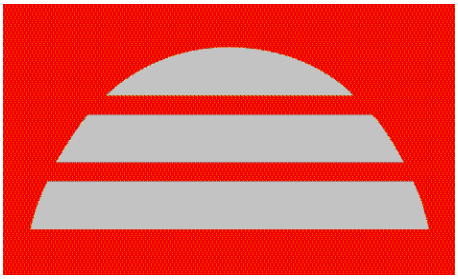

Rasp Mine
Monthly Environmental Monitoring Report
December 2018

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 (MOD4 6 September 2017) 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

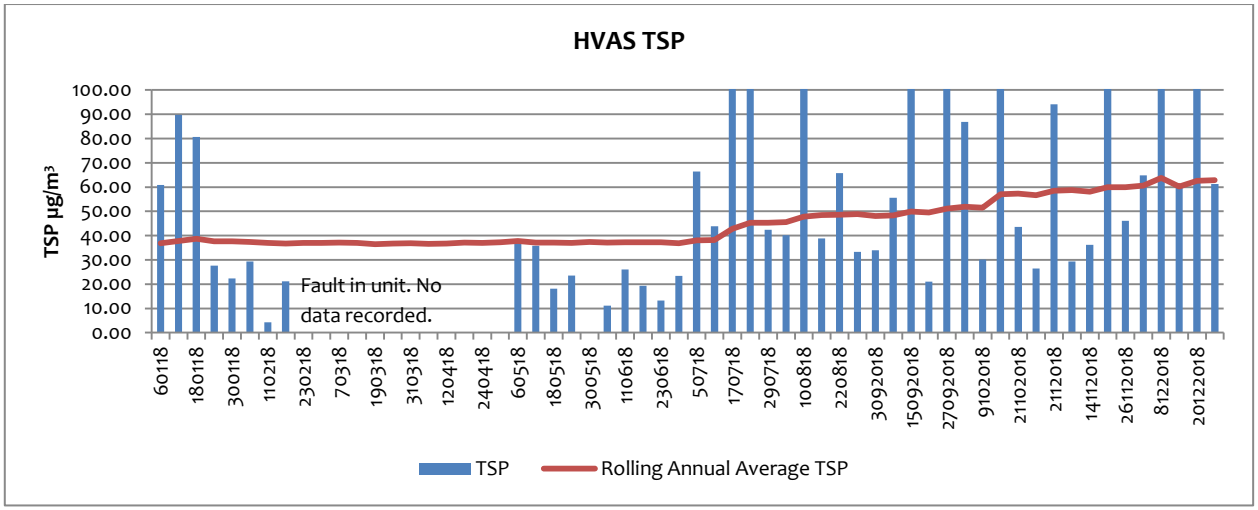
Pollutant	Averaging Period	Maximum Project Contribution	Maximum Total Deposited Dust Level
Deposited dust	Annual	2 g/m^2/month	4 g/m^2/month

1.1 High Volume Air Samplers

There are three 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) is located adjacent to and north of Blackwood Pit. A map indicating these locations can be found on the Rasp Mine web site. HVAS samples for total suspended particulates (TSP) and lead dust, and HVAS1 and HVAS2 sample for particulate matter less than 10 microns (PM_{10}) and lead dust.

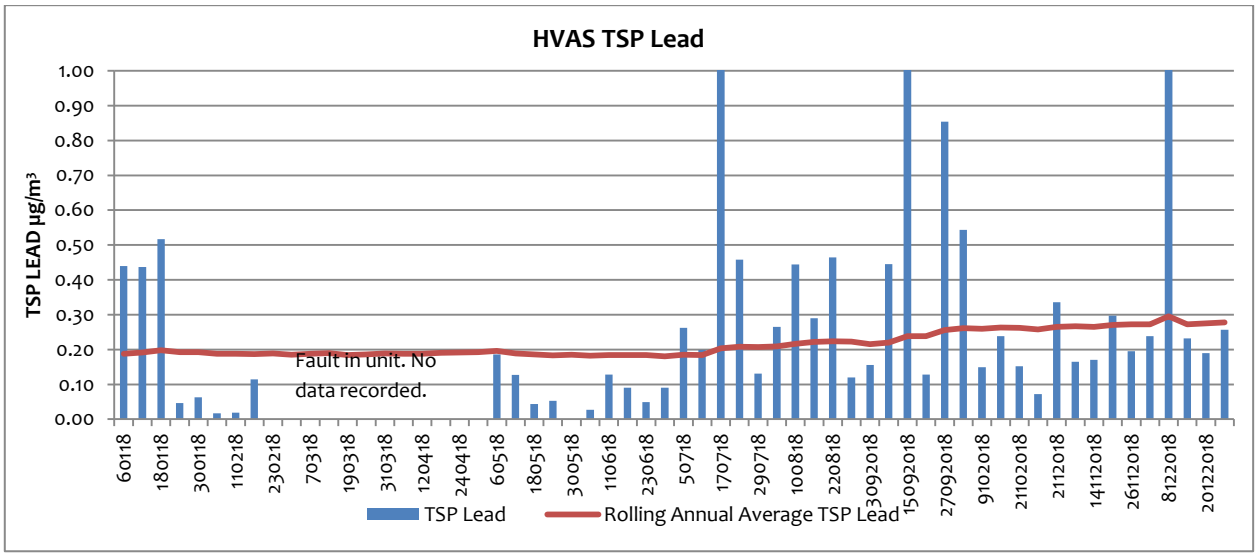
HVAS (EPL10) - Silver Tank (On Site) Results for December

