

TECHNICAL
REPORT

PEAK MONTHLY ENVIRONMENTAL MONITORING
SUMMARY NOVEMBER 2023



Table of Contents

1. Intent 3

2. Scope..... 3

3. Definitions 3

4. Monitoring Results4

4.1 Weather4

4.2 Surface Water 6

4.3 Noise Monitoring 6

4.4 Air Quality 8

4.5 Blast Monitoring..... 10

4.6 Haulage Movements 13

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NOVEMBER 2023

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 November 2023. 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

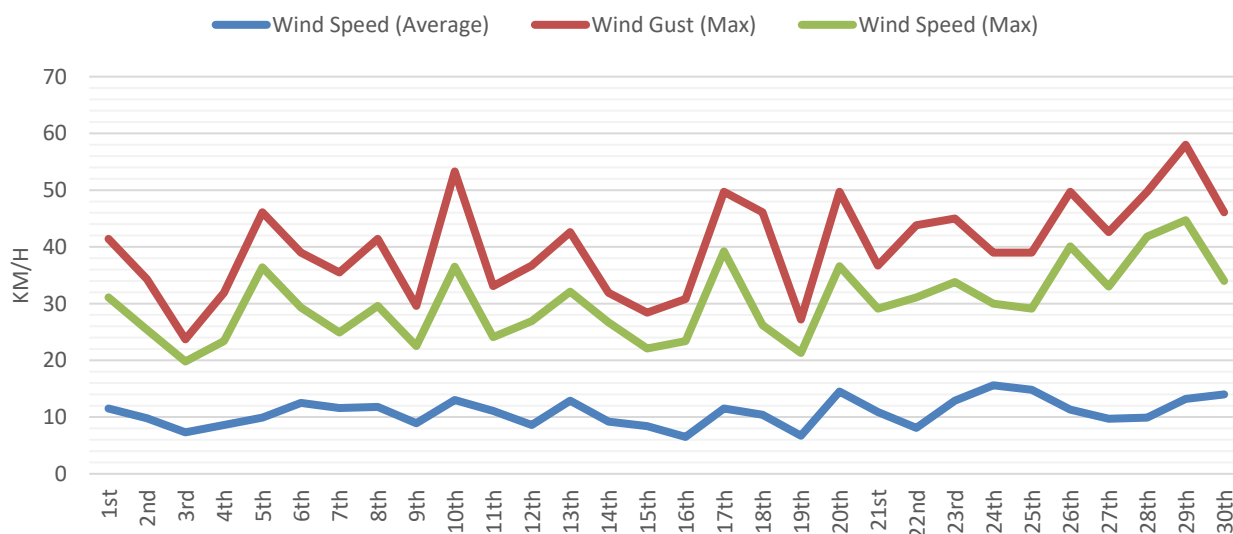
Term	Definition
mm/s	The peak of the vibration in millimetres per second
Insoluble Solids	The insoluble portion of the dust deposited in dust deposition gauge
Total Lead	Including dissolved lead in the liquid portion and the lead particulates in the filter paper following laboratory analysis
g/m ² /month	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

