

Rasp Mine
Monthly Environmental Monitoring Report
September 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.

Contents

| | | |
|----------|---|-----------|
| 1 | AIR QUALITY | 3 |
| 1.1 | HIGH VOLUME AIR SAMPLERS | 3 |
| 1.2 | TAPERED ELEMENT OSCILLATING MICROBALANCE SAMPLING (TEOM)..... | 7 |
| 1.3 | DUST DEPOSITION SAMPLING | 10 |
| 1.4 | VENTILATION OUTLETS AND BAG HOUSE MONITORING | 11 |
| 2 | NOISE..... | 12 |
| 2.1 | BLASTING (VIBRATION AND OVERPRESSURE) | 12 |
| 2.2 | NOISE | 13 |
| 3 | WATER..... | 14 |
| 3.1 | GROUNDWATER..... | 14 |
| 3.2 | SURFACE WATER SAMPLE RECORD | 14 |
| 4 | WEATHER DATA | 15 |
| 5 | DATA LOG | 16 |
| 6 | CORRECTION LOG..... | 16 |



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

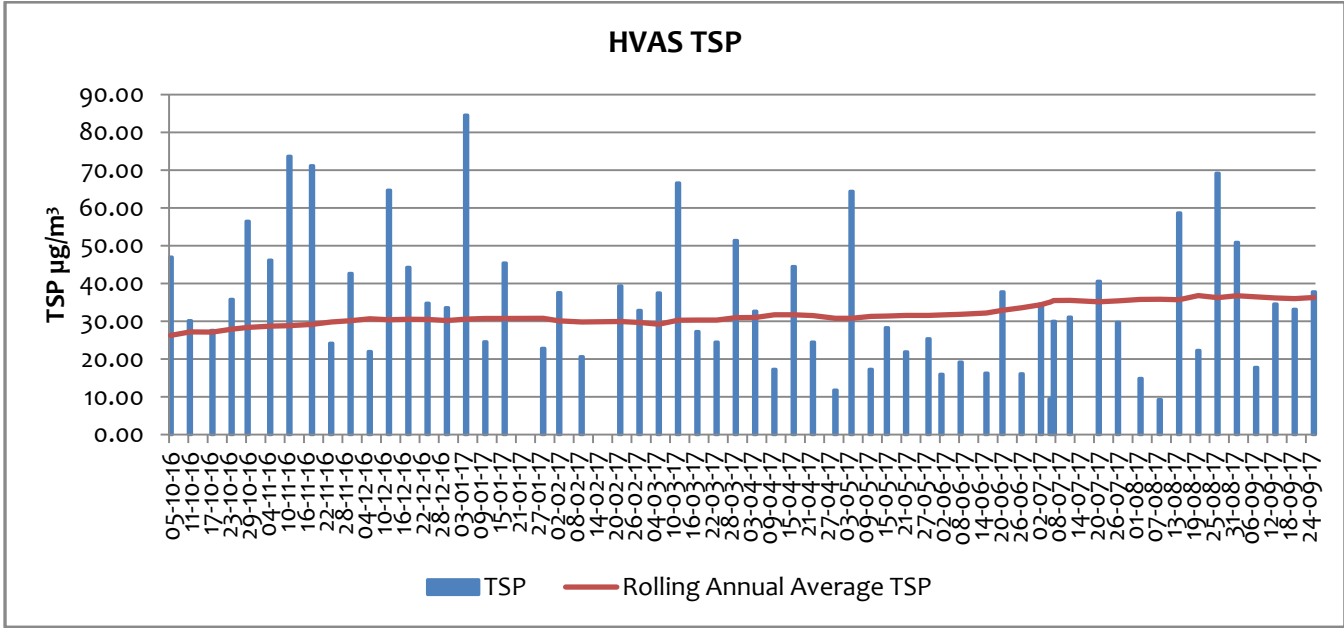
| Pollutant | Averaging Period | Maximum Project Contribution | Maximum Total Deposited Dust Level |
|----------------|------------------|------------------------------|------------------------------------|
| Deposited dust | Annual | 2 g/m ² /month | 4 g/m ² /month |

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 (PM₁₀) and lead dust.

