

TOMINGLEY GOLD PROJECT

Monthly Environmental Monitoring Report

May 2018

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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 May 2018.

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

2. Weather for May 2018

A. Weather Station Data

TGO WEATHER DATA IS PRESENTED BELOW.

Figure 1. May 2018 wind rose

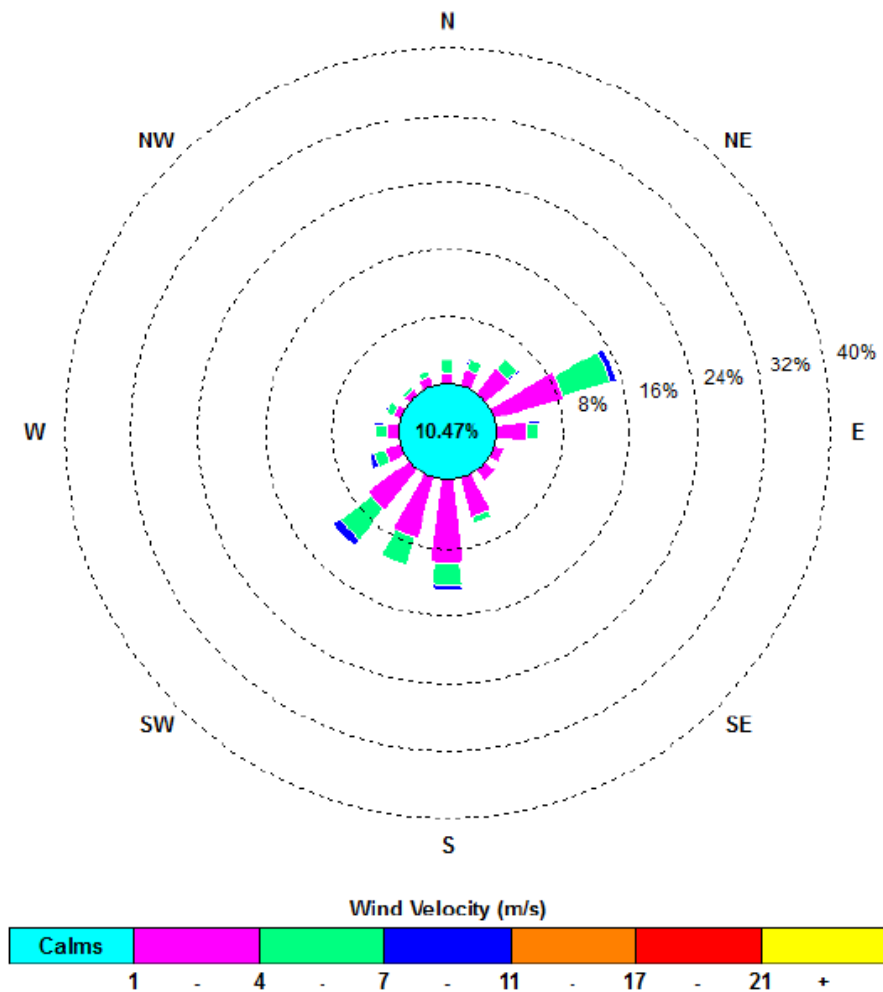


Figure 2. Rainfall May 2018

May 2018	Rainfall (mm)
May 4	0.6
May 10	0.2
May 11	2
May 12	0.6
May 29	3
May 30	0.4
Total Rainfall	6.8

3. Monitoring Locations

FIGURE 3 indicates the location of where monitoring is undertaken for the project. Any additional monitoring undertaken will be discussed within the body of this report.

