

TOMINGLEY GOLD PROJECT

Monthly Environmental Monitoring Report

February 2017

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Document History

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1. Introduction and Scope

This Monthly Environmental Monitoring Report has been prepared to collate environmental monitoring data undertaken for the Tomingley Gold Project during the month of February 2017.

This report also compares data collected to targets and provides commentary on environmental issues during the month.

2. Weather for February 2017

A. Weather Station Data

TGO WEATHER DATA IS PRESENTED BELOW.

Figure 1. February 2017 wind rose

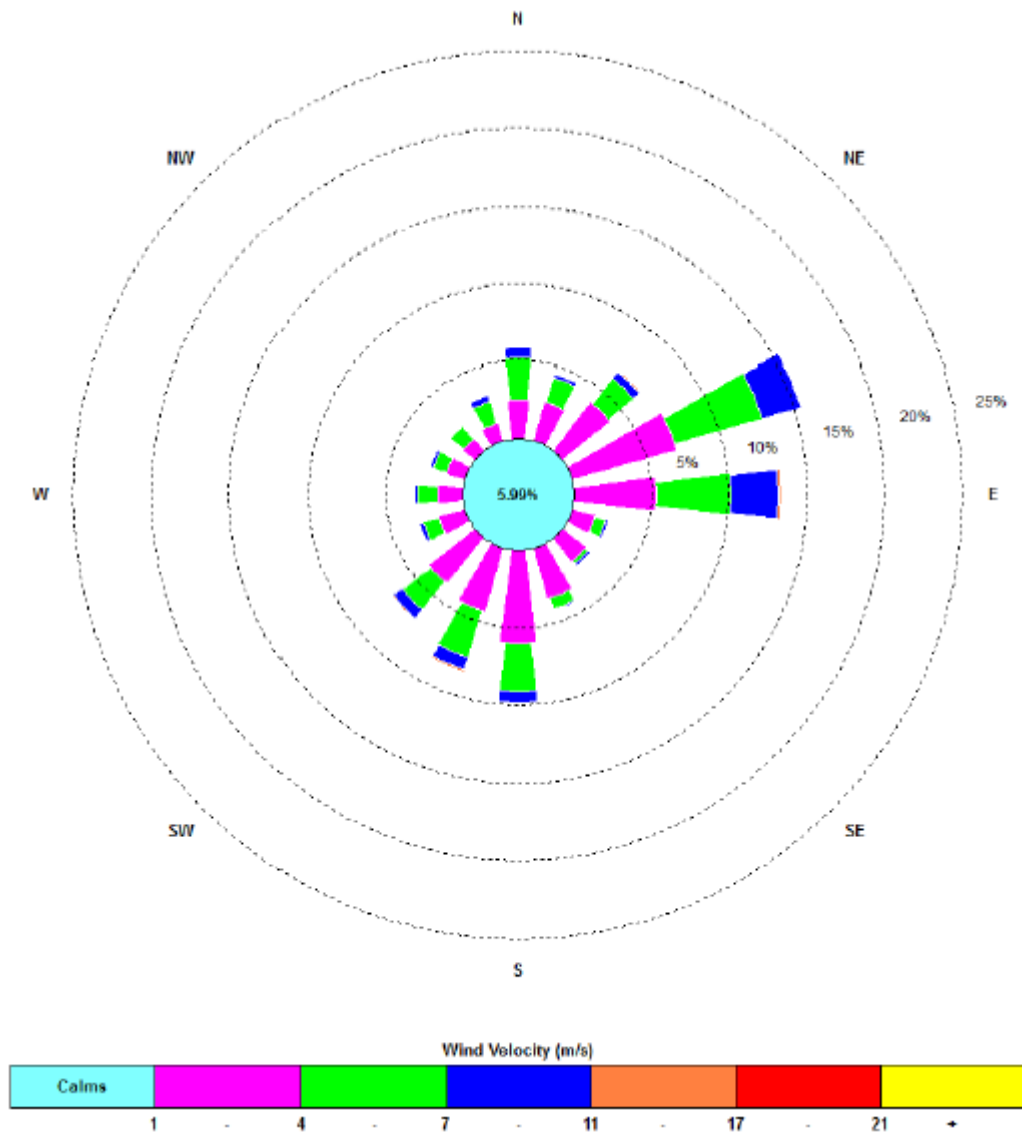
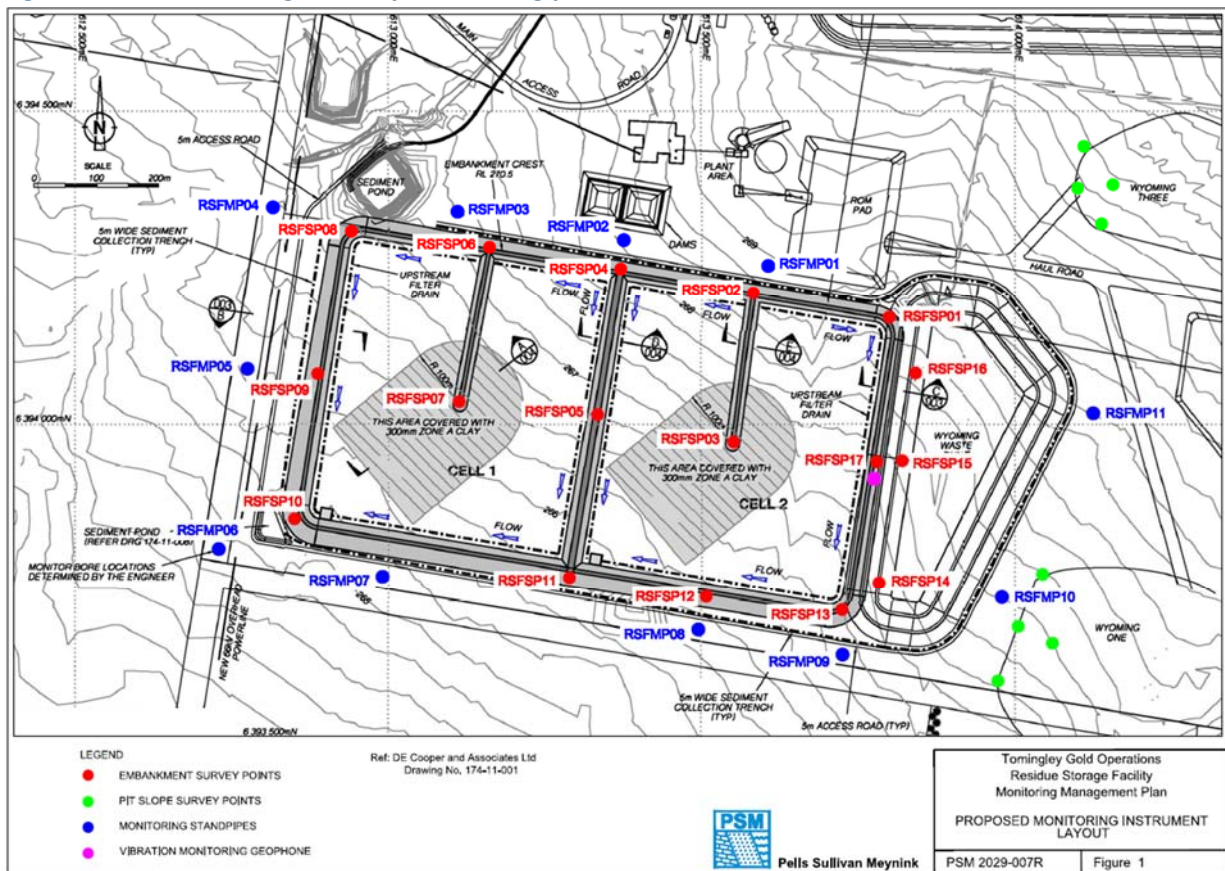


