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

August 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 August 2018.

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

2. Weather for August 2018

A. Weather Station Data

TGO WEATHER DATA IS PRESENTED BELOW.

Figure 1. August 2018 wind rose

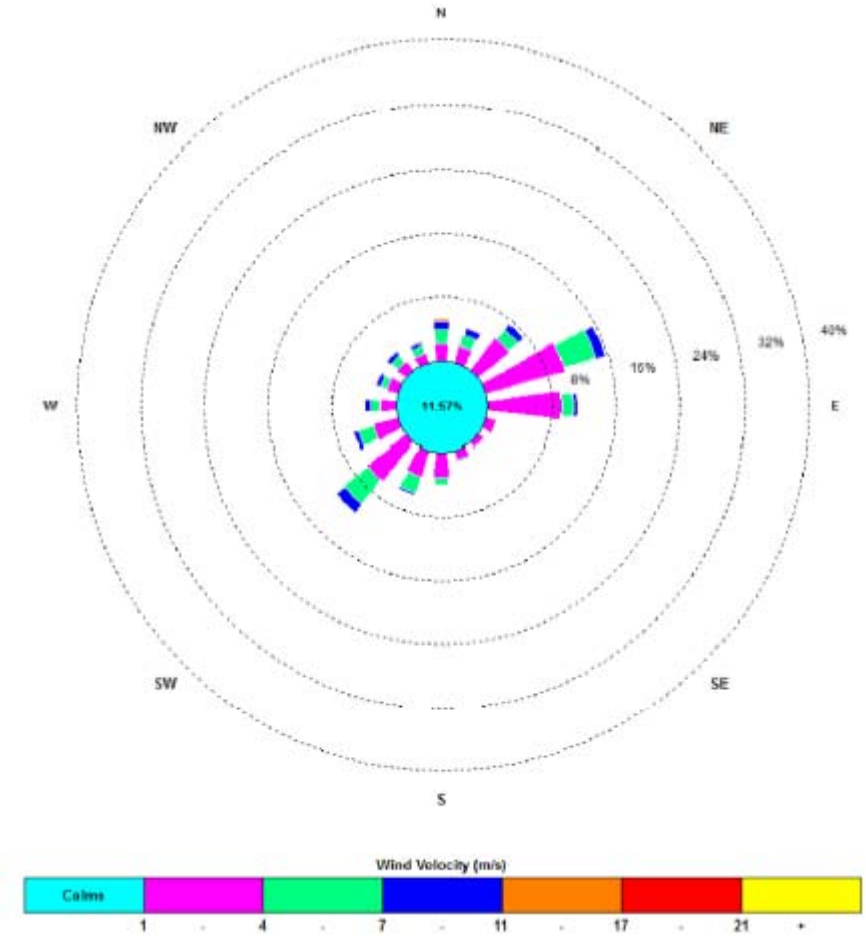


Figure 2. Rainfall August 2018

August 2018	Rainfall (mm)
August 3	3.0
August 4	0.2
August 6	7.4
August 25	10.6
August 26	11.6
August 27	0.2
August 31	8.4
Total Rainfall	41.4

