

Rasp Mine
Monthly Environmental Monitoring Report
November 2020



INTRODUCTION

Broken Hill Operations Pty Ltd (BHOP) [a wholly owned subsidiary of CBH Resources Limited (CBH)] owns and operates the Rasp Mine (the Mine), which is located centrally within the City of Broken Hill on Consolidated Mine Lease 7 (CML7).

Mining has been undertaken within CML7 since 1885. The existing operations at the Rasp Mine include underground mining operations, a processing plant producing zinc and lead concentrates and a rail siding for concentrate dispatch. These operations are undertaken in accordance with Project Approval 07_0018 granted 31 January 2011, under Part3A of the Environmental Planning and Assessment Act 1979 (EP&A Act).

As the holder of an Environmental Protection Licence, 12559, BHOP is required, under Section 66(6) of the NSW *Protection of the Environment Operations Act 1997*, to publish pollution monitoring data. In addition BHOP is required to publish data in accordance with its Project Approval 07_0018 Schedule 4 Condition 9. These documents can be found on the Rasp Mine web site.

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1 Air Quality

The following criteria as listed in the Project Approval (DA 07_0018 MOD7 July 2019) apply to air quality monitoring:

Long Term Criteria for Particulate Matter

Pollutant	Averaging Period	Criterion
Total solid particles (TSP)	Annual	90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	25 µg/m ³

Short Term Criterion for Particulate Matter

Pollutant	Averaging Period	Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m ³

Long Term Criteria for Deposited Dust

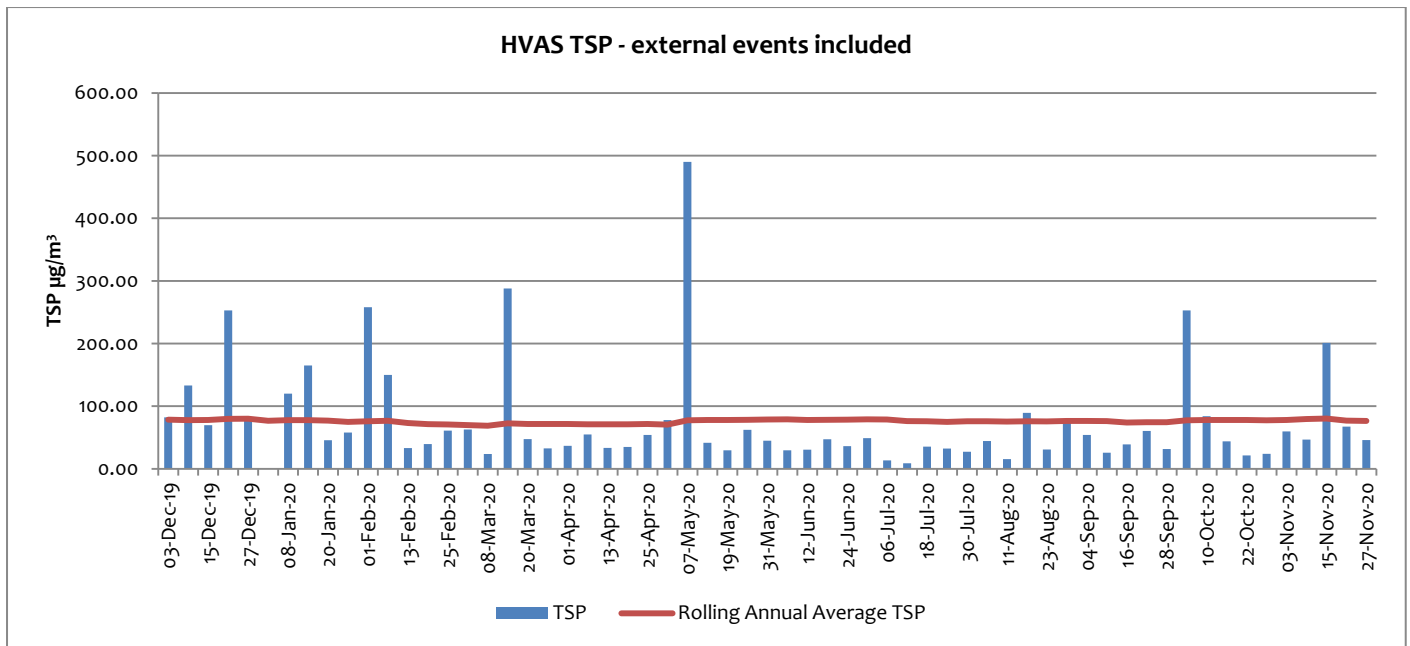
Pollutant	Averaging Period	Maximum Project Contribution	Maximum Total Deposited Dust Level
Deposited dust	Annual	2 g/m ² /month	4 g/m ² /month

1.1 High Volume Air Samplers

There are four high volume air samplers used to measure ambient air quality at the Rasp Mine – HVAS (EPL10) and HVAS1 (EPL11) are located at the Silver Tank, central and to the south of the mine lease, and HVAS2 (EPL12) and HVAS3 (EPL57) are located adjacent to and north of Blackwood Pit. A map indicating these locations can be found on the Rasp Mine web site. HVAS and HVAS3 sample for total suspended particulates (TSP) and lead dust, and HVAS1 and HVAS2 sample for particulate matter less than 10 microns (PM₁₀) and lead dust.

HVAS (EPL10) - Silver Tank (On Site) Results for November

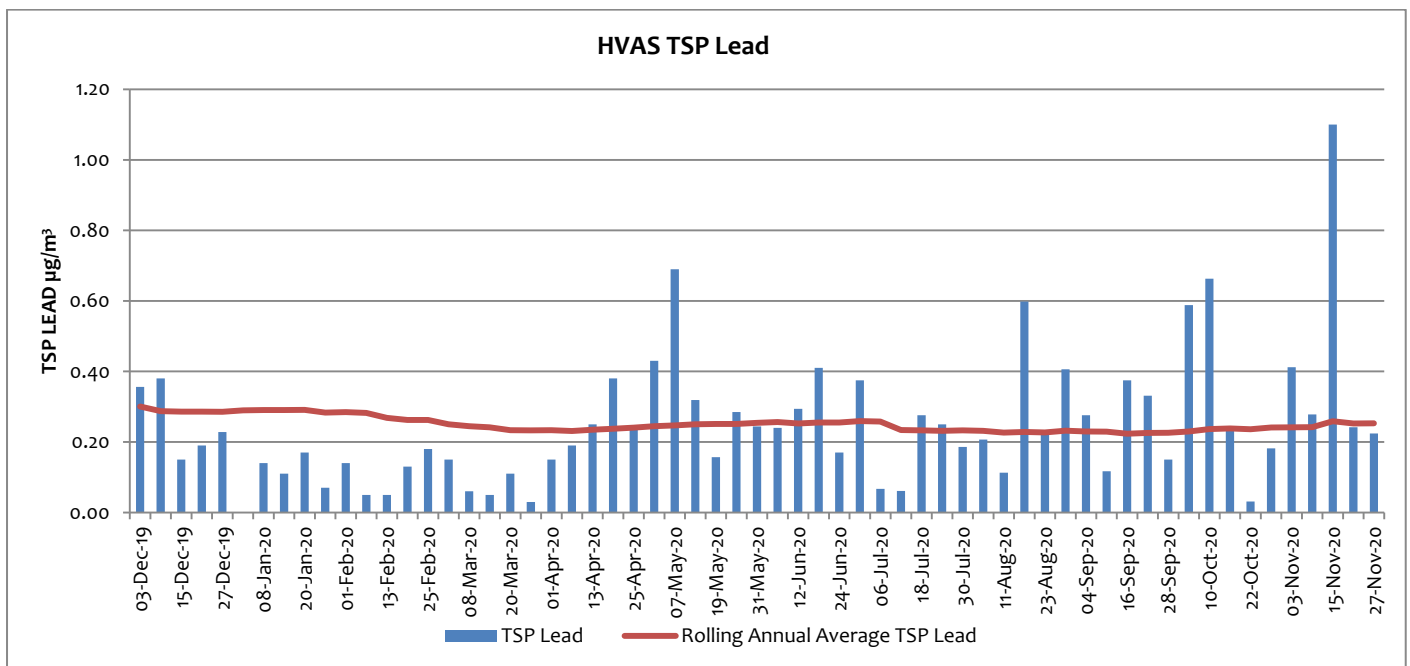
DATE	TSP (µg/m ³)	Lead (µg/m ³)
3-11-2020	59.80	0.41
9-11-2020	46.70	0.28
15-11-2020	201.00	1.10
21-11-2020	67.30	0.24
27-11-2020	46.00	0.22



