

HUNTER VALLEY OPERATIONS

Monthly Environmental Monitoring Report

April 2020

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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 1st to 30th April 2020.

2.0 AIR QUALITY

2.1 Meteorological Monitoring

HVO maintains two meteorological stations; 'HVO 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 2020 trend and historical trends are shown in Figure 1.

Table 1: Rainfall data - April 2020

2020	Monthly Rainfall (mm)	Cumulative Rainfall (mm)
April	54.8	324.4

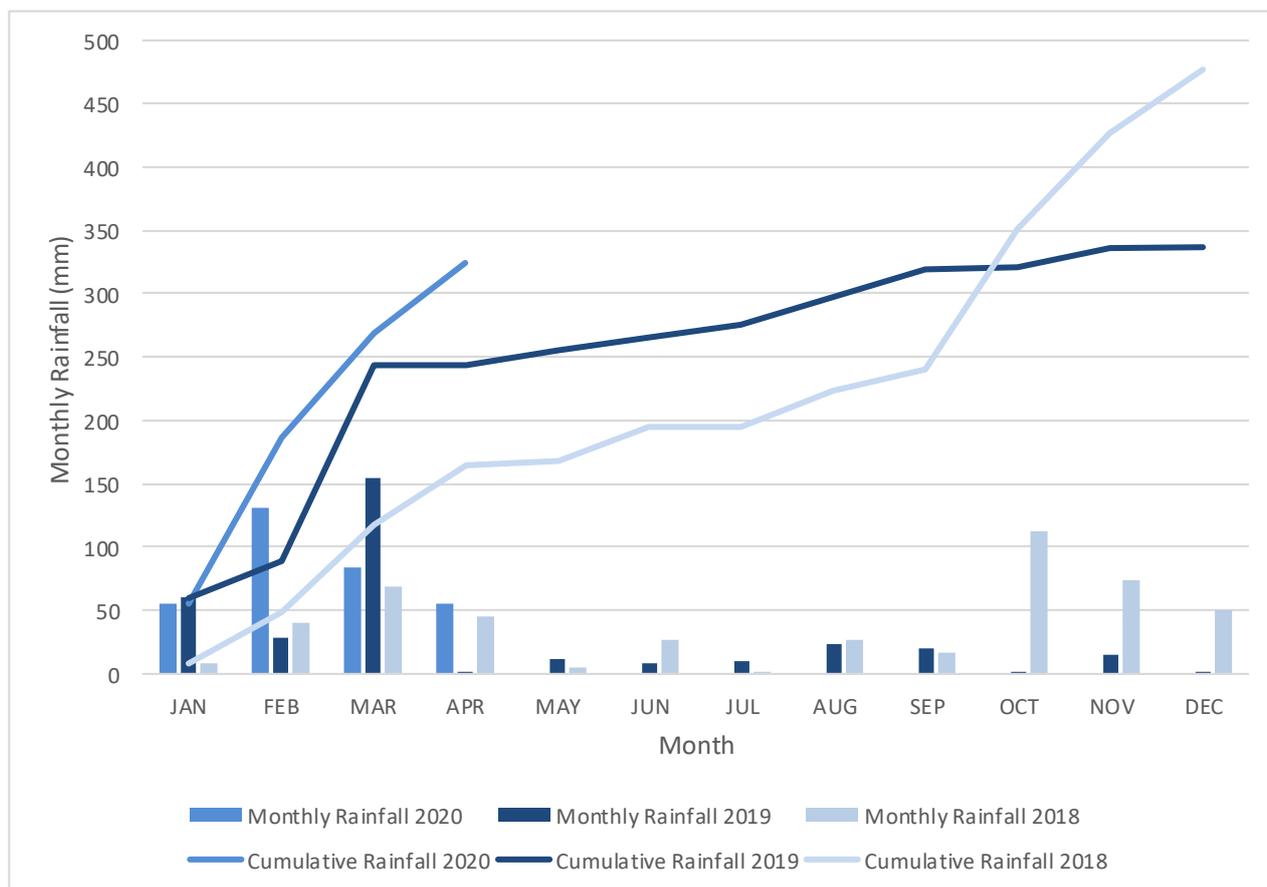


Figure 1: Rainfall Summary 2020

2.1.2 Wind Speed and Direction

Westerly and North-Westerly winds were dominant during April as shown in Figure 2 (HVO Corporate) and Figure 3 (HVO Cheshunt).

