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

Tomingley Gold Project

Monthly Environmental Monitoring Report – February 2015

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TABLE OF REVISIONS

Revision Number	Revision Date	Prepared By	Comments
Revision 1		Mark Williams	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 February 2015.

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

2. WEATHER FOR FEBRUARY 2015

2.1 WEATHER STATION DATA

TGO weather data is presented below.

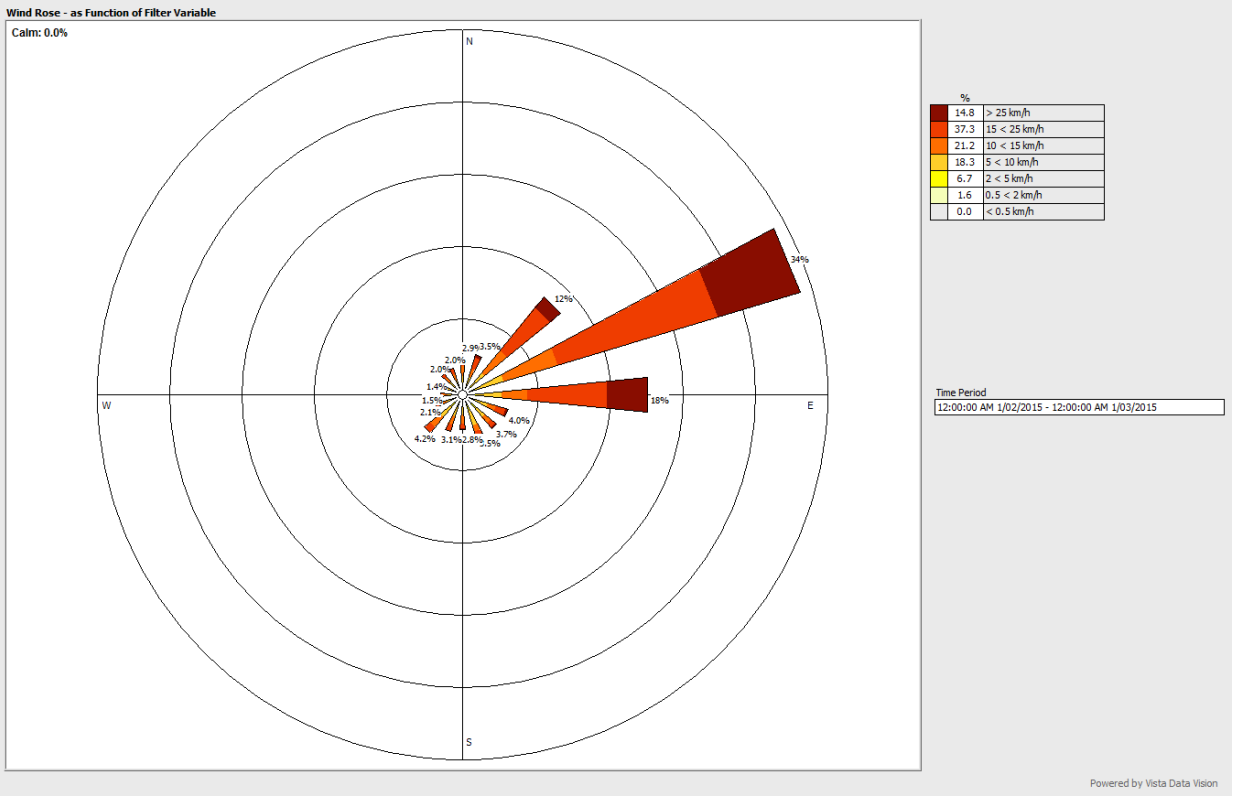


Figure 1. February 2015 wind monitoring station data

2.2 RAINFALL DATA

February	**Amount (millimetres)**
2/02/2015	1.6
12/02/2015	3.2
13/2/2015	5.8
25/02/2015	1.2
Total	**Approximately 11.8mm**

Table 1. February 2015 rainfall data.

3. MONITORING LOCATIONS

Figure 2 indicates the location of where monitoring is undertaken for the project. Any additional monitoring undertaken will be discussed within the body of this report.