HVAS (EPL10) is located on the southern boundary of Rasp Mine and while limit criteria do not apply at this point, they do apply at the closest residential location.

There were elevated TSP levels of 201 µg/m³ on 15 November. There was a dust storm on 15 November with heavy winds from multiple directions so contribution from site activities is difficult to determine. The annual rolling average for TSP at this location is 76.37 µg/m³ at the end of November.

The annual rolling average for TSP is determined using data with extreme dust events included.





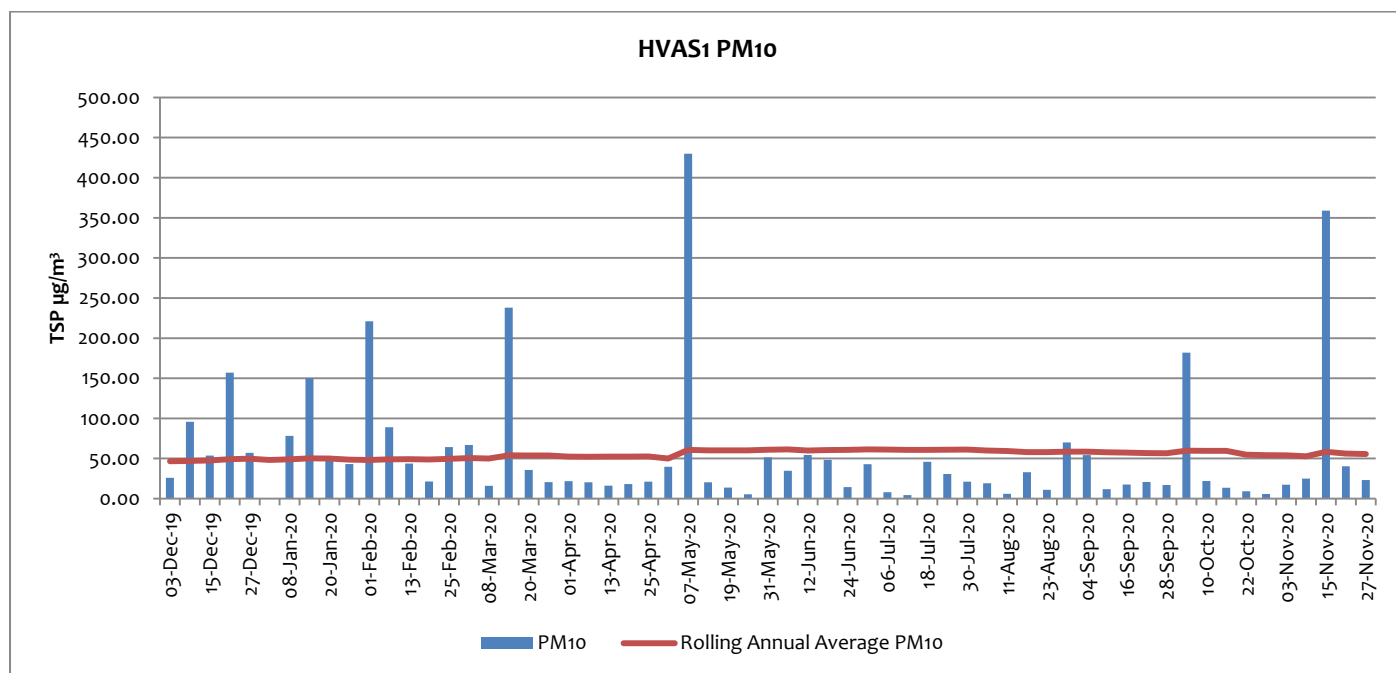
There were elevated TSP Lead levels of $1.1 \mu\text{g}/\text{m}^3$ on 15 November. There was a dust storm on 15 November with heavy winds from multiple directions so contribution from site activities is difficult to determine. The rolling annual average for TSP Lead in November 2020 was $0.25 \mu\text{g}/\text{m}^3$, down from $0.30 \mu\text{g}/\text{m}^3$ in December 2019.

Dust is controlled on site using the application of dust suppressant on free (unused) areas and side tracks, and from the frequent watering of haul roads.