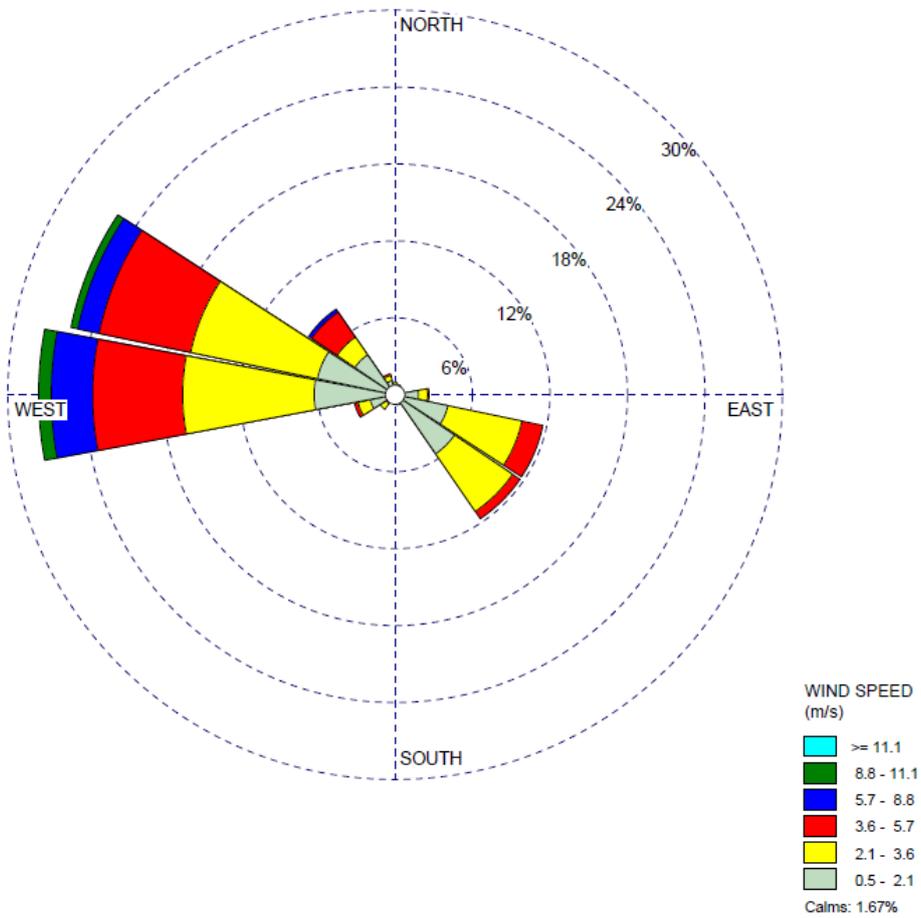


Figure 2: HVO Corporate Wind Rose – April 2020

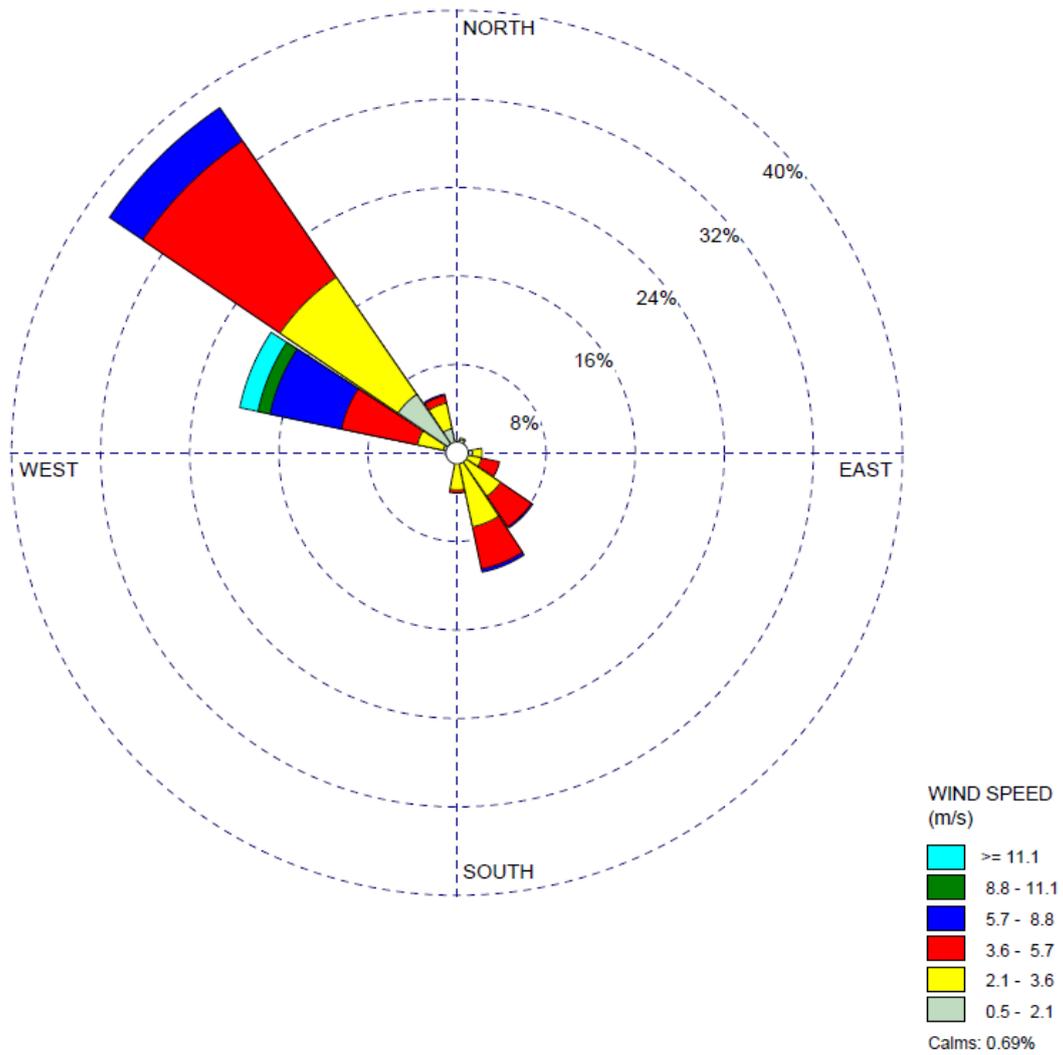


Figure 3: HVO Cheshunt Wind Rose – April 2020

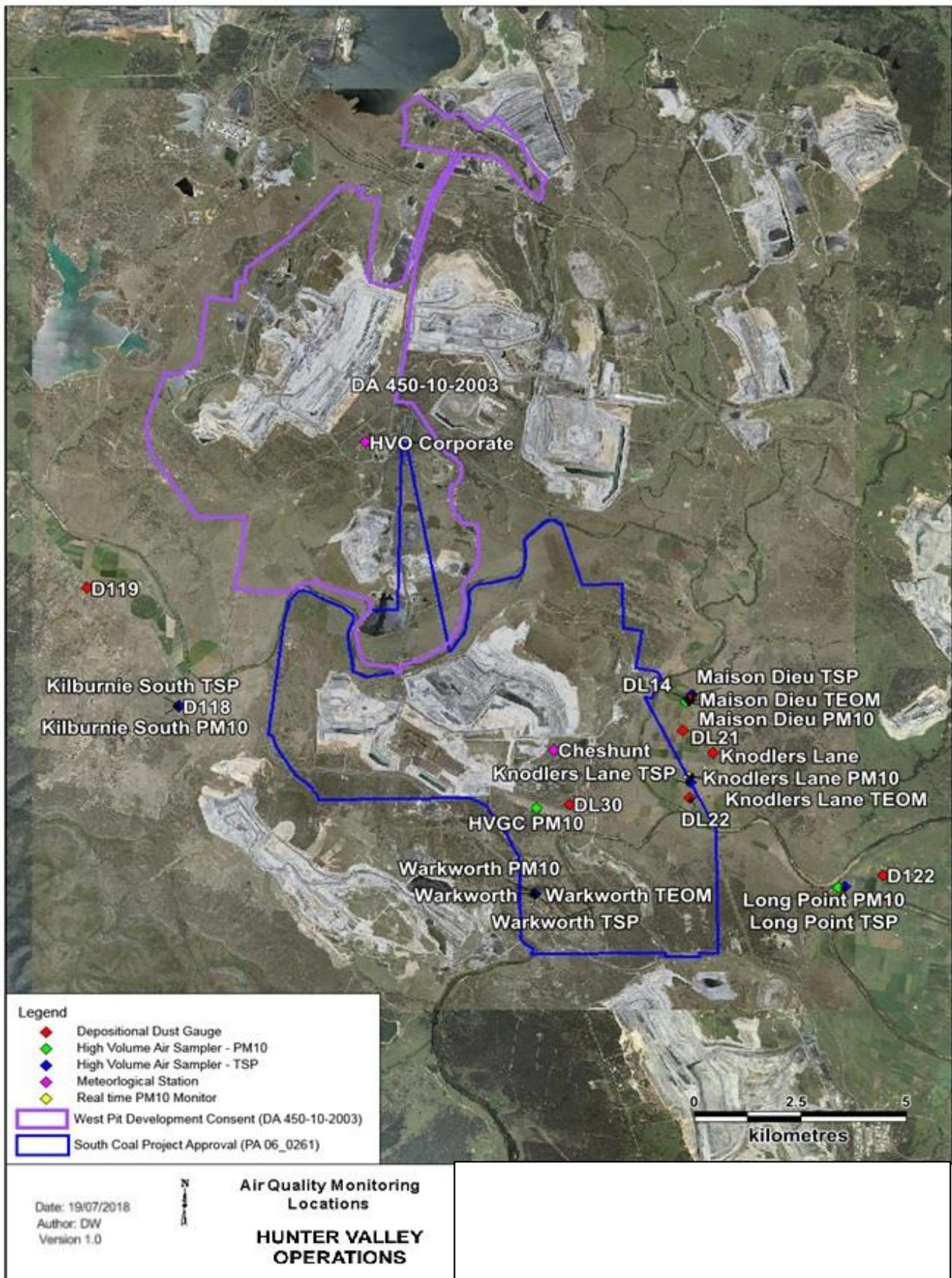


Figure 4: Air Quality Monitoring Location Plan

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 annual impact assessment criteria.

During the reporting period the D118 and Warkworth monitors recorded a monthly result above the long term impact assessment criteria of 4.0 g/m² per month.

An assessment of HVO's contribution against the long term impact assessment criteria will be provided in the 2020 Annual Review.

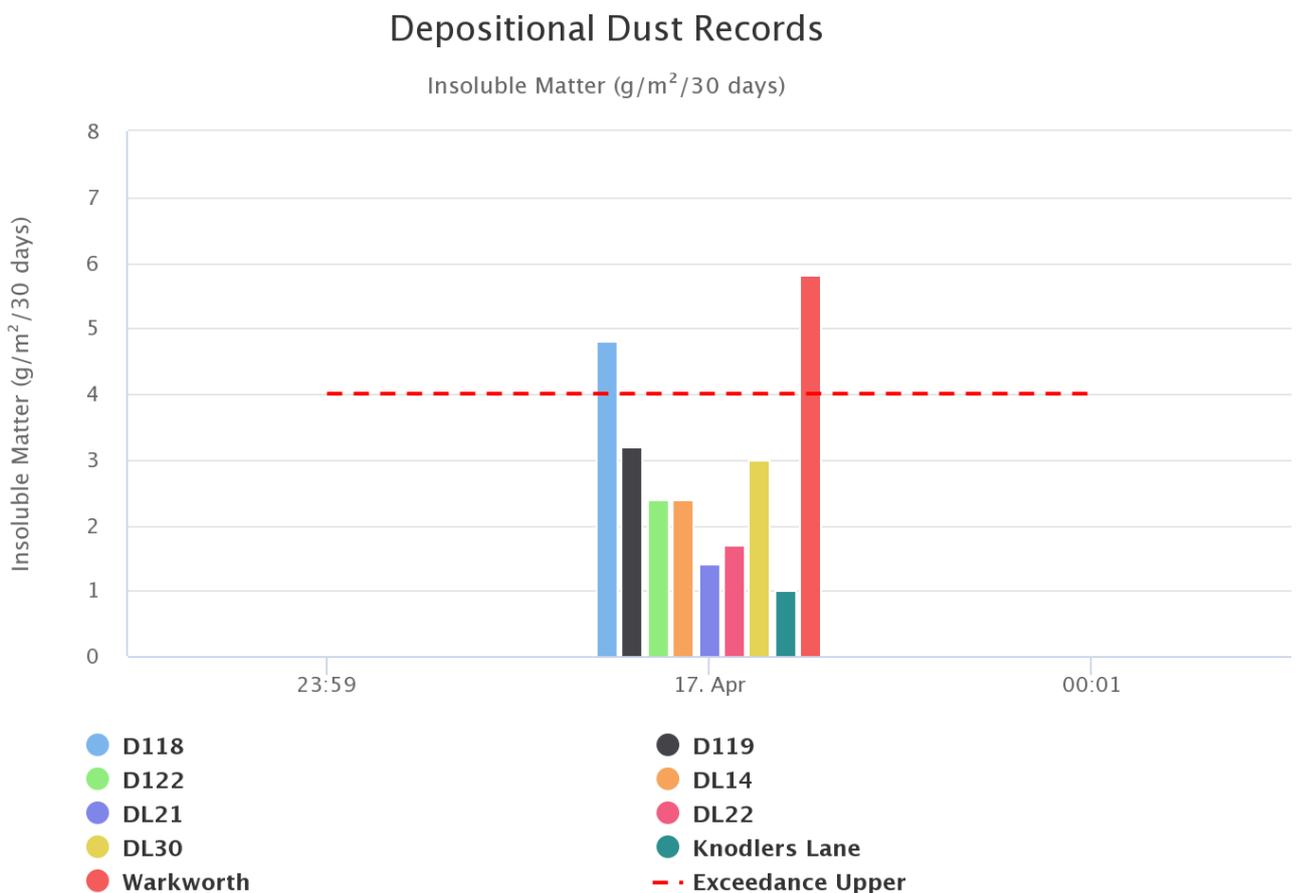


Figure 5: Depositional Dust Results – April 2020

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 (PM₁₀). The Kilburnie South and Maison Dieu HVAS also monitor Particulate Matter <2.5µm (PM_{2.5}). The location of these monitors can be found in Figure 4. Each HVAS runs for 24 hours on a six-day cycle.

