

# **PEAK GOLD MINES**

## **MONTHLY ENVIRONMENTAL SUMMARIES**

### **January 2015**

<b>Prepared By</b>	Peak Gold Mines
<b>Signature</b>	<b>Jenna Marett</b>
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## 1. INTENT

This monthly environmental summary report is a requirement under section 66(6) of the *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 PGM's environmental performance and to maintain a transparent and accountable reporting system.

## 2. SCOPE

This report covers all of PGMs environmental monitoring conditions covered for January 2015. These conditions, where applicable, are measured against PGMs Environmental Protection Licence (EPL), development consent conditions and Australian Standard to determine PGMs compliance. The conditions include;

- Blasting monitoring results
- Air Quality Monitoring results;
- Noise Monitoring results;
- Surface Water Monitoring results;
- Weather Conditions.

## 3. DEFINITIONS

**mm/s** – the peak of the vibration in millimetres per second

**Insoluble Solids** – the insoluble portion of the dust deposition

**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 meter 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 Vibration Monitoring Results

The vibration monitoring results displayed in Table 4.1a represents all blast vibration events that were triggered at the New Occidental and/or Fort Bourke monitors. The New Gold Internet link on the cover page contains the full dataset for EPL licenced monitoring locations.

As seen in Table 4.1a all blasting events for the month were below PGMs EPL limits. Vibration limits set by the Environmental Protection Authority (EPA) can be viewed in Table 4.1b.

The compliance against the overall 12 month period will be reported in the EPL Annual Return and Annual Environmental Management Report (AEMR).

**Table 4.1a New Occidental and Fort Bourke Vibration Result**

Location	Date Sampled & Received	Blast ID	Development / Production	New Occidental (mm/s)	Fort Bourke (mm/s)	Complies (Y/N)
New Cobar	1/01/2015	48StpMainS120	Production	0.56	3.14	Yes
New Cobar	3/01/2015	10005StpMainN54	Production	No Trigger	1.98	Yes
New Cobar	26/01/2015	48StpMainS120	Production	No Trigger	2.72	Yes

**Table 4.1b PGMs EPL Limits for Vibration**

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

## 4.2 Air Quality Monitoring Results

Fall out dust deposition bottles are currently used to monitor air quality. The bottles are position in the field for a period of  $30 \pm 2$  days. Monitoring is undertaken every second month. The bottles are then sent to Australian Laboratory Services (ALS) for external analysis.

PGM has no set limits for air quality monitoring levels. However, takes on board the EPAs best practice limit of  $4\text{g/m}^2/\text{time}$  (limit is applicable to 12 month averaging period). If a single monitoring result is over the EPAs best practice limit of  $4\text{g/m}^2/\text{time}$ , the cause is investigated and reported in the AEMR.

The New Gold Internet link on the cover page contains the full dataset for EPL licenced monitoring locations.

Site	Location	Date			Australian Standard Limit ( $\text{g/m}^2/\text{month}$ )	Insoluble Solids ( $\text{g/m}^2/\text{month}$ )	Total Lead ( $\text{g/m}^2/\text{month}$ )	Complies
		Sampled	Obtained	Published				
DM1	NW corner of tailings dam	23/12/14 – 22/1/15	9/02/15	9/02/15	4	2.2	0.00008	Y
DM2	SW corner of tailings dam	23/12/14 – 22/1/15	9/02/15	9/02/15	4	1.8	0.00009	Y
DM3	Carpark	23/12/14 – 22/1/15	9/02/15	9/02/15	4	3.0	0.00382	Y
DM4	NE corner of PGM magazine	23/12/14 – 22/1/15	9/02/15	9/02/15	4	2.4	0.00035	Y
Dellavale	1.3km ESE of New Cobar	23/12/14 – 22/1/15	9/02/15	9/02/15	4	2.2	0.00016	Y
Bimbimbie	1.2km SW of New Cobar	23/12/14 – 22/1/15	9/02/15	9/02/15	4	0.9	0.00014	Y

### 4.3 Attended Noise Monitoring Results

A hand held monitor is used by PGM employees to monitor noise limits at times set out by the EPL and development consent conditions. Noise monitoring is conducted at the closest resident and sporadically depending on operation requirements. Table 4.3b below outlines PGM noise limits set by the EPL and Development Consent Conditions and Table 4.3a outlines the monitoring results.

The New Gold Internet link on the cover page contains the full dataset for EPL licenced monitoring locations.

**Table 4.3a Attended Noise Monitoring Results**

Location	Date		Time	Limit	Noise Level (LAeq <sub>15</sub> )	Key Noise Source	Complies
	Sampled & Obtained	Published					
Dellavale	19/01/2015	19/01/2015	13:20	45	34.1	Wind gust.	Y

**Table 4.3b Attended Noise Monitoring Limits**

Time Band	Day	Noise Level (dB)
8:00am – 6:00pm	Mon – Fri	45
6:00pm – 10:00pm	Mon – Fri	40
10:00pm – 8:00am	Mon – Fri	35
8:00am – 1:00pm	Sat	45
1:00pm – 8:00am	Sat	35
12:00am – 12:00pm	Sun	35

## 4.4 Water Monitoring Results

Surface water monitoring involves collecting water samples from a number of locations around site and submitted to external laboratory for physical and chemical analysis, pH and electrical conductivity are obtained using a handheld monitor. Table 4.4 gives the results in as per the PGM EPL requirements.

The New Gold Internet link on the cover page contains the full dataset for EPL licenced monitoring locations.

**Table 4.4 Surface Water Monitoring Results**

Monitoring Point	Date			Limit	CN WAD	CN Free	Complies
	Sampled	Received	Published		mg/L	mg/L	
Tailings Feed	6/01/2015	20/01/2015	22/01/2015	No Limit	288	193	Yes
Recycled Water Dam Feed	6/01/2015	20/01/2015	22/01/2015	No Limit	<0.004	<0.004	Yes
Tailings Feed	13/01/2015	26/01/2015	26/01/2015	No Limit	409	252	Yes
Tailings Feed	20/01/2015	20/02/2015	20/02/2015	No Limit	421	282	Yes
Tailings Feed	27/01/2015	20/02/2015	20/02/2015	No Limit	303	202	Yes

## 4.5 Weather Data Results

PGM meteorology monitoring data has been acquired through PGMs onsite weather station and the Bureau of Meteorology (BOM) weather station located 2km North West of Cobar.

PGM onsite weather station has been used to obtain temperature, relative humidity, and rainfall monitoring data. Wind speed has been obtained the BOM weather station.

The BOM can be used as an alternate source for this monitoring data.





