

Rasp Mine
Monthly Environmental Monitoring Report
July 2017



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 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	30 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

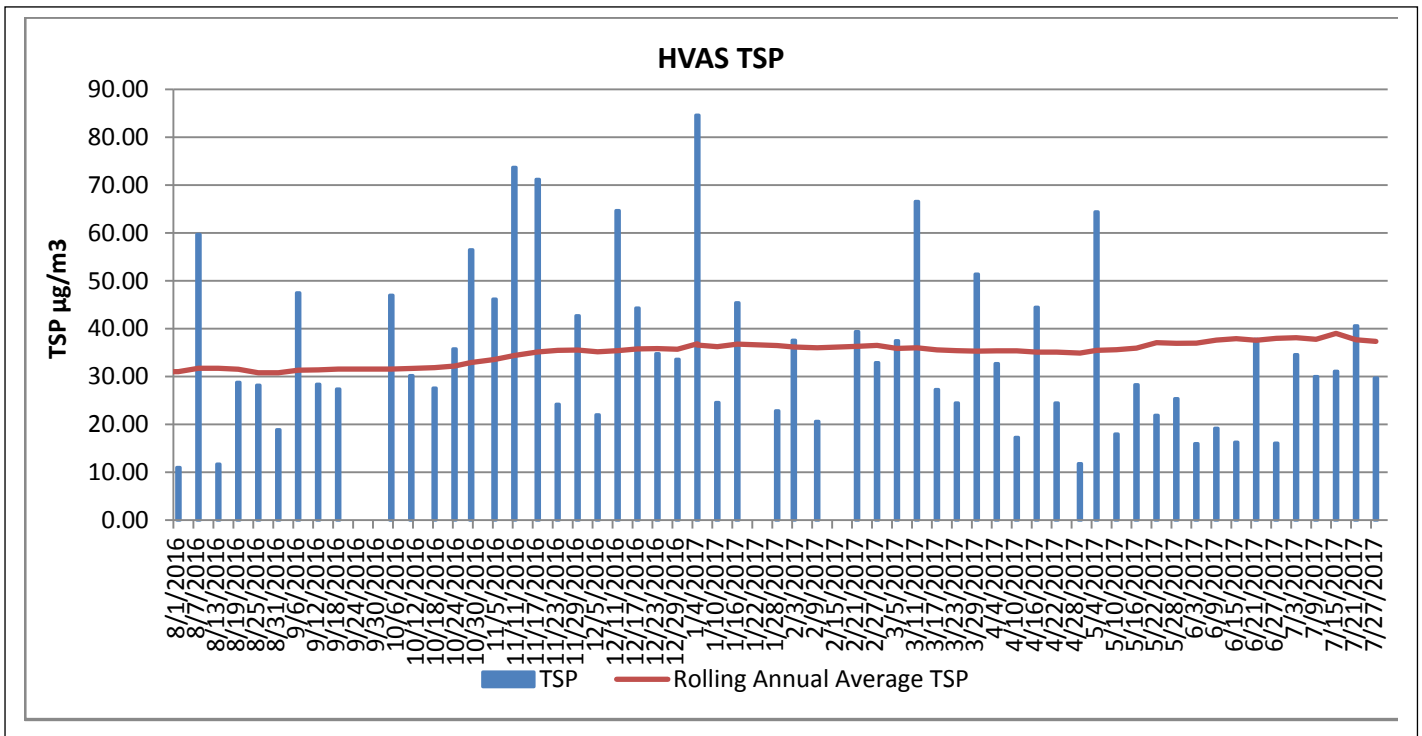
Pollutant	Averaging Period	Maximum Project Contribution	Maximum Total Deposited Dust Level
Deposited dust	Annual	2 g/m ² /month	4 g/m ² /month

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 (PM₁₀) and lead dust.

