

**HUNTER VALLEY**  
OPERATIONS

**MONTHLY  
ENVIRONMENTAL  
MONITORING REPORT  
FEBRUARY 2024**

**DOCUMENT NUMBER**

HVOOC-1797567310-4955

**STATUS**

Approved

**VERSION**

1.0

**EFFECTIVE**

27/06/2024

**REVIEW**

[Planned Review Date]

**OWNER**

Superintendent - Environment and Community

1	Introduction.....	4
2	Air Quality.....	4
2.1	Meteorological Monitoring.....	4
2.1.1	Rainfall.....	4
2.1.2	Wind Speed and Direction.....	5
2.2	Depositional Dust.....	7
2.3	Suspended Particles.....	8
2.3.1	HVAS PM <sub>10</sub> Results.....	8
2.3.2	HVAS PM <sub>2.5</sub> Results.....	10
2.3.3	TSP Results.....	12
2.3.4	Real Time PM <sub>10</sub> Results.....	13
2.3.5	Real Time Alarms for Air Quality.....	14
3	Water Quality.....	15
3.1	Surface Water.....	15
3.1.1	Surface Water Trigger Tracking.....	17
3.2	Site Water Use.....	17
3.3	HRSTS Discharge.....	17
3.4	Groundwater Monitoring Results.....	17
3.4.1	Groundwater Trigger Tracking.....	19
4	Blasting.....	20
4.1	Blast Monitoring Results.....	21
5	Noise.....	24
5.1	Attended Noise Monitoring Results.....	24
5.2	Low Frequency Assessment.....	27
5.3	Real Time Noise Monitoring.....	28
6	Operational Downtime.....	30
7	Rehabilitation.....	31
8	Complaints.....	32
9	Environmental Incidents.....	33

Appendix A: Meteorological Data (HVO Corporate).....	34
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## Table of Figures

Figure 1 - Rainfall Summary 2024 .....	4
Figure 2 – HVO Corporate Wind Rose for the Reporting Period .....	5
Figure 3 – HVO Cheshunt Wind Rose for the Reporting Period.....	5
Figure 4 – Air Quality Monitoring Location Plan .....	6
Figure 5 - Depositional Dust Results for the Reporting Period .....	7
Figure 6 – Individual PM <sub>10</sub> Results for the Reporting Period .....	8
Figure 7 – Year to Date Average PM <sub>10</sub> as at end of the Reporting Period .....	9
Figure 8 - Results for the Reporting Period.....	10
Figure 9 - Year to Date Average PM <sub>2.5</sub> as at end of the Reporting Period .....	11
Figure 10 - Year to Date Average Total Suspended Particulates as at end of the Reporting Period .....	12
Figure 11 – Real Time PM <sub>10</sub> 24hr for the Reporting Period .....	13
Figure 12 – Real Time PM <sub>10</sub> Annual Average for the Reporting Period.....	14
Figure 13 – HVO Surface Water Monitoring Locations .....	16
Figure 14 - Groundwater Monitoring Locations at HVO .....	18
Figure 15 - Blast Monitoring Location Plan .....	23
Figure 16 - Noise Monitoring Location Plan .....	29
Figure 17 - Operational Downtime by Equipment Type for the Reporting Period .....	30
Figure 18 - Rehabilitation YTD November 2024 .....	31
Table 1 - Rainfall data for the reporting period.....	4
Table 2 – Blasting Criteria .....	20
Table 3 – Overpressure Blast Monitoring Results for the reporting period .....	21
Table 4 – Ground Vibration Blast Monitoring Results for the reporting period.....	22
Table 5 - LAeq,15minute and 1minute HVO North Against Impact Assessment Criteria for the Reporting Period.....	25
Table 6 - LAeq,15minute and 1minute HVO South Against Impact Assessment Criteria for the Reporting Period.....	26
Table 7 - Modifying Factor Assessment HVO North for the Reporting Period .....	27
Table 8 - Modifying Factor Assessment HVO South for the Reporting Period.....	28
Table 9 - Complaints Summary 2024 .....	32

## 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 1 – 29 February 2024 (the 'Reporting Period').

## 2 | AIR QUALITY

### 2.1 | METEOROLOGICAL MONITORING

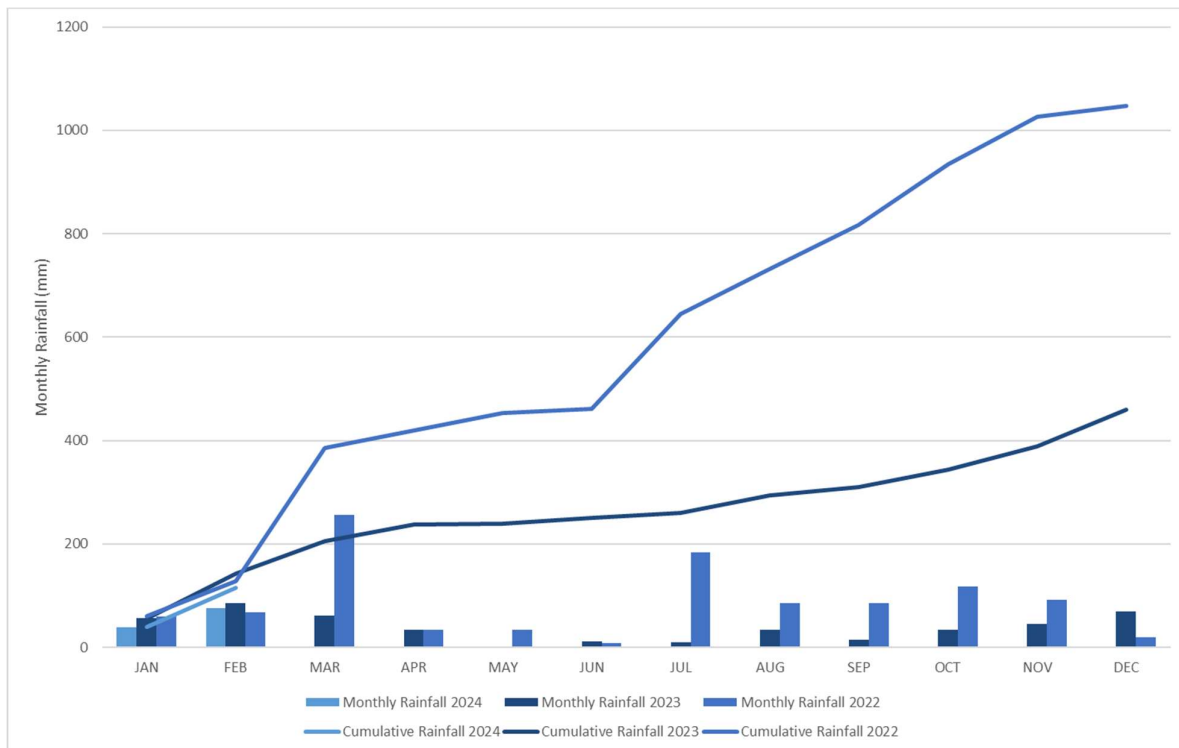
HVO maintains two meteorological stations: 'HVO Corporate' and 'Cheshunt' (refer to **Figure 4**).

#### 2.1.1 | RAINFALL

Rainfall recorded at the HVO Corporate weather station during the period is summarised in **Table 1**. The 2022, 2023 and 2024 trends are shown in **Figure 1**.

*Table 1 - Rainfall data for the reporting period*

2024	Monthly Rainfall (mm)	Cumulative Rainfall (mm)
February	76.6	122.6



*Figure 1 - Rainfall Summary 2024*

## 2.1.2 | WIND SPEED AND DIRECTION

**Figures 2 and 3** wind roses show wind speeds and directions during the reporting period at HVO Corporate and Cheshunt meteorological stations respectively. South easterly winds were prevailing at HVO Corporate, whilst south to southeast winds were prevailing at HVO Cheshunt