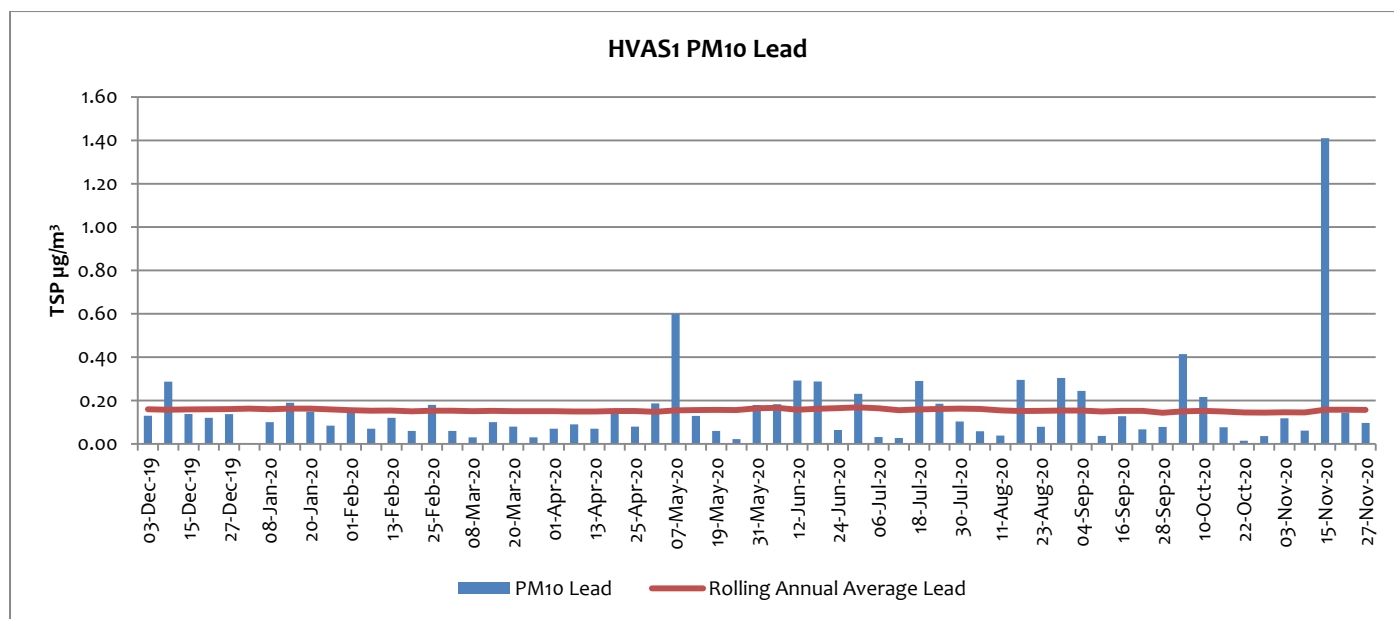
HVAS1 (EPL11) - Silver Tank (On Site) Results for November

DATE	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM ₁₀ Lead ($\mu\text{g}/\text{m}^3$)
3-11-2020	17.30	0.12
9-11-2020	25.00	0.06
15-11-2020	359.00	1.41
21-11-2020	40.40	0.14
27-11-2020	23.20	0.10

HVAS1 (EPL11) is located on the southern boundary of Rasp Mine and while limit criteria do not apply at this point, they do apply at the closest residential location.



There were elevated PM₁₀ levels of $359 \mu\text{g}/\text{m}^3$ on 15 November. There was a dust storm on 15 November with heavy winds from multiple directions so contribution from site activities is difficult to determine. The annual rolling average for PM₁₀ at this location is $55.6 \mu\text{g}/\text{m}^3$ at November 2020. While the annual rolling average for PM₁₀ at this location exceeds the long term criteria of $25 \mu\text{g}/\text{m}^3$, the reported data includes dust levels influenced by extreme dust events, and external events or sources due to the variability of wind directions on any day.



There were elevated PM₁₀ lead dust levels of 1.41 µg/m³ on 15 November. There was a dust storm on 15 November with heavy winds from multiple directions so contribution from site activities is difficult to determine. There is no guideline for assessing PM₁₀ lead dust; the rolling annual average for PM₁₀ lead dust at this location over 12 months is 0.16 µg/m³ and is likely the result of drought conditions and windy weather transporting lead contaminated dust from the Broken Hill environs.

HVAS 2 (EPL12) - Blackwood Pit (On Site) Results for November

HVAS2 (EPL12) is located on the northern boundary of Rasp Mine and while limit criteria do not apply at this point, they do apply at the closest residential location. HVAS2 has been decommissioned since June 2019 while Embankment 2 TSF2 construction works are undertaken. A real-time PM₁₀ monitor is in place adjacent to the HVAS2 location.

HVAS 3 (EPL57) - Blackwood Pit (On Site) Results for November

HVAS3 (EPL57) is located on the northern boundary of Rasp Mine and while limit criteria do not apply at this point, they do apply at the closest residential location. HVAS3 (EPL57) was included in EPL 12559 on 14 March 2019 to provide for monitoring of TSP Dust on the northern boundary of the site at Blackwoods Pit TSF2. HVAS3 has been decommissioned since June 2019 while Embankment 2 TSF2 construction works are undertaken. A real-time PM₁₀ monitor is in place adjacent to the HVAS2 location.



1.2 Tapered Element Oscillating Microbalance Sampling (TEOM)

There are two Tapered Element Oscillating Microbalance (TEOM) sampling units used to measure ambient air quality at the Rasp Mine – TEOM1 (EPL13) is located off-site within the perimeter fence of Essential Water south of the mine lease, and TEOM2 (EPL14) is located on-site adjacent to Blackwood Pit to the north of the mine lease. A map indicating these locations can be found on the Rasp Mine web site. TEOM1 and TEOM2 are designed to operate continuously and sample for particulate matter less than 10 microns (PM₁₀) in size.

TEOM2 was temporarily decommissioned in 19 June 2019 due to Embankment 2 TSF2 construction works. The decommissioning is in accordance with dust management strategies agreed with the EPA which includes the operation of a real-time PM10 monitor north of the construction works. Both Project Approval and Environment Protection Licence criteria exclude dust storms and other extraordinary events.

Project Approval 07_0018 criteria apply at TEOM1 and TEOM2, with two criteria listed for PM10, a 24 hour average criteria of 50 ug/m³ and an annual average criteria of 25 ug/m³.

TEOM data is validated by third party consultants using Australian Standards and internal procedures, and is used to populate the table of TEOM monthly data provided below.



