TOMINGLEY
GOLD OPERATIONS PTY LTD
(A wholly owned subsidiary of Alkane Resources Ltd)

Tomingley Gold Project

Monthly Environmental Monitoring Report – October 2015

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TABLE OF REVISIONS

Revision Number	Revision Date	Prepared By	Comments
Revision 1		MW	Submitted for Information

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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 October 2015.

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

2. WEATHER FOR OCTOBER 2015

2.1 WEATHER STATION DATA

TGO weather data is presented below.

Figure 1 **October Wind rose**

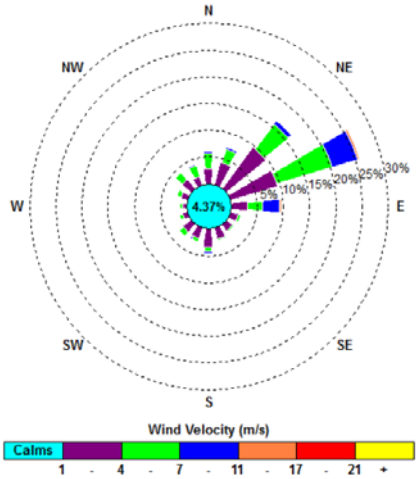


Figure 2 Rainfall October 2015

October 2015	Rainfall (mm)
10/10/2015	1.8
11/10/2015	4.2
18/10/2015	0.2
19/10/2015	5.8
21/10/2015	1
22/10/2015	10.2
23/10/2015	0.2
29/10/2015	1.0
30/10/2015	18.2
31/10/2015	13.8
Total	56.4