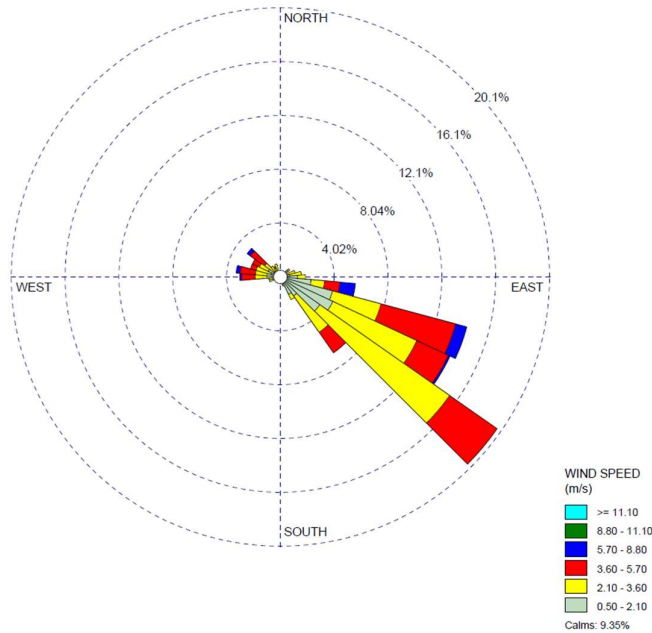


Figure 2 – HVO Corporate Wind Rose for the Reporting Period

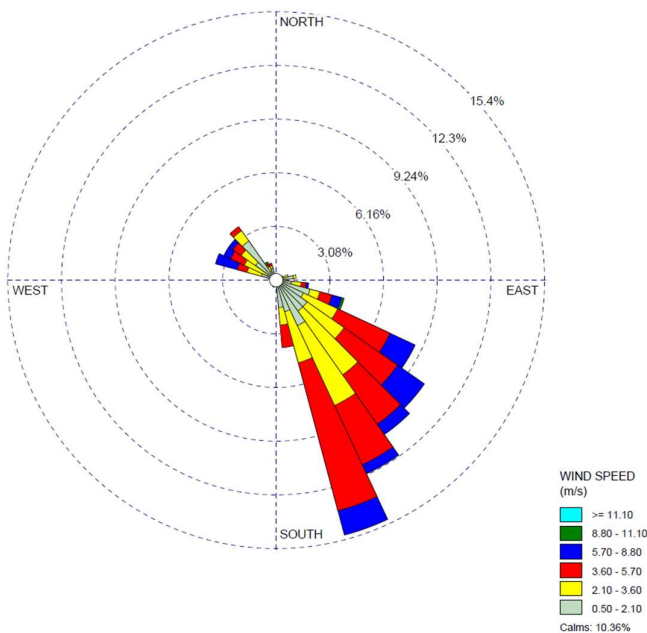


Figure 3 – HVO Cheshunt Wind Rose for the Reporting Period

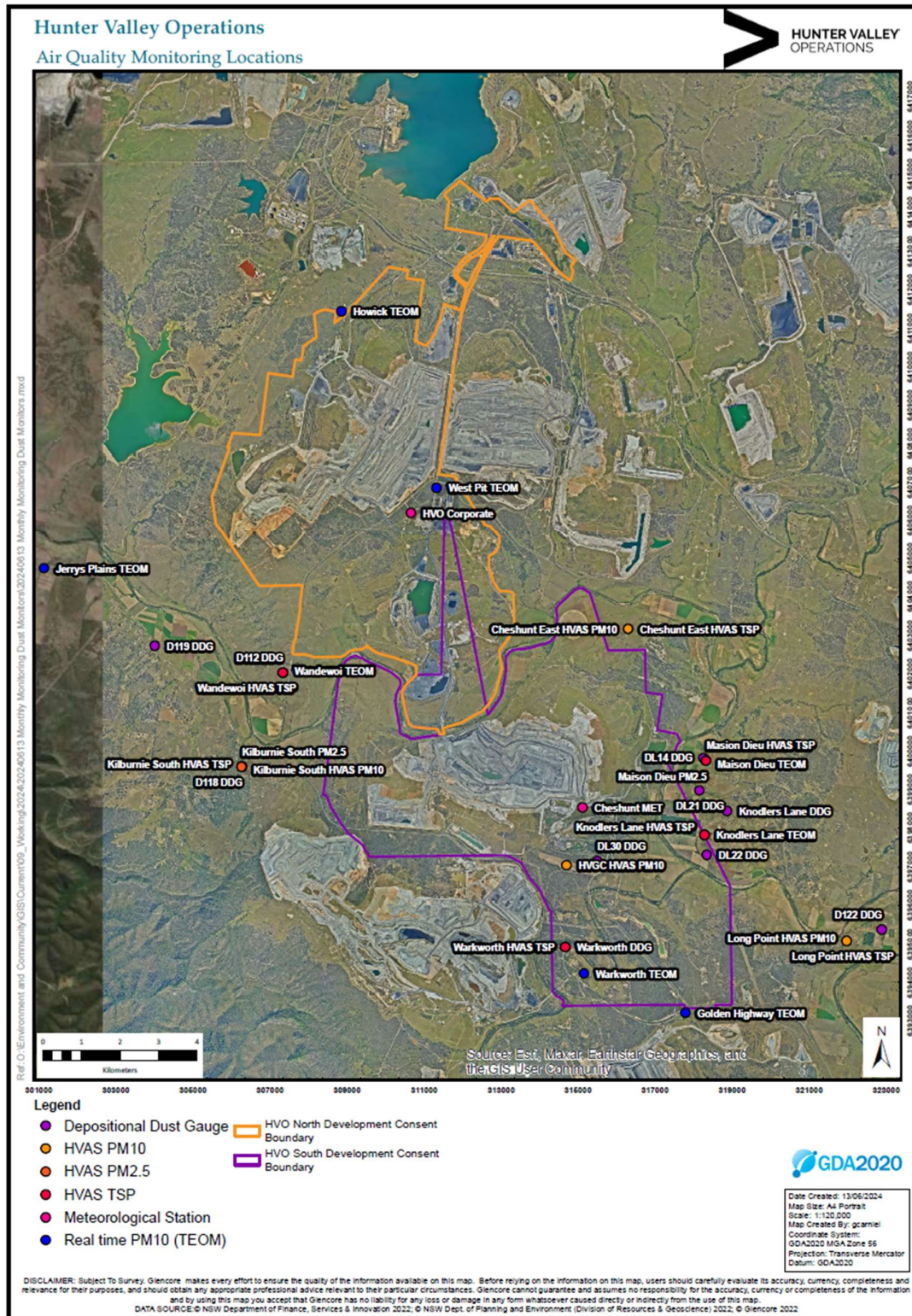


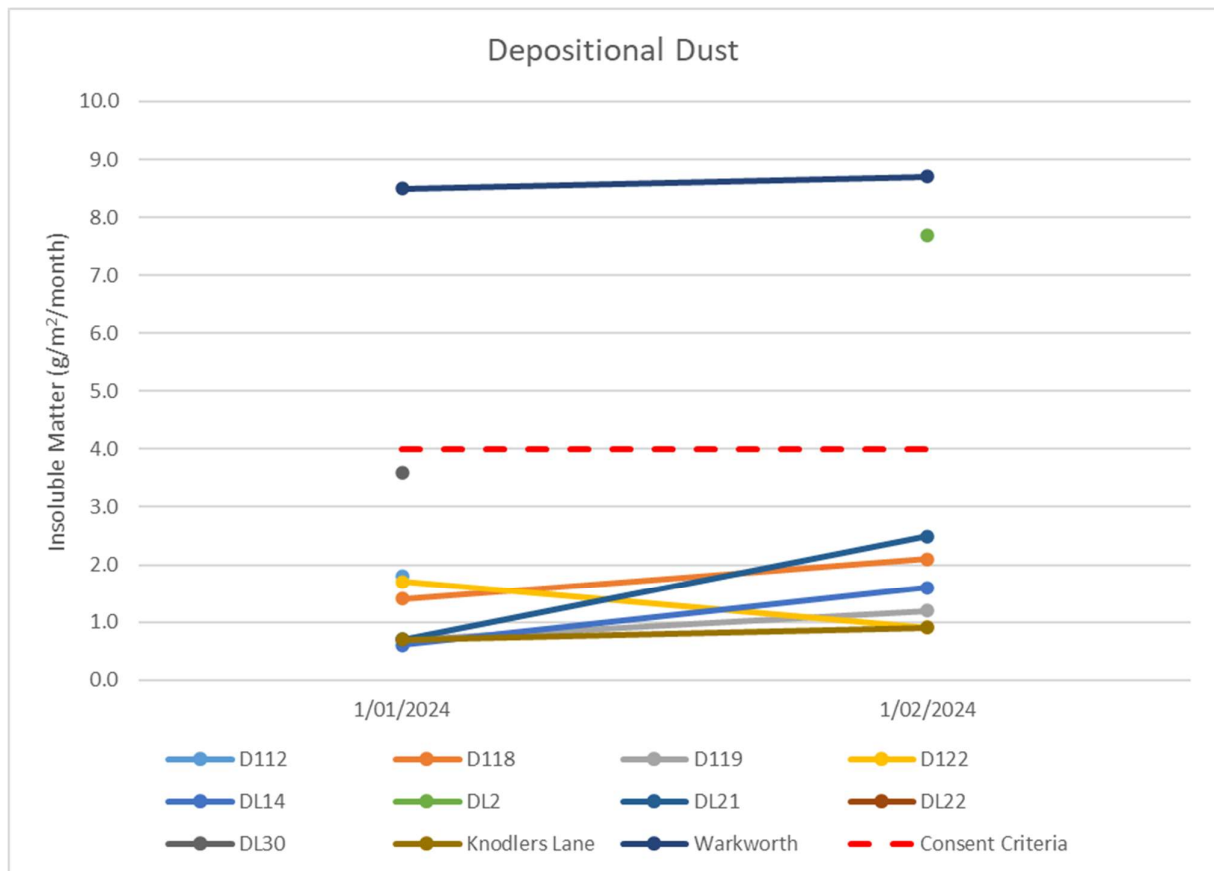
Figure 4 – Air Quality Monitoring Location Plan



## 2.2 | DEPOSITIONAL DUST

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

**Figure 5** displays year-to-date (YTD) 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. An assessment of HVO's contribution against the long-term impact assessment criteria will be provided in the 2024 Annual Review.



*Figure 5 – YTD Depositional Dust Results as at end of the Reporting Period*

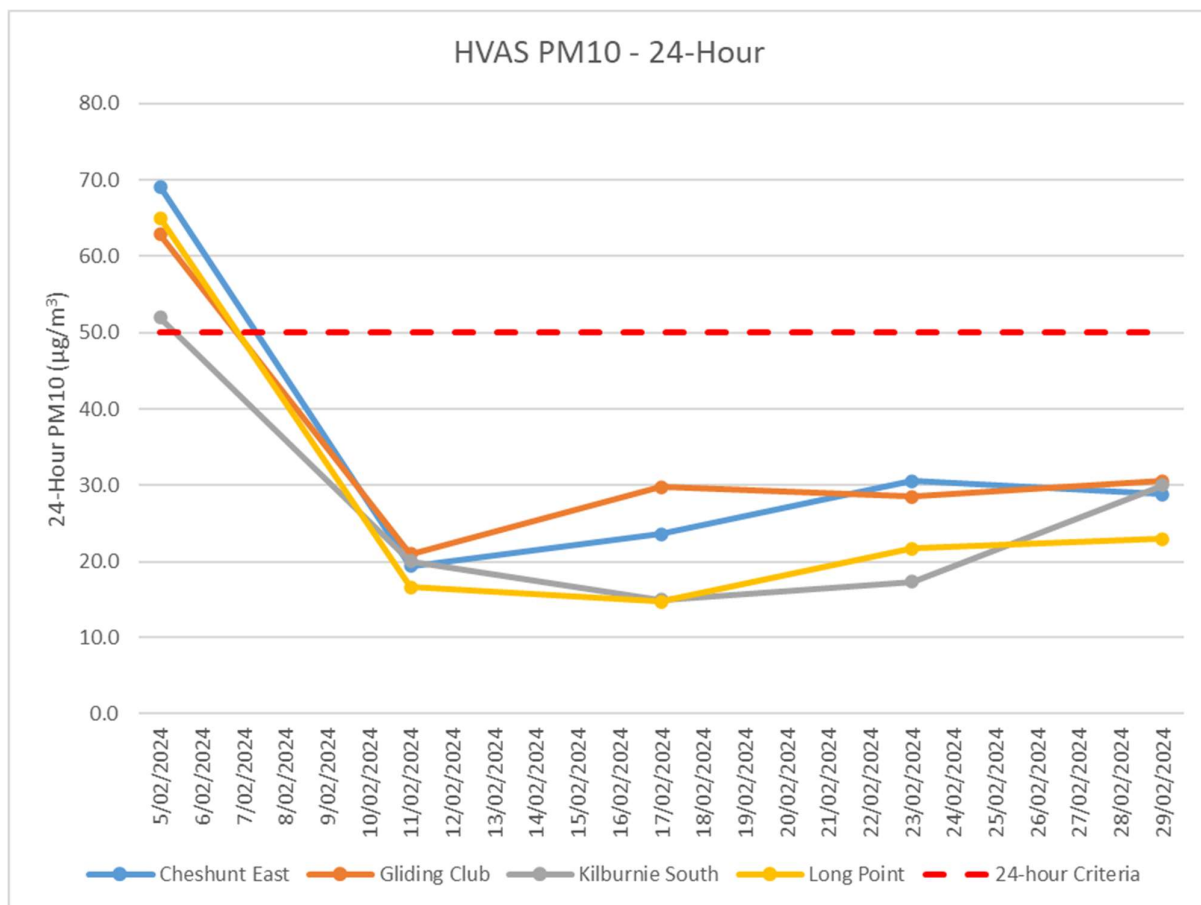
## 2.3 | SUSPENDED PARTICLES

Suspended particles are measured by a network of High Volume Air Samplers (HVAS) measuring Total Suspended Particulates (TSP) and Particulate Matter <10µm (PM<sub>10</sub>). The Kilburnie South and Maison Dieu HVAS also monitor Particulate Matter <2.5µm (PM<sub>2.5</sub>). The location of these monitors is presented in **Figure 4**. Each HVAS runs for 24-hours on a six-day cycle.