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

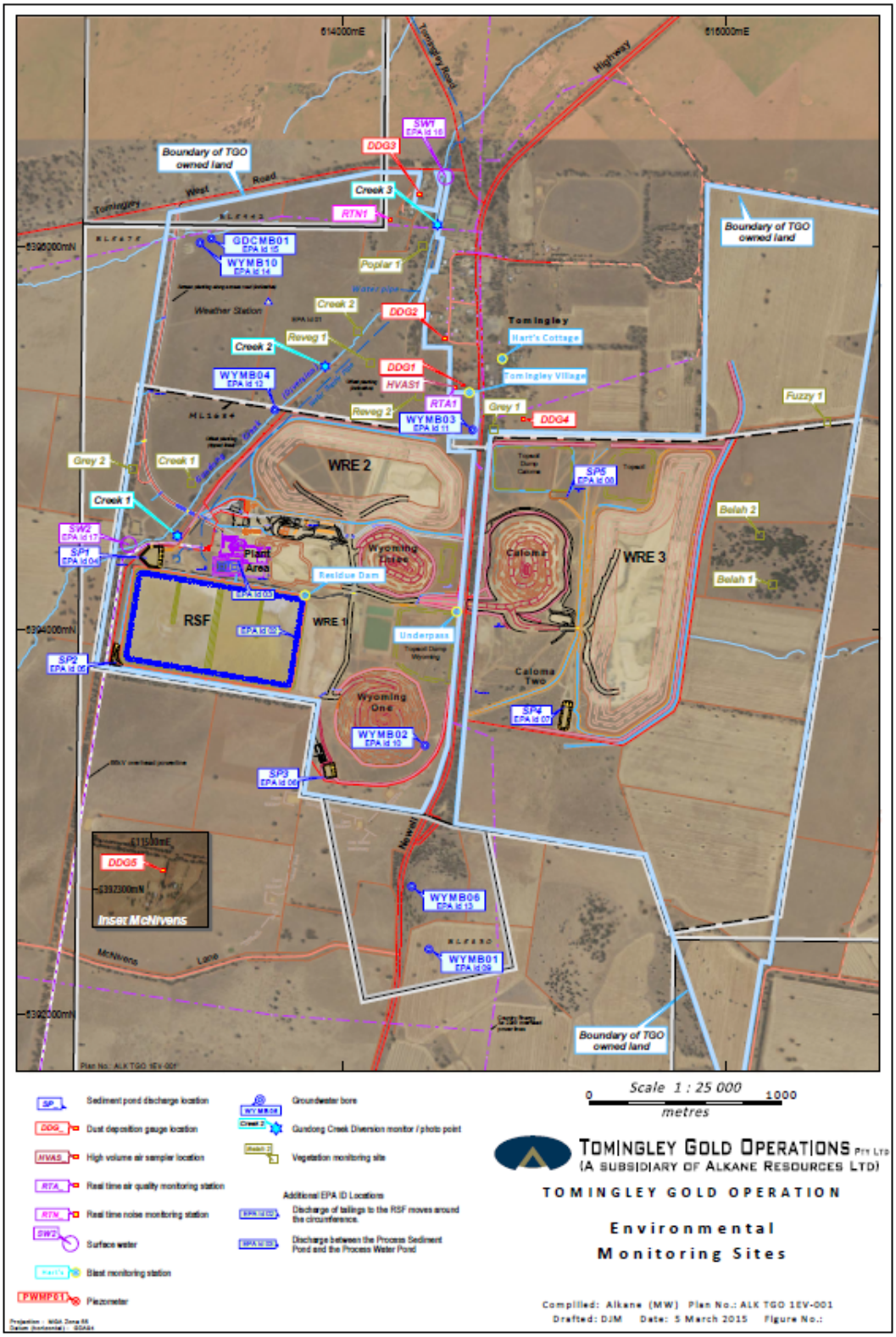
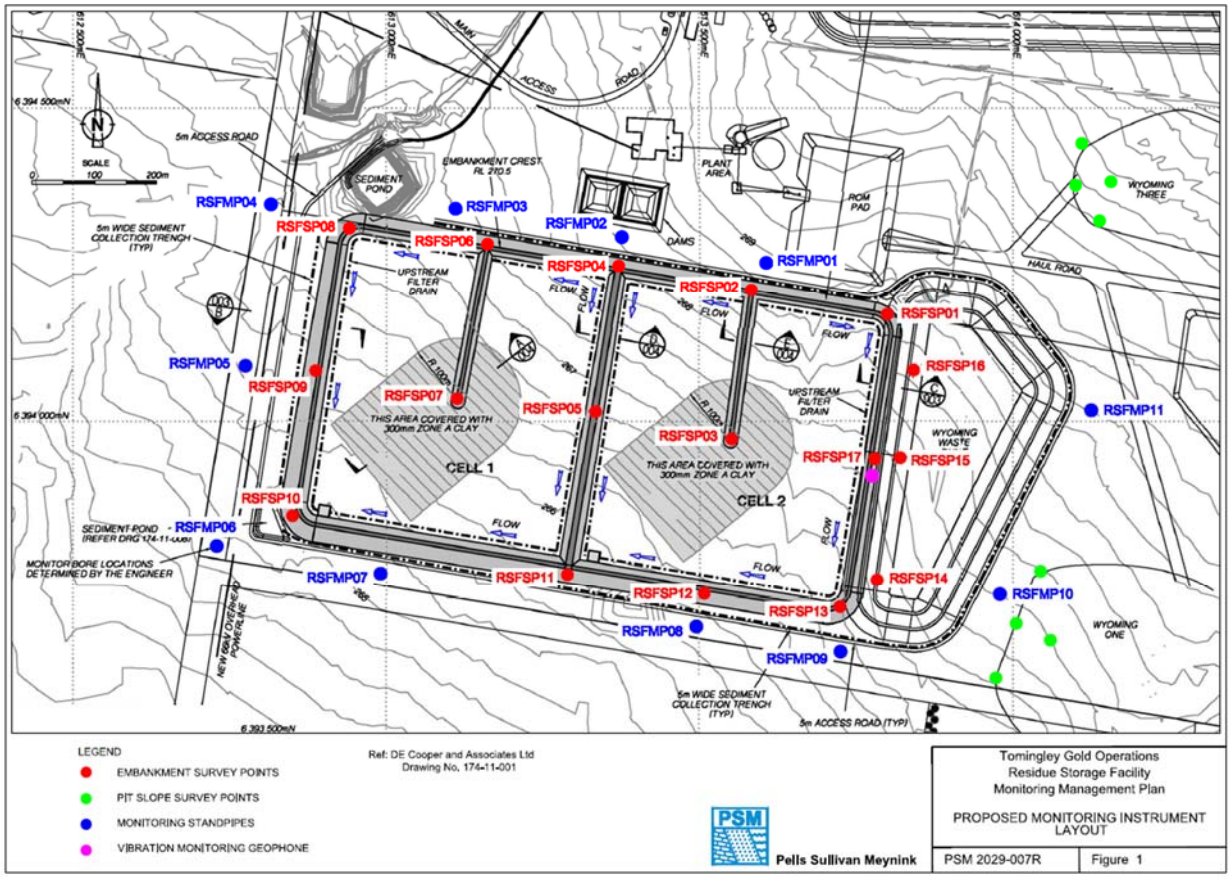