3. MONITORING LOCATIONS

Figure 3indicates 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

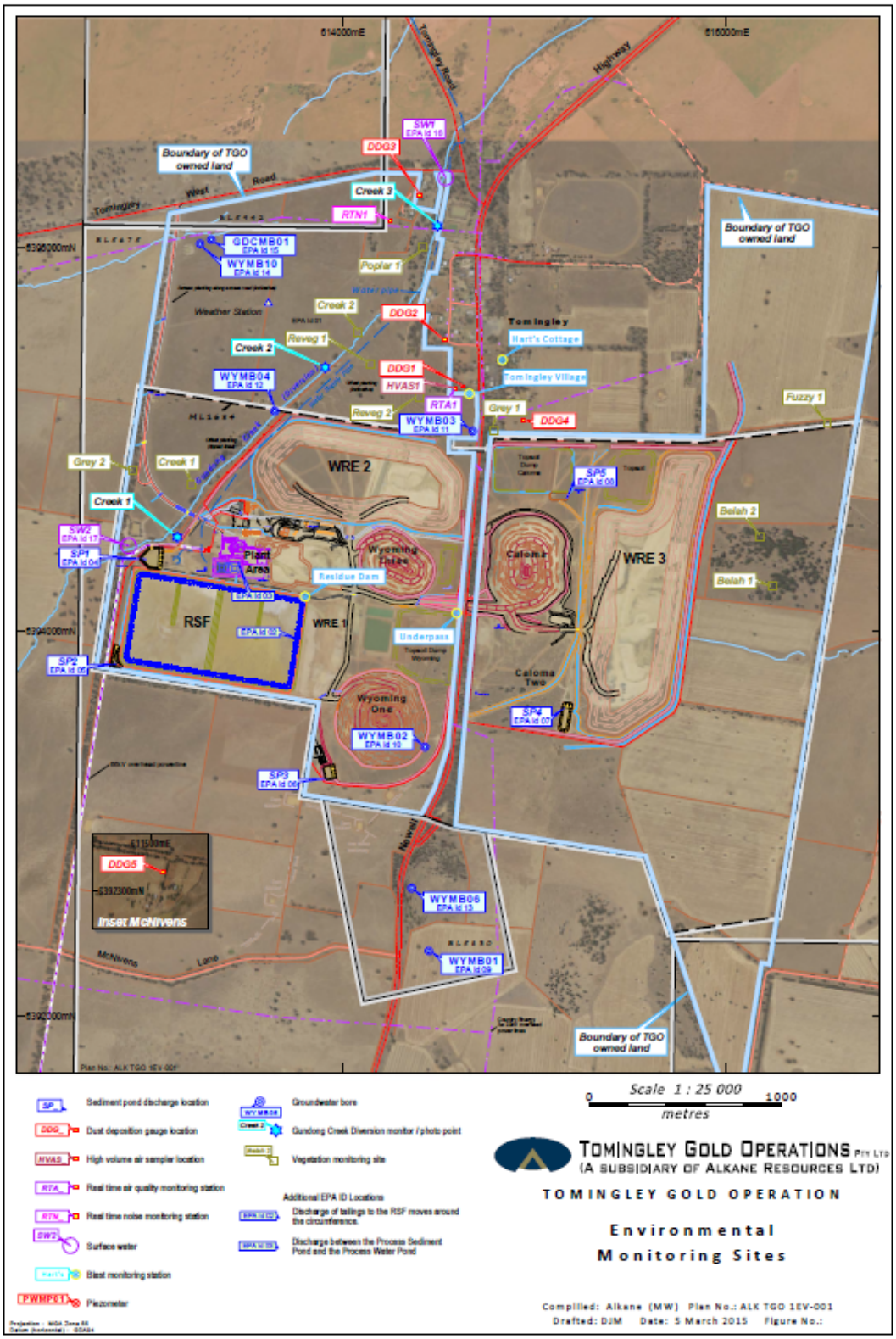
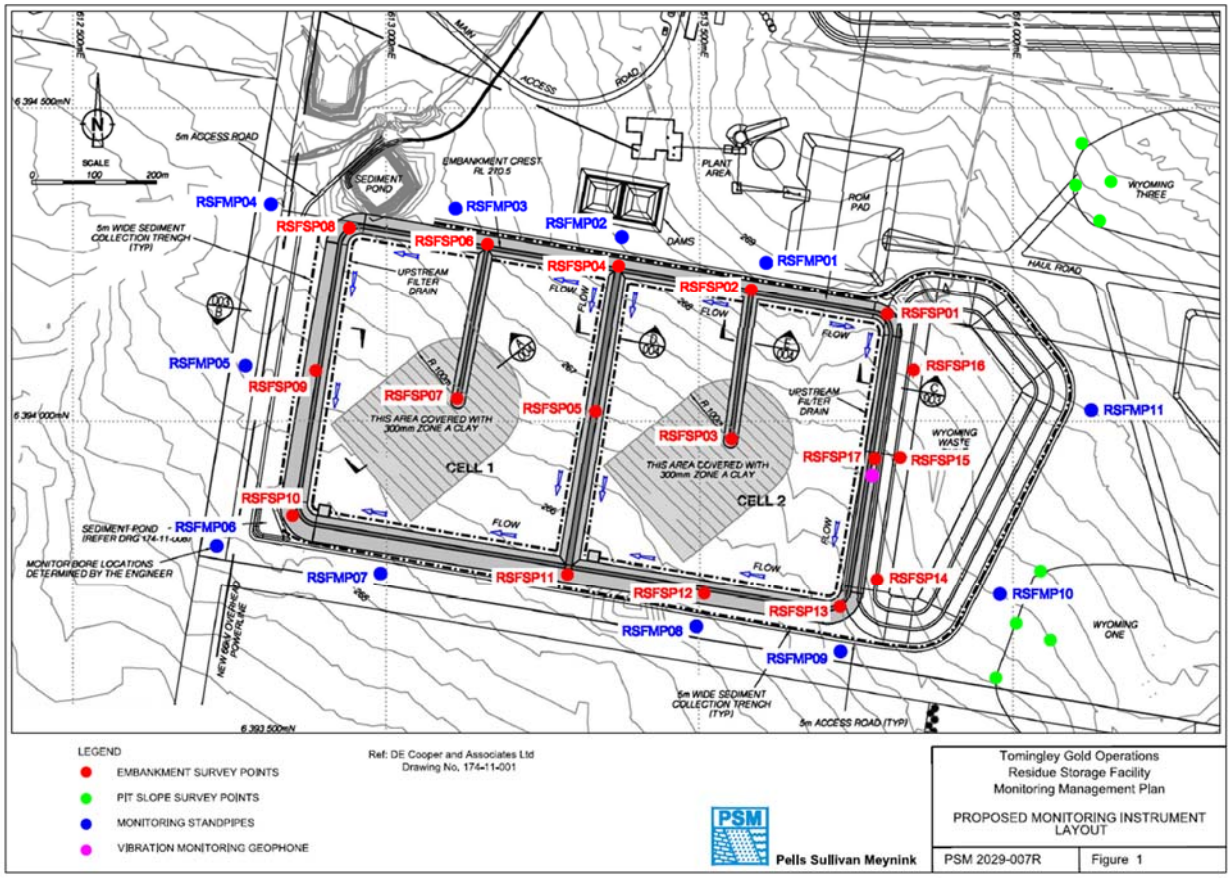


