# RIXS CREEK NORTH & RIXS CREEK SOUTH COMMUNITY CONSULTATIVE COMMITTEE MEETING

**MEETING:** 01/06/2017

**PRESENT:** Chairperson- Councilor . Sarah Lukeman.

Community Representatives . Reg Eveleigh (RE), Patricia Bestic (PB) and Michelle

Higgins (MH), Deidre Olofsson (DO), David Moran (DM).

Company Representatives . Garry Bailey (GB), Luke Murray (LM), John

Hindmarsh (JH), Chris Quinn (CQ) (Minutes).

APOLOGIES: Lyn MacBain, Greg Hall. Company representative Hannah Bowe

Meeting commenced 10:05 am at Rixs Creek North board room.

# 1 AGENDA

É Councilor Sarah Lukeman chaired the meeting.

#### 2 PECUNIARY INTERESTS

- É Patricia Bestic mentioned legal practise where she works had done work on property sales and for Aboriginal groups.
- É Michelle Higgins . mentioned physiotherapy practise had been awarded provider agreement with Company.
- É Sarah Lukeman . mentioned her husband was general manager of a mining operation in the valley.

# 3 PREVIOUS MINUTES

Minutes of meeting 20/09/16 Accepted. Moved Patricia Bestic, Seconded Reg Eveleigh.

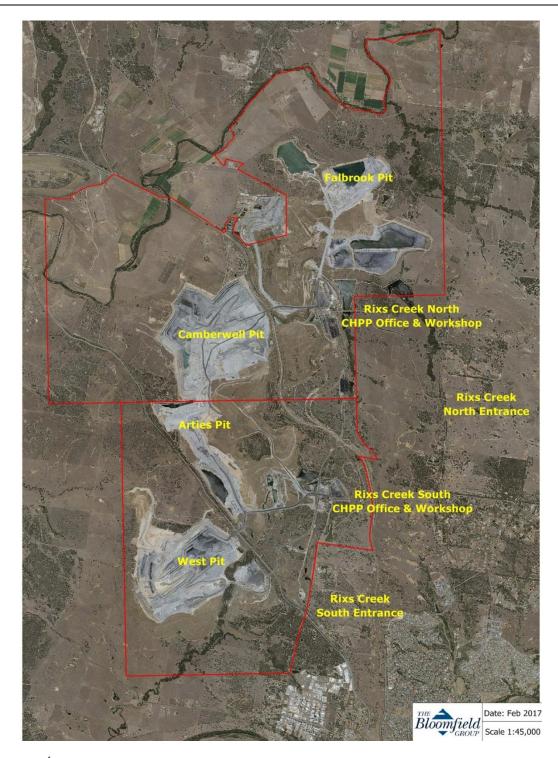
## 4 BUSINESS ARISING.

Nil.

# 5 PRESENTATION OF 2016 ENVIRONMENTAL REVIEW REPORT.

# **OVERVIEW**

- É Presentation of Annual Review Report for the period January to end December 2016 for Rixs Creek North (RCN) and Rixs Creek South (RCS).
- É On the 18th December 2015 Glencore acquired of 100% of Integra Coal Operations in which The Bloomfield Group subsequently purchased, from Glencore, the previous Integra Open Cut Operations, CHPP, Train loading infrastructure and Rail Loop.
- É The Bloomfield Group have continued to run the Rixos Creek site now known as %Rixos Creek South+ whilst operating the former Integra Open Cut operations known as %Rixos Creek North+:



- É Rixqs Creek North transitioned from Care & Maintenance to operational first part of 2016. First Overburden was removed in April 2016. First coal in May 2016. Currently mining a much lower rate than the former ownerqs (Integra).
- É Glencore retain ownership of the Integra Underground Mine and will continue to manage Integra Underground Mine in Care and Maintenance. Operations recommence May 2017.

Question: Separation from the Rixos Creek North Open Cut and Glencoreos Integra Underground operations.

A part lease transfer of CL382 is currently being processed. And that generally land to the east of Glennies Creek, with the exception of the UG surface operations and land from Nobles Lane to the Northern Rail line, resides with the OC operations and land to the west of Glennies Creek resides with Integra UG operations. There is an

agreement is in place for RCN Coal Handling Preparation Plant (CHPP) to wash UG coal. Once ROM coal leaves the head rollers from the UG operations it will be the responsibility of Rixs Creek Mine to manage the environmental aspects of transporting and washing the coal.

**Question:-** Is Rixs Creek using any water allocation from Glennies Creek to wash the coal in the RCN CHPP.

Mine water storage from D1 dirty water Dam will be used to wash the UG coal and that tailings will be deposited within the RCN Tailings Dam 2 emplacement area,

#### SECTION 1 STATEMENT OF COMPLIANCE

- É Rixs Creek North . Project Approval 08\_102 Mod 6 had noncompliance with Schedule 3 Condition 33 . Surface Water Discharges during heavy rains in January 2016
- É Rixs Creek South . Development Application 49/94 Mod 8 had noncompliance with Condition 15 . Off-site water release during heavy rains in January 2016.
- É RCS undertook Independent Environmental Audit report in line with . Section 10

# **CONSENTS, LEASES & LICENSES**

- É EPL 3391 varied to cove retire site . 18th Dec 2015
- É Varied December 2016 . Real time air quality monitoring
- É Variation pending to update outdated conditions & include noise
- É RCN Project Approval 08\_102 Mod 6
- É Mod 4 Biodiversity offset variation
- É Mod 5. Run coal both ways. both approved Feb 2016
- É Separate opencut & underground consents. Sept 2016
- É RCS Development Application 49/94
- É Mod 7 enable coal mined at each site to be processed and handled at the other site - Feb 2016
- $\acute{\rm E}~$  Mod 8 . ROM coal to be stockpiled on 2 satellite pads . reduce congestion on ROM pad at CHPP. Dec 2016

#### **OPERATIONS SUMMARY**

É Rixqs Creek North PA08\_0102 Production Summary RCN coal washed at RCS CHPP in 2016

