

HUNTER VALLEY OPERATIONS



Monthly Environmental Monitoring Report October 2020

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1 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 31st October 2020 (the 'Reporting Period').

2 Air Quality

2.1 Meteorological Monitoring

HVO maintains two meteorological stations: 'HVO Corporate' and 'Cheshunt' (refer to **Figure 4**)

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 - October 2020

2020	Monthly Rainfall (mm)	Cumulative Rainfall (mm)
October	87.0	651.2

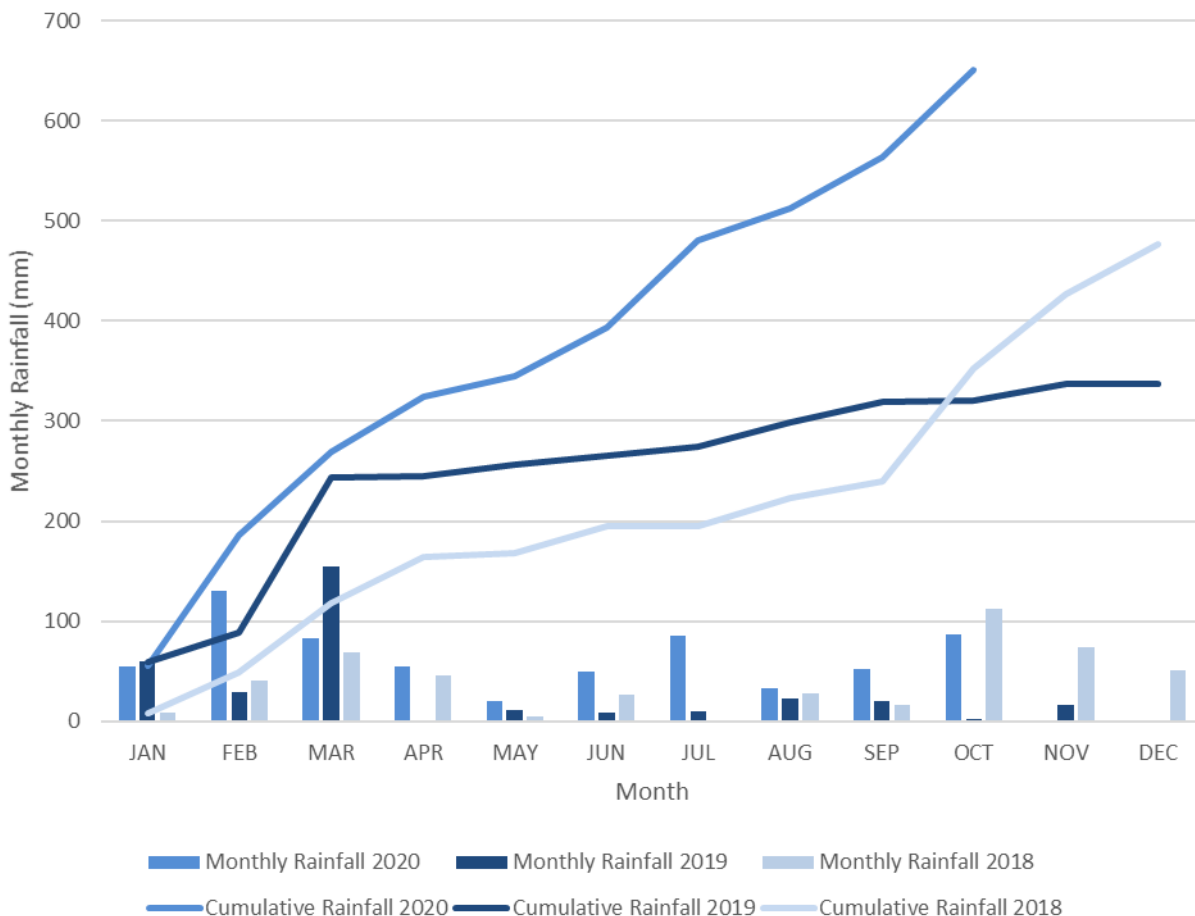


Figure 1 - Rainfall Summary 2020

2.1.2 Wind Speed and Direction

South Easterly winds were prevailing during October, with Westerly to North Westerly winds also common as shown in **Figure 2** (HVO Corporate) and **Figure 3** (HVO Cheshunt).

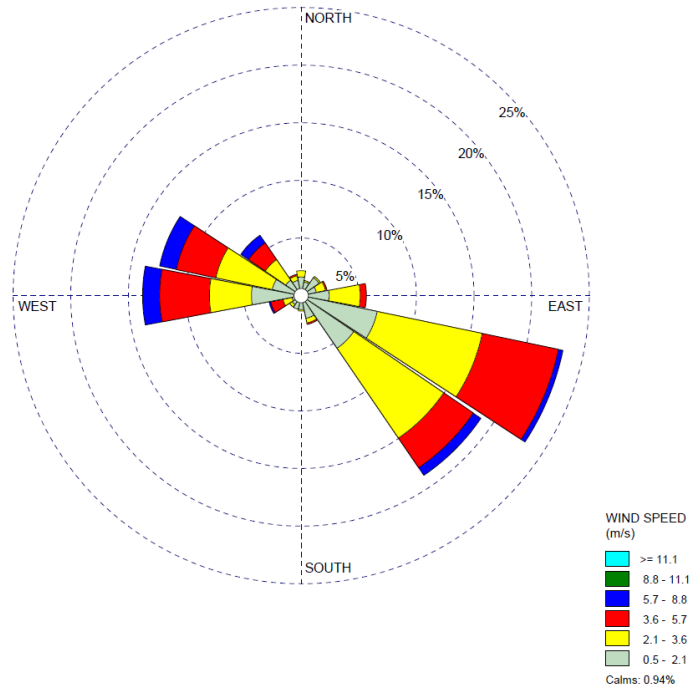


Figure 2 - HVO Corporate Wind Rose October 2020

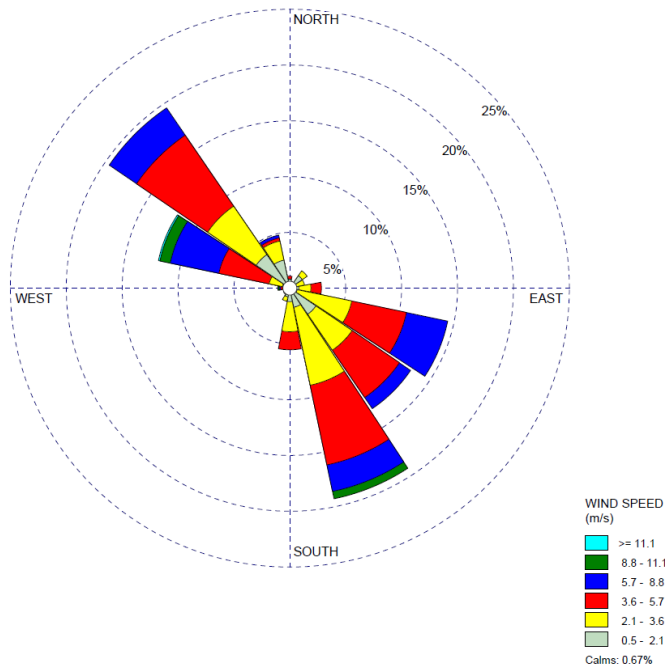


Figure 3 - HVO Cheshunt Wind Rose October 2020

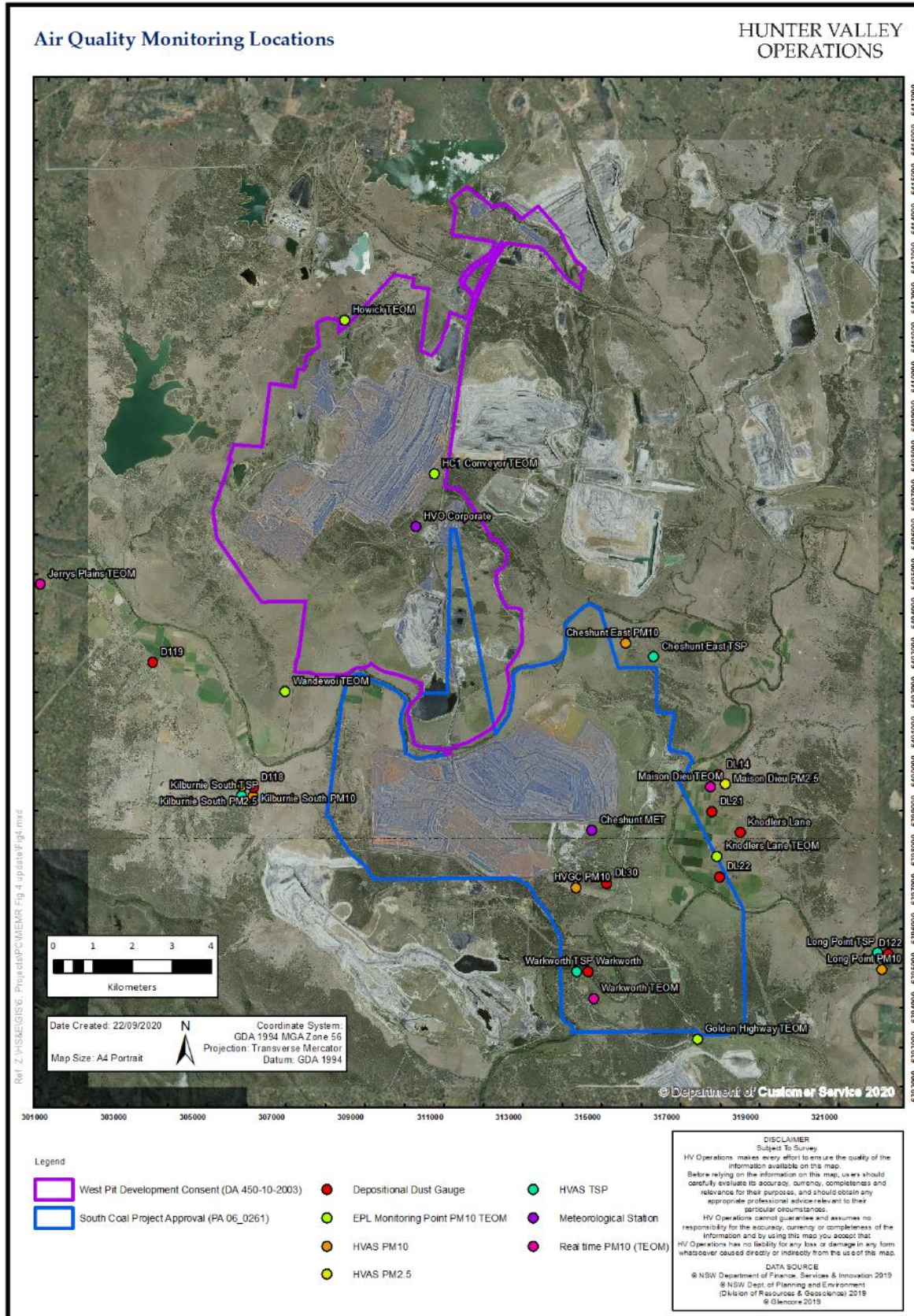


Figure 4 - Air Quality Monitoring Location Plan

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. Any monthly results deemed to be contaminated (due to presence of bird droppings, insects, etc.) are not displayed.