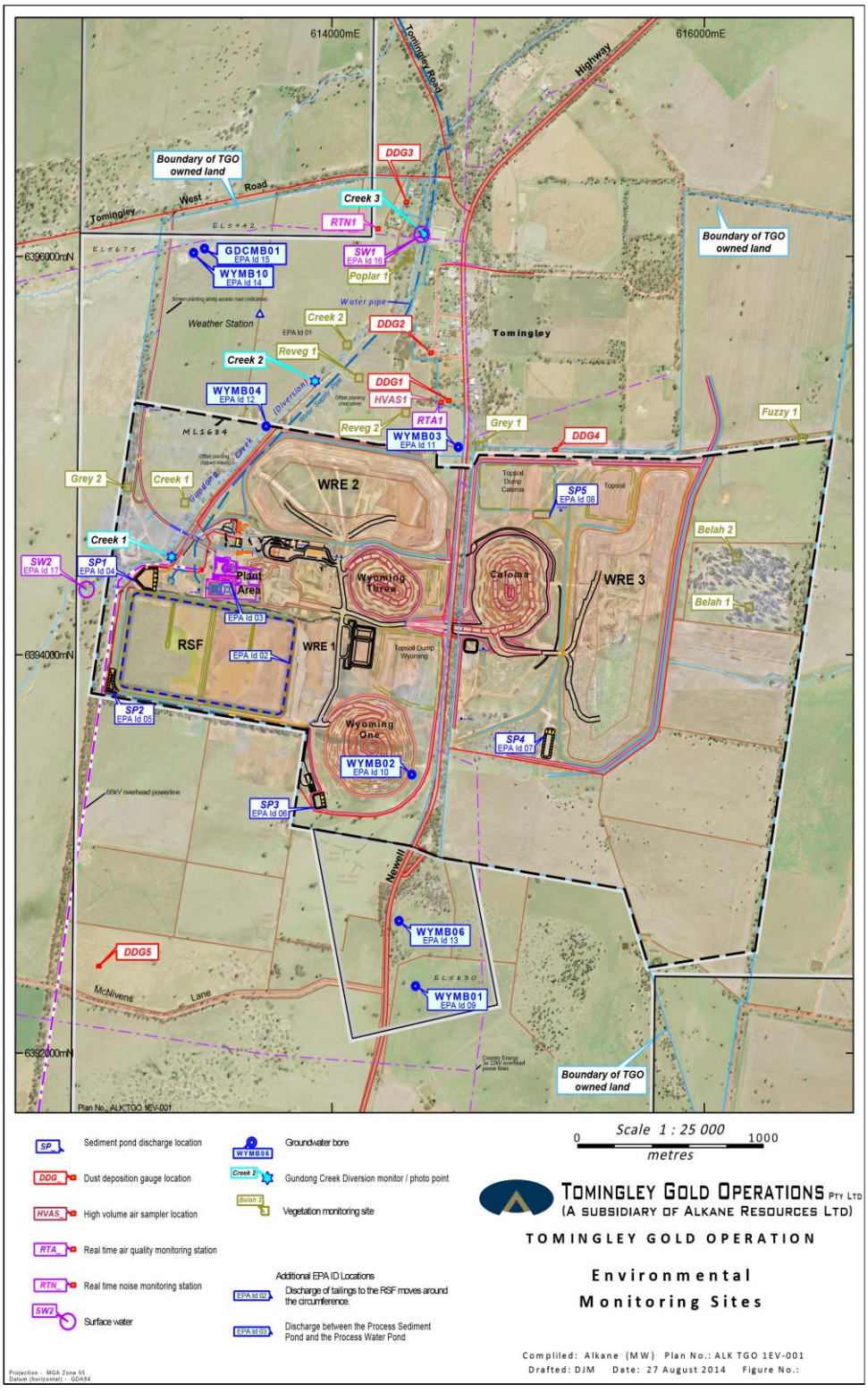


Figure 2. TGO water and vegetation monitoring points.

Figure 3 indicates the location of environmental and survey monitoring points on and around the Residue Storage Facility.

