



# Monthly Environmental Monitoring Report

Yancoal Hunter Valley Operations

February 2018

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## Revision History

Version No.	Person Responsible	Document Status	Date
1.0	Environmental Advisor	Draft	16/04/2018
1.1	Environmental Specialist	Final	17/04/2018

# 1.0 INTRODUCTION

This report has been compiled to provide a monthly summary of environmental monitoring results for Hunter Valley Operations (HVO). This report includes all monitoring data collected for the period 1<sup>st</sup> February to 28<sup>th</sup> February 2018.

# 2.0 AIR QUALITY

## 2.1 Meteorological Monitoring

HVO maintains two meteorological stations; ‘Corporate’ and ‘Cheshunt’ (Refer to Figure 4: Air Quality Monitoring Location Plan).

### 2.1.1 Rainfall

Rainfall for the period is summarised in Table 1, the 2018 trend and historical trend are shown in Error! Reference source not found.

Table 1: Monthly Rainfall HVO

2018	Monthly Rainfall (mm)	Cumulative Rainfall (mm)
February	40.6	48.8

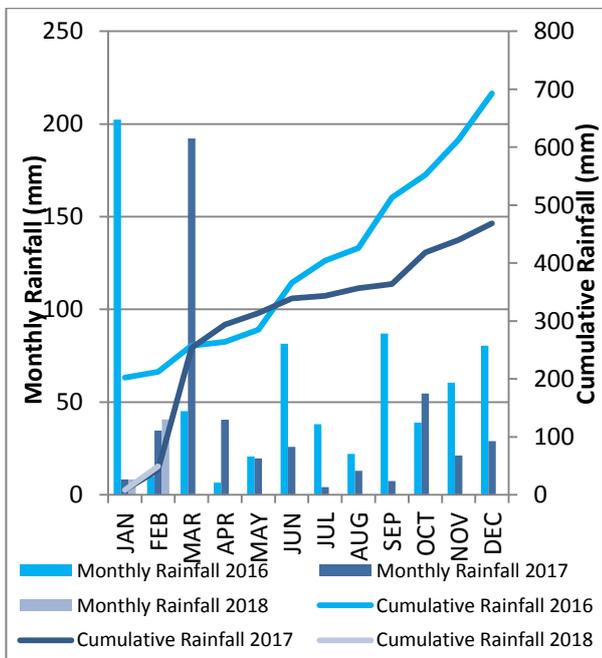


Figure 1: Rainfall Summary 2018

## 2.1.2 Wind Speed and Direction

South-easterly winds were dominant during November as shown in Figure 2 (HVO Corporate) and Figure 3 (HVO Cheshunt).

