

RIXS CREEK NORTH & RIXS CREEK SOUTH COMMUNITY CONSULTATIVE COMMITTEE MEETING

MEETING: 19/10/2017

PRESENT: Chairperson- Councilor – Sarah Lukeman.
Community Representatives – Reg Eveleigh (RE), Michelle Higgins (MH), Deidre Olofsson (DO) and Lyn MacBain (LMB).

Company Representatives – Garry Bailey (GB), Luke Murray (LM), Chris Knight (CK), Chris Quinn (CQ), Hannah Bowe (HB) (Minutes).

APOLOGIES: Greg Hall, David Moran and Patricia Bestic.

Meeting commenced 09:10 am at Rixs Creek North board room.

1 AGENDA

- Councilor Sarah Lukeman chaired the meeting.

2 PECUNIARY INTERESTS

- MH mentioned physiotherapy practice had been awarded provider agreement with Company.

3 PREVIOUS MINUTES

- DO did not access previous meeting minutes due to email going to “Junk” folder in Outlook.
- SL mentioned that the non-compliances listed in SECTION 10 INDEPENDENT AUDIT OF RCS RESULTS lacked references and discussion.
- Minutes of meeting 01/06/17 Accepted. Moved RE, Seconded DO.

4 BUSINESS ARISING.

- **DO queried** the re-submission of the 2016 Annual Environmental Management Review (AEMR), stating that distribution of the AEMR alludes to the assumption that DPE has accepted and approved the document. DO requested that clear notification be provided in regards to the status of the AEMR. CQ & GB explained that the Final Rix's Creek AEMR document is submitted to DPE and distributed to the community simultaneously.

5 PRESENTATION OF ENVIRONMENTAL MONITORING RESULTS FOR JANUARY – JUNE 2017

OVERVIEW

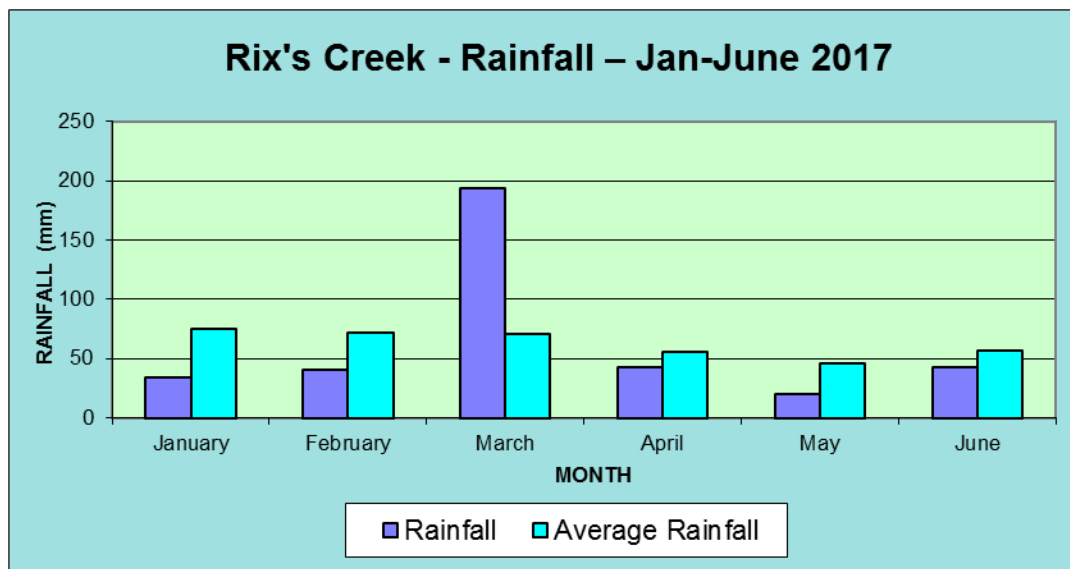
- Presentation of environmental monitoring results for the period January to end June 2017 for Rixs Creek North (RCN) and Rixs Creek South (RCS).

- The Bloomfield Group have continued to run the Rix's Creek Mine site now known as "Rix's Creek South" whilst operating the former Integra Open Cut operations known as "Rix's Creek North".
- Glencore's Integra Underground Mine transitioned from Care & Maintenance to operational in May 2017.
- The first Glencore coal was washed and rail loaded by Rix's Creek in June 2017.
- Senior Environmental Officer John Hindmarsh has transitioned into a period of extended leave prior to his retirement after 22 years at Rix's Creek Mine.
- Chris Knight commenced in the Environment Manager Position for the Bloomfield Group on the 10th October 2017.
- 3-yearly Independent audit of RCN and RCS audit to be conducted October 2017.



