

**RIX'S CREEK COMMUNITY CONSULTATIVE
COMMITTEE MEETING**

MEETING 12/5/2015

PRESENT: Councillor - Val Scott. Community Representatives – Reg Eveleigh, Patricia Bestic and Michelle Higgins.

Company Representatives – Garry Bailey, Luke Murray, John Hindmarsh (Minutes), Jason Desmond.

APOLOGIES: NSW Planning & Environment (DPE) – Scott Brooks / Chris Knight.

Meeting commenced 9:55 am. No site inspection was undertaken.

1 AGENDA

Councillor Val Scott chaired the meeting.

2 PECUNIARY INTERESTS

None reported.

3 PREVIOUS MINUTES

Minutes of meeting 9/09/2014 Accepted. Moved Reg Eveleigh Seconded Val Scott.

4 BUSINESS ARISING.

Chris Knight now in DPE and Rix's Creek site contact. Previously Ann Hagerthy (maternity leave).

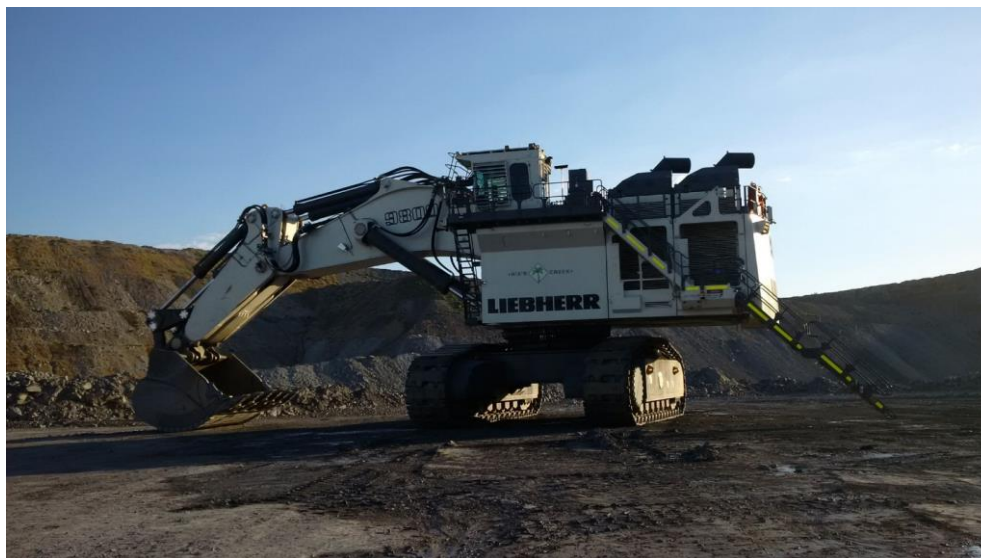
5 PRESENTATION OF ENVIRONMENTAL MONITORING REPORT.

SUMMARY

- Presentation of Annual Environmental Management Report (AEMR) for the period January to end December 2014 for Rix's Creek (RC).

ACTIVITY

- Operations continuing in Pit 3 (West Pit) which is focus of operation and dumping in Pit 1 (North Pit) since last coal removed January 2014. Previously Hitachi EX5500 excavator, Hitachi 3600 excavator and Marion 305 Dragline in Pit 3. Dragline sold and removed from site February 2014. This was replaced with the new Liebherr R9800 excavator to increase overburden production.



Production for 1st January 2014 to the 31st December 2014 was:-

Overburden removed	13.234 million BCM
Run-of-mine coal	2.761 million t
Clean coal	1.482 million t

- Rix's Creek previous production level limit was 15 million bank cubic metres (bcm) of total material movement per year – The purchase of the Liebherr 9800 has been successful to the extent that continued production at current levels would have resulted in an exceedance of the production limit by 6 to 7 percent by the end of 2014. To alleviate this Rix's Creek submitted a Development Consent Modification # 6 to the NSW Department of Planning & Environment (DPE) for an increase in the yearly total movement of material limit. This increase from 15 million bcm to 16.1 million bcm was approved in November 2014.
- Main changes across site for 2014 include the New England Highway visual bunds, the construction of an out-of-pit emplacement area west of Pit 3 and Tailing's Dam #2 rehabilitation works over a large area.
- 30 exploration drill sites were drilled ahead of the operation on land previously not owned by the company. This drilling was done to attain full extent of coal resource and existing coal measures.
- Other changes across site included CHPP upgrades by going from 1 Solid-bowl centrifuge (SBC) unit to three for tailing's drying and co-disposal in-pit moving away from tailing's dams

RIX'S CREEK MINE COMMUNITY CONSULTATIVE COMMITTEE MEETING MINUTES – 12/05/2015

- Tailing's Dam # 3 stopped being used in May 2014 with the approved Tailing's Dam # 4 taking its place.