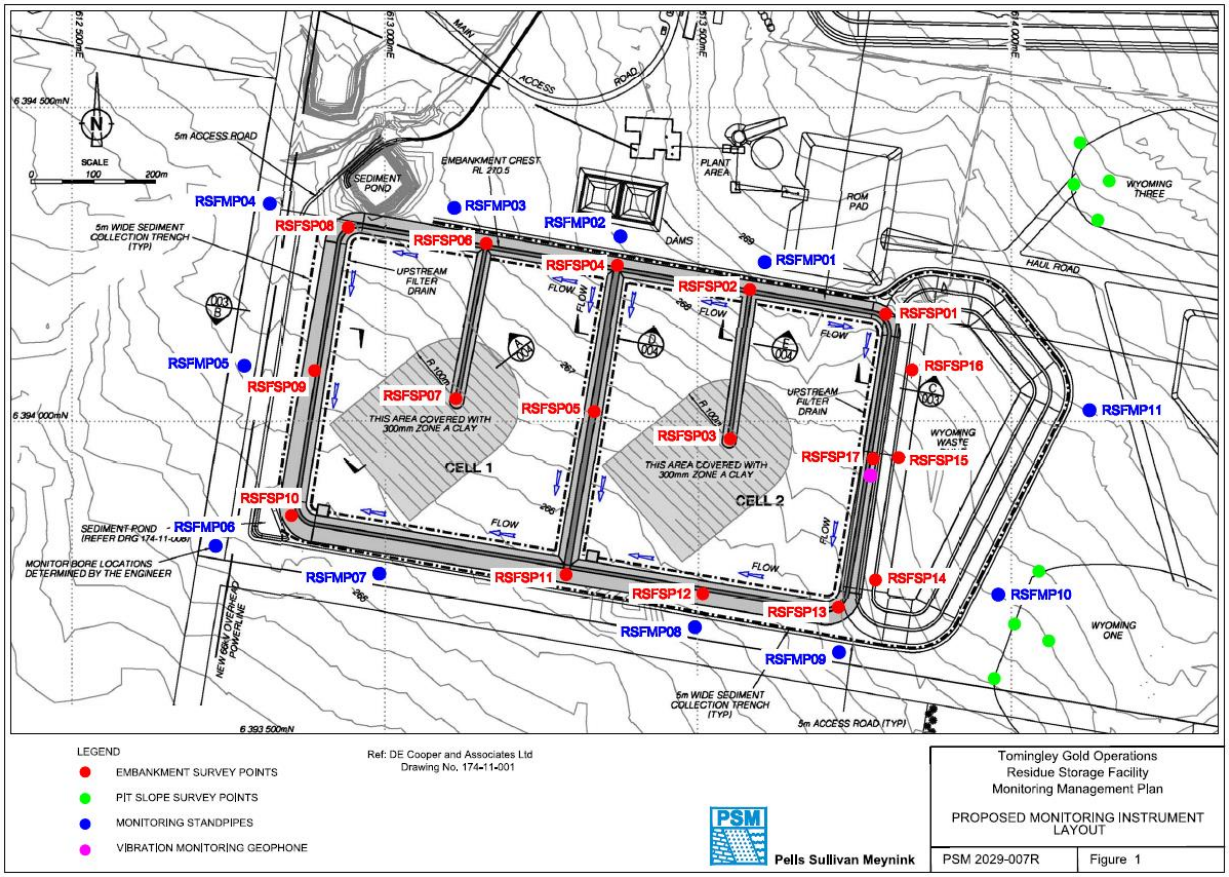


Figure 3. Residue Storage Facility monitoring points.

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 this month.

Date	24 Hr Averages (µg/m3)	Running Average (µg/m3)	Comment
1/02/2015	28.2	19.6	
2/02/2015	20.0	19.6	
3/02/2015	26.6	19.6	
4/02/2015	27.2	19.7	
5/02/2015	33.8	19.7	
6/02/2015	17.3	19.7	
7/02/2015	20.2	19.7	
8/02/2015	32.0	19.8	
9/02/2015	34.2	19.8	
10/02/2015	28.2	19.8	
11/02/2015	15.2	19.8	
12/02/2015	14.8	19.8	
13/02/2015	13.5	19.8	
14/02/2015	13.1	19.8	
15/02/2015	14.7	19.7	
16/02/2015	13.4	19.7	
17/02/2015	25.2	19.7	1 hr average data used
18/02/2015	21.4	19.8	
19/02/2015	19.9	19.8	
20/02/2015	15.2	19.7	
21/02/2015	12.7	19.7	
22/02/2015	9.6	19.7	
23/02/2015	20.7	19.7	
24/02/2015	33.2	19.7	
25/02/2015	12.6	19.7	1 hr average data used
26/02/2015	17.4	19.7	1 hr average data used
27/02/2015	28.0	19.7	
28/02/2015	17.5	19.7	
Average	20.9		
	24 Hour criteria exceedance		

Table 2. Real time dust monitoring

4.2 DEPOSITIONAL DUST

Depositional Dust monitoring undertaken during December 2014 returned the results indicated in Table 3 below.