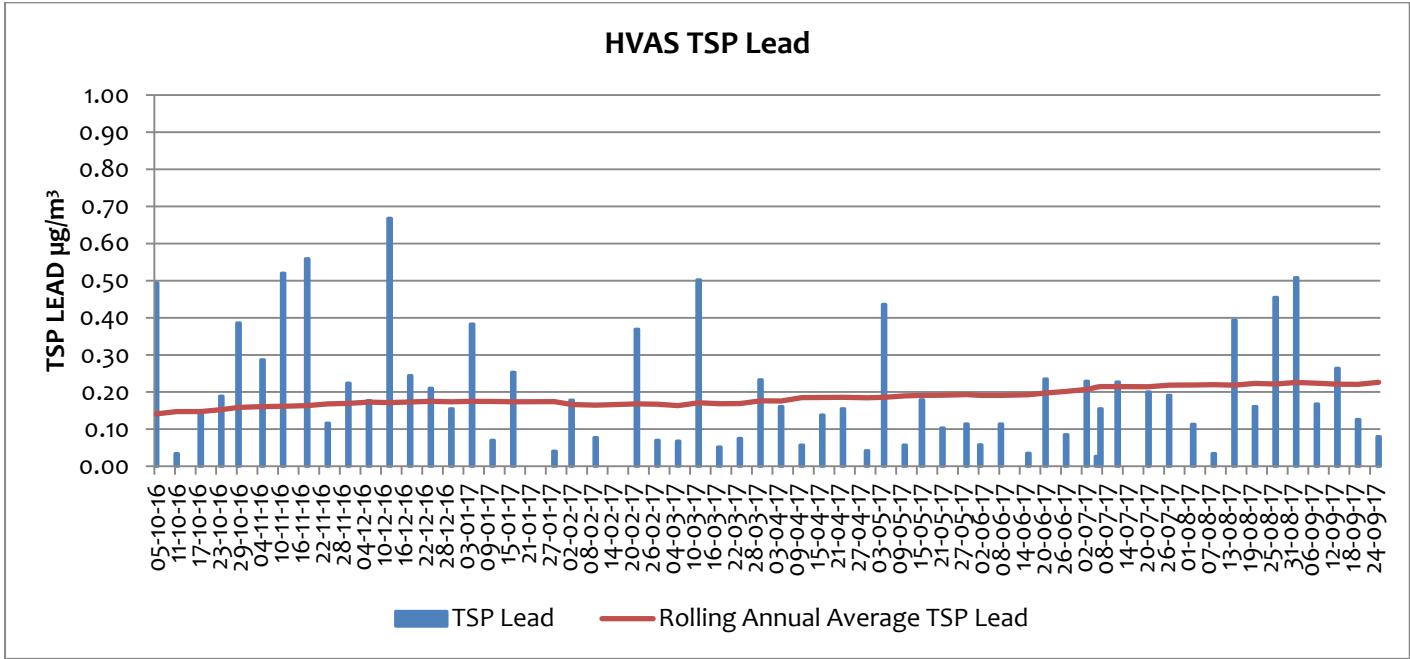
HVAS (EPL10) - SILVER TANK - ON SITE

| DATE | TSP (µg/m ³) | Lead (µg/m ³) |
|----------|-----------------------------|------------------------------|
| 02-09-17 | 50.90 | 0.51 |
| 08-09-17 | 17.80 | 0.17 |
| 14-09-17 | 34.60 | 0.26 |
| 20-09-17 | 33.20 | 0.13 |
| 26-09-17 | 37.80 | 0.08 |



This monitoring unit is located on the Rasp Mine mining lease and thus no criteria applies at this point, criteria apply to the closest residential location. The data indicates that the annual average TSP of $36 \mu\text{g}/\text{m}^3$ is well below the TSP annual average criterion of $90 \mu\text{g}/\text{m}^3$ at the nearest residential location.

Rasp Mine is in compliance with this criterion.



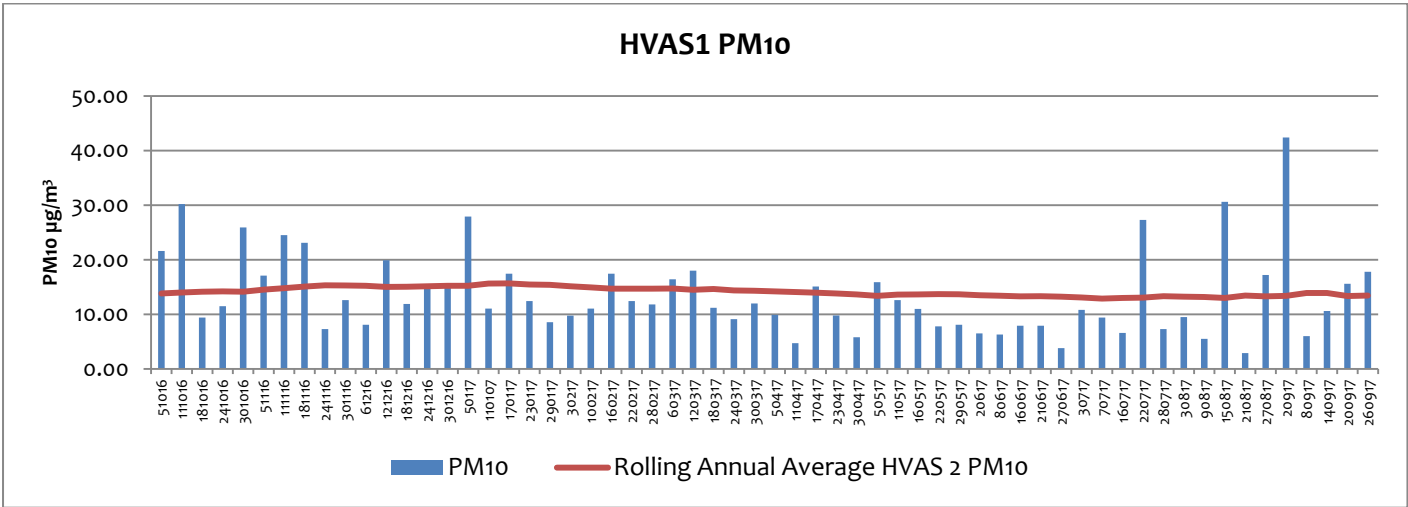
Guidelines for air quality are provided by the DECCW NSW (now EPA), 2005 Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales. In regards to ambient lead dust the Rasp Mine annual average value for September of $0.21 \mu\text{g}/\text{m}^3$ is below the DECCW guideline of $0.50 \mu\text{g}/\text{m}^3$.

Rasp Mine is in compliance with this criterion.