- During the Jan – June 2017 period the main loading units were the Liebherr R9800 and the Hitachi EX5500 and EX3600-1 excavators in RCS and in RCN the Cat 6060, 6040 and the Hitachi EX3600-2 excavators. In early July 2017 the Liebherr R9800 was relocated to RCN. In October 2017 the CAT6040 was sold.
- Both sites maintain multi bench style sequence of mining with simultaneous rehabilitation following the pit progression.
- Sound attenuated plant includes the majority of the CAT 789 dump trucks, Liebherr R9800 and CAT 6060.

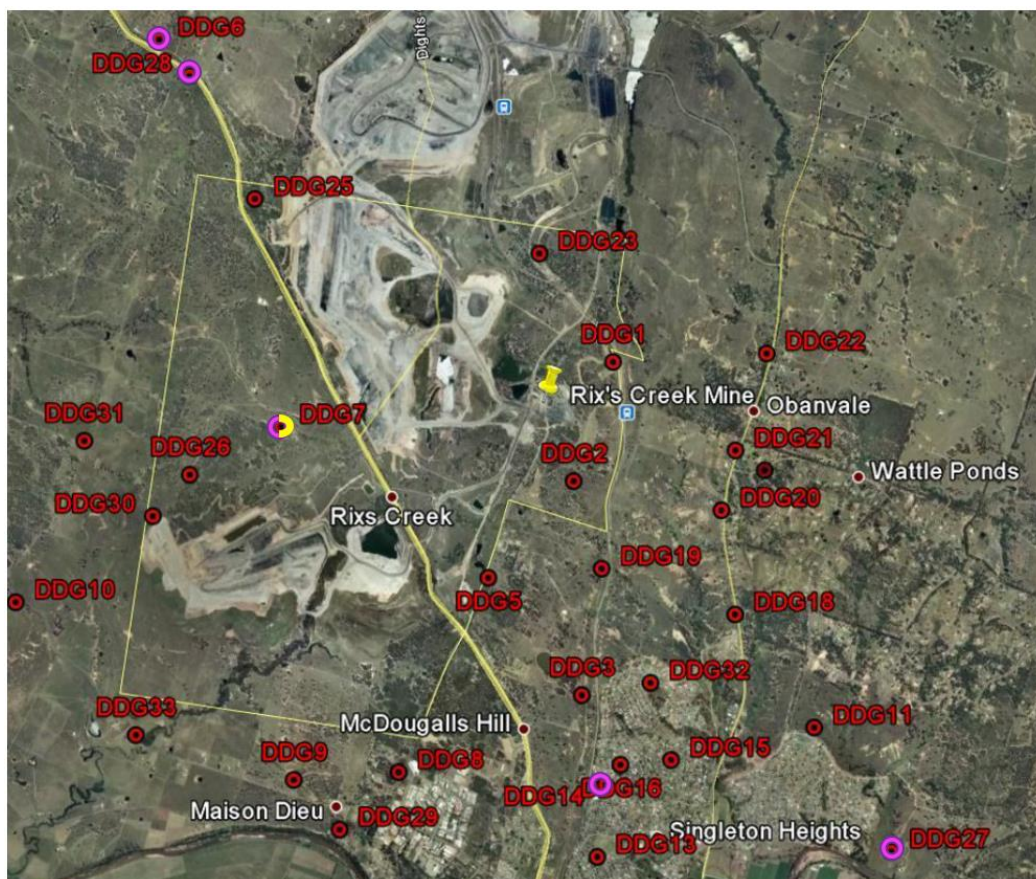
WEATHER



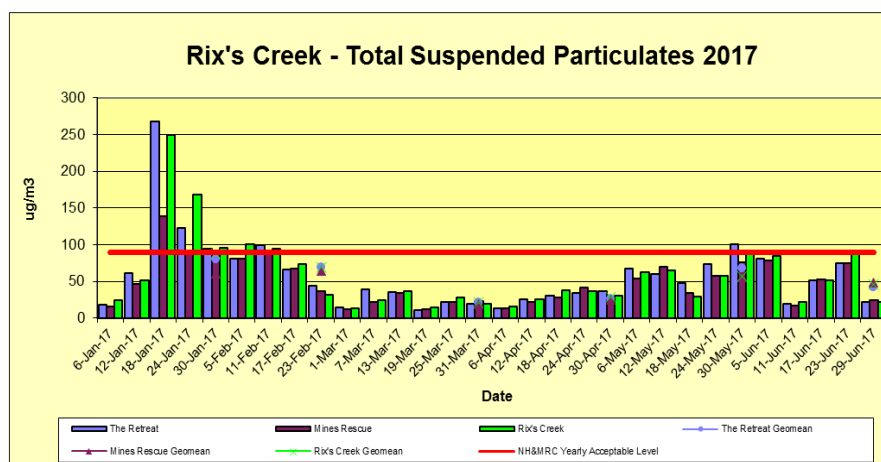
- Rain during the Jan – June 2017 period was 3.5 mm below average.
- March rainfall was 193.75 mm.
- Predominant winds during the period were similar to previous years: During Jan-March from the SE. April was a transition month from SE to NW. May and June were predominantly from the NW.