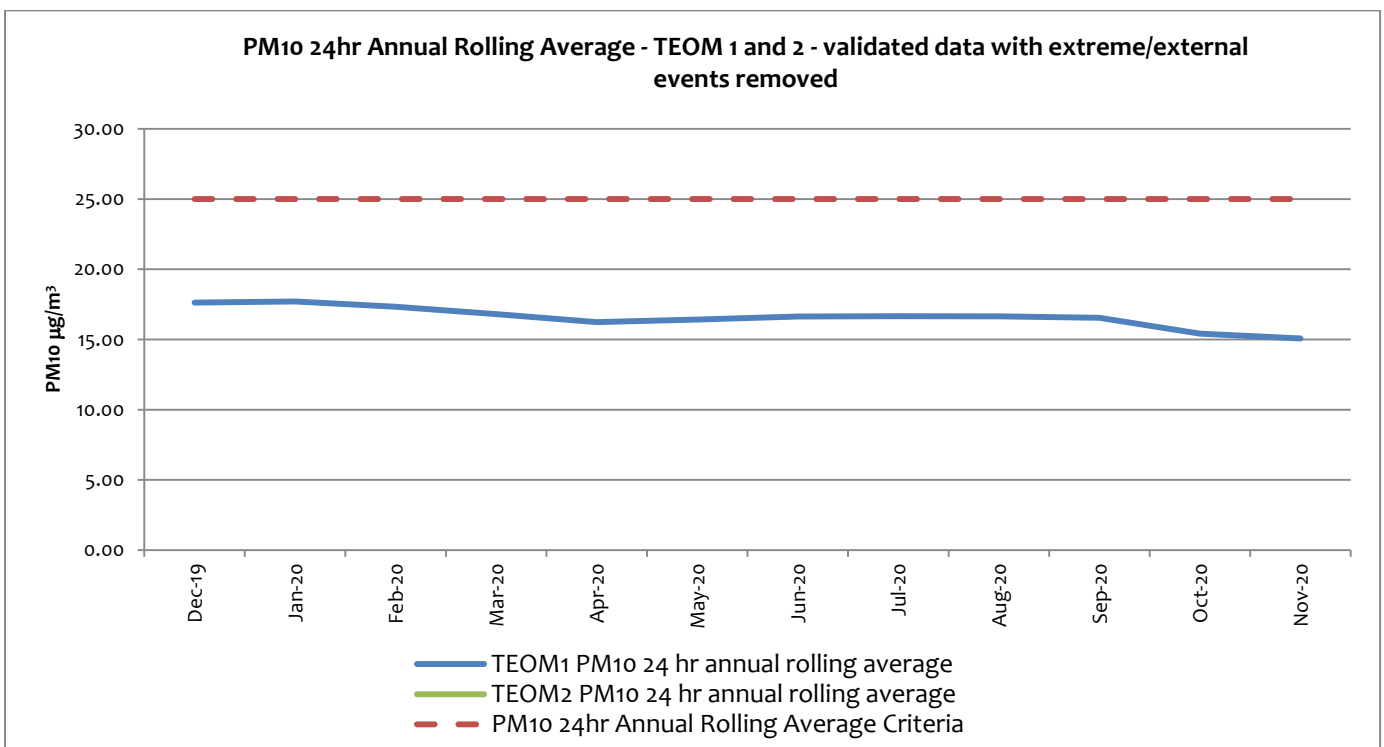
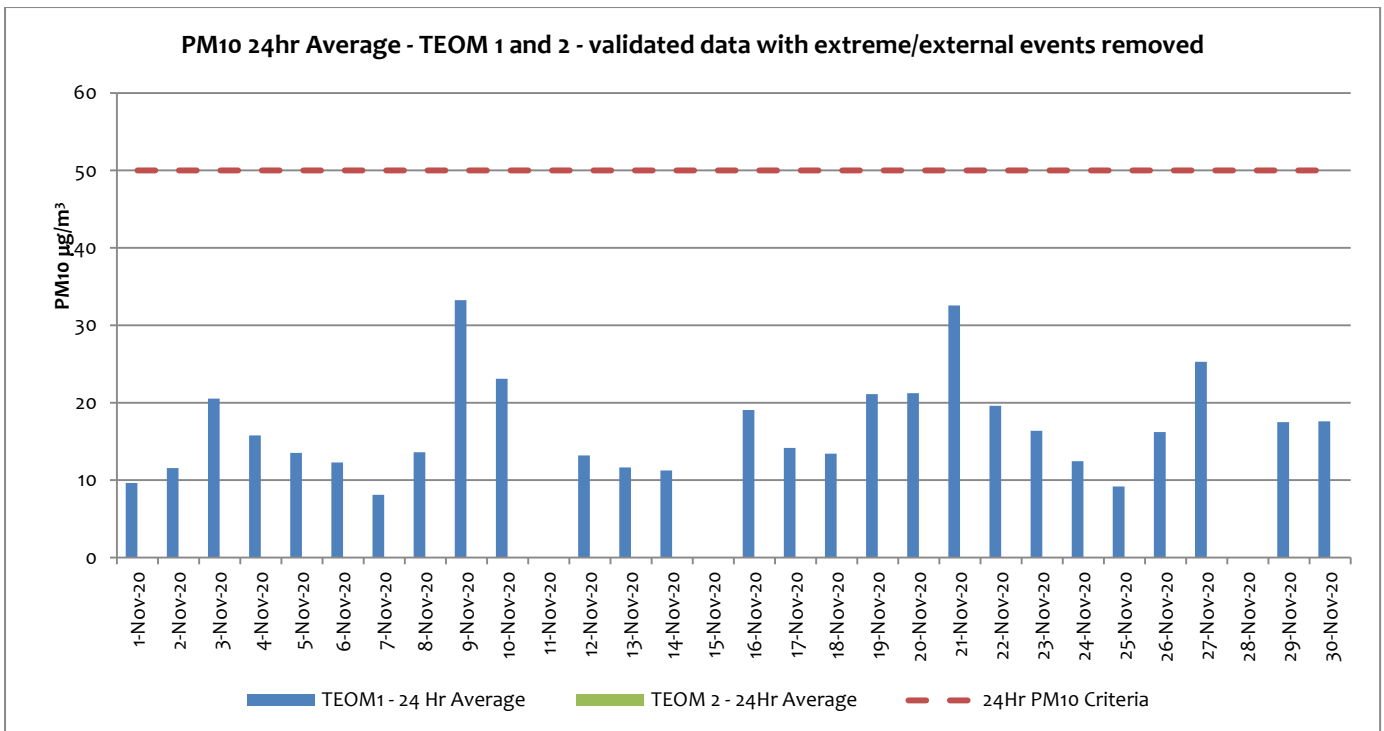
TEOM1 (EPL13) (Off Site) and TEOM2 (EPL14) (On Site) Validated Results for November

Particulate Matter <10 Microns 24Hr Average				
Date	TEOM 1 ($\mu\text{g}/\text{m}^3$)	Compliant with 50 $\mu\text{g}/\text{m}^3$ 24hr average?	TEOM 2 ($\mu\text{g}/\text{m}^3$)	Compliant with 50 $\mu\text{g}/\text{m}^3$ 24hr average?
1-Nov-20	9.6	Y	NS	Y
2-Nov-20	11.6	Y	NS	Y
3-Nov-20	20.5	Y	NS	Y
4-Nov-20	15.8	Y	NS	Y
5-Nov-20	13.5	Y	NS	Y
6-Nov-20	12.3	Y	NS	Y
7-Nov-20	8.1	Y	NS	Y
8-Nov-20	13.6	Y	NS	Y
9-Nov-20	33.2	Y	NS	Y
10-Nov-20	32.2	Y	NS	Y
11-Nov-20	107.2	Y	NS	Y
12-Nov-20	21.6	Y	NS	Y
13-Nov-20	11.6	Y	NS	Y
14-Nov-20	11.2	Y	NS	Y
15-Nov-20	182.1	Y	NS	Y
16-Nov-20	19.1	Y	NS	Y
17-Nov-20	14.2	Y	NS	Y
18-Nov-20	13.4	Y	NS	Y
19-Nov-20	25.7	Y	NS	Y
20-Nov-20	21.2	Y	NS	Y
21-Nov-20	32.6	Y	NS	Y
22-Nov-20	27.1	Y	NS	Y
23-Nov-20	16.4	Y	NS	Y
24-Nov-20	12.5	Y	NS	Y
25-Nov-20	9.2	Y	NS	Y
26-Nov-20	16.2	Y	NS	Y
27-Nov-20	25.3	Y	NS	Y
28-Nov-20	90.3	Y	NS	Y
29-Nov-20	17.5	Y	NS	Y
30-Nov-20	17.6	Y	NS	Y

NS¹ – no sample collected due to temporary decommissioning of TEOM unit.