During the reporting period, the Warkworth monitor 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.

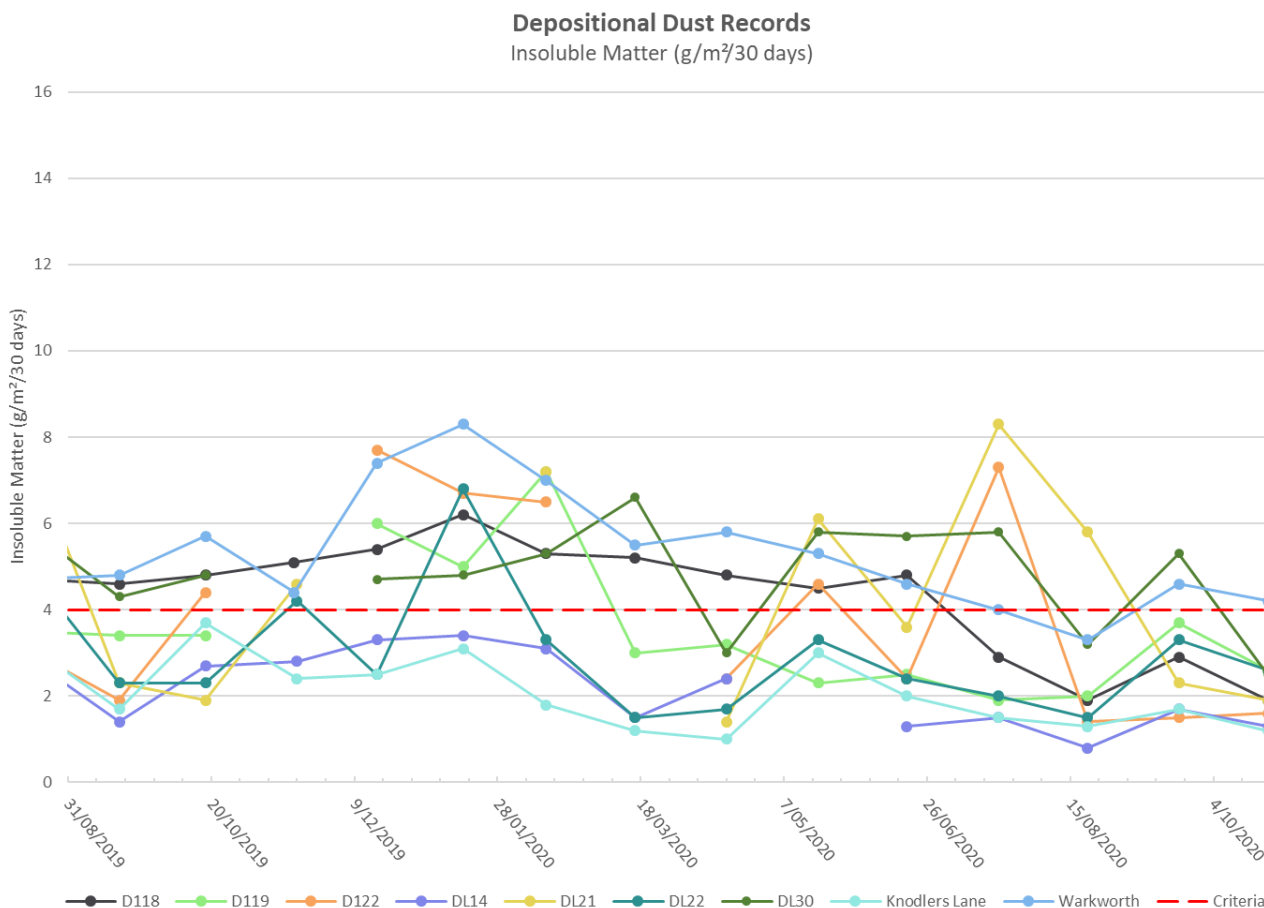


Figure 5 - Depositional Dust Results October 2020

2.3 Suspended Particles

Suspended particles 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 seen in Figure 4. Each HVAS runs for 24-hours on a six-day cycle.

2.3.1 HVAS PM₁₀ Results

2.3.1.1 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 50µg/m³. During the reporting period, no monitors recorded an exceedance above the short-term impact assessment criteria of 50µg/m³.

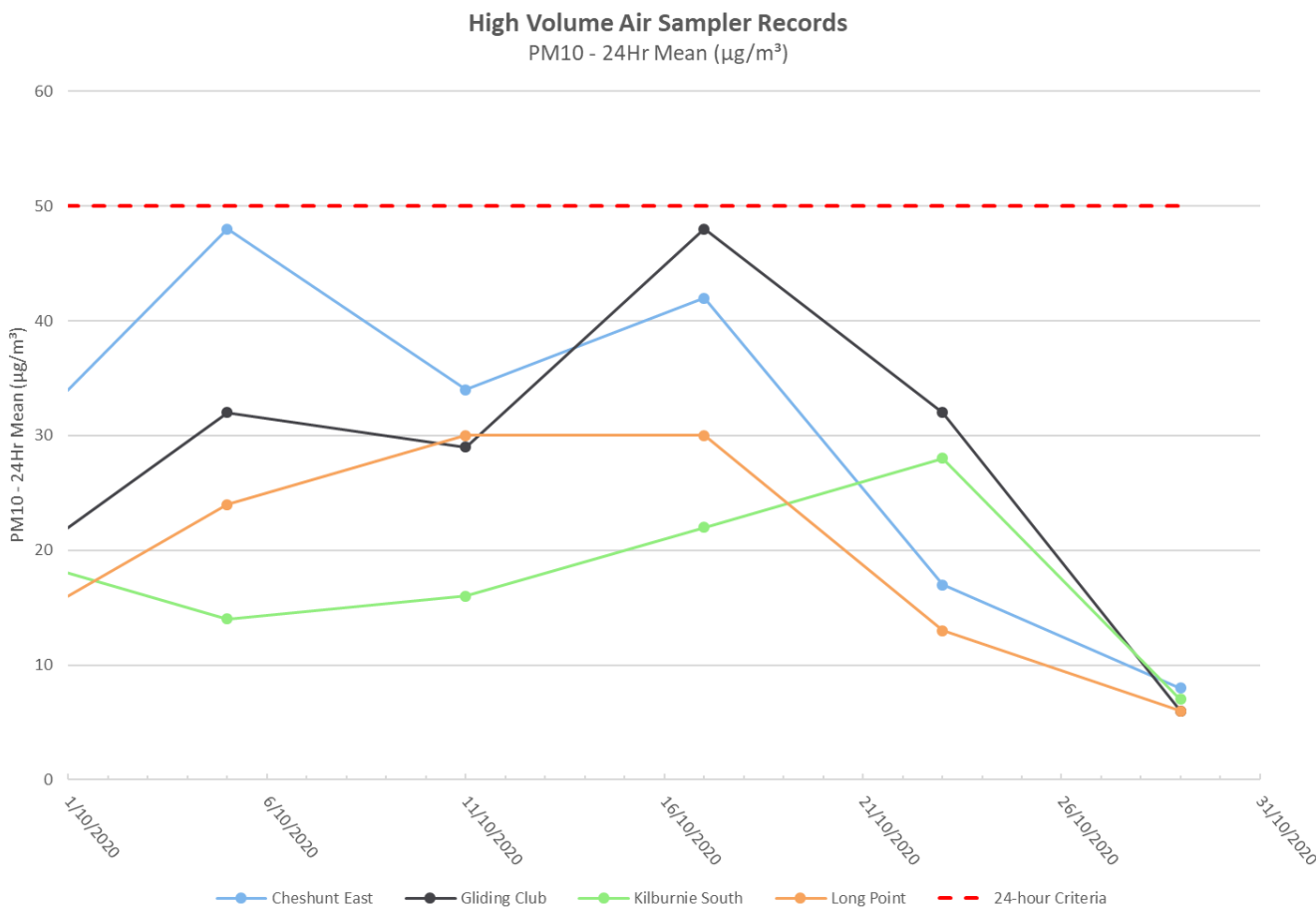


Figure 6 - Individual PM₁₀ Results October 2020

2.3.1.2 Performance against long term impact assessment criteria

Figure 7 shows the year to date annual average PM₁₀ results. During the reporting period, the Gliding Club monitor recorded an annual average above the PM₁₀ Annual Rolling Mean criteria of 25µg/m³ for HVO South. All monitors recorded an annual average below the 30µg/m³ criteria for HVO North.

