TOMINGLEY
GOLD OPERATIONS PTY LTD
(A wholly owned subsidiary of Alkane Resources Ltd)
ABN 53 149 040 371

TOMINGLEY GOLD PROJECT

Monthly Environmental Monitoring Report

March 2018

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Document History

DATE	VERSION	REASON FOR CHANGE	AUTHOR
	Rev 1	Submitted for Information	CH

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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 March 2018.

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

2. Weather for March 2018

A. Weather Station Data

TGO WEATHER DATA IS PRESENTED BELOW.

Figure 1. March 2018 wind rose

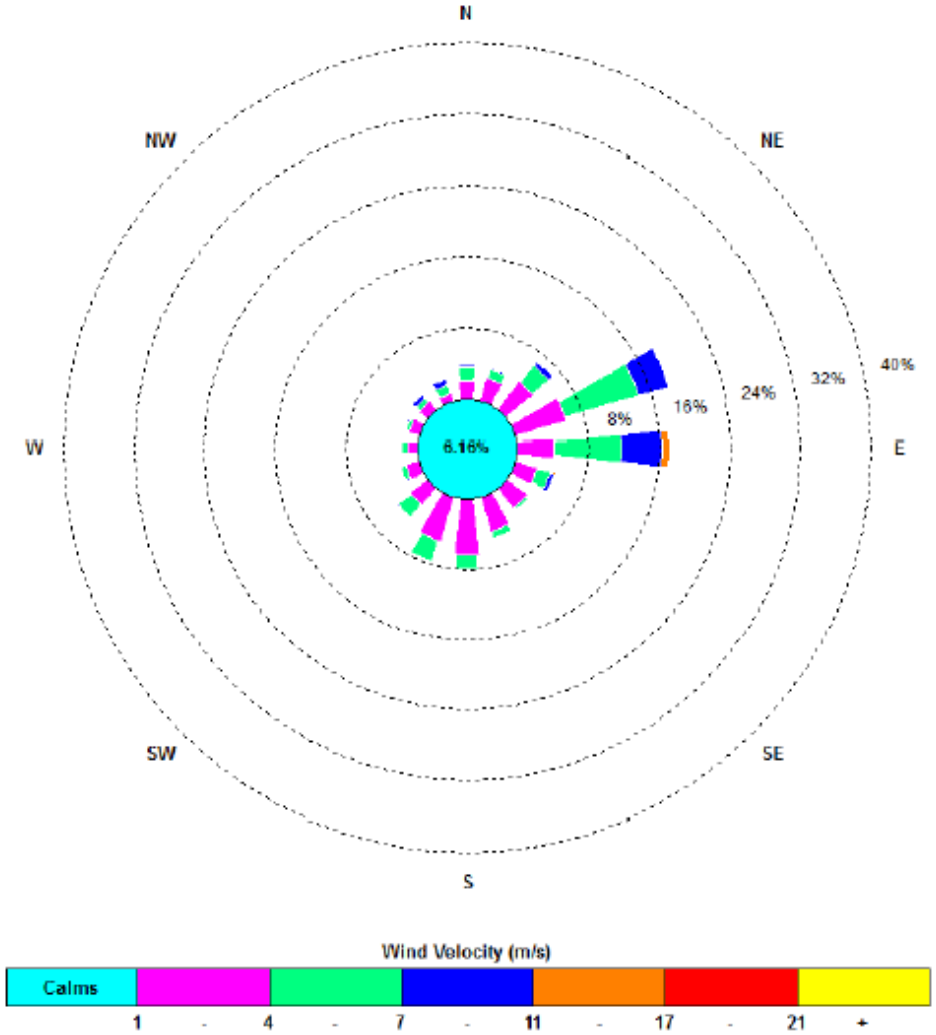


Figure 2. Rainfall March 2018

March 2018	Rainfall (mm)
March 2	3.8
March 25	9.8
March 26	1.2
Total Rainfall	14.8