There were dust storms in Broken Hill on 10 – 12, 15, 22, and 28 November and the 24-hour average level for the day as provided in the above table includes the results recorded during the dust storm. Dust storms on the 11, 15, and 28 November occurred for most or all of the day so the data is not provided in the PM₁₀ 24-hour average graph below.

The PM₁₀ 24-hour rolling annual average for data with external elevated dust events removed at November 2020 is 15.08 $\mu\text{g}/\text{m}^3$ for TEOM1. The PM₁₀ 24-hour rolling annual average for both TEOM sites remain below the annual average criteria of 25 $\mu\text{g}/\text{m}^3$.





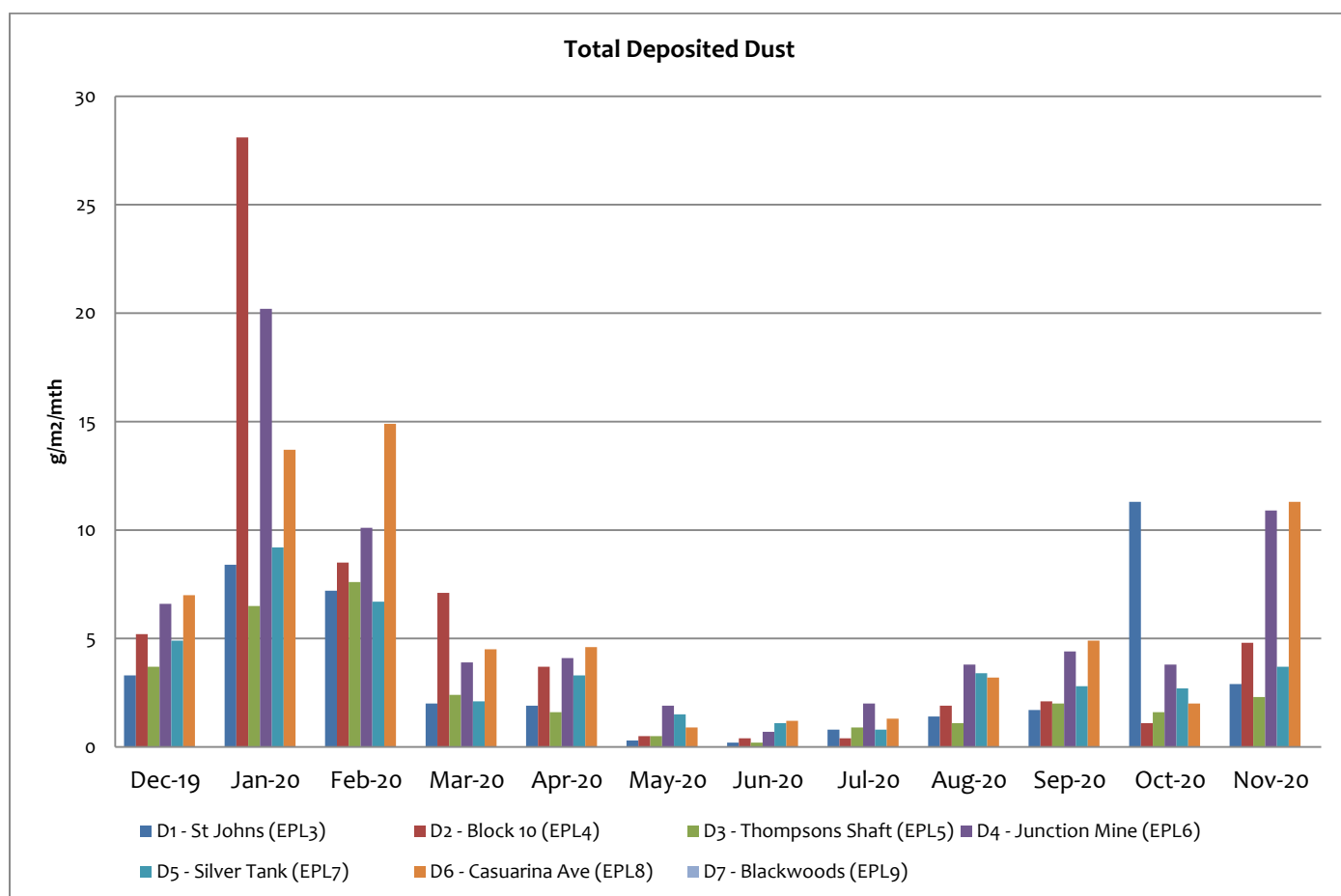
1.3 Dust Deposition Sampling

There are seven dust deposition gauges to measure ambient air quality at the Rasp Mine – D1 to D7. D1 and D6 are located off-site, D1 near the St Johns training facility north of the Rasp Mine and D6 in Casuarina Avenue south of the Rasp Mine. D2 to D5 and D7 are located on the mine lease in various locations. A map indicating these locations can be found on the Rasp Mine web site. Dust samples are collected monthly and analysed for total deposited dust and deposited lead dust. DDG7 has been decommissioned since June 2019 due to works on TSF Embankment 2.

Dust Deposition Gauges D1 (EPL3) to D7 (EPL9) – Results for November

Total Deposited Dust (g/m ² /Month)							
Sample Period	D1 (off site)	D2 (on site)	D3 (on site)	D4 (on site)	D5 (on site)	D6 (off site)	D7 (on site)
November 2020	2.9	4.8	2.3	10.90	3.7	11.3	NS
Background (2010)	4.0	3.1	4.3	5.7	- ¹	5.8	- ¹
Compliant?	N	N/A	N/A	N/A	N/A	Y	N/A

Note: "¹" = background not available, N/A = not applicable as dust deposition unit is located on site, NS = No sample