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

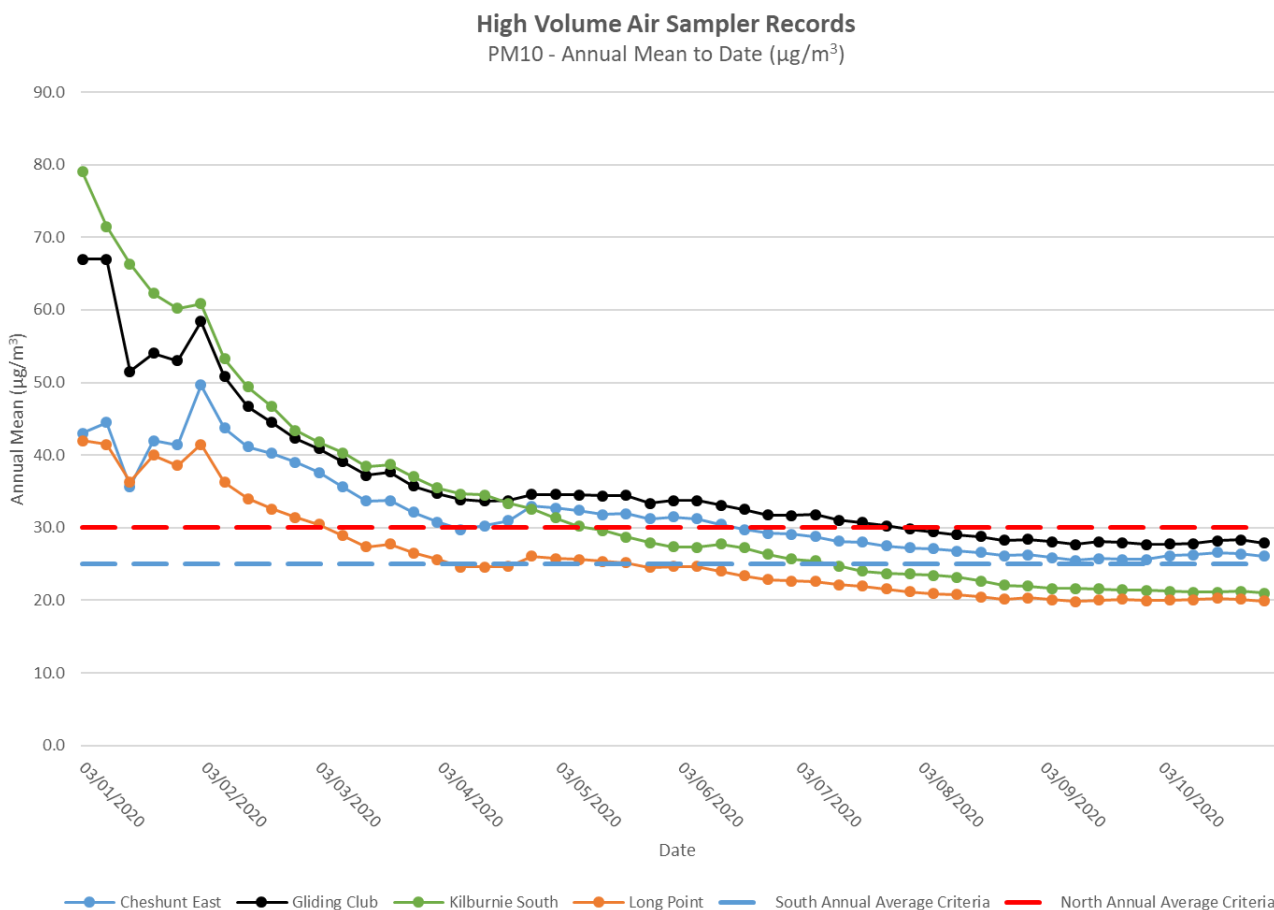


Figure 7 - Year to Date Average PM₁₀ as at end of October 2020

2.3.2 HVAS PM_{2.5} Results

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

2.3.2.1 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 25µg/m³.

The Maison Dieu monitor recorded three exceedances above the short-term impact assessment criteria of 25µg/m³ during the reporting period. Internal investigations into these exceedances deemed HVO’s contribution to be below the short-term impact assessment criteria of 25µg/m³

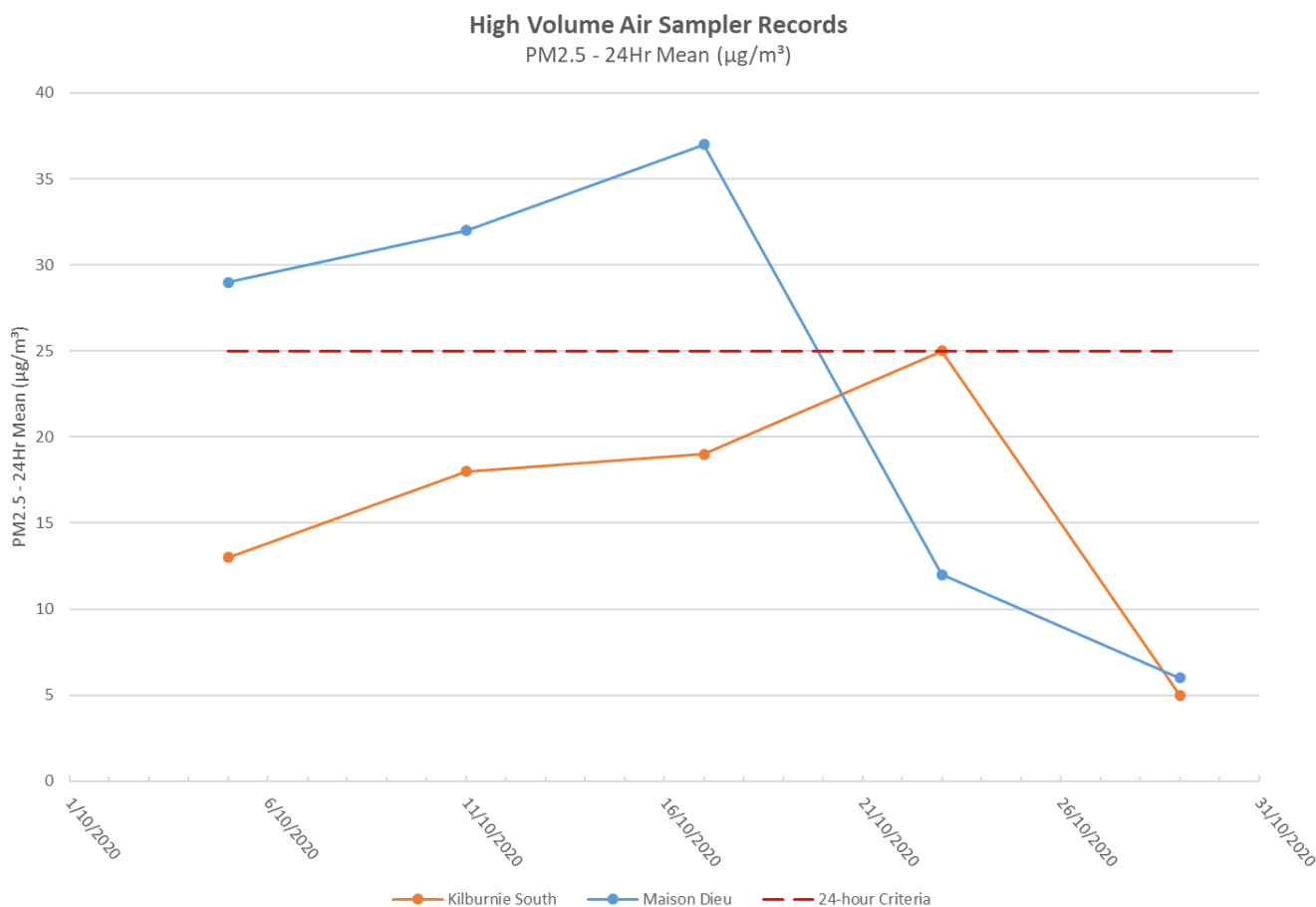


Figure 8 - Individual PM_{2.5} Results October 2020

2.3.2.2 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 monitors recorded an annual average above the PM_{2.5} Annual Rolling Mean criteria of 8µg/m³.

This is likely due to the impact of bushfire smoke and regional air quality in the first months of the year. An assessment of HVO’s contribution against the long term impact assessment criteria will be provided in the 2020 Annual Review.

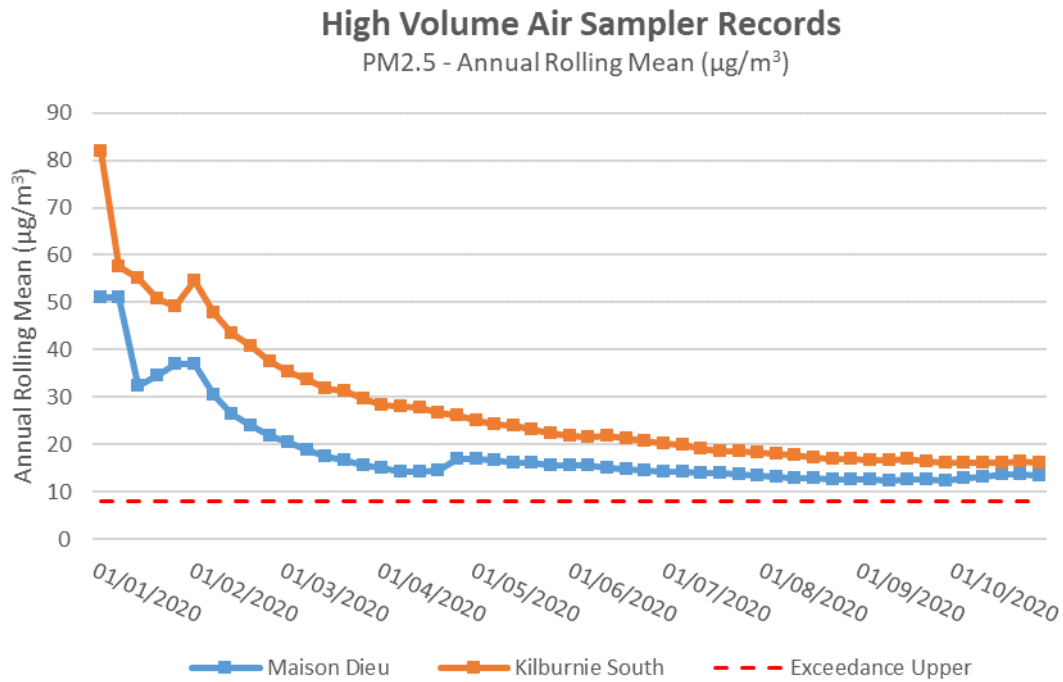


Figure 9 - Year to Date Average PM_{2.5} as at end of October 2020

2.3.3 TSP Results

2.3.3.1 Performance against long term impact assessment criteria

Figure 10 shows the annual average TSP results compared against the long-term impact assessment criteria of 90µg/m³.

No monitors recorded an annual average above the long-term impact assessment criteria of 90µg/m³ during the reporting period.