Location	Date Monitored	Insoluble solids (g/m^2/month)	Maximum increase in deposited dust level
DDG1	6/01/15 – 2/02/15	1.1	The greatest increase in deposited dust level was recorded at DDG4; an increase of 11.4 g/m^2/month.
DDG2	6/01/15 – 2/02/15	1.2	
DDG3	6/01/15 – 2/02/15	0.9	
DDG4	6/01/15 – 2/02/15	16.2	
DDG5	6/01/15 – 2/02/15	1.1	

Table 3. Deposited Dust results for January 2015. DDG4 recorded 16.2 g/m2/month. This exceeds the annual average threshold for deposited dust.

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

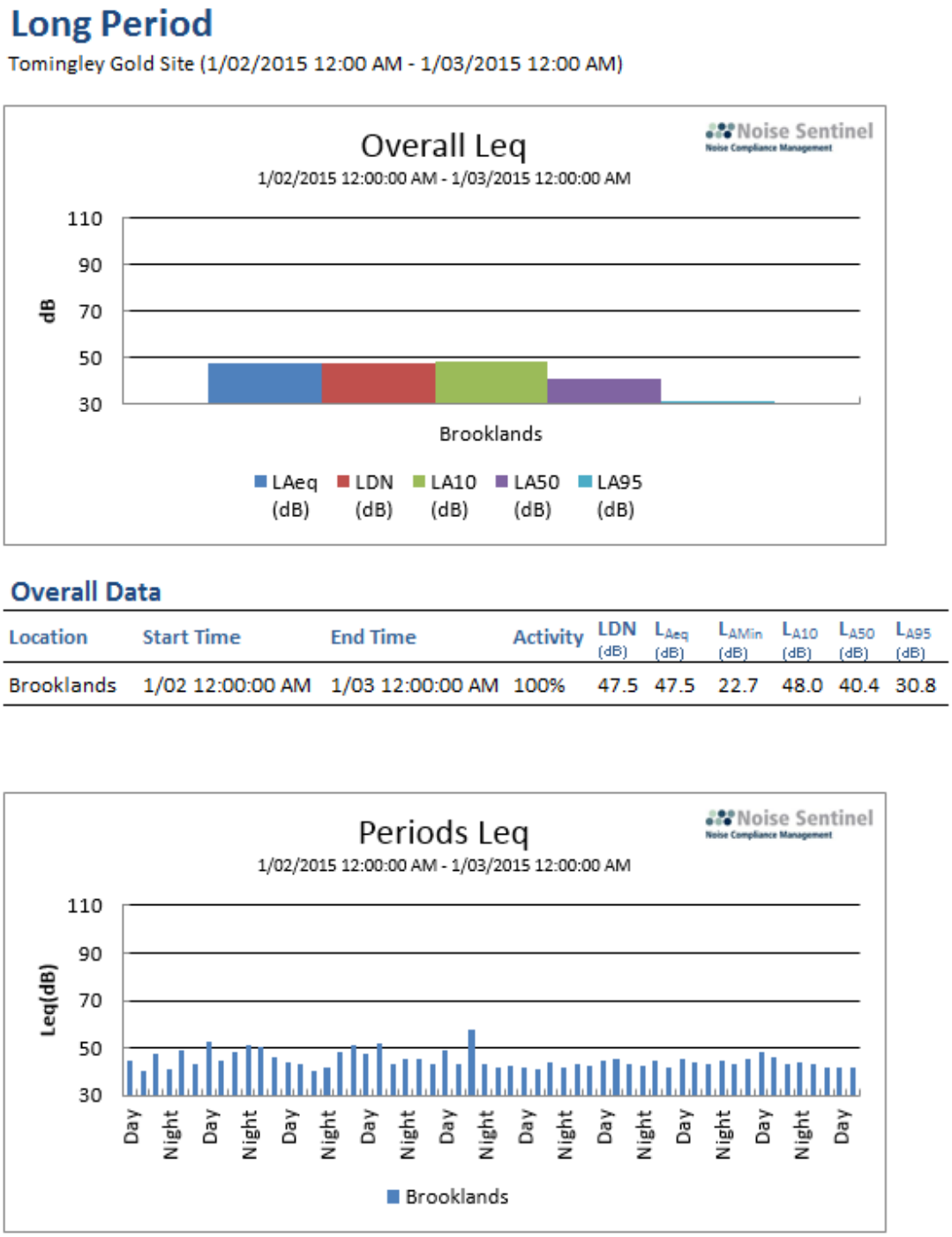
Location	Sheet ID	Date On	Date Off	Results (TSP µg/m³)	Performance Criteria (Annual Average)
HVAS1	8890497	2 January 2015	3 January 2015	84.8	90 µg/m3
HVAS1	8890498	8 January 2015	9 January 2015	35.6	
HVAS1	8890499	14 January 2015	15 January 2015	26.6	
HVAS1	9027558	1 February 2015	2 February 2015	83.4	

