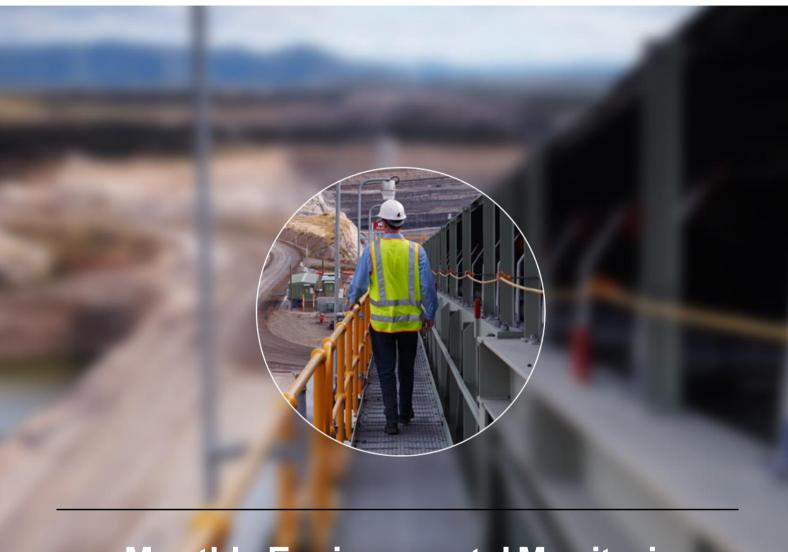
HUNTER VALLEY OPERATIONS



Monthly Environmental Monitoring Report January 2021

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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 January 2021 (the 'Reporting Period').

1 Air Quality

2.1 Meteorological Monitoring

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

²2.1.1 Rainfall

Rainfall for the period is summarised in **Table 1**. The 2021 trend and historical trends are shown in **Figure 1**.

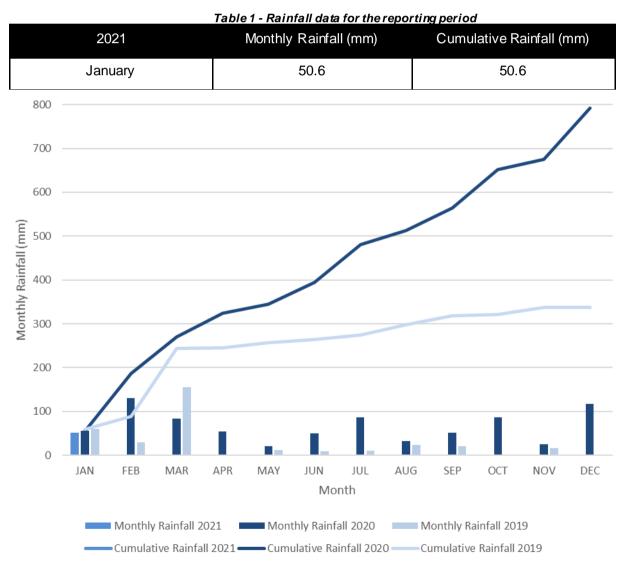


Figure 1 - Rainfalll Summary 2021

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2.1.2 Wind Speed and Direction

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

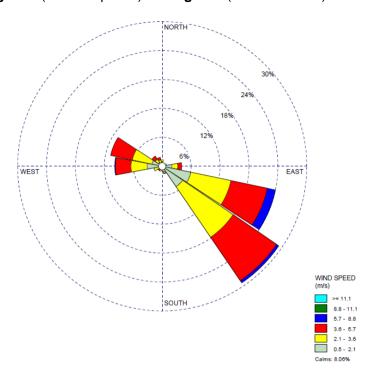


Figure 2 - HVO Corporate Wind Rose for the reporting period

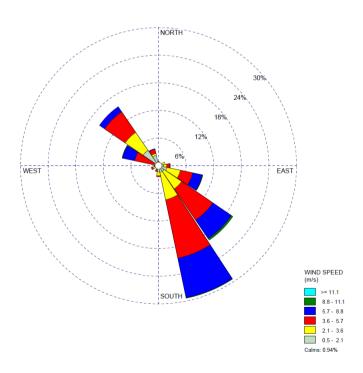


Figure 3 - HVO Cheshunt Wind Rose for the reporting period

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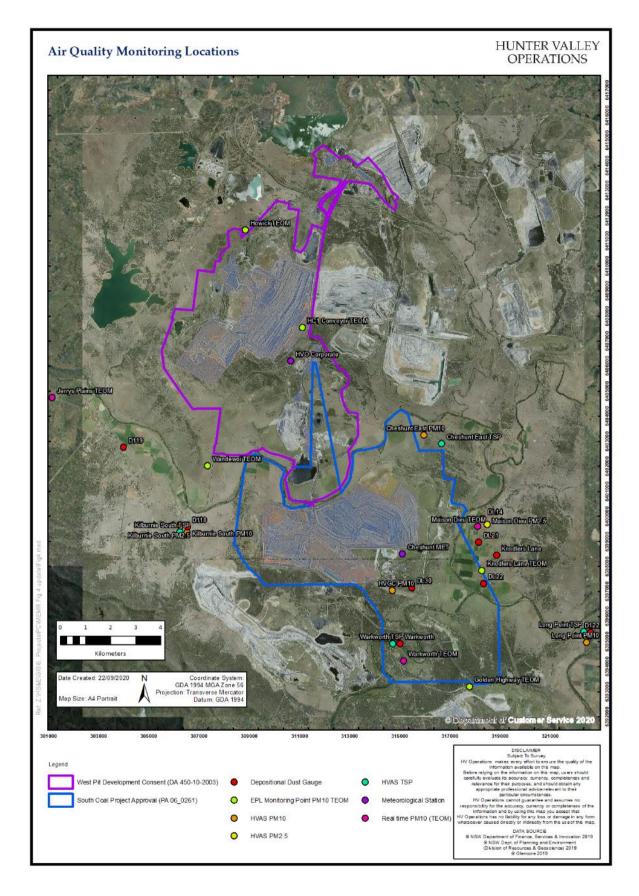