2.3.1 HVAS PM₁₀ Results

Performance against Short Term Impact Assessment Criteria

Figure 6 shows individual PM₁₀ results at each monitoring station against the short term impact assessment criteria of 50 µg/m³. During the reporting period, the Long Point and Cheshunt East monitors recorded an exceedance above the short term impact assessment criteria of 50 µg/m³. However, a post-monitoring event assessment indicated that HVO's contribution at both of these monitors was less than 50 µg/m³ (27.5 µg/m³ for Long Point and 37.6 µg/m³ for Cheshunt East).

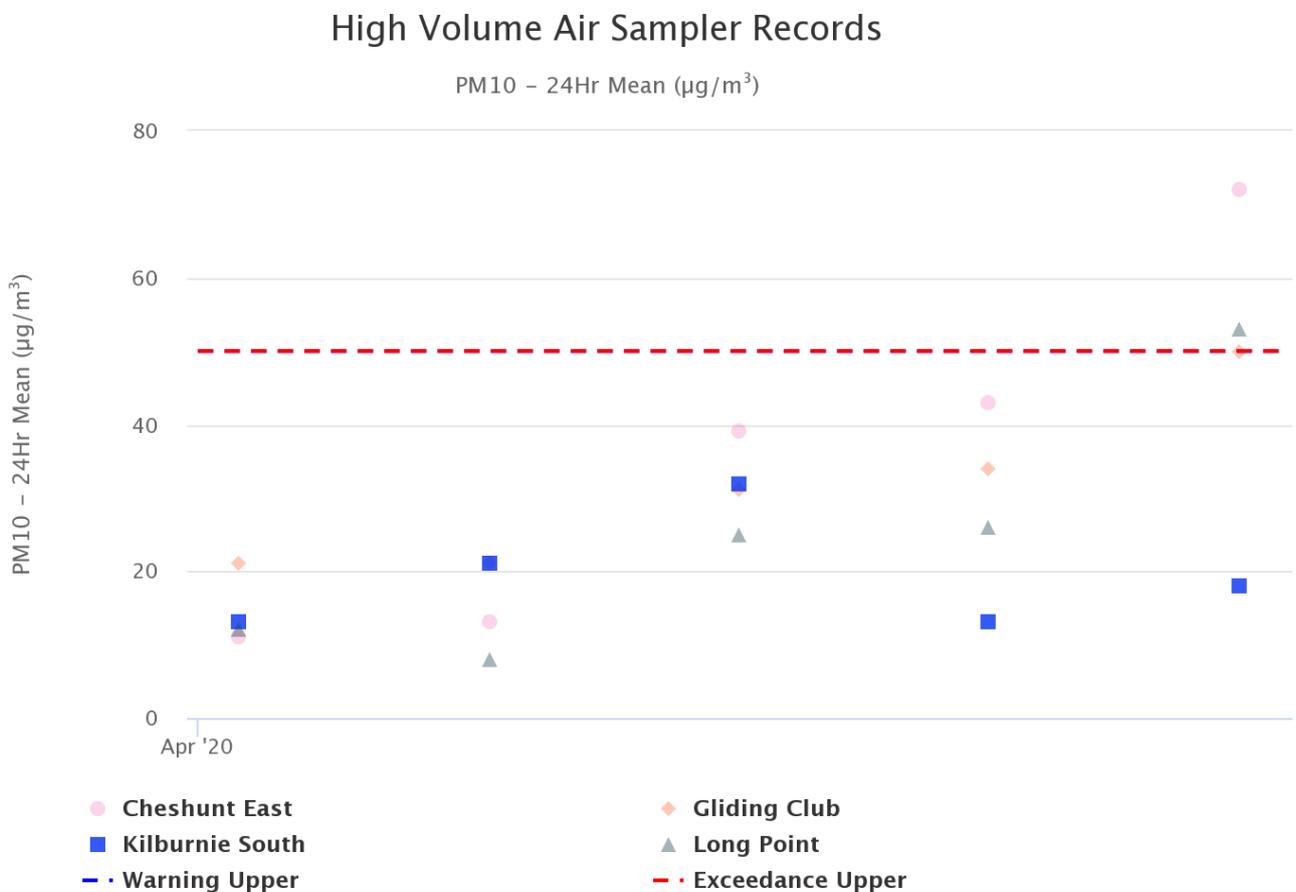


Figure 6: Individual PM₁₀ Results – April 2020

Performance against Long Term Impact Assessment Criteria

Figure 7 shows the year to date annual average PM₁₀ results. During the reporting period all monitors recorded an annual average above the PM₁₀ Annual Rolling Mean of 30µg/m³.

This is likely to be due to the bushfires experienced in January as well as the result being an average of the January - April period which historically has higher ambient dust levels, and will decrease over the remainder of the reporting period. However, an assessment of HVO's contribution against the long term impact assessment criteria will be provided in the 2020 Annual Review.

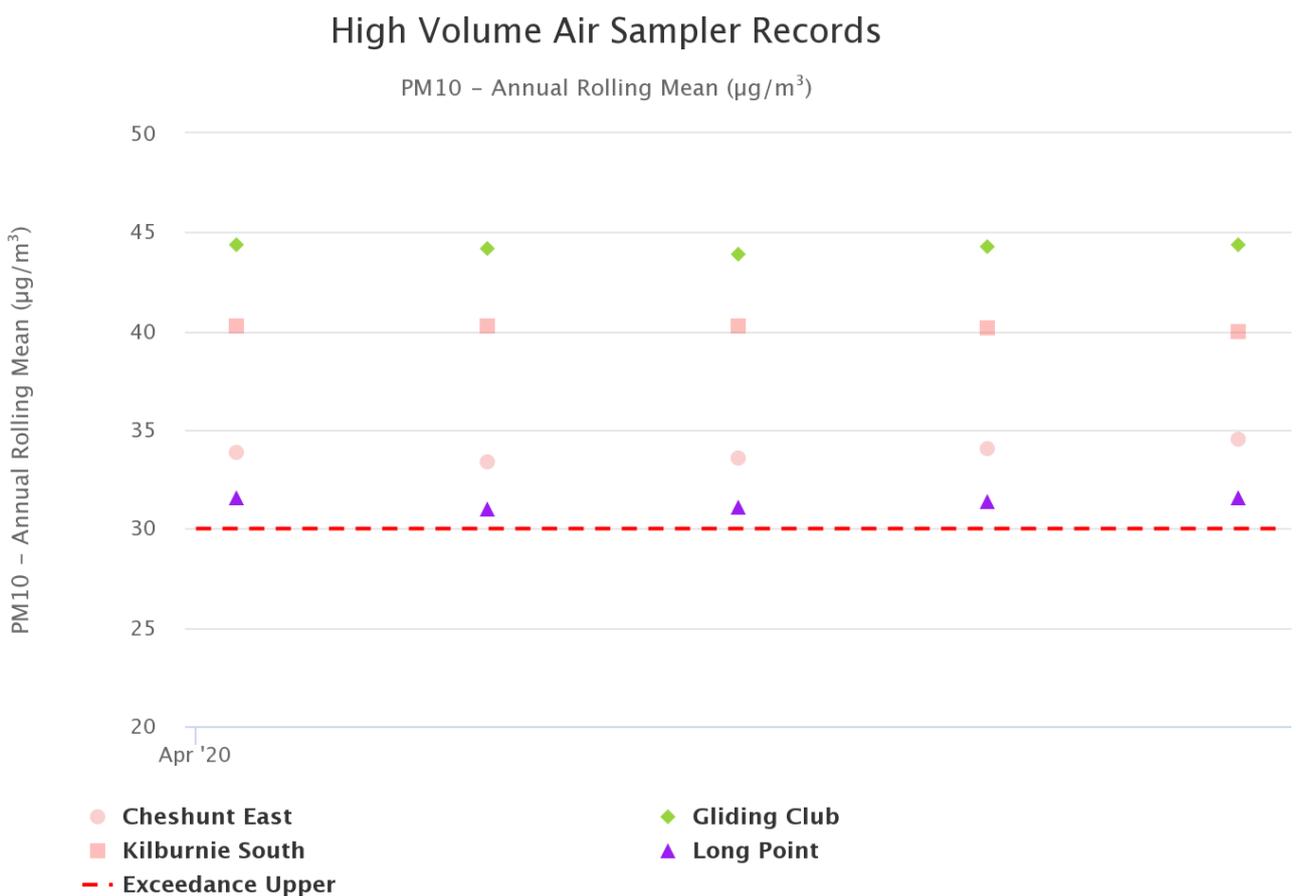


Figure 7: Year to Date Average PM₁₀ – as at end of April 2020

2.3.2 HVAS PM_{2.5} Results

HVO monitors PM_{2.5} at two HVAS locations i.e. Kilburnie South and Maison Dieu.