DATE	TSP (µg/m^3)	Lead (µg/m^3)
2-12-2018	64.80	0.24
8-12-2018	182.00	1.18
14-12-2018	61.10	0.23
20-12-2018	131.00	0.19
26-12-2018	61.30	0.26



HVAS (EPL10) is located on the Rasp Mine and while limit criteria do not apply at this point, they do apply at the closest residential location. There was elevated dust levels recorded at HVAS throughout December. Overall the trend for TSP at this location has risen over the past 12 months which is likely due to the severe drought conditions over this period.

The rolling annual average for TSP to December is 62.89 µg/m^3 which is below the long term annual average criteria of 90 µg/m^3.

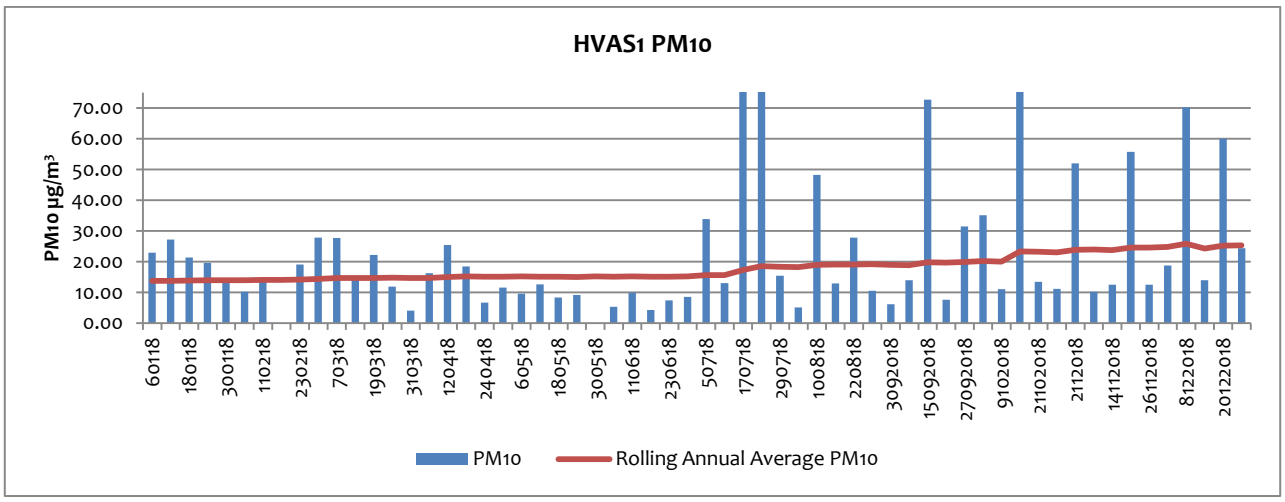


Lead levels were elevated on 8 December which was consistent with the high wind gusts of up to 36.6 km/h winds from the northeast on this day. Dust suppressant is applied to free areas on site and roads are continually watered using water carts. The rolling annual average for TSP Lead to December has risen slightly to 0.28 µg/m^3 however this well below the criterion of 0.5 µg/m^3.

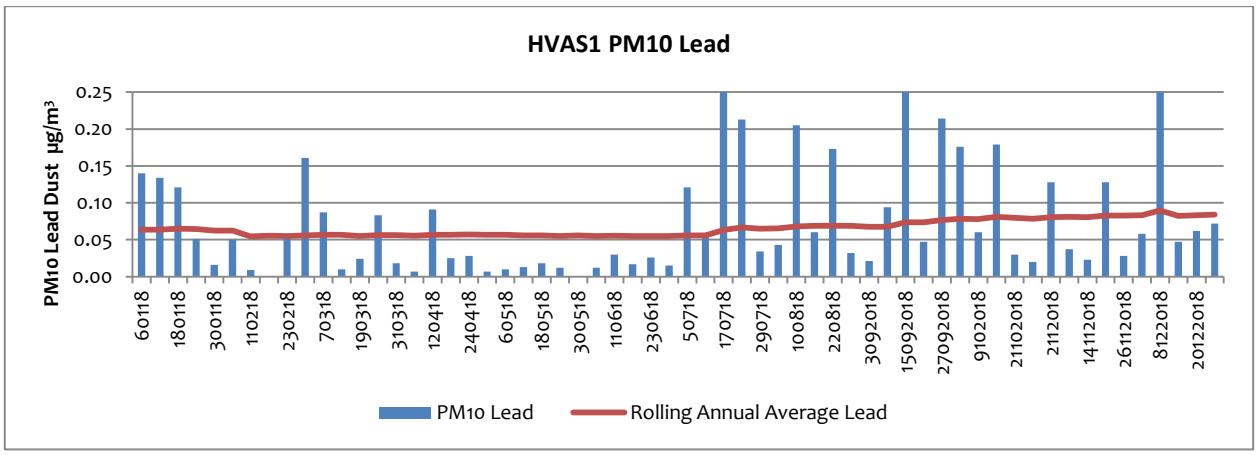
HVAS1 (EPL11) - Silver Tank (On Site) Results for December