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

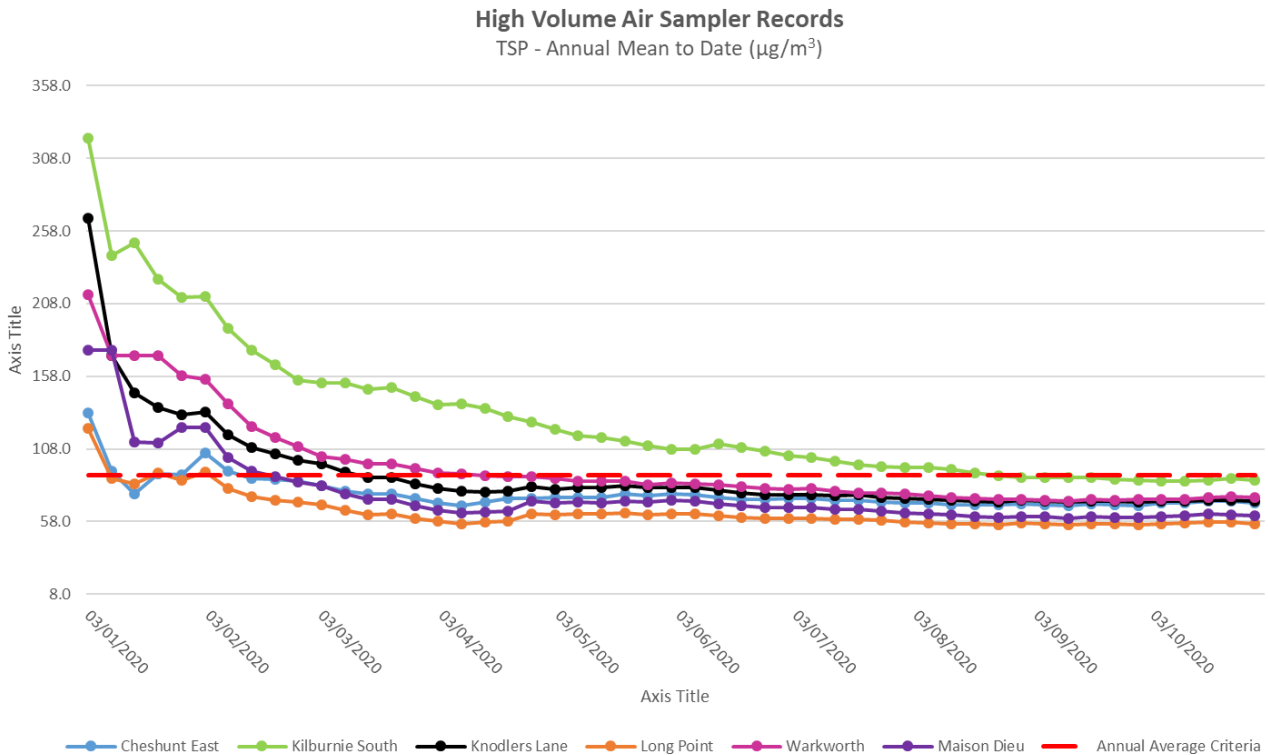


Figure 10 - Year to Date Average Total Suspended Particulates at end of October 2020

2.3.4 Real Time PM₁₀ Results

HVO 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.

Figure 11 shows the daily 24-hour average PM₁₀ result from the real time monitoring sites. The year to date annual averages for each monitoring site are shown in **Figure 12**.

On the 16th October the Knodlers Lane Monitor exceeded the 24-hour average PM₁₀ result limit, an investigation determined HVO's contribution to be below the criteria value.

No monitors recorded an annual average above the long-term impact criteria.

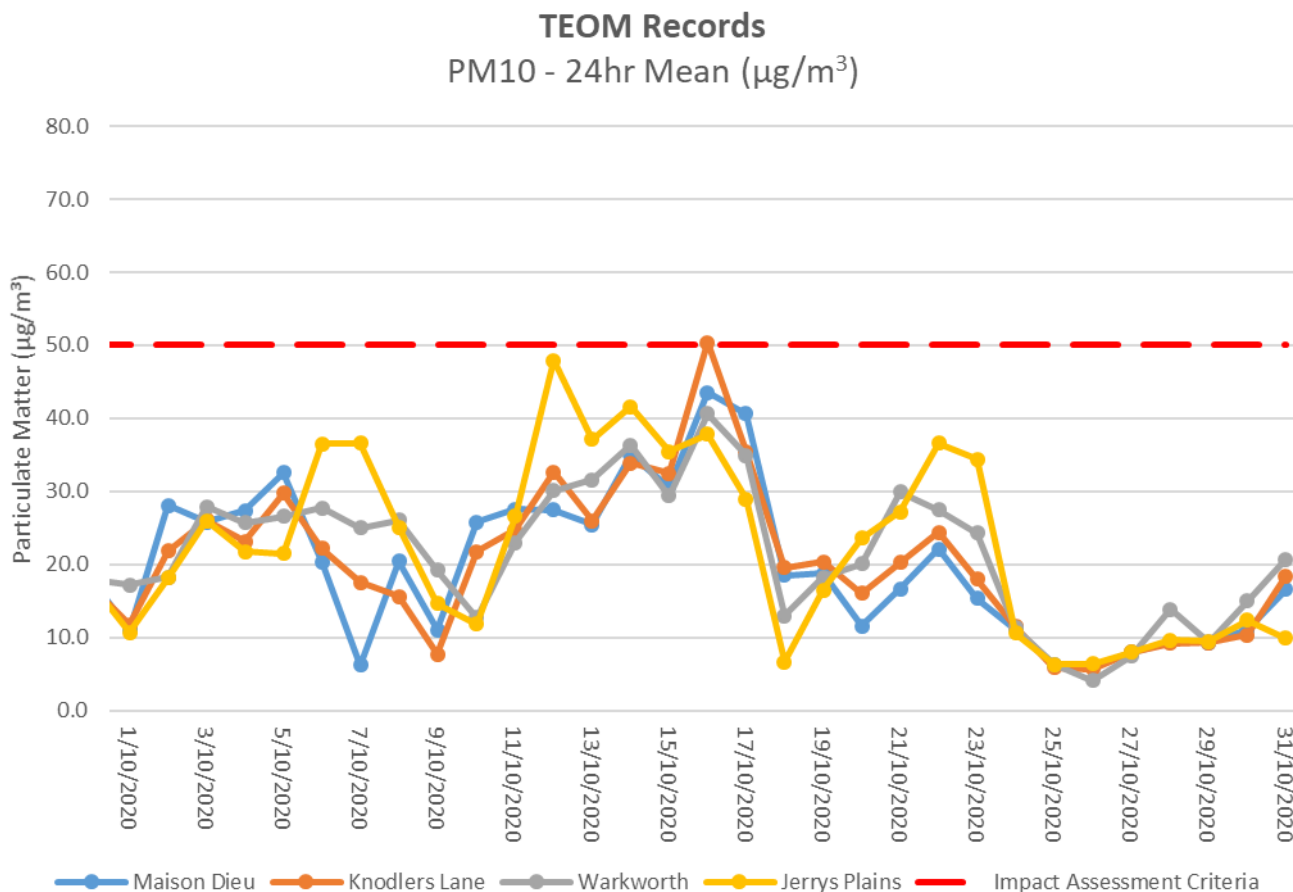


Figure 11 - Real Time PM₁₀ 24hr average and YTD average October 2020

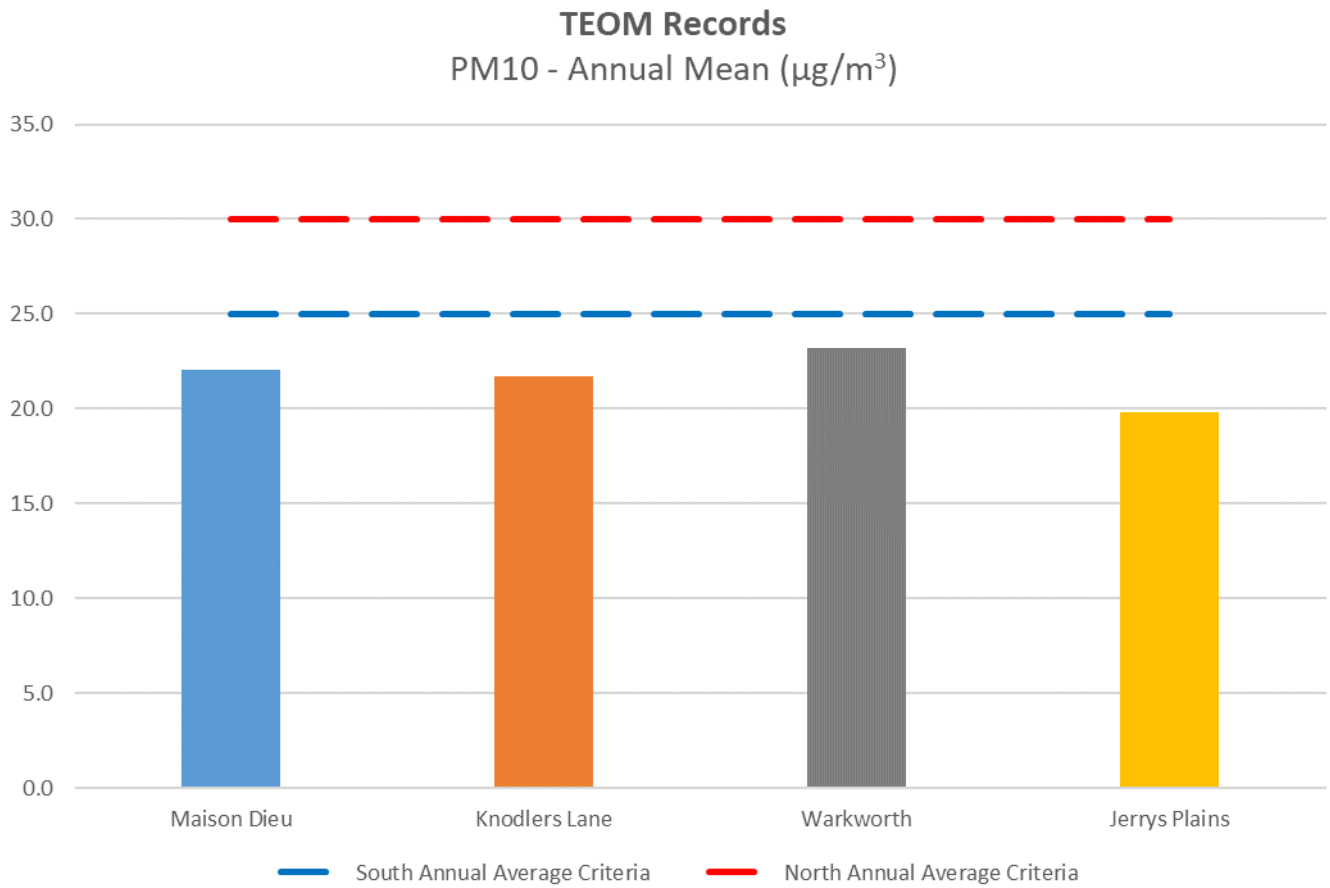


Figure 12 - Real Time PM₁₀ Annual Average October 2020

2.3.5 Real Time Alarms for Air Quality

During October, the real time monitoring system generated 181 automated air quality related alarms; of these alarms, 81 related to adverse weather conditions and 100 related to dust conditions.