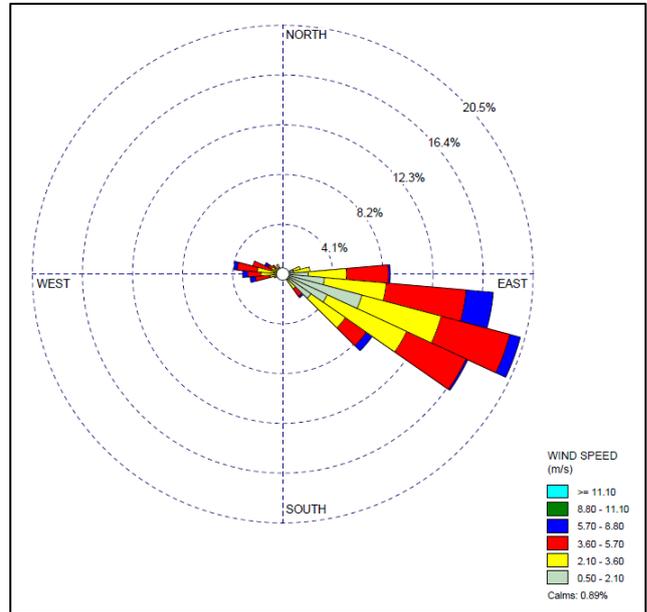


Figure 2: HVO Corporate Wind Rose – February 2018

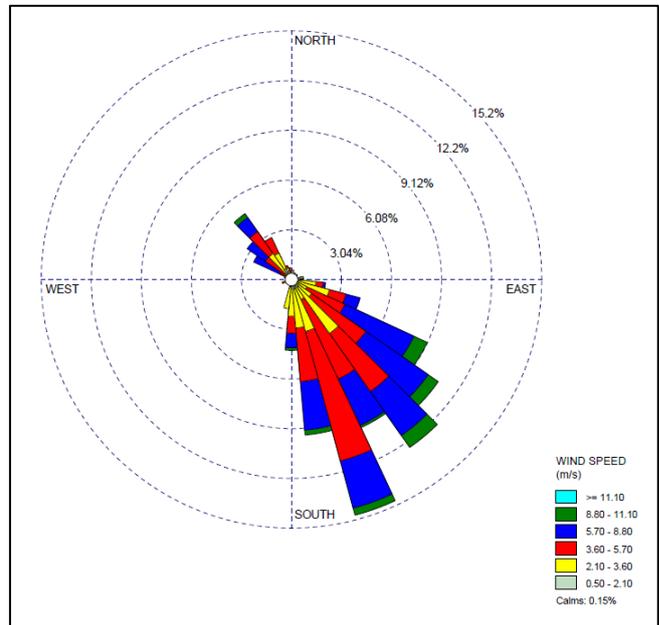


Figure 3: HVO Cheshunt Wind Rose – February 2018

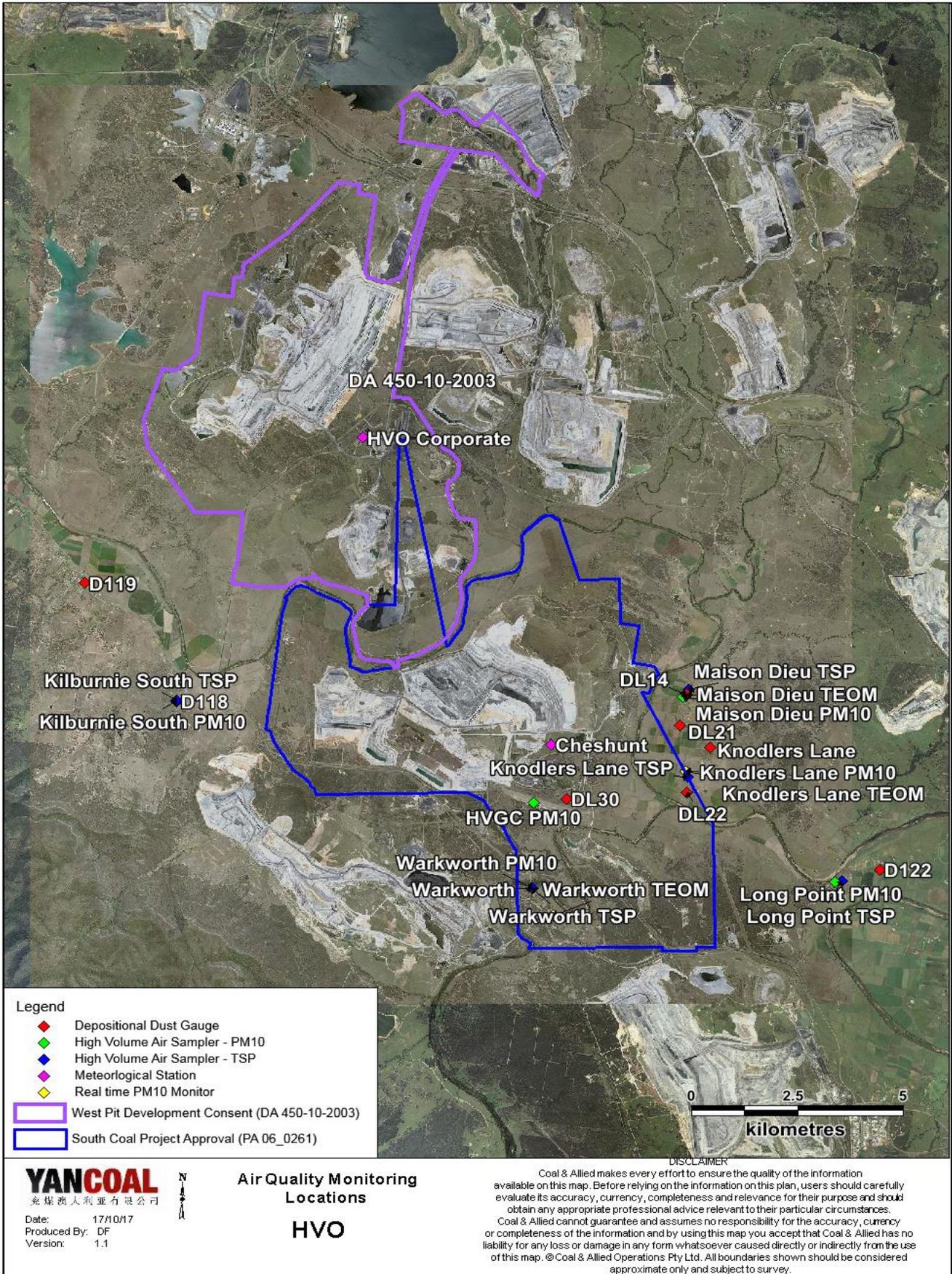


Figure 4: Air Quality Monitoring Location Plan

## 2.2 Depositional Dust

To monitor regional air quality, HVO operates and maintains a network of nine depositional dust gauges, situated on private and mine owned land surrounding HVO.

Figure 5 displays insoluble solids results from depositional dust gauges during the reporting period compared against the year-to-date average and the annual impact assessment criteria.

During the reporting period the D118, DL30 and Warkworth monitors recorded a monthly result above the long term impact assessment criteria of 4.0 g/m<sup>2</sup> per month.

The field notes associated with the D118, DL30 and Warkworth monitor's results indicate no evidence to suggest that the result was contaminated. An assessment of HVO's contribution against the long term impact assessment criteria will be provided in the 2018 Annual Review.

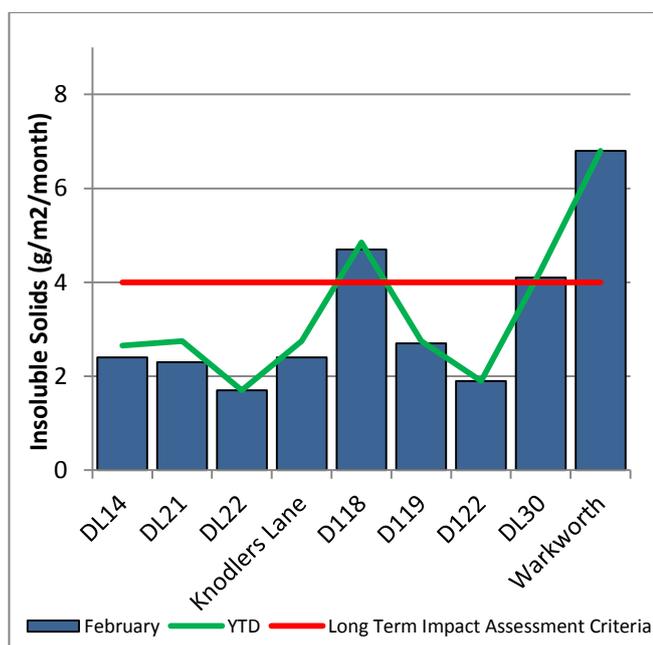


Figure 5: Depositional Dust Results – February 2018

## 2.3 Suspended Particulates

Suspended particulates are measured by a network of High Volume Air Samplers (HVAS) measuring Total Suspended Particulates (TSP) and Particulate Matter <10µm (PM<sub>10</sub>). The location of these monitors can be found in Figure 4. Each HVAS was run for 24 hours on a six-day cycle.

### 2.3.1 HVAS PM<sub>10</sub> Results

Figure 6 shows individual PM<sub>10</sub> results at each monitoring station against the short term impact assessment criteria of 50 µg/m<sup>3</sup>.

On 18/02/2018 the Kilburnie South HVAS PM<sub>10</sub> unit recorded an elevated 24 hour average. Investigation determined that HVO's maximum contribution at Kilburnie South HVAS PM<sub>10</sub> unit was 14.3µg/m<sup>3</sup> or 33.3% of the total measured PM<sub>10</sub>. Accordingly, no further action is required (as per approved Air Quality Monitoring Programme).

On 24/02/2018 two HVAS PM<sub>10</sub> units recorded and elevated 24 hour averages at Glider Club (55 µg/m<sup>3</sup>) and Long Point (82µg/m<sup>3</sup>). Investigation determined that HVO's maximum contribution at each monitor is as follows:

- Glider Club –29 µg/m<sup>3</sup>; or 52.7% of the measured result.
- Long Point –29 µg/m<sup>3</sup> or <35.4% of the measured result

Accordingly, no further action is required (as per approved Air Quality Monitoring Programme).

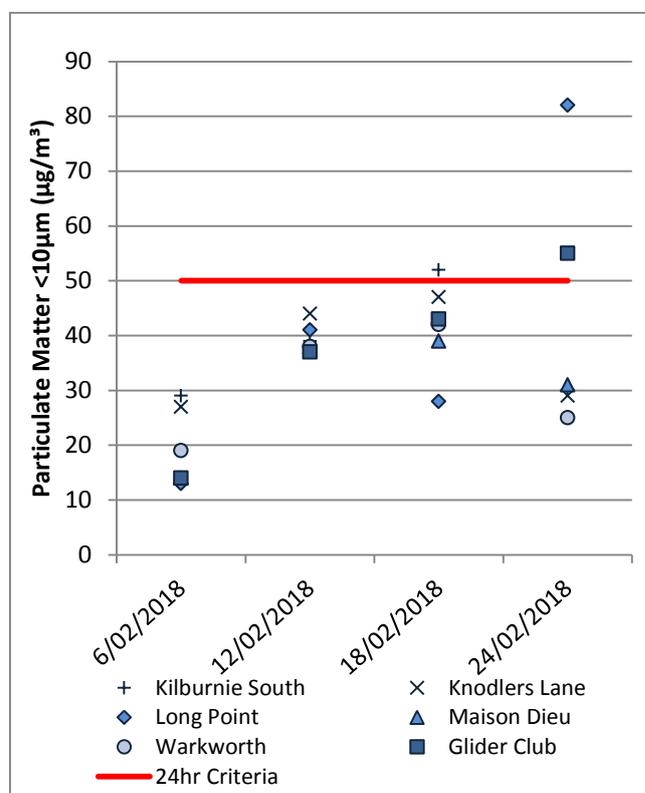


Figure 6: Individual PM<sub>10</sub> Results – February 2018

Figure 7 shows the year to date annual average PM<sub>10</sub> results.

An assessment of HVO's contribution against the long term impact assessment criteria will be provided in the 2018 Annual Review.