Figure 3. TGO water and vegetation monitoring points

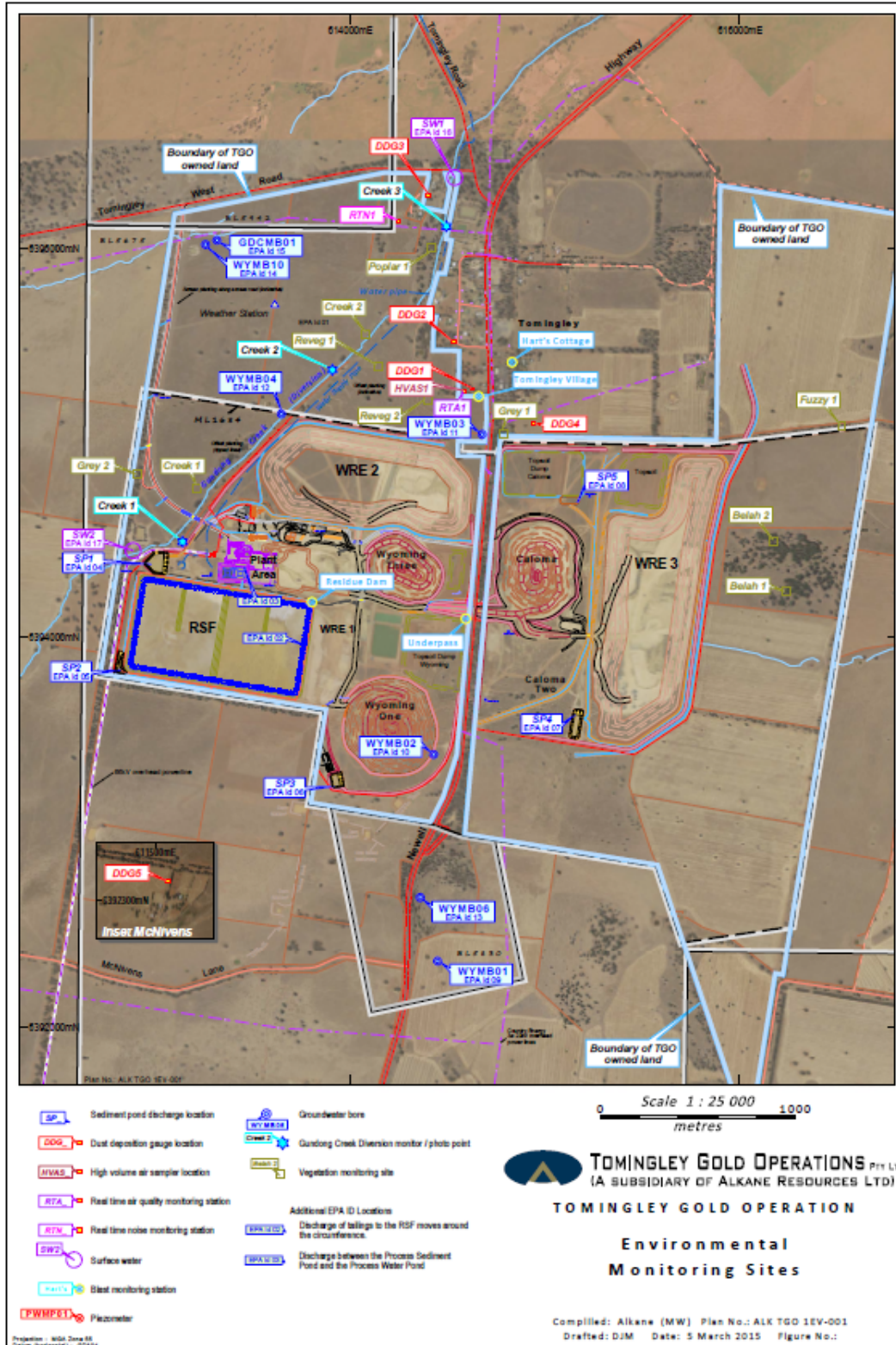
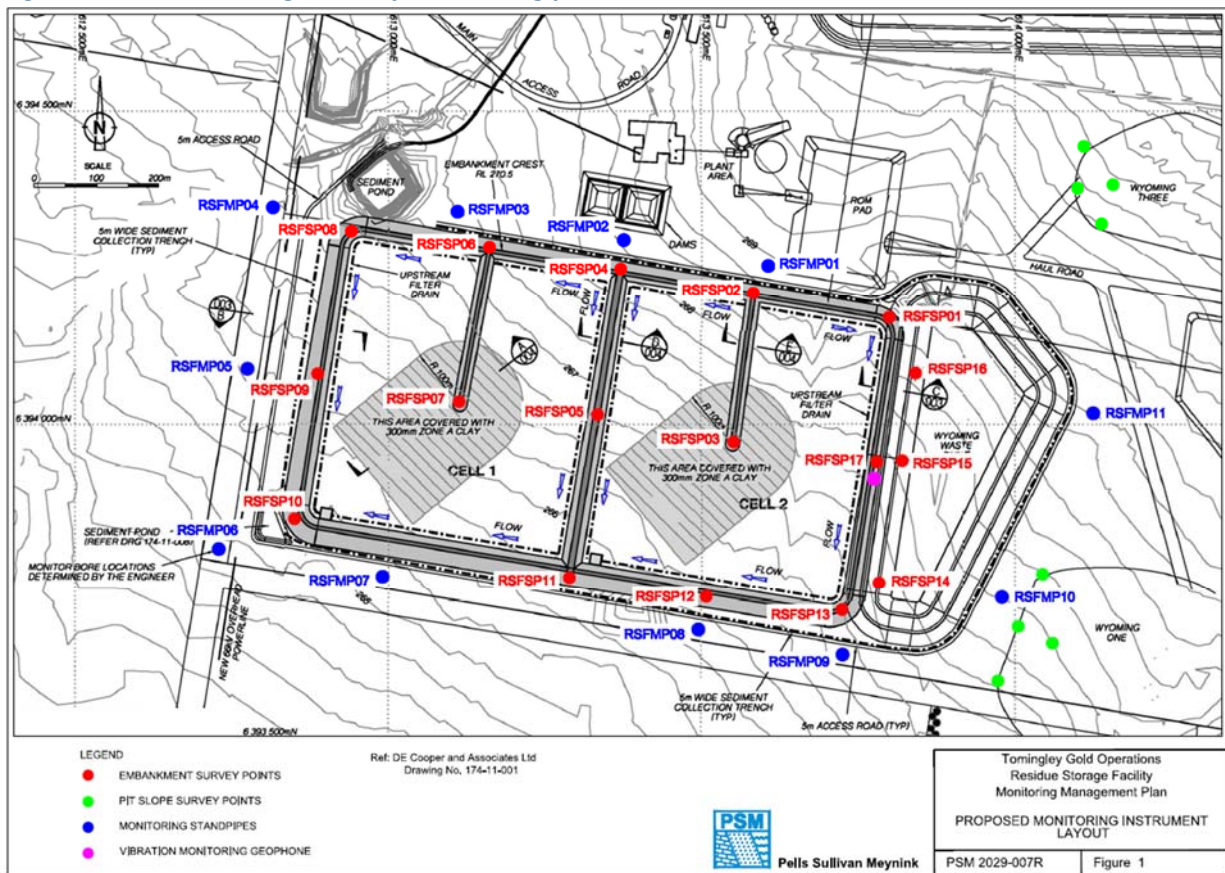