DATE	PM10 (µg/m^3)	PM10 Lead (µg/m^3)

2-12-2018	18.80	0.06
8-12-2018	70.20	0.42
14-12-2018	14.00	0.05
20-12-2018	60.00	0.06
26-12-2018	24.40	0.07



HVAS1 (EPL11) is located on the Rasp Mine and while limit criteria do not apply at this point, they do apply at the closest residential location. There were elevated dust levels recorded at HVAS1 on 8 and 20 December which were attributable to high winds gusts of approximately 36km/h from the North East on the 8 December and 53km/h winds from the South on 20 December 2018. Overall the trend for PM10 at this location has risen slightly over the previous 12 months, the results show that the PM_{10} rolling annual average for HVAS 1 has risen to 25.4 µg/m^3 which is just above the PM_{10} annual average criterion of 25 µg/m^3 required at the nearest residential location. The increase in PM_{10} annual average would be a result of severe drought conditions over this period.

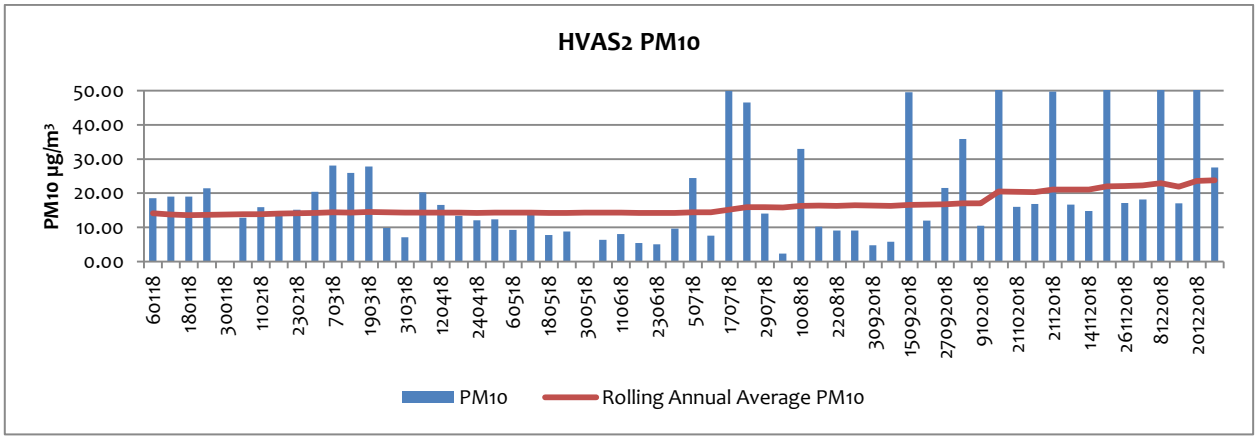


Lead levels were elevated on 8 December which was consistent with the high winds on these days. Dust suppressant is applied to free areas on site and roads are continually watered using water carts.

There is no guideline for assessing PM_{10} lead dust; the trend for PM10 lead dust at this location has risen slightly over the previous 12 months and is likely the result of drought conditions.

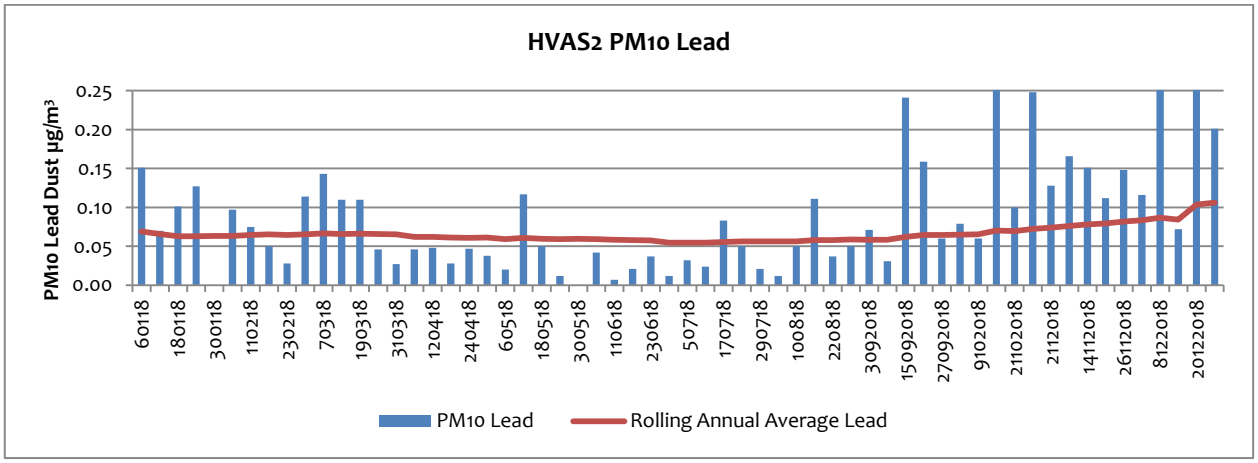
HVAS 2 (EPL12) - Blackwood Pit (On Site) Results for December