Figure 4 indicates the location of environmental and survey monitoring points on and around the Residue Storage Facility.

Figure 4 Residue Storage Facility monitoring points



4. AIR QUALITY MONITORING

4.1 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 24 Hour Average was not exceeded month.

Figure 5 TEOM Data October 2015

Date	24 Hr Averages (µg/m3)	Running Average	Comment
1/10/2015	29.6	21.7	
2/10/2015	22.3	21.7	
3/10/2015	22.4	21.7	
4/10/2015	21.4	21.7	
5/10/2015	20.0	21.7	
6/10/2015	23.5	21.7	
7/10/2015	45.4	21.8	
8/10/2015	31.3	21.8	
9/10/2015	20.8	21.8	1 hr avg data used
10/10/2015	30.0	21.8	
11/10/2015	11.3	21.8	1 hr avg data used
12/10/2015	18.7	21.8	
13/10/2015	32.0	21.8	
14/10/2015	17.6	21.8	
15/10/2015	17.1	21.8	
16/10/2015	12.9	21.8	
17/10/2015	25.2	21.8	
18/10/2015	21.6	21.8	1 hr avg data used
19/10/2015	13.3	21.8	1 hr avg data used
20/10/2015	16.1	21.8	
21/10/2015	16.4	21.8	
22/10/2015	8.1	21.8	
23/10/2015	8.1	21.7	
24/10/2015	12.1	21.7	
25/10/2015	16.4	21.6	
26/10/2015	17.6	21.5	
27/10/2015	12.5	21.4	1 hr avg data used
28/10/2015	12.6	21.3	
29/10/2015	14.7	21.3	
30/10/2015	14.5	21.2	
31/10/2015	6.5	21.1	
Average	19.1		
	24 Hour criteria exceedance		

4.2 DEPOSITIONAL DUST

Depositional Dust monitoring undertaken during this month returned the results indicated in Table 3 below. The performance criteria for deposited dust is averaged over 12 months.

Figure 6 Dust Deposition Results September 2015

Location	Date Monitored	Insoluble solids (g/m^2/month)	Maximum increase in deposited dust level
DDG1	03/09/2015–01/10/2015	0.7	The greatest increase in deposited dust level was recorded at DDG4; a decrease of 2 g/m^2/month. This increase is due • Seasonal variation
DDG2	03/09/2015–01/10/2015	0.2	
DDG3	03/09/2015–01/10/2015	0.2	
DDG4	03/09/2015–01/10/2015	1.6	
DDG5	03/09/2015–01/10/2015	0.2	

4.3 HIGH VOLUME AIR SAMPLER - TOTAL SUSPENDED PARTICULATES

High Volume Air Sampling (HVAS) for Total Suspended Particulates (TSP) was undertaken this month. Table 4 below provides the results.