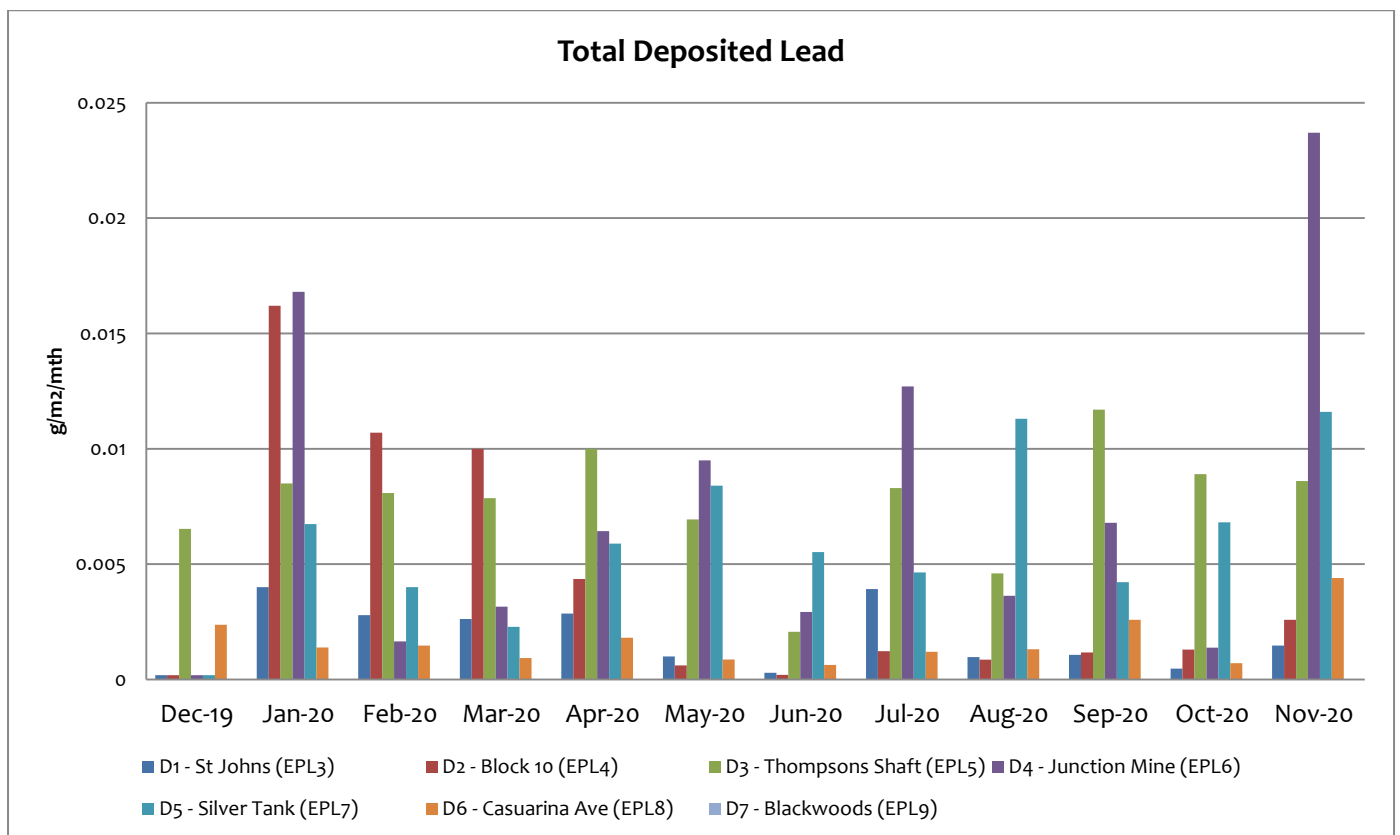
The dust levels recorded in Dust Gauges in November are elevated due to dust storms on 10 – 12, 15, 22, and 28 November. The wind directions for November were mainly from the South and SSW as shown in the Wind Rose in Section 4. The highest dust levels were recorded in the D4 Junction Mine and D6 Casuarina Avenue gauge. The D4 Junction Mine site is north of the site and impacted by both on-site and off-site activities. Much of the area around



the gauge is bare of cover and characterised by historical mining activities. D6 Casuarina Avenue in a control site in the southern suburbs of Broken Hill and impacted by regional dust storms and local activities.

Total Deposited Lead (g/m ² /Month)							
Sample Period	D1 (off Site)	D2 (on site)	D3 (on site)	D4 (on site)	D5 (on site)	D6 (off Site)	D7 (on site)
November 2020	0.00147	0.00259	0.0086	0.024	0.0116	0.0044	NS
Background (2010)	0.0034	0.005	0.005	0.006	⁻¹	0.004	⁻¹

Note: "⁻¹" = background not available, NS = No sample



There are no guidelines for deposited lead dust. Lead results in November 2020 were highest in the D3 Thompsons Shaft, D4 Junction Mine and D5 Silver Tank gauges. The wind directions for November were mainly from the South and SSW as shown in the Wind Rose in Section 4. Site activities around the Rail Loadout area may account for increased elevated Lead levels at D3 Thompsons Shaft while Lead levels at D5 Silver Tank may be affected by non-mining related activities as it is located on the southern boundary of the site. The D4 Junction Mine site is north of the site and impacted by both on-site and off-site activities. Much of the area around the gauge is bare of cover and characterised by historical mining activities.

Dust suppressant is applied to unsealed areas of the site and roads are frequently watered using water carts in an attempt to control dust emissions.



1.4 Ventilation Outlets and Bag House Monitoring

There are two locations to measure pollutants from exhausts or stacks; these include the Primary Ventilation Shaft, measuring pollutants from underground firings, and the Baghouse Stack at the crusher measuring dust. Each are located on site; the Primary Ventilation Shaft is located centrally and to the north of the mine lease and the Primary Crusher Baghouse Stack is located within the area of the processing plant to the east of the lease. Shaft 6 (EPL56) was removed as a monitoring location with the variation of EPL12559 in March 2019 as it became an intake rather than an exhaust in April 2018. A map indicating these locations can be found on the Rasp Mine web site. Samples are collected quarterly and analysed for a number parameters listed in below. Reference to the item required in the Rasp Mine Environment Protection Licence (EPL) is provided below. Emissions monitoring is conducted quarterly.

The following criteria apply:

Primary Ventilation Shaft (EPL1)

	Unit	Criteria
Nitrogen Oxides	mg/m ³	350
Volatile Organic Compounds	mg/m ³	40

Primary Ventilation Shaft (EPL1) and Crusher Baghouse (EPL2)

	Unit	Criteria
Total Suspended particles	mg/m ³	20
Type 1 and Type 2 ¹	mg/m ³	1

Note 1: "Type 1 substance" means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements.

"Type 2 substance" means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements.

Primary Vent Shaft (EPL1) and Crusher Baghouse (EPL2) Results for November

Monitoring was conducted at the Primary Bent Shaft (EPL1) and the Crusher Baghouse (EPL2) on 17 November 2020 and measured results were below the licence criteria. The measured results from this monitoring event were below the licence criteria.

	Unit	Primary Vent Shaft (EPL1)	Crusher Baghouse (EPL2)
Dry Gas Density	Kg/m ³	1.29	1.29
Moisture	%	2.1	1.0
Molecular weight of stack gases	g/m ³	1,288	1,288
Temperature	°C	26	29
Nitrogen Oxides	mg/m ³	7.05	NA
Volatile Organic Compounds	mg/m ³	0.465	NA
Total Suspended particles	mg/m ³	3.00	19.2
Type 1 and Type 2	mg/m ³	0.139	0.734
Velocity	m/sec	11.7	20.5
Volumetric Flowrate	m ³ /sec	208	8.63



2 Noise

2.1 Blasting (Vibration and Overpressure)

There are 6 vibration monitors at various locations to measure for vibration and overpressure from blast firings. These include V1 to V5 which are located off-site and V6 which is located on-site near Shaft 4. A map indicating these locations can be found on the Rasp Mine web site. In addition, there are a number of roving monitors which may be used to monitor vibration and overpressure at particular locations as required. Monitors operate continuously and are automatically triggered to record when a blast occurs. The following conditions apply as listed in the PA 07_0018 and EPL 12559:-

Blasting Criteria (Western Mineralisation and Main Lodes excluding Block 7)

Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (mm/s)	Allowable Exceedance (for production and development blasts)
Residence on privately owned land (7am-7pm)	115	5	5% of the total number of blasts over a 12-month period ¹
(7am-7pm)	120	10	0%
(7pm-10pm)	105	-	-
(10pm-7am)	95	-	-
Public Infrastructure	-	100	0%

Note 1: Does not apply until completion of Pollution Reduction Program on the EPL at the end of 2018. Applies to EPL criteria in the period for the Annual Return 3 Nov to 2 Nov the following year and to DPE criteria in the reporting period 1 Jul to 30 Jun each year.