### 2.3.1 | HVAS PM<sub>10</sub> RESULTS

#### 2.3.1.1 | PERFORMANCE AGAINST SHORT TERM IMPACT ASSESSMENT CRITERIA

**Figure 6** shows individual PM<sub>10</sub> results at each monitoring station against the short-term impact assessment criteria of 50µg/m<sup>3</sup> for the reporting period. All monitors were below the short-term impact assessment criteria during the reporting period, with the exception of 5 February when all monitors reported exceedances of the criteria. These exceedances were investigated internally by HVO and it was found that the maximum calculated HVO contribution was below the compliance limit.



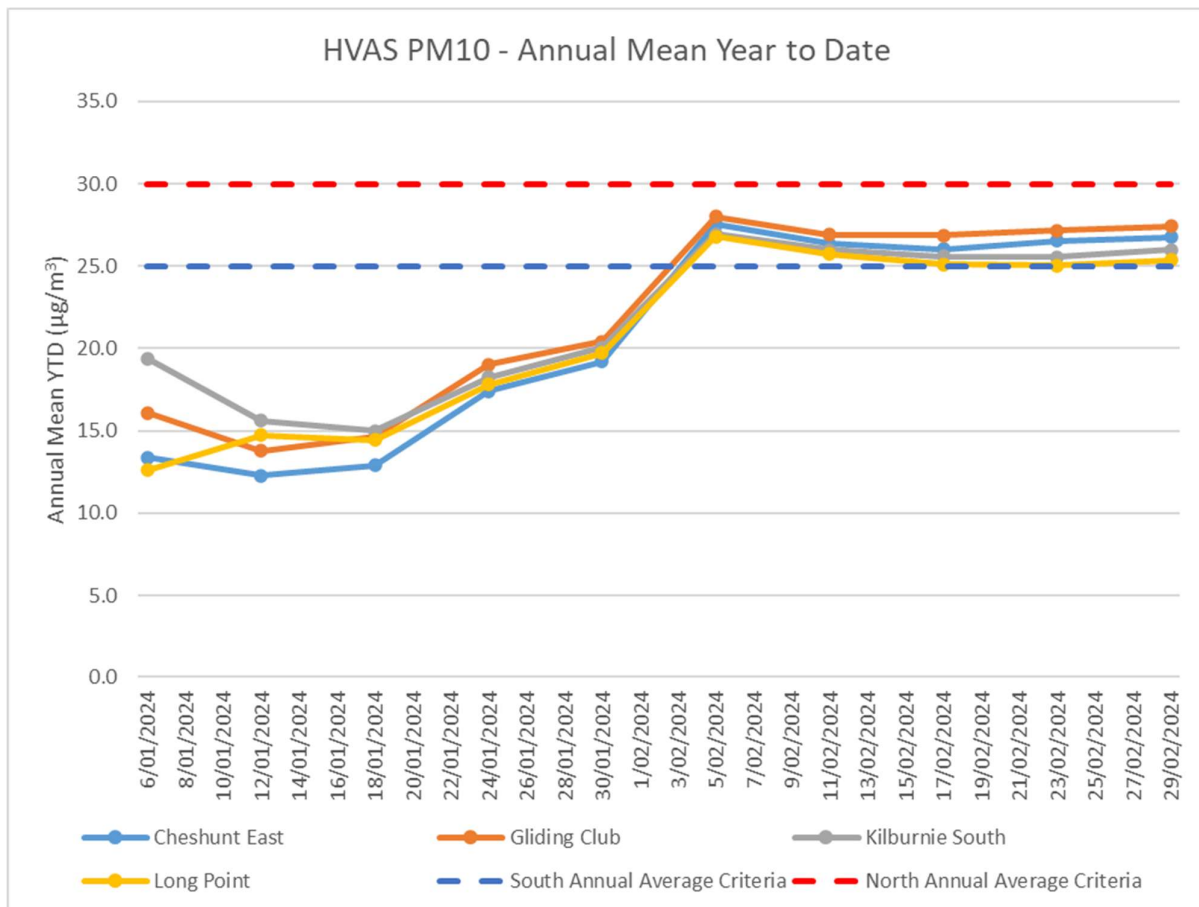
*Figure 6 – Individual PM<sub>10</sub> Results for the Reporting Period*



## 2.3.1.2 | PERFORMANCE AGAINST LONG TERM IMPACT ASSESSMENT CRITERIA

**Figure 7** shows the year-to-date annual average PM<sub>10</sub> results. The Gliding Club, Kilburnie South and Long Point monitors annual averages reported results greater than the relevant (South) long term impact assessment criteria during the reporting period. All other monitors were below the relevant (North) long term impact assessment criteria during the reporting period.

An assessment of HVO's contribution against the long-term impact assessment criteria will be provided in the 2024 Annual Review.



*Figure 7 – Year to Date Average PM<sub>10</sub> as at end of the Reporting Period*

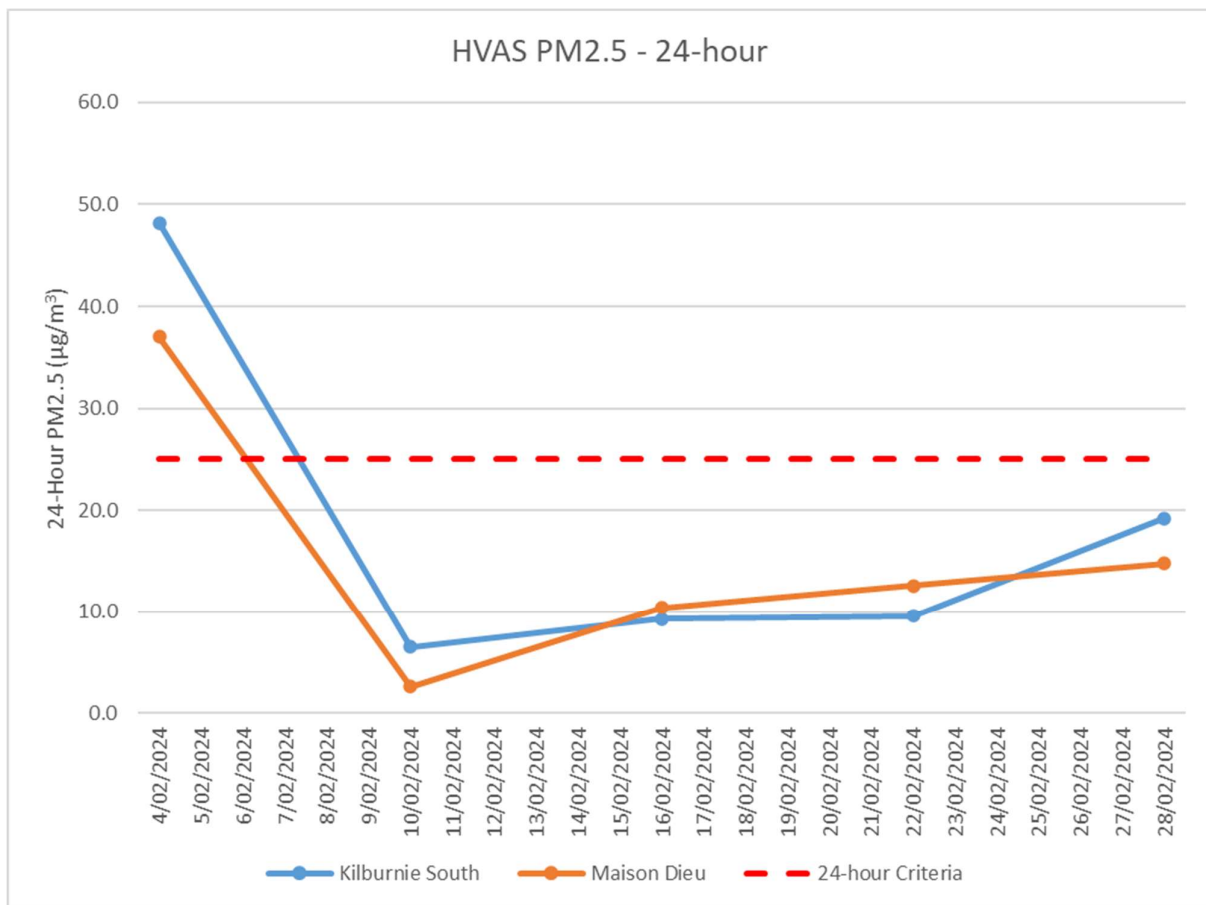
### 2.3.2 | HVAS PM<sub>2.5</sub> RESULTS

HVO monitors PM<sub>2.5</sub> at two HVAS locations, Kilburnie South and Maison Dieu.

#### 2.3.2.1 | HVAS PM<sub>2.5</sub> RESULTS

**Figure 8** shows individual PM<sub>2.5</sub> results at each monitoring station against the HVO South short-term impact assessment criteria of 25µg/m<sup>3</sup> for the reporting period. Both monitors were below the relevant short-term impact assessment criteria during the reporting period, with the exception of 5 February when both monitors reported exceedances of the criteria. These exceedances were investigated internally by HVO and it was found that the maximum calculated HVO contribution was below the compliance limit.

An assessment of HVO's contribution against the long-term impact assessment criteria will be provided in the 2024 Annual Review.



*Figure 8 - Results for the Reporting Period*



### 2.3.2.2 | PERFORMANCE AGAINST LONG TERM IMPACT ASSESSMENT CRITERIA

**Figure 9** shows the year-to-date annual average PM<sub>2.5</sub> results. During the reporting period, the Knodlers Lane and Warkworth monitors annual average year to date results were both above the PM<sub>2.5</sub> Annual Rolling Mean criteria of 8µg/m<sup>3</sup>.

An assessment of HVO's contribution against the long-term impact assessment criteria will be provided in the 2024 Annual Review.