Performance against Short Term Impact Assessment Criteria

Figure 8 shows individual PM_{2.5} results at each monitoring station against the HVO South short term impact assessment criteria of 25 µg/m³.

During the reporting period, the Maison Dieu monitor recorded an exceedance above the short term impact assessment criteria of 25 µg/m³. A post-monitoring event assessment of this exceedance indicated that HVO's contribution on this day was only 40.0 µg/m³.

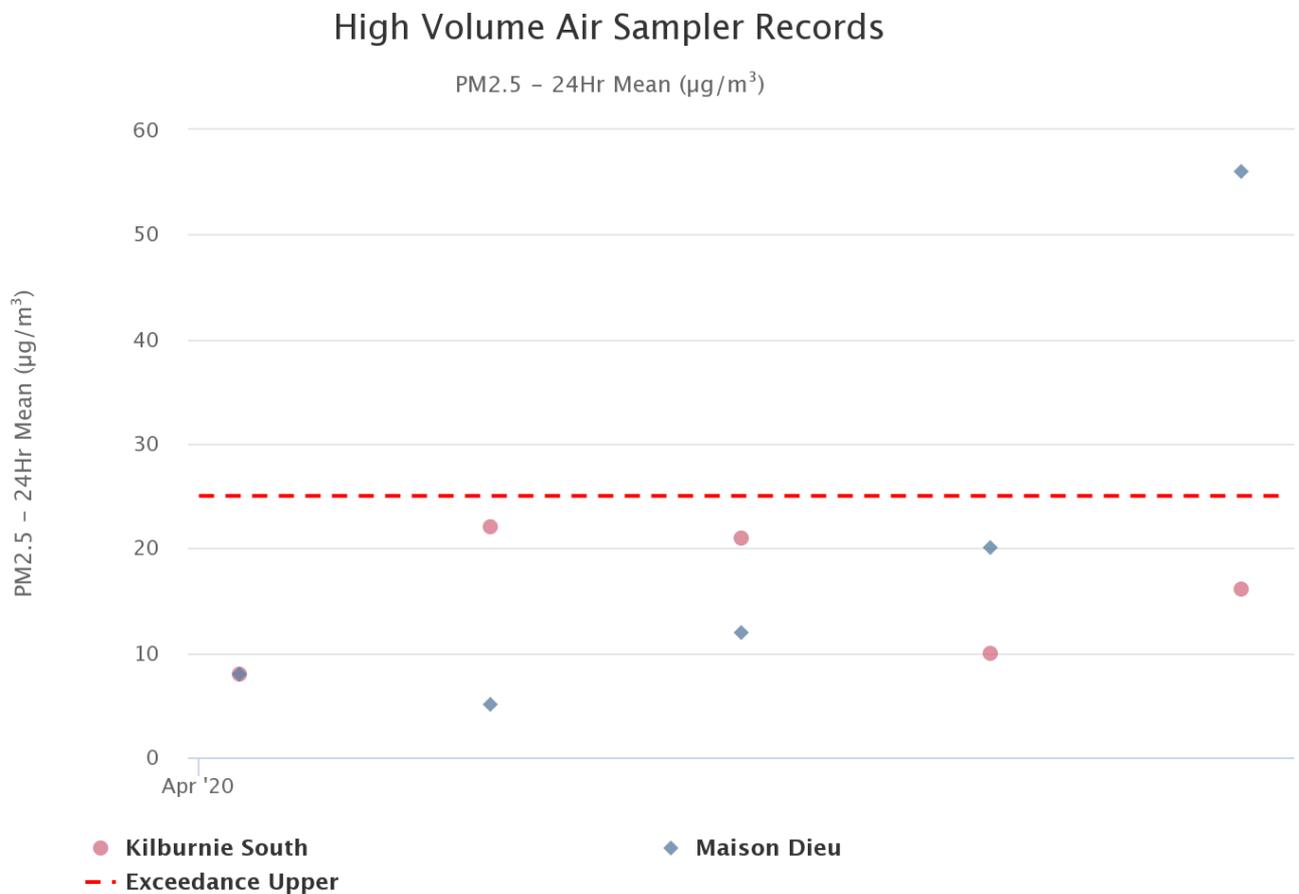


Figure 8: Individual PM_{2.5} Results – April 2020

Performance against Long Term Impact Assessment Criteria

Figure 9 shows the year to date annual average PM_{2.5} results. During the reporting period, both the Maison Dieu and Kilburnie South monitors recorded an annual average above the PM_{2.5} Annual Rolling Mean of 8µg/m³.

This is likely to be due to the bushfires experienced in January as well as the result being an average of the January - April period which historically has higher ambient dust levels, and will decrease over the remainder of the reporting period. However, an assessment of HVO's contribution against the long term impact assessment criteria will be provided in the 2020 Annual Review.

High Volume Air Sampler Records PM2.5 - Annual Rolling Mean ($\mu\text{g}/\text{m}^3$)

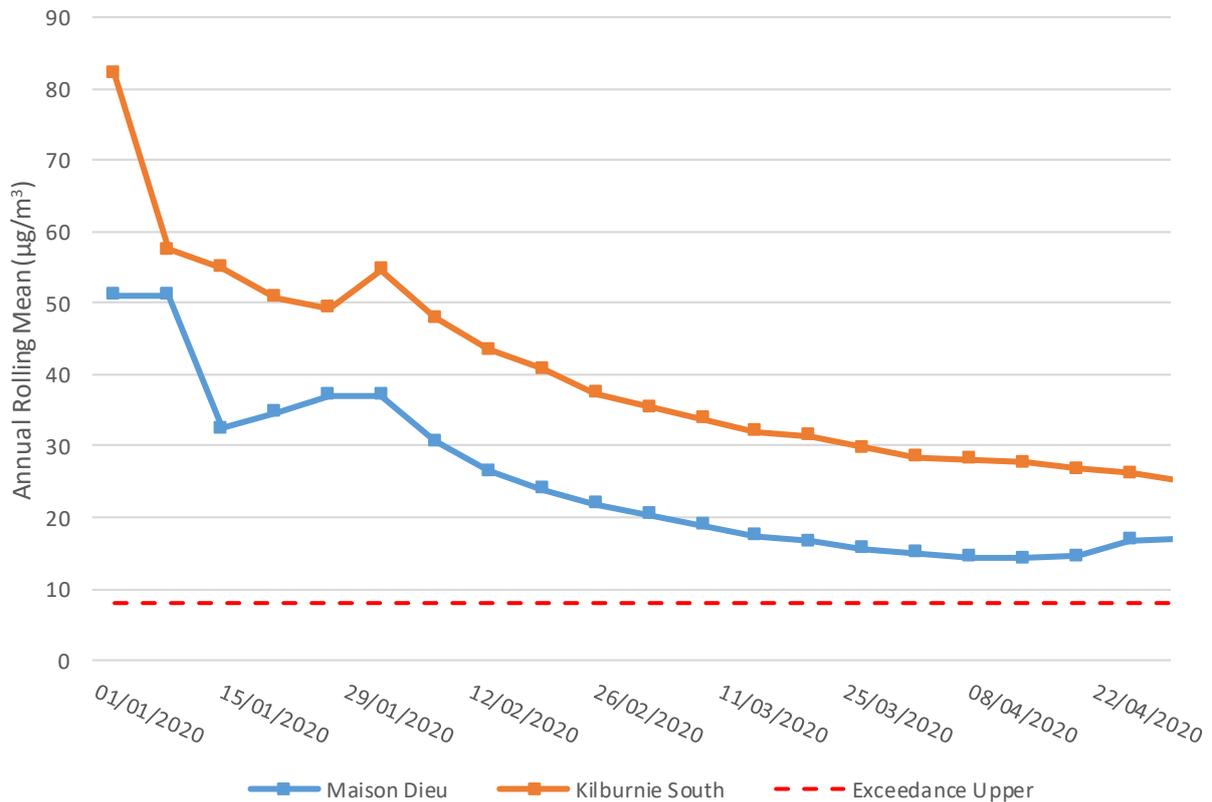


Figure 9: Year to Date Average PM_{2.5} – as at end of April 2020

2.3.3 TSP Results

Performance against Long Term Impact Assessment Criteria

Figure 10 shows the annual average TSP results compared against the long term impact assessment criteria of $90\mu\text{g}/\text{m}^3$.

During the reporting period, the Kilburnie South, Maison Dieu, Knodlers Lane and Warkworth monitors recorded annual averages above the long term impact assessment criteria of $90\mu\text{g}/\text{m}^3$.

This is likely to be due to the bushfires experienced in January as well as the result being an average of the January - April period which historically has higher ambient dust levels, and will decrease over the remainder of the reporting period. However, an assessment of HVO’s contribution against the long term impact assessment criteria will be provided in the 2020 Annual Review.