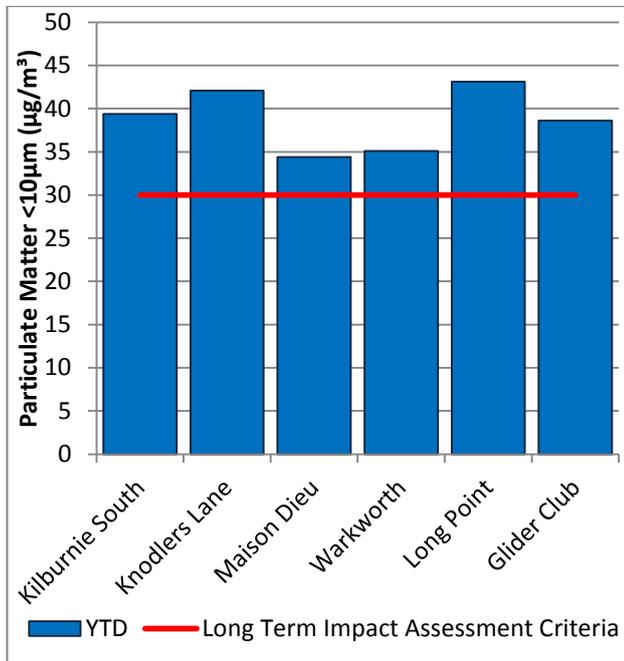


Figure 7: Year to Date Average PM<sub>10</sub> – February 2018

### 2.3.2 TSP Results

Figure 8 shows the annual average TSP results compared against the long term impact assessment criteria of 90µg/m<sup>3</sup>. An assessment of HVO's contribution against the long term impact assessment criteria will be provided in the 2018 Annual Review.

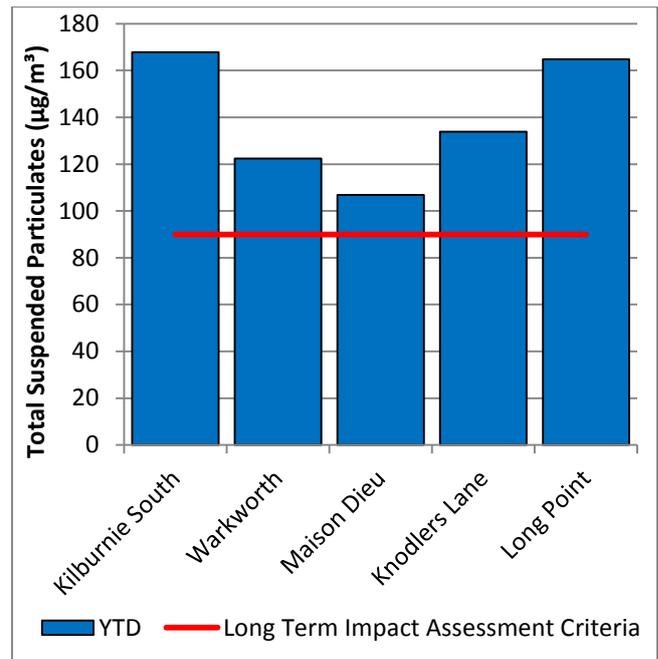


Figure 8: Year to Date Average Total Suspended Particulates – February 2018

### 2.3.3 Real Time PM<sub>10</sub> Results

Hunter Valley Operations maintains a network of real time PM<sub>10</sub> monitors. The real time air quality monitoring stations continuously log information and transmit data to a central database, generating alarms when particulate matter levels exceed internal trigger limits. Results from real time PM<sub>10</sub> monitoring are used as a reactive measure to guide mining operations to ensure compliance with the relevant conditions of the project approval.

Results for real time dust sampling is shown in Figure 9, including the daily 24 hour average PM<sub>10</sub> result and the year to date 24 hour PM<sub>10</sub> annual average.

Results from investigations of elevated results are presented in Table 2.

### 2.3.4 Real Time Alarms for Air Quality

During February the real time monitoring system generated 136 automated air quality related alarms. 41 were related to adverse weather conditions and 95 alarms relating to PM<sub>10</sub>.

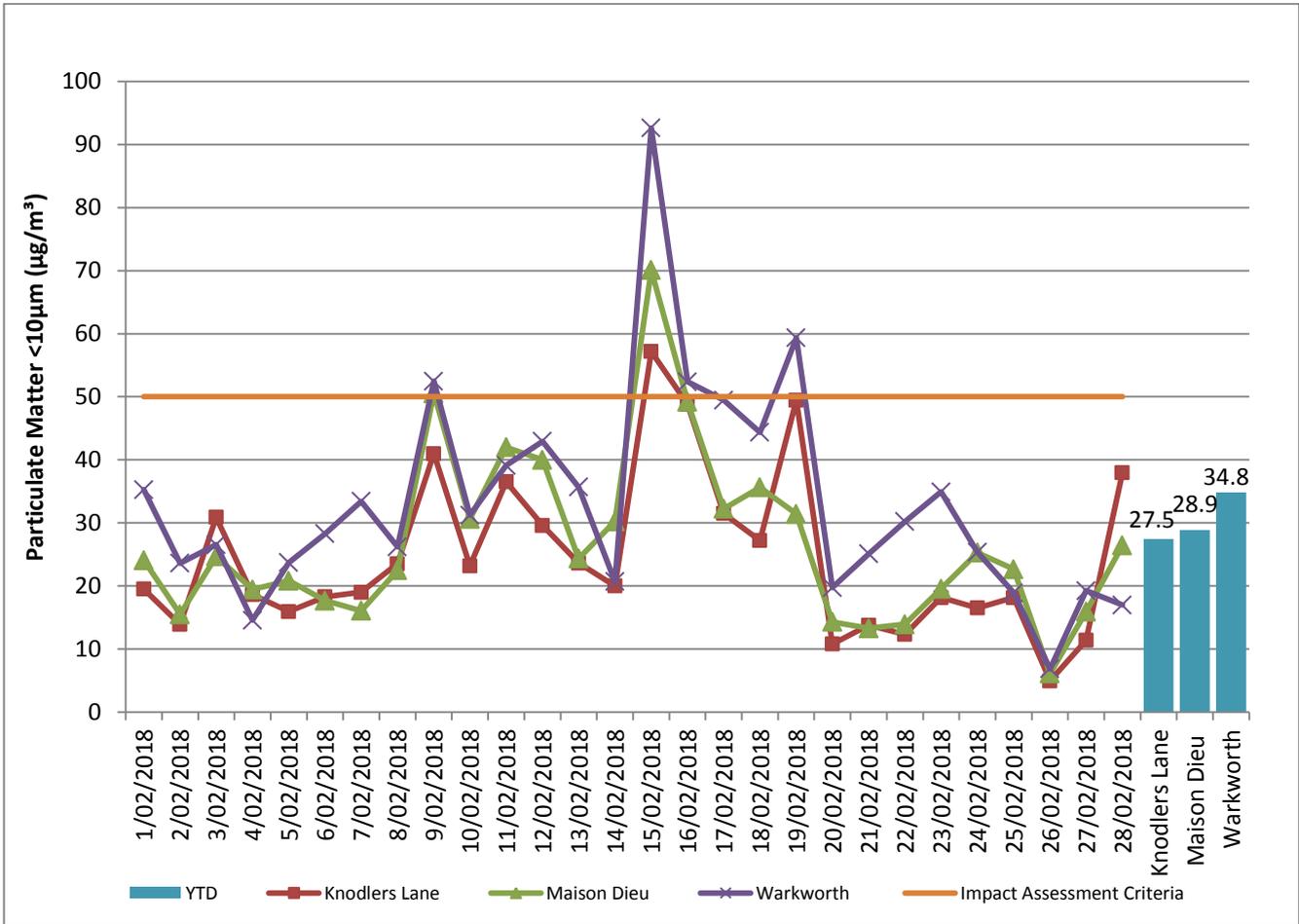


Figure 9: Real Time PM<sub>10</sub> 24hr average and YTD average – February 2018

Table 2: Real-time PM10 Investigation Results

Date	Site	24hr PM <sub>10</sub> result (µg/m <sup>3</sup> )	Estimated contribution from MTW (µg/m <sup>3</sup> )	Discussion
9/02/2018	Maison Dieu TEOM	50.5	6.2	An analysis of meteorological data has determined the maximum potential HVO contribution to the result to be in the order of 6.2µg/m <sup>3</sup> or 12.3% of the measured result. As the calculated contribution was less than 75% of the measured result HVO is not considered to be a significant contributor to the result as described in the HVO Air Quality Management Plan.