DATE	PM10 (µg/m^3)	Lead (µg/m^3)
2-12-2018	18.20	0.12
8-12-2018	52.80	0.39
14-12-2018	17.00	0.07
20-12-2018	110.00	1.17
26-12-2018	27.50	0.20



HVAS2 (EPL12) is located on the Rasp Mine and while limit criteria do not apply at this point, they do apply at the closest residential location. There were elevated dust levels recorded at HVAS2 on 8 and 20 December. On both occasions the regional dust levels contributed to the dust loading recorded

The rolling annual average PM_{10} to December is 23.78 µg/m^3 which is below the PM_{10} annual average criterion 25 µg/m^3 required at the nearest residential location.



There is no guideline for assessing PM10 lead dust; the trend for lead dust at this location remains consistent with the previous 12 months with the rolling annual average for Lead the end of December 2018 (0.11 µg/m^3).

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 operate continuously and sample for particulate matter less than 10 microns (PM_{10}) in size.

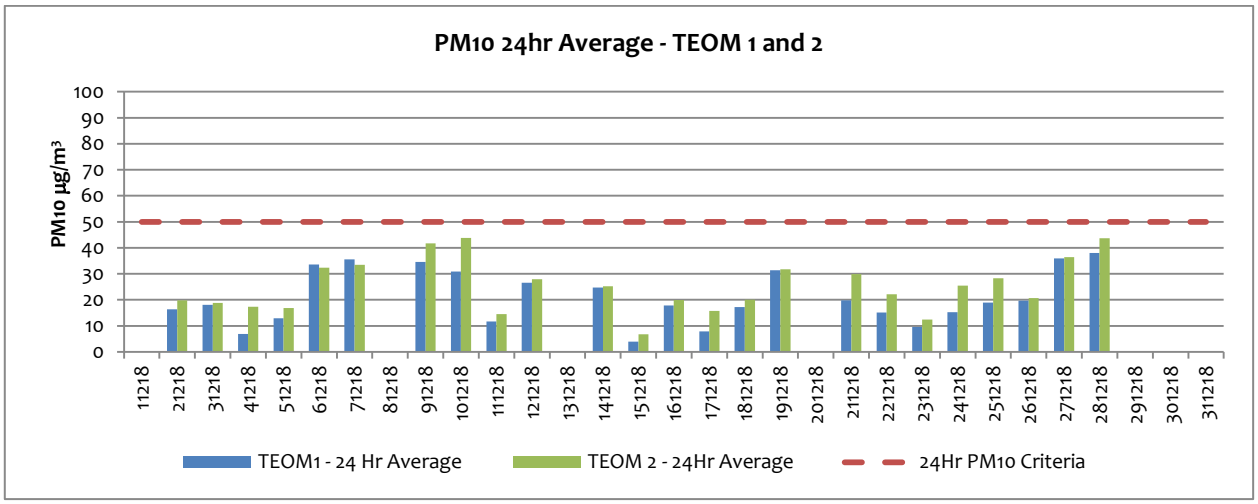
TEOM1 (EPL13) (Off Site) and TEOM2 (EPL14) (On Site) Results for December