AIR QUALITY

- **Depositional Dust Gauge:** In March 2017 five depositional dust gauges exceeded the annual average of 4 g/m²/month (DDG6, DDG7, DDG14, DDG27 and DDG28) and in June one gauge exceeded annual average of 4 g/m²/month (DDG7). MH asked why these exceedances occurred and GB explained that all of the gauges that experienced high results were situated in very close proximity to the operation. SL asked where DDG7 was located as this gauge exceeded the monthly limit on two occasions. CQ identified the location of DDG7 on the map and explained that DDG7 is located north of the West Pit and a very short distance from the active mining operation.

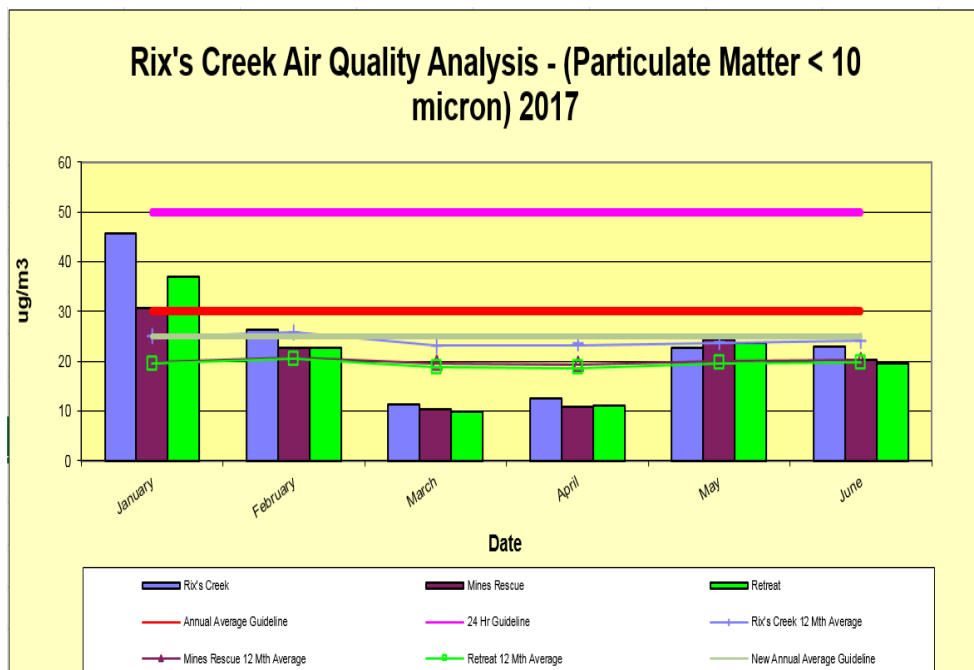


- To fulfil the requirements of the EPA and to facilitate the capture of improved air quality data at Rix's Creek Mine, TEOMs were relocated both upwind and downwind of the mine site to align with the predominant wind direction.
In April and May 2017 the EPL reporting requirements in relation to Air Quality monitoring were modified. This included;
 - 2 TEOM units were relocated and commenced monitoring. 1 TEOM was commissioned at the NW location off Glennies Creek Road
 - 28 DDG's were removed from EPL reporting requirements – 2 DDG's now remain.
- TSP and PM10 results across all sites were elevated in January and early February following above average summer temperatures and strong NW winds.