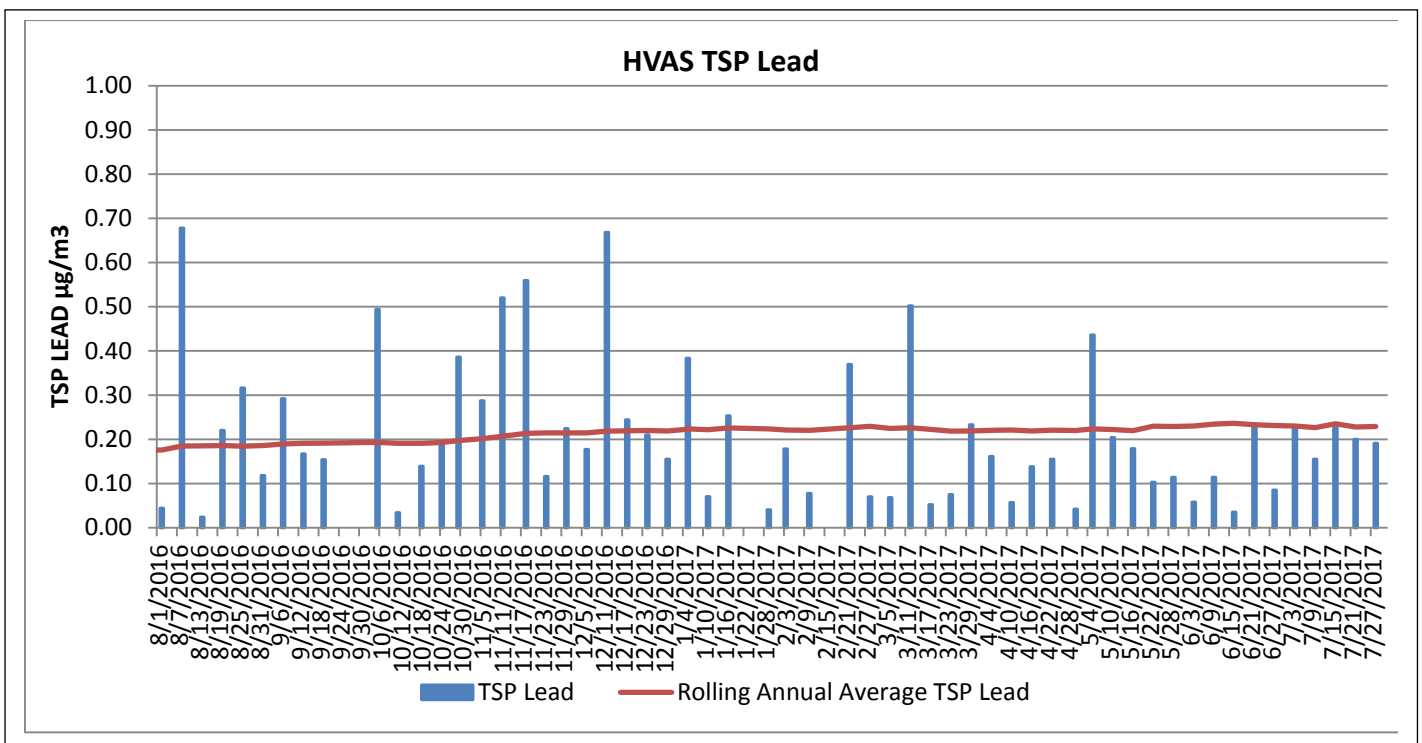
HVAS (EPL10) - SILVER TANK - ON SITE

DATE	TSP (µg/m ³)	Lead (µg/m ³)
4/07/2017	34.60	0.23
10/07/2017	30.00	0.16
16/07/2017	31.10	0.23
22/07/2017	40.60	0.20
28/07/2017	29.70	0.19



This monitoring unit is located on the Rasp Mine and no criterion applies at this point, criteria apply to the closest residential location. The annual average TSP for July of 36 µg/m³ is well below the TSP annual average criterion of 90 µg/m³ required at the nearest residential location.

The Rasp Mine is in compliance with this criterion.



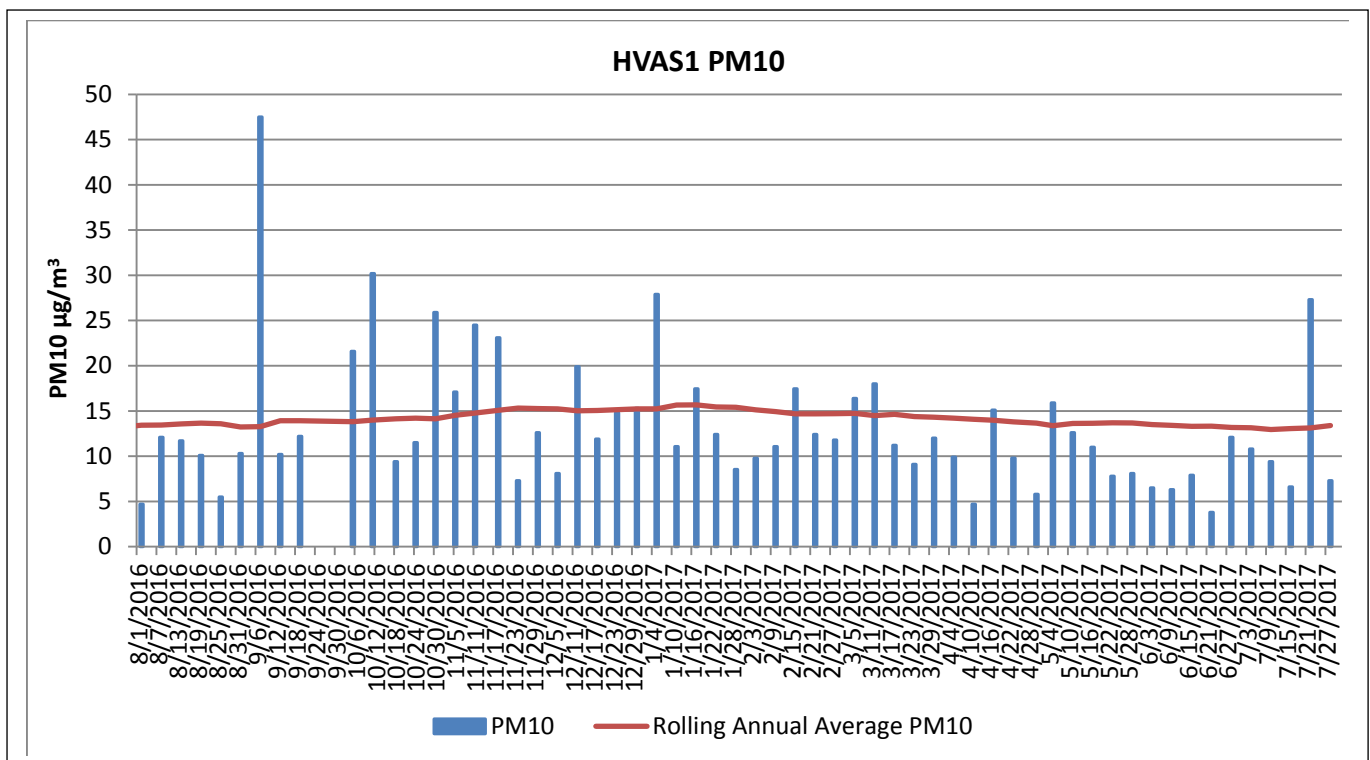


Guidelines for air quality are provided by the DECCW NSW (now EPA), 2005 Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales. In regards to ambient lead dust the Rasp Mine annual average value for July of $0.22 \mu\text{g}/\text{m}^3$ is below the DECCW guideline of $0.50 \mu\text{g}/\text{m}^3$.

The Rasp Mine is in compliance with this criterion.