Material	Approved limit	Previous Reporting Period	This Reporting Period	Next Reporting Period
Waste Rock / Overburden	N/A	0 BCM	4.825m BCM	8.090m BCM
ROM Coal / Ore	4.5 Million Tonne per annum (western OC)	Ot	915,010 t	1,969,335 t
Coarse reject / Fine reject (Tailings)	N/A	Ot	0 t*	968,894 t
Saleable product	N/A	Ot	462,393 t	1.011mt

É Rixcs Creek South DA49/94 Production Summary \*Combined tailings from RCN and RCS operations

Material	Approved limit	Previous Reporting Period	This Reporting Period	Next Reporting Period
Waste Rock / Overburden	16.1 Million BCM total material movement as per	13.364m BCM	13.534m BCM	13.4m BCM

	DA 49/94 Mod 6			
ROM Coal / Ore	N/A	2.847m t	2.662m t	2.7m t
Total Material Movement on Site . Overbruden + Coal	16.1 Million BCM total material movement as per DA 49/94 Mod 6	14.503m BCM	15.132m BCM	14.48. BCM
Coarse reject / Fine reject (Tailings)	N/A	1.341m t	1.732m t *	1.2m t
Saleable product	N/A	1.505m t	1.377 t	1.5m t

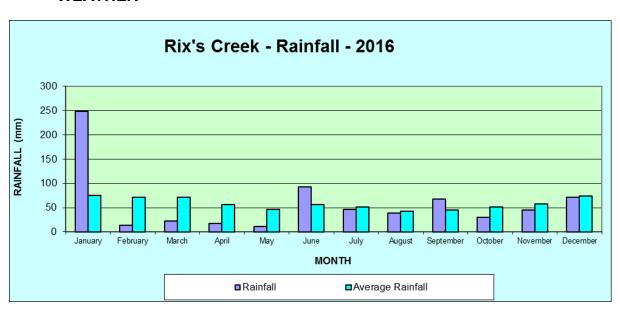
É Rixos Creek North and Rixos Creek South operations will be operating as a complex not individual sites.

# **WASTE VOLUMES**

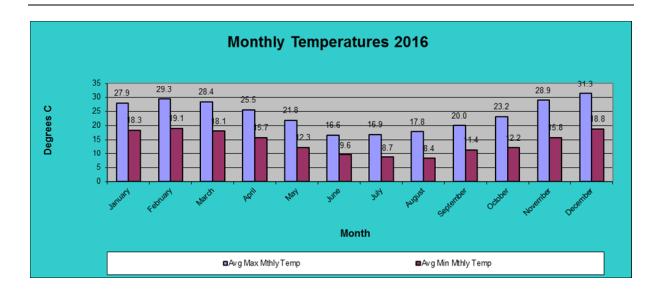
10	tal for year 2016	
É	Waste Oil	63,000 I
	Waste Metal	123.2 t
É	General Waste	112.5 t
É	Paper/Cardboard	11.4 t
É	Oil Filters	10.5 T

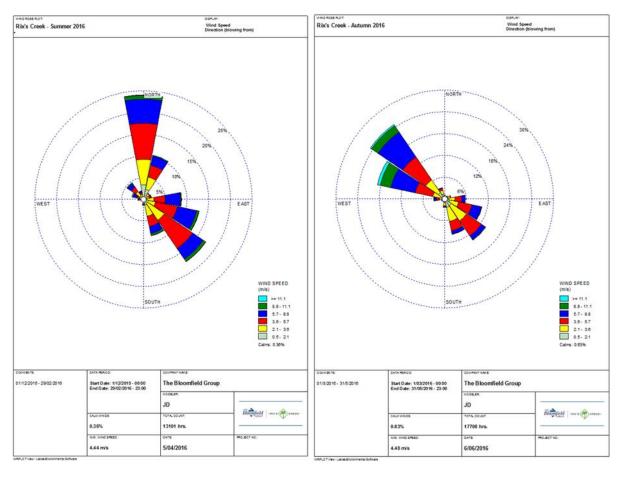
# **SECTION 6 ENVIRONMENTAL PERFORMANCE**

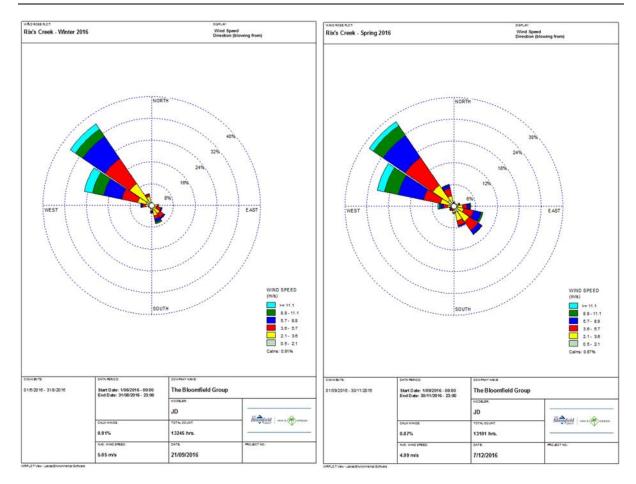
# **WEATHER**



É 2016 Rainfall 705.75 mm Average 698 mm







# **NOISE**

- É Proposed to change monitoring in line with current recommended best practise.
  - Compliance monitoring Monthly attended monitoring was undertaken by an independent noise consultant
  - Nightly noise monitoring by Rix
     « Creek personnel to manage offsite operational noise levels.
- É No exceedances occurred as per the project specific noise criteria.
  - Mine noise was audible on several occasions.
- É 38 noise complaints 6 noise enquiries received operational noise.
  - 33 complaints from 2 residents in Maison Dieu and McDougalls Hill