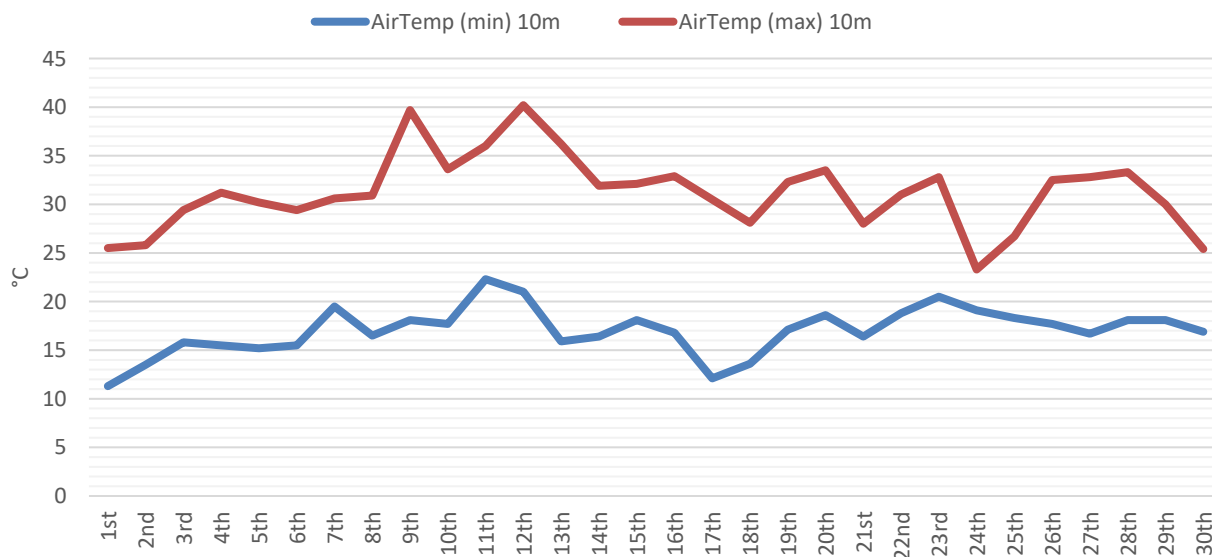
4.1 Weather

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.