Figure 4 indicates the location of environmental and survey monitoring points on and around the Residue Storage Facility.

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 annual average at the end of May was 22.2ug/m³, well below the license limit.

A number of high readings throughout the month were as a result of strong winds combined with regional smoke and dust from the ongoing drought. The high level recorded during May was not a result of mining activity and TGO has kept all government agencies informed of the ongoing high dust levels in the region.

Figure 5. TEOM Data May 2018

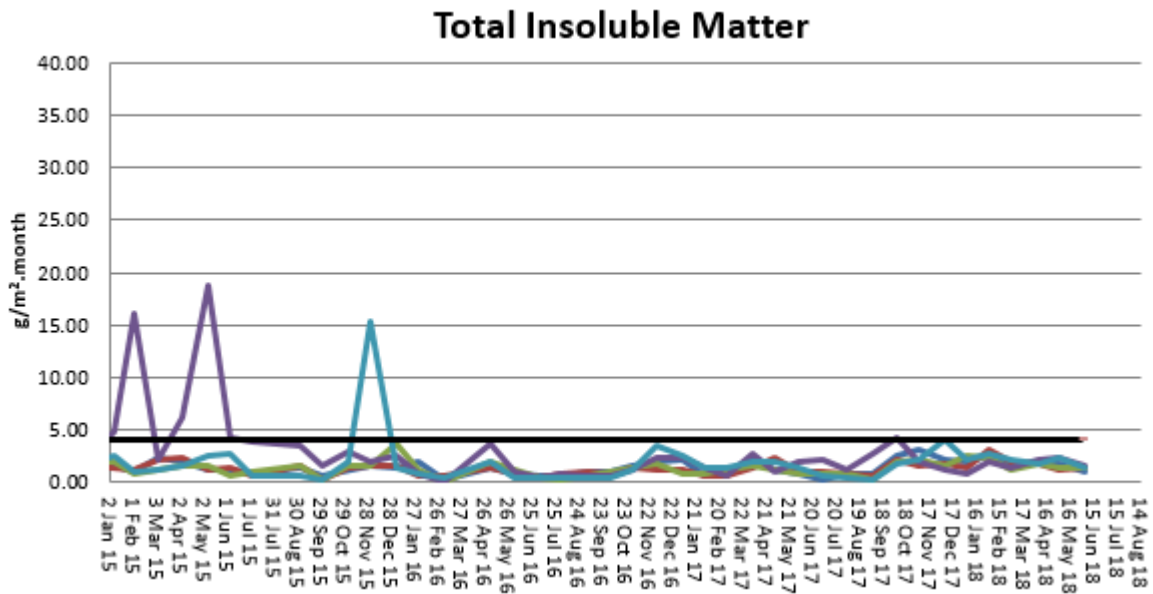
Date	24 Hr Averages	Running Average	Comment
	(µg/m ³)		
1/05/2018	13.4	21.6	
2/05/2018	29.9	21.7	
3/05/2018	29.9	21.7	
4/05/2018	57.8	21.8	1 hour average data used
5/05/2018	23.1	21.8	
6/05/2018	18.9	21.8	
7/05/2018	23.8	21.8	
8/05/2018	23.5	21.8	1 hour average data used
9/05/2018	24.5	21.8	1 hour average data used
10/05/2018	33.7	21.9	
11/05/2018	11.2	21.8	
12/05/2018	17.1	21.8	
13/05/2018	14.3	21.8	
14/05/2018	18.2	21.8	
15/05/2018	33.1	21.8	
16/05/2018	27.9	21.8	
17/05/2018	27.0	21.8	
18/05/2018	33.3	21.8	
19/05/2018	17.5	21.8	
20/05/2018	19.8	21.9	
21/05/2018	31.1	21.9	
22/05/2018	24.8	22.0	
23/05/2018	26.1	22.0	
24/05/2018	30.8	22.0	
25/05/2018	32.2	22.1	
26/05/2018	22.2	22.1	
27/05/2018	21.8	22.1	
28/05/2018	23.0	22.2	
29/05/2018	28.4	22.2	
30/05/2018	10.0	22.2	1 hour average data used
31/05/2018	15.6	22.2	
Average	24.6		
	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 with a maximum total average of 4g/m²/month.