Figure 4 indicates the location of environmental and survey monitoring points on and around the Residue Storage Facility.

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 June was 23.6ug/m^3, well below the license limit.

There were 2 high and 1 extremely high readings during the month as a result of strong winds combined with regional dust creating dust storm conditions. This was as a result if the drought and not a result of mining activity. TGO has kept all government agencies informed of the ongoing high dust levels in the region.

Figure 5. TEOM Data August 2018

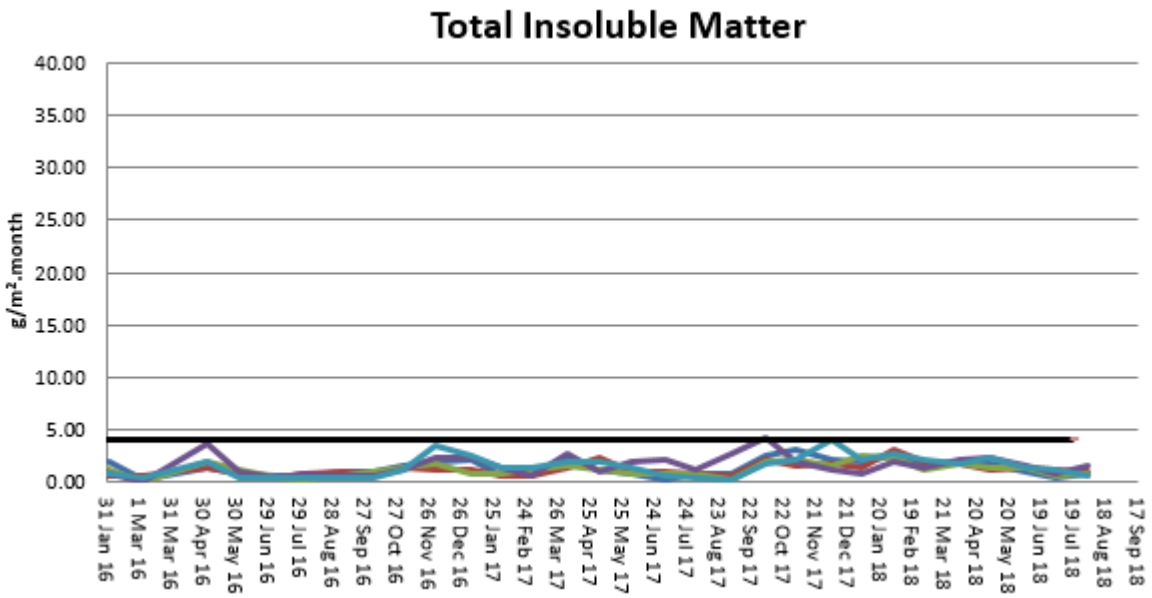
Date	24 Hr Averages	Running Average	Comment
	(µg/m3)		
1/08/2018	23.7	22.3	
2/08/2018	22.0	22.4	
3/08/2018	344.5	23.3	
4/08/2018	65.3	23.5	
5/08/2018	23.9	23.5	
6/08/2018	22.1	23.6	
7/08/2018	30.3	23.6	
8/08/2018	12.0	23.6	
9/08/2018	13.3	23.6	
10/08/2018	16.5	23.6	
11/08/2018	26.6	23.7	
12/08/2018	10.2	23.6	
13/08/2018	16.1	23.7	1 hour average data used
14/08/2018	12.9	23.7	
15/08/2018	15.1	23.6	
16/08/2018	20.0	23.6	
17/08/2018	17.1	23.6	
18/08/2018	23.3	23.6	
19/08/2018	41.3	23.7	
20/08/2018	19.4	23.7	
21/08/2018	16.4	23.7	
22/08/2018	13.8	23.6	
23/08/2018	19.0	23.6	
24/08/2018	18.5	23.6	
25/08/2018	30.8	23.6	
26/08/2018	6.4	23.5	
27/08/2018	9.5	23.5	
28/08/2018	11.9	23.4	
29/08/2018	13.8	23.4	
30/08/2018	11.5	23.3	
31/08/2018	114.7	23.6	
Average	**33.6**		
	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 2016 - 2018