Figure 4 - Air Quality Monitoring Location Plan

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2.2 Depositional Dust

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

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. The results from DL22 were deemed contaminated during January.

An assessment of HVO's contribution against the long-term impact assessment criteria will be provided in the 2021 Annual Review.

Depositional Dust Records

Insoluble Matter (g/m²/30 days)

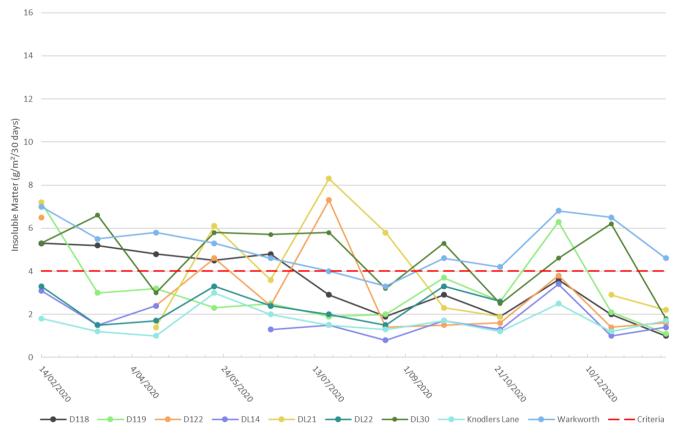


Figure 5 - Depositional Dust Results for the reporting period

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Suspended Particles 2.3

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.

HVAS PM₁₀ Results 2.3.1

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. The Gliding Club monitor recorded a result above the short-term impact assessment criteria on 15 January. An internal investigation determined HVO's contribution to be below the impact assessment criteria.

High Volume Air Sampler Records

PM10 - 24Hr Mean (µg/m³)

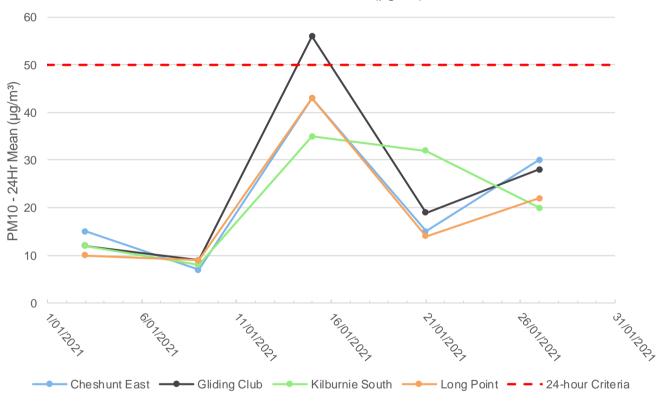


Figure 6 - Individual PM 10 Results for the reporting period

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2.3.1.2 Performance against long term impact assessment criteria

Figure 7 shows the year to date annual average PM_{10} results. All monitors 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 2021 Annual Review.

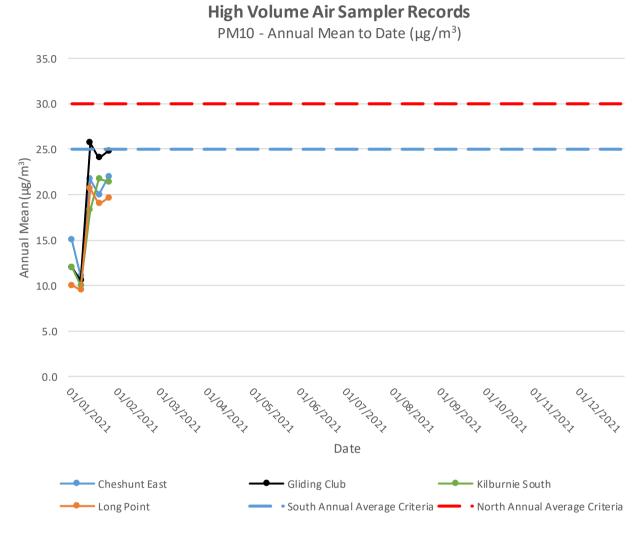


Figure 7 - Year to Date Average PM 10 as at end of January 2021

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2.3.2 HVAS PM_{2.5} Results

HVO monitors PM₂₅ 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 $25\mu g/m^3$.

Two results above the short term impact assessment criteria were recorded at Maison Dieu during the reporting period. Internal investigations into these results deemed HVO's contribution to be below the short-term impact assessment criteria.