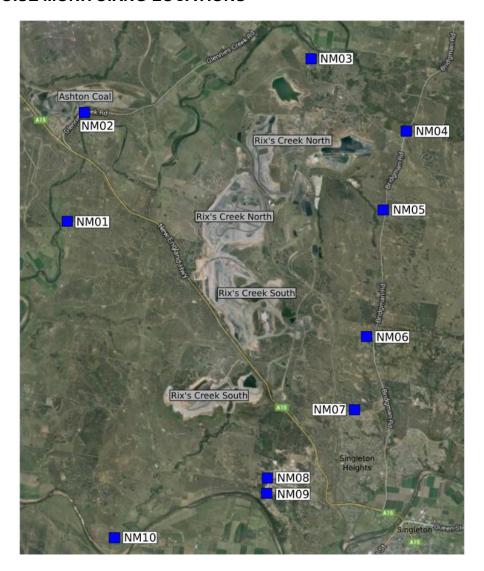
# **RIX'S CREEK NOISE MONITORING CRITERIA**

NMP ID	EA Ref. (ICO/RCM) <sup>1</sup>	Rix's Creek North		Rixs Cree	k South
		L Aeq,15minute dB	L <sub>A1,1minute</sub> dB	L <sub>Aeq,15minute</sub>	L <sub>A1,1minute</sub> dB
NM01	132/171	38	48	40	48
NM02	91/NA	40	47	40	47 1
NM03	47/NA	39	45	NA	NA

NM04	19/12	37	49	42	48
NM05	11/8	41	47	42	48
NM06	145/19	36	48	42	47
NM07	NA/61	NA	NA	42	45
NM08	NA/152	NA	NA	40	47
NM09	NA/121	NA	NA	40	47
NM10	NA/135	NA	NA	40	47

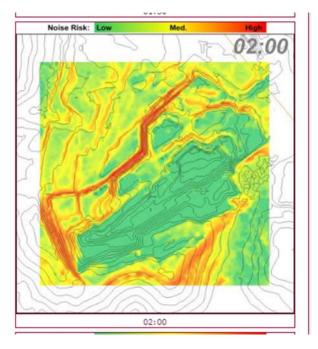
Notes: 1. Criterion set as for Rixs Creek North in the absence of data in the EIS; and 2. NA indicates criteria not applicable at that location, as it was not included in the relevant EA, EIS or Project Approval.

# **NOISE MONITOIRNG LOCATIONS**



# Noise Enhancement: 1 2 3 4 5 - 92:00

# PREDICTIVE NIOSE MODEL OUTPUTS



- É JH provided an overview of operational noise management which included updates to the predicitive noise model. JH explained how the noise model has been modelled in reverse to determine where where noise contributors may be positioned within the OC operations. The Red highlighted areas within precitive model simulate heavy equipment locations that could contribute to noise enhacement offsite. JH said that this additional tool helps operations make more informed decisions on where the likely noise contributors are positioned.
- É MH said that a nearby resident spoke to her while she was conducting shopping and discussed Rixos Creek mines noise for an extended period of time.

#### Question:- Do we have real time monitors around the mine?

Site personnel that conduct noise monitoring at areas that show enhancement on the predictive noise model. Every night that Rix¢ Creek are operational a person is out conducting noise monitoring at the various noise monitoring locations. Due to the complex noise environment that includes the New England Highway, the Northern Rail Line and populated areas that surround the mine, having a stationary noise monitor that cant filter out mine noise from other noise contributors. Having a person out in the community at night conducting noise monitoring and reporting the noise levels back to the shift supervisor is Rix¢ Creek method for managing noise.

- É There is a trigger action response plan (TARP) in place that is followed in case elevated noise samples from operations are recorded. Once the noise sampler identifies an elevated noise reading, this information is communicated to the Shift Supervisor so operational changes can be made to reduce noise. Also, if there is a complaint, having a person during the night conducting noise monitoring provides the flexibility for a noise sample to be taken near the complainants residence to determine if noise levels are within compliance.
- É Out of the 38 noise complaints received during the 2016 reporting period, 33 complaints were registered from 2 residences.

Question:- Why Rixos Creek Mine was singling out two residences as believed this was unfair?

In the Maison Dieu area the majority of residences are privately owned and that if only two residences are contributing to majority of the noise complaints that the vast majority of private residences may not be impacted by operational noise. JH said that hypothetically if 38 noise complaints were received from different residences within the Maison Dieu locality then this would trigger Rixs Creek to investigate further.

Question:- Singling out two residences shouldnot of been included in the 2016 Annual; Review?

É Two CCC members didn¢ have any objections with reporting that two residences from the Maison Dieu location contributed to the majority of the noise complaints for the 2016 period because it was a factual statement and not designed to intent ally single out any repeat complainants.

#### **BLASTING**

- É 153 production blasts initiated into overburden during 2016.
  - o 108 were located in the West pit
  - o 45 were located in the Camberwell Pit.
- É Of the 153 blasts the fume ratings recorded were as follows:-

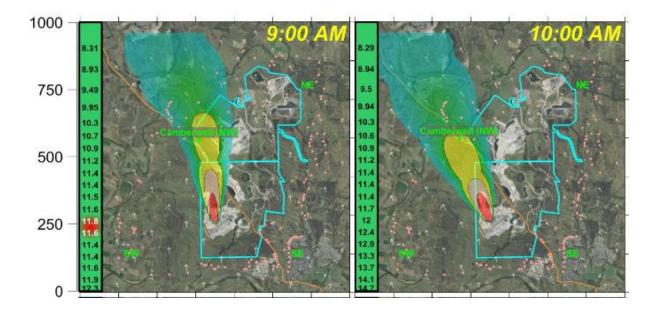
Rating		A	В	С
0	100	-	-	-
1	-	45	1	-
2	-	5	2	-
3	-	-	-	-
4	-	-	-	-
5	-	-	-	-

- É 9 complaints were received by the Company relating 7 blasts
  - o 60 blasts cancelled or rescheduled due to unfavourable weather conditions
- É Predictive Model for Blast Fume and Dust

Question:- If the blasts were filmed that are fired at Rixqs Creek?

Rixes film the blast and record the blast until the dust cloud dissipates.