Figure 2. Rainfall February 2017

February 2017	Rainfall (mm)
February 1	0.2
Total Rainfall	0.2

Figure 4 indicates the location of environmental and survey monitoring points on and around the Residue Storage Facility.

Figure 4. Residue Storage Facility monitoring points



4. Air Quality Monitoring

A. PM10 Monitoring

PM10 is measured via a Tapered Element Oscillating Microbalance (TEOM) located at the southern edge of the Tomingley Village. This machine transmits real-time data via the internet to a computer located on site.

The Performance Criteria for PM10 has been set at an Annual Average of 30ug/m³ and a 24-Hour Average of 50ug/m³.

The 24 hour average limit exceeded on two occasions during February. Both of these instances occurred during days with temperatures up to 45degrees Celsius, strong winds and high levels of regional dust and smoke. These exceedances were reported to the relevant authorities.

The annual average at the end of December was 18.5ug/m³, well below the license limit.

Figure 5. TEOM Data February 2017

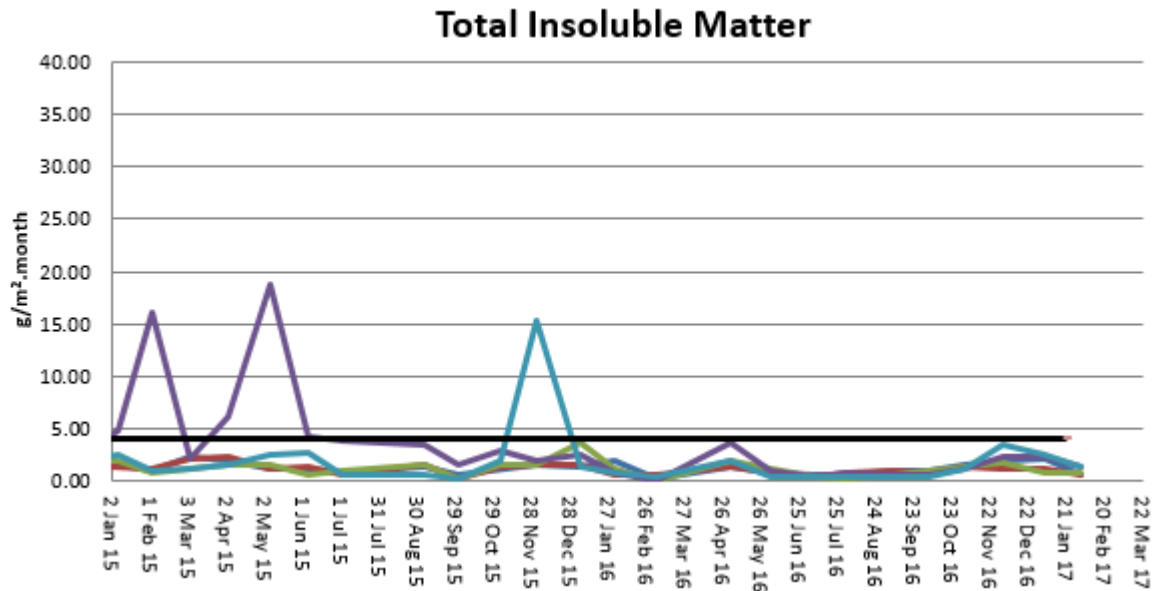
Date	24 Hr Averages	Running Average	Comment
	(µg/m ³)		
1/02/2017	35.8	18.5	
2/02/2017	16.3	18.5	
3/02/2017	40.6	18.6	
4/02/2017	24.7	18.6	
5/02/2017	15.3	18.6	
6/02/2017	23.1	18.6	
7/02/2017	25.3	18.6	
8/02/2017	10.3	18.6	
9/02/2017	11.7	18.6	
10/02/2017	20.0	18.6	
11/02/2017	20.6	18.6	
12/02/2017	73.5	18.7	1-hour average data used
13/02/2017	21.5	18.7	
14/02/2017	NA	18.7	Annual TEOM calibration in progress - insufficient valid data
15/02/2017	NA	18.6	Annual TEOM calibration in progress - insufficient valid data
16/02/2017	37.0	18.5	
17/02/2017	49.2	18.6	
18/02/2017	32.4	18.6	
19/02/2017	26.2	18.6	
20/02/2017	33.3	18.5	
21/02/2017	53.2	18.6	
22/02/2017	33.4	18.6	
23/02/2017	30.0	18.6	
24/02/2017	49.6	18.7	
25/02/2017	29.9	18.7	
26/02/2017	14.1	18.6	
27/02/2017	13.1	18.5	
28/02/2017	15.5	18.5	
Average	29.1		
	24 Hour Criteria Exceedance		

Note: For comparison purposes highlighted results indicate levels above the EPA and NEPM 24-hour maximum criteria for PM₁₀

B. Depositional Dust

Depositional Dust monitoring undertaken during this month returned the results indicated in the table below. The performance criteria for deposited dust is averaged over 12 months.