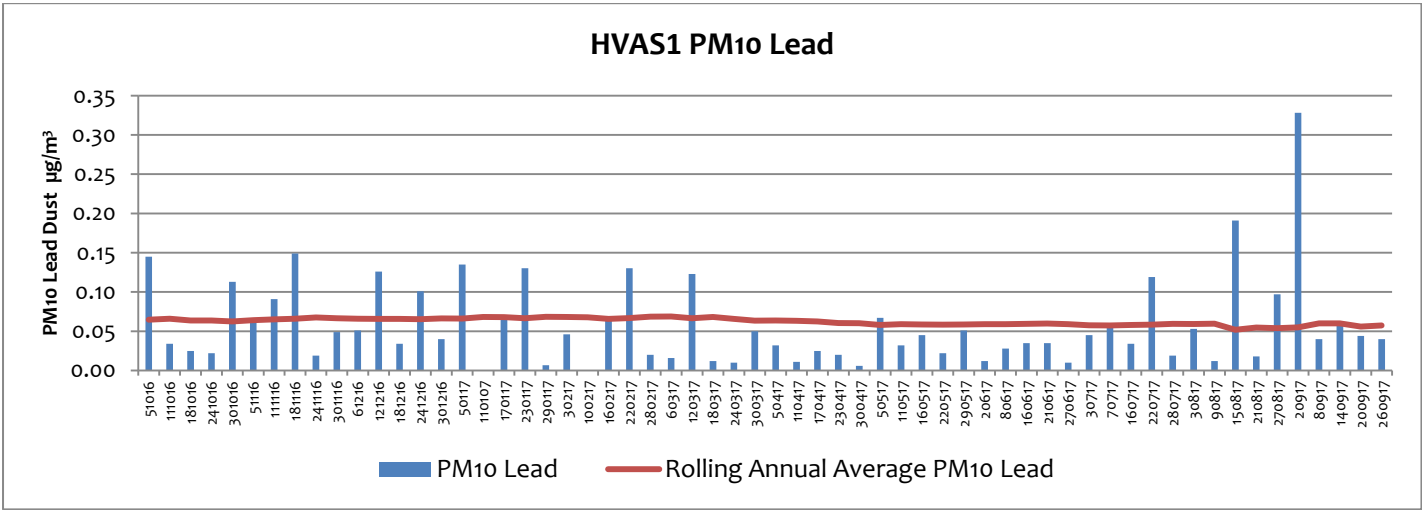


HVAS1 (EPL11) - Silver Tank - On Site

| DATE | PM10 ($\mu\text{g}/\text{m}^3$) | Lead ($\mu\text{g}/\text{m}^3$) |
|----------|--------------------------------------|--------------------------------------|
| 02-09-17 | 42.40 | 0.33 |
| 08-09-17 | 6.00 | 0.04 |
| 14-09-17 | 10.60 | 0.06 |
| 20-09-17 | 15.60 | 0.04 |
| 26-09-17 | 17.80 | 0.04 |



This monitoring unit is located on the Rasp Mine mining lease and thus no criteria applies at this point, criteria apply to the closest residential location. The data indicates that the annual average PM₁₀ for September of 13 $\mu\text{g}/\text{m}^3$ is below the PM₁₀ annual average criterion of 25 $\mu\text{g}/\text{m}^3$ required at the nearest residential location. Rasp Mine is in compliance with this criterion.

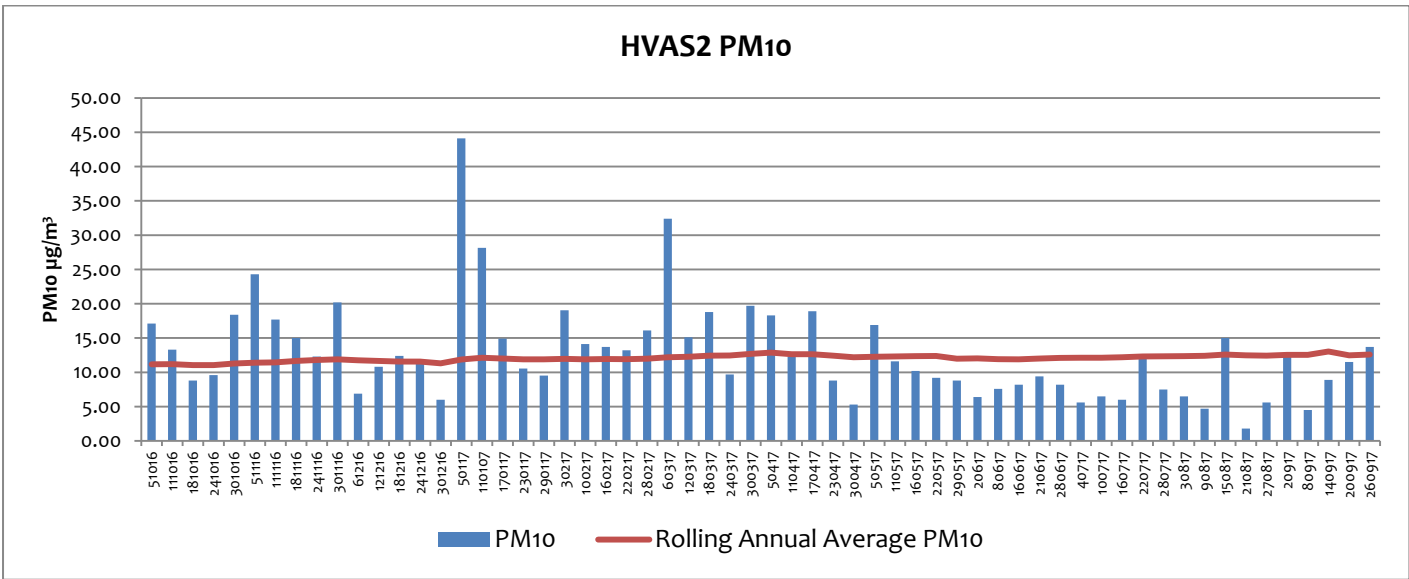


There is no guideline for assessing PM₁₀ Lead dust, however , the overall the trend for lead dust at this location remains consistent with the previous 12 months.