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

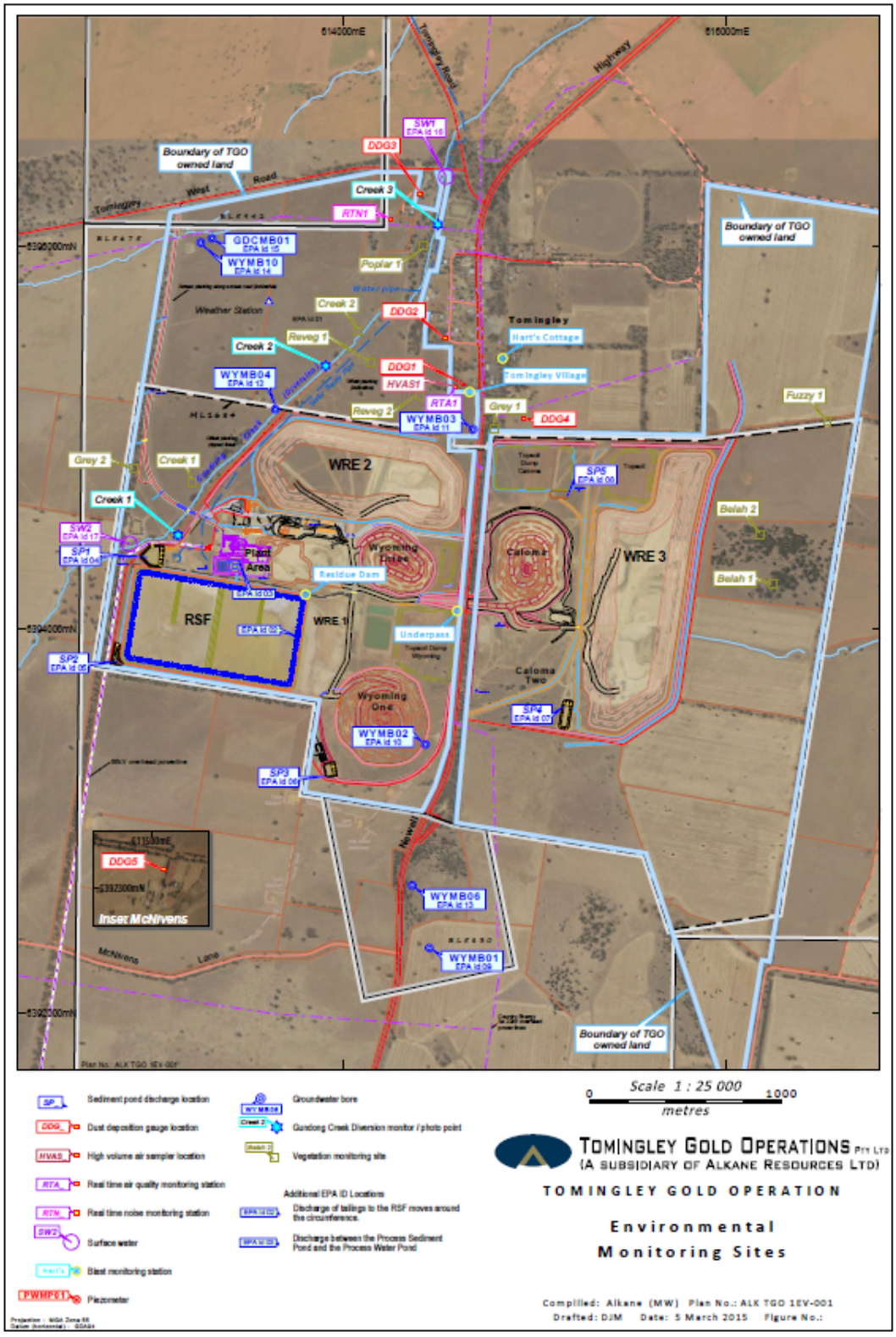
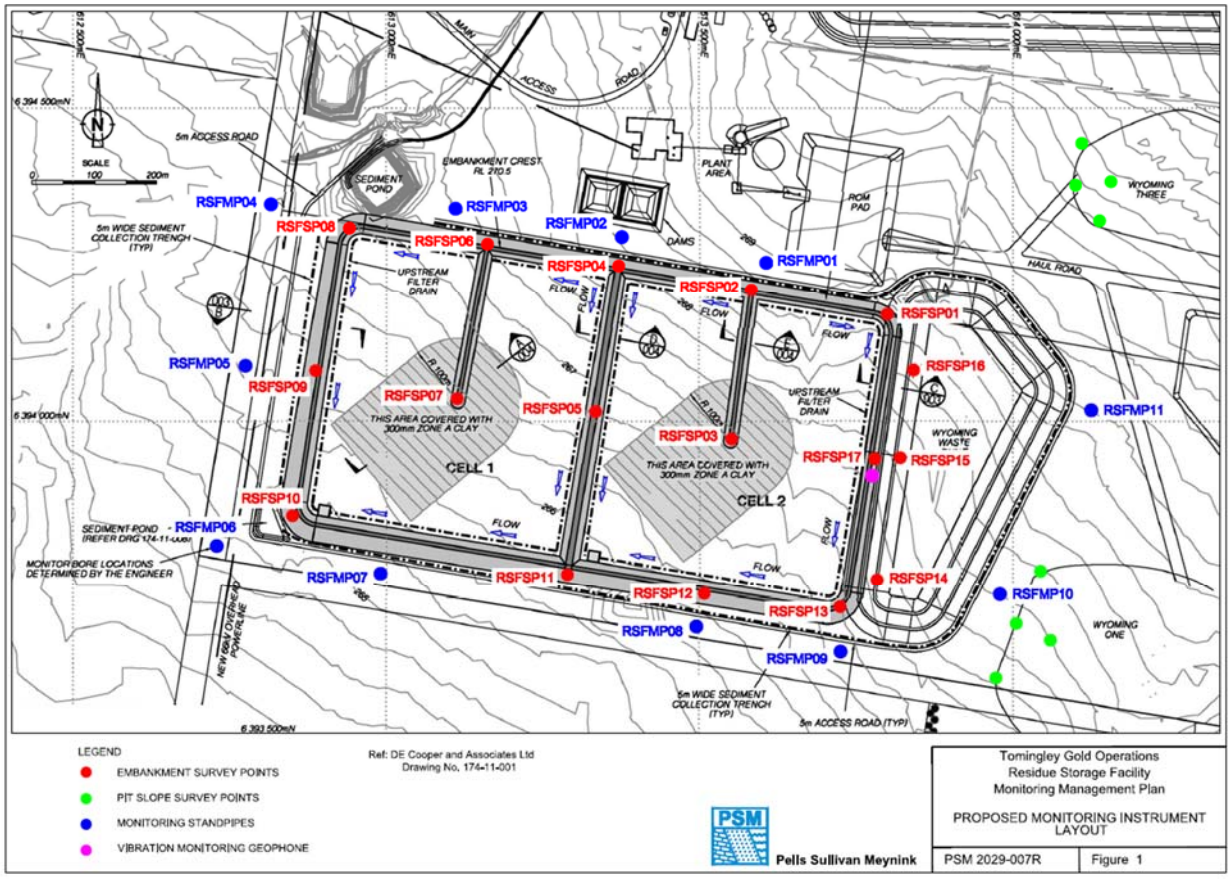