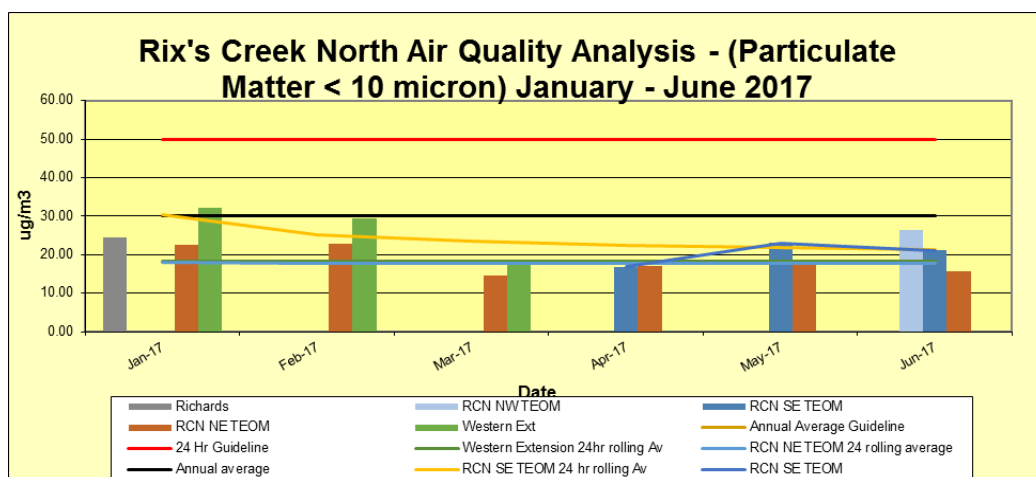


- The rolling twelve monthly PM10 averages of HVAS units were all below the annual average level of 30 $\mu\text{g}/\text{m}^3$ (Rix's Creek 23.4 $\mu\text{g}/\text{m}^3$, Mines Rescue 20 $\mu\text{g}/\text{m}^3$ and Retreat 19.3 $\mu\text{g}/\text{m}^3$).

The 50 $\mu\text{g}/\text{m}^3$ 24 hour limit during the period was exceeded on 4 occasions in the period. Two occasions at the Rix's Creek site with readings of 88 $\mu\text{g}/\text{m}^3$ during 18th Jan and 59 $\mu\text{g}/\text{m}^3$ during 24th Jan. One occasion at the Mines Rescue site with a reading of 53 $\mu\text{g}/\text{m}^3$ during 18th Jan. One occasion at the Retreat site with a reading of 80 $\mu\text{g}/\text{m}^3$ during 18th Jan.



- The rolling twelve monthly PM10 averages of TEOM units were also all below the annual average level of 30 $\mu\text{g}/\text{m}^3$ (RCN NE TEOM 18.0 $\mu\text{g}/\text{m}^3$, Western Extension 19.9 $\mu\text{g}/\text{m}^3$ and RCN SE TEOM 20.5 $\mu\text{g}/\text{m}^3$).



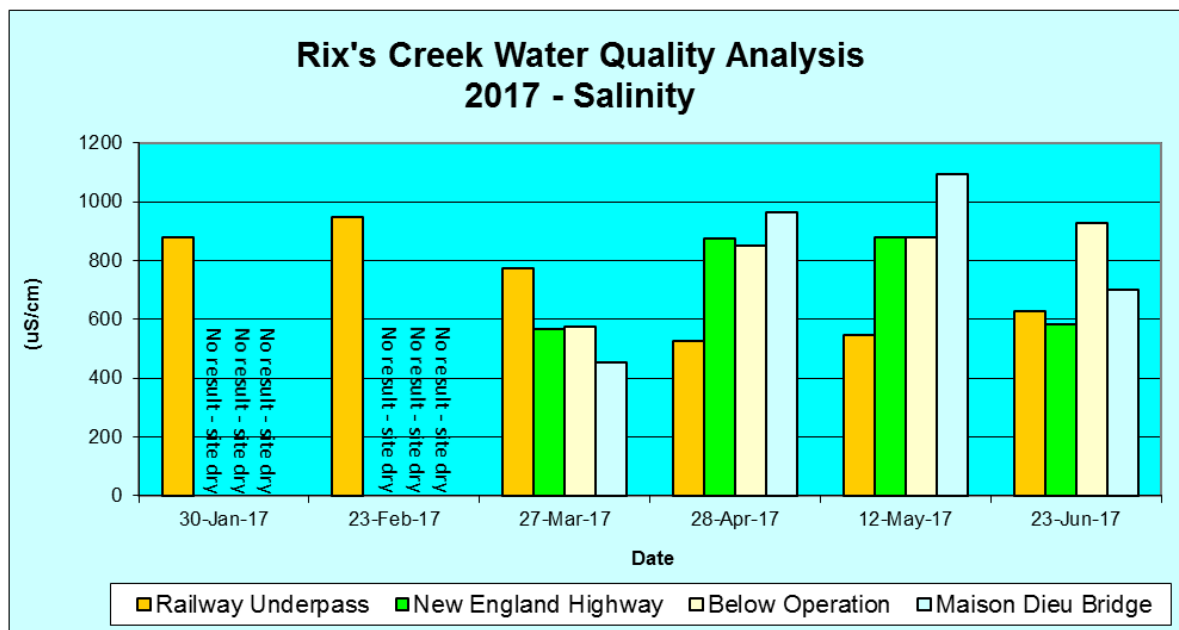
- CQ explained** the Pulse shift report for 18th Jan 2017 which highlighted the operational changes made as a result of the hot, dry and windy conditions to manage potential dust.
- Question** - LMB asked how much water was distributed via water carts on this day. CQ responded that this information is collected and that Rix's Creek Mine has the capacity to operate 6 watercarts and 1 smaller ACCO watercart to minimise dust on days with unfavourable weather conditions.
- Investigation and assessment of the four exceedances during the period showed that the levels of particulate matter from the Rix's Creek North and South did not exceed the contribution criteria for PM10.
- MH commented** that the variation to the Ambient Air Quality NEPM document has reduced the annual average level from 30 $\mu\text{g}/\text{m}^3$ to 25 $\mu\text{g}/\text{m}^3$ and noted that some annual averages of