High Volume Air Sampler Records

PM2.5 - 24Hr Mean ($\mu g/m^3$)

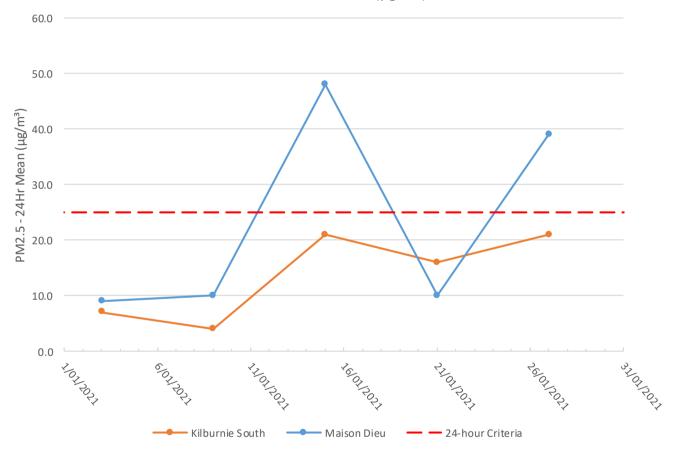


Figure 8 - Individual PM2.5 Results for the reporting period

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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 $8\mu g/m^3$.

An assessment of HVO's contribution against the long term impact assessment criteria will be provided in the 2021 Annual Review.

High Volume Air Sampler Records

PM2.5 - Annual Rolling Mean (µg/m³)

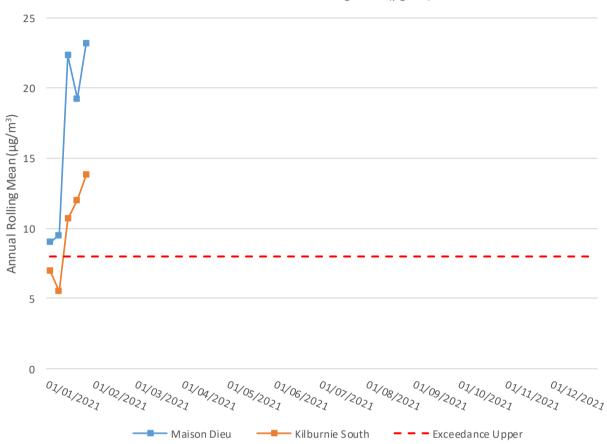


Figure 9 - Year to Date Average PM 25 as at end of January 2021

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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.

All monitors 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 2021 Annual Review.

High Volume Air Sampler Records

TSP - Annual Mean to Date (µg/m³)

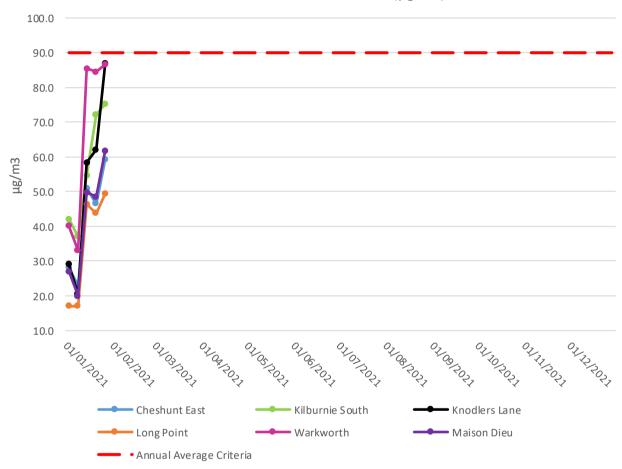


Figure 10 - Year to Date Average Total Suspended Particulates as at end of January 2021

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2.3.4 Real Time PM₁₀ Results

HVO maintains a network of real time PM₁₀ 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 trigger levels. 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.

All results were below the relevant short or long term impact assessment criteria during the reporting period.