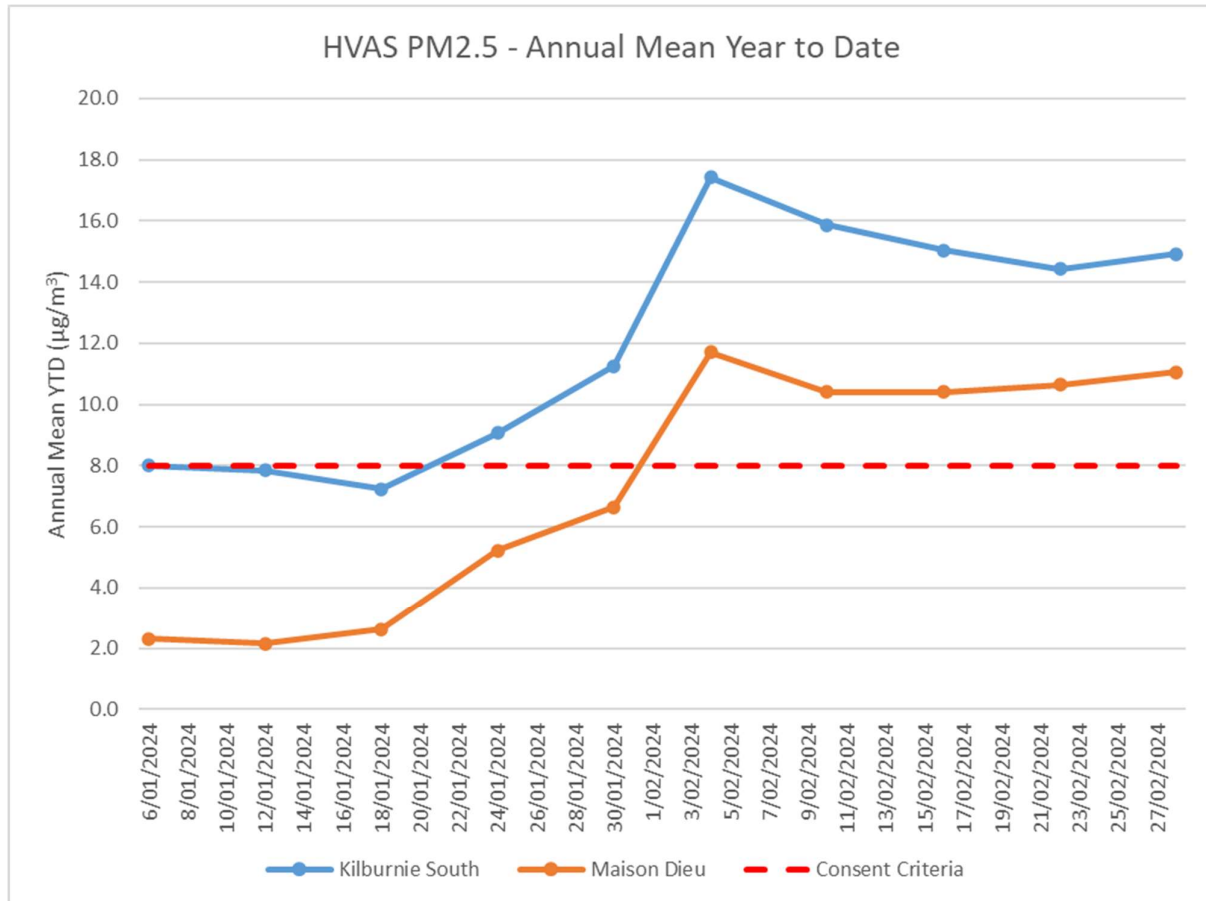


Figure 9 - Year to Date Average PM<sub>2.5</sub> as at end of the Reporting Period

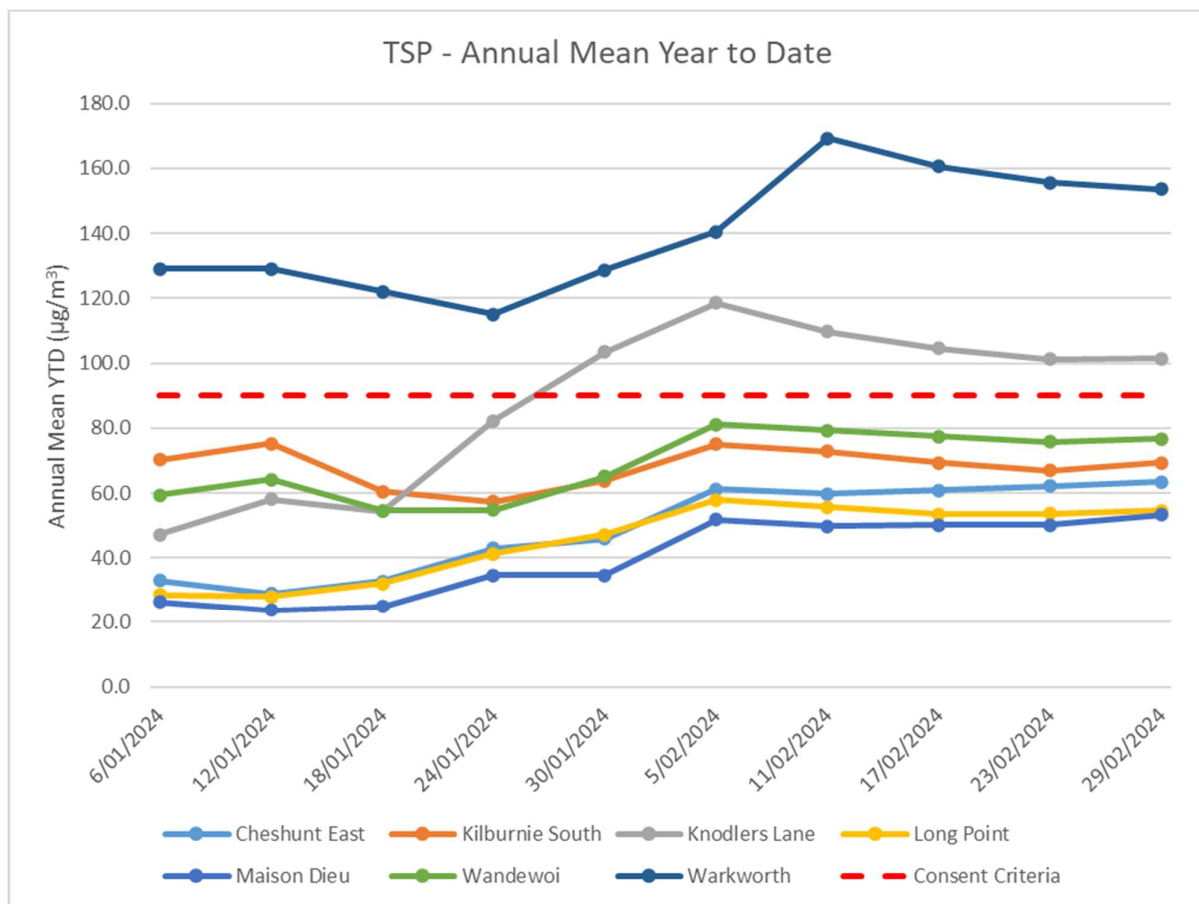
### 2.3.3 | TSP RESULTS

#### 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  $90\mu\text{g}/\text{m}^3$ .

All monitors, except for Knodlers Lane and Warkworth, were below the relevant long-term impact assessment criteria during the reporting period.

An assessment of HVO's contribution against the long-term impact assessment criteria will be provided in the 2024 Annual Review.



*Figure 10 - Year to Date Average Total Suspended Particulates as at end of the Reporting Period*

## 2.3.4 | REAL TIME PM<sub>10</sub> RESULTS

HVO maintains a network of real time PM<sub>10</sub> monitors. The real time air quality monitoring stations continuously record information and transmit data to a central database, generating alarms when particulate matter levels exceed internal HVO trigger levels. Results from real time PM<sub>10</sub> 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 PM<sub>10</sub> result from the real time monitoring sites. During the reporting period, daily results were below the 24-hr average criteria of 50µg/m<sup>3</sup> with the exception of:

- Knodlers Lane monitor on 3, 4 and 5 February; and
- Maison Dieu and Warkworth on 4 and 5 February.

All exceedances were investigated internally by HVO and it was found that the maximum calculated HVO contribution was below the compliance limit.

**Figure 12** shows the annual rolling average PM<sub>10</sub> results from the real time monitoring sites. The annual average results for all monitors are currently below the relevant long-term impact assessment criteria for the reporting period.