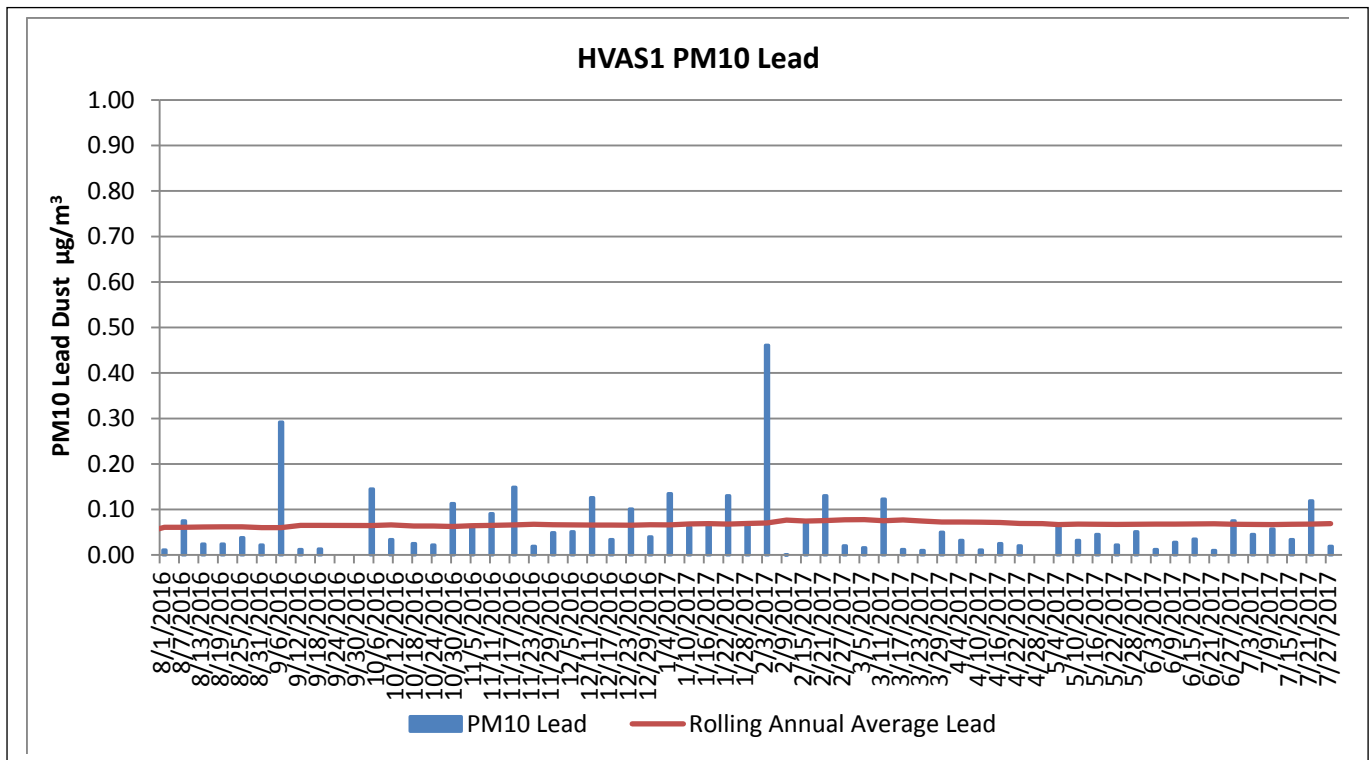
HVAS1 (EPL11) - Silver Tank - On Site

DATE	PM10 ($\mu\text{g}/\text{m}^3$)	Lead ($\mu\text{g}/\text{m}^3$)
4/07/2017	10.80	0.05
10/07/2017	9.40	0.06
16/07/2017	6.60	0.03
22/07/2017	27.30	0.12
28/07/2017	7.30	0.02



This monitoring unit is located on the Rasp Mine and no criterion applies at this point, criteria apply to the closest residential location. The data indicates that the annual average PM₁₀ for July of $13 \mu\text{g}/\text{m}^3$ is well below the PM₁₀ annual average criterion of $30 \mu\text{g}/\text{m}^3$.

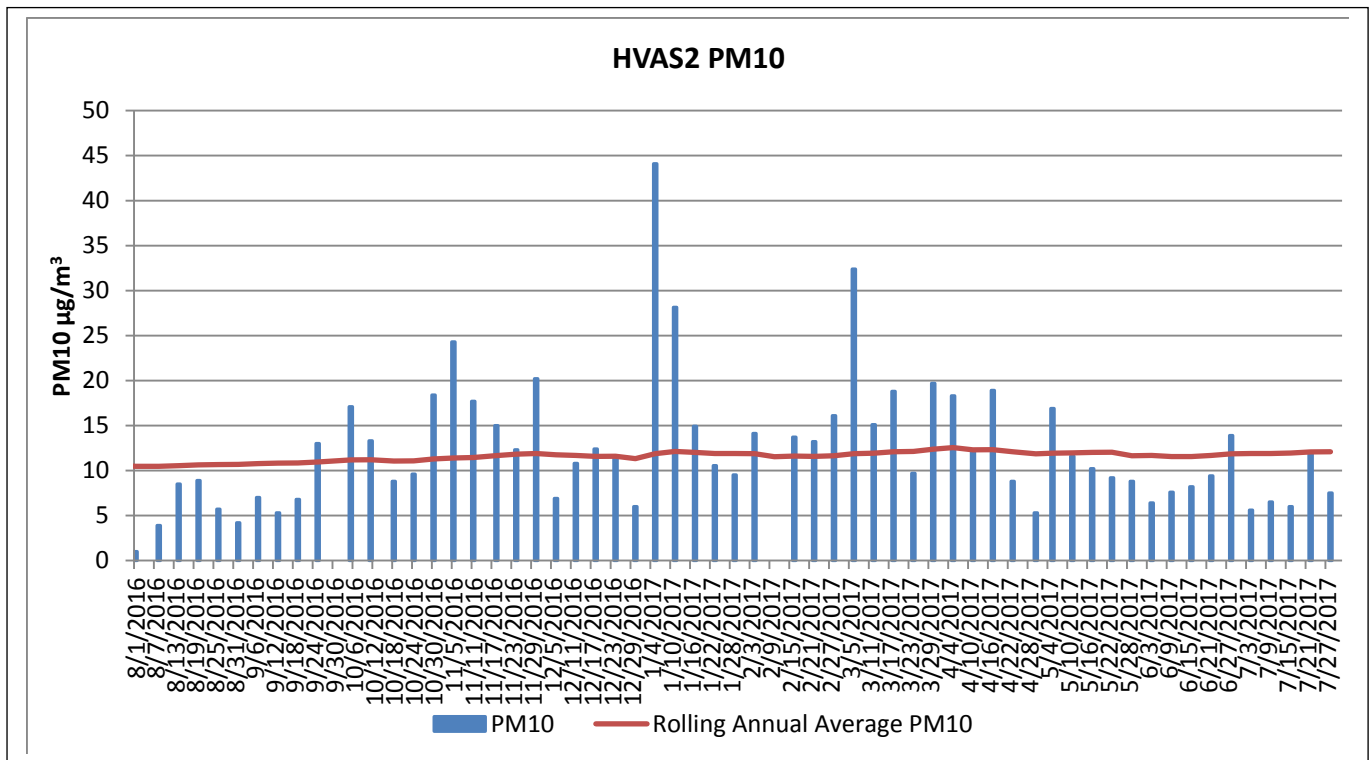
The Rasp Mine is in compliance with this criterion.