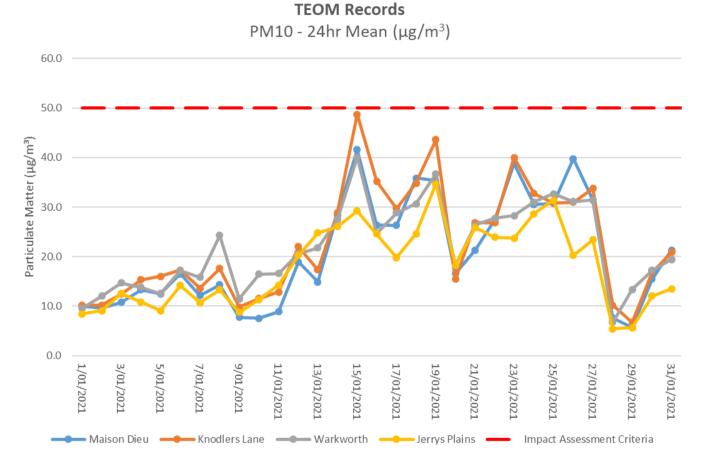


Figure 11 - Real Time PM 10 24hr average and YTD average January 2021

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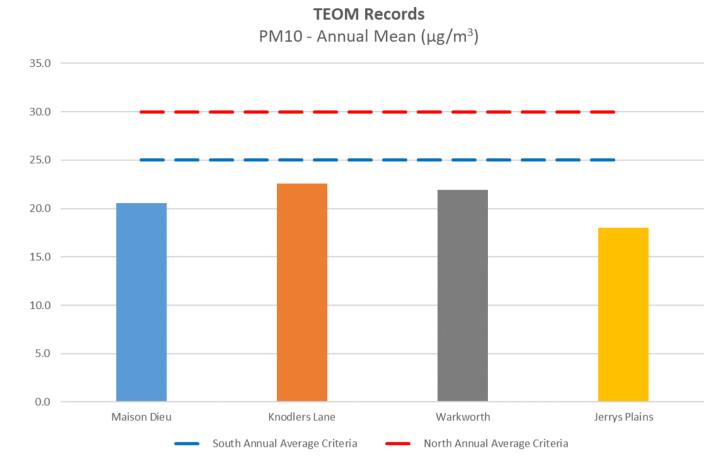


Figure 12 - Real Time PM 10 Annual Average January 2021

2.3.5 Real Time Alarms for Air Quality

The real time monitoring system generated 77 automated air quality related alarms during the reporting period. 45 alarms related to adverse weather conditions and 32 alarms related to dust conditions.

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Water Quality

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

Surface Water 3.1

Surface watercourses are sampled on a quarterly sampling regime. Water quality is assessed through 3 the parameters of pH, electrical conductivity (EC) and Total Suspended Solids (TSS). The location of surf ace 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 be provided in the March 2021 Monthly Environmental Monitoring Report.

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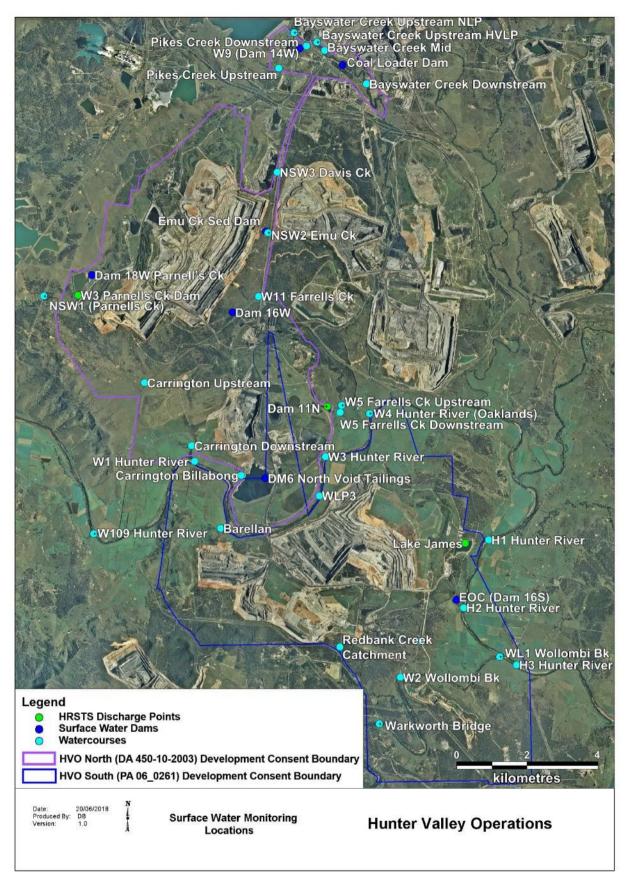


Figure 13 - HVO Surface Water Monitoring Locations

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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 March 2021 report.

3.2 Site Water Use

HVO is permitted to extract water from the Hunter River under water allocation licenses is sued by Water NSW. During the reporting period, HVO extracted 0 ML of water from the Hunter River.

HRSTS Discharge 3.3

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 discharged 517ML of water under the HRSTS during the reporting period.

Groundwater Monitoring Results 3.4

Groundwater monitoring is undertaken on a quarterly basis in accordance with the HVO Water Management Plan and Groundwater Monitoring Program. The location of groundwater monitoring points across HVO are showin Figure 14.

Groundwater monitoring results are provided on a quarterly basis. Results will be provided in the March 2021 Monthly Environmental Monitoring Report.

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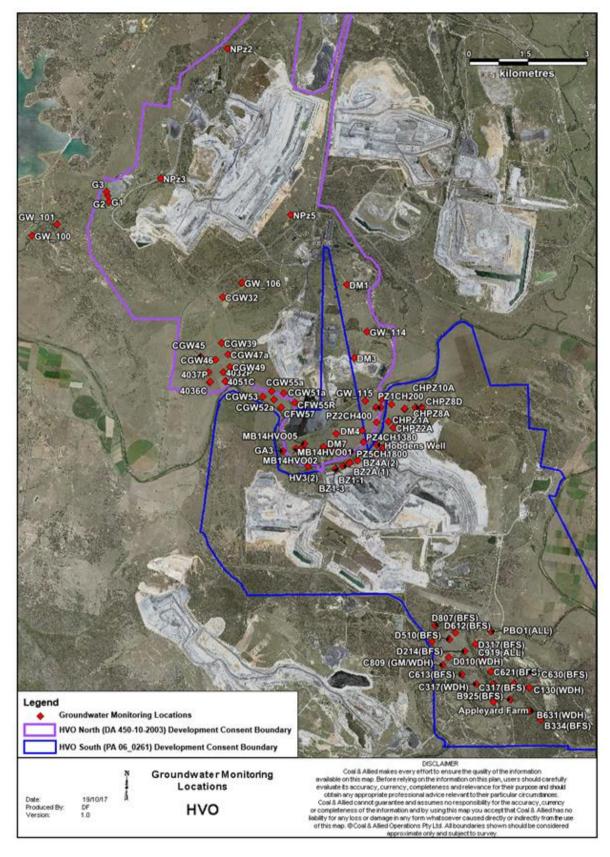