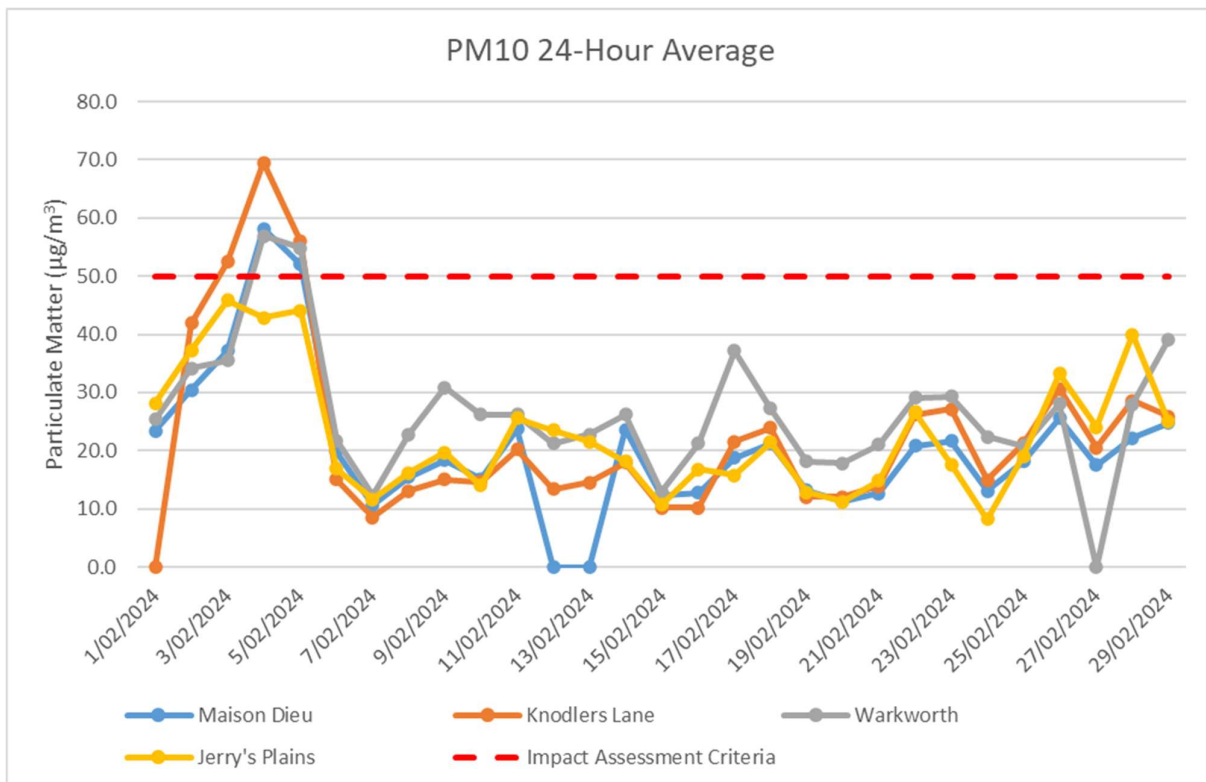


Figure 11 – Real Time PM<sub>10</sub> 24hr for the Reporting Period

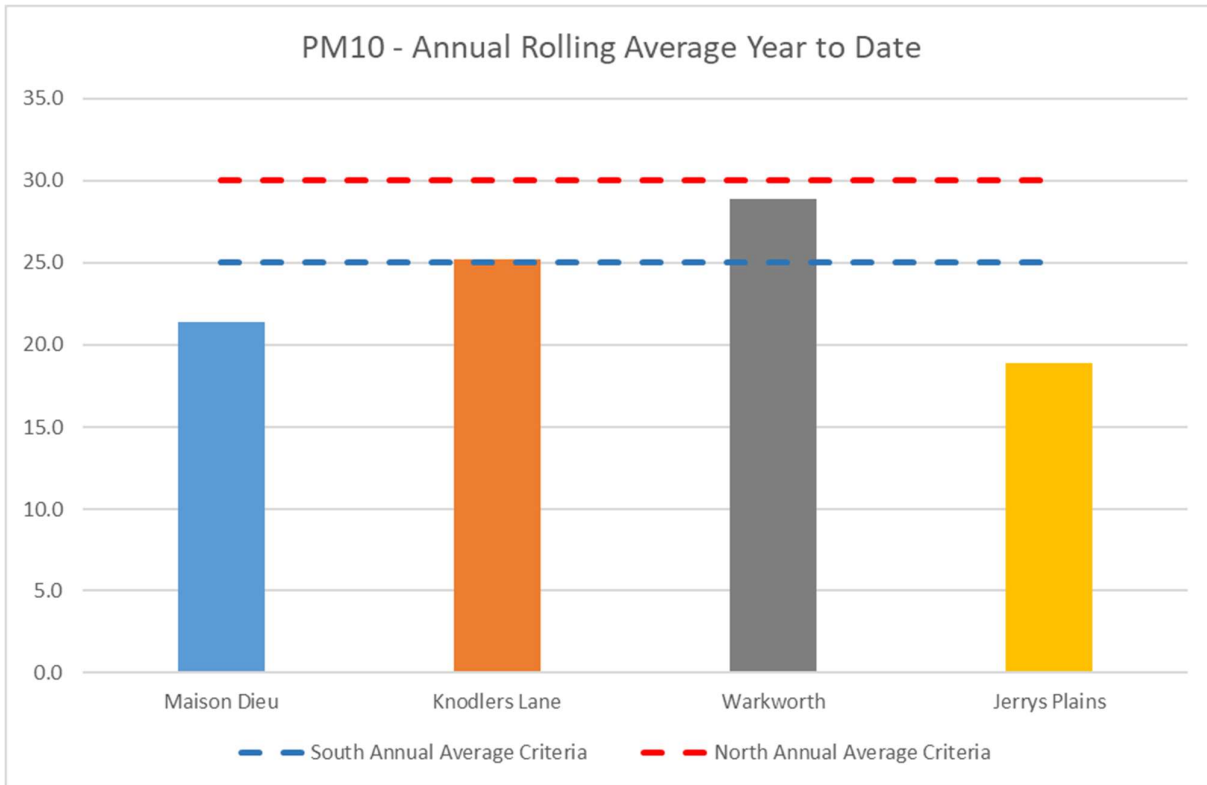


Figure 12 – Real Time PM<sub>10</sub> Annual Average for the Reporting Period

### 2.3.5 | REAL TIME ALARMS FOR AIR QUALITY

The real time monitoring system generated one hundred and five (105) automated air quality related alarms during the reporting period. Twenty-eight (28) alarms related to adverse weather conditions (wind or rain) and seventy-seven (77) alarms 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 is 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 be provided in the March 2024 Monthly Environmental Monitoring Report.

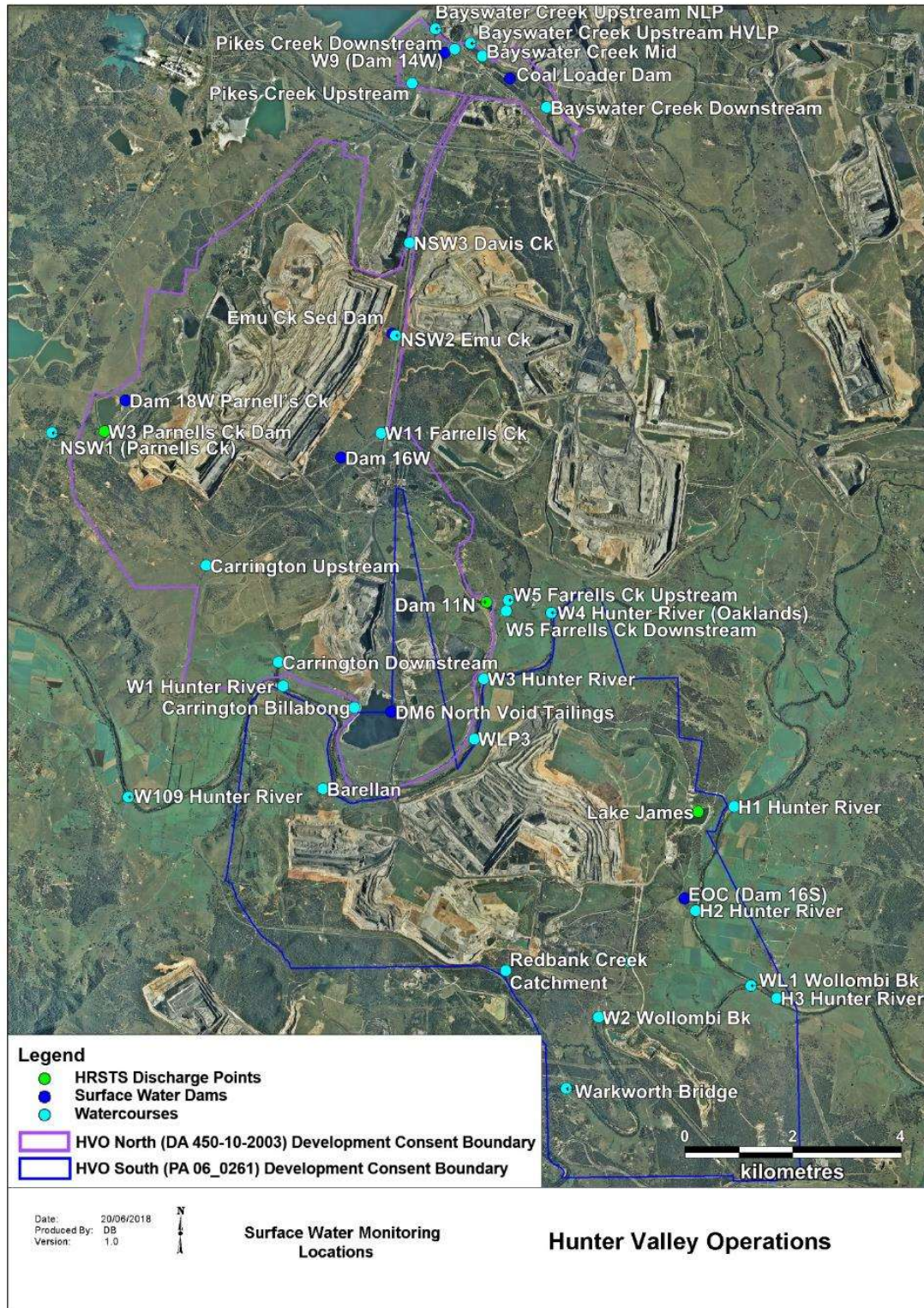


Figure 13 – HVO Surface Water Monitoring Locations

### **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 be reported in the March 2024 Monthly Environmental Monitoring Report.

### **3.2 | SITE WATER USE**

HVO is permitted to extract water from the Hunter River under water allocation licenses issued by Water NSW.

HVO did not extract water from the Hunter River during the reporting period.

### **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.

HVO did not undertake any HRSTS discharges during the reporting period.

### **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 be provided in the March 2024 Monthly Environmental Monitoring Report.



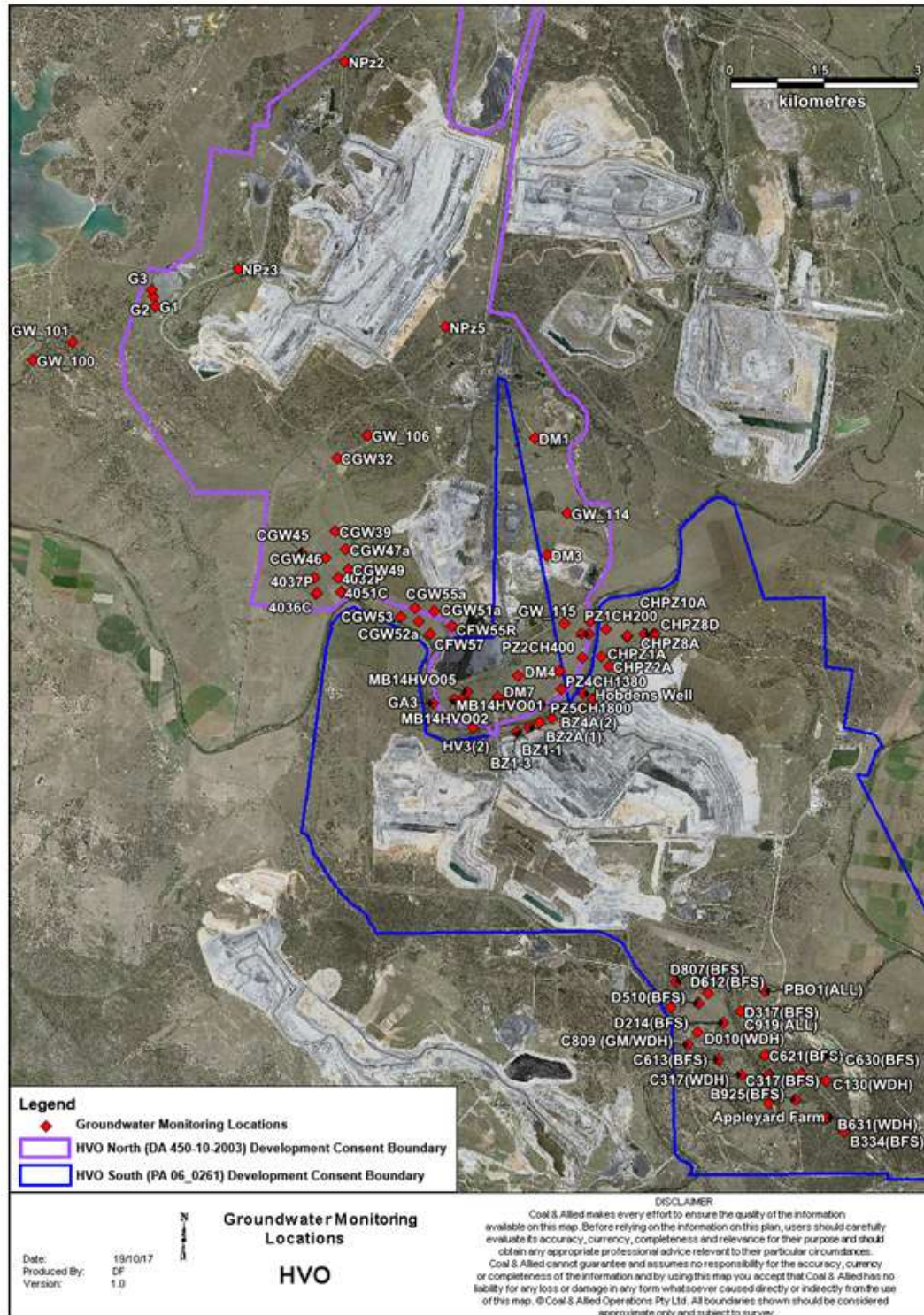


Figure 14 - Groundwater Monitoring Locations at HVO



### 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 is outlined in the HVO Water Management Plan.

Groundwater trigger tracking results are provided on a quarterly basis. Results will be provided in the March 2024 Monthly Environmental Monitoring 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 (dBL)	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