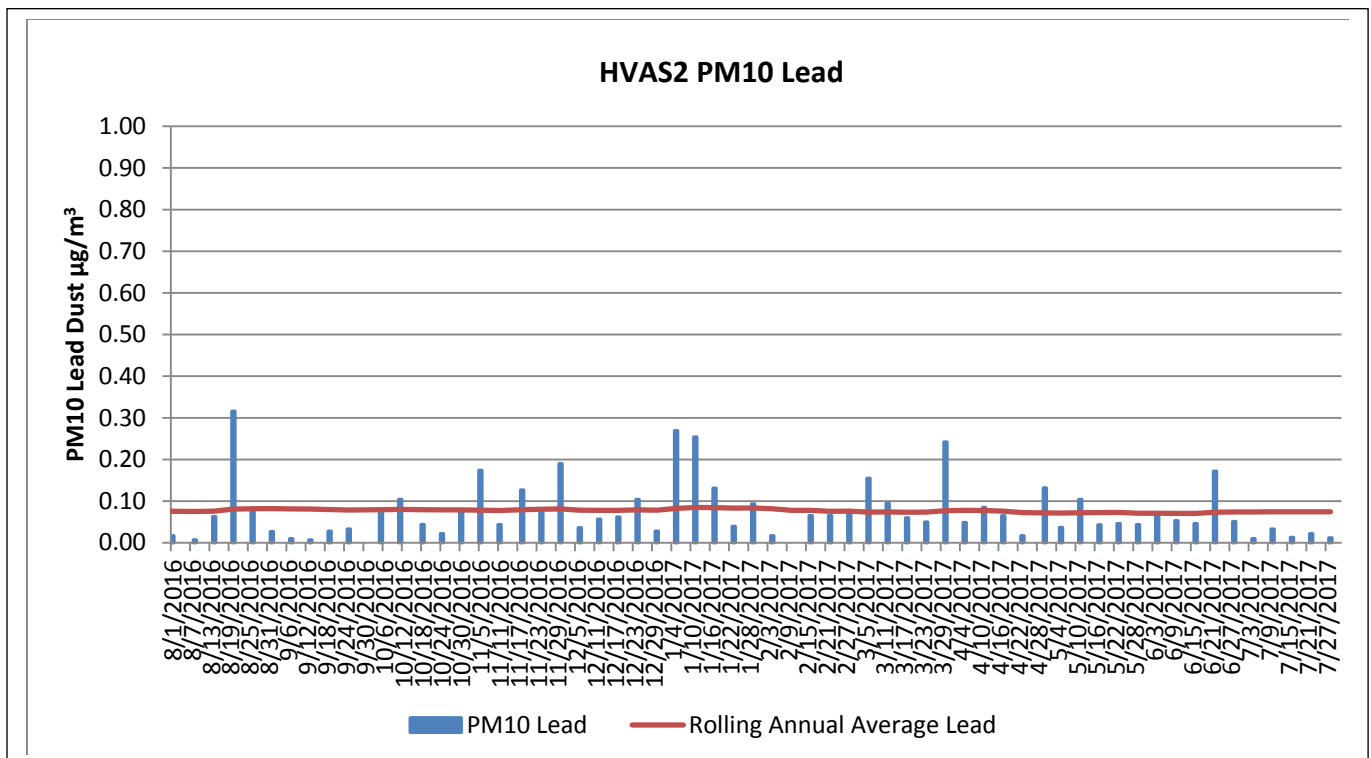
There is no guideline for assessing PM₁₀ lead dust. However, the overall the trend for lead dust at this location remains consistent with the previous 12 months.

HVAS 2 (EPL12) - Blackwood Pit – On Site

DATE	PM10 ($\mu\text{g}/\text{m}^3$)	Lead ($\mu\text{g}/\text{m}^3$)
4/07/2017	5.60	0.01
10/07/2017	6.50	0.03
16/07/2017	6.00	0.01
22/07/2017	12.00	0.02
28/07/2017	7.50	0.01



This monitoring unit is located on the Rasp Mine and no criterion applies at this point, criteria apply to the closest residential location. The annual average PM₁₀ for July of 12 µg/m³ is well below the PM₁₀ annual average criterion of 30 µg/m³ required at the nearest residential location. The Rasp Mine is in compliance with this criterion.



There is no guideline for assessing PM₁₀ lead dust, however the overall the trend for lead dust at this location remains consistent with the previous 12 months.



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 (PM₁₀).

TEOM1 (EPL13) – Off-site and TEOM2 (EPL14) – On Site

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
1/07/2017	7.00	Y	7.84	Y
2/07/2017	11.06	Y	8.7	Y
3/07/2017	12.15	Y	10.38	Y
4/07/2017	8.43	Y	6.8	Y
5/07/2017	12.76	Y	12.08	Y
6/07/2017	10.24	Y	9.94	Y
7/07/2017	6.14	Y	5.3	Y
8/07/2017	15.20	Y	15.35	Y
9/07/2017	10.29	Y	9.94	Y
10/07/2017	8.71	Y	9.23	Y
11/07/2017	7.79	Y	10.49	Y
12/07/2017	12.98	Y	8.24	Y
13/07/2017	17.40	Y	8.56	Y
14/07/2017	10.75	Y	9.95	Y
15/07/2017	16.61	Y	16.18	Y
16/07/2017	6.33	Y	6.61	Y
17/07/2017	7.63	Y	8.23	Y
18/07/2017	15.76	Y	16.05	Y
19/07/2017	13.55	Y	13.42	Y
20/07/2017	8.78	Y	10.59	Y
21/07/2017	9.15	Y	11.15	Y
22/07/2017	15.74	Y	14.08	Y
23/07/2017	12.54	Y	13.64	Y
24/07/2017	15.13	Y	14.75	Y
25/07/2017	12.77	Y	17.83	Y
26/07/2017	16.62	Y	18.95	Y
27/07/2017	9.81	Y	11.83	Y
28/07/2017	15.70	Y	12.97	Y
29/07/2017	17.72	Y	16.66	Y
30/07/2017	183.71	See notes	152.72	See notes
31/07/2017	17.76	Y	18.94	Y