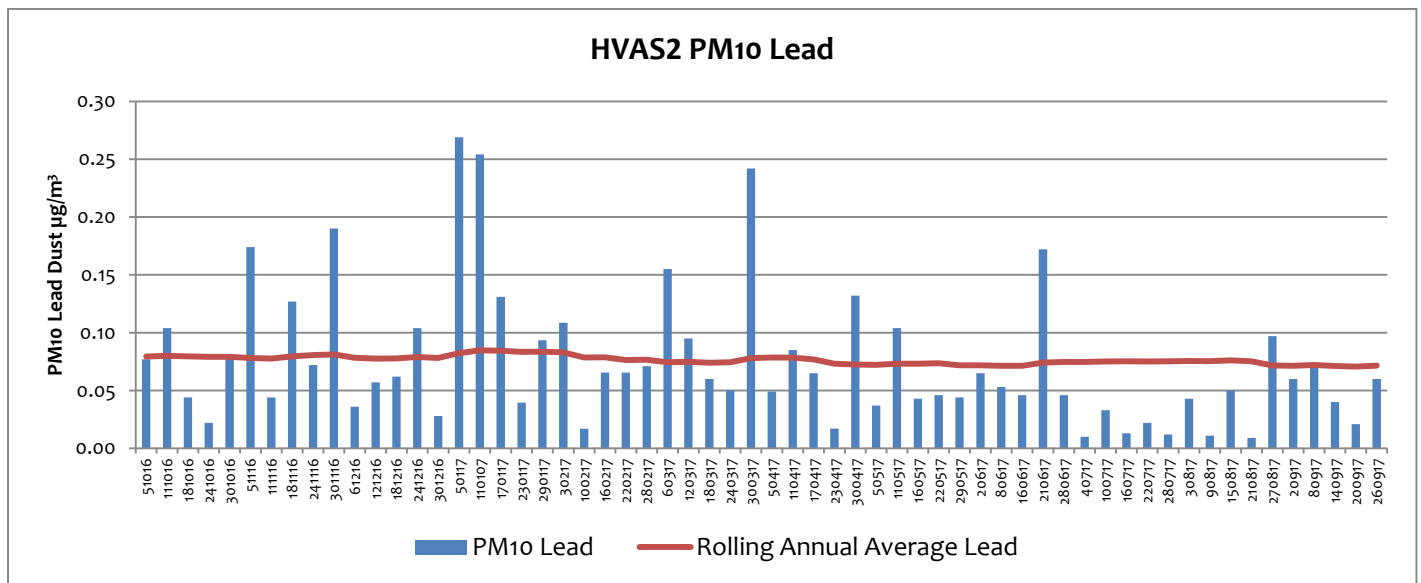
HVAS 2 (EPL12) - Blackwood Pit – On Site

| DATE | PM10 ($\mu\text{g}/\text{m}^3$) | Lead ($\mu\text{g}/\text{m}^3$) |
|----------|--------------------------------------|--------------------------------------|
| 02-09-17 | 12.70 | 0.06 |
| 08-09-17 | 4.50 | 0.07 |
| 14-09-17 | 8.90 | 0.04 |
| 20-09-17 | 11.50 | 0.02 |
| 26-09-17 | 13.70 | 0.06 |



This monitoring unit is located on the Rasp Mine mining lease and thus no criteria applies at this point, criteria apply to the closest residential location. The data indicates that the annual average PM₁₀ for September of 12 $\mu\text{g}/\text{m}^3$ is well below the PM₁₀ annual average criterion 25 $\mu\text{g}/\text{m}^3$ required at the nearest residential location.

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? |
| 01-09-17 | 13.25 | Y | 11.80 | Y |
| 02-09-17 | 17.57 | Y | 19.54 | Y |
| 03-09-17 | 24.08 | Y | 25.18 | Y |
| 04-09-17 | 16.90 | Y | 18.70 | Y |
| 05-09-17 | 12.77 | Y | 12.43 | Y |
| 06-09-17 | 11.21 | Y | 12.01 | Y |
| 07-09-17 | 8.19 | Y | 8.89 | Y |
| 08-09-17 | 7.30 | Y | 10.92 | Y |
| 09-09-17 | 18.03 | Y | 14.96 | Y |
| 10-09-17 | 15.77 | Y | 13.36 | Y |
| 11-09-17 | 13.41 | Y | 17.49 | Y |
| 12-09-17 | 32.81 | Y | 45.76 | Y |
| 13-09-17 | 28.80 | Y | 39.05 | Y |
| 14-09-17 | 15.11 | Y | 17.35 | Y |
| 15-09-17 | 13.01 | Y | 13.84 | Y |



| | | | | |
|----------|-------|---|-------|---|
| 16-09-17 | 9.83 | Y | 13.74 | Y |
| 17-09-17 | 12.65 | Y | 11.93 | Y |
| 18-09-17 | 41.27 | Y | 47.14 | Y |
| 19-09-17 | 15.17 | Y | 21.62 | Y |
| 20-09-17 | 16.62 | Y | 13.79 | Y |
| 21-09-17 | 14.00 | Y | 14.54 | Y |
| 22-09-17 | 25.06 | Y | 24.77 | Y |
| 23-09-17 | 87.08 | Y | 77.71 | Y |
| 24-09-17 | 23.60 | Y | 22.80 | Y |
| 25-09-17 | 18.65 | Y | 24.37 | Y |
| 26-09-17 | 22.77 | Y | 19.15 | Y |
| 27-09-17 | 29.19 | Y | 29.63 | Y |
| 28-09-17 | 7.57 | Y | 9.33 | Y |
| 29-09-17 | 8.94 | Y | 11.33 | Y |
| 30-09-17 | 10.56 | Y | 16.28 | Y |