Fifteen (15) blasts were initiated at HVO during the reporting period. Blast monitoring results for the period are shown in **Table 3** and **Table 4**.

*Table 3 – Overpressure Blast Monitoring Results for the reporting period*

Date and Time	Moses Crossing (dBL)	Jerrys Plains Village (dBL)	Maison Dieu (dBL)	Warkworth (dBL)	Knodlers Lane (dBL)
2/02/2024 13:53	95.07	84.68	88.59	91.80	95.07
3/02/2024 13:34	100.31	103.86	107.46	97.96	100.31
5/02/2024 13:48	93.09	85.30	95.05	88.89	93.09
6/02/2024 13:02	81.57	82.22	94.28	87.14	81.57
6/02/2024 13:04	84.22	88.07	90.66	82.54	84.22
10/02/2024 15:21	112.26	104.22	110.11	92.62	112.26
13/02/2024 13:32	94.48	82.14	93.25	93.84	94.48
13/02/2024 13:34	91.41	83.39	100.25	89.97	91.41
16/02/2024 16:14	108.80	103.54	107.47	91.23	108.80
16/02/2024 16:15	108.26	100.92	107.27	84.71	108.26
17/02/2024 13:24	98.55	90.80	98.43	91.73	98.55
17/02/2024 13:26	100.31	85.75	92.76	100.46	100.31
20/02/2024 13:13	100.94	88.94	104.30	89.45	100.94
26/02/2024 13:04	91.13	79.16	87.08	85.19	91.13
26/02/2024 15:00	92.87	83.64	93.59	95.21	92.87

*Table 4 – Ground Vibration Blast Monitoring Results for the reporting period*

Date and Time	Moses Crossing (mm/s)	Jerrys Plains Village (mm/s)	Maison Dieu (mm/s)	Warkworth (mm/s)	Knodlers Lane (mm/s)
2/02/2024 13:53	0.28	0.21	0.23	0.19	0.28
3/02/2024 13:34	0.15	0.22	0.08	0.07	0.15
5/02/2024 13:48	0.08	0.03	0.06	0.32	0.08
6/02/2024 13:02	0.08	0.02	0.03	0.07	0.08
6/02/2024 13:04	0.13	0.13	0.16	0.12	0.13
10/02/2024 15:21	0.10	0.03	0.06	0.11	0.10
13/02/2024 13:32	0.13	0.09	0.14	0.12	0.13
13/02/2024 13:34	0.16	0.09	0.12	0.23	0.16
16/02/2024 16:14	0.08	0.04	0.06	0.24	0.08
16/02/2024 16:15	0.10	0.09	0.10	0.08	0.10
17/02/2024 13:24	0.08	0.03	0.07	0.13	0.08
17/02/2024 13:26	0.12	0.06	0.19	0.46	0.12
20/02/2024 13:13	0.16	0.07	0.10	0.26	0.16
26/02/2024 13:04	0.09	0.07	0.07	0.15	0.09
26/02/2024 15:00	0.20	0.10	0.42	0.80	0.20

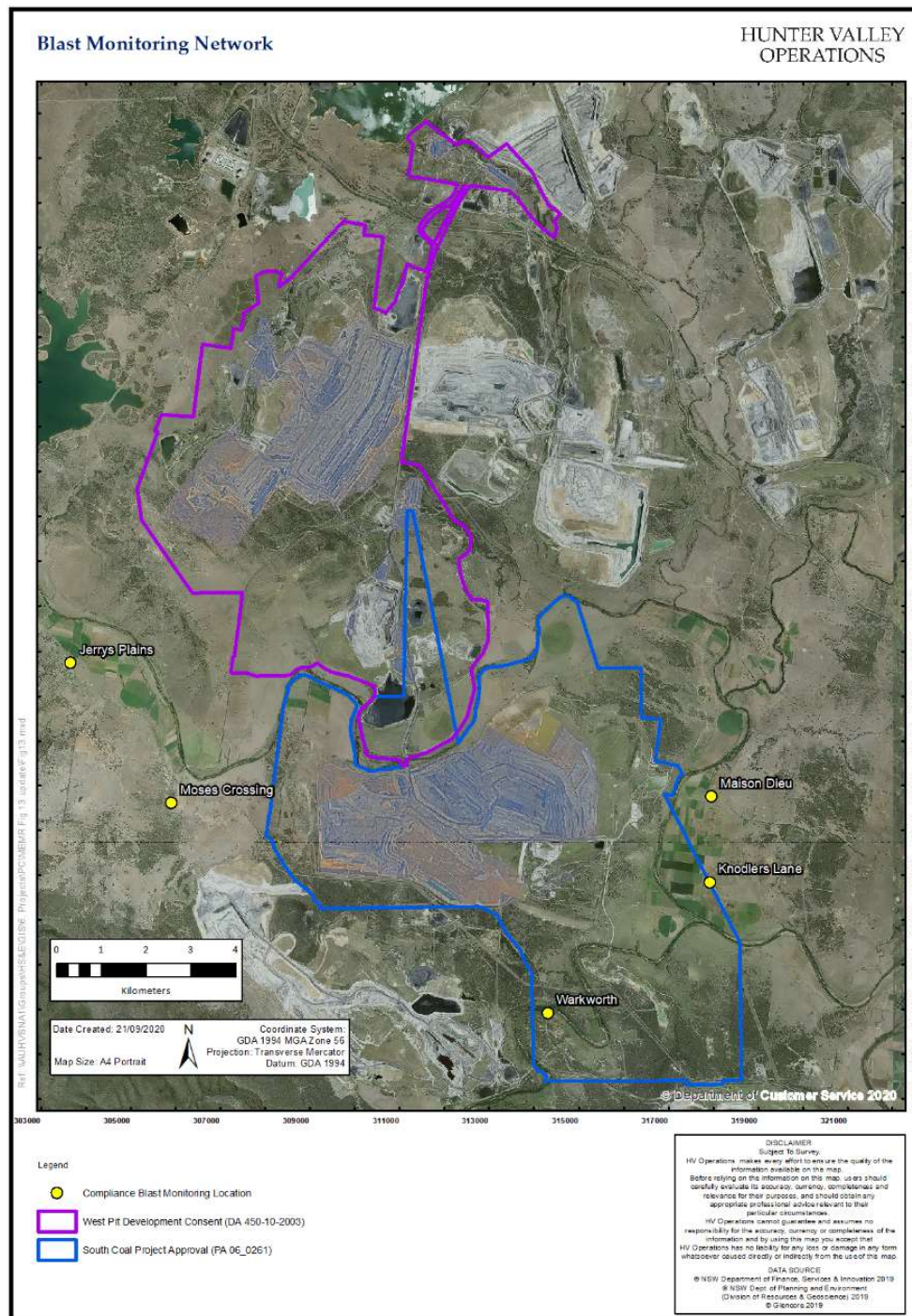


Figure 15 - Blast Monitoring Location Plan

## 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 during the night period of 12 February 2024.

Compliance with the HVO noise impact limits ensures compliance with the land acquisition criteria. Therefore, since no noise impact exceedances occurred for the reporting period the land acquisition assessment has not been presented. These will only be reported in instances of noise impact exceedances.

Monitoring results are detailed in **Table 5** and **Table 6**.



# REPORT | MONTHLY ENVIRONMENTAL MONITORING REPORT FEBRUARY 2024

Table 5 - LAeq,15minute and 1minute HVO North Against Impact Assessment Criteria for the Reporting Period

Location	Start date and time	Wind		Stability class	Very enhancing? <sup>1</sup>	HVO North limits, dB <sup>1</sup>		HVO North levels, dB		Exceedances, dB	
		Speed m/s	Direction <sup>3</sup>			L <sub>Aeq,15minute</sub>	L <sub>A1,1min</sub>	L <sub>Aeq,15minute</sub> <sup>2</sup>	L <sub>A1,1min</sub>	L <sub>Aeq,15minute</sub>	L <sub>A1,1min</sub>
Shearers Lane	12/02/2024 21:00	0.9	97	D	Yes	35	46	IA	IA	Nil	Nil
Knodlers Lane	12/02/2024 21:39	1.2	99	E	Yes	35	46	IA	IA	Nil	Nil
Maison Dieu	12/02/2024 21:19	1.6	121	E	Yes	35	46	IA	IA	Nil	Nil
Long Point (Dights Crossing)	12/02/2024 22:27	1.6	155	E	Yes	35	46	IA	IA	Nil	Nil
Kilburnie South	12/02/2024 23:55	1.8	150	E	Yes	39	46	28	33	Nil	Nil
Jerrys Plains East	12/02/2024 23:32	1.6	178	E	Yes	39	46	<25	31	Nil	Nil
Jerrys Plains Village	12/02/2024 21:39	1.2	99	E	Yes	40	46	27	28	Nil	Nil
Jerrys Plains West	12/02/2024 21:09	1.6	121	E	Yes	40	46	27	31	Nil	Nil
Kilburnie South	27/03/2024 21:03	2.7	116	E	Yes	39	46	IA	IA	Nil	Nil
Jerrys Plains East	21/02/2024 21:00	3.2	118	E	No	39	46	25	29	Nil	Nil
Jerrys Plains Village	21/02/2024 21:24	2.8	126	E	Yes	40	46	33	37	Nil	Nil

- Noise limits are adjusted by +5 dB during 'very noise-enhancing meteorological conditions' in accordance with the NPfl.
- Site-only LAeq,15minute, includes modifying factor penalties if applicable.
- Degrees magnetic north, "-" indicates calm conditions.