Table 4. High Volume Air Sampler Data for January 2015

5. NOISE MONITORING

5.1 REAL-TIME NOISE MONITORING

See real-time noise monitoring data presented below.



Overall Data

Location	Start Time	End Time	Activity	LDN (dB)	L_{Aeq} (dB)	L_{AMin} (dB)	L_{A10} (dB)	L_{A50} (dB)	L_{A95} (dB)
Brooklands	1/02 12:00:00 AM	1/03 12:00:00 AM	100%	47.5	47.5	22.7	48.0	40.4	30.8

Figure 4. Fixed, real time noise monitoring data.

6. SURFACE WATER MONITORING

6.1 GUNDONG CREEK

Gundong Creek did not run the reporting period and hence water sampling did not occur.

6.2 SEDIMENTATION PONDS

No discharge or water testing occurred this month.

7. GROUNDWATER MONITORING

Groundwater monitoring is carried out quarterly and will be completed in March 2015.

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.

EventKey	Event	Date/Time	Max R (mm/s)	Max AB (Pa)	Max AB (dBL)	Monitor location
60178	TMG04R	28/02/2015 14:01	0.15	0.92	93.3	Harts Cottage
60152	TMG04Q	27/02/2015 13:42	0.24	2.1	100.4	Harts Cottage
60019	TMG04P	23/02/2015 12:56	0.19	7.72	111.7	Harts Cottage
59914	TMG04O	18/02/2015 13:39	0.31	6.27	109.9	Harts Cottage
59872	TMG04N	16/02/2015 12:59	0.32	2.47	101.8	Harts Cottage
59822	TMG04M	13/02/2015 13:00	0.26	3.05	103.7	Harts Cottage
59719	TMG04L	10/02/2015 12:58	0.35	6.53	110.3	Harts Cottage
59660	TMG04K	6/02/2015 12:56	0.19	5.73	109.1	Harts Cottage
59592	TMG04J	4/02/2015 15:50	0.01	0.26	82.2	Harts Cottage
59550	TMG04I	2/02/2015 13:06	0.2	4.48	107	Harts Cottage
60178	TMG04R	28/02/2015 14:01	0.15	1.29	96.2	Tomingley Village
60152	TMG04Q	27/02/2015 13:42	0.23	2.42	101.6	Tomingley Village
60019	TMG04P	23/02/2015 12:56	0.18	9.22	113.3	Tomingley Village
59914	TMG04O	18/02/2015 13:39	0.46	6.75	110.6	Tomingley Village
59872	TMG04N	16/02/2015 12:59	0.28	2.27	101.1	Tomingley Village
59822	TMG04M	13/02/2015 13:00	0.35	4.35	106.7	Tomingley Village
59719	TMG04L	10/02/2015 12:58	0.56	10.8	114.6	Tomingley Village
59660	TMG04K	6/02/2015 12:56	0.27	7.83	111.9	Tomingley Village
59592	TMG04J	4/02/2015 15:50	0	0.19	79.4	Tomingley Village
59550	TMG04I	2/02/2015 13:06	0.27	7.33	111.3	Tomingley Village

Table 5. Blast monitoring

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 this month are:

- Monthly average: 3.865 ppm
- Daily maximum: 16.065 ppm on 16 February.
- Daily minimum: 0.365 ppm on 1 February.
- Number of exceedances: zero

10. BIODIVERSITY MONITORING

- The number of fauna deaths during the month was zero.
- Native fauna sightings:
  - Red-backed Kingfisher, *Todiramphus pyrrhopygius,* seen at 'Brooklands'.
- Native animal rescue:
  - Inland Carpet Python, *Morelia spilota metcalfei,* was seen twice near the front access road before being shifted off the road to a sheltered location in vegetation area nearby.
  - Juvenile Crested Pigeon, *Ocyphaps lophotes*, rescued from bunded area within the processing plant.
- Vertebrate pests:
  - A foxes and hares observed frequently across the site during the days and nights.