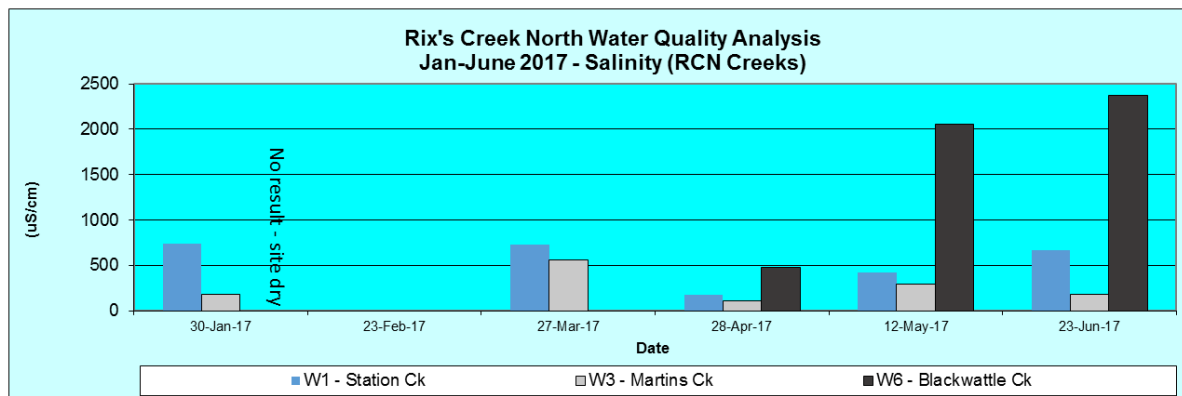
Rix's Creek sites are close to 25 $\mu\text{g}/\text{m}^3$. CQ explained that Rix's Creek operates to the development consent requirements which stipulate a 30 $\mu\text{g}/\text{m}^3$ annual average.

- **Question** - MH asked what other strategies are in place when weather conditions are poor. GB said that the national average levels as well as the EPA's spring 2017 dust forecast trial reflect the strong focus placed on strategies for air quality improvement.
- **Question** - MH asked what the consequences for the mine are if there is a breach of a requirement. GB explained Industry faces government penalties for failure to meet requirements.
- **LMB commented** on the health issue of heatstroke and the impact that this could have on Rix's Creek operators. GB explained that the majority of Rix's personnel are working in air conditioned conditions, that all Rix's Creek personnel are provided with appropriate PPE, supplies and education to manage heatstroke and that all Rix's Creek personnel have a responsibility to identify and manage risks such as heat stroke.
- **Question** - DO asked when the mining industry will stop operations due to adverse weather conditions posing health and environmental concerns. It was explained that Rix's Creek have demonstrated that operations can and do stop as necessary.
- **Question** - SL asked if dehydration was measured via colour coded urine. GB stated that that particular education and signage has been provided previously.
- **Question** - SL asked if a separate presentation would be appropriate in the future and CQ stated that this was an area he could discuss with the safety department. LMB stated that this conversation may fall outside the scope of a Community Consultative Committee. CQ explained it will be raised with the safety department.

WATER QUALITY

- Both sites undertake monthly analysis of water sampling sites.
- No water complaints received or water incidents recorded / occurred during the period.
- Both RCS and RCN annual full-suite water analysis to be undertaken second half of 2017.
- All sites had results similar to previous years with the only stand out results seen in Blackwattle Creek's increasing salinity after being dry for 4 months. Blackwattle creek only flows under high rainfall and is generally stagnant in dry conditions.