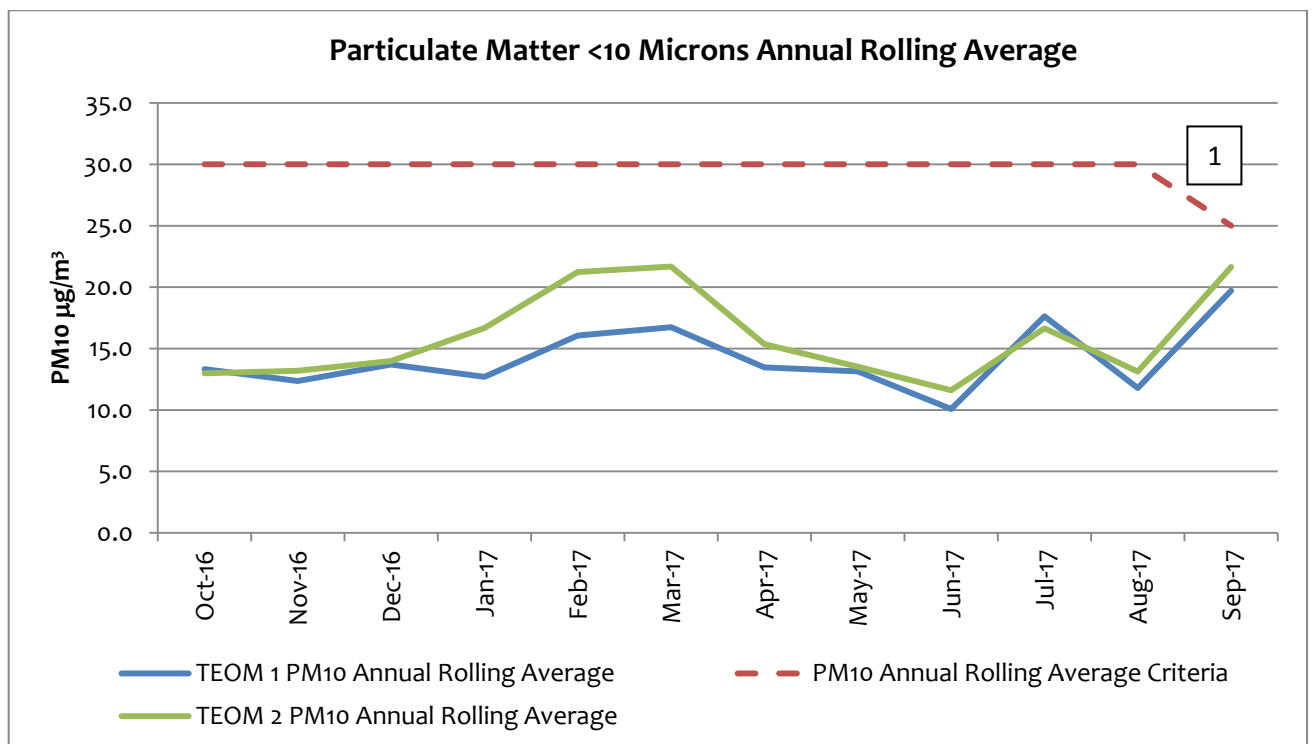
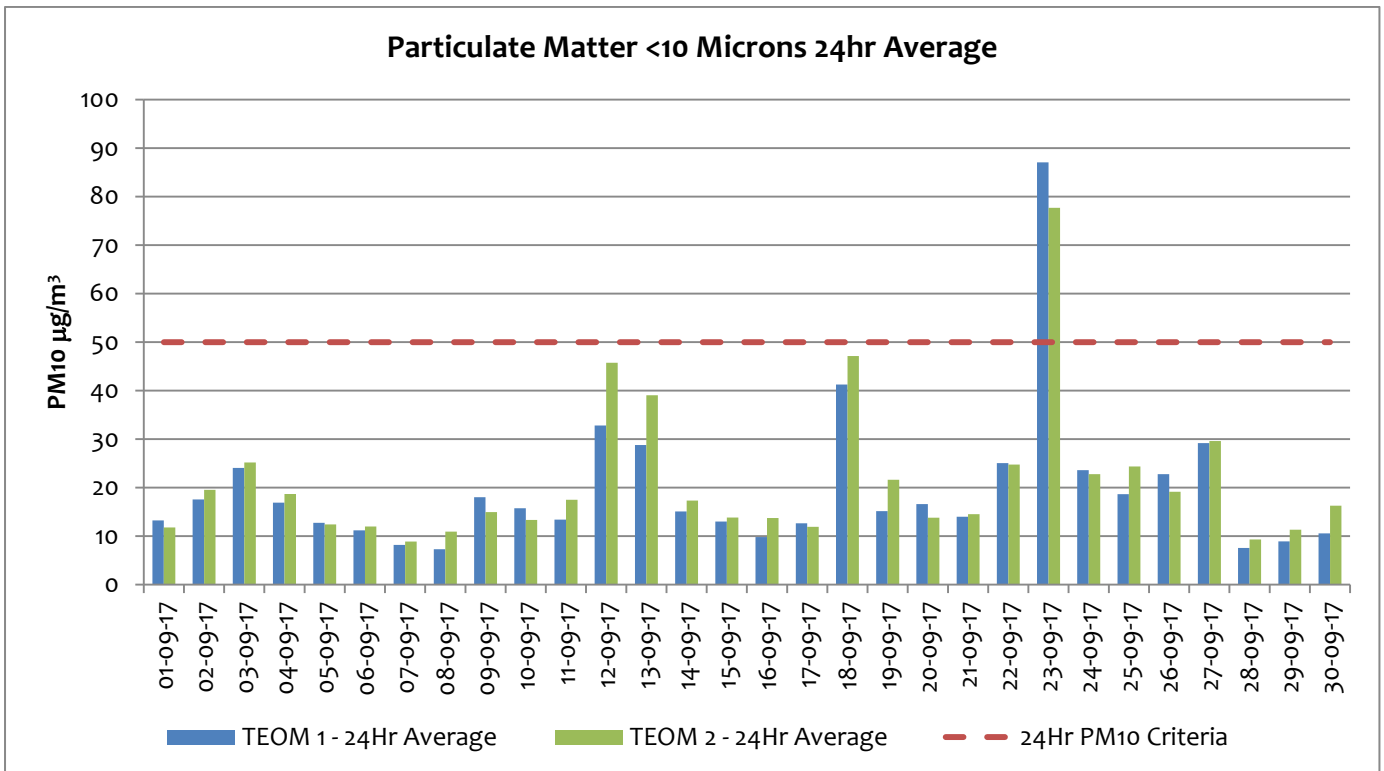
The TEOM1 monitoring unit is located off-site from the Rasp Mine and the criteria as listed in the Project Approval 07_00180 applies at this point. There are two criterion listed in the Project Approval for PM₁₀, 24 hour average and an annual average. The highest 24 hour average recorded at TEOM1 was 87.08 µg/m³ on 23 September, this is above the criteria listed of 50 µg/m³ and was due to a general dust storm in Broken Hill with wind speeds exceeding 64 km/h, the wind direction was predominantly from the north of the Mine site and mining activities were not a major contributor to this result. The annual average PM₁₀ at the end of September was 19.7 µg/m³ and is below the listed criteria of 25 µg/m³.