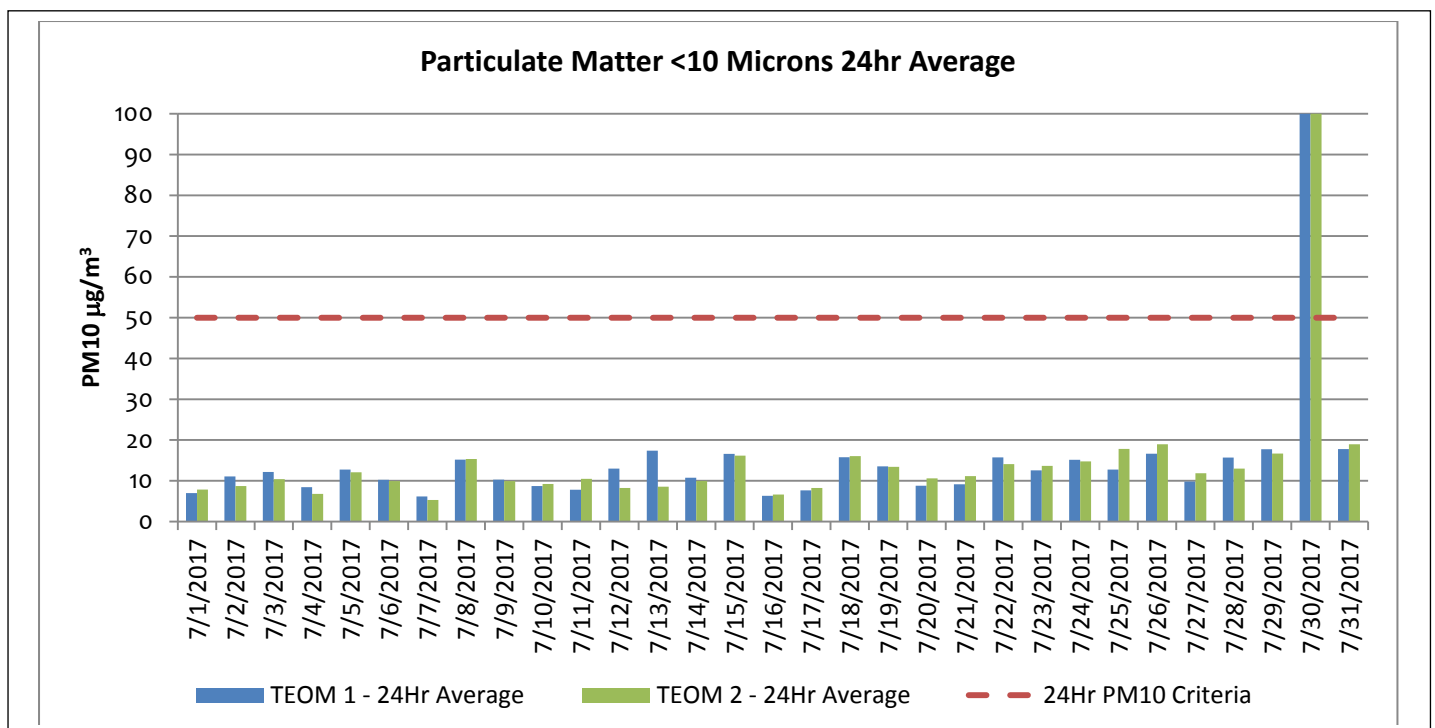


The TEOM1 monitoring unit is located off-site from the Rasp Mine and the criterion as listed in the Project Approval applies at this point. There are two criterion listed for PM₁₀, a 24 hour average and an annual average. The highest 24-hour average at TEOM1 was 183.71 µg/m³ recorded on 30 July was above the criteria of 50 µg/m³ and was the result of a general dust storm in Broken Hill which affected both monitors. The rolling annual average at the end of July was 17.6 µg/m³ below the listed criteria of 30 µg/m³.

The TEOM2 monitoring unit is located on the Rasp Mine and no criterion applies at this point, criteria apply to the closest residential location. The highest 24-hour average of 152.72 µg/m³ recorded on 30 July was above the criteria of 50 µg/m³ and was the result of a general dust storm in Broken Hill which affected both monitors. The annual average PM₁₀ for July of 16.7 µg/m³ is well below the annual average criterion of 30 µg/m³.required at the nearest residential location.

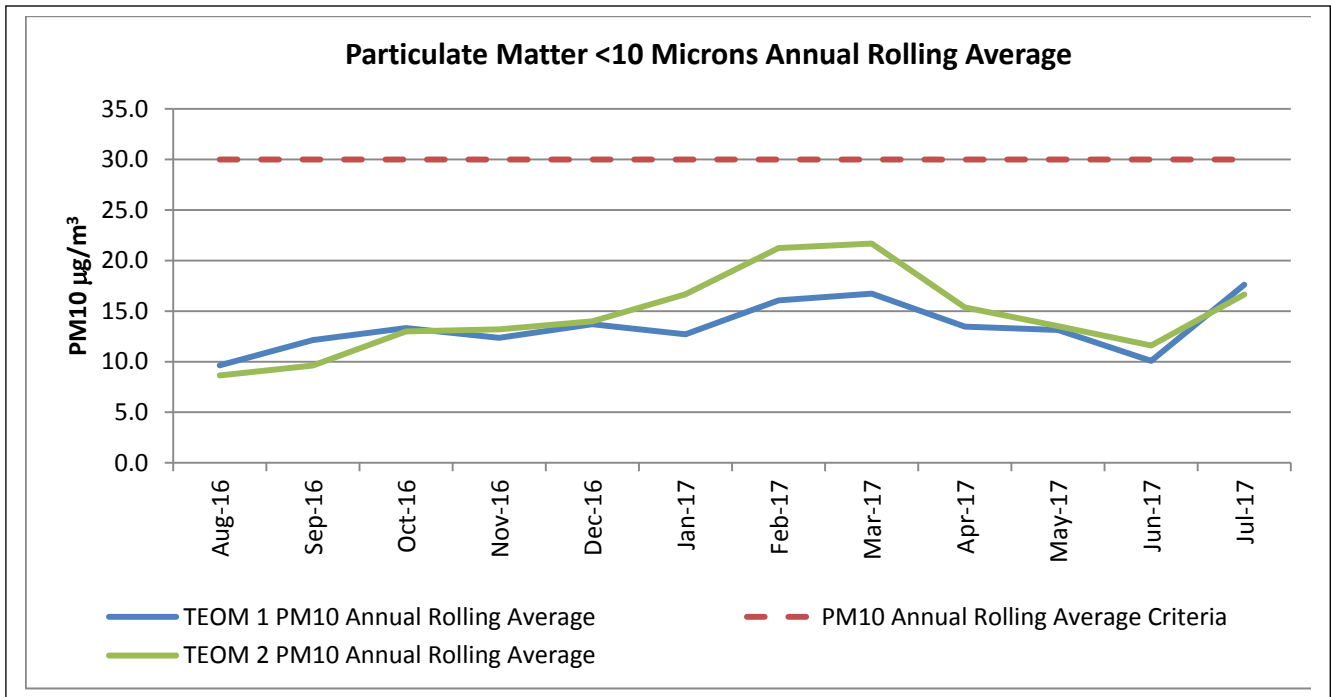
The Rasp Mine is in compliance with all listed criteria.