9/02/2018	Warkworth TEOM	52.5	16.3	An analysis of meteorological data has determined the maximum potential HVO contribution to the result to be in the order of 16.3µg/m <sup>3</sup> or 31.1% of the measured result. As the calculated contribution was less than 75% of the measured result HVO is not considered to be a significant contributor to the result as described in the HVO Air Quality Management Plan.
15/02/2018	Maison Dieu TEOM	70.1	3.2	An analysis of meteorological data has determined the maximum potential HVO contribution to the result to be in the order of 3.2 µg /m <sup>3</sup> or 2.6% of the measured result. As the calculated contribution was less than 75% of the measured result HVO is not considered to be a significant contributor to the result as described in the HVO Air Quality Management Plan.
15/02/2018	Knodlers Lane TEOM	57.2	1.7	An analysis of meteorological data has determined the maximum potential HVO contribution to the result to be in the order of 1.7µg/m <sup>3</sup> or 3.0% of the measured result. As the calculated contribution was less than 75% of the measured result HVO is not considered to be a significant contributor to the result as described in the HVO Air Quality Management Plan.
15/02/2018	Warkworth OEH TEOM	92.6	1.8	An analysis of meteorological data has determined the maximum potential HVO contribution to the result to be in the order of 1.8µg/m <sup>3</sup> or 3.5% of the measured result. As the calculated contribution was less than 75% of the measured result HVO is not considered to be a significant contributor to the result as described in the HVO Air Quality Management Plan.
16/02/2018	Warkworth OEH TEOM	52.4	21.1	An analysis of meteorological data has determined the maximum potential HVO contribution to the result to be in the order of 21.1µg/m <sup>3</sup> or 40.3% of the measured result. As the calculated contribution was less than 75% of the measured result HVO is not considered to be a significant contributor to the result as described in the HVO Air Quality

				Management Plan.
19/02/2018	Warkworth OEH TEOM	59.3	0	HVO could not have contributed to the measured result at this monitoring location as wind did not blow from the direction of HVO to the monitor at any time during the period.

### 3.0 WATER QUALITY

HVO maintains a network of surface water and groundwater monitoring sites.

#### 3.1.1 Surface Water

Surface water courses are sampled on a quarterly sampling regime. Water quality is evaluated through the parameters of pH, Electrical Conductivity (EC) and Total Suspended Solids (TSS).

Results of monitoring on Site Dams and the Hunter River as well as other natural tributaries are provided on a quarterly basis, results will appear in the March 2018 report.

#### 3.1.2 Site Water Use

Under water allocation licences issued by the NSW DPI Water, HVO is permitted to extract water from the Hunter River. During the reporting period, HVO extracted 70.9ML of water from the Hunter River.

#### 3.1.3 HRSTS Discharge

HVO participates in the Hunter River Salinity Trading Scheme (HRSTS), allowing discharge from licensed discharge points Dam 11N (to Farrell's Creek), Lake James (to the Hunter River) and Parnell's Dam (to Parnell's Creek). Discharges can only take place subject to HRSTS regulations.

During the reporting period no water was discharged under the HRSTS

### 3.2.1 Groundwater Monitoring Results

Groundwater monitoring is undertaken on a quarterly basis in accordance with the HVO Water Management Plan and Ground Water Monitoring Programme. Results of groundwater monitoring are reported quarterly and as such will be reported in the March 2018 monthly report.

### 4.0 BLASTING

HVO have a network of five blast monitoring units. These are located at nearby privately owned residences and function as regulatory compliance monitors. The location of these monitors can be found in Figure 15.

Blasting criteria are summarised in Table 3.

**Table 3: Blasting Criteria**

Airblast Overpressure (dB(L))	Comments
115	5% of the total number of blasts in a 12 month period
120	0%
Ground Vibration (mm/s)	Comments
5	5% of the total number of blasts in a 12 month period
10	0%

## 4.1 Blast Monitoring Results

During February, 15 blasts were initiated at HVO Figure 10 through to Figure 14. Error! Reference source not found. show the blast monitoring results for the reporting period against the impact assessment criteria. The criteria are summarised in Table 3.