**Number:** HVOOC-1797567310-4955

**Status:** Approved

**Effective:** 27/06/2024

Page 25 of 34

**Owner:** Superintendent - Environment and Community

**Version:** 1.0

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# REPORT | MONTHLY ENVIRONMENTAL MONITORING REPORT FEBRUARY 2024

*Table 6 - LAeq,15minute and 1minute HVO South Against Impact Assessment Criteria for the Reporting Period*

Location	Start date and time	Wind		Stability class	Very enhancing? <sup>1</sup>	HVO South limits, dB <sup>1</sup>		HVO South levels, dB		Exceedances, dB	
		Speed m/s	Direction <sup>3</sup>			L <sub>Aeq,15minute</sub>	L <sub>A1,1min</sub>	L <sub>Aeq,15minute</sub> <sup>2</sup>	L <sub>A1,1min</sub>	L <sub>Aeq,15minute</sub>	L <sub>A1,1min</sub>
Shearers Lane	12/02/2024 21:00	2.0	122	D	Yes	41	45	IA	IA	N/A	N/A
Knodlers Lane	12/02/2024 21:39	2.3	119	E	Yes	40	45	IA	IA	N/A	N/A
Maison Dieu	12/02/2024 21:19	2.6	119	D	Yes	39	45	IA	IA	N/A	N/A
Long Point (Dights Crossing)	12/02/2024 22:27	2.5	162	D	Yes	37	45	IA	IA	N/A	N/A
Kilburnie South (Moses Crossing)	12/02/2024 23:55	2.8	164	D	Yes	39	45	IA	IA	N/A	N/A
Jerrys Plains East	12/02/2024 23:32	1.6	148	E	Yes	38	45	IA	IA	N/A	N/A
Jerrys Plains Village	12/02/2024 21:39	2.3	119	E	Yes	35	45	IA	IA	N/A	N/A
Jerrys Plains West	12/02/2024 21:09	2.6	119	D	Yes	35	45	IA	IA	N/A	N/A
HVGC	13/02/2024 0:21	2.7	160	D	Yes	35	--	IA	-	N/A	N/A

- Noise limits are adjusted by +5 dB during 'very noise-enhancing meteorological conditions' in accordance with the NPfl.
- Site-only LAeq,15minute, includes modifying factor penalties if applicable.
- Degrees magnetic north, "--" indicates calm conditions.

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**Page 26 of 34**

**Owner:** Superintendent - Environment and Community

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## 5.2 | LOW FREQUENCY ASSESSMENT

In accordance with the requirements of the EPA's Noise Policy for Industry (NPfI), the applicability of the low frequency modification penalty has been assessed. No penalties were applied for monitoring undertaken through the reporting period. The assessments for the low frequency noise are shown in **Table 7** and **Table 8**.

*Table 7 - Modifying Factor Assessment HVO North for the Reporting Period*

Location	Start date and time	Measured HVO South $L_{Aeq}$ dB	Very enhancing? <sup>1</sup>	Intermittency modifying factor?	Tonality modifying factor?	Frequency of tonality	Low-frequency modifying factor? <sup>1,2</sup>	Exceedance of reference spectrum <sup>2,3</sup>	Total penalty dB <sup>2,3</sup>
Shearers Lane	12/02/2024 21:00	IA	Yes	No	No	N/A	No	N/A	Nil
Knodlers Lane	12/02/2024 21:39	IA	Yes	No	No	N/A	No	N/A	Nil
Maison Dieu	12/02/2024 21:19	IA	Yes	No	No	N/A	No	N/A	Nil
Long Point (Dights Crossing)	12/02/2024 22:27	IA	Yes	No	No	N/A	No	N/A	Nil
Kilburnie South	12/02/2024 23:55	28	Yes	No	No	N/A	No	N/A	Nil
Jerrys Plains East	12/02/2024 23:32	<25	Yes	No	No	N/A	No	N/A	Nil
Jerrys Plains Village	12/02/2024 21:39	27	Yes	No	No	N/A	No	N/A	Nil
Jerrys Plains West	12/02/2024 21:09	27	Yes	No	No	N/A	No	N/A	Nil
Kilburnie South	27/03/2024 21:03	IA	Yes	No	No	N/A	No	N/A	Nil
Jerrys Plains East	21/02/2024 21:00	25	No	N/A	N/A	N/A	N/A	N/A	Nil
Jerrys Plains Village	21/02/2024 21:24	33	Yes	No	No	N/A	No	N/A	Nil

1. Low-frequency modifying factors are not applicable during 'very noise-enhancing meteorological conditions' in accordance with the NPfI.

2. NA denotes 'not applicable'.

3. Bold results indicate that application of NPfI modifying factor(s) is required.



Table 8 - Modifying Factor Assessment HVO South for the Reporting Period

Location	Start date and time	Measured HVO South LAeq dB	Very enhancing? 1	Intermittency modifying factor?	Tonality modifying factor?	Frequency of tonality	Low-frequency modifying factor? 1,2	Exceedance of reference spectrum 2,3	Total penalty dB 2,3
Shearers Lane	12/02/2024 21:00	IA	Yes	No	No	N/A	No	N/A	Nil
Knodlers Lane	12/02/2024 21:39	IA	Yes	No	No	N/A	No	N/A	Nil
Maison Dieu	12/02/2024 21:19	IA	Yes	No	No	N/A	No	N/A	Nil
Long Point (Dights Crossing)	12/02/2024 22:27	IA	Yes	No	No	N/A	No	N/A	Nil
Kilburnie South	12/02/2024 23:55	IA	Yes	No	No	N/A	No	N/A	Nil
Jerrys Plains East	12/02/2024 23:32	IA	Yes	No	No	N/A	No	N/A	Nil
Jerrys Plains Village	12/02/2024 21:39	IA	Yes	No	No	N/A	No	N/A	Nil
Jerrys Plains West	12/02/2024 21:09	IA	Yes	No	No	N/A	No	N/A	Nil
HVGC	13/02/2024 0:21	33	Yes	No	No	N/A	No	N/A	Nil

1. NA denotes 'not applicable'

2. NM denotes 'not measurable'

3. Bold results indicate that application of NPfl modifying factor/s 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 that require investigation.

HVO investigates and responds to noise alarms with appropriate modification to operations. Changes in response to a noise alarm can include replacing equipment with alternative 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.

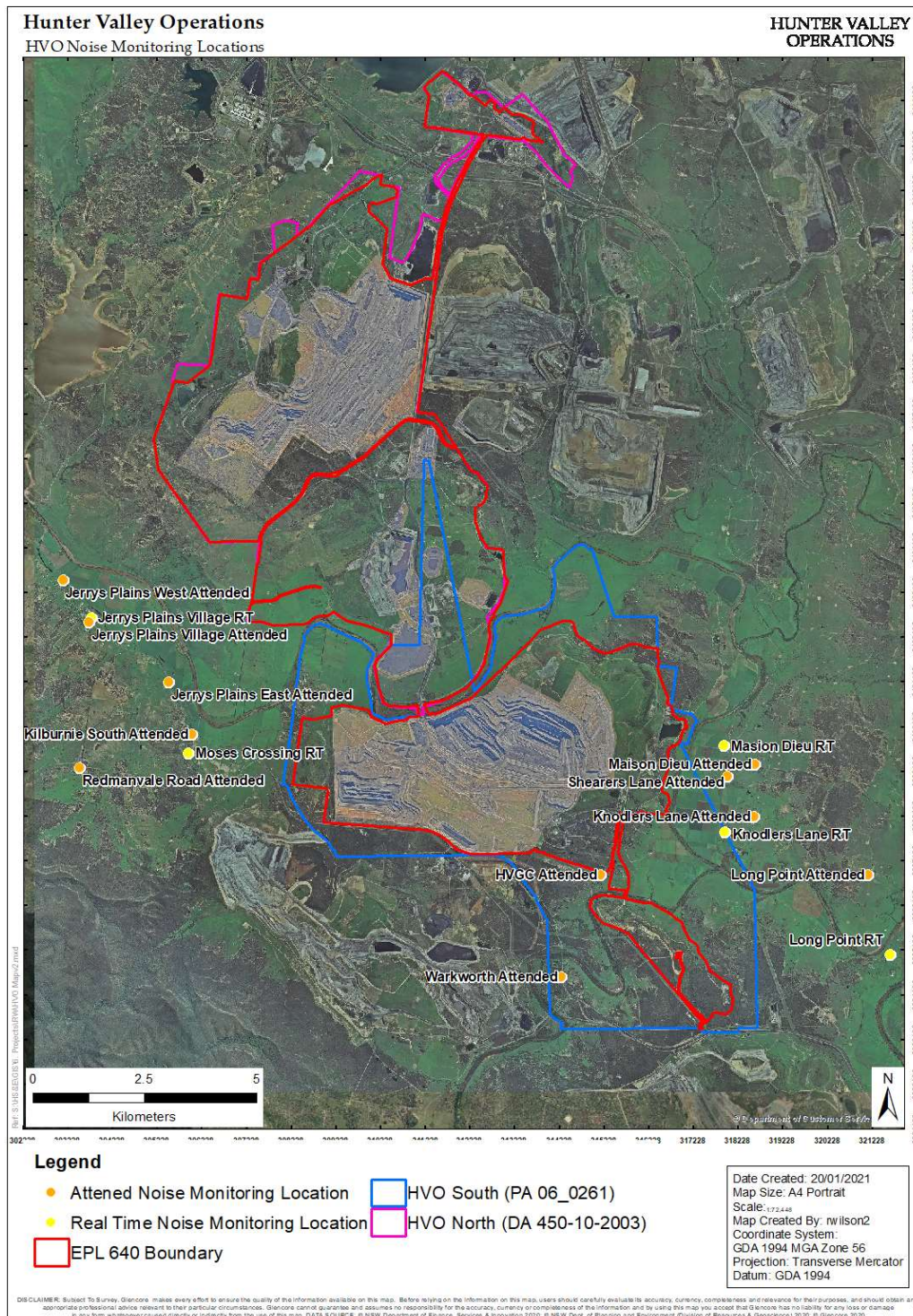


Figure 16 - Noise Monitoring Location Plan

## 6 | OPERATIONAL DOWNTIME

A total of one hundred and eighty-five (185) hours of equipment downtime was logged in response to real time monitoring and inspections for environmental factors such as noise and dust during the reporting period. 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).