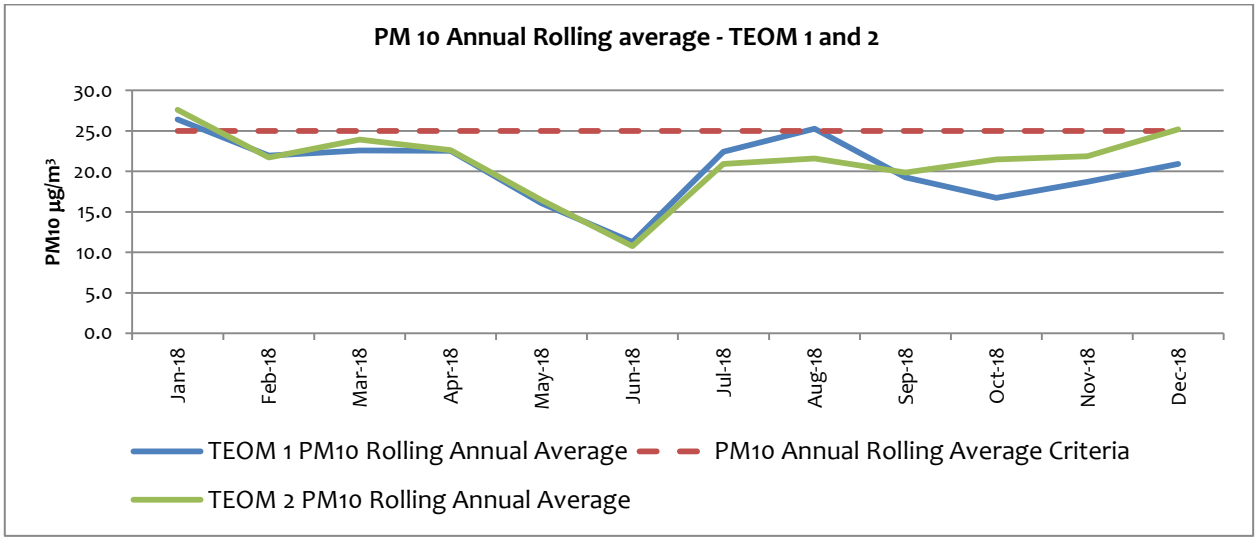
Particulate Matter <10 Microns 24Hr Average				
Date	TEOM 1 (µg/m^3)	Compliant with 50µg/m^3 24hr average?	TEOM 2 (µg/m^3)	Compliant with 50µg/m^3 24hr average?
01-Dec-18	81.4	Y[1]	68.2	Y[1]
02-Dec-18	16.3	Y	19.8	Y
03-Dec-18	18.0	Y	18.8	Y
04-Dec-18	6.8	Y	17.3	Y
05-Dec-18	12.9	Y	16.8	Y
06-Dec-18	33.5	Y	32.4	Y
07-Dec-18	35.5	Y	33.4	Y
08-Dec-18	45.9	Y	66.4	Y[1]
09-Dec-18	34.6	Y	41.7	Y
10-Dec-18	30.9	Y	43.7	Y
11-Dec-18	11.7	Y	14.5	Y
12-Dec-18	26.6	Y	27.9	Y
13-Dec-18	187.7	Y[1]	197.2	Y[1]
14-Dec-18	24.7	Y	25.2	Y
15-Dec-18	3.9	Y	6.7	Y
16-Dec-18	17.9	Y	19.9	Y
17-Dec-18	7.8	Y	15.8	Y
18-Dec-18	17.2	Y	20.1	Y
19-Dec-18	31.4	Y	31.7	Y
20-Dec-18	67.6	Y[1]	113.6	Y[1]
21-Dec-18	19.8	Y	29.9	Y
22-Dec-18	15.1	Y	22.1	Y
23-Dec-18	9.6	Y	12.4	Y
24-Dec-18	15.3	Y	25.5	Y
25-Dec-18	19.0	Y	28.3	Y
26-Dec-18	19.7	Y	20.6	Y
27-Dec-18	35.9	Y	36.4	Y
28-Dec-18	38.0	Y	43.7	Y
29-Dec-18	50.6	Y[1]	58.9	Y[1]
30-Dec-18	111.3	Y[1]	125.3	Y[1]
31-Dec-18	175.3	Y[1]	208.2	Y[1]

[1] = Monitoring results affected by general dust storms and high winds, particularly from the northwest and north-northeast.

Project Approval 07_0018 apply at TEOM1 and 2, with two criteria listed for PM10, a 24 hour average criteria of 50 ug/m^3 and an annual average criteria of 25 ug/m^3.

Both Project Approval and Environment Protection Licence criteria exclude dust storms and other extraordinary events. If the results of 1, 8, 13, 20, and 29 – 31 December were not included in the calculations then the rolling annual average PM10 results for TEOM1 and TEOM2 would be 20.9 µg/m^3 and 25.2 µg/m^3 respectively, which is below the PM10 annual average criterion of 25 µg/m^3 for TEOM1 and slightly above it for TEOM2 required at the nearest residential location. Taking this into consideration the Rasp Mine is in compliance with this criterion at TEOM1 and out of compliance at TEOM2..