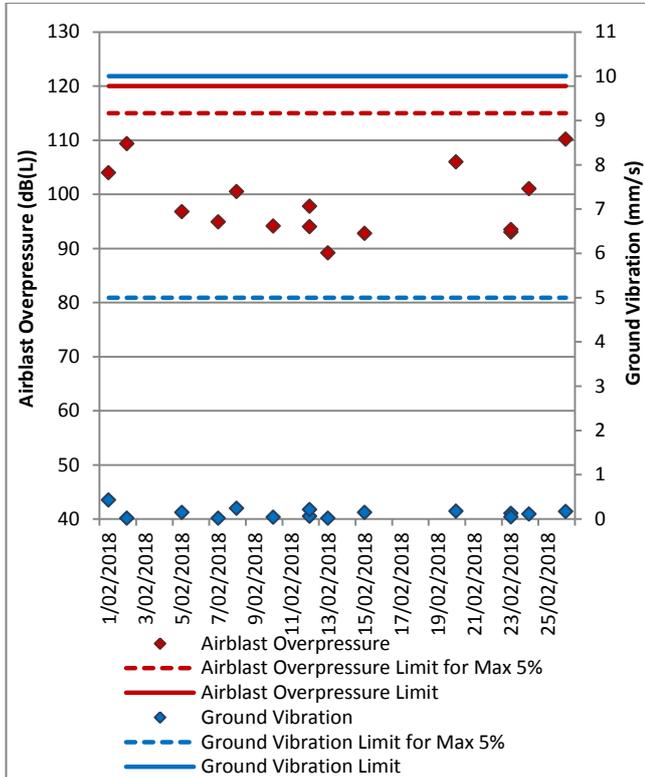


Figure 10: Moses Crossing Blast Monitoring Results – February 2018

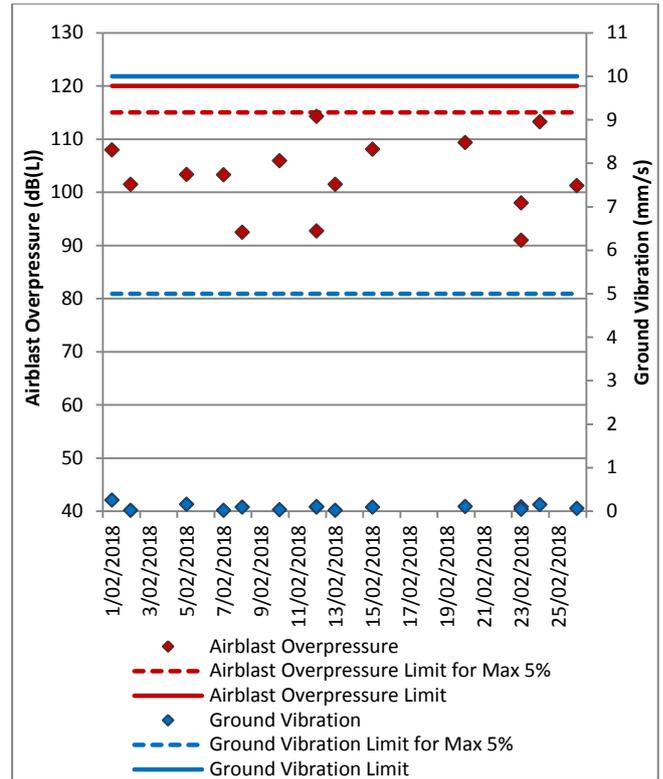


Figure 11: Jerrys Plains Blast Monitoring Results – February 2018

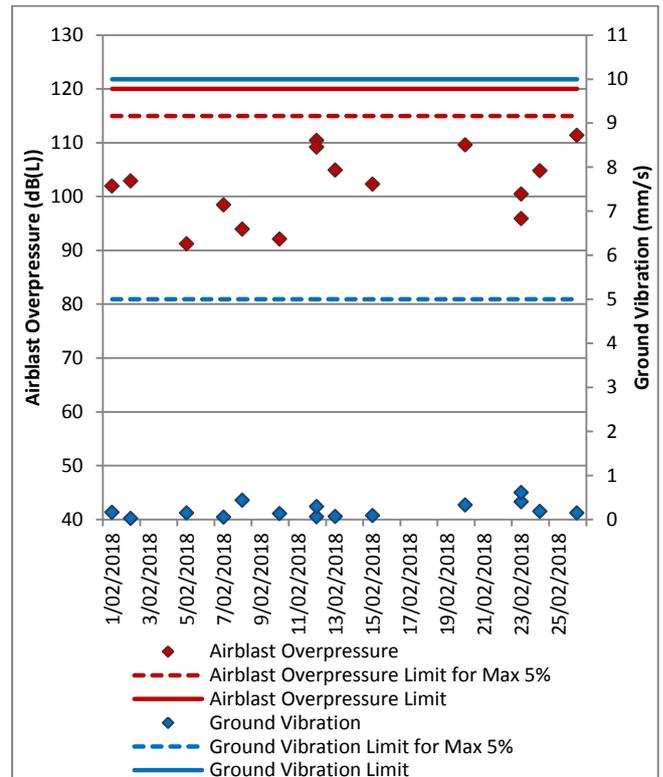


Figure 12: Maison Dieu Blast Monitoring Results – February 2018

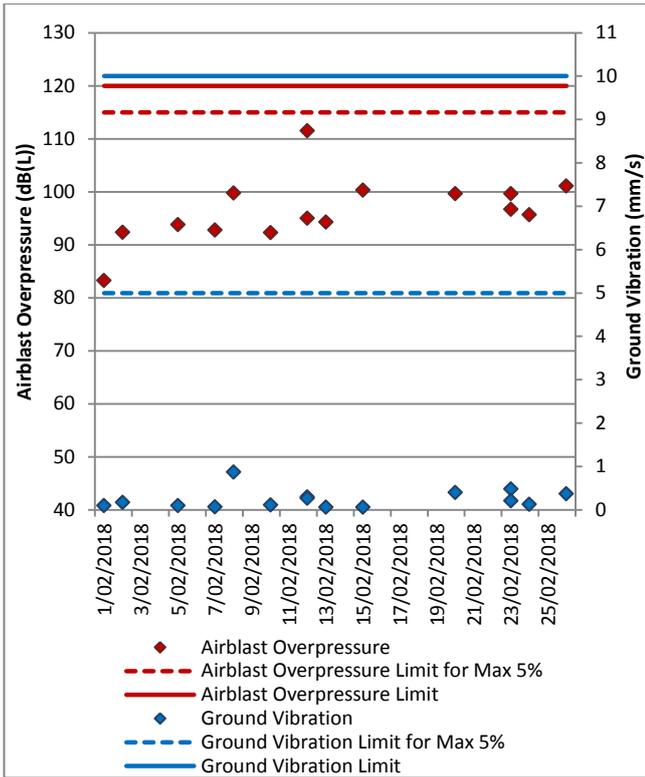


Figure 13: Warkworth Blast Monitoring Results – February 2018

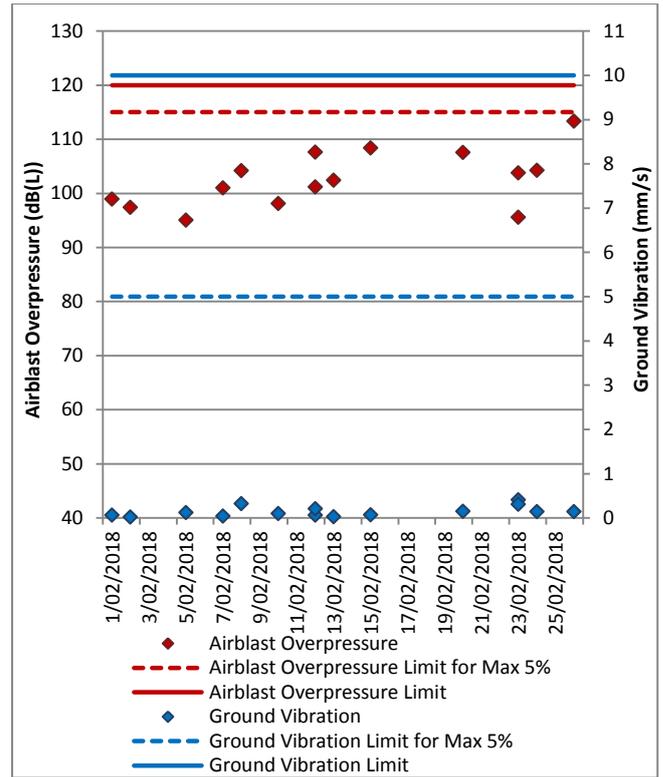


Figure 14: Knodlers Lane Blast Monitoring Results – February 2018

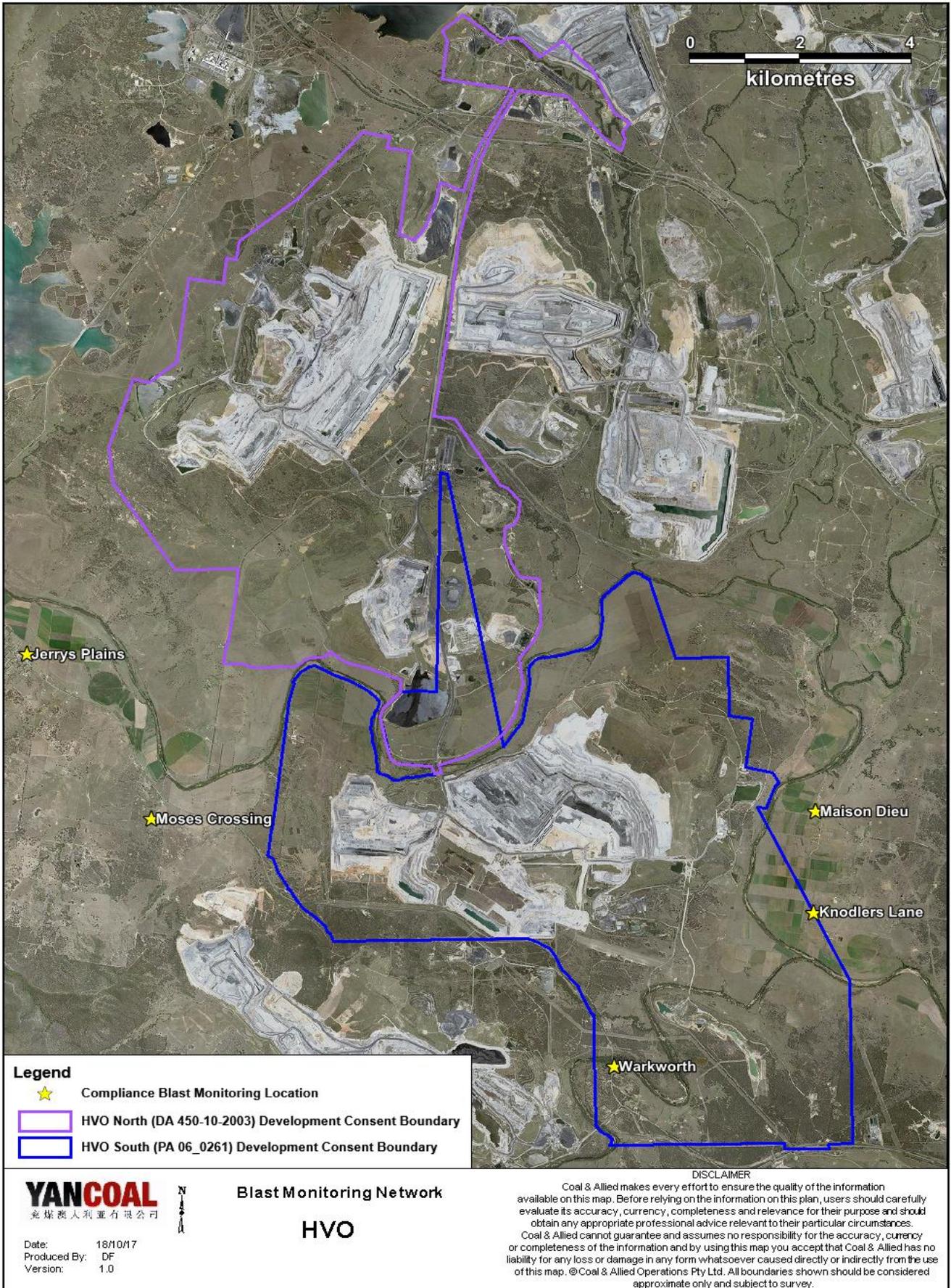


Figure 15: Blast Monitoring Location Plan

## 5.0 NOISE

Routine attended noise monitoring is carried out at defined locations around HVO as described in the HVO Noise Monitoring Programme. The purpose of the noise surveys is to quantify and describe the acoustic environment around the site and compare results with specified limits. Unattended monitoring (real time noise monitoring) also occurs at five sites surrounding HVO. The attended noise monitoring locations are displayed in Figure 16.

### 5.1 Attended Noise Monitoring Results

Attended monitoring was conducted at receiver locations surrounding HVO on the night of 20 February 2018. Monitoring results are detailed in Table 4 to Table 9 .

**Table 4: L<sub>Aeq, 15 minute</sub> HVO South - Impact Assessment Criteria – February 2018**

Location	Date and Time	Wind Speed (m/s) <sup>5</sup>	VTG <sup>5</sup>	Criterion dB (A)	Criterion Applies? <sup>1,6</sup>	HVO South L <sub>Aeq</sub> dB <sup>2,4</sup>	Exceedance <sup>3</sup>
Knodlers Lane	20/02/2018 21:00	4.7	-1	37	No	IA	NA
Maison Dieu	20/02/2018 21:18	5	-1	37	No	IA	NA
Shearers Lane	20/02/2018 21:39	5.2	-1	41	No	IA	NA
Kilburnie South	20/02/2018 22:42	4.2	-1	36	No	NM	NA
Jerrys Plains Village	20/02/2018 22:02	5.6	-1	35	No	IA	NA
Jerrys Plains East	20/02/2018 21:31	4.6	-1	35	No	NM	NA
Long Point	20/02/2018 21:38	4.2	-1	35	No	IA	NA
HVGC	20/02/2018 23:53	3.8	0.5	55	No	IA	NA

**Table 5: L<sub>Aeq, 15 minute</sub> HVO South - Land Acquisition Criteria – February 2018**

Location	Date and Time	Wind Speed (m/s) <sup>5</sup>	VTG <sup>5</sup>	Criterion dB (A)	Criterion Applies? <sup>1,6</sup>	HVO South L <sub>Aeq</sub> dB <sup>2,4</sup>	Exceedance <sup>3</sup>
Knodlers Lane	20/02/2018 21:00	4.7	-1	41	No	IA	NA
Maison Dieu	20/02/2018 21:18	5	-1	41	No	IA	NA
Shearers Lane	20/02/2018 21:39	5.2	-1	41	No	IA	NA
Kilburnie South	20/02/2018 22:42	4.2	-1	41	No	NM	NA
Jerrys Plains Village	20/02/2018 22:02	5.6	-1	40	No	IA	NA
Jerrys Plains East	20/02/2018 21:31	4.6	-1	40	No	NM	NA
Long Point	20/02/2018 21:38	4.2	-1	40	No	IA	NA
HVGC	20/02/2018 23:53	3.8	-0.5	55	No	IA	NA