Blasting Criteria (Block 7)

Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (mm/s)	Allowable Exceedance (for production and development blasts)
Residence on privately owned land (7am-7pm)	115	3 (interim)	5% of the total number of blasts over a 12-month period ¹
(7am-7pm)	120	10	0%
(7pm-10pm)	105	-	-
(10pm-7am)	95	-	-
Broken Hill Bowling Club, Italio (Bocce) Club, Heritage Items within CML7	-	50	0%
Perilya Southern Operations	-	100	0%
Public Infrastructure	-	100	0%

Note 1: Applies to EPL criteria in the period for the Annual Return 3 Nov to 2 Nov the following year and to DPE criteria in the reporting period 1 Jul to 30 Jun each year.

In addition the following conditions also apply:-

- Production blasts may occur between 6.45 am and 7.15 pm on any day
- 1 production blast per day, with 6 per week averaged over a calendar year
- 6 development blasts per day, with 42 per week averaged over a calendar year



Blasting Data Summary Results for November

Total Blasts:

- 0 production blasts occurred before 6.45 am or after 7.15 pm
- The number of Production blasts averaged 3.44 per week over the previous calendar year
- The number of Development blasts averaged 31.56 per week over the previous calendar year

Western Mineralisation and Main Lodes (excluding Block 7):

- 0 Blasts recorded >5 mm/s
- 0 Blasts recorded >10 mm/s
- 0 development blasts recorded an over pressure level over 95 dBL (10pm to 7am)
- 0 development blasts recorded an over pressure level over 105 dBL (7pm to 10pm)
- 0 Blasts recorded an over pressure level over 115dBL (7am to 7pm)
- 0 Blasts recorded an over pressure level over or 120 dBL at any time
- Percentage of development blasts over 5 mm/sec for the annual period = 0%
- Percentage of production blasts over 5 mm/sec for the annual period = 5.6%

Block 7:

- 0 Blasts recorded >3 mm/s
- 0 Blasts recorded >10 mm/s
- 0 Blasts recorded >50 mm/s at V6
- 0 development blasts recorded an over pressure level over 95 dBL (10pm to 7am)
- 0 development blasts recorded an over pressure level over 105 dBL (7pm to 10pm)
- 0 Blasts recorded an over pressure level over 115 dBL (7am to 7pm)
- 0 Blasts recorded an over pressure level over or 120 dBL at any time
- Percentage of development blasts over 3mm/sec for the annual period = 0%
- Percentage of production blasts over 3mm/sec for the annual period = 0%

The percentage of production blasts in the Western Mineralisation and Main Lodes producing vibration at monitors over 5 mm/sec for the 12-month period is 5.6%.

The percentage of production blasts over 3 mm/sec in Block 7 for the 12-month period is below the licence limit of 5%. There were no production blasts in Block 7 in the previous 12 months.

2.2 Noise

Noise monitoring is undertaken as per the NSW Noise Policy for Industry at a frequency of once per annum. Annual noise monitoring was last conducted in October 2019.

The monitoring assessment found that site LAeq, 15min noise contributions satisfied the relevant limits during the measurements at all assessment locations.



3 Water

3.1 Groundwater

There are eighteen sampling locations for groundwater. GW01 (EPL37) to GW16 (EPL52) are piezometers installed at various locations around the mine site and are sampled quarterly. There are also two sampling locations for water pumped from underground mining, Shaft 7 (EPL53) and Kintore Pit (EPL54), which are sampled monthly. A map indicating these locations can be found on the Rasp Mine web site. Groundwater monitoring is scheduled for completion in March, June, September and January. No limits are applied in the EPL to the results from groundwater monitoring.

After a decrease in EC levels in August and September 2020, levels have risen to normal levels for Shaft 7 and Kintore in October and November.

Groundwater Monitoring Requirements

EPA Identification Number	Frequency	Parameters to be analysed
Shaft 7 EPL53	Monthly	alkalinity (calcium carbonate (CaCO ₃)), cadmium (Cd), calcium (Ca), chloride (Cl), electrical conductivity (EC), iron (Fe), lead Pb), magnesium (Mg), manganese (Mn), pH, sodium (Na), sulphate (SO ₄), total dissolved solids (TDS) and zinc (Zn)
Kintore Pit (U/G dewatering) EPL54	Monthly	
Piezometers EPL37 (GW01) to EPL52 (GW16)	Quarterly	

Shaft 7 (EPL53) and Kintore Pit (EPL54) Results for November

Sample Point	pH	EC (µS/cm ²)	TDS (mg/l)	Alkalinity (CaCO ₃) (mg/l)	SO ₄ (mg/l)	Cl (mg/l)	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	Cd (mg/l)	Pb (mg/l)	Mn (mg/l)	Zn (mg/l)	Fe (mg/l)
Shaft 7 (EPL53)	6.28	13100	13800	10	5760	1720	478	279	1500	3.71	0.972	306	983	0.05
Kintore Pit (EPL54)	6.18	13300	14600	7	5950	1720	478	279	1580	4.63	1.04	351	1210	0.05

Groundwater Bores (EPL37 - EPL52) Results for November

No monitoring required in November.

3.2 Surface Water Sample Record

There are seven sampling locations for surface water, these include surface water basins located on the mine lease to capture and retain rainfall and two locations up and down stream of an ephemeral creek located south of the mine lease boundary. A map indicating these locations can be found on the Rasp Mine web site. Sampling is expected to be undertaken in October (highest rainfall month as recorded by Bureau of Meteorology) and April.



Surface Water Monitoring Requirements

Description	Frequency	Parameters to be Analysed
Federation Way Culvert EPL29/S31-1	2 x per year, six months apart	cadmium (Cd), chloride (Cl), electrical conductivity (EC), lead Pb), manganese (Mn), pH, sodium (Na), sulphate (SO ₄), total dissolved solids (TDS) and zinc (Zn)
Ryan Street Dam EPL31/S49	2 x per year, six months apart	
Adjacent Olive Grove EPL32/S1A	2 x per year, six months apart	
Adjacent Bowls Club EPL33 /S9-B2	2 x per year, six months apart	
Horwood Dam EPL34/S34	2 x per year, six months apart	
Upstream Bonanza St EPL35	2 x per year, six months apart	
Downstream Sydney Rd EPL36	2 x per year, six months apart	

Surface Water Monitoring Results for November

No sampling was conducted in November as there was insufficient rainfall in the month. Previously sampling was conducted in September after 29.4mm fell on 19 September. Surface water results for the September sampling event are provided in the September report.