High Volume Air Sampler Records

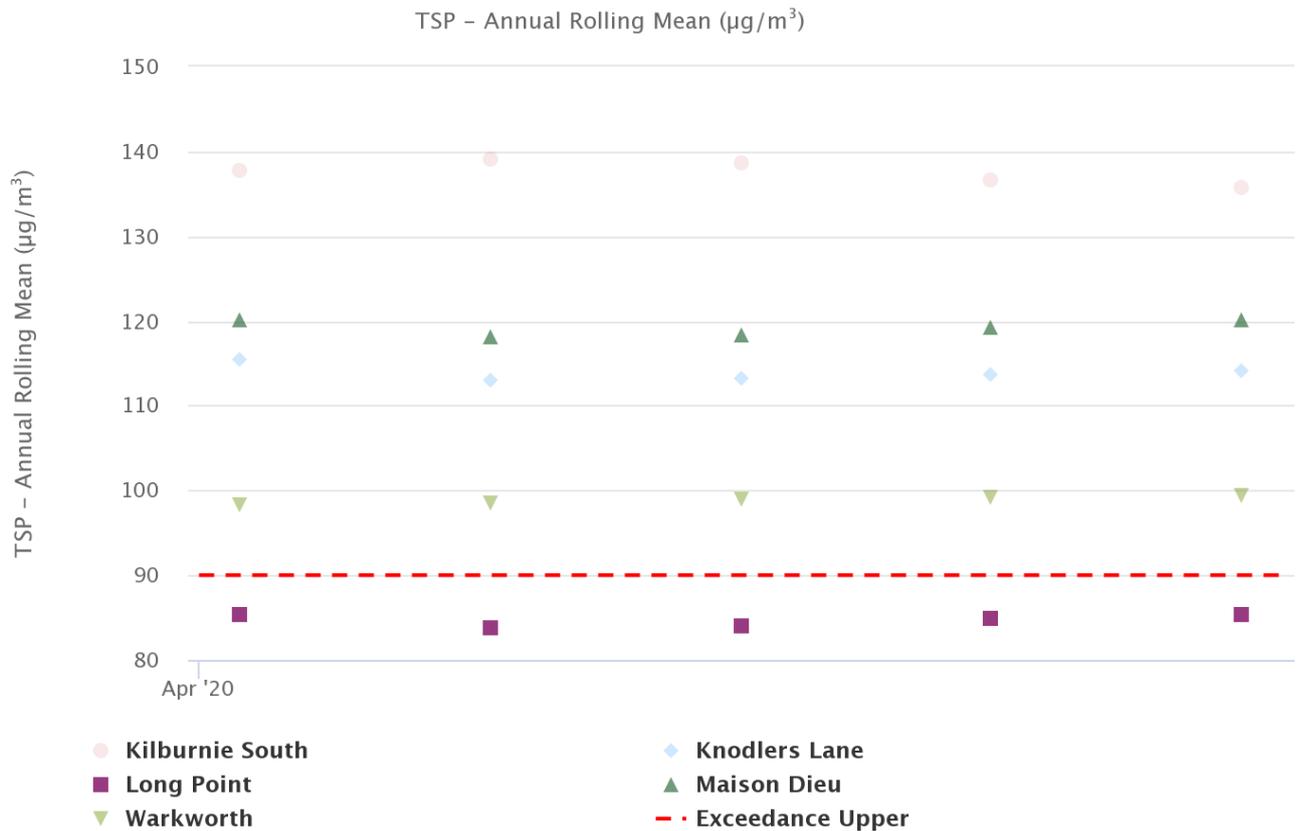


Figure 10: Year to Date Average Total Suspended Particulates – as at end of April 2020

2.3.4 Real Time PM₁₀ Results

Hunter Valley Operations maintains a network of real time PM₁₀ 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 PM₁₀ monitoring are used as a reactive measure to guide mining operations to help achieve compliance with the relevant conditions of the project approval.

Results for real time dust sampling is shown in Figure 11, including the daily 24 hour average PM₁₀ result and the year to date 24 hour PM₁₀ annual average.

During the reporting period the Maison Dieu (24th and 26th April) and Knodlers Lane (9th, 11th and 24th April) monitors exceeded the daily 24 hour average PM₁₀ result (50 $\mu\text{g}/\text{m}^3$). On all occasions an assessment indicated that HVO's contribution to the overall dust level was below 50 $\mu\text{g}/\text{m}^3$.

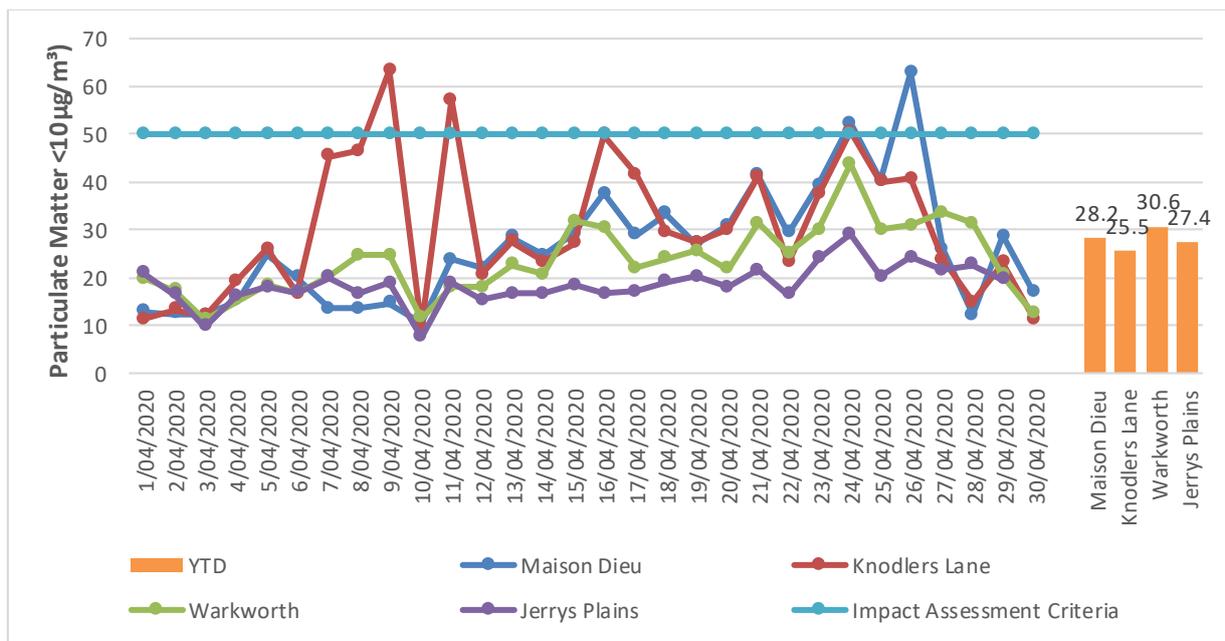


Figure 11: Real Time PM₁₀ 24hr average and YTD average – April 2020

2.3.5 Real Time Alarms for Air Quality

During April the real time monitoring system generated 149 automated air quality related alarms. 108 alarms were related to adverse weather conditions and 41 alarms relating to PM₁₀.

3.0 WATER QUALITY

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

3.1 Surface Water

Surface water courses are sampled on a quarterly sampling regime. Water quality is assessed 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 June 2020 report.

3.2 Site Water Use

Under water allocation licences issued by the Water NSW, HVO is permitted to extract water from the Hunter River. During the reporting period, HVO extracted 181.8 ML of water from the Hunter River.

3.3 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.

3.4 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 June 2020 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 14. Blasting criteria are summarised in Table 2.

Table 2: Blasting Criteria

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

4.1 Blast Monitoring Results

During April, 16 blasts were initiated at HVO. Figure 12 and Figure 13 show the blast monitoring results for the reporting period against the impact assessment criteria.