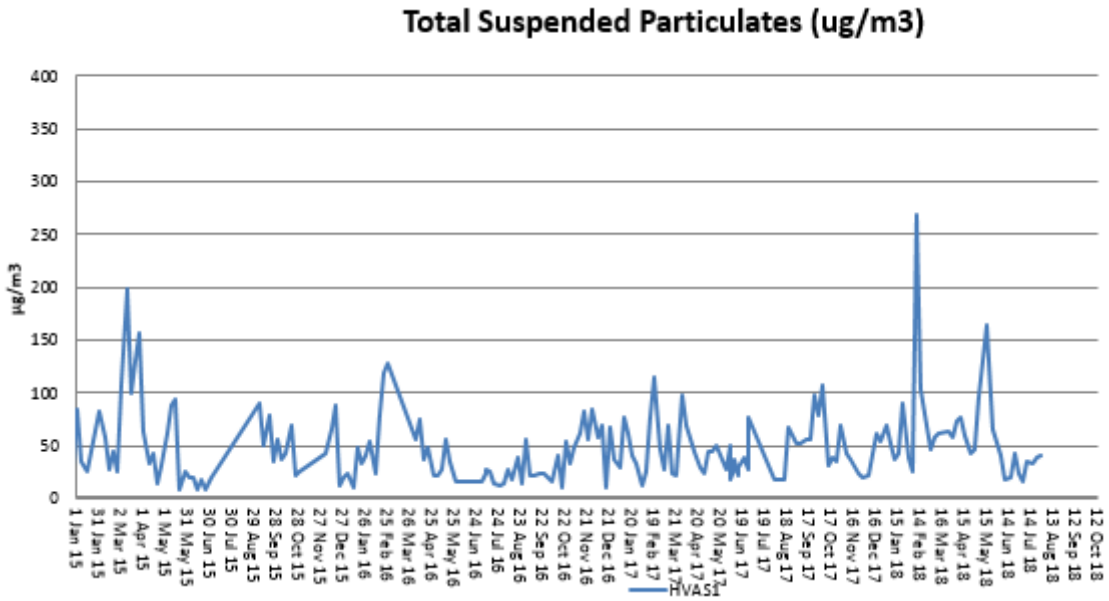


C. High Volume Air Sampler - Total Suspended Particulates

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 August. Full report provided separately on webpage.

6. Surface Water Monitoring

A. Gundong Creek

Gundong Creek did not flow during August 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 June in line with license requirements.

Results from this round of monitoring fell within expected limits.

A further round of monitoring is scheduled in for September.

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
89602	2/08/2018 13:46	0.09	Harts Cottage
89602	2/08/2018 13:46	0.1	Tomingley Village
89830	13/08/2018 12:57	0.1	Harts Cottage
89830	13/08/2018 12:57	0.09	Tomingley Village
89884	15/08/2018 14:12	0.1	Harts Cottage
89884	15/08/2018 14:12	0.1	Tomingley Village
89902	16/08/2018 12:57	0.07	Harts Cottage
89902	16/08/2018 12:57	0.07	Tomingley Village
89970	18/08/2018 14:59	0.08	Harts Cottage
89970	18/08/2018 14:59	0.07	Tomingley Village
89999	20/08/2018 15:16	0.16	Harts Cottage
89999	20/08/2018 15:16	0.16	Tomingley Village
90101	22/08/2018 14:55	0.12	Harts Cottage
90101	22/08/2018 14:55	0.12	Tomingley Village
90127	24/08/2018 12:53	0.11	Harts Cottage
90127	24/08/2018 12:53	0.09	Tomingley Village
90154	25/08/2018 16:28	0.34	Harts Cottage
90154	25/08/2018 16:28	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: 4.75 ppm
- Daily maximum: 9.36 ppm on 6th August
- Daily minimum: 1.0 ppm on 11th August
- Number of exceedances: zero

10. Biodiversity Monitoring

Fauna deaths:

- No fauna deaths were recorded during August.