4 Weather Data

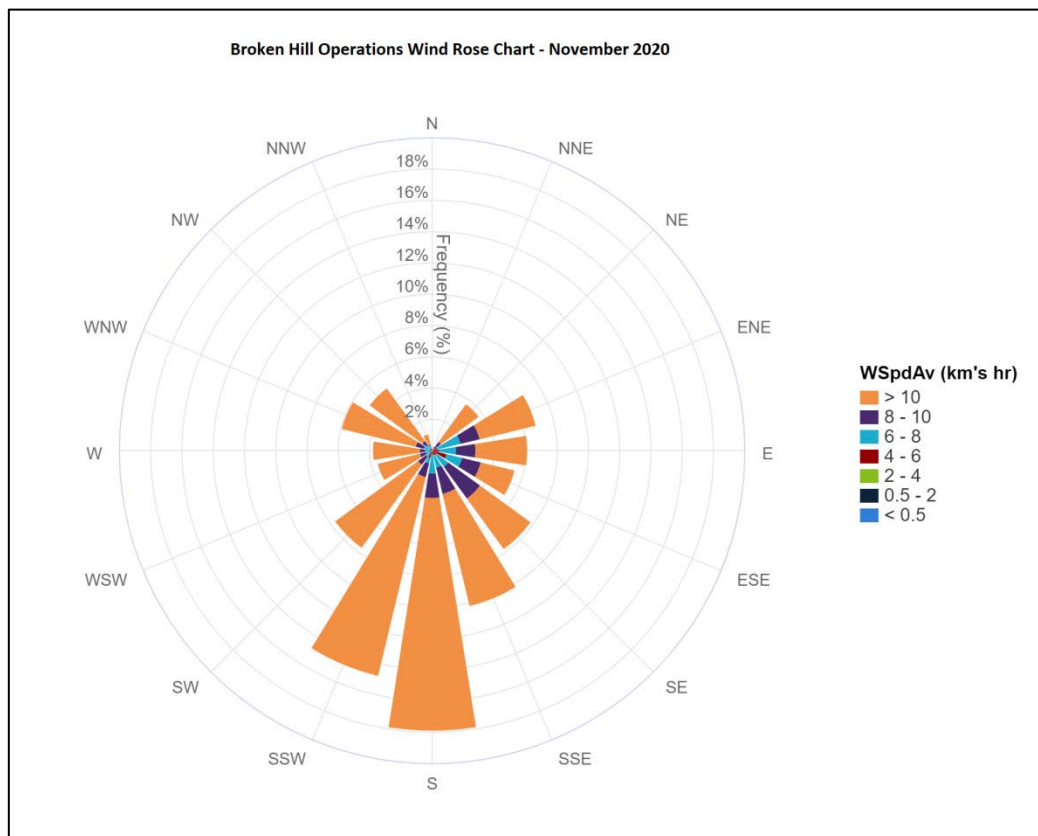
The weather station continuously monitors the following parameters as per Point 55 of the Environmental Protection Licence.

The following parameters are required to be recorded each month as listed in the EPL 12559:-

Rasp Mine Weather Station (EPL55) Monitoring Requirements

Parameter	Sampling method	Units of measure	Averaging period	Frequency
Temperature at 10 metres	AM-4	degrees Celsius	15 minutes	Continuous
Wind Direction at 10 metres	AM-4	degrees in a clockwise direction from True North	15 minutes	Continuous
Wind Speed at 10 metres	AM-4	metres per second	15 minutes	Continuous
Rainfall	AM-4	millimetres	1 hour	Continuous
Sigma theta	AM-2 & AM-4	degrees	15 minutes	Continuous

The windrose provided below indicates the main wind directions for the month of November were from the South and SSW.





Weather Data Summary for November

Date	Temperature @ 10m (°C)		Wind Speed @ 10m (km/hr)		Predominant Wind Direction @ 10m		Rainfall (mm)
	Min	Max	Min	Max	Cardinal	Degree	Total
01-Nov-18	11.2	23.5	3.9	22.6	SE	136	0.00
02-Nov-18	17.2	29.7	3.2	17.5	ENE	66	0.00
03-Nov-18	21.7	31.9	3.4	23.6	NNE	25	0.00
04-Nov-18	11.6	25.9	7.5	36.9	SSW	205	0.00
05-Nov-18	8.8	18.2	7.3	48.6	South	180	0.00
06-Nov-18	9.4	20.8	6.9	28.8	South	181	0.00
07-Nov-18	9.3	21.1	7.1	26.7	SSE	157	0.00
08-Nov-18	13.5	26.5	5.4	22.6	ESE	113	0.00
09-Nov-18	19.2	31.6	5.3	32.5	NE	43	0.00
10-Nov-18	23.4	33.2	9.5	41.8	NNE	29	0.00
11-Nov-18	19.5	34.7	10.1	52.3	SW	227	0.00
12-Nov-18	17.2	27.0	1.9	30.7	SSW	203	0.00
13-Nov-18	14.2	24.5	4.4	24.5	South	183	0.00
14-Nov-18	13.7	30.8	3.9	23.2	SSE	157	0.00
15-Nov-18	20.9	39.2	10.8	59.2	NNE	24	0.40
16-Nov-18	15.6	25.4	9.0	38.0	SSW	201	0.00
17-Nov-18	12.7	25.4	4.5	29.0	SSE	160	0.00
18-Nov-18	16.8	30.8	2.4	17.8	ENE	67	0.00
19-Nov-18	23.0	35.6	5.0	19.8	WNW	289	0.00
20-Nov-18	19.4	36.7	1.3	29.4	SSE	156	0.00
21-Nov-18	26.6	37.2	1.2	35.1	ENE	67	0.00
22-Nov-18	22.7	37.5	5.2	37.2	SE	133	0.00
23-Nov-18	16.8	26.1	4.6	36.7	South	184	0.00
24-Nov-18	12.7	26.1	3.8	31.1	South	177	0.00
25-Nov-18	18.6	31.4	1.8	14.8	South	182	0.00
26-Nov-18	26.0	35.2	3.6	23.5	SE	136	0.00
27-Nov-18	25.6	39.7	5.0	23.5	East	91	0.00
28-Nov-18	22.9	42.3	7.9	43.1	SSW	204	0.00
29-Nov-18	17.8	25.6	9.8	40.2	South	177	0.00
30-Nov-18	16.7	35.4	0.8	26.6	East	87	0.00

Rainfall of 0.4mm fell on 15 November when there was also a dust storm and the highest recorded winds of the month of 59.2 km/hr.



5 Data Log

Sample	Result Received
Hi Volume Samples	11-12-2020
TEOM	24-12-2020
Dust Deposition	31-12-2020
Vents & Bag House	3-12-2020
Water	23-11-2020
Blast vibration and overpressure	1-12-2020
Weather	11-01-2021
Date posted to web site	21-01-2021

6 Correction Log

No corrections.