Figure 14 Groundwater monitoring Locations at HVO

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Groundwater Trigger Tracking 3.4.1

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 2021 Monthly Environmental Monitoring Report.

Blasting

HVO maintains a network of blast monitoring units located at nearby privately owned residences and f unction 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

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4.1 **Blast Monitoring Results**

13 blasts were initiated at HVO during the reporting period. Blast monitoring results for the period are shown in Table 3 and

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Table 4.

Table 3 - Overpressure Blast Monitoring Results for the reporting period

Date and Time	Moses Crossing (dB)	Jerrys Plains Village (dB)	Maison Dieu (dB)	Warkworth (dB)	Knodlers Lane (dB)
8/01/202113:05	101.9	98.2	105.5	90.4	103.6
12/01/2021 11:38	96.2	86.2	90.5	84.9	91.1
12/02/2021 13:02	94.3	93.1	92.4	95.2	91.8
14/01/2021 14:19	100.7	95.5	110.6	89.8	103.8
16/01/2021 13:03	97.8	99.2	97.1	92.2	109.9
20/01/2021 13:07	102.5	103.0	103.9	86.5	100.6
22/01/2021 12:54	96.6	98.2	91.7	104.9	108.2
23/01/2021 13:01	96.0	99.2	94.2	94.5	100.5
25/01/2021 13:01	91.2	101.1	97.9	89.4	94.7
25/01/2021 15:03	110.7	95.4	102.7	93.3	106.8
27/01/2021 13:28	107.2	110.9	103.7	92.1	109.3
27/01/2021 13:29	104.3	103.8	101.0	98.0	105.4
28/01/2021 13:14	100.6	107.9	99.9	90.3	113.3

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Table 4 - Ground Vibration Blast Monitoring Results for the reporting period

Date and Time	Moses Crossing (mm/s)	Jerry's Plains Village (mm/s)	Maison Dieu (mm/s)	Warkworth (mm/s)	Knodlers Lane (mm/s)
8/01/202113:05	0.19	0.09	0.5	1.08	0.51
12/01/2021 11:38	0.15	0.15	0.07	0.22	0.10
12/02/2021 13:02	0.2	0.07	0.07	0.25	0.09
14/01/2021 14:19	0.33	0.16	0.13	0.22	0.10
16/01/2021 13:03	0.11	0.06	0.15	0.30	0.14
20/01/2021 13:07	0.21	0.09	0.08	0.11	0.10
22/01/2021 12:54	0.29	0.22	0.22	0.71	0.19
23/01/2021 13:01	0.14	0.07	0.1	0.27	0.13
25/01/2021 13:01	0.13	0.11	0.09	0.31	0.10
25/01/2021 15:03	0.45	0.16	0.16	0.48	0.17
27/01/2021 13:28	0.14	0.05	0.08	0.21	0.13
27/01/2021 13:29	0.15	0.05	0.1	0.67	0.17
28/01/2021 13:14	0.13	0.14	0.07	0.11	0.08

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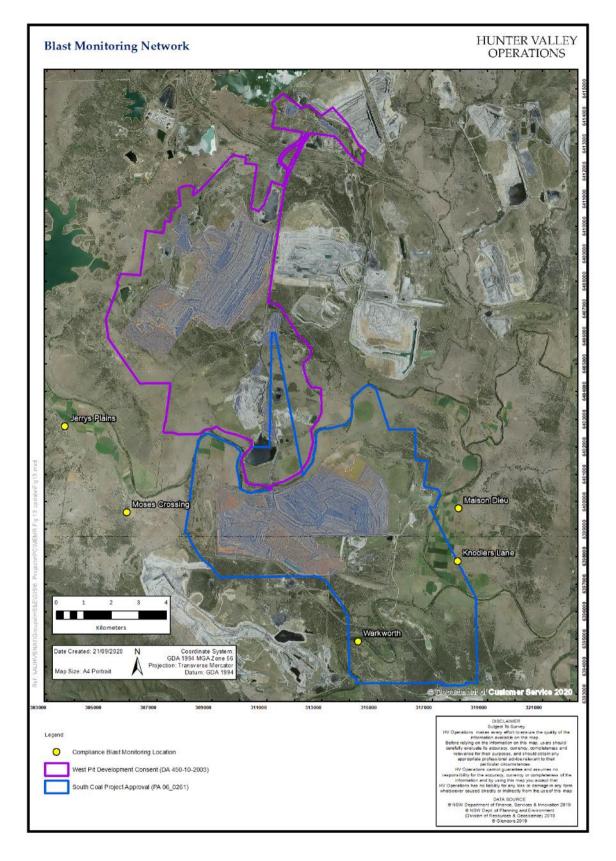


Figure 15 - Blast Monitoring Location Plan

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Noise

Routine attended noise monitoring occurs at defined locations around HVO, as described in the HVO Noise Monitoring Program. 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.