WIND SPEED NOVEMBER 2023

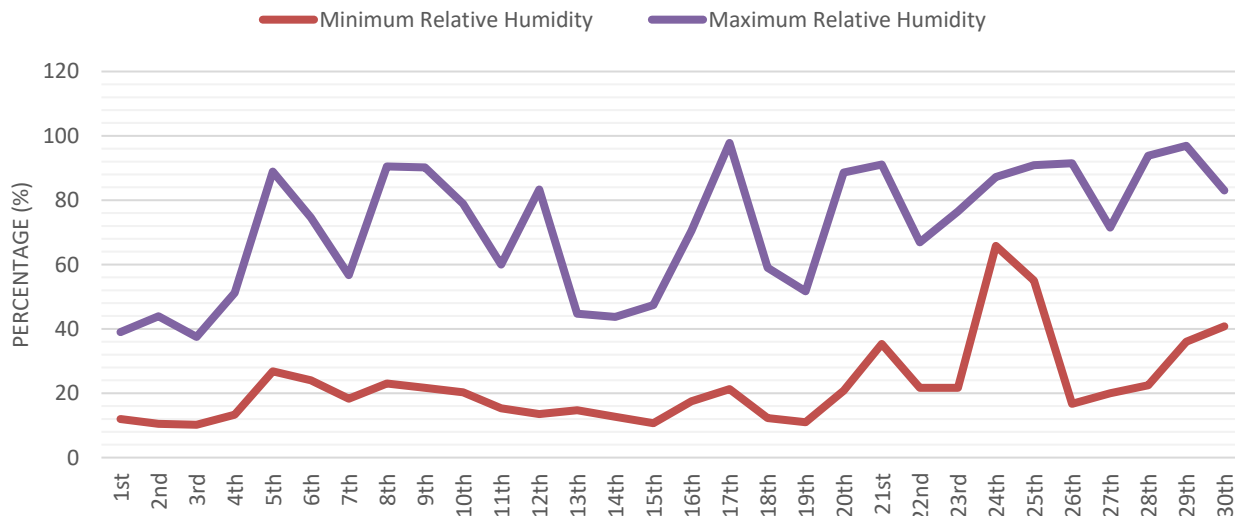


AIR TEMPERATURE NOVEMBER 2023

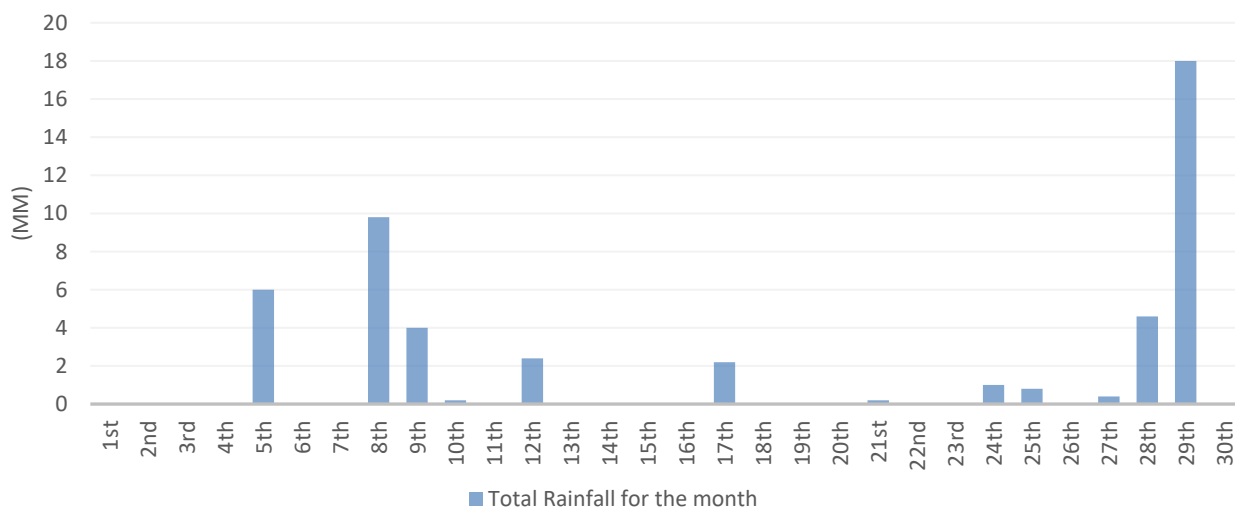


NOVEMBER 2023

RELATIVE HUMIDITY NOVEMBER 2023



TOTAL RAINFALL NOVEMBER 2023



Graphs 1-4: Summary of meteorological data for November 2023

NOVEMBER 2023

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	7/11/23	17/11/23	15/12/23	No Limit	<0.1	<0.1	*	*
5	TSF feed	7/11/23	17/11/23	15/12/23	No Limit	106	95.4	*	*
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.

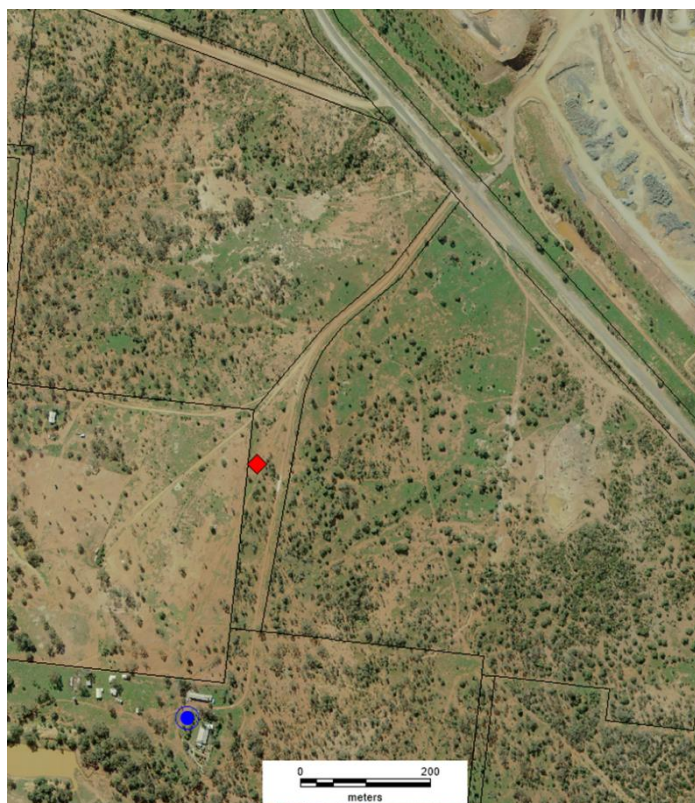


Figure 1: Location of the "Dellavale" properties house (blue circle) and noise monitoring location (red diamond).

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	28/11/23	15/12/2023	7:25	45	48.6	44.62	Highway traffic, birds, mining	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

NOVEMBER 2023

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 ± 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 EPA's 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

NOVEMBER 2023

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	17/10/23 - 17/10/23	13/12/23	15/12/23	4	0.7	<0.00000050	Yes
9	DM2	17/10/23 - 17/10/23	13/12/23	15/12/23	4	0.9	0.000236	Yes
10	DM3	17/10/23 - 17/10/23	13/12/23	15/12/23	4	1.6	0.0214	Yes
11	DM4	17/10/23 - 17/10/23	13/12/23	15/12/23	4	0.7	0.000982	Yes
4	Dellavale	17/10/23 - 17/10/23	13/12/23	15/12/23	4	0.7	0.000151	Yes
3	Bimbimbie	17/10/23 - 17/10/23	13/12/23	15/12/23	4	1.5	0.000134	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