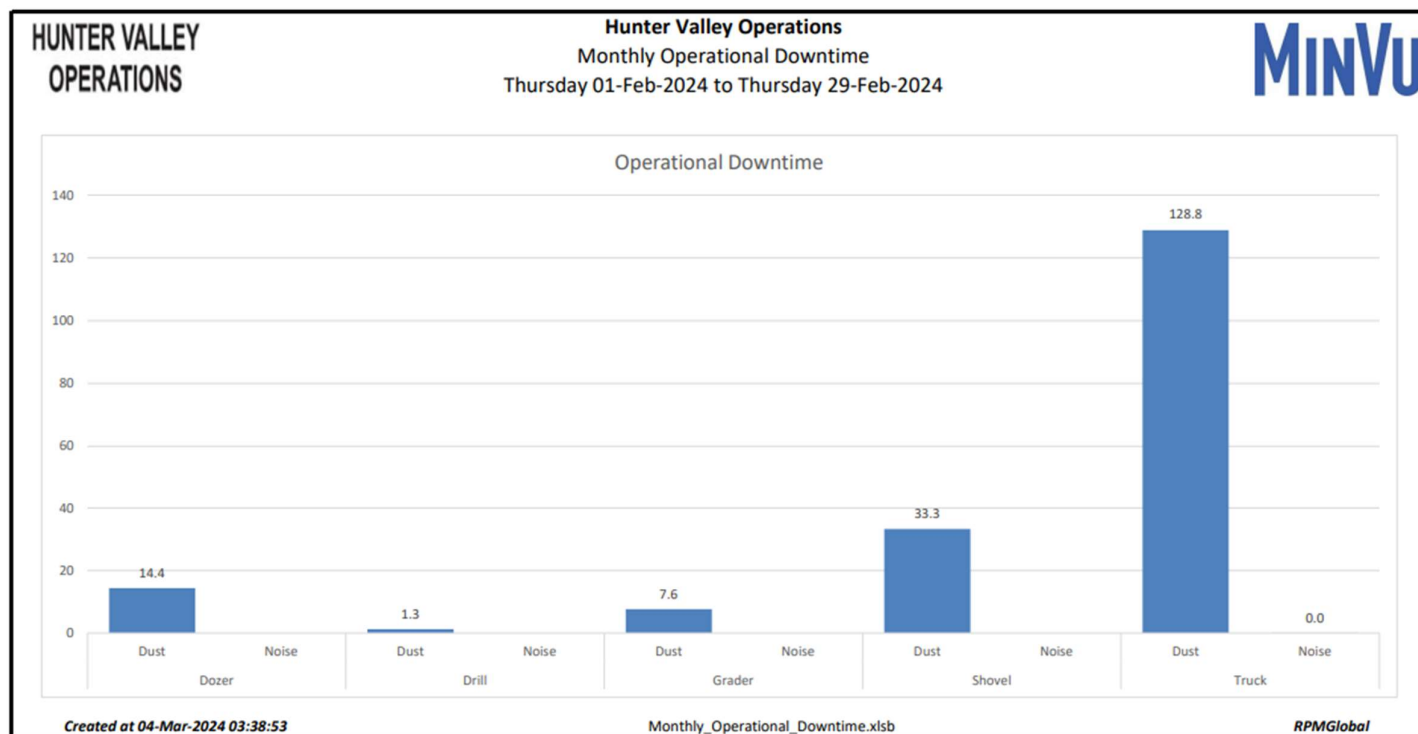


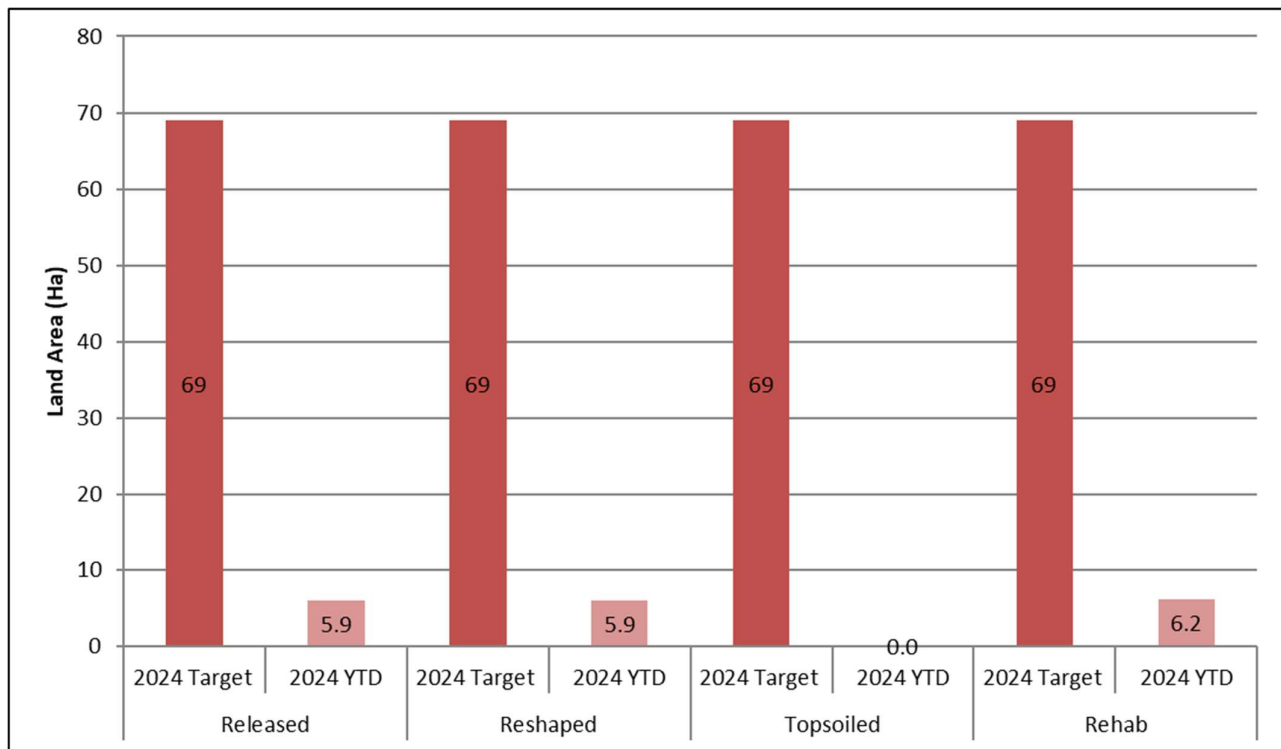
Figure 17 - Operational Downtime by Equipment Type for the Reporting Period

## 7 | REHABILITATION

The following activities related to rehabilitation were completed during the reporting period:

- 3.96ha of land was reshaped;
- 3.96ha of land was released (became available for the application of topsoil);
- 0.00ha of land was topsoiled; and
- 0.00ha of land was rehabilitated.

Year to date progress is shown in **Figure 18**.



*Figure 18 - Rehabilitation YTD February 2024*



## 8 | COMPLAINTS

No complaints were received during the reporting period. Details of complaints received during 2024 are shown in **Table 9**.

*Table 9 - Complaints Summary 2024*

Complaint Number	Date	Time	Complainant ID	Nature of Complaint	Mode of Complaint	Brief Description and Response
No community complaints were received during January						
No community complaints were received during February						



## 9 | ENVIRONMENTAL INCIDENTS

There was one (1) reportable environmental incident during the reporting period. A summary of this incident is provided below.

### 5/02/2024 – PM<sub>10</sub> Dust Exceedance – Cheshunt East

Monitoring results indicate that on 5 February 2023, the Cheshunt East High Volume Air Sampler (HVAS) recorded a total result of 69.1µg/m<sup>3</sup> for the 24-hour averaging period for PM<sub>10</sub>, exceeding the relevant criteria of 50ug/m<sup>3</sup>. Todoroski Air Sciences were engaged to investigate the result and determined HVO's maximum possible contribution to be 24.4 ug/m<sup>3</sup>. HVO implemented operational controls to comply with the approved Air Quality and Greenhouse Gas Management Plan. The Department of Planning Housing Infrastructure (DPHI) were advised of this exceedance on 28 February and an incident report was submitted. No further information was requested from DPHI.



# REPORT | MONTHLY ENVIRONMENTAL MONITORING REPORT FEBRUARY 2024

## APPENDIX A: METEOROLOGICAL DATA (HVO CORPORATE)

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)
1/02/2024	33.05	20.02	89.30	36.08	1468.0	139.6	2.02	0.0
2/02/2024	38.30	21.03	84.40	16.41	1047.0	181.5	3.20	0.0
3/02/2024	31.00	18.92	81.80	38.43	1040.0	118.7	4.08	0.0
4/02/2024	40.20	18.43	84.20	18.87	1215.0	207.4	1.92	0.0
5/02/2024	35.85	27.44	61.76	31.30	1081.0	219.5	2.93	0.0
6/02/2024	28.01	16.64	95.50	58.80	1248.0	148.2	2.42	14.2
7/02/2024	17.85	14.24	96.10	79.83	251.5	111.2	2.18	7.2
8/02/2024	22.33	16.41	95.90	58.15	485.1	118.3	3.12	0.2
9/02/2024	27.58	15.31	80.90	40.17	1387.0	112.2	2.00	0.0
10/02/2024	24.07	17.40	94.40	44.55	995.0	129.9	3.76	1.2
11/02/2024	23.04	17.59	84.60	63.24	1128.0	121.8	3.79	0.0
12/02/2024	31.50	15.92	91.40	32.22	1404.0	121.8	1.45	0.0
13/02/2024	34.83	18.62	92.60	27.16	1103.0	191.7	1.47	0.0
14/02/2024	34.88	18.86	94.90	27.94	1515.0	231.4	3.43	7.4
15/02/2024	23.34	18.08	95.10	70.52	745.2	124.8	3.02	0.6
16/02/2024	30.20	18.34	88.60	47.48	1392.0	117.3	2.46	0.0
17/02/2024	32.40	18.86	95.60	35.60	1187.0	140.8	1.49	0.0
18/02/2024	31.90	18.61	92.40	36.07	1197.0	148.9	1.40	3.0
19/02/2024	23.94	17.06	95.30	55.88	1322.0	141.0	2.16	23.8
20/02/2024	22.92	16.53	94.70	70.99	1336.0	122.3	1.99	7.8
21/02/2024	27.87	17.19	93.60	50.05	1276.0	116.6	2.20	0.0
22/02/2024	33.22	18.78	90.90	36.94	994.0	148.2	0.94	0.0
23/02/2024	37.20	20.46	91.40	27.97	1284.0	256.5	3.56	9.8
24/02/2024	21.89	16.95	92.50	73.80	407.5	129.7	3.30	0.4
25/02/2024	27.18	17.09	82.20	49.83	1388.0	115.6	2.00	0.2
26/02/2024	33.81	16.85	92.40	26.07	1118.0	180.3	2.54	0.0
27/02/2024	26.14	18.88	90.10	61.20	1385.0	125.2	3.43	1.0
28/02/2024	32.68	19.58	90.90	42.63	1023.0	110.2	1.82	0.0
29/02/2024	38.13	21.13	90.60	26.18	959.0	234.1	3.45	0.2