3 Water Quality

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

3.1 Surface Water

Surface watercourses are sampled on a quarterly sampling regime. Water quality is assessed through the parameters of pH, electrical conductivity (EC) and Total Suspended Solids (TSS). The location of surface water monitoring points across HVO are shown in Figure 13

Results from monitoring on site dams, the Hunter River and other natural tributaries are provided on a quarterly basis; results will appear in the December 2020 report.

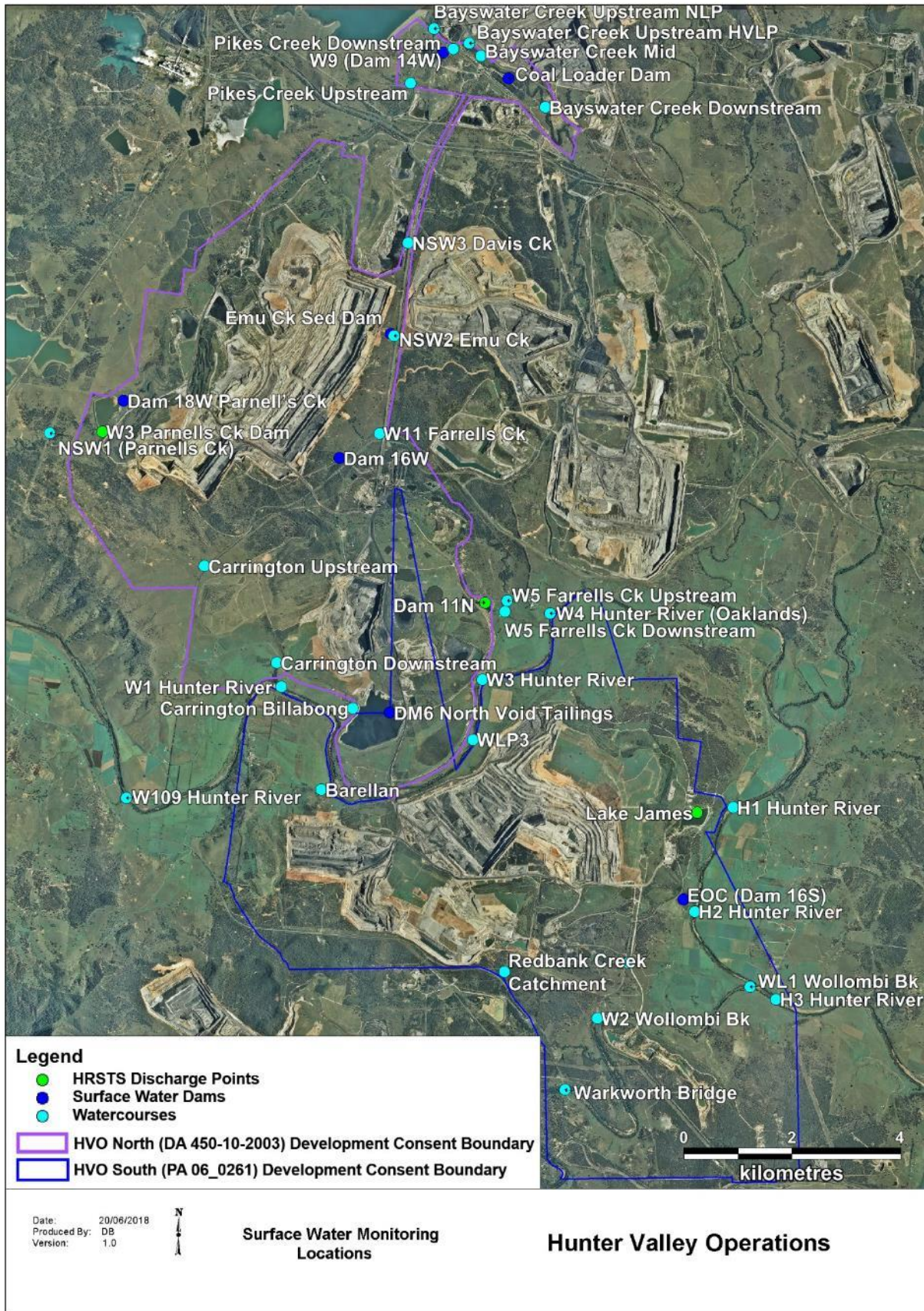


Figure 13 - HVO Surface Water Monitoring Locations

3.1.1 Surface Water Trigger Tracking

Internal trigger limits have been developed to assess monitoring data on an on-going basis and to highlight potentially adverse surface water impacts. The process for evaluating monitoring results against the internal triggers and subsequent responses are outlined in the HVO Water Management Plan.

Surface water trigger tracking results are provided on a quarterly basis; results will appear in the December 2020 report.

3.2 Site Water Use

Under water allocation licenses issued by Water NSW, HVO is permitted to extract water from the Hunter River. During the reporting period, HVO extracted 40.8 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, HVO discharged 0ML of water 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 Groundwater Monitoring Programme. The location of groundwater monitoring points across HVO are show in **Figure 14**

Groundwater monitoring results are provided on a quarterly basis; results will appear in the December 2020 report.

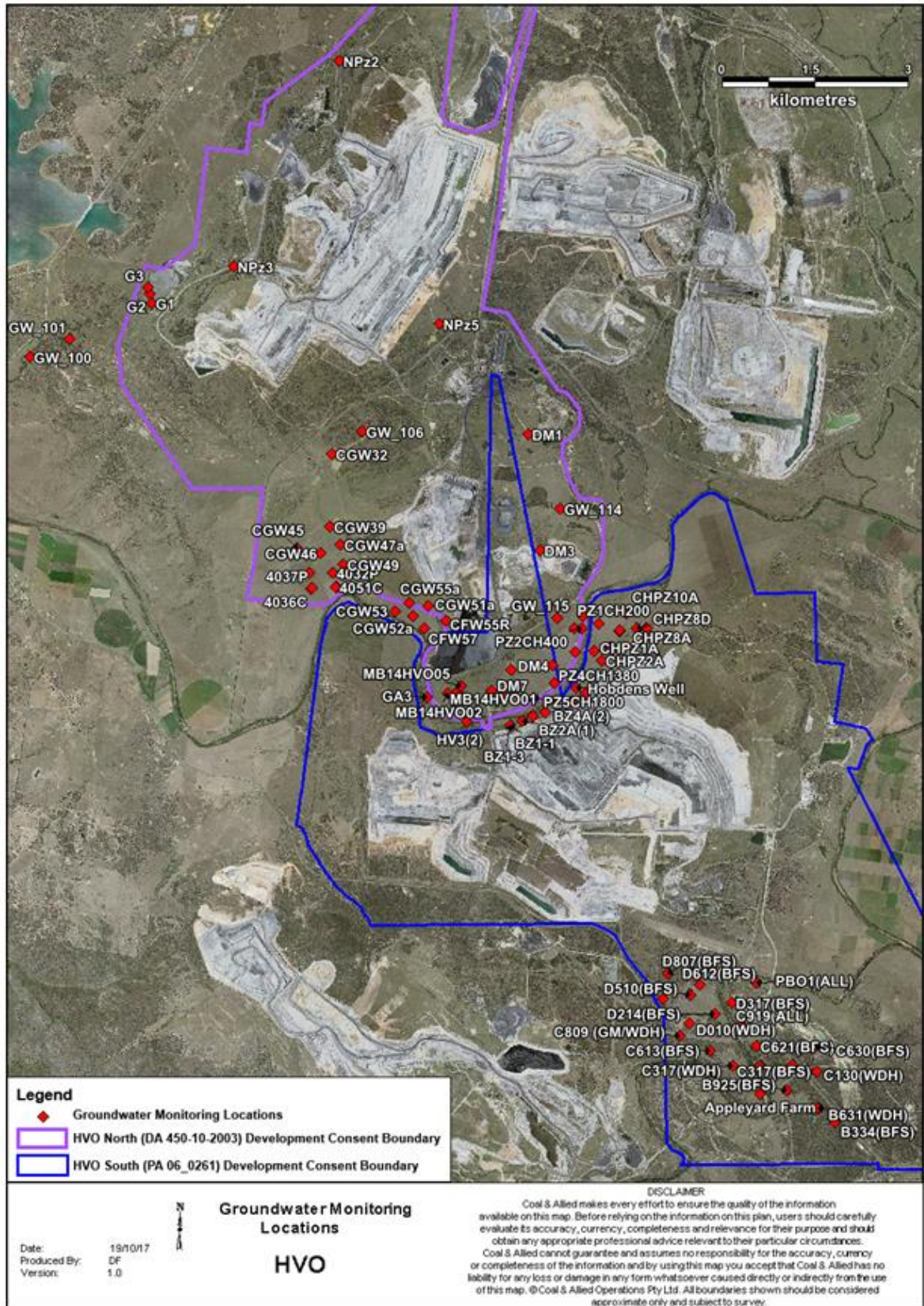


Figure 14 Groundwater monitoring Locations at HVO

3.4.1 Groundwater Trigger Tracking

Internal trigger limits have been developed to assess monitoring data on an on-going basis and to highlight potentially adverse groundwater impacts. The process for evaluating monitoring results against the internal triggers and subsequent responses are outlined in the HVO Water Management Plan.

Groundwater trigger tracking results are provided on a quarterly basis; results will appear in the December 2020 report.

4 Blasting

HVO maintains a network of blast monitoring units 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 for HVO are summarised in **Table 2**.

Table 2 - Blasting Criteria

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

4.1 Blast Monitoring Results

During October, eight blasts were initiated at HVO. **Table 3** and **Table 4** show the blast monitoring results for the reporting period against the impact assessment criteria.