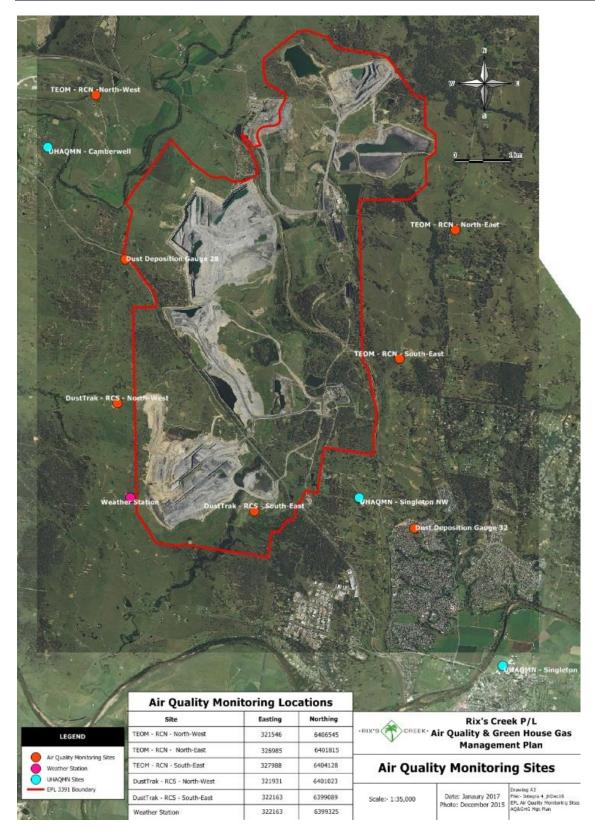
É The fume management plan which involves rating fume on colour and dispersion. The fume prediction tool explained and that based on the fume prediction, gas monitors are set out determine the gas contribution of the blast for every shot.



# **AIR QUALITY**

- É Previous monitoring requirements
  - 30 Dust Deposition . no gauges exceeded annual average of 4 g/m2/month.
  - 3 Total Suspended Particulate samplers
  - 3 PM10 samplers
- Real-Time Monitoring upstream and downstream of the operation  $\circ$  3 TEOM units RCN

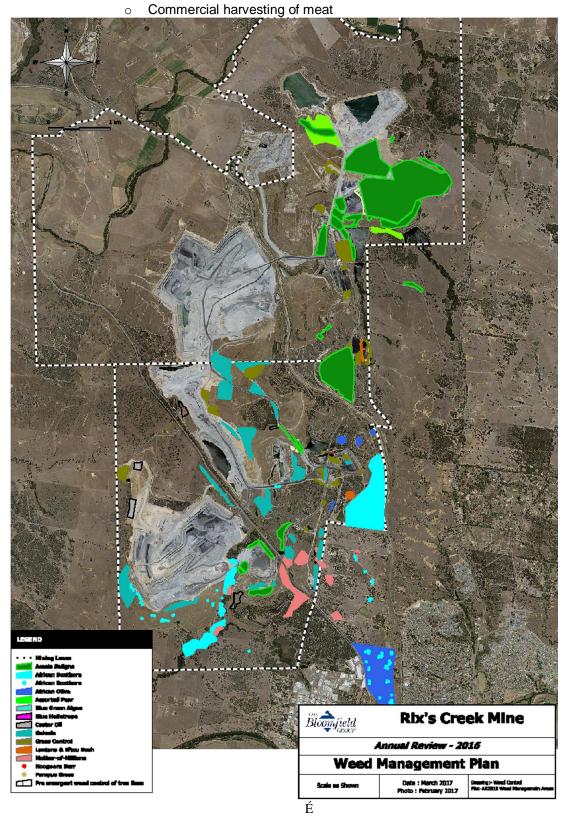
  - 2 DustTrak units RCS
  - UHAQMN . Singleton NW & Camberwell.
  - 2 Deposition Gauges
- É 5 complaints were received in relation to air quality during the 2016 reporting period.
- An EPL variation was approved in consultation with EPA to monitor upstream and downstream dust contributions from Rixcs Creek Mine. Real time dust monitors have been relocated to better determine the dust contribution from Rixs Creek Mine.



# **WEEDS & PESTS**

- Weed Spraying conducted throughout the year

  O Number of species including wild olive & Acacia saligna
  Wild Dog baiting program conducted during May 2016
- - 31 ground baits laid
- Population control of Kangaroos conducted 2nd half of year



# **SECTION 7 WATER MANAGEMENT**

# **SURFACE WATER**

- É RCS undertook full-suite water analysis during June 2016 with RCN undertaken second half of 2016.
- É All sites had results similar to previous years with the only stand out results seen in February 2016 at the Maison Dieu and Blackwattle Creek sites:
- É Two water incidents occurred during the period .
- É January 2016. 141.5 mm over a 72 hour period
- É 5 sediment containment dams overtopped (three at RCS and two at RCN)
- É All site sediment dams -reviewed & cleaned / increased in capacity as necessary.
- É The incident report is provided in Appendix 6 of the report.
- £ 1 inquiry received 11th January 2016 from Camberwell potential release of water into Glennies Creek on 29th December 2015 from RCN.
- É Inspection of the site -no evidence of any water being released from the site.

#### Static Water Balance Rix's Creek North 2016

Water Stream	2016 (ML)
Inputs	
Imported Fresh Water	0
Imported Potable	10
Groundwater & Spoil Seepage To Portal	511
Groundwater Seepage To Open Cuts	100
Underground Dewatering	0
Rainfall Runoff . Into Dirty Water System	2,165
Recycled to CHPP from Tails & Storage (not included in total)	0
Water from ROM Coal	0
Total Inputs	2,783
Outputs	
Groundwater Seepage Out	0
Dust Suppression . Water Carts	145
Exported to Other Mines . Dirty Water	0
Evaporation Fans & Sprays (Operated Jan . Oct)	0
Evaporation - Mine Water & Tailings Dams	1,350
Entrained in Process Waste	0
Water in Product Coal	0
Potable Usage	10
Total Outputs	1,505
Estimated Change in Pit Storage (increased)	1,278