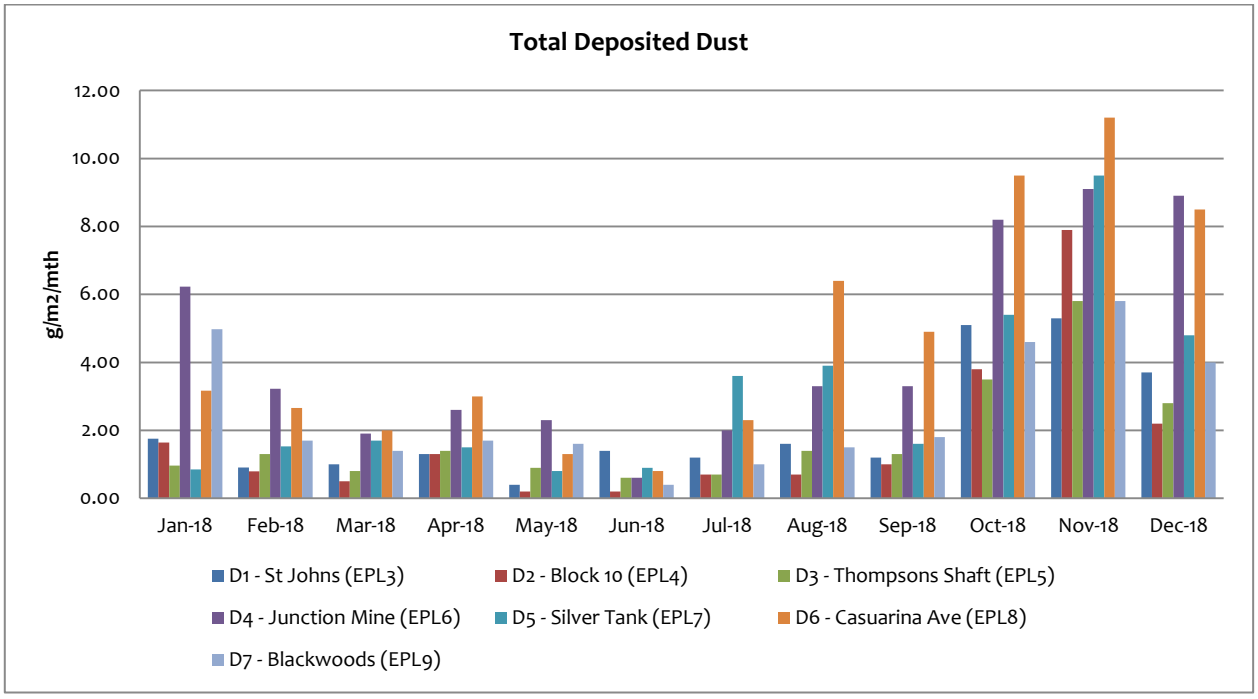
1.3 Dust Deposition Sampling

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.

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

Total Deposited Dust (g/m^{2}/Month)							
Date	D1 (off site)	D2 (on site)	D3 (on site)	D4 (on site)	D5 (on site)	D6 (off site)	D7 (on site)
December 2018	3.7	2.2	2.8	8.9	4.8	8.8	4
Background (2010)	4.0	3.1	4.3	5.7	-1	5.8	-1
Compliant?	Y	N/A	N/A	N/A	N/A	Y	N/A

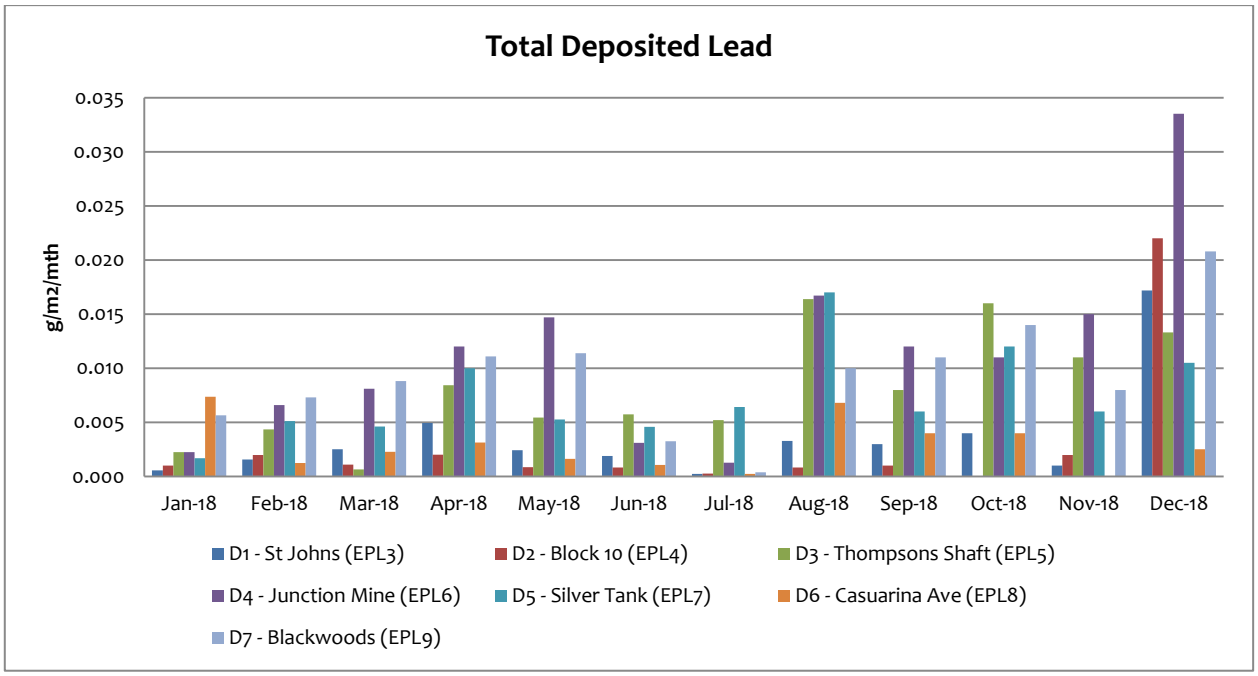
Note: "1"= background not available N/A = not applicable as dust deposition unit is located on site



Results for all dust gauges were elevated in December. While the December results at D4 and D6 are above the background levels measured in 2010 they were impacted by particularly dry conditions resulting in dust storms on 1 and 13 December. Results were highest at Junction Mine and Casuarina Ave. There are no Rasp Mine activities being undertaken at the Junction Mine and Casuarina Avenue is not on the Mine site. The Casuarina Avenue location returns consistently high dust readings which is likely due to being situated in the backyard of a residence adjacent to a bare block. The Junction Mine location is also surrounded by bare areas subject to vehicular traffic which likely contribute dust to the elevated readings.