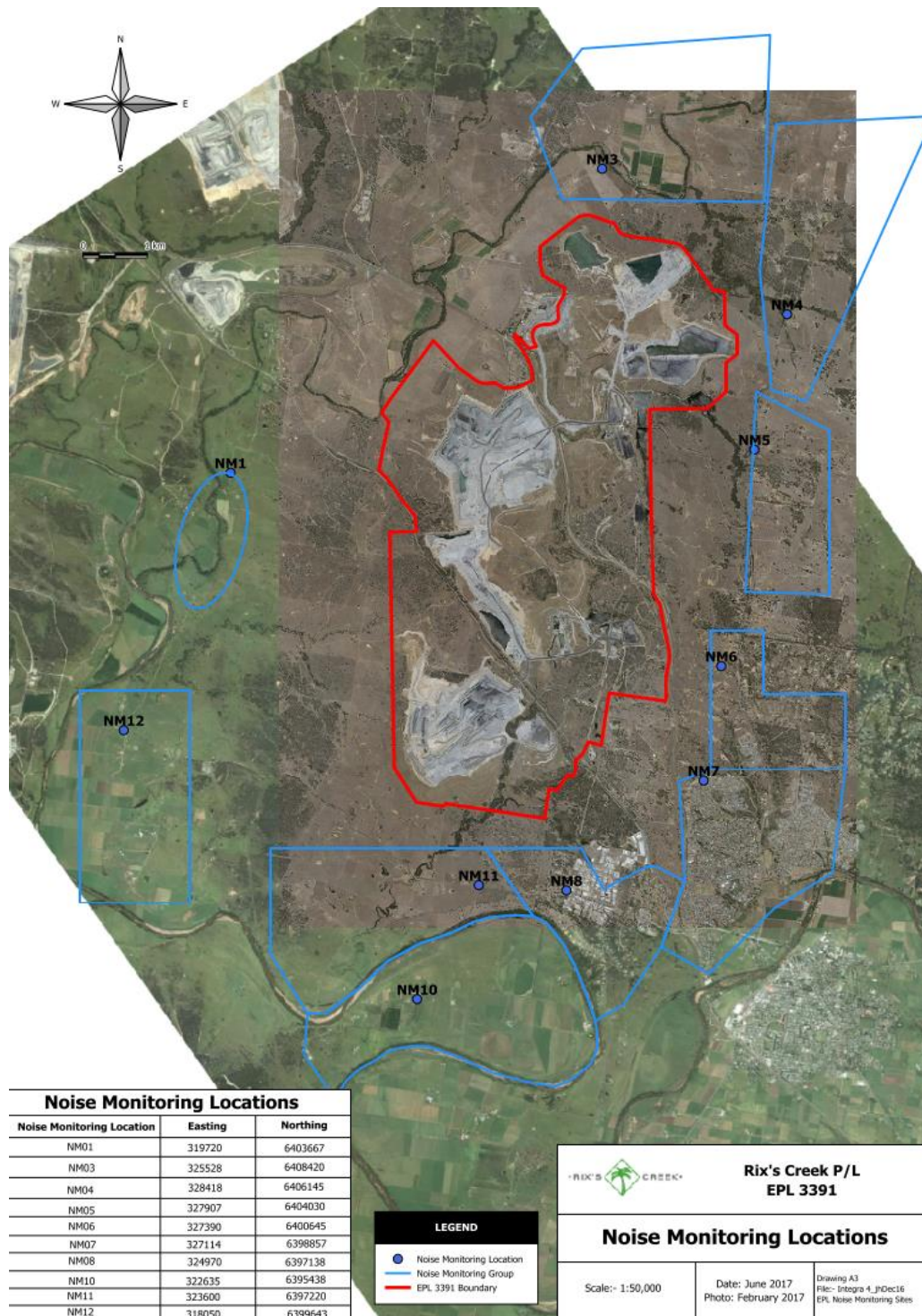
NOISE

- The Environmental Protection Licence 3391 was varied in August 2017 to include changes to Noise Limits.
- Joint access arrangement with Glencore to use the Sentinex Noise Monitor located at Camberwell Village to meet requirement for real time noise monitoring. Alarms are received by Rix's Creek personnel when approaching noise limits to activate attended noise monitoring and, if required, modification to operations prior to any exceedance. Alarm level is 2dB lower than Noise Criteria Limit.
- The requirement for 72 hour LA10 design goal was removed from the EPL. Noise monitoring has shifted toward industry best practice of LAeq 15min average. The RCN and RCS noise monitoring limits defined in the EPL are referred to below:

L3 Noise limits

L3.1 Noise generated at the premises must not exceed the noise limits in the Table below.