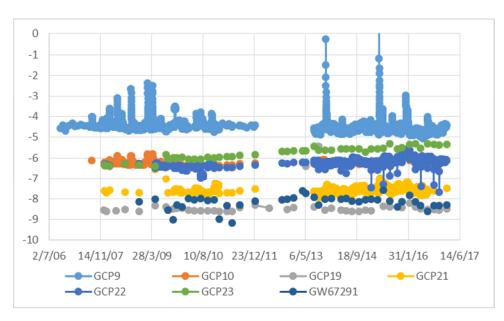
# Static Water Balance Rix's Creek South (2016)

Water Stream	2016 (ML)
Inputs	
Imported Fresh Water	
Imported Potable	10
Groundwater Seepage To Open Cuts	47
Underground Dewatering	0
Rainfall Runoff . Into Dirty Water System	1,749
Recycled to CHPP from Tails & Storage (not included in total)	(646)
Water from ROM Coal	187
Total Inputs	1,919
Outputs	
Groundwater Seepage Out	0
Dust Suppression . Water Carts	611
Exported to Other Mines . Dirty Water	0
Evaporation Fans & Sprays	0
Evaporation - Mine Water & Tailings Dams	427
Entrained in Process Waste	572
Water in Product Coal	124
Potable Usage	10
Total Outputs	1,744
Estimated Change in Pit Storage (increased)	249

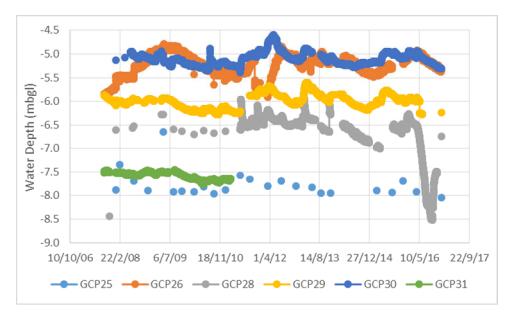
#### **GROUNDWATER**

- É RCN monitor . 29 bores
- É RCS monitor . 8 bores
- É RCN
  - Around Falbrook pit . no response to alluvial groundwater levels outside normal variation
  - Camberwell pit . GCP28 2 m in May 2016 but shown signs of recovery in December 2016, others showed no unusual variation
- É RCS
- É Groundwater levels maintained consistent since monitoring commenced in 2010

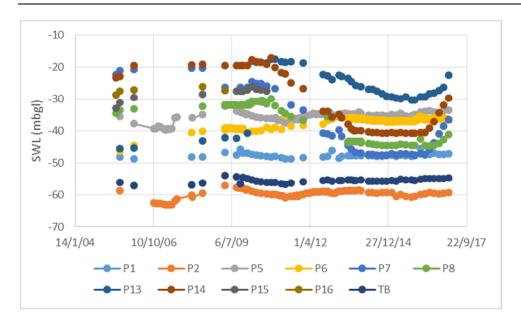
# **RCN GROUNDWATER**



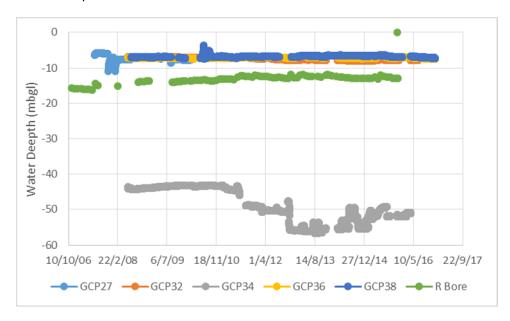
# Falbrood Open Cut Alluvium Water Levels



Glennies Creek Alluvium Water Levels

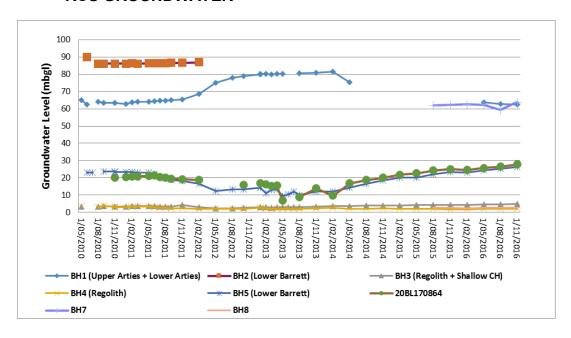


# Falbrook Open Cut Basement Water Levels



Camberwell Open Cut Basement Water Levels

# **RCS GROUNDWATER**



# **SECTION 8 REHABILITATION**

É RCN . 18.7 ha Cumulative Total . 391.9 ha 30.3 ha behind MOP total



Falbrook Pit . Stoney Creek Road batter rehabilitation facing west

 $\acute{\rm E}$  RCS - 27 ha Cumulative Total . 423.1 ha 22.9 ha ahead of MOP total

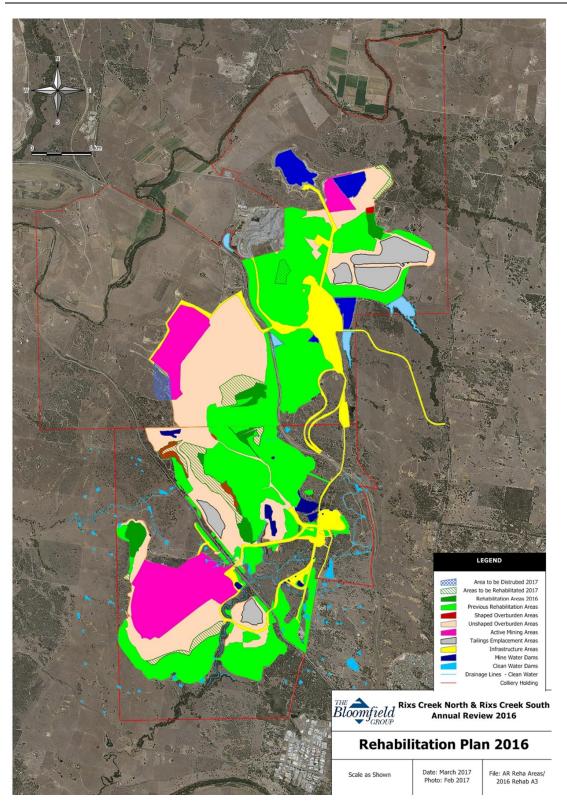


Arties Pit . pin dump batter (visible from New England Highway) and RL140 dump . tree seeded areas

- É Total 45.7 ha rehabilitation sown to pasture completed June,
- É 7 ha of tree seed completed in April,
- É 5270 tubestock planted 1000 reeds planted during June following good rainfall.
- É Approximately 6 km of clean water drains installed on rehabilitation areas during April.
- RCS has met MOP target for 2016 of 423.1ha cumulative (22.9 ha ahead) RCN 18.7 ha cumulative hectares 391.9 ha being 30.3 ha behind MOP target.