Total Deposited Lead (g/m$^{2/}$Month)							
Date	D1 (off Site)	D2 (on site)	D3 (on site)	D4 (on site)	D5 (on site)	D6 (off Site)	D7 (on site)
December 2018	0.0172	0.022	0.0133	0.034	0.0105	0.00253	0.0208
Background (2010)	0.0034	0.005	0.005	0.006	-1	0.004	-1

Note: "1"= background not available



There are no guidelines for deposited lead dust. Lead results in December were elevated at Junction Mine, Block 10 and Blackwood's gauges. The Junction mine gauge is located on the northern corner of the site and would have received a majority of the dust from the northeast and northwest during the dust storms. Blackwood's is located to the north of the Rasp Mine and the gauge is sited adjacent to unsurfaced areas subject to vehicular traffic. Block 10 usually has low Total deposited Lead results and Decembers results appear to be anomalous.

1.4 Ventilation Outlets and Bag House Monitoring

There are three locations to measure pollutants from exhausts or stacks, these include the Primary Ventilation Shaft and Shaft 6, both measuring pollutants from underground firings, and the Baghouse Stack at the crusher measuring dust. All are located on site; the Primary Ventilation Shaft is located centrally and to the north of the mine lease and Shaft 6 is located centrally within the lease. The Primary Crusher Baghouse Stack is located within the area of the processing plant to the east of the lease. 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.

Quarterly sampling is undertaken in March, June, September and December. The following criteria apply:

Primary Ventilation Shaft (EPL1) and Shaft 6 (EPL56)

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

Primary Ventilation Shaft (EPL1), Shaft 6 (EPL56) 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), Crusher Baghouse (EPL2) and Vent Shaft 6 (EPL56) Results for December

	Unit	Primary Vent Shaft (EPL1)	Crusher Baghouse (EPL2)	Vent Shaft 6 (EPL 56)
Nitrogen Oxides	mg/m^3	6.76	NA	<2.05
Volatile Organic Compounds	mg/m^3	<0.960	NA	<0.978
Total Suspended particles	mg/m^3	6.66	19.8	5.14
Type 1 and Type 2	mg/m^3	0.191	0.831	0.0662

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 2 roving monitors, which may be used to monitor vibration and overpressure at particular locations as required. Monitors operate continuously and are automatically triggered 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	115	5	5% of the total number of blasts over a 12-month

(7am-7pm)			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 December

Total Blasts:

- 0 production blasts occurred before 6.45 am or after 7.15 pm
- The number of Production blasts averaged 4.1 per week over the previous calendar year
- The number of Development blasts averaged 29.65 per week over the previous calendar year

Western Mineralisation and Main Lodes (excluding Block 7):

- 2 Blast 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 = 0% (1 January 2018 until 31 December 2018)
- Percentage of production blasts over 5 mm/sec = 3.3% (1 January 2018 until 31 December 2018)

Block 7:

- 2 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 = 0% (1 January 2018 until 31 December 2018)
- Percentage of production blasts over 3mm/sec = 13.3% (1 January 2018 until 31 December 2018) (criteria does not apply in this period as not a regulator reporting period)

There was no blasting in Block 7 during December. However, during the last 12 months two blasts in Block 7 have exceeded 3 mm/s - 3.1 (Jan) and 3.45 (Jan) and continue to impact the rolling average.

2.2 Noise

Noise monitoring is undertaken as per the NSW Noise Policy for Industry at a frequency of once per annum. A noise assessment was conducted from 10 to 12 December 2018.

Rasp Mine LAeq,15min noise contributions (including the addition of the relevant modification factor) satisfied the relevant night-time noise limits at all assessment locations, including during attended measurements when noise limits did not apply due to adverse weather conditions.

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 May, June, September and January. No limits are applied in the EPL to the results from groundwater monitoring.