PM10 (µg/m³) 12 Month Rolling Average												
	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17
TEOM 1 (EPL13)	9.6	12.1	13.3	12.4	13.7	12.7	16.1	16.3	13.5	13.1	10.1	17.6
Compliant with 30µg/m³ annual average?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
TEOM 2 EPL14	8.6	9.6	13.0	13.2	14.0	16.7	21.2	21.7	15.4	13.5	11.6	16.7
Compliant with 30µg/m³ annual average?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y





With the exception of an anomaly recorded on the 30 July the 24 hour averages during the period were quite low and consistent with averages over the last 12 months.



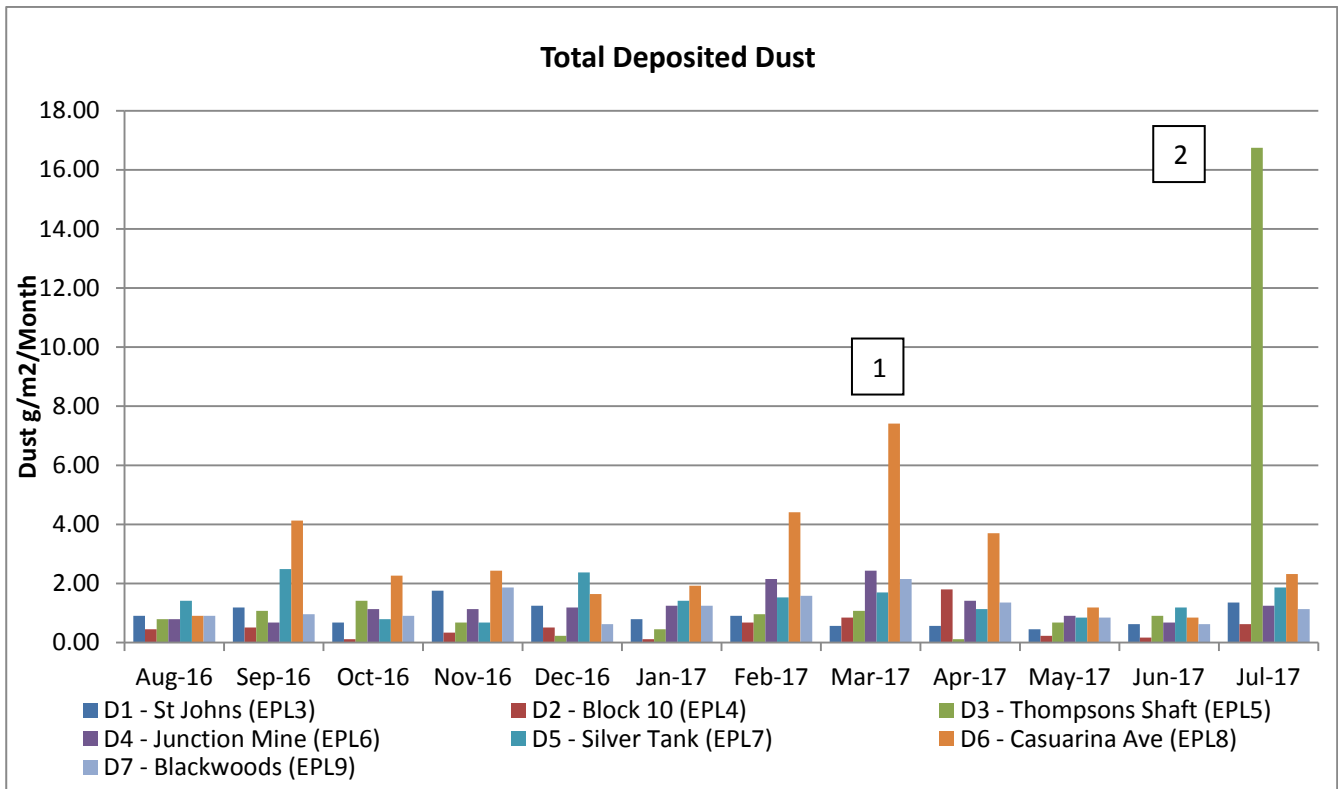
Values for PM₁₀ are below the criteria of 30 µg/m³ and the Rasp Mine is in compliance with this criterion. Overall the trend for PM₁₀ at this location remains consistent with the previous 12 months.

1.3 Dust Deposition Sampling

There are seven dust deposition gauges used 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 Mine and D6 in Casuarina Avenue south of the 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.