Table 3 - Overpressure Blast Monitoring Results October 2020

Date and Time	Moses Crossing (dB)	Jerrys Plains Village (dB)	Maison Dieu (dB)	Warkworth (dB)	Knodlers Lane (dB)
14/10/2020 14:05	90.0	107.3	103.0	100.5	104.0
16/10/2020 14:16	101.1	94.9	95.9	100.8	96.3
19/10/2020 13:05	97.9	96.3	95.6	93.6	99.4
21/10/2020 13:04	97.1	97.1	91.7	99.4	91.0
23/10/2020 09:57	97.7	92.3	87.8	92.8	91.2
24/10/2020 12:54	90.3	89.7	95.4	96.6	95.1
27/10/2020 14:10	92.1	104.4	94.5	97.8	97.1
29/10/2020 14:57	90.3	92.2	93.7	93.9	94.2

Table 4 - Ground Vibration Blast Monitoring Results October 2020

Date and Time	Moses Crossing (mm/s)	Jerrys Plains Village (mm/s)	Maison Dieu (mm/s)	Warkworth (mm/s)	Knodlers Lane (mm/s)
14/10/2020 14:05	0.21	0.14	0.19	0.32	0.15
16/10/2020 14:16	0.23	0.09	0.15	0.65	0.18
19/10/2020 13:05	0.19	0.05	0.05	0.10	0.07
21/10/2020 13:04	0.26	0.11	0.24	0.69	0.25
23/10/2020 09:57	0.16	0.05	0.05	0.11	0.08
24/10/2020 12:54	0.17	0.09	0.92	1.10	0.77
27/10/2020 14:10	0.12	0.04	0.07	0.90	0.08
29/10/2020 14:57	0.25	0.13	0.23	0.54	0.16

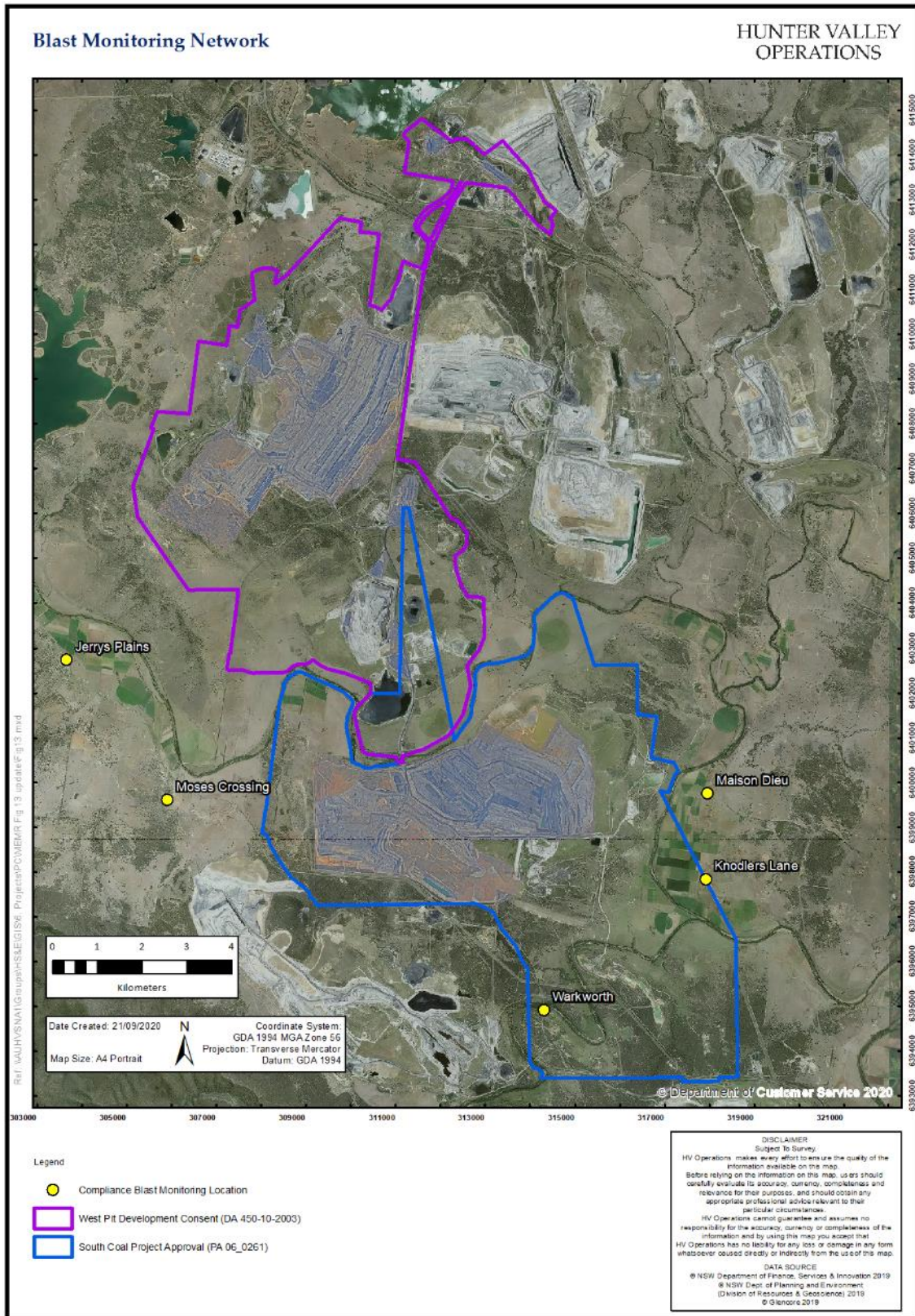


Figure 15 - Blast Monitoring Location Plan

5 Noise

Routine attended noise monitoring occurs at defined locations around HVO, as described in the HVO Noise Monitoring Programme. The noise monitoring aims to quantify and describe the acoustic environment around the site and compare results with specified limits. The attended noise monitoring locations are displayed in **Figure 16**.

5.1 Attended Noise Monitoring Results

Attended monitoring was conducted at receiver locations around HVO on the night of 14th October 2020 with no non-compliances recorded. Monitoring results are detailed in **Table 7** to **Table 11**.

Table 5 - LAeq,15minute HVO North Against Impact Assessment Criteria October 2020

Location	Date and Time	Wind Speed (m/s) ¹	Stability Class	Criterion dB(A)	Criterion Applies ²	HVO North L _{Aeq} dB ^{3,4,5,6,7}	Exceedance ^{4,5}
Shearers Lane	14/10/2020 21:00	3.0	D	35	Yes	IA	Nil
Knodlers Lane	14/10/2020 21:44	3.4	D	35	No	IA	NA
Maison Dieu	14/10/2020 21:21	2.6	D	35	Yes	IA	Nil
Long Point	14/10/2020 22:35	3.0	D	35	Yes	IA	Nil
Kilburnie South	14/10/2020 23:41	2.7	D	39	Yes	32	Nil
Jerrys Plains East	14/10/2020 23:14	3.2	D	39	No	34	NA
Jerrys Plains Village	14/10/2020 21:33	3.0	D	40	Yes	32	Nil
Jerrys Plains West	14/10/2020 21:03	3.0	D	40	Yes	33	Nil
HVGC	15/10/2020 00:15	2.0	D	Nil	Yes	IA	Nil

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 3m/s (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 indicated 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 therefore criterion not applicable;

6. IA means inaudible, there was no site noise at the monitoring location; and

7. NM means not measureable, noise was audible but could not be quantified.

Table 6 - LAeq,15minute HVO North Against Land Acquisition Criteria October 2020

Location	Date and Time	Wind Speed (m/s) ¹	Stability Class	Criterion dB(A)	Criterion Applies ²	HVO North LAeq dB ^{3,4,6,7}	Exceedance ^{4,5}
Shearers Lane	14/10/2020 21:00	3.0	D	41	Yes	IA	Nil
Knodlers Lane	14/10/2020 21:44	3.4	D	41	No	IA	NA
Maison Dieu	14/10/2020 21:21	2.6	D	41	Yes	IA	Nil
Long Point	14/10/2020 22:35	3.0	D	41	Yes	IA	Nil
Kilburnie South	14/10/2020 23:41	2.7	D	41	Yes	32	Nil
Jerrys Plains East	14/10/2020 23:14	3.2	D	41	No	34	Na
Jerrys Plains Village	14/10/2020 21:33	3.0	D	41	Yes	32	Nil
Jerrys Plains West	14/10/2020 21:03	3.0	D	41	Yes	33	Nil
HVGC	15/10/2020 00:15	2.0	D	NA	Yes	IA	Nil

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 3m/s (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 LAeq,15 minute attributed to HVO South Pit Area, including modifying factors if applicable;

4. Bold results in red indicated 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 therefore criterion not applicable;

6. IA means inaudible, there was no site noise at the monitoring location; and

7. NM means not measureable, noise was audible but could not be quantified.

Table 7 - LA1,1minute HVO North Against Impact Assessment Criteria October 2020

Location	Date and Time	Wind Speed (m/s) ¹	Stability Class	Criterion dB(A)	Criterion Applies ²	HVO North L _{Aeq} dB ^{3,4,6,7}	Exceedance ^{4,5}
Shearers Lane	14/10/2020 21:00	3.0	D	46	Yes	IA	Nil
Knodlers Lane	14/10/2020 21:44	3.4	D	46	No	IA	NA
Maison Dieu	14/10/2020 21:21	2.6	D	46	Yes	IA	Nil
Long Point	14/10/2020 22:35	3.0	D	46	Yes	IA	Nil
Kilburnie South	14/10/2020 23:41	2.7	D	46	Yes	33	Nil
Jerrys Plains East	14/10/2020 23:14	3.2	D	46	No	38	NA
Jerrys Plains Village	14/10/2020 21:33	3.0	D	46	Yes	37	Nil
Jerrys Plains West	14/10/2020 21:03	3.0	D	46	Yes	35	Nil
HVGC	15/10/2020 00:15	2.0	D	Nil	Yes	IA	Nil

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 3m/s (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 indicated 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 therefore criterion not applicable;

6. IA means inaudible, there was no site noise at the monitoring location; and

7. NM means not measureable, noise was audible but could not be quantified.

Table 8 - LAeq,15minute HVO South Against Impact Assessment Criteria October 2020

Location	Date and Time	Wind Speed (m/s) ¹	Stability Class	Criterion dB(A)	Criterion Applies ²	HVO South L _{Aeq} dB ^{3,4,6,7}	Exceedance ^{4,5}
Shearers Lane	14/10/2020 21:00	3.2	D	41	No	IA	NA
Knodlers Lane	14/10/2020 21:44	3.4	E	40	No	IA	NA
Maison Dieu	14/10/2020 21:21	3.3	E	39	No	IA	NA
Long Point	14/10/2020 22:35	3.2	E	37	No	IA	NA
Kilburnie South	14/10/2020 23:41	3.3	E	39	No	34	NA
Jerrys Plains East	14/10/2020 23:14	3.2	E	38	No	<30	NA
Jerrys Plains Village	14/10/2020 21:33	3.3	E	35	No	<30	NA
Jerrys Plains West	14/10/2020 21:03	3.2	D	35	No	IA	NA
HVGC	15/10/2020 00:15	3.1	E	55	No	<30	NA

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 3m/s (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 indicated 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 therefore criterion not applicable;
6. IA means inaudible, there was no site noise at the monitoring location; and
7. NM means not measureable, noise was audible but could not be quantified.