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 (SO4), 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 December

Sample Point	pH	EC (µS/cm^2)	TDS (mg/l)	Alkalinity ($CaCO_3$) (mg/l)	SO4 (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)	6.4	12400	12500	4	6220	1580	502	240	1470	2.7	0.525	345	1220	1.45
Kintore Pit (EPL54)	6.45	12000	12600	6	5820	1500	483	229	1410	2.48	0.489	319	1170	3.13

Groundwater Bores (EPL37 - EPL52) Results for December

Sample Point	pH	EC (µS/cm^2)	TDS (mg/l)	Alkalinity ($CaCO_3$) (mg/l)	SO4 (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)
GW01 (EPL37)	4.7	12100	10800	<1	5240	1190	304	503	1600	0.218	0.191	312	251	0.05
GW02 (EPL38)	-Bore Dry-													
GW03 (EPL39)	3.74	15400	12300	1	4820	3160	559	359	2210	1.18	2.99	254	260	0.05
GW04 (EPL40)	3.01	15300	11600	256	4780	2950	601	536	2360	0.076	0.078	32	14.9	0.05
GW05 (EPL41	6.29	16800	14300	114	6210	2940	521	632	2580	0.757	0.239	305	280	0.05
GW06 (EPL42)	6.36	13800	11500	47	4790	2540	524	409	1970	0.618	0.062	241	149	0.05
GW07 (EPL43)	6.22	12200	10400	32	4720	1820	572	337	1830	2.8	0.149	292	354	0.05
GW08 (EPL44)	6.05	12200	11000	13	4440	2460	620	293	1450	1.99	0.358	541	676	0.05
GW09 (EPL45)	6.95	11400	9370	122	4300	1790	663	562	1390	0.638	0.005	50.2	66.2	0.05
GW10 (EPL46)	7.11	14600	11000	249	4590	2830	592	523	2200	0.218	0.001	7.21	21.6	0.05
GW11 (EPL47)	6.23	11200	9230	62	4440	1550	438	465	1570	1.8	0.032	106	142	0.05
GW12 (EPL48)	6.16	12500	10300	68	4930	1670	398	485	1890	1.07	0.002	64.1	142	0.05
GW13 (EPL49)	-Bore Dry-													
GW14 (EPL50)	-Bore Dry-													
GW15 (EPL51)	-Bore Dry-													
GW16 (EPL52)	-Bore Dry-													
Eyre St Trench	6.51	14500	12300	27	5200	2650	525	391	1920	1.26	0.096	328	266	0.05

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 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 (SO4), 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

Surface water sampling was not required for December.

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

Note: The onsite weather station currently does not report Sigma theta

Weather Data Summary for December

Date	Temperature @ 10m (°C)		Wind Speed @ 10m (m/s)		Predominant Wind Direction @ 10m		Rainfall (mm)
	Min	Max	Min	Max	Cardinal	Degree	Total
01-Dec-18	20.2	33.5	0.7	16.8	North	5	0.2
02-Dec-18	14.1	24.5	0.8	15.2	SW	224	0.0
03-Dec-18	13.0	25.9	0.8	7.6	SSW	200	0.0
04-Dec-18	16.2	27.7	0.1	7.7	SSE	159	0.0
05-Dec-18	19.9	31.6	0.4	7.8	ESE	114	0.0
06-Dec-18	24.2	36.3	0.5	10.9	East	90	0.0
07-Dec-18	26.7	36.1	0.2	11.6	NNE	19	0.0
08-Dec-18	27.0	37.7	0.2	10.1	NNE	19	0.0
09-Dec-18	25.4	36.7	1.1	10.7	NW	318	0.0
10-Dec-18	22.0	28.9	0.1	10.6	South	183	0.0
11-Dec-18	22.9	33.0	0.2	12.3	East	88	0.1
12-Dec-18	24.4	34.5	1.0	13.1	NW	315	0.0
13-Dec-18	12.7	26.7	0.6	17.9	SW	226	0.1
14-Dec-18	9.2	17.4	1.2	13.8	NW	316	1.1
15-Dec-18	12.2	21.9	0.3	6.0	SW	225	0.0
16-Dec-18	17.7	29.2	0.4	11.4	NNW	341	0.0
17-Dec-18	18.5	30.6	0.2	7.5	SSE	160	0.0
18-Dec-18	22.8	35.1	0.6	8.7	SE	136	0.0
19-Dec-18	24.5	41.0	0.5	13.9	East	93	0.0
20-Dec-18	23.7	33.9	2.0	14.7	South	184	0.0
21-Dec-18	14.8	25.5	2.1	13.1	South	185	0.0
22-Dec-18	13.0	24.5	1.2	12.8	South	180	0.0
23-Dec-18	15.3	27.9	0.3	8.3	SSE	160	0.0
24-Dec-18	21.3	34.1	0.1	9.3	ENE	70	0.0
25-Dec-18	27.8	37.0	0.3	6.9	NNE	21	0.0
26-Dec-18	26.2	39.0	0.4	6.6	East	89	0.0
27-Dec-18	30.6	40.0	0.5	12.2	North	5	0.0
28-Dec-18	25.3	40.9	0.8	14.7	North	5	0.0
29-Dec-18	29.8	39.9	0.2	14.7	North	6	0.0
30-Dec-18	26.0	40.0	0.4	12.1	SSE	155	0.0
31-Dec-18	24.7	37.3	0.4	10.0	South	183	0.0

5 Data Log

Sample	Result Received
Hi Volume Samples	15-01-2019
TEOM	25-01-2019
Dust Deposition	18-01-2019
Vents & Bag House	23-01-2019
Water	17-12-2019
Blast vibration and overpressure	01-01-2019
Weather	01-01-2019
Date posted to web site	12-01-2019

6 Correction Log

No corrections required.