Figure 6. Dust Deposition Results 2015 - 2017

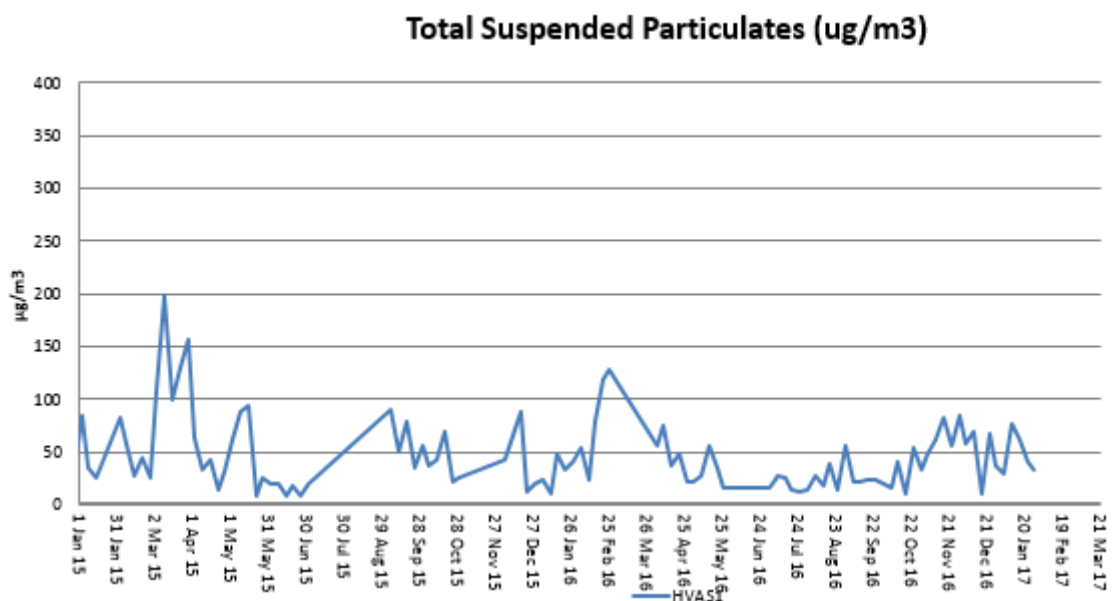


C. High Volume Air Sampler - Total Suspended Particulates

High Volume Air Sampling (HVAS) for Total Suspended Particulates (TSP) was undertaken this month. Figure 7 below provides the results.

The performance criteria for TSP is averaged over 12 months

Figure 7. Hi-Volume Air Sampler Data 2015 - 2017



6. Surface Water Monitoring

A. Gundong Creek

Gundong Creek ceased to flow during February and as such, weekly sampling was also put on hold until flow resumes.

B. Sedimentation Ponds

Sediment basins did not experience any discharges during the month of February.

7. Groundwater Monitoring

Groundwater monitoring was in December and due again in March, in line with license requirements.

Results from Decembers monitoring fell within expected limits.

8. Blast Monitoring

Blasts are carried out in all open cut pits and vibration and decibels are monitored from several locations. Below are the vibration results recorded from the monitors at Hart's Cottage and Tomingley Village.

Figure 9. Blast Monitoring

EventKey	Date/Time	Max R (mm/s)	Location
75712	1/02/2017 13:01	0.38	Harts Cottage
75712	1/02/2017 13:01	0.63	Tomingley Village
75759	3/02/2017 12:59	0.12	Harts Cottage
75759	3/02/2017 12:59	0.23	Tomingley Village
75784	6/02/2017 13:35	0.38	Harts Cottage
75784	6/02/2017 13:35	0.64	Tomingley Village
75822	8/02/2017 13:01	0.39	Harts Cottage
75822	8/02/2017 13:01	0.62	Tomingley Village
75895	13/02/2017 13:00	0.27	Harts Cottage
75895	13/02/2017 13:00	0.39	Tomingley Village
75925	15/02/2017 12:56	0.16	Harts Cottage
75925	15/02/2017 12:56	0.25	Tomingley Village
75988	17/02/2017 12:55	0.24	Harts Cottage
75988	17/02/2017 12:55	0.52	Tomingley Village
76017	18/02/2017 12:54	0.27	Harts Cottage
76017	18/02/2017 12:54	0.28	Tomingley Village
76049	20/02/2017 12:56	0.51	Harts Cottage
76049	20/02/2017 12:56	0.71	Tomingley Village
76079	21/02/2017 12:58	0.15	Harts Cottage
76079	21/02/2017 12:58	0.2	Tomingley Village
76422	24/02/2017 14:00	0.47	Harts Cottage
76422	24/02/2017 14:00	0.99	Tomingley Village
76479	25/02/2017 13:00	0.02	Harts Cottage
76479	25/02/2017 13:00	0.03	Tomingley Village
76469	27/02/2017 13:06	0.19	Harts Cottage
76469	27/02/2017 13:06	0.29	Tomingley Village

9. Residue Storage Facility

Residue from the processing plant is discharged into the Residue Storage Facility or RSF. The Environmental Protection Licences dictates that the Weak Acid Dissociable (WAD) Cyanide found in this residue must be less than 20 milligrams per litre for 90% of the time and less than 30 milligrams per litre for 100% of the time.

WAD cyanide discharge levels are shown below with the maximum reading well below the 100th percentile limit of 30ppm.

- Monthly average: 2.14 ppm
- Daily maximum: 10.96 ppm on 3rd February
- Daily minimum: 0.358 ppm on 16th February
- Number of exceedances: zero

10. Biodiversity Monitoring

Fauna deaths:

- There were no fauna deaths in the RSF for the month.

Vertebrate pests

- A program of trapping feral cats and foxes has continued with no animals being captured throughout February