Figure 12: Overpressure Blast Monitoring Results – April 2020

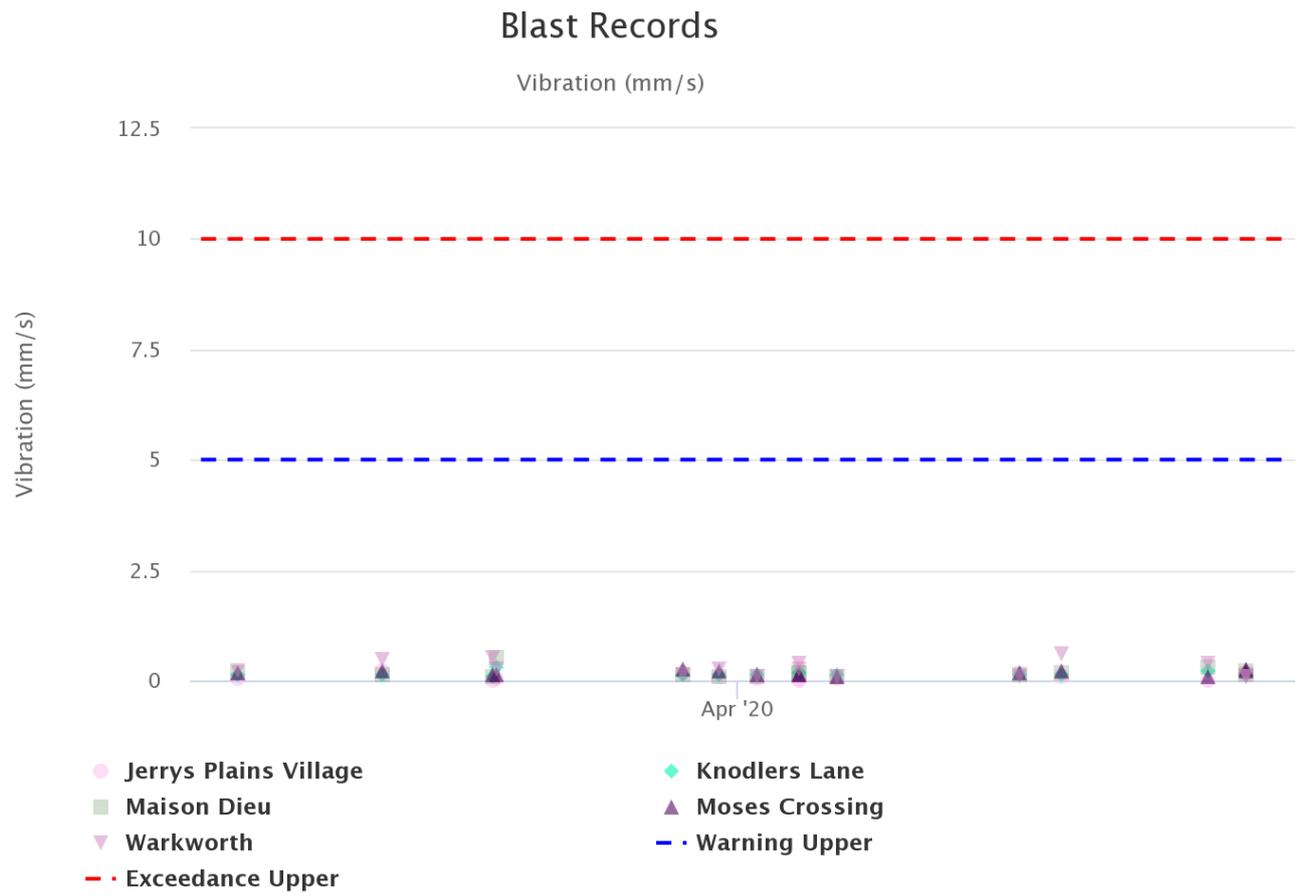


Figure 13: Ground Vibration Blast Monitoring Results – April 2020



Figure 14: 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 15.

5.1 Attended Noise Monitoring Results

Attended monitoring was conducted at receiver locations surrounding HVO on the night of 8th April 2020 with no non-compliances recorded. Monitoring results are detailed in Table 3 to Table 7.

Table 3: L_{Aeq}, 15 minute HVO South - Impact Assessment Criteria – April 2020

Location	Date and Time	Wind Speed (m/s) ¹	Stability Class ¹	Criterion dB (A)	Criterion Applies? ²	HVO South L _{Aeq} dB ^{3,4,6,7}	Exceedance ^{4,5}
<i>Knodlers Lane</i>	<i>8/4/20 21:09</i>	<i>3.2</i>	<i>D</i>	<i>39</i>	<i>No</i>	<i>IA</i>	<i>NA</i>
<i>Maison Dieu</i>	<i>8/4/20 22:00</i>	<i>3.3</i>	<i>E</i>	<i>39</i>	<i>No</i>	<i>IA</i>	<i>NA</i>
<i>Shearers Lane</i>	<i>8/4/20 21:35</i>	<i>2.8</i>	<i>D</i>	<i>41</i>	<i>Yes</i>	<i>IA</i>	<i>Nil</i>
<i>Kilburnie South</i>	<i>8/4/20 22:59</i>	<i>3.6</i>	<i>D</i>	<i>39</i>	<i>No</i>	<i>35</i>	<i>NA</i>
<i>Jerrys Plains Village</i>	<i>8/4/20 21:20</i>	<i>3.2</i>	<i>D</i>	<i>35</i>	<i>No</i>	<i><30</i>	<i>NA</i>
<i>Jerrys Plains East</i>	<i>8/4/20 21:00</i>	<i>3.0</i>	<i>D</i>	<i>35</i>	<i>No</i>	<i>NM</i>	<i>NA</i>
<i>Long Point Road</i>	<i>8/4/20 21:04</i>	<i>2.4</i>	<i>D</i>	<i>35</i>	<i>Yes</i>	<i>IA</i>	<i>Nil</i>
<i>HVGC</i>	<i>8/4/20 23:31</i>	<i>3.9</i>	<i>D</i>	<i>55</i>	<i>No</i>	<i>IA</i>	<i>NA</i>

Notes:

1. Atmospheric data is sourced from the HVO Cheshunt (or MTW Charlton Ridge for Long Point) AWS using logged meteorological data;
2. Noise criteria apply for wind speeds up to 3 metres per second (at a height of 10m), or during stability class G conditions. Criterion may or may not apply due to rounding of meteorological data values;
3. Site-only L_{Aeq}, 15 minute attributed to HVO South Pit Area, including modifying factors if applicable;
4. Bold results in red indicate exceedance of relevant criterion;
5. NA in exceedance column means atmospheric conditions outside specified in approval and so criterion is not applicable;
6. IA means inaudible, there was no site noise at the monitoring location; and
7. NM means not measurable, noise was audible but could not be quantified.

Table 4: LA1, 1 minute HVO South - Impact Assessment Criteria – April 2020

Location	Date and Time	Wind Speed (m/s) ¹	Stability Class ¹	Criterion dB (A)	Criterion Applies? ²	HVO South L _{A1, 1min} dB ^{3,4,6,7}	Exceedance ^{4,5}
Knodlers Lane	8/4/20 21:09	3.2	D	45	No	IA	NA
Maison Dieu	8/4/20 22:00	3.3	E	45	No	IA	NA
Shearers Lane	8/4/20 21:35	2.8	D	45	Yes	IA	Nil
Kilburnie South	8/4/20 22:59	3.6	D	45	No	40	NA
Jerrys Plains Village	8/4/20 21:20	3.2	D	45	No	<30	NA
Jerrys Plains East	8/4/20 21:00	3.0	D	45	No	NM	NA
Long Point Road	8/4/20 21:04	2.4	D	45	Yes	IA	Nil
HVGC	8/4/20 23:31	3.9	D	NA	No	IA	NA

Notes:

1. Atmospheric data is sourced from the HVO Cheshunt (or MTW Charlton Ridge for Long Point) AWS using logged meteorological data;
2. Noise criteria apply for wind speeds up to 3 metres per second (at a height of 10m), or during stability class G conditions. Criterion may or may not apply due to rounding of meteorological data values;
3. Site-only LA1, 1 minute attributed to HVO South Pit Area;
4. Bold results in red indicate exceedance of relevant criterion;
5. NA in criterion column indicates no criterion is applicable at this location. NA in exceedance column means atmospheric conditions outside specified in approval and so criterion is not applicable;
6. IA means inaudible, there was no site noise at the monitoring location; and
7. NM means not measurable, noise was audible but could not be quantified.

Table 5: LAeq, 15 minute HVO North – Impact Assessment Criteria – April 2020

Location	Date and Time	Wind Speed (m/s) ¹	Stability Class ¹	Criterion dB (A)	Criterion Applies? ²	HVO North LAeq dB ^{3,4,6,7}	Exceedance ^{4,5}
Knodlers Lane	8/4/20 21:09	2.4	D	35	Yes	IA	Nil
Maison Dieu	8/4/20 22:00	2.5	D	35	Yes	IA	Nil
Shearers Lane	8/4/20 21:35	2.8	D	35	Yes	IA	Nil
Kilburnie South	8/4/20 22:59	3.0	D	39	Yes	IA	Nil
Jerrys Plains Village	8/4/20 21:20	2.4	D	36	Yes	IA	Nil
Jerrys Plains East	8/4/20 21:00	2.4	D	39	Yes	IA	Nil
Long Point Road	8/4/20 21:04	2.4	D	35	Yes	IA	Nil
HVGC	8/4/20 23:31	2.7	E	NA	Yes	IA	NA

Notes:

1. Atmospheric data is sourced from the HVO Corporate (or MTW Charlton Ridge for Long Point) AWS using logged meteorological data;
2. 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 stability class G conditions. Criterion may or may not apply due to rounding of meteorological data values;
3. Site-only LAeq, 15 minute attributed to HVO North Pit Area, including modifying factors if applicable;
4. Bold results in red indicate exceedance of criteria;
5. NA in criterion column indicates no criterion is applicable at this location. NA in exceedance column means atmospheric conditions outside specified in approval and so criterion is not applicable;
6. IA means inaudible, there was no site noise at the monitoring location; and
7. NM means not measurable, noise was audible but could not be quantified.