**Table 6: L<sub>A1, 1minute</sub> HVO South - Impact Assessment Criteria – February 2018**

Location	Date and Time	Wind Speed (m/s) <sup>5</sup>	VTG <sup>5</sup>	Criterion dB (A)	Criterion Applies? <sup>1,6</sup>	HVO South L <sub>A1, 1min</sub> dB <sup>2,4</sup>	Exceedance <sup>3</sup>
Knodlers Lane	20/02/2018 21:00	4.7	-1	45	No	IA	NA
Maison Dieu	20/02/2018 21:18	5	-1	45	No	IA	NA
Shearers Lane	20/02/2018 21:39	5.2	-1	45	No	IA	NA
Kilburnie South	20/02/2018 22:42	4.2	-1	45	No	40	NA
Jerrys Plains Village	20/02/2018 22:02	5.6	-1	45	No	IA	NA
Jerrys Plains East	20/02/2018 21:31	4.6	-1	45	No	NM	NA
Long Point	20/02/2018 21:38	4.2	-1	45	No	IA	NA
HVGC	20/02/2018 23:53	3.8	-0.5	NA	NA	IA	NA

**Notes**

1. Noise emission limits apply for wind speeds up to 3 metres per second (at a height of 10m), or temperature inversion conditions of up to 3 degrees/100m (at a height of 10m);
2. Estimated or measured L<sub>Aeq,15minute</sub> dB attributed to HVO South Pit Area;
3. NA in exceedance column means atmospheric conditions outside specified in approval and so criterion is not applicable;
4. Bolded results in red indicate exceedance of criteria;
5. Atmospheric data is sourced from the HVO Corporate or Cheshunt weather station using logged met data;
6. Criterion may or may not apply due to rounding of meteorological data values

**Table 7: L<sub>Aeq, 15minute</sub> HVO North – Impact Assessment Criteria – February 2018**

Location	Date and Time	Wind Speed (m/s) <sup>5</sup>	VTG <sup>5</sup>	Criterion dB (A)	Criterion Applies? <sup>1,6</sup>	HVO North L <sub>Aeq</sub> dB <sup>2,4</sup>	Exceedance <sup>3</sup>
Knodlers Lane	20/02/2018 21:00	3.6	-1	35	No	IA	NA
Maison Dieu	20/02/2018 21:18	3.8	-1	35	No	IA	NA
Shearers Lane	20/02/2018 21:39	3.1	-1	35	No	IA	NA
Kilburnie South	20/02/2018 22:42	3.5	-1	39	No	IA	NA
Jerrys Plains Village	20/02/2018 22:02	3.3	-1	36	No	IA	NA
Jerrys Plains East	20/02/2018 21:31	3.6	-1	39	No	IA	NA
Long Point	20/02/2018 21:38	4.2	-1	35	No	IA	NA
HVGC	20/02/2018 23:53	2.3	-0.5	NA	NA	IA	NA

**Table 8: L<sub>Aeq,15minute</sub> HVO North - Land Acquisition Criteria – February 2018**

Location	Date and Time	Wind Speed (m/s) <sup>5</sup>	VTG <sup>5</sup>	Criterion dB (A)	Criterion Applies? <sup>1,6</sup>	HVO North L <sub>Aeq</sub> dB <sup>2,4</sup>	Exceedance <sup>3</sup>
Knodlers Lane	20/02/2018 21:00	3.6	-1	41	No	IA	NA
Maison Dieu	20/02/2018 21:18	3.8	-1	41	No	IA	NA
Shearers Lane	20/02/2018 21:39	3.1	-1	41	No	IA	NA
Kilburnie South	20/02/2018 22:42	3.5	-1	41	No	IA	NA
Jerrys Plains Village	20/02/2018 22:02	3.3	-1	41	No	IA	NA
Jerrys Plains East	20/02/2018 21:31	3.6	-1	41	No	IA	NA
Long Point	20/02/2018 21:38	4.2	-1	41	No	IA	NA