Deposited Dust Results for July

Total Deposited Dust (g/m ² /Month)							
Date	D1 EPL3 (off site)	D2 EPL4	D3 EPL5	D4 EPL6	D5 EPL7	D6 EPL8 (off site)	D7
July 2017	1.36	0.62	16.75	1.24	1.87	2.32	1.13
Background (2010)	4.0	3.1	4.3	5.7	N/A	5.8	N/A
Maximum Mine contribution	2.0					2.0	
Maximum deposition level	4.0					4.0	
Compliant?	Y					Y	

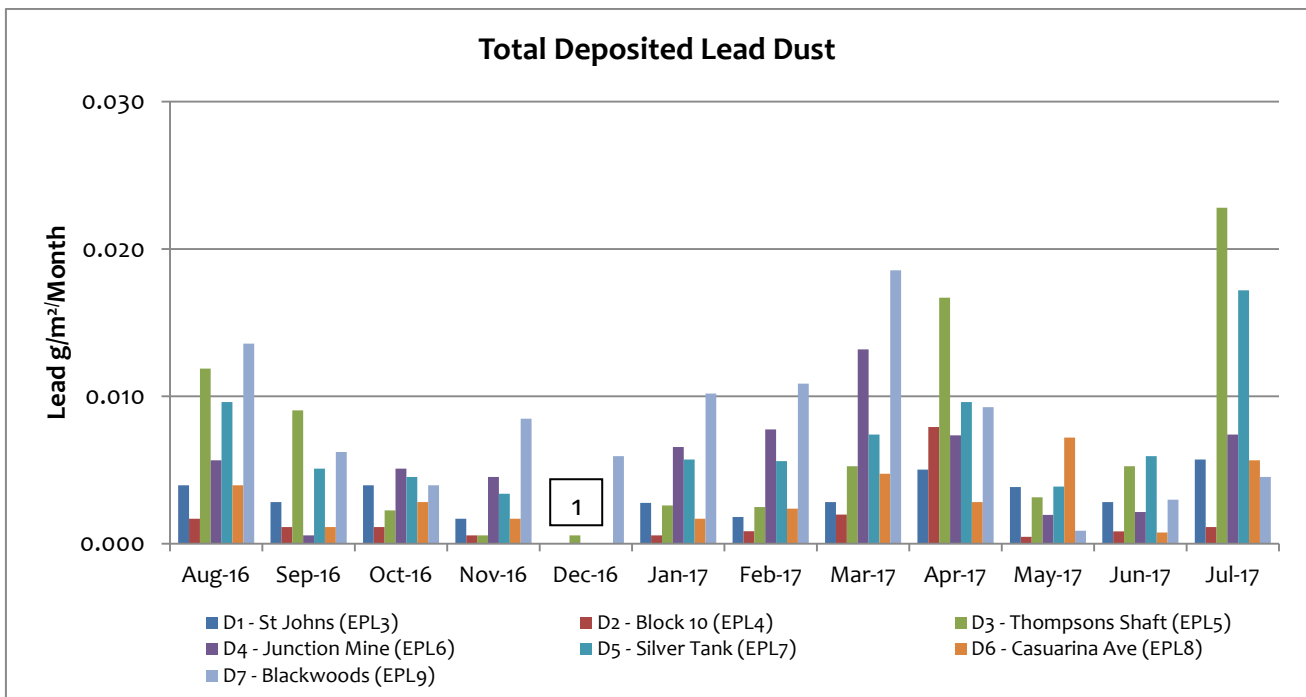


Note 1: The elevated levels at Casuarina Avenue appear to have been caused by motor bikes accessing the vacant lot at the rear of the property.

Note 2: The spike in total deposited dust and lead dust at the Thompson’s Shaft location (onsite) is unknown, there were no changes to mining activities during this period.

Deposited Lead Dust Results for July

Total Deposited Lead (g/m ² /Month)							
Date	D1 EPL3 (Off Site)	D2 EPL4	D3 EPL5	D4 EPL6	D5 EPL7	D6 EPL8 (Off Site)	D7
July 2017	0.006	0.001	0.023	0.007	0.017	0.006	0.005
Background (2010)	0.0034	0.005	0.005	0.006	N/A	0.004	N/A



Note 1: D1 – St Johns, D2 – Block 10, D4 – Junction Mine, D5 – Silver Tank and D6 – Casuarina Ave had zero results for December 2016.

There is no guideline or criterion for deposited lead dust. Total deposited lead dust results remain lower than the initial measurements taken prior to commencement of operations.

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 (EPL1) and Shaft 6 (EPL56), both measuring pollutants from underground firings, and the Crusher Baghouse Stack (EPL2) 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. Quarterly sampling is undertaken in January, April, July and October. 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	mg/m ³	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 (EPL) and Vent Shaft 6 (EPL56) July Results

	Unit	Primary Vent Shaft (EPL1)	Crusher Baghouse (EPL2)	Vent Shaft 6 (EPL 56)
Nitrogen Oxides	mg/m ³	3.9-	NA	2.05
Volatile Organic Compounds	mg/m ³	<0.444	NA	<0.460
Total Suspended particles	mg/m ³	9.64	13.6	5.29
Type 1 and Type 2	mg/m ³	0.139	0.248	0.0595

The Rasp Mine is in compliance with all listed criteria.

2 Noise

2.1 Blasting (Vibration and Overpressure)

There are six 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 are included in EPL12559, and V6 which is located on-site near Shaft 4 is used to monitor PPV impact for local buildings and public infrastructure for the Zinc Lodes. 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 Lode (excluding Block 7)

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



Blasting Criteria Block 7

Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (mm/s)	Allowable Exceedance
Residence on privately owned land (7am-7pm)	115	3 (interim)	5% of the total number of blasts over a 12-month period
(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%

In addition the following conditions 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

Summary Results for July

Total number of blasts

- no production blasts occurred before 6.45 am or after 7.15 pm
- production blasts averaged 3.7 per week over the previous calendar year
- development blasts averaged 34 per week over the previous calendar year

Rest of Mine - Western Mineralisation and Main Lodes:

- 0 Blast recorded a ppv of >5mm/s
- 0 Blasts recorded a ppv of >10mm/s
- 0 Blasts recorded a ppv >100mm/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 or 120 dBL (7am to 7pm)
- % of all blasts over 5mm/sec = 0.3% calculated from 1 August 2016 until 31 July, 2017;
- % of production blasts over 5mm/sec = 3.63% calculated from 1 August 2016 until 31 July, 2017

Block 7:

- 0 Blasts recorded a ppv of >3mm/s
- 0 Blasts recorded a ppv of >10mm/s
- 0 Blasts (V6) recorded a ppv of >50mm/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 or 120 dBL (7am to 7pm)



- % of all blasts over 3mm/sec = 2.8% calculated from 1 August 2016 until 31 July, 2017;
- % of production blasts over 3mm/sec = 3.2% calculated from 1 August 2016 until 31 July, 2017

The Rasp Mine is in compliance with all listed criteria.