The performance criteria for TSP is averaged over 12 months

Figure 7 Hi-Volume Air Sampler Data September 2015

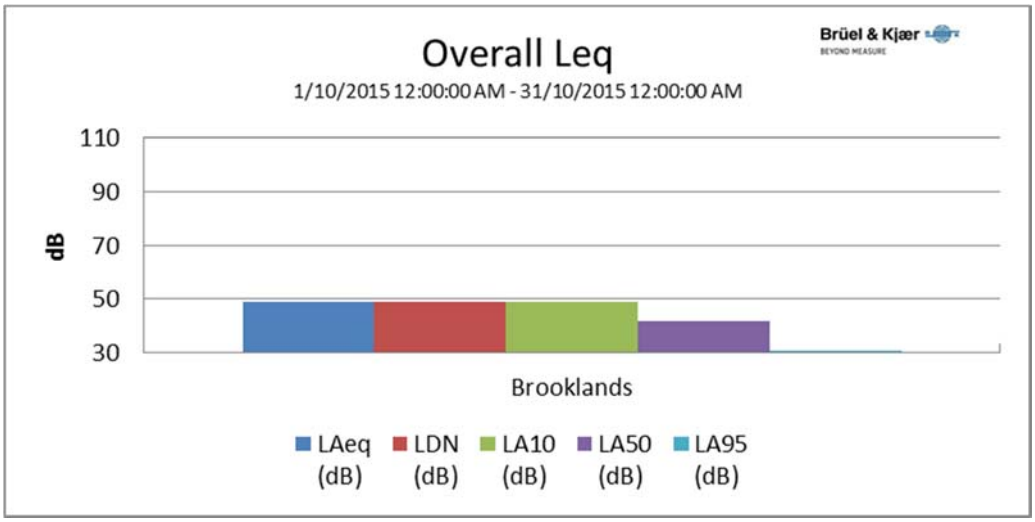
Location	Sheet ID	Date On	Results (TSP µg/m³)	Performance Criteria (Annual Average)
HVAS1	9149230	05-Sep-15	89.7	90 µg/m3.
HVAS1	9149231	11-Sep-15	51.3	
HVAS1	9149232	17-Sep-15	79.6	
HVAS1	9149233	23-Sep-15	36	
HVAS1	9149234	29-Sep-15	56.9	

5. NOISE MONITORING

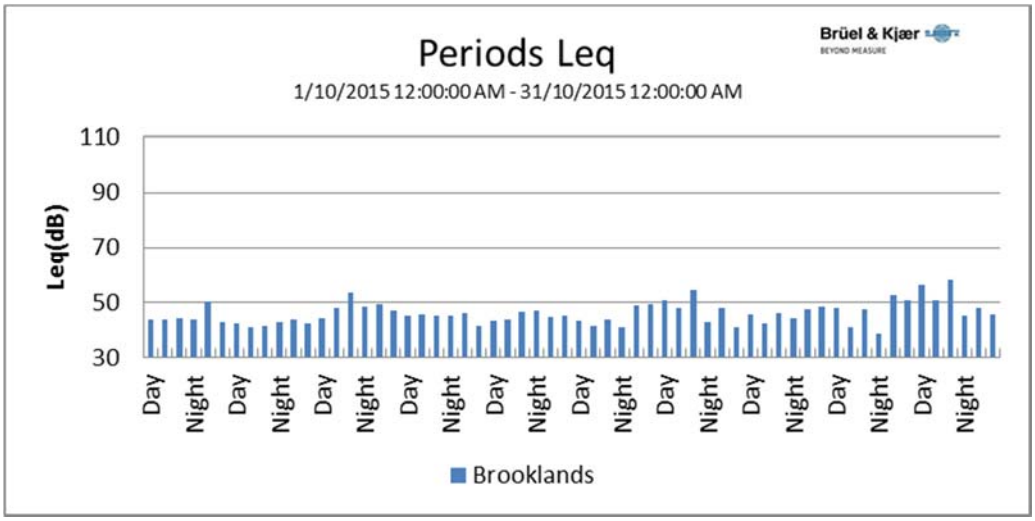
5.1 REAL-TIME NOISE MONITORING

See real-time noise monitoring data presented below.