HVGC	20/02/2018 23:53	2.3	-0.5	NA	NA	IA	NA
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**Table 9: L<sub>A1, 1Minute</sub> HVO North - Impact Assessment Criteria – February 2018**

Location	Date and Time	Wind Speed (m/s) <sup>5</sup>	VTG <sup>5</sup>	Criterion dB (A)	Criterion Applies? <sup>1,6</sup>	HVO North L <sub>A1, 1min</sub> dB <sup>2,4</sup>	Exceedance <sup>3</sup>
Knodlers Lane	20/02/2018 21:00	3.6	-1	46	No	IA	NA
Maison Dieu	20/02/2018 21:18	3.8	-1	46	No	IA	NA
Shearers Lane	20/02/2018 21:39	3.1	-1	46	No	IA	NA
Kilburnie South	20/02/2018 22:42	3.5	-1	46	No	IA	NA
Jerrys Plains Village	20/02/2018 22:02	3.3	-1	46	No	IA	NA
Jerrys Plains East	20/02/2018 21:31	3.6	-1	46	No	IA	NA
Long Point	20/02/2018 21:38	4.2	-1	46	No	IA	NA
HVGC	20/02/2018 23:53	2.3	-0.5	NA	NA	IA	NA

**Notes**

1. Noise emission limits apply under all meteorological conditions, except during periods of rain or hail, when average winds speed at microphone heights exceeds 5 metres per second, when wind speeds greater than 3 metres per second are measured at 10m above ground level, or during temperature inversion conditions greater than 3 degrees C/100m;
2. Estimated or measured LAeq,15minute dB attributed to HVO North Area;
3. NA in exceedance column means atmospheric conditions outside specified in approval and so criterion is not applicable;
4. Bolded results in red indicate exceedance of criteria;
5. Atmospheric data is sourced from the HVO Corporate or Cheshunt weather station using logged met data;
6. Criterion may or may not apply due to rounding of meteorological data values

## 5.2 NPfl Low Frequency Assessment

In accordance with the requirements of the EPA's Noise Policy for Industry (NPfl), the applicability of the low frequency modification penalty has been assessed. During February 2018 no measurements required the penalty to be applied. The assessment for low frequency noise is shown in Table 10.

**Table 10: Low Frequency Noise Assessment - February 2018**

Location	Date and Time	Measured Site Only LA <sub>eq</sub> dB (Sth/Nth)	Site Only LC <sub>eq</sub> dB <sup>4</sup> (Sth/Nth)	Site Only LC <sub>eq</sub> -LA <sub>eq</sub> dB <sup>1,4</sup> (Sth/Nth)	Result Max exceedance of ref spectrum dB <sup>2,3,4</sup> (Sth/Nth)	Penalty dB(A)	Exceedance
Knodlers Lane	20/02/2018 21:00	IA/IA	NA/NA	NA/NA	NA/NA	0	NA
Maison Dieu	20/02/2018 21:18	IA/IA	NA/NA	NA/NA	NA/NA	0	NA
Shearers Lane	20/02/2018 21:39	IA/IA	NA/NA	NA/NA	NA/NA	0	NA
Kilburnie South	20/02/2018 22:42	NM/IA	NA/NA	NA/NA	NA/NA	0	NA
Jerrys Plains Village	20/02/2018 22:02	IA/IA	NA/NA	NA/NA	NA/NA	0	NA
Jerrys Plains East	20/02/2018 21:31	NM/IA	NA/NA	NA/NA	NA/NA	0	NA
Long Point	20/02/2018 21:38	IA/IA	NA/NA	NA/NA	NA/NA	0	NA
HVGC	20/02/2018 23:53	IA/IA	NA/NA	NA/NA	NA/NA	0	NA

Notes:

1. As per NPfl, if LC<sub>eq</sub> - LA<sub>eq</sub> >= 15 dB further assessment of low frequency noise required.

2. As per NPfl, compare measured spectrum against reference spectrum to determine if the low frequency modifying factor is triggered and application of penalty is required;

3. Bold results and penalties in red are where the relevant modifying factor trigger was exceeded; and

4. Where it is not possible to determine the site only result due to the presence of other low frequency noise sources occurring during the measurement, or where criteria were not applicable due to meteorological conditions, this is noted as NA (not available) and no further assessment has been undertaken.

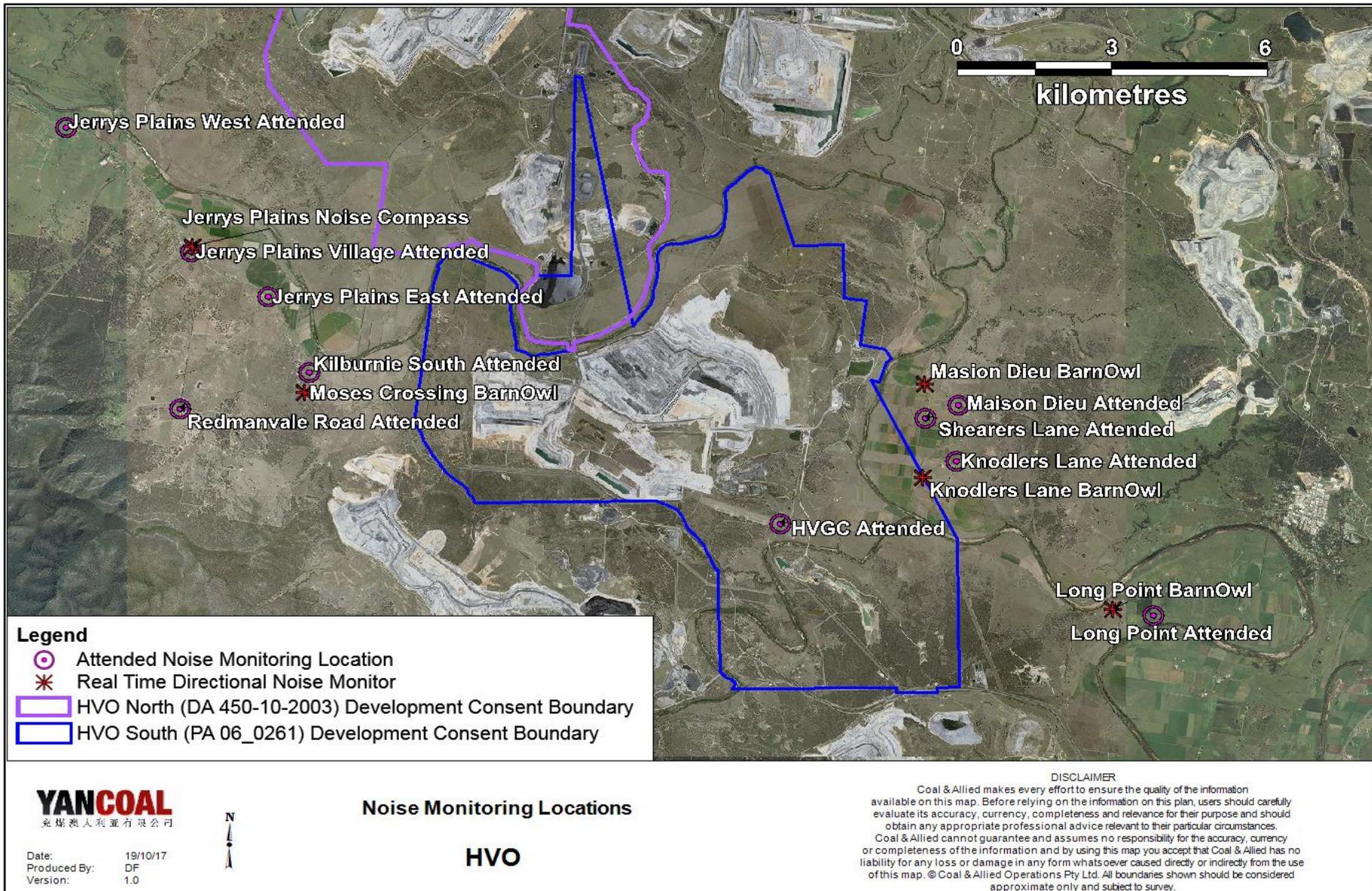


Figure 16: Noise Monitoring Location Plan

### 5.2.1 Real Time Noise Monitoring

HVO utilises a network of real-time directional noise monitors to manage noise impacts on a continuous basis. Noise alarms are in place at five monitoring locations (Knodlers Lane, Maison Dieu, Jerrys Plains, Moses Crossing, and Long Point), which alert HVO staff to elevated noise levels likely to be attributable to HVO. Noise alarms are investigated and responded to with the appropriate level of operational modification. Changes in response to a noise alarm can include replacing equipment with quieter (noise attenuated) units, changing or relocating tasks, and shutting down equipment.