⁵5.1 **Attended Noise Monitoring Results**

Attended monitoring was conducted at receiver locations around HVO on the night of 20th January 2021. All monitoring levels were below relevant criteria. Monitoring results are detailed in **Table 7** to Table 11.

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Table 5 - LAeq, 15minute HVO North Against Impact Assessment Criteria for the reporting period

Tubico Eneq; formitate TVO North Agamst impact As			, par et 7 1000 00.	TOTAL CITEDIA	a rer tirer epe	or arrig period	
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	20/01/2021 21:00	3.7	D	35	No	IA	NA
Knodlers Lane	20/01/2021 21:47	2.9	D	35	Yes	IA	Nil
Maison Dieu	20/01/2021 21:24	2.8	D	35	Yes	IA	Nil
Long Point	20/01/2021 22:39	1.6	E	35	Yes	IA	Nil
Kilburnie South	20/01/2021 23:34	2.0	D	39	Yes	NM	Nil
Jerrys Plains East	20/01/2021 23:05	2.0	D	39	Yes	29	Nil
Jerrys Plains Village	20/01/2021 21:29	2.8	D	40	Yes	<30	Nil
Jerrys Plains West	20/01/2021 21:04	3.7	D	40	No	IA	NA
HVGC	21/01/2021 00:08	2.7	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;

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^{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;

^{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 for the reporting period

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	20/01/2021 21:00	3.7	D	41	No	IA	NA
Knodlers Lane	20/01/2021 21:47	2.9	D	41	Yes	IA	Nil
Maison Dieu	20/01/2021 21:24	2.8	D	41	Yes	IA	Nil
Long Point	20/01/2021 22:39	1.6	E	41	Yes	IA	Nil
Kilburnie South	20/01/2021 23:34	2.0	D	41	Yes	NM	Nil
Jerrys Plains East	20/01/2021 23:05	2.0	D	41	Yes	29	Nil
Jerrys Plains Village	20/01/2021 21:29	2.8	D	41	Yes	<30	Nil
Jerrys Plains West	20/01/2021 21:04	3.7	D	41	No	IA	NA
HVGC	21/01/2021 00:08	2.7	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;

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^{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;

^{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 for the reporting period

Table 7 - LAT, Illimate TIVO North Against Illipact Ass				Jack Assessin	sessifient official of the reporting period				
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	20/01/2021 21:00	3.7	D	46	No	IA	NA		
Knodlers Lane	20/01/2021 21:47	2.9	D	46	Yes	IA	Nil		
Maison Dieu	20/01/2021 21:24	2.8	D	46	Yes	IA	Nil		
Long Point	20/01/2021 22:39	1.6	Е	46	Yes	IA	Nil		
Kilburnie South	20/01/2021 23:34	2.0	D	46	Yes	<30	Nil		
Jerrys Plains East	20/01/2021 23:05	2.0	D	46	Yes	34	Nil		
Jerrys Plains Village	20/01/2021 21:29	2.8	D	46	Yes	<30	Nil		
Jerrys Plains West	20/01/2021 21:04	3.7	D	46	No	IA	Nil		
HVGC	21/01/2021 00:08	2.7	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;

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^{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;

^{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

Table 8 - LAeq, 15minute HVO South Against Impact Assessment Criteria for the reporting period

Tubico	EACY, rominat	e m e cour	n Agamoe iii	part Hoocoon	TOTAL OTTECTA	a for the repe	rung perreu
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	20/01/2021 21:00	3.6	D	41	No	IA	NA
Knodlers Lane	20/01/2021 21:47	3.8	D	40	No	IA	NA
Maison Dieu	20/01/2021 21:24	3.7	D	39	No	IA	NA
Long Point	20/01/2021 22:39	3.4	E	37	No	IA	NA
Kilburnie South	20/01/2021 23:34	2.9	F	39	Yes	IA	Nil
Jerrys Plains East	20/01/2021 23:05	3.2	E	38	No	IA	NA
Jerrys Plains Village	20/01/2021 21:29	3.7	D	35	No	IA	NA
Jerrys Plains West	20/01/2021 21:04	3.6	D	35	No	IA	NA
HVGC	21/01/2021 00:08	3.7	E	55	No	IA	NA

^{1.} Atmospheric data is sourced from the HVO Cheshunt (or MTW Charlton Ridge for Long Point) AWS using logged meteorological data;

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^{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;

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

Table 9 - LA1,1minute HVO South Against Impact Assessment Criteria for the reporting period

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	20/01/2021 21:00	3.6	D	45	No	IA	NA
Knodlers Lane	20/01/2021 21:47	3.8	D	45	No	IA	NA
Maison Dieu	20/01/2021 21:24	3.7	D	45	No	IA	NA
Long Point	20/01/2021 22:39	3.4	E	45	No	IA	NA
Kilburnie South	20/01/2021 23:34	2.9	D	45	Yes	IA	Nil
Jerrys Plains East	20/01/2021 23:05	3.2	E	45	No	IA	NA
Jerrys Plains Village	20/01/2021 21:29	3.7	D	45	No	IA	NA
Jerrys Plains West	20/01/2021 21:04	3.6	D	45	No	IA	NA
HVGC	21/01/2021 00:08	3.7	Е	NA	No	IA	NA

^{1.} Atmospheric data is sourced from the HVO Cheshunt (or MTW Charlton Ridge for Long Point) AWS using logged meteorological data;

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^{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;

^{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

Low Frequency Assessment 5.2

In accordance with the requirements of the EPA's Noise Policy for Industry (NPfI), the applicability of the low f requency 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 10 and Table 11.