Arties Pit dump facing north-west . photo taken while spreading topsoil over subsoil



Question:- What was the final land use classification of the Rehabilitated land?

The final land use classification was Class 4 and Class 5. The final land use form has a combination of derived grasses and established native tree corridors within the Rixs Creek site.

#### **SECTION 9 COMMUNITY**

É CCC meetings

É Integra - February 2016 . Final meeting

At that meeting it was decided to disband the Integra CCC with members with an interest in the opencut operation to combine with the Rixs Creek CCC and members with an interest in the underground to combine with the Mt Owen CCC.

É RCS. Committee members joined - 10/5/2016, 22/9/2016

Chairperson:- Councillor Val Scott

Community representatives:- Patricia Bestic

Reg Eveleigh

Michelle Higgins

Integra members:- Lyn McBain,

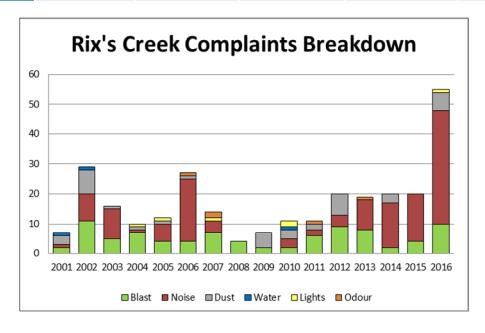
Deidre Olofsson, Greg Hall; and David Moran.

New Chairperson:- Councillor Sarah Lukeman

# **COMPLAINTS**

2016 Complaints						
	Noise	Dust	Water	Lights	Odour	Total
	38	5	0	1	0	53

	Total:						
Email	Email Hotline phone DPE EPA						
1	1 10 34 5 3						



# **SECTION 10 INDEPENDENT AUDIT OF RCS RESULTS**

# 4.1.1 Development Consent (DA49/94)

The non-compliances identified with DA49/94 are detailed in Table 4.1 below.

Table 4.1 Non Compliances with Development Consent (DA49/94)

Condition	Non-Compliance	Risk Level
Schedule 2, Condition 1A	Not all of the conditions of the Project Approval have been complied with. See risk ratings for each individual condition.	Low
Schedule 2, Condition 3	Non-compliances have been recorded during the audit period for legislative acts and agencies as detailed within this condition and these are discussed in Section 4 of the report.	Low
Schedule 2, Condition 6(c)	No formal building maintenance program was implemented to specifically review the maintenance of buildings.	Administrative
Schedule 2, Condition 7	Site lighting has not been confirmed with Singleton Council that it is managed to their satisfaction.	Administrative
Schedule 2, Condition 9	The Traffic Management Plan was not approved by the Secretary prior to the commencement of the tunnel construction activities.	Administrative
Schedule 2, Condition 11	Noise monitoring is not undertaken in accordance with the requirements of this condition as noise monitoring is not undertaken on a quarterly basis, monitoring is undertaken on a 6 monthly basis.	Low
Schedule 2, Condition 14	The area of disturbance onsite reflected the extent of disturbance as approved at the end of the MOP term (2020) and therefore ground disturbance was ahead of the schedule within the MOP; and  Not all sprays on site, including the coal stockpile, are automatic.	Medium
Schedule 2, Condition 14A	No evidence was available to confirmation that the NGERS Report had been undertaken to the satisfaction of the Secretary.	Administrative

umw

Condition	Non-Compliance	Risk Level
Schedule 2, Condition 15	Sections of the Water Management Plan did not include the information required below:     Describe measures to minimise water use by the development.     detail that visual monitoring of flow volume will be undertaken.     process for monitoring yield into the open cut.     process for monitoring impacts to baseflow and offsetting as required any loss of base flow, impacts to private land owners caused by Rix's Creek Operations.	Low
Schedule 2, Condition 16A	A copy of the Landscape Management Plan marked 'final' was not forwarded to the Singleton office as requested by the DP&E. The Final Void Management Plan was not submitted to the DP&E by the due date. The Mine Closure Plan was not submitted to the DP&E by the due date.	Administrative
Schedule 2, Condition 16B	Sections of the Rehabilitation Management Plan did not include the information required below:  procedure to protect vegetation and soil outside the disturbance areas.  procedure to manage impacts on fauna.  procedure to landscape the site to minimise visual impacts.  procedure to conserve and reuse topsoil.  information regarding the salvage and re-use of material.  monitoring program to include all measures in 16B(v) and effectiveness of these measures.  clearly state who is responsible for monitoring and reviewing the plan.	Low
Schedule 2, Condition 16D	Sections of the Mine Closure Plan did not include the information required below:     objectives and criteria for mine closure for ML 1432 and completion criteria for each domain.	Low
Schedule 2, Condition 19	Sections of the Annual Environmental Management Reports/Annual Review did not include the information required below:  - updated water balance for the reporting year not included each year as required Note it was included in 2015 Annual Review.  - not all reports were submitted by the due date.  - Specific targets for the next year have not been included in the 2011 2015 reports.	Low
Schedule 2, Condition 28	Not all management plans / programs were revised following the submission of an incident report under Condition 19 or modifications of the Development Consent to the satisfaction of the Secretary.	Low