The TEOM2 monitoring unit is located on the Rasp Mine lease and the criteria does not apply at this point, criteria apply to the closest residential location. The highest 24 hour average recorded at TEOM2 was 77.71 µg/m³ on 23 September, this is above the listed criteria of 50 µg/m³ and was due to a general dust storm in Broken Hill with wind speeds in excess of 64 km/h, the wind direction was predominantly from the north of the Mine site and mining activities were not a major contributor to this result. The annual average PM₁₀ at the end of September was 21.6 µg/m³ and is below the annual average criterion 25 µg/m³ required at the nearest residential location.

Rasp Mine is in compliance with all listed criteria.

PM10 (µg/m³) 12 Month Rolling Average

| | Oct-16 | Nov-16 | Dec-16 | Jan-17 | Feb-17 | Mar-17 | Apr-17 | May-17 | Jun-17 | Jul-17 | Aug-17 | Sep-17 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| TEOM 1 (EPL13) | 13.3 | 12.4 | 13.7 | 12.7 | 16.1 | 16.7 | 13.5 | 13.1 | 10.1 | 17.6 | 11.8 | 19.7 |
| Compliant with 30µg/m³ annual average? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| TEOM 2 EPL14 | 13.0 | 13.2 | 14.0 | 16.7 | 21.2 | 21.7 | 15.4 | 13.5 | 11.6 | 16.7 | 13.1 | 21.6 |
| Compliant with 30µg/m³ annual average? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |



Note 1: Criteria change to $25\mu\text{g}/\text{m}^3$ in September as per PA MOD4.