Location	Day/Evening/Night LAeq (15 minute)	Night LA1 (1 minute)
EPA 29 and NMG1	40	48
EPA 30 and NMG3	40	45
EPA 31 and NMG4	37	49
EPA 32 and NMG5	41	47
EPA 33 and NMG6	42	47
EPA 34 and NMG7	40	45
EPA 35 and NMG8	40	47
EPA 36 and NMG10	40	47
EPA 37 and NMG11	40	47
EPA 38 and NMG12	40	47



- **GB explained** that the RCS 95 Consent noise limit figures were indicative noise goals and that in recent years Rix's Creek have been operating under a noise pollution reduction plan that was reflective of what would commonly be expected under the Industrial Noise Policy. Now, Rix's Creek is reporting under Industrial Noise Policy best Industry practice.
- Monitoring for the period was undertaken during March and June 2017. Additional monthly attended monitoring was undertaken by an independent noise consultant during January – June 2017. Additional nightly noise monitoring by Rix's Creek personnel was undertaken during every night of production throughout this period for maintaining site compliance.
- Throughout both March and June 2017 no non-compliances occurred as per the project specific noise criteria. During the noise assessments the mine noise was audible but within operational noise limits.

- Twenty-seven complaints and four enquiries were received during the January to June 2017 period regarding noise.
- **Question** - DO asked why there was only one stationary real-time noise monitor. GB responded that due to the complex noise environment around Rix's Creek Mine nightly attended noise monitoring has proved to be the best method.
- **Question** - DO asked if the Sentinex has the correct direction suited towards Rix's Creek mine and the answer was yes. CQ noted that receiving a noise alarm via the Sentinex unit would initiate attended noise monitoring nearby the locality.
- **Question** - DO asked what is cumulative noise and if it includes the New England Highway (NEH), train line and other mines? CQ responded that our attended noise monitoring measures the noise from Rix's Creek mining operations and eliminates all other identifiable noise sources such as dogs and traffic via the "pause reading" function, DO responded that she would investigate more clarification on cumulative noise definition elsewhere.
- **Question** - LMB asked if temperature inversions were considered in the noise prediction model and the answer was yes. LMB continued that the community in general may not understand the complex nature of the prediction model.
- **Question** - SL asked if there are any mine noise exceedances or complaints with the predictive measures in place and CQ answered that mine noise enhancement still does occur however the attended noise personnel have the benefit of being able to monitor areas of enhancement early and make operational changes if necessary. GB further explained that the predictive model is a beneficial tool as it provides the forecast information 24hrs prior so that mining plans can be accustomed early in the day to suit the noise conditions forecast for that night.
- **Question** - DO asked if two complaints are received at once what the response plan is. CQ explained that Rix's Creek have a Trigger Action Response Plan in place that details the procedures to follow. HB commented that attended monitoring would be conducted at locations nearby each resident consecutively - the model would be reviewed to determine which reading would be conducted first.
- **Question** - MH asked if there has been occasions when noise complaints have been received from residents located in different areas or on opposite sides of the operation, HB answered no.
- **Question** - MH asked if operational changes made due to noise limits have a conflicting effect on residents elsewhere. GB answered that this was unlikely due to the nature of most noise changes being reduce speed, shut downs, lower dumps etc. GB added that continued monitoring throughout the night after a complaint confirms continued compliance.
- **CK commented** that the current internal procedures, efforts and systems related to noise monitoring that are in place at Rix's Creek Mine exceed the response procedures of compliance protocols.

BLASTING

- 69 production blasts initiated into overburden during the Jan – June 2017 period.
 - 41 were located in the West pit
 - 28 were located in the Camberwell Pit.
- No blasts exceeded vibration or overpressure levels. No reportable incidents from blast fume occurred during the Jan-June period.
- Three blast complaints were received during the period.

REHABILITATION

- An approximate area of 2ha was tree seeded during April across the Arties Pit rehabilitation areas to create habitat corridors. Approximately 5ha of pasture rehabilitation was completed from March to June.
- 4730 Tube stock were planted during May. 1530 Tube stock were planted during May along the Rix's Creek South entry lane visual bunds, clean water diversion behind ROM pad noise bund, West Pit Out-Of-Pit-Dump and the Ernst Property located on the New England Highway for visual amenity.