Table 9 - LA1,1minute HVO South Against Impact Assessment Criteria October 2020

Location	Date and Time	Wind Speed (m/s) ¹	Stability Class	Criterion dB(A)	Criterion Applies ²	HVO South L _{Aeq} dB ^{3,4,6,7}	Exceedance ^{4,5}
Shearers Lane	14/10/2020 21:00	3.2	D	45	No	IA	NA
Knodlers Lane	14/10/2020 21:44	3.4	E	45	No	IA	NA
Maison Dieu	14/10/2020 21:21	3.3	E	45	No	IA	NA
Long Point	14/10/2020 22:35	3.2	E	45	No	IA	NA
Kilburnie South	14/10/2020 23:41	3.3	E	45	No	39	NA
Jerrys Plains East	14/10/2020 23:14	3.2	E	45	No	<30	NA
Jerrys Plains Village	14/10/2020 21:33	3.3	E	45	No	<30	NA
Jerrys Plains West	14/10/2020 21:03	3.2	D	45	No	IA	NA
HVGC	15/10/2020 00:15	3.1	E	NA	No	<30	NA

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 3m/s (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 indicated 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 therefore criterion not applicable;
6. IA means inaudible, there was no site noise at the monitoring location; and
7. NM means not measureable, 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 October 2020 no penalties were applied. The assessments for the low frequency noise are shown in **Table 10** and **Table 11**.

Table 10 - Modifying Factor Assessment HVO North October 2020

Location	Date and Time	Measured HVO North $L_{Aeq}dB$	Criterion Applies?	Intermittency Modifying Factor?	Tonality Modifying Factor?	Frequency of Tonality ¹	Low-frequency Modifying Factor?	Maximum Exceedance of NPfl Reference Spectrum ^{1,2}	Total Penalty dB^2
Sheares Lane	14/10/20 20 21:00	IA	Yes	No	No	NA	No	NA	Nil
Knodlers Lane	14/10/20 20 21:44	IA	No	No	No	NA	No	NA	NA
Maison Dieu	14/10/20 20 21:21	IA	Yes	No	No	NA	No	NA	Nil
Long Point	14/10/20 20 22:35	IA	Yes	No	No	NA	No	NA	Nil
Kilburnie South	14/10/20 20 23:41	32	Yes	No	No	NA	No	NA	Nil
Jerrys Plains East	14/10/20 20 23:14	34	No	No	No	NA	No	NA	NA
Jerrys Plains Village	14/10/20 20 21:33	32	Yes	No	No	NA	No	NA	Nil
Jerrys Plains West	14/10/20 20 21:03	33	Yes	No	No	NA	No	NA	Nil
HVGC	15/10/20 20 00:15	IA	Yes	No	No	NA	No	NA	Nil

1. NA means not applicable;

2. Bold results indicate that NPfl low-frequency modifying factor has been triggered and application of correction is required.

Table 11 - Modifying Factor Assessment HVO South October 2020

Location	Date and Time	Measured HVO South LAeqdB	Criterion Applies?	Intermittency Modifying Factor?	Tonality Modifying Factor?	Frequency of Tonality ¹	Low-frequency Modifying Factor?	Maximum Exceedance of NPfI Reference Spectrum ^{1,2}	Total Penalty dB ²
Sheares Lane	14/10/20 20 21:00	41	No	No	No	NA	No	NA	NA
Knodlers Lane	14/10/20 20 21:44	40	No	No	No	NA	No	NA	NA
Maison Dieu	14/10/20 20 21:21	39	No	No	No	NA	No	NA	NA
Long Point	14/10/20 20 22:35	37	No	No	No	NA	No	NA	NA
Kilburnie South	14/10/20 20 23:41	39	No	No	No	NA	No	NA	NA
Jerrys Plains East	14/10/20 20 23:14	38	No	No	No	NA	No	NA	NA
Jerrys Plains Village	14/10/20 20 21:33	35	No	No	No	NA	No	NA	NA
Jerrys Plains West	14/10/20 20 21:03	35	No	No	No	NA	No	NA	NA
HVGC	15/10/20 20 00:15	55	No	No	No	NA	No	NA	NA

1. NA means not applicable;

2. Bold results indicate that NPfI 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, shown in **Figure 16**. 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.

HVO investigates and responds to noise alarms with appropriate modification to operations. Changes in response to a noise alarm can include replacing equipment with quieter (noise attenuated) units, changing or relocating tasks, or shutting down equipment. It should be noted that this assessment does not compliment or conflict with attended noise monitoring detailed in **Section 5.1**. Real time monitoring data includes non-mine noise sources such as animals, road traffic and weather.

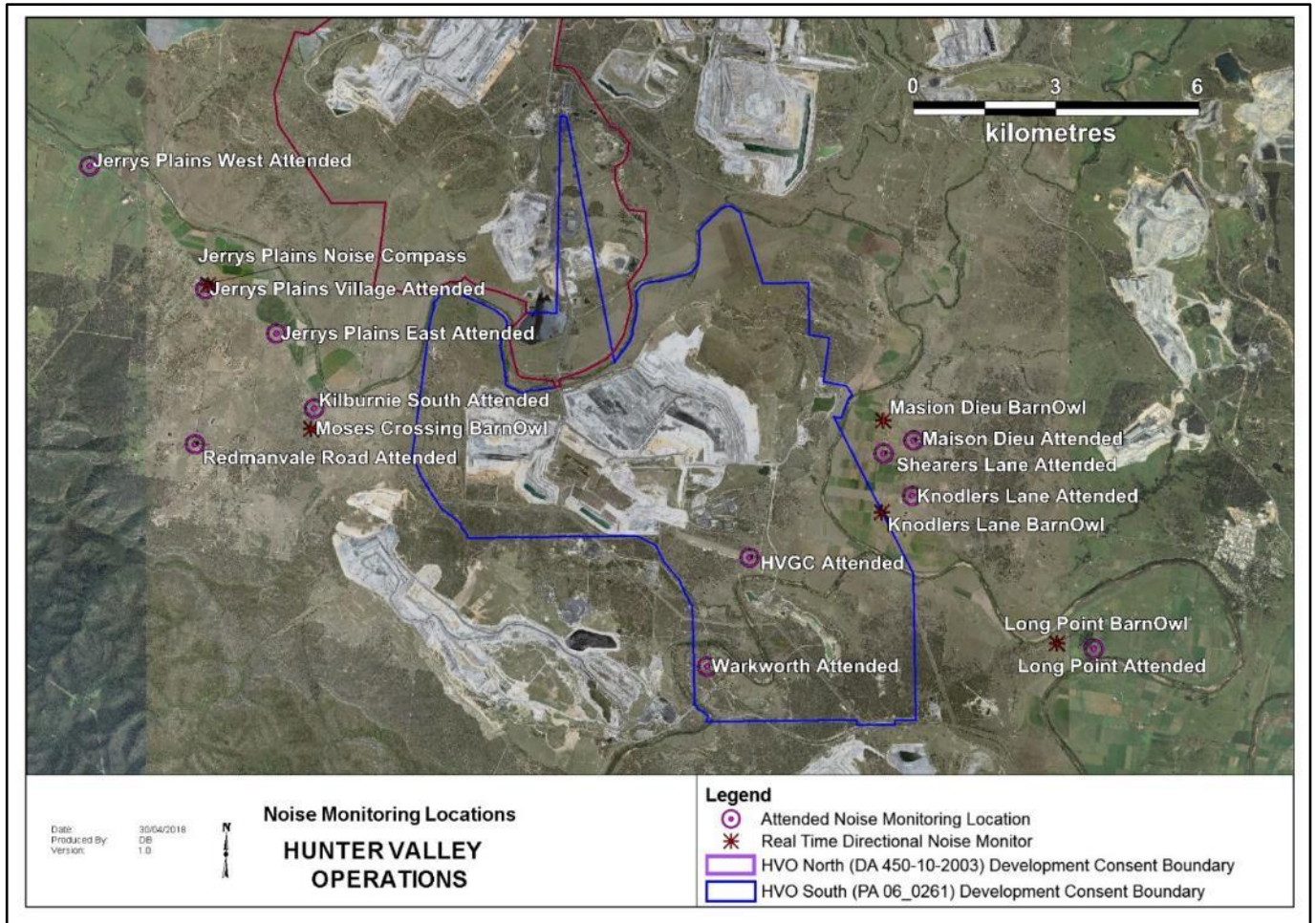


Figure 16 - Noise Monitoring Location Plan

6 Operational Downtime

During October a total of 22 hours of equipment downtime were logged in response to real time monitoring and inspections for environmental factors such as noise and dust. Operational downtime by equipment type is show in **Figure 17**. Note that these delays are instances where operations were completely stopped and does not include occasions where operations were changed/modified but not stopped (e.g. changed from exposed dump to in-pit dump).