It should be noted that this assessment does not compliment or conflict with attended noise monitoring detailed in Section 5.1, and that real time monitoring data includes non-mine noise sources such as dogs, cows, or more commonly, road traffic.

### 6.0 OPERATIONAL DOWNTIME

During February, a total of 721 hours of equipment downtime was logged in response to real time monitoring and visual inspections for environmental reasons such as dust, noise and meteorological conditions. Operational downtime by equipment type is shown in Figure 17.

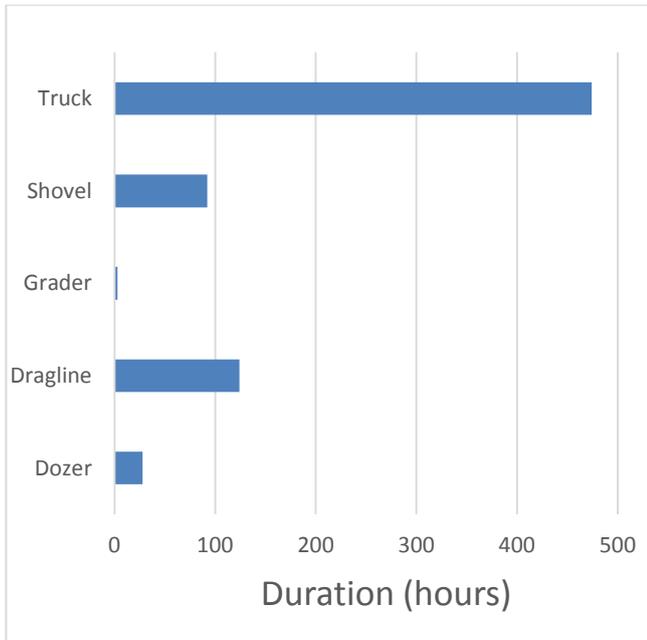


Figure 17: Operational Downtime by Equipment Type – February 2018

### 7.0 REHABILITATION

During February 1.7 Ha of land was released, 5.5 Ha of land was bulk shaped 12.4 Ha of land was Topsoiled and 7.3 Ha of land was Composted. Year to date progress can be viewed in Figure 18.

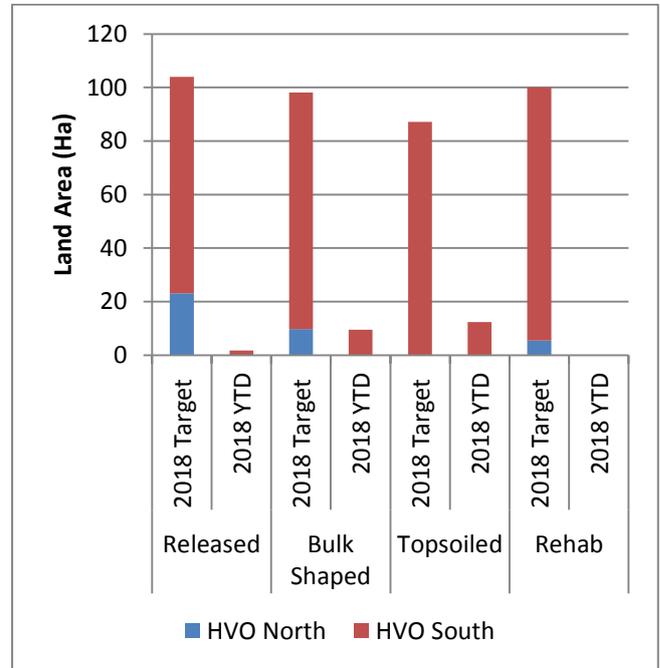


Figure 18: Rehabilitation YTD – February 2018

## 8.0 COMPLAINTS

Two complaints were received during the reporting period. Details of complaints received YTD are shown in Table 11 below.

**Table 11: Complaints Summary YTD**

	Noise	Dust	Blast	Lighting	Other	Total
<b>January</b>	-	2	4	-	-	6
<b>February</b>	1	-	-	-	1	2
<b>March</b>	-	-	-	-	-	-
<b>April</b>	-	-	-	-	-	-
<b>May</b>	-	-	-	-	-	-
<b>June</b>	-	-	-	-	-	-
<b>July</b>	-	-	-	-	-	-
<b>August</b>	-	-	-	-	-	-
<b>September</b>	-	-	-	-	-	-
<b>October</b>	-	-	-	-	-	-
<b>November</b>	-	-	-	-	-	-
<b>December</b>	-	-	-	-	-	-
<b>Total</b>	1	2	4	-	1	8

## 9.0 ENVIRONMENTAL INCIDENTS

During the reporting period there were no reportable environmental incidents.

## **Appendix A: Meteorological Data**

**Table 12: Meteorological Data - HVO Corporate Meteorological Station – February 2018**

Date	Air Temperature Maximum (°C)	Air Temperature Minimum (°C)	Relative Humidity Maximum (%)	Relative Humidity Minimum (%)	Solar Radiation Maximum (W/Sq. M)	Wind Direction Average (°)	Wind Speed Average (m/sec)	Rainfall(mm)
1/02/2018	23	14	68	38	1282	100	3.5	0.0
2/02/2018	24	12	91	40	1012	109	3.0	0.2
3/02/2018	27	13	83	32	1543	117	3.9	0.0
4/02/2018	28	12	87	29	1359	115	3.6	0.0
5/02/2018	31	12	89	14	1067	111	2.3	0.0
6/02/2018	31	13	90	20	1425	109	3.2	0.0
7/02/2018	31	13	91	17	1198	103	3.1	0.0
8/02/2018	35	13	84	10	999	-	1.6	0.0
9/02/2018	40	15	87	8	1217	183	2.6	0.8
10/02/2018	37	16	91	12	1016	134	2.5	0.0
11/02/2018	39	18	82	10	1432	189	3.9	0.0
12/02/2018	37	18	84	4	1103	161	3.1	0.0
13/02/2018	35	18	90	21	1092	112	3.1	0.0
14/02/2018	38	18	95	6	1094	223	3.3	0.0
15/02/2018	37	17	83	5	1027	142	2.7	0.0
16/02/2018	38	16	89	1	1484	219	3.7	0.0
17/02/2018	33	16	86	25	1062	108	3.7	0.0
18/02/2018	37	16	87	14	948	109	2.3	0.0
19/02/2018	32	16	71	22	1428	107	3.6	0.0
20/02/2018	22	12	100	60	262	109	4.2	4.2
21/02/2018	28	11	98	28	1302	108	3.3	0.0
22/02/2018	29	15	91	26	1254	104	3.2	0.0
23/02/2018	32	14	85	23	1134	111	2.1	0.0
24/02/2018	35	16	90	26	1372	232	2.8	0.0
25/02/2018	36	14	100	29	1364	215	3.6	20.4
26/02/2018	20	14	100	76	989	124	3.2	15.0
27/02/2018	26	12	92	35	1445	102	2.9	0.0
28/02/2018	34	11	93	25	982	243	2.4	0.0

“-“ Indicates that data was not available due to technical issues.