Figure 6. Dust Deposition Results 2015 - 2018

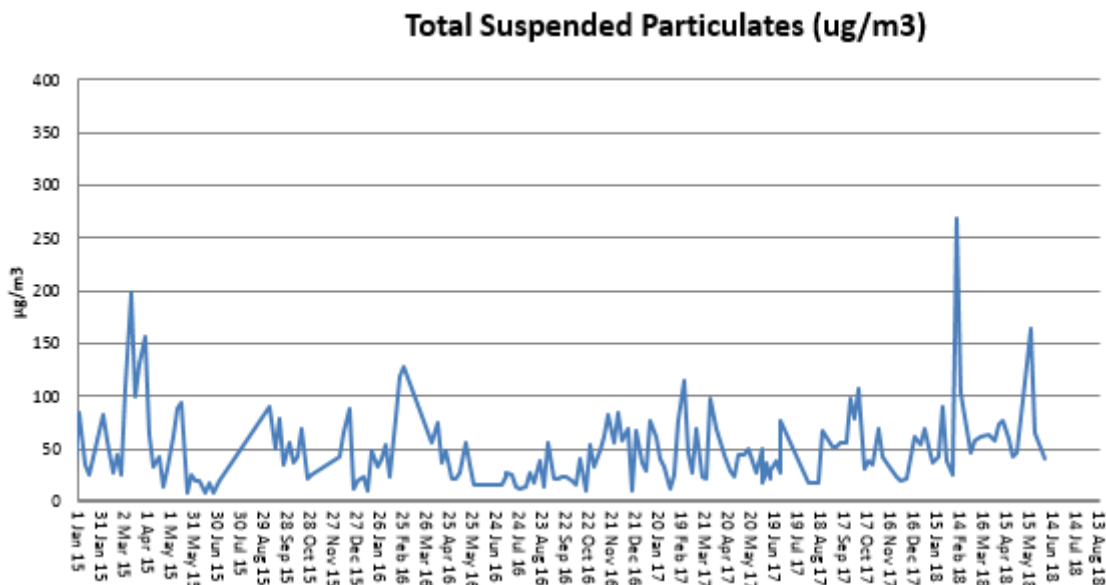


C. High Volume Air Sampler - Total Suspended Particulates

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 - 2018



5. Noise Monitoring

A. Real-Time Noise Monitoring

Real-time noise monitoring data showed no exceedances during the month of May. Full report provided separately on webpage.

6. Surface Water Monitoring

A. Gundong Creek

Gundong Creek did not flow during May and as such no samples were taken.

B. Sedimentation Ponds

No discharge was experienced from any of the sediment ponds during the month.

7. Groundwater Monitoring

Groundwater was undertaken during March in line with license requirements.

Results from this round of monitoring fell within expected limits.

A further round of monitoring is scheduled in for June.

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 8. Blast Monitoring

EventKey	Date/Time	Max R (mm/s)	Location
87369	1/05/2018 13:00	0.07	Harts Cottage
87369	1/05/2018 13:00	0.06	Tomingley Village
87441	3/05/2018 15:19	0.06	Harts Cottage
87441	3/05/2018 15:19	0.08	Tomingley Village
87632	11/05/2018 14:39	0.07	Harts Cottage
87632	11/05/2018 14:39	0.06	Tomingley Village
87647	12/05/2018 16:09	0.1	Harts Cottage
87647	12/05/2018 16:09	0.11	Tomingley Village
87689	14/05/2018 14:30	0.11	Harts Cottage
87689	14/05/2018 14:30	0.11	Tomingley Village
87717	15/05/2018 13:39	0.09	Harts Cottage
87717	15/05/2018 13:39	0.1	Tomingley Village
87739	16/05/2018 12:58	0.05	Harts Cottage
87739	16/05/2018 12:58	0.05	Tomingley Village
87782	17/05/2018 12:59	0.04	Harts Cottage
87782	17/05/2018 12:59	0.06	Tomingley Village
87847	19/05/2018 13:00	0.08	Harts Cottage
87847	19/05/2018 13:00	0.08	Tomingley Village
87910	22/05/2018 13:52	0.11	Harts Cottage
87910	22/05/2018 13:52	0.12	Tomingley Village
87990	24/05/2018 14:07	0.09	Harts Cottage
87990	24/05/2018 14:07	0.11	Tomingley Village
88069	26/05/2018 14:04	0.13	Harts Cottage
88069	26/05/2018 14:04	0.13	Tomingley Village
88067	28/05/2018 10:59	0.16	Harts Cottage
88067	28/05/2018 10:59	0.19	Tomingley Village
88106	29/05/2018 16:57	0.13	Harts Cottage
88106	29/05/2018 16:57	0.09	Tomingley Village
88107	30/05/2018 15:13	0.1	Harts Cottage
88107	30/05/2018 15:13	0.13	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: 4.76 ppm
- Daily maximum: 11.26 ppm on 17th May
- Daily minimum: 2.09 ppm on 5th May
- Number of exceedances: zero

10. Biodiversity Monitoring

Fauna deaths:

- No fauna deaths were recorded during May.

Vertebrate pests

- A program of trapping feral cats and foxes has continued with one feral cat being captured during May.