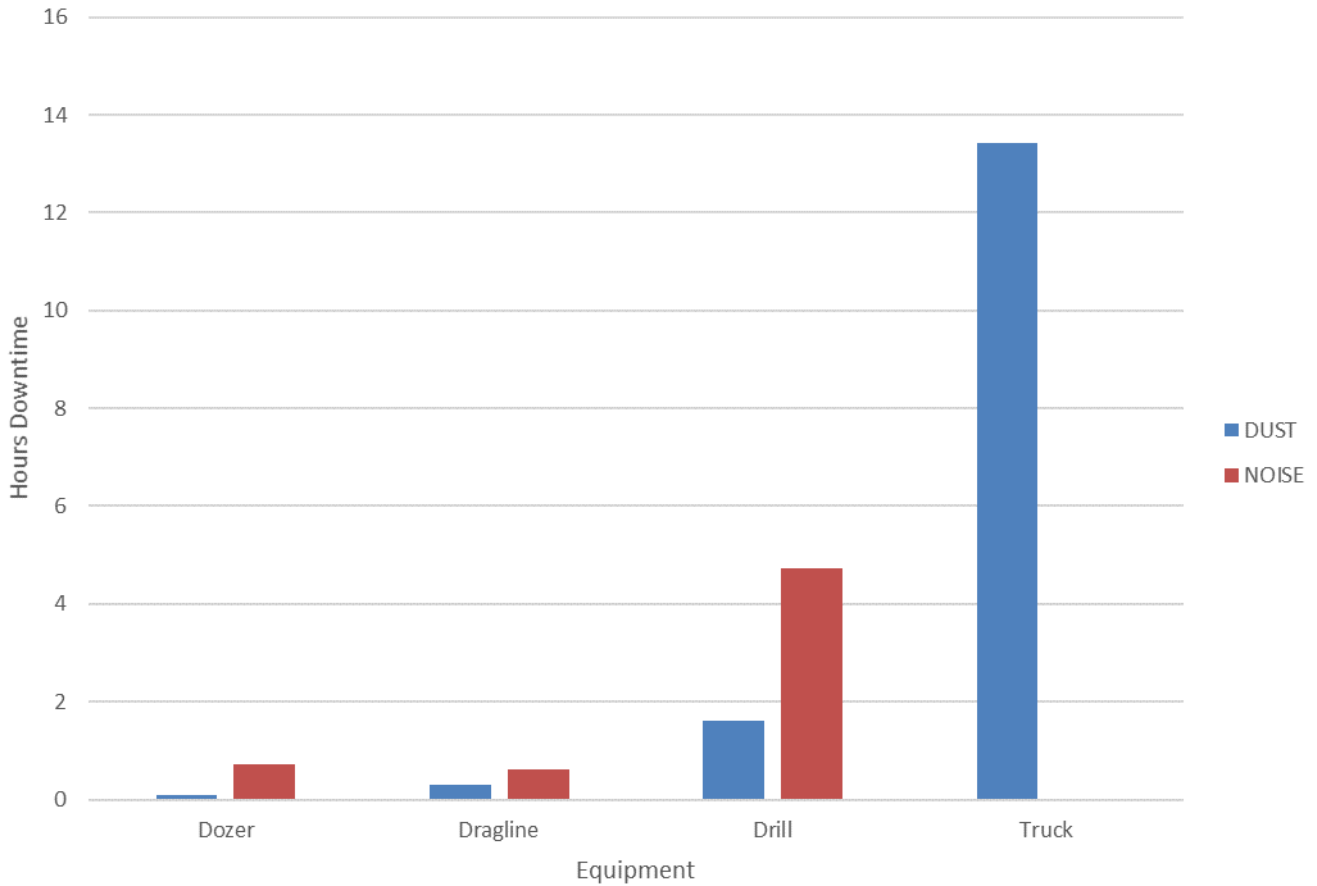


Figure 17 - Operational Downtime by Equipment Type October 2020

7 Rehabilitation

During October, 10.01 Ha of land was bulk shaped, 3.43 Ha of land was released, 17 Ha of land was topsoiled, and 16.67 Ha was rehabilitated. Year to date progress can be viewed in **Figure 18**.

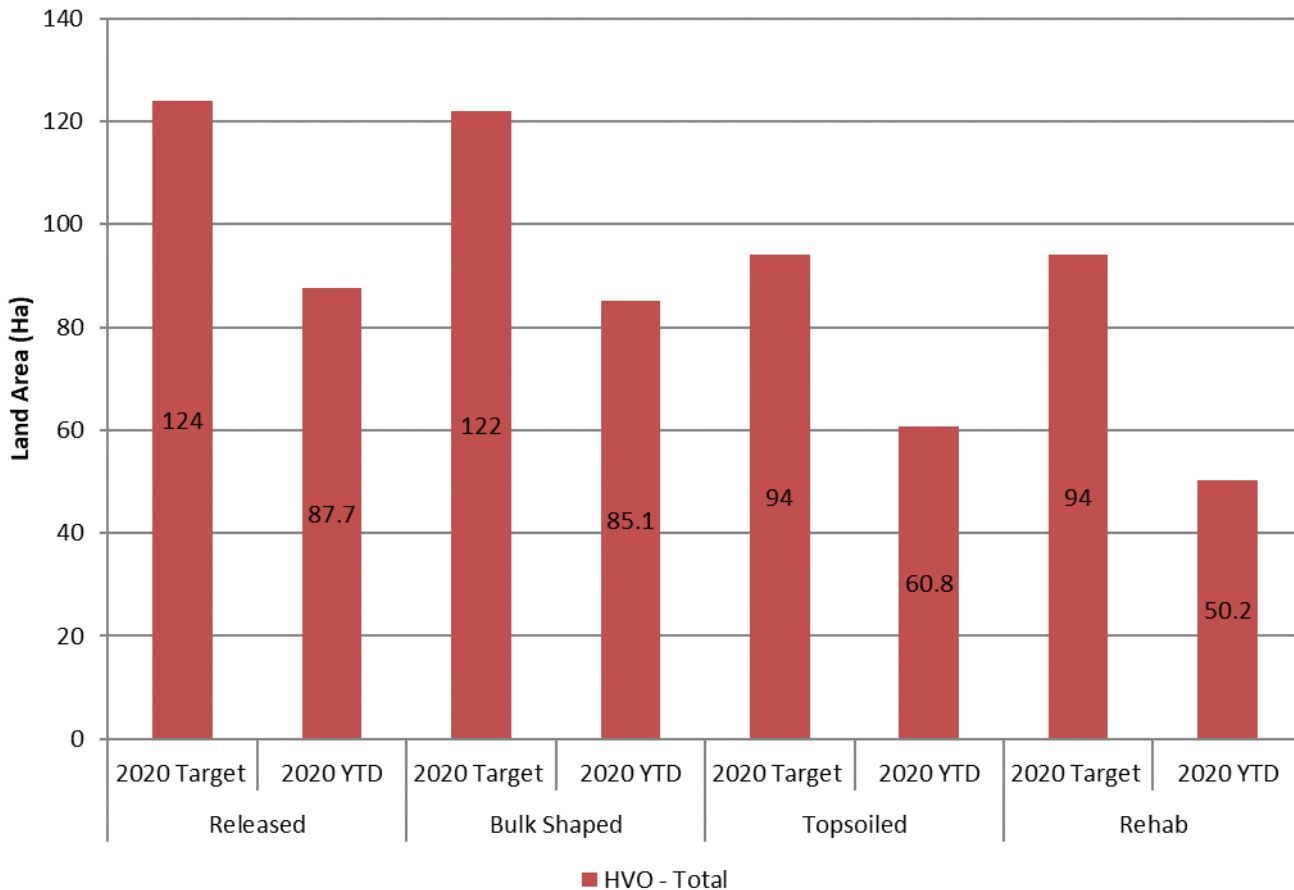


Figure 18 - Rehabilitation YTD October 2020

8 Complaints

Three complaints were received during October 2020. Fourteen complaints have been received in 2020. Details of complaints received are shown in **Table 12**.

Table 12 - Complaints Summary 2020

Month	Noise	Dust	Blast	Lighting	Other	Total
January	-	-	-	-	-	-
February	-	-	-	-	-	-
March	-	-	-	-	-	-
April	-	-	-	-	-	-
May	3	-	-	-	-	3
June	2	-	-	-	-	2
July	-	-	-	-	-	-
August	-	-	1	-	-	1
September	-	-	1	3	1	5
October	-	1	-	1	1	3
November						
December						
Total	5	1	2	4	2	14

9 Environmental Incidents

During October there were no reportable environmental incidents.

Appendix A - Meteorological Data

Date	Air Temp Max (°C)	Air Temp Min (°C)	Relative Humidity (Max %)	Relative Humidity (Min %)	Solar Radiation Maximum (W/Sq. M)	Average Wind Direction (°)	Average Wind Speed (m/sec)	Rainfall (mm)
01/10/2020	23.5	0.6	100	17.1	1135	253.6	4.3	0.6
02/10/2020	26.3	-2.0	108.6	10.1	930	212.9	1.6	0
03/10/2020	28.4	-1.5	95.4	2.6	945	197	1.5	0
04/10/2020	29.4	0.8	100	12.4	925	233.3	2.2	0
05/10/2020	29.2	2.5	82.2	18.3	919	254.8	2.9	0
06/10/2020	22.2	2.4	100	37.6	1408	128.1	3.0	0
07/10/2020	23.2	3.1	100	50.3	1215	110.6	2.6	0
08/10/2020	28.6	3.0	109.2	28.9	1131	231.4	3.7	0
09/10/2020	21.3	1.1	66.74	21.7	1241	284.5	4.3	0
10/10/2020	24.9	-1.1	77.74	10.5	968	269.1	2.5	0
11/10/2020	26.3	0.2	63.6	11.8	1176	207.3	1.8	0
12/10/2020	26.7	1.4	86.3	17.5	1100	137	2.3	0
13/10/2020	28.4	1.6	100	13.1	975	164	2.0	0
14/10/2020	24.0	2.1	99.4	40.3	1332	115.4	3.3	0
15/10/2020	28.3	2.7	109.3	19.2	921	225.8	2.3	0
16/10/2020	26.7	5.0	93.7	26.0	1370	175.8	3.5	0
17/10/2020	30.7	4.3	100	12.0	1044	217.4	3.4	0
18/10/2020	21.3	2.8	108.6	46.1	843	277.9	4.1	9.4
19/10/2020	20.1	1.8	108.7	56.3	1407	118.9	3.0	0.2
20/10/2020	24.1	0.4	110.5	32.3	1270	116.4	2.6	0
21/10/2020	26.6	0.9	100	24.6	1168	134.7	2.1	0
22/10/2020	26.8	4.0	93.7	32.9	1223	135.2	1.8	0
23/10/2020	30.2	2.6	111.5	27.3	1078	126.3	1.8	0
24/10/2020	21.2	4.7	111.7	74.4	728.4	238.5	2.1	35
25/10/2020	16.5	0.5	109.4	79.9	1060	147.3	3.3	12.4

Date	Air Temp Max (°C)	Air Temp Min (°C)	Relative Humidity (Max %)	Relative Humidity (Min %)	Solar Radiation Maximum (W/Sq. M)	Average Wind Direction (°)	Average Wind Speed (m/sec)	Rainfall (mm)
26/10/2020	15.6	0.2	110.4	73.6	1294	133.4	3.6	8.4
27/10/2020	18.8	1.0	99.7	58.4	1040	119.7	2.6	0
28/10/2020	17.7	0.5	110.8	68.5	667.1	130.8	2.5	16.4
29/10/2020	22.4	0.4	111.3	44.4	838	151.7	1.6	3.8
30/10/2020	22.2	-1.3	111	46.2	557.3	153.9	2.9	0.6
31/10/2020	24.1	2.9	100	20.6	583.3	214.4	3.3	0.2