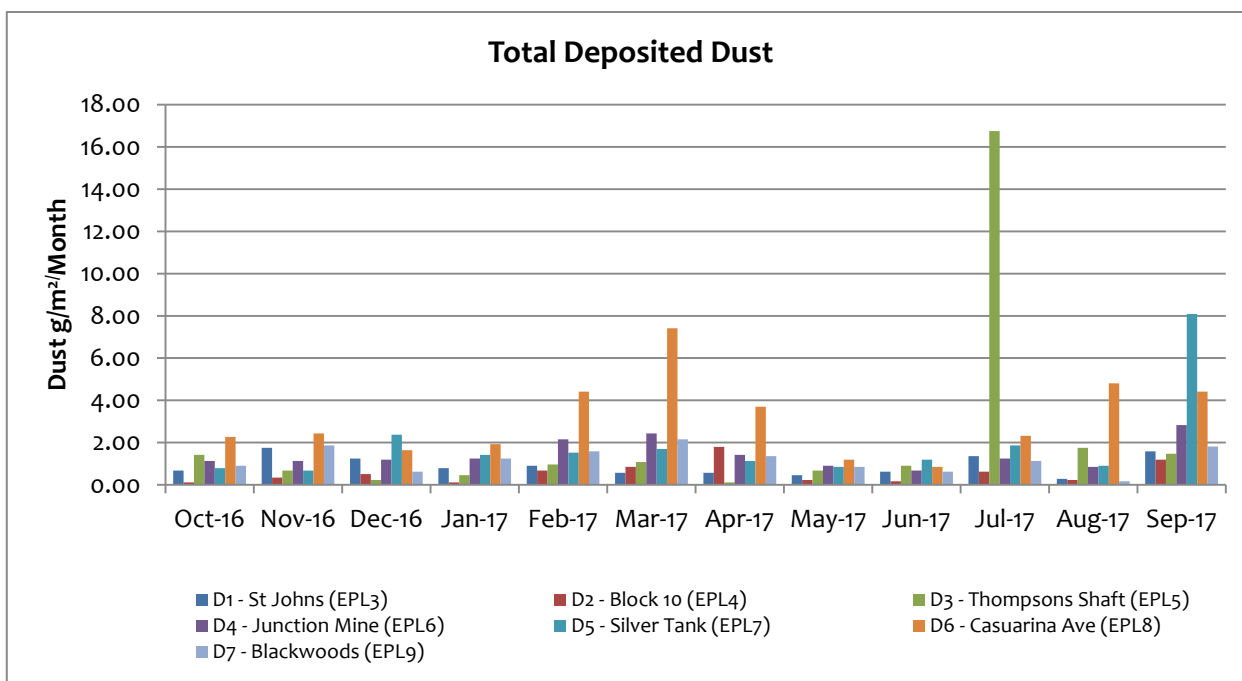
Overall the trend for PM₁₀ at this location remains consistent with the previous 12 months. September through to November is known throughout Broken Hill as a period of high winds and a dust storm occurred on the 23 September impacting results.



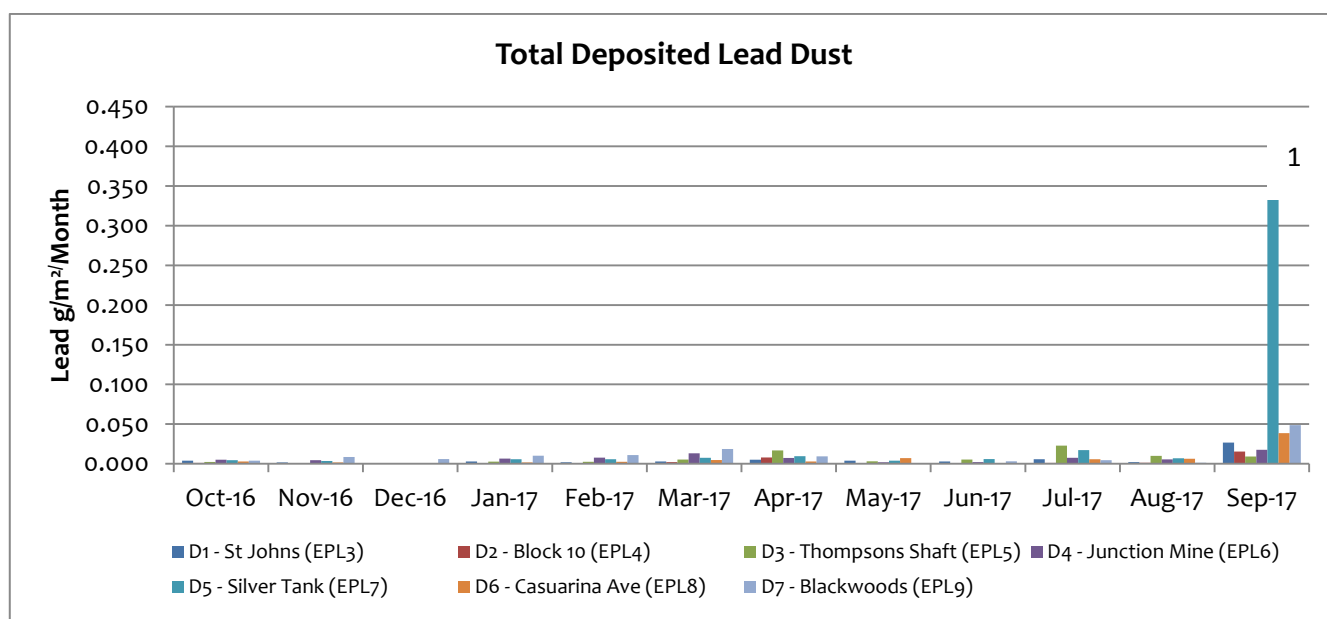
1.3 Dust Deposition Sampling

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.

| Total Deposited Dust (g/m ² /Month) | | | | | | | |
|--|------------------|------|------|------|------|------------------|------|
| Date | D1 (off site) | D2 | D3 | D4 | D5 | D6 (off site) | D7 |
| September 2017 | 1.58 | 1.19 | 1.47 | 2.83 | 8.09 | 4.41 | 1.81 |
| 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 | |



| Total Deposited Lead (g/m ² /Month) | | | | | | | |
|--|------------------|-------|-------|-------|-------|------------------|-------|
| Date | D1 (Off Site) | D2 | D3 | D4 | D5 | D6 (Off Site) | D7 |
| September 2017 | 0.027 | 0.015 | 0.009 | 0.018 | 0.401 | 0.038 | 0.049 |
| Background (2010) | 0.0034 | 0.005 | 0.005 | 0.006 | N/A | 0.004 | N/A |



1 Note: Following an investigation the result for the high reading in September for D5 – Silver Tank (on-site) is unknown and has been identified as probable contamination of the sample.