Table 6: LAeq,15 minute HVO North - Land Acquisition Criteria – April 2020

Location	Date and Time	Wind Speed (m/s) ¹	Stability Class ¹	Criterion dB (A)	Criterion Applies? ²	HVO North L _{Aeq} dB ^{3,4,6,7}	Exceedance ^{4,5}
<i>Knodlers Lane</i>	<i>8/4/20 21:09</i>	<i>2.4</i>	<i>D</i>	<i>41</i>	<i>Yes</i>	<i>IA</i>	<i>Nil</i>
<i>Maison Dieu</i>	<i>8/4/20 22:00</i>	<i>2.5</i>	<i>D</i>	<i>41</i>	<i>Yes</i>	<i>IA</i>	<i>Nil</i>
<i>Shearers Lane</i>	<i>8/4/20 21:35</i>	<i>2.8</i>	<i>D</i>	<i>41</i>	<i>Yes</i>	<i>IA</i>	<i>Nil</i>
<i>Kilburnie South</i>	<i>8/4/20 22:59</i>	<i>3.0</i>	<i>D</i>	<i>41</i>	<i>Yes</i>	<i>IA</i>	<i>Nil</i>
<i>Jerrys Plains Village</i>	<i>8/4/20 21:20</i>	<i>2.4</i>	<i>D</i>	<i>41</i>	<i>Yes</i>	<i>IA</i>	<i>Nil</i>
<i>Jerrys Plains East</i>	<i>8/4/20 21:00</i>	<i>2.4</i>	<i>D</i>	<i>41</i>	<i>Yes</i>	<i>IA</i>	<i>Nil</i>
<i>Long Point Road</i>	<i>8/4/20 21:04</i>	<i>2.4</i>	<i>D</i>	<i>41</i>	<i>Yes</i>	<i>IA</i>	<i>Nil</i>
<i>HVGC</i>	<i>8/4/20 23:31</i>	<i>2.7</i>	<i>E</i>	<i>NA</i>	<i>Yes</i>	<i>IA</i>	<i>NA</i>

Notes:

1. Atmospheric data is sourced from the HVO Corporate (or MTW Charlton Ridge for Long Point) AWS using logged meteorological data;
2. 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 stability class G conditions. Criterion may or may not apply due to rounding of meteorological data values;
3. Site-only LAeq, 15minute attributed to HVO North Pit Area, including modifying factors if applicable;
4. Bold results in red indicate exceedance of relevant criterion;
5. NA in criterion column indicates no criterion is applicable at this location. NA in exceedance column means atmospheric conditions outside specified in approval and so criterion is not applicable;
6. IA means inaudible, there was no site noise at the monitoring location; and
7. NM means not measurable, noise was audible but could not be quantified.

Table 7: LA1, 1 Minute HVO North - Impact Assessment Criteria – April 2020

Location	Date and Time	Wind Speed (m/s) ¹	Stability Class ¹	Criterion dB (A)	Criterion Applies? ²	HVO North L _{A1, 1min} dB ^{3,4,6,7}	Exceedance ^{4,5}
Knodlers Lane	8/4/20 21:09	2.4	D	46	Yes	IA	Nil
Maison Dieu	8/4/20 22:00	2.5	D	46	Yes	IA	Nil
Shearers Lane	8/4/20 21:35	2.8	D	46	Yes	IA	Nil
Kilburnie South	8/4/20 22:59	3.0	D	46	Yes	IA	Nil
Jerrys Plains Village	8/4/20 21:20	2.4	D	46	Yes	IA	Nil
Jerrys Plains East	8/4/20 21:00	2.4	D	46	Yes	IA	Nil
Long Point Road	8/4/20 21:04	2.4	D	46	Yes	IA	Nil
HVGC	8/4/20 23:31	2.7	E	NA	Yes	IA	NA

Notes:

1. Atmospheric data is sourced from the HVO Corporate (or MTW Charlton Ridge for Long Point) AWS using logged meteorological data;
2. 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 stability class G conditions. Criterion may or may not apply due to rounding of meteorological data values;
3. Site-only LA1, 1 minute attributed to HVO North Pit Area;
4. Bold results in red indicate exceedance of relevant criterion;
5. NA in criterion column indicates no criterion is applicable at this location. NA in exceedance column means atmospheric conditions outside specified in approval and so criterion is not applicable;
6. IA means inaudible, there was no site noise at the monitoring location; and
7. NM means not measurable, noise was audible but could not be quantified.

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 April 2020 no penalties were applied. The assessment for low frequency noise is shown in Table 8.

Table 8: Low Frequency Noise Assessment – April 2020

Location	Date and Time	Measured Site Only LA _{eq} dB (Sth/Nth) ^{4,5}	Site Only LC _{eq} dB ¹ (Sth/Nth)	Site-Only LC _{eq} – LA _{eq} dB ^{1,2} (Sth/Nth)	Result Max exceedance of ref spectrum dB ^{1,3} (Sth/Nth)	Penalty dB(A) ^{1,6} (Sth/Nth)
Knodlers Lane	8/4/20 21:09	IA/IA	NA/NA	NA/NA	NA/NA	NA/NA
Maison Dieu	8/4/20 22:00	IA/IA	NA/NA	NA/NA	NA/NA	NA/NA
Shearers Lane	8/4/20 21:35	IA/IA	NA/NA	NA/NA	NA/NA	NA/NA
Kilburnie South	8/4/20 22:59	IA/35	NA/NA	NA/NA	NA/NA	NA/NA
Jerrys Plains Village	8/4/20 21:20	IA/<30	NA/NA	NA/NA	NA/NA	NA/NA
Jerrys Plains East	8/4/20 21:00	IA/NM	NA/NA	NA/NA	NA/NA	NA/NA
Long Point Road	8/4/20 21:04	IA/IA	NA/NA	NA/NA	NA/NA	NA/NA
HVGC	8/4/20 23:31	IA/IA	NA/NA	NA/NA	NA/NA	NA/NA

Notes:

1. 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, or where site-only contributions were more than 5 dB less than the relevant LA_{eq} criterion this is noted as NA (not available) and no further assessment has been undertaken;
2. As per NPfl, if LC_{eq} – LA_{eq} ≥ 15 dB further assessment of low-frequency noise required;
3. 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; and
4. IA means inaudible, there was no site noise at the monitoring location;
5. NM means not measurable, noise was audible but could not be quantified; and
6. Bold results indicate that NPfl low-frequency modifying factor has been triggered and application of correction is required.

5.3 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.

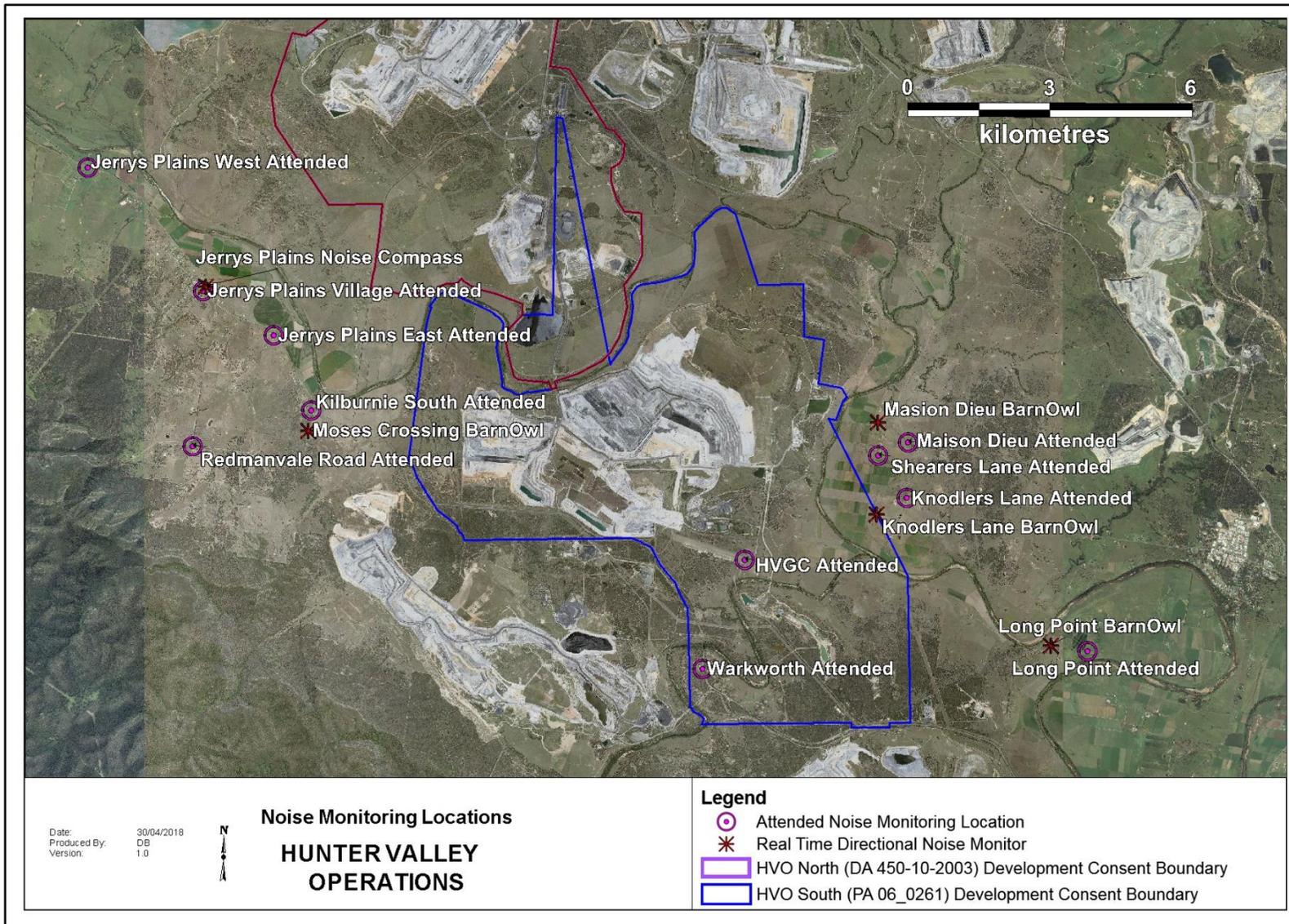


Figure 15: Noise Monitoring Location Plan

6.0 OPERATIONAL DOWNTIME

During April, a total of 69 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 16.