Figure 4 indicates the location of environmental and survey monitoring points on and around the Residue Storage Facility.

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/m^3 and a 24-Hour Average of 50ug/m^3.

The annual average at the end of September was 20.4ug/m^3, 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 farming activities. None of the high levels recorded during March were as a result of mining activity.

Figure 5. TEOM Data March 2018

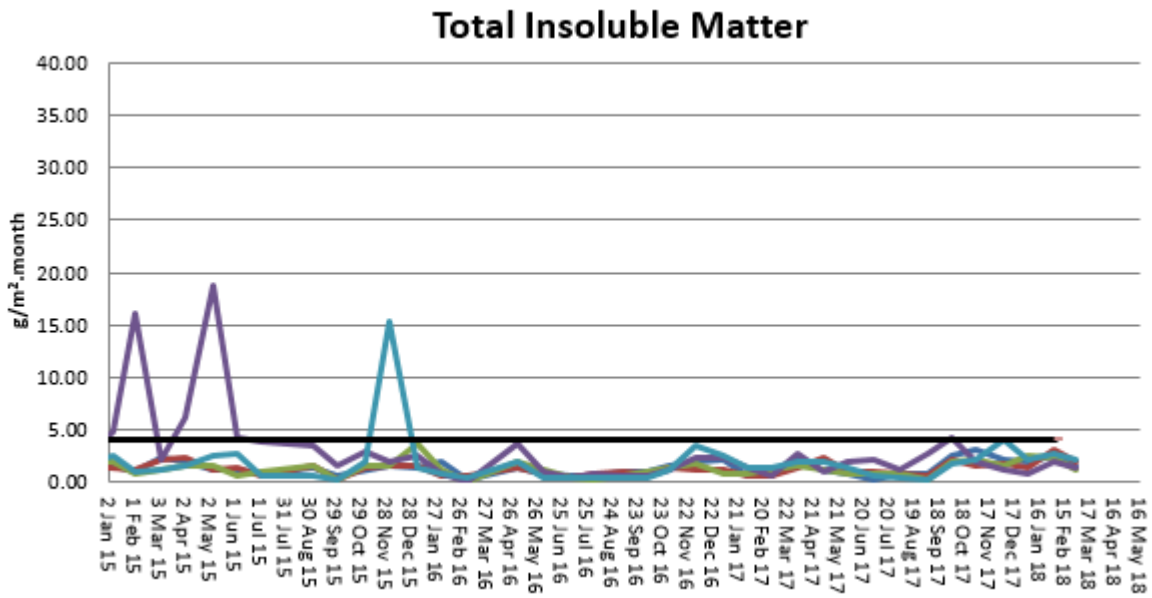
Date	24 Hr Averages (µg/m3)	Running Average (µg/m3)	Comment
1/03/2018	10.1	18.5	
2/03/2018	24.9	18.5	1 hour average data used
3/03/2018	27.4	18.5	
4/03/2018	33.7	18.6	
5/03/2018	20.6	18.6	
6/03/2018	17.7	18.6	
7/03/2018	22.8	18.6	
8/03/2018	19.3	18.7	
9/03/2018	13.6	18.7	
10/03/2018	18.1	18.6	
11/03/2018	24.4	18.6	
12/03/2018	46.1	18.7	
13/03/2018	58.2	18.8	
14/03/2018	33.4	18.9	
15/03/2018	41.8	19.0	
16/03/2018	49.7	19.1	
17/03/2018	39.1	19.2	
18/03/2018	114.4	19.5	
19/03/2018	89.2	19.7	
20/03/2018	59.1	19.8	
21/03/2018	104.3	20.1	
22/03/2018	22.3	20.2	
23/03/2018	17.6	20.2	
24/03/2018	17.0	20.2	
25/03/2018	50.0	20.3	
26/03/2018	21.1	20.4	
27/03/2018	22.4	20.4	
28/03/2018	29.4	20.3	
29/03/2018	27.9	20.3	
30/03/2018	41.2	20.3	
31/03/2018	35.4	20.4	
Average	**37.2**		
	24 Hour Criteria Exceedance		

Note: For comparison purposes, highlighted results indicate levels above the EPA and NEPM 24-hour maximum criteria for PM_{10}.