Figure 8 TGO Noise Monitoring October 2015



Location	Start Time	End Time	Activity	LDN (dB)	L_{Aeq} (dB)	L_{AMin} (dB)	L_{A10} (dB)	L_{A50} (dB)	L_{A95} (dB)
Brooklands	1/10 12:00:00 AM	31/10 12:00:00 AM	100%	48.8	48.8	21.3	48.9	41.5	30.7



6. SURFACE WATER MONITORING

6.1 GUNDONG CREEK

There was no flow in the Gundog Creek During October.

6.2 SEDIMENTATION PONDS

No discharge and associated water testing occurred this month.

7. GROUNDWATER MONITORING

No ground Water monitoring occurred in October, next round of monitoring is scheduled for December.

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 Harts Cottage and Tomingley Village.

Figure 10 Blast Monitoring

EventKey	Event	Date/Time	Max R (mm/s)	Monitor Location
64681	TMG07U	1/10/2015 13:00	0.6	Residue Dam
64681	TMG07U	1/10/2015 13:00	0.75	Underpass
64699	TMG07V	2/10/2015 12:00	0.17	Residue Dam
64699	TMG07V	2/10/2015 12:00	1.8	Underpass
64734	TMG07W	6/10/2015 14:13	0.21	Residue Dam
64734	TMG07W	6/10/2015 14:13	1.2	Underpass
64783	TMG07X	8/10/2015 12:59	0.93	Residue Dam
64783	TMG07X	8/10/2015 12:59	1.47	Underpass
64784	TMG07Y	8/10/2015 13:13	0.09	Residue Dam
64784	TMG07Y	8/10/2015 13:13	0.79	Underpass
64834	TMG07Z	10/10/2015 12:55	0.09	Residue Dam
64834	TMG07Z	10/10/2015 12:55	0.44	Underpass
64867	TMG080	12/10/2015 14:00	0.76	Residue Dam
64867	TMG080	12/10/2015 14:00	1.92	Underpass
64935	TMG081	15/10/2015 12:57	0.11	Residue Dam
64935	TMG081	15/10/2015 12:57	0.95	Underpass
65009	TMG082	19/10/2015 12:55	0.09	Residue Dam
65009	TMG082	19/10/2015 12:55	0.93	Underpass
65012	TMG083	19/10/2015 13:04	0.19	Residue Dam
65012	TMG083	19/10/2015 13:04	0.44	Underpass
65036	TMG084	20/10/2015 13:00	0.17	Residue Dam
65036	TMG084	20/10/2015 13:00	1.26	Underpass
65130	TMG085	24/10/2015 12:58	0.11	Residue Dam
65130	TMG085	24/10/2015 12:58	0.87	Underpass
65131	TMG086	24/10/2015 13:13	0.31	Residue Dam
65131	TMG086	24/10/2015 13:13	0.49	Underpass
65153	TMG087	26/10/2015 14:04	0.7	Residue Dam
65153	TMG087	26/10/2015 14:04	1.08	Underpass
65226	TMG088	30/10/2015 12:01	0.1	Residue Dam
65226	TMG088	30/10/2015 12:01	0.57	Underpass
65253	TMG089	31/10/2015 13:59	0.09	Residue Dam
65253	TMG089	31/10/2015 13:59	1.59	Underpass

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.

The WAD results for October 2015 are:

- Monthly average: 2.9 ppm
- Daily maximum: 10.37 ppm on 16th Oct.
- Daily minimum: 1.09 ppm on 8th Oct.
- Number of exceedances: zero

10. BIODIVERSITY MONITORING

- Fauna deaths:
  - There were no fauna deaths in the RSF for the month.
- Native fauna sightings:
  - 15th October, Appostle Bird, *Struthidea cinerea* was sighted dead on the site access road.
  - 16th October, Bearded Dragon on fence post to south of RSF
  - 28th October, Grey Crowned Babbler *Pomatostomus temporalis* was seen feeding near the SW corner of the RSF
  - Family of Wood Ducks with approx 8 chicks noted to be roosting to the west of the Process Water Storage
- Single fauna death recorded on site access road. No other fauna deaths recorded on site.
- Vertebrate pests:
  - Foxes and hares are seen occasionally.