- Glennies Creek Riparian enhancement program provided an additional 3200 plants which were planted along Glennies Creek during May and June 2017.
- Rehabilitation for the second half of 2017 will be focussed on RCN Camberwell Pit RL150, RCS Arties Pit - Pin Dump, RCS South Pit Rehab and RCN Falbrook Pit batters as areas become available.
- **Question** - MH asked what the success rate of the tube stock is and are they getting watered. CQ answered yes the trees are watered monthly and the success rate will ultimately be weather dependant – we do practice re-planting.
- **Question** - MH asked how much top soil is used. CQ answered the standard top soil depth is still 100-200mm.
- **DO** commented that Visual Screen works are not rehabilitation.
- **Question** - DO asked if Rix's Creek use OGM/compost material as this material may contain plastics – CQ answered no, we use Biosolids. DO stated that Vale-Integra Operations historically used OGM Compost on the rehabilitation and asked how much plastic was present in this material. CQ responded that we are unsure of the volume of plastic that might be present in the Vale-Integra rehabilitation and stated that we would need to investigate this via soil testing and analysis.
- **Question** - MH asked if there are long term studies on Biosolids and how they perform over the long term. CQ responded that we have established rehabilitation from as early as 1994 (23 years) where Biosolids has been utilised. CQ also stated that we have the 4ha comparative rehab trial which compares the ongoing differences of Biosolids and OGM use.
- **LMB** commented that native trees do not advance under high phosphorous conditions and that Biosolids soils are high in phosphorous. CQ responded that this is known to the company and we mitigate this in a number of ways such as areas that are intended for native tree seed or tube stock are spread with a lower rate of Biosolids, and/or a cover crop / slash /rip prior to direct tree seed methodology to effectively reduce the levels of phosphorous that may affect tree seed propagation.
- **Question** - MH asked if Rix's Creek have a compliance licence in place to utilise Biosolids on site. CQ answered yes – there is a waste exemption in place.
- **Question** - MH asked if it is human waste and CQ answered yes it is a composted human by-product from sewerage treatment facilities.
- **Question** - MH asked if there are erosion control in these stages (rehab topsoil etc.) CQ & CK replied yes – there are designs, sediment dams in place, ripping across slope not down slope, bunds and contours in place.

- **Question** - DO asked if the Rix's Creek CCC will be receiving an independent chair. CQ answered that DPE are still organising the final pool of potential independent chair people and confirmed that it will be a new application process and not an automatic transition.
- **DO** commented that there was no mention of native Flora or Fauna at Rix's Creek Mine and suggested that details of pest control be provided e.g. wild dog baiting programs conducted and the number of baits taken reported.
- **SL** commented that there was no mention of the weed control that has occurred at Rix's Creek Mine during the Jan – June period.
- **Action** – A Land Management Slide will be included in the next presentation.
- **LMB** commented that the St. Clemente Church near Camberwell Village is not receiving any deterioration preventative measures from either Rix's Creek Mine or Ashton Mine. CQ responded that unlike the Dulwich Homestead and James' Glennies Grave the St. Clemente Church falls outside our Heritage Management Scope.
- **SL notified** the CCC that UMWELT Chief Auditor Daniel Sullivan will be conducting an Environmental Audit on Rix's Creek in the coming weeks – SL asked the CCC members to contact her privately if there were any particular areas that members were concerned with that they would like Daniel Sullivan to increase audit focus.
- **SL** commented that site water balance information was not included in the presentation and should be included in the next presentation. SL also commented that waste management data was not included and that the next presentation should include waste data (e.g. waste oil and oil filters) including total figures, procedures and locations of the receptive facilities. CQ noted this and explained that the Site Water Balance and waste management are included in the AEMR. The half yearly report that Rix's Creek has historically provide to the community is not a development consent requirement and is used to inform the community of the environment progress throughout the year.
- **MH** commented that soft plastics recycling should receive increased focus.
- **Question** - LMB asked how much diesel is consumed on site per annum.
- **DO** commented that there is generally a community component for an enforceable undertaking and asked if the community received any resources regarding the Rix's Creek Enforceable Undertaking. GB responded that the consent order in Land and Environment Court identified areas of potential impact and established agreements with the Company based on those views – these identified potential impacts were Aboriginal Heritage and the Hunter River. Bloomfield Group contributed one \$25,000 payment to local Indigenous program 'Hunter Research Health' and one \$25,000 payment to Singleton Council for improvement works on the Hunter River. In addition to this, there was a requirement that additional annual independent environmental audits be conducted at each Bloomfield site (Bloomfield Colliery, Rix's Creek North and Rix's Creek South).
- Details of the 2016 AEMR amendment are available at www.bloomcoll.com.au

7 NEXT MEETING.

A meeting date of Thursday the 24th May 2018 at 9am is proposed at the Rix's Creek South training room.

Meeting Closed 11:35 am.

8 MINE TOUR.

- A mine tour was conducted from approximately 11:45 am.
- Two light-vehicles utilised.
- First vehicle passengers: GB (driver), CQ, RE, SL.
- Second vehicle passengers: LM (driver), CK, MH, HB.
- LMB and DO were not able to participate in the mine tour.
- Mine tour departed from Rix's creek North administration building and drove across the Main Northern Railway Bridge to the RL100 level viewing platform where the active Rix's Creek North operation was viewed. The tour then continued around the Rix's Creek South Arties Pit rehabilitation and existing established rehabilitation was identified and explained. The tour then proceeded to the Rix's Creek South Pin Dump rehabilitation area where recently completed and not yet established 2017 rehabilitation was viewed by the tour participants.

- The tour then returned back to the Rix's Creek North administration building via the RL100 road and the tour commenced at approximately 12:30pm.