Table 10 - Modifying Factor Assessment HVO North for the reporting period

	Table 10 - I	<i>I</i> I odifying	Factor A	ssessment H	VO North	tor the rep	orting pe	riod	
Location	Date and Time	Measured HVO North L _{Aeq} dB	Criterion Applies?	Intermittency Modifying Factor?	Tonality Modif ying Factor?	Frequency of Tonality ¹	Low- frequency Modifying Factor?	Maximum Exceedance of NPfI Reference Spectrum ^{1,2}	Total Penalty dB ²
Shearers Lane	20/01/2021 21:00	IA	No	No	No	NA	No	NA	NA
Knodlers Lane	20/01/2021 21:47	IA	Yes	No	No	NA	No	NA	NA
Maison Dieu	20/01/2021 21:24	IA	Yes	No	No	NA	No	NA	NA
Long Point	20/01/2021 22:39	IA	Yes	No	No	NA	No	NA	NA
Kilbumie South	20/01/2021 23:34	NM	Yes	No	No	NA	No	NA	NA
Jerrys Plains East	20/01/2021 23:05	29	Yes	No	No	NA	No	NA	NA
Jerrys Plains Village	20/01/2021 21:29	<30	Yes	No	No	NA	No	NA	NA
Jerrys Plains West	20/01/2021 21:04	IA	No	No	No	NA	No	NA	NA
HVGC	20/01/2021 00:08	IA	Yes	No	No	NA	No	NA	NA

^{1.} NA means not applicable;

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Table 11 - Modifying Factor Assessment HVO South for the reporting period

	lable 11 - Modifying Factor Assessment HVO South for the reporting period								
Location	Date and Time	Measured HVO South L _{Aeq} dB	Criterion Applies?	Intermittency Modifying Factor?	Tonality Modifying Factor?	Frequency of Tonality ¹	Low- f requency Modif y ing Factor?	Maximum Exceedance of NPfI Reference Spectrum ^{1,2}	Total Penalty dB ²
Shearers Lane	20/01/2021 21:00	IA	No	No	No	NA	No	NA	NA
Knodlers Lane	20/01/2021 21:47	IA	No	No	No	NA	No	NA	NA
Maison Dieu	20/01/2021 21:24	IA	No	No	No	NA	No	NA	NA
Long Point	20/01/2021 22:39	IA	No	No	No	NA	No	NA	NA
Kilburnie South	20/01/2021 23:34	IA	Yes	No	No	NA	No	NA	NA
Jerrys Plains East	20/01/2021 23:05	IA	No	No	No	NA	No	NA	NA
Jerrys Plains Village	20/01/2021 21:29	IA	No	No	No	NA	No	NA	NA
Jerrys Plains West	20/01/2021 21:04	IA	No	No	No	NA	No	NA	NA
HVGC	20/01/2021 00:08	IA	No	No	No	NA	No	NA	NA

^{1.} NA means not applicable;

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Real Time Noise Monitoring 5.3

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.

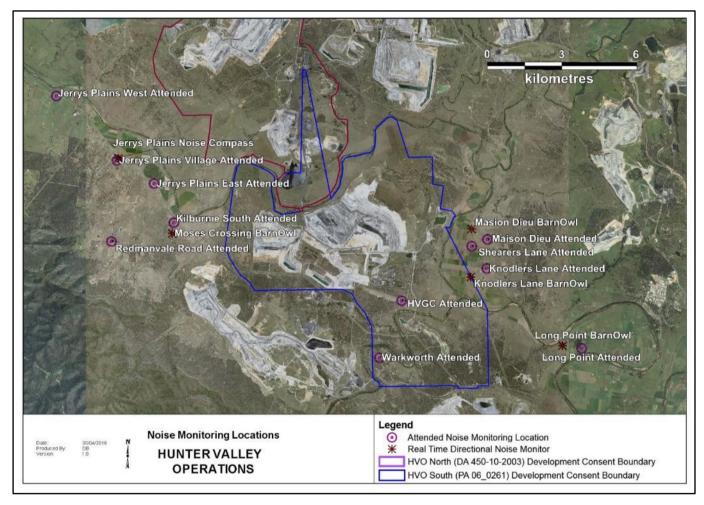


Figure 16 - Noise Monitoring Location Plan

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Operational Downtime

A total of 242 hours of equipment downtime were 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).