There is no guideline 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 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 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. 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.

These monitoring points were not scheduled for sampling in September.

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 (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, Italo (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

Blasting Data Summary for September

For Total Blasts:

- 0 production blasts occurred before 6.45 am or after 7.15 pm
- production blasts averaged 4 per week over the previous calendar year
- development blasts, averaged 34 per week over the previous calendar year

For Rest of Mine - Western Mineralisation and Main Lodes:

- 1 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 30 September, 2017;
- % of production blasts over 5mm/sec = 3.6% calculated from 1 August 2016 until 30 September, 2017.

For Block 7:

- 0 Blasts recorded a ppv of >3mm/s
- 0 Blasts recorded a ppv of >10mm/s
- 0 Blasts recorded a ppv of >50mm/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 115dBL or 120 dBL (7am to 7pm)
- % of all blasts over 3mm/sec = 0% calculated from 1 August 2016 until 30 September, 2017;
- % of production blasts over 3mm/sec = 0% calculated from 1 August 2016 until 30 September, 2017.

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 monitoring is scheduled for completion in March, June, September and December.

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) September 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) |
|----------------------|--|-----------|-----------|-----------|--------------------------|-----------|-----------|-----------|-----------|------|-----------|------------------------|------------|-----------|
| Shaft 7 (EPL53) | 10 | 2.24 | 501 | 1670 | 12590 | 1.51 | 1.6 | 327 | 387 | 6.58 | 1610 | 5610 | 13000 | 1000 |
| Kintore Pit* (EPL54) | Not undertaken | | | | | | | | | | | | | |

* Sampling not undertaken for underground mine water extraction - error by operator.

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 (SO ₄), total dissolved solids |
| 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 | |



| Description | Frequency | Parameters to be Analysed |
|-------------------------------|---------------------------------|---------------------------|
| Horwood Dam EPL34/Horwood Dam | 2 x per year , six months apart | (TDS) and zinc (Zn) |
| Upstream Bonanza St EPL35 | 2 x per year , six months apart | |
| Downstream Sydney Rd EPL36 | 2 x per year , six months apart | |

Surface water was not scheduled for monitoring in September.

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)

| 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 |

Summary of Weather Data for September

| 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) |
|----------|---------------------|----------------|----------------------------|----------------------------|----------------------------------|
| 01-09-17 | 10.2 | 21.7 | 0.7 | 9.8 | North |
| 02-09-17 | 15.5 | 27 | 1.8 | 15.5 | North |
| 03-09-17 | 11.06 | 16.7 | 0.5 | 13.6 | WSW |
| 04-09-17 | 7.1 | 15.8 | 1.2 | 12.7 | West |
| 05-09-17 | 5.3 | 15.7 | 1 | 10.6 | WSW |
| 06-09-17 | 6 | 15.9 | 0.6 | 6.9 | WSW |
| 07-09-17 | 7.7 | 16.4 | 0.9 | 8 | SW |
| 08-09-17 | 6.9 | 16.2 | 0.8 | 9 | SSW |
| 09-09-17 | 5.5 | 16.6 | 0.1 | 6.3 | South |
| 10-09-17 | 9.5 | 20.8 | 0.3 | 6.1 | NW |
| 11-09-17 | 14.9 | 26 | 1.6 | 12.2 | North |



| 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) |
|----------|------------------------|----------------|-------------------------------|-------------------------------|--|
| 12-09-17 | 19.2 | 30.1 | 0.6 | 15.4 | North |
| 13-09-17 | 7.1 | 16.6 | 0.8 | 14.5 | SW |
| 14-09-17 | 5.3 | 16.1 | 0.6 | 10.1 | SW |
| 15-09-17 | 8.2 | 17.9 | 0.1 | 7.8 | SW |
| 16-09-17 | 9.2 | 17.9 | 0.4 | 8.4 | South |
| 17-09-17 | 7.4 | 21.5 | 0.3 | 9.7 | North |
| 18-09-17 | 13.5 | 25.8 | 0.8 | 17.2 | North |
| 19-09-17 | 6.2 | 17.2 | 0.2 | 8.7 | SSW |
| 20-09-17 | 10 | 22.4 | 0.1 | 7 | North |
| 21-09-17 | 14.9 | 27.8 | 0.7 | 12.1 | North |
| 22-09-17 | 15.5 | 32.1 | 0.2 | 16.4 | North |
| 23-09-17 | 19 | 34.1 | 1.5 | 17.8 | North |
| 24-09-17 | 14.4 | 23.4 | 0.4 | 15.7 | NW |
| 25-09-17 | 10.6 | 20.2 | 0.1 | 7.3 | South |
| 26-09-17 | 12.2 | 27.1 | 0.8 | 9.1 | ENE |
| 27-09-17 | 20.6 | 30.5 | 0.8 | 15.2 | ENE |
| 28-09-17 | 12.2 | 20.2 | 0.2 | 9.3 | NW |
| 29-09-17 | 10.3 | 21.3 | 0.5 | 10.9 | South |
| 30-09-17 | 11.9 | 17.6 | 1.5 | 9 | South |

5 Data Log

| Sample | Result Received |
|----------------------------------|-----------------|
| Hi Volume Samples | 10-Nov-17 |
| TEOM | 01-Sept-17 |
| Dust Deposition | 16-Oct-17 |
| Water | 10-Nov-17 |
| Blast Vibration and overpressure | 01-Sept-17 |
| Weather | 01-Sept-17 |

6 Correction Log

There are no corrections to the previous reports.