2.2 Noise

Noise monitoring is undertaken as per the NSW Industrial Noise Policy at a frequency of once per annum. A noise assessment was conducted in 2016, and is next due in Q4 2017.

3 Water

3.1 Groundwater

There are eighteen sampling locations for groundwater, GW01 (EPL37) to GW16 (EPL52) are installed piezometers 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), sampled monthly. A map indicating these locations can be found on the Rasp Mine web site. Groundwater is analysed for a number of parameters.

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) July Results

Sample Point	Alkalinity CaCO ₃ mg/l)	Cd (mg/l)	Ca (mg/l)	Cl (mg/l)	EC (µS/cm ²)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	pH	Na (mg/l)	SO ₄ (mg/l)	TDS (mg/l)	Zn (mg/l)
Sample Point	CaCO ₃	Cd	Ca	Cl	EC	Fe	Pb	Mg	Mn	pH	Na	SO ₄	TDS	Zn
Shaft 7 (EPL53)	10	2.03	493	1300	12000	0.2	0.515	296	384	6.65	1570	6020	11900	984
Kintore Pit (EPL54)	4	2.60	508	1340	12400	019	0.945	313	426	6.52	1500	6190	12400	1090



Groundwater (EPL37 - 52) July Results

Sample Point	Alkalinity CaCO ₃ mg/l	Cd (mg/l)	Ca (mg/l)	Cl (mg/l)	EC (µS/cm ²)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	pH	Na (mg/l)	SO ₄ (mg/l)	TDS (mg/l)	Zn (mg/l)
GW01 (EPL37)	1	0.167	246	1010	10300	0.05	0.089	412	291	4.88	1440	4110	9970	215
GW02 (EPL38)	- Bore dry -													
GW03 (EPL39)	4	1.05	550	3100	14900	18.5	2.38	365	380	5.76	2140	4120	12800	300
GW04 (EPL40)	241	0.0546	553	2870	14700	0.05	0.04	505	35.3	7.15	2270	4690	11800	19.1
GW05 (EPL41)	- Bore dry -													
GW06 (EPL42)	47	0.697	519	2570	13600	0.05	0.061	406	249	6.53	1970	4240	11900	156
GW07 (EPL43)	- Bore dry -													
GW08 (EPL44)	14	1.81	545	1420	9410	0.05	0.386	220	451	6.32	923	3240	9320	542
GW09 (EPL45)	300	0.0218	720	2500	11800	0.05	0.001	533	0.049	7.55	1330	3190	9100	1.78
GW10 (EPL46)	215	0.44	559	2650	13900	0.05	0.001	488	18	7.14	2100	4480	11200	34.1
GW11 (EPL47)	56	0.0563	287	418	4480	0.05	0.063	128	15.2	215	530	1560	2650	25
GW12 (EPL48)	1	0.167	246	1010	10300	0.05	0.089	412	291	4.88	1440	4110	9970	215
GW13 (EPL49)	- Bore dry -													
GW14 (EPL50)	4	1.05	550	3100	14900	18.5	2.38	365	380	5.76	2140	4120	12800	300
GW15 (EPL51)	241	0.0546	553	2870	14700	0.05	0.04	505	35.3	7.15	2270	4690	11800	19.1
GW16 (EPL52)	- Bore dry -													

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),
Ryan Street Dam EPL31/S49	2 x per year , six months apart	
Adjacent Olive Grove EPL32/S1A	2 x per year , six months apart	



Description	Frequency	Parameters to be Analysed
Adjacent Bowls Club EPL33 /S9-B2	2 x per year , six months apart	sulphate (SO ₄), total dissolved solids (TDS) and zinc (Zn)
Horwood Dam EPL34/Horwood Dam	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	

No sampling was scheduled for July.

4 Weather Data

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

Rasp Mine Weather Station (EPL55)

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

Weather Data Summary

Date	Min Temp @ 10m (°C)	Max Temp @ 10m	Min Wind Speed @ 10m (m/s)	Max Wind Speed @ 10m (m/s)	Predominant wind dir @ 10m (deg)
1-Jul-17	3.5	15.2	0.4	5.1	SE
2-Jul-17	5.3	17.4	1	6	ESE
3-Jul-17	10.5	16.2	1.7	8.9	ESE
4-Jul-17	9.3	16.3	0.7	6.6	NE
5-Jul-17	6.9	15.1	0.2	6.4	NE
6-Jul-17	7.4	16	0.2	7.3	East
7-Jul-17	6.4	14.3	1	7.2	NNE
8-Jul-17	5.5	13.7	0.6	5.1	North
9-Jul-17	7	15.5	0.9	5.7	ENE
10-Jul-17	7.1	16.9	0.1	2.6	NE
11-Jul-17	8.3	16.3	0.3	3.3	SSW



12-Jul-17	7.3	16.8	0.4	5.3	SE
13-Jul-17	9.4	17.6	0.6	7.6	East
14-Jul-17	9.7	15.8	0.2	5.7	NW
15-Jul-17	5.6	14.2	0.2	3.6	WNW
16-Jul-17	6.4	14.8	1.7	7	East
17-Jul-17	11.4	20.1	1.4	8.2	East
18-Jul-17	7.4	14.4	2.3	7.7	North
19-Jul-17	7.1	13.8	1	8.5	NW
20-Jul-17	4.4	14.1	0.2	2.8	WNW
21-Jul-17	6.3	15.6	0.2	4.1	SE
22-Jul-17	7.5	18.2	1	7.7	East
23-Jul-17	11.4	20.5	1.1	7.6	ENE
24-Jul-17	9.2	18.9	0.7	4.9	NW
25-Jul-17	12.8	23.1	0.1	7.3	East
26-Jul-17	10.2	17.5	0.3	4.6	NW
27-Jul-17	9.6	20.2	1.3	7.2	East
28-Jul-17	6.9	19.2	0.6	5.2	NNE
29-Jul-17	13.5	24.7	2.2	13	North
30-Jul-17	9	21.4	0.7	4.6	SW
31-Jul-17	6.8	16	0.8	6.4	WNW

5 Data Log

Sample	Result Received
Hi Volume Samples	26-Sep-17
TEOM	01-Aug-17
Dust Deposition	12-Sep-17
Water	17-Jul-17
Blast Vibration and overpressure	01-Aug-17
Weather	01-Aug-17

6 Correction Log

There are no corrections to the previous reports.