauges on PGM Mining Leases

Table 4: Air Quality Results

EPA identification no.	Site	Sampled	Received	Published	Australian Standard Limit (g/m2/month)	Insoluble Solids (g/m2/month)	Total Lead (g/m2/month)	Complies
8	**DM1**	19/12/24 – 19/01/24	8/03/24	8/03/24	4	1.8	0.000629	Yes
9	**DM2**	19/12/24 – 19/01/24	8/03/24	8/03/24	4	1.3	0.000562	Yes
10	**DM3**	19/12/24 – 19/01/24	8/03/24	8/03/24	4	2.1	0.0174	Yes
11	**DM4**	19/12/24 – 19/01/24	8/03/24	8/03/24	4	1.2	0.00215	Yes
4	**Dellavale**	19/12/24 – 19/01/24	8/03/24	8/03/24	4	1.1	0.000453	Yes
3	**Bimbimbie**	19/12/24 – 19/01/24	8/03/24	8/03/24	4	1.6	0.000316	Yes

4.4 Blast Monitoring

The vibration monitoring results displayed in Table 6 represents all blast vibration events that were trigged 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

Table 6: Vibration Results

Location	Sampled & Received	ID	New Occidental (mm/s)	Fort Bourke (mm/s)	Dellavale (mm/s)	Complies
New Cobar	1/01/2024	CH 10005_RAD	0.05	0.1	0.28	Yes
New Cobar	1/01/2024	JUB_15_XCUT	0.01	0.45	0.05	Yes
Peak	1/01/2024	CRS_9715_Sth_485	No Trigger	No Trigger	No Trigger	Yes
Peak	2/01/2024	KRS_1030_ODN	0.19	0	0	Yes
New Cobar	3/01/2024	CH 10050_INC	0.03	0.39	0.23	Yes
Peak	3/01/2024	CRS_9715_Sth_485	No Trigger	No Trigger	No Trigger	Yes
Peak	5/01/2024	CRS_9715_Sth_485	No Trigger	No Trigger	No Trigger	Yes
New Cobar	6/01/2024	CH 10005_RAD	0.04	0.09	0.25	Yes
Peak	6/01/2024	CRS_9350_765_560	No Trigger	No Trigger	No Trigger	Yes
New Cobar	7/01/2024	CH 10005_RAD	0.03	0.18	0.24	Yes
peak	7/01/2024	CRS_9715_Sth_485	No Trigger	No Trigger	No Trigger	Yes
New Cobar	8/01/2024	CH 10050_INC	0.01	0.82	0.05	Yes
New Cobar	10/01/2024	JUB_21_NTH_495 bridge	0.03	0.12	0.27	Yes
New Cobar	11/01/2024	CH 10050_INC	0.01	0.67	0.1	Yes
New Cobar	11/01/2024	JUB_21_NTH_495	0.01	1.17	0.09	Yes
Peak	11/01/2024	CRS_9350_765_560	No Trigger	No Trigger	No Trigger	Yes
New Cobar	18/01/2024	JUB_15_ODN_460_L	0.03	0.7	0.21	Yes
Peak	18/01/2024	CRS_9350_765_560	No Trigger	No Trigger	No Trigger	Yes
Peak	19/01/2024	S4U_9201_SDR_745	0.19	0.09	0.16	Yes
Peak	19/01/2024	KRS_1005_INC	0.01	0.83	0.04	Yes
Peak	20/01/2024	CRS_9715_Sth_485	No Trigger	No Trigger	No Trigger	Yes
New Cobar	22/01/2024	JUB_15_ODN_460_L	0.01	0.71	0.03	Yes
Peak	22/01/2024	CRS_9490_765_520	No Trigger	No Trigger	No Trigger	Yes
New Cobar	23/01/2024	CH 10005_RAD	0.01	0.78	0.04	
New Cobar	24/01/2024	JUB_15_ODN_460_L	0	0.57	0.03	
Peak	26/01/2024	CRS_9520_790_475	No Trigger	No Trigger	No Trigger	

Location	Sampled & Received	ID	New Occidental (mm/s)	Fort Bourke (mm/s)	Dellavale (mm/s)	Complies
Peak	26/01/2024	KRS_1080_NTH_665	No Trigger	No Trigger	No Trigger	
New Cobar	27/01/2024	JUB_15_ODN_460_L	0	0.52	0.03	
New Cobar	28/01/2024	JUB_15_ODN_460_L	0	0.57	0.03	
Peak	28/01/2024	CRS_9715_Sth_485	No Trigger	No Trigger	No Trigger	
New Cobar	29/01/2024	CH 10050_INC	0.01	0.55	0.06	
New Cobar	30/01/2024	JUB_15_ODN_460_L	0.01	0.64	0.03	

4.5 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, 159 truckloads were completed. Table 7 shows a summary of the trucking for the month.

Table 7: Haulage Summary

Date	Truck Loads
1/01/2024	0
2/01/2024	0
3/01/2024	0
4/01/2024	19
5/01/2024	42
6/01/2024	0
7/01/2024	0
8/01/2024	0
9/01/2024	0
10/01/2024	0
11/01/2024	0
12/01/2024	0
13/01/2024	0
14/01/2024	0
15/01/2024	0
16/01/2024	0
17/01/2024	0
18/01/2024	0
19/01/2024	0
20/01/2024	0
21/01/2024	0
22/01/2024	0
23/01/2024	0
24/01/2024	18
25/01/2024	14
26/01/2024	0
27/01/2024	0
28/01/2024	0
29/01/2024	25
30/01/2024	26
31/01/2024	15
Average	**5.13**