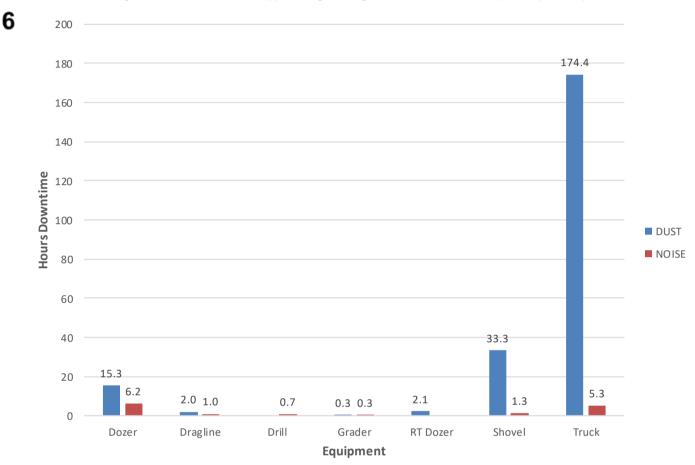


Figure 17 - Operational Downtime by Equipment Type for the reporting period

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Rehabilitation

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

- 13.4 Ha of land was bulk shaped
- 23.3 Ha of land was released (became available for the application of topsoil)
- 5.1 Ha of land was topsoiled
- 5.1 Ha was rehabilitated

Year to date progress is shown in Figure 18.

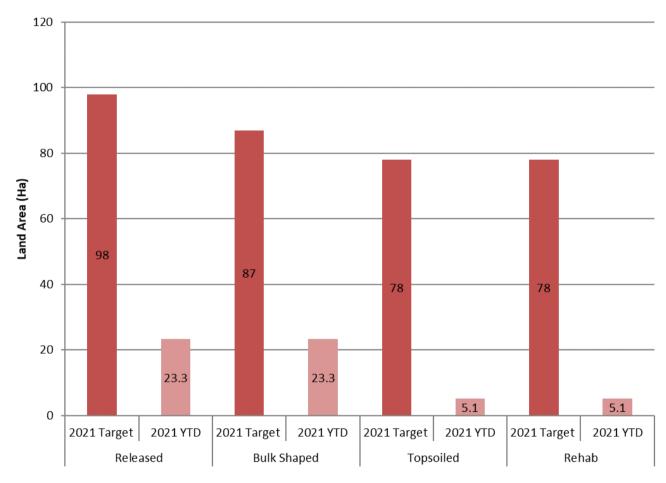


Figure 18 - Rehabilitation YTD January 2021

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Complaints

Two complaints were received during the reporting period. Details of complaints received are shown in Table 12.

Table 12 - Complaints Summary 2021

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

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Environmental Incidents

There were no reportable environmental incidents during the reporting period.

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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)
1/01/2021	18.1	2.0	109.8	75.8	367.6	128	3.2	6.6
2/01/2021	19.9	1.8	111.1	74.7	723	119	2.6	1
3/01/2021	25.9	4.6	109.4	59.9	1705	129	1.2	0.8
4/01/2021	27.2	4.0	111.3	54.8	1433	216	1.7	28.2
5/01/2021	29.4	3.7	108.9	32.3	1372	267	2.4	0.2
6/01/2021	23.3	5.5	98.0	50.4	1535	128	3.4	0
7/01/2021	21.2	3.6	100.0	53.8	946	127	3.9	0.4
8/01/2021	21.9	1.8	100.0	43.1	1727	125	4.1	0
9/01/2021	22.7	1.9	111.1	57.7	1508	115	3.0	9.8
10/01/2021	26.6	1.0	110.2	38.0	1402	116	2.5	0
11/01/2021	28.2	2.6	100.0	20.4	1126	122	2.2	0
12/01/2021	31.5	3.1	100.0	20.3	1289	171	1.4	0
13/01/2021	29.3	3.9	100.0	28.8	1231	116	2.2	0
14/01/2021	34.0	5.2	100.0	23.7	1405	241	2.6	0
15/01/2021	31.9	7.3	100.0	10.3	1226	212	2.8	0.2
16/01/2021	27.0	2.7	68.1	4.8	1117	249	3.2	0
17/01/2021	28.6	0.4	81.8	11.7	1200	218	2.1	0
18/01/2021	31.3	2.7	99.3	12.4	1236	244	2.4	0
19/01/2021	28.5	5.6	87.3	28.6	1362	166	4.1	0
20/01/2021	22.4	2.2	108.3	44.5	1596	115	3.8	0
21/01/2021	28.1	-0.3	100.0	23.7	1096	125	2.0	0
22/01/2021	33.6	2.4	100.0	19.6	1026	220	2.3	0
23/01/2021	36.6	8.8	66.1	12.2	1013	223	2.4	0
24/01/2021	36.6	8.3	76.5	8.7	1015	188	1.8	0

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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)
25/01/2021	36.3	6.1	89.7	8.1	1036	208	2.2	0
26/01/2021	36.5	9.7	87.3	12.6	1010	259	2.9	0
27/01/2021	28.7	6.1	98.4	33.4	1281	133	3.9	0
28/01/2021	20.9	3.6	109.4	71.9	379.3	129	4.4	2
29/01/2021	24.4	3.2	111.4	67.2	1188	126	3.9	1.2
30/01/2021	28.6	6.0	109.5	44.4	1439	164	1.4	0.2
31/01/2021	28.4	5.6	109.0	49.9	1422	148	2.6	0

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