NOVEMBER 2023

Table 6: Vibration Results

Location	Sampled & Received	ID	New Occidental (mm/s)	Fort Bourke (mm/s)	Dellavale (mm/s)	Complies
Peak	1/11/2023	PVD_8750_NTH_810	0.01	0.46	0.05	Yes
New Cobar	2/11/2023	JUB_15_FWN	0	0.35	0.04	Yes
New Cobar	3/11/2023	JUB_37_NTH_445	No trigger	No trigger	No trigger	Yes
Peak	5/11/2023	PVD_8720_NTH_810	No trigger	No trigger	No trigger	Yes
New Cobar	7/11/2023	JUB_15_ACC	0	0.33	0.05	Yes
New Cobar	8/11/2023	JUB_15_FWN	0.02	0.89	0.12	Yes
Peak	8/11/2023	PVD_8720_NTH_810	No trigger	No trigger	No trigger	Yes
New Cobar	9/11/2023	CH 10050_INC	0	0.62	0.04	Yes
Peak	9/11/2023	S4U_9161_745_440	No trigger	No trigger	No trigger	Yes
New Cobar	10/11/2023	JUB_15_FWN	0	0.44	0.05	Yes
New Cobar	11/11/2023	JUB_15_FWN	0	0.61	0.04	Yes
Peak	11/11/2023	S4U_9161_745_440	No trigger	No trigger	No trigger	Yes
Peak	12/11/2023	CRS_9740_9715_RAR	No trigger	No trigger	No trigger	Yes
Peak	13/11/2023	S4U_9161_745_440	0	0.44	0.03	Yes
New Cobar	15/11/2023	CH 10050_INC	0.01	0.89	0.04	Yes
New Cobar	15/11/2023	JUB_21_NTH_395	No trigger	No trigger	No trigger	Yes
Peak	15/11/2023	CRS_9490_765_520	No trigger	No trigger	No trigger	Yes
New Cobar	16/11/2023	JUB_15_FWN	0	0.39	0.03	Yes
New Cobar	17/11/2023	JUB_15_FWN	0	0.29	0.02	Yes
New Cobar	19/11/2023	JUB_15_FWN	0.01	0.36	0.04	Yes
New Cobar	20/11/2023	JUB_15_FWN	0.01	0.49	0.04	Yes
New Cobar	20/11/2023	JUB_21_NTH_395	0.02	1.02	0.15	Yes
New Cobar	21/11/2023	JUB_21_NTH_395	0.01	0.35	0.03	Yes
New Cobar	22/11/2023	JUB_15_FWN	0.05	2.37		Yes
New Cobar	23/11/2023	JUB_15_FWN	0	0.38	0.03	Yes
Peak	23/11/2023	CRS_9490_765_520	No trigger	No trigger	No trigger	Yes
New Cobar	24/11/2023	JUB_21_NTH_395	0.01	0.69	0.08	Yes

NOVEMBER 2023

Location	Sampled & Received	ID	New Occidental (mm/s)	Fort Bourke (mm/s)	Dellavale (mm/s)	Complies
New Cobar	25/11/2023	JUB_21_NTH_395	0.01	0.36	0.03	Yes
Peak	25/11/2023	CRS_9740_9715_RAR	No trigger	No trigger	No trigger	Yes
New Cobar	26/11/2023	JUB_15_FWN	0.01	0.28	0.1	Yes
New Cobar	26/11/2023	JUB_21_NTH_395	0.09	4.94	0.78	Yes
Peak	27/11/2023	KRS_1005_INC	0.09	3.97	0.88	Yes
New Cobar	29/11/2023	JUB_37_NTH_445	0.07	1.67	0.61	Yes
New Cobar	30/11/2023	JUB_15_FWN	0	0.39	0.03	Yes

NOVEMBER 2023

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 November, 750 truckloads were permitted to be delivered to Peak Gold Mine. In total, 379 truckloads were completed. Table 7 shows a summary of the trucking for the month.

Table 7: Haulage Summary

Date	Truck Loads
1/11/2023	0
2/11/2023	19
3/11/2023	24
4/11/2023	0
5/11/2023	0
6/11/2023	24
7/11/2023	13
8/11/2023	0
9/11/2023	0
10/11/2023	16
11/11/2023	0
12/11/2023	0
13/11/2023	0
14/11/2023	0
15/11/2023	0
16/11/2023	10
17/11/2023	12
18/11/2023	0
19/11/2023	0
20/11/2023	12
21/11/2023	15
22/11/2023	22
23/11/2023	13
24/11/2023	42
25/11/2023	0
26/11/2023	41
27/11/2023	40
28/11/2023	10
29/11/2023	25
30/11/2023	41
Average	12.63