ULLIAN

Condition	Non-Compliance	Risk Level
Schedule 2, Condition 29	Management plans have not been updated as required by Condition 28 of the Development Consent.     Some management plans have been updated without consultation being undertaken with all parties nominated by the Development Consent. No agreement with the Secretary was sought to revise the management plans without consultation with relevant parties.	Low

Table 4.2 Non Compliances with EPL 3391

Condition	Non-Compliance	Risk Level	
M2.1	During the audit period, there have been a number of instances where dust gauges have not been able to be sampled due to the dust gauge being broken. These non-compliances have been reported annually to the EPA in the Annual Return.	Low	
L1.1	Overflow of sediment dams and mine water dam at clean coal stockpile, rail loading facility and mine water dam (DWD 3) (see Section 6.2.2).	Low	
L2.2	Five deliveries of waste oil were received without analysis undertaken to confirm quality limits as prescribed within the EPL had been met. It is noted that Rix's Creek has ceased utilising waste oil within blasting activities on site.	Administrative	

# 4.3 Mining Authorities

The audit findings indicate that Rix's Creek has achieved a high level of compliance with the environmental management conditions of its Mining Authorities. Rix's Creek hold Mining Authorities CL 352 and ML 1432. The non-compliances identified with Mining Authorities are detailed in Table 4.3.

Table 4.3 Non-Compliances With Mining Authorities

Lease	Non-Compliance	Risk Level
ML 1432 – Condition 2(d) and CL 352 – Condition 3(a) and (b)	Ground disturbance at Rix's Creek has been undertaken at a rate which is in advance of the approved stage plans within the MOP for 2016.	Medium
CL 352 - Condition 2(b) (i)(A)	During the audit period, five incidents were reported related to the overflow of sediment dams and water release to Rix's Creek due to a pipeline leakage and seepage from old underground workings. This is further detailed in Section 6.2.2.	Low

Table 5.1 Rix's Creek Mine Environmental Management Plans

Management Plan	Comments
Traffic Management Plan	The TMP was developed for the construction of the Rix's Creek Mine 'Cut and Cover Tunnel' crossing of the New England Highway. It is noted the TMP was provided to the DPE in 2011 following the commencement of construction of the tunnel. However, the commencement of construction activities was approved by the Roads and Maritime Services (RMS) (formerly Roads and Traffic Authority) in 2010. All relevant approvals had been obtained from the RMS including a number of Road Occupancy Licences throughout the audit period.  At the time of the audit, the relevant controls in the TMP were observed to be implemented by Rix's Creek Mine.
	Not all requirements of the Project Approval were complied with during the preparation of the TMP, comments are provided in Appendix 1 with non-compliances noted in Section 4.
Noise and Vibration Management Plan	The NMP has been prepared as an integrated management plan for Rix's Creek North and Rix's Creek South Mine for the period 2016 – 2019. The NMP was approved by the DP&E on 16 February 2016. It is noted that the NMP has been prepared for Rix's Creek North and South Operations.
	Not all operational requirements of the Project Approval have complied with the NMP, non-compliances and recommendations are noted in Section 4 with further detail provided in Appendix 1. A key issue is related to the noise monitoring which is being undertaken on site which is not consistent with the Development Consent e.g. real time noise monitoring is undertaken and used for operational performance management with attended monitoring undertaken on a monthly basis. This monitoring practice detailed within the Noise Management Plan as approved during 2016 does not outline the requirement for quarterly noise monitoring in accordance with the requirements of Condition 11 of the Development Consent (refer to Section 6.3.2) and therefore noise monitoring as required by the Development Consent is not occurring. Noise monitoring is undertake in accordance with the NMP which has been prepared to conform to the INP, however the monitoring detailed within the NMP is not consistent with the Development Consent. It is noted that Rix's Creek have well developed and implemented predictive noise and blast management systems in place and these are discussed further in Section 6.3.2.
Water Management Plan	The Water Management Plan (WMP) including the Erosion and Sediment Control Plan (ESCP) has been prepared for Rix's Creek Mine and was approved by the DPE on 22 January 2014.  The WMP includes the site water balance, surface water and groundwater monitoring program and response plan. Each of these sections is required to be updated to ensure compliance with the Development Consent has been addressed within the WMP, non-compliances and recommendations noted in Section 4 with further detail provided in Appendix 1. The ESCP has been developed for the site and is compliant with the Development Consent.
	It is noted that Rix's Creek has not been diverted in accordance with MOD 4. The WMP will be updated prior to the diversion of Rix's Creek to include updates on monitoring and rehabilitation.

_			_	_

Management Plan	Comments
Landscape Management Plan	The Landscape Management Plan (LMP) has been prepared for Rix's Creek Mine and was approved by the DP&E on 22 January 2014.
	The LMP is the over-arching document with supporting documents including the Rehabilitation Management Plan, Final Void Management Plan and Mine Closure Plan. Administrative non-compliances with the Development Consent were related to the preparation of the Plans and submission to the DP&E after the required date. Non-compliances and recommendations are noted in Section 4 with further detail provided in Appendix 1.
	The LMP includes a Rehabilitation Management Plan (RMP), Final Void Management Plan and Mine Closure Plan as required by the Development Consent. It is noted that the RMP does not currently reflect the strong rehabilitation practices which are implemented on site and therefore it is suggested that the RMP is updated or prepared as the MOP.
Mining Operations Plan	Rix's Creek developed the Rix's Creek MOP for the period 2013 – 2020 with the MOP approved by DRE on 8 March 2013.
	It is noted that mining operations undertaken at Rix's Creek Mine appear to have been undertaken out to the disturbance extent as defined in "Map 3G – Mining and Rehabilitation – Year 2020" and therefore the existing ground disturbance at Rix's Creek has been undertaken at a rate which is in advance of the approved stage plans within the MOP for 2016. Rehabilitation is progressing in accordance with the schedules for rehabilitation as noted in the Rix's Creek MOP. As noted in Section 6.2.1, Rix's Creek are currently liaising with DRE and DPE in regards to the location of site emplacement areas and the extent of mining undertaken at Rix's Creek.

# 7.0 Recommendations and Conclusion

# 7.1 Recommendations

A summary of recommendations identified as an outcome of the audit process is provided in Table 7.1.