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

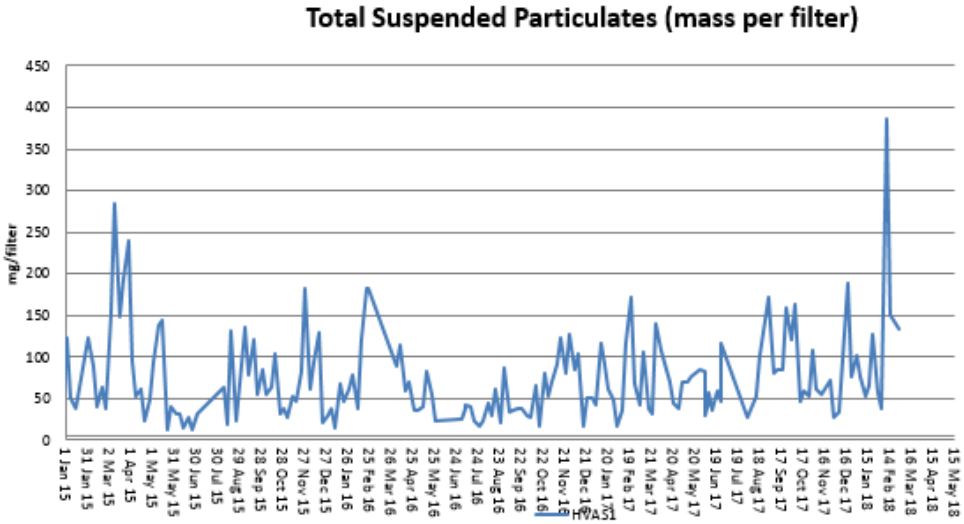


C. High Volume Air Sampler - Total Suspended Particulates

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 March. Full report provided separately on webpage.

6. Surface Water Monitoring

A. Gundong Creek

Gundong Creek did not flow during March 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
85772	6/03/2018 13:52	0.11	Harts Cottage
85772	6/03/2018 13:52	0.12	Tomingley Village
85855	7/03/2018 15:07	0.02	Harts Cottage
85855	7/03/2018 15:07	0.02	Tomingley Village
85918	9/03/2018 12:57	0.05	Harts Cottage
85918	9/03/2018 12:57	0.05	Tomingley Village
85936	10/03/2018 8:14	0	Harts Cottage
85936	10/03/2018 8:14	0.01	Tomingley Village
85940	10/03/2018 13:05	0.13	Harts Cottage
85940	10/03/2018 13:05	0.11	Tomingley Village
85989	12/03/2018 13:52	0.07	Harts Cottage
85989	12/03/2018 13:52	0.05	Tomingley Village
86256	19/03/2018 13:00	0.13	Harts Cottage
86256	19/03/2018 13:00	0.14	Tomingley Village
86390	22/03/2018 13:57	0.15	Harts Cottage
86390	22/03/2018 13:57	0.17	Tomingley Village
86428	24/03/2018 14:57	0.1	Harts Cottage
86428	24/03/2018 14:57	0.09	Tomingley Village
86488	26/03/2018 14:55	0.06	Harts Cottage
86488	26/03/2018 14:55	0.05	Tomingley Village
86503	27/03/2018 12:59	0.11	Harts Cottage
86503	27/03/2018 12:59	0.11	Tomingley Village
86598	29/03/2018 14:54	0.09	Harts Cottage
86598	29/03/2018 14:54	0.07	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: 4.95 ppm
- Daily maximum: 13.63 ppm on 31st March
- Daily minimum: 2.28 ppm on 26th March
- Number of exceedances: zero

10. Biodiversity Monitoring

Fauna deaths:

- No fauna deaths were recorded during March.

Vertebrate pests

- A program of trapping feral cats and foxes has continued with no feral cats being captured during March.