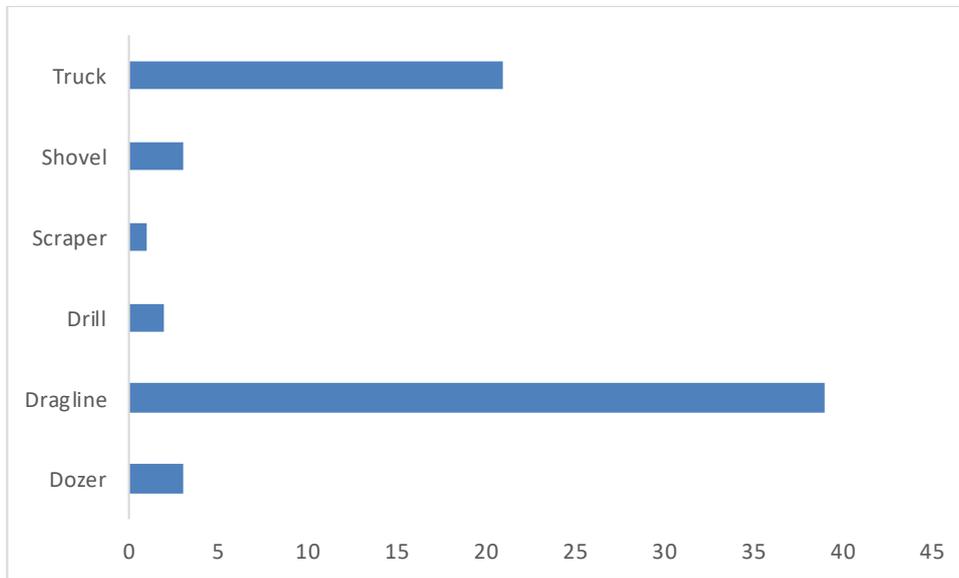


Figure 16: Operational Downtime by Equipment Type – April 2020

7.0 REHABILITATION

During April, 3.01 Ha of land was released, 4.76 HA of land was bulk shaped, 3.17 Ha of land was topsoiled and 13.49 Ha rehabilitated. Year to date progress can be viewed in Figure 17.

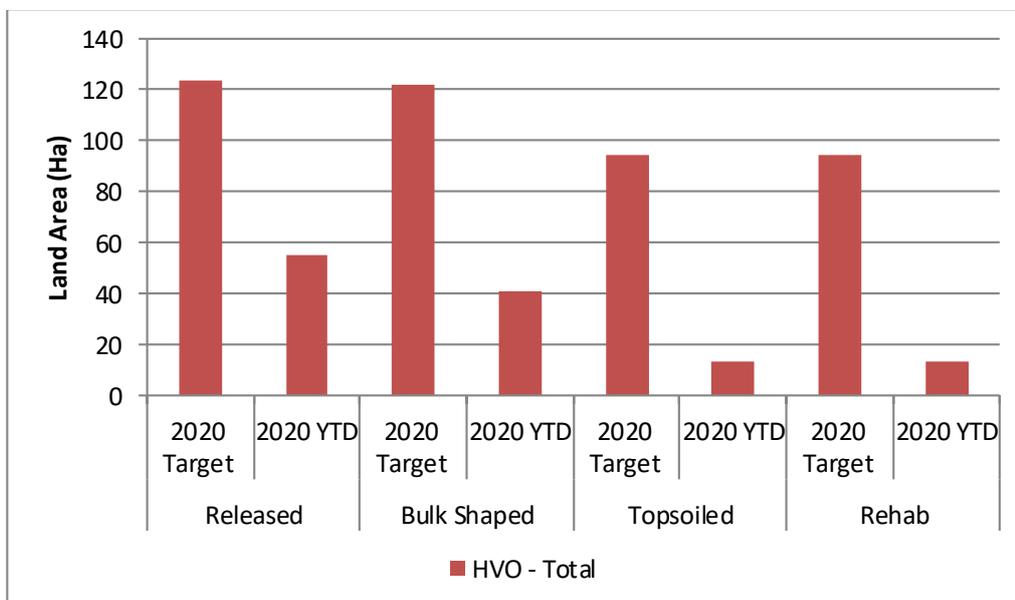


Figure 17: Rehabilitation YTD – April 2020

8.0 COMPLAINTS

No complaints were received during April 2020. No complaints have been received for 2020. Details of complaints received are shown in Table 9 below.

Table 9: Complaints Summary 2020

Month	Noise	Dust	Blast	Lighting	Other	Total
January	-	-	-	-	-	-
February	-	-	-	-	-	-
March	-	-	-	-	-	-
April	-	-	-	-	-	-
May						
June						
July						
August						
September						
October						
November						
December						
Total	0	0	0	0	0	0

9.0 ENVIRONMENTAL INCIDENTS

During the reporting period there were two reportable environmental incidents.

- 26/04/2020 – Cheshunt East PM10 HVAS Exceedance**
 The Cheshunt East HVAS recorded an exceedance against the 24 hour averaging period for PM10, recording a measurement of 72 µg/m³.
 Environmental consequence: Cat 1 Negligible
- 26/04/2020 – Cheshunt East TSP HVAS Failure to Run**
 The Cheshunt East HVAS failed to run for a full 24hr period on the 26th April.
 Environmental consequence: Cat 1 Negligible

APPENDIX A: METEOROLOGICAL DATA

Table 10: Meteorological Data - HVO Corporate Meteorological Station – April 2020

Date	Air Temp Max (°C)	Air Temp Min (°C)*	Relative Humidity Max (%)	Relative Humidity Min (%)*	Solar Radiation Maximum (W/Sq. M)	Wind Dir. Avg (°)	Wind Speed Avg (m/sec)	Rainfall (mm)
1/04/2020	27.0	12.1	112.6	51.9	1121	112.5	2.1	0
2/04/2020	23.4	11.7	112.1	80.1	928	197.7	1.7	5.6
3/04/2020	23.7	12.6	111.4	72.6	516.5	255	2.0	13.8
4/04/2020	23.7	10.1	110.3	39.2	903	290.8	6.1	16.2
5/04/2020	22.3	6.7	85.1	37.9	844	285.5	3.9	0
6/04/2020	24.4	5.1	100	40.4	934	210.4	2.3	0
7/04/2020	20.4	8.0	100	59.4	1193	120.3	2.7	0
8/04/2020	19.8	7.5	100	72.7	839	122	2.3	0
9/04/2020	18.8	8.1	100	78.4	321.8	117	2.2	0
10/04/2020	19.4	9.5	110.9	87.7	770	224.1	2.0	6.8
11/04/2020	24.1	8.5	98.8	31.1	862	275.9	6.8	0
12/04/2020	21.6	3.1	87.4	30.8	772.1	209.9	1.6	0
13/04/2020	22.9	2.3	99.9	32.7	938	197.7	1.0	0
14/04/2020	25.3	4.0	108.6	31.1	726	244.7	1.7	0
15/04/2020	27.1	4.6	100	29.4	697.2	275.8	2.1	0
16/04/2020	27.2	9.7	76.81	39.4	1115	287	4.0	0
17/04/2020	25.6	8.8	71.73	26.0	739	279.5	4.4	0
18/04/2020	23.3	4.3	82	23.7	833	235.6	2.5	0
19/04/2020	22.6	0.5	99.7	23.3	682.5	233.1	1.3	0
20/04/2020	20.4	1.8	84.1	34.6	920	281.5	3.2	0
21/04/2020	24.4	5.1	81.4	33.4	1029	287.5	2.8	0
22/04/2020	25.1	4.8	84.4	28.2	678.2	272.9	2.8	0
23/04/2020	23.2	1.2	88	24.2	707.4	271.5	2.4	0
24/04/2020	26.2	4.4	70.15	22.2	659.8	289	2.8	0
25/04/2020	25.8	3.6	80.9	24.4	657	246.1	2.1	0
26/04/2020	26.3	2.6	76.84	21.1	709.8	279.5	3.8	0
27/04/2020	20.0	4.7	100	56.9	936	133.3	2.7	0
28/04/2020	22.8	4.4	110	57.1	972	116.8	2.5	0
29/04/2020	27.7	16.2	80.8	44.4	720.4	229.6	2.2	0
30/04/2020	21.4	5.1	100	72.0	733	260.3	4.4	12.4