Table 7.1 Consolidated Recommendations

Condition / Issue	Recommendation		
Rix's Creek Mine Development Consent (DA49/94)			
Schedule 2, Condition 4	The Annual Review is to include a summary table which details the total BCM of material moved at Rix's Creek to demonstrate compliance with this condition. Note it was confirmed Rix's Creek have complied with this condition during the audit period.		
Schedule 2, Condition 6(c)	Formal building maintenance program to be developed and included in the Landscape Management Plan.		
Schedule 2, Condition 7	Confirmation should be sought from Singleton Council that site lighting is managed to their satisfaction.		
Schedule 2, Condition 10	The approach with regard to noise compliance monitoring to meet this condition should be agreed with DPE and EPA and included within the Noise Management Plan for approval.		
Schedule 2, Condition 11	Noise monitoring is to be undertaken on a quarterly basis in accordance with the requirements of this condition unless approval is received from DPE and EPA to suggest otherwise. Any approved changes to the monitoring requirements under this condition should be included in the noise management plan.		
Schedule 2, Condition 13	A formal procedure should be prepared to outline the process that is followed onsite to assess and manage operations when the average hourly wind velocity exceeds 10 metres per second.		
Schedule 2, Condition 14	Rix's Creek to work with DRE and seek to amend the MOP to address the extent of current mining disturbance and include in the revised MOP an appropriate rehabilitation schedule.		
	Rix's Creek to consult with DPE regarding the need to install automatic dust sprays at coal stockpiles on site.		
Schedule 2, Condition 14A	Include findings of the NGERs report in the Annual Review for submission to DPE.		
Schedule 2, Condition 15	Water Management Plan to be updated to include the following as required by the condition:  Inclusion of the water minimisation measures identified and implemented on site within the Water Management Plan.  Detail that visual monitoring of flow volume will be undertaken.  Detail process for monitoring yield into the open cut.  Detail the process for monitoring impacts to baseflow and offsetting as required any loss of base flow and impacts to private land owners caused by Rix's Creek Operations.		

Condition / Issue	Recommendation			
Schedule 2, Condition 16A	A copy of the Landscape Management Plan marked 'final' should be forwarded to the DPE Singleton office.			
Schedule 2, Condition 16B	Rehabilitation Management Plan to be updated to include the following as required by the condition:			
	<ul> <li>Procedure to protect vegetation and soil outside the disturbance areas to be included in the monitoring protocol.</li> <li>Procedure to manage impacts on fauna to be included in the monitoring protocol.</li> <li>Procedure to landscape the site to minimise visual impacts to be included in the monitoring protocol.</li> </ul>			
	<ul> <li>Information regarding the salvage and re-use of material to be included in the RMP as the re-use of material was observed to be leading practice during the field inspection.</li> <li>Monitoring program to include all measures in 16B (v) and effectiveness of these measures to be reported in the Annual Review.</li> <li>Clearly state who is responsible for monitoring and reviewing the plan.</li> </ul>			
Schedule 2, Condition 16D	Mine Closure Plan to be updated to include the following as required by the condition:  Include objectives and criteria for mine closure for ML 1432 and completion criteria for each domain in the Mine Closure Plan.			
Schedule 2, Condition 19	Ensure each year that the Annual Review includes the following as required by the condition:  Provide updated water balance for the reporting year. Specific targets for improved environmental performance.			
Schedule 2, Condition 27	Report waste volumes in the Annual Review compared to previous years to enable identification of waste management performance over time.			
Schedule 2, Condition 28 and 29	A process of regular review and revision of management plans should be established to confirm compliance with these conditions.			
Environment Protection Licer	тсе			
EPL Variation  An EPL variation should be sought to ensure that there are no conflicting of between the EPL and DA (example noise criteria).				
Mining Authorities				
ML 1432 – Condition 2(d) and CL 352 – Condition 3(a) and (b)	Rix's Creek should work with DRE and seek to amend the MOP to address the extent of current mining disturbance and include in the revised MOP an appropriate rehabilitation schedule.			
Environmental Performance Recommendations				
Oily Water Separator System	An investigation should be undertaken to assess the effectiveness of the current oily water separator system. As a minimum the overflow tank (refer Plate 3 in Appendix 3) should be replaced with a fit for purpose system that is covered and compliant with current Australian Standards. Further corrective actions are required to clean up the hydrocarbon contamination that has resulted from the failures of the existing system (refer Plate 4 in Appendix 3)			

Waste Segregation	Documented procedures should be prepared for waste management onsite and appropriate bins should be provided and clearly labelled for all designated waste streams.
Hydrocarbon Management	Ensure that all relevant personnel are trained in the requirements of the Rix's Creek Hydrocarbon Management Procedure.

#### 7.2 Conclusion

This IEA has assessed the compliance status of at Rix's Creek Mine with the key approvals in place including the Development Consent for the mining operation, Mining Authorities and the EPL. The audit has identified a number of non-compliances and where appropriate, has made recommendations to improve the compliance status of the operation.

#### **GENERAL BUSINESS**

GB explained that there is a modification proposed for the Rixs Creek South consent and Rixs Creek North consent. The first part of the modification will propose the placement of overburden from Rixs Creek South operations to Rixs Creek North operations. Currently the consent only allows ROM Coal to be transported between sites. The second requirement for the modification is to propose an exploration schedule at the western extent of the Camberwell Pit to better determine the coal resource within the area. An archaeological survey as well as a Flora and Fauna survey will be conducted on the area to determine the impact prior to exploration commencing.

RCS continuation project was discussed, with process update. EIS includes new air quality modelling requirements released by EPA in January 2017.

New England Highway now stable after cracks appeared in 2012. Final fix including drainage yet to be agreed between RMS and insurance company.

# **NEXT MEETING.**

A meeting date of Thursday the 19<sup>th</sup> October at 9am is proposed at the Rixcs Creek North Board room. A site inspection will be undertaken of the Rixcs Creek mine during the meeting.

Meeting Closed 1:01pm.