WEATHER

- New real-time weather station was installed April 2014 near West Pit dump.



Rix's Creek new weather-station located near Granbalang trig-station RL160

- Rainfall for 2014 was 606.75 mm which was 91.25 mm below average for the year. Was a drier year with noticeable above average rainfall months being March and December.

AIR QUALITY

Insoluble solids deposition results.

- The year to date average of all of the gauges from January to December was 1.9 g/m²/month, which is slightly lower (5%) than the 2013 year to date average of 2.0 g/m²/month. Interesting as 2014 was particularly drier than these previous years in which slightly higher results would have been expected.

QUESTION: Is dust management on site only reactive i.e. to high readings regarding Dusttrak units set up across Pit 3?

No. Proactive through predictive weather models for 48 hours ahead of operation as well as predictive blast dust/fume models and noise models. A lot of operational planning now done with weather forecast in place to manage air quality, blasting and noise. Consultant currently developing site-specific predictive dust model to forecast when operations need to be modified or shut-down prior to weather event occurring. Not only environmental benefits but operational outcomes assisting production.

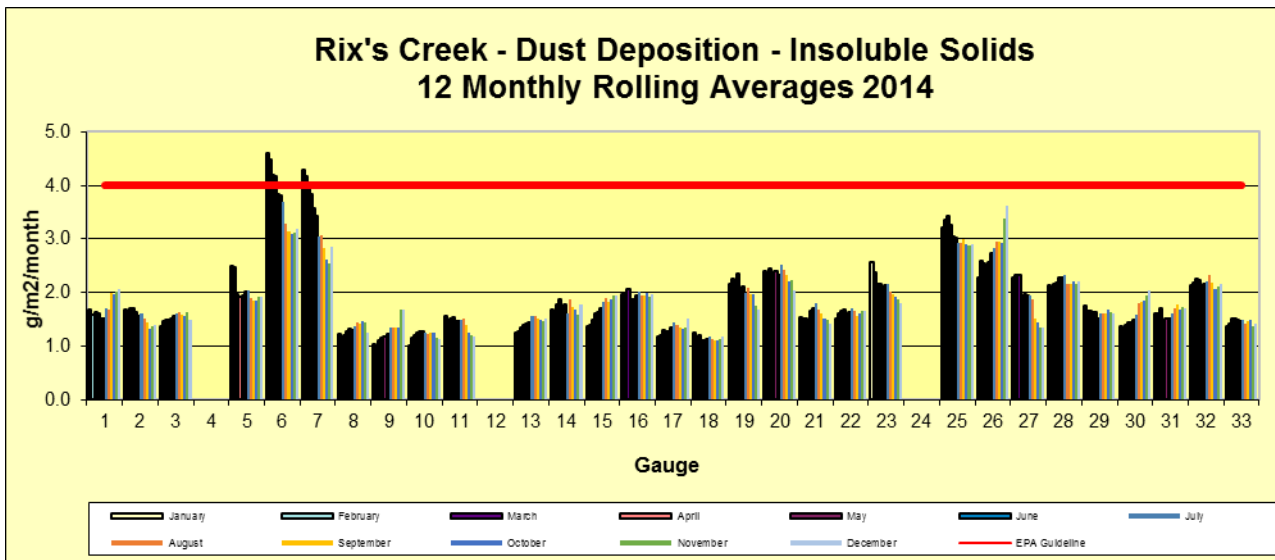


Figure 1 Dust Deposition (Insoluble Solids) 12 monthly rolling averages.

Gauges 6 and 7 show elevated results over a 12-monthly rolling average and this is similar to previous years, however, levels decreased over the last 6 months of the year below 4.0 g/m²/month.

Total Suspended Particulates

- All sites below annual limit: 90 ug/m³
- The Retreat site recorded 16 runs, the Rix's Creek site 15 runs and the Mines Rescue site 8 runs over the annual average limit of 90 ug/m³. Results for 2014 have slightly decreased to that of 2013. Year to date geomeans are:-
- Overall 2014 average across all sites 64.3 ug/m³ decrease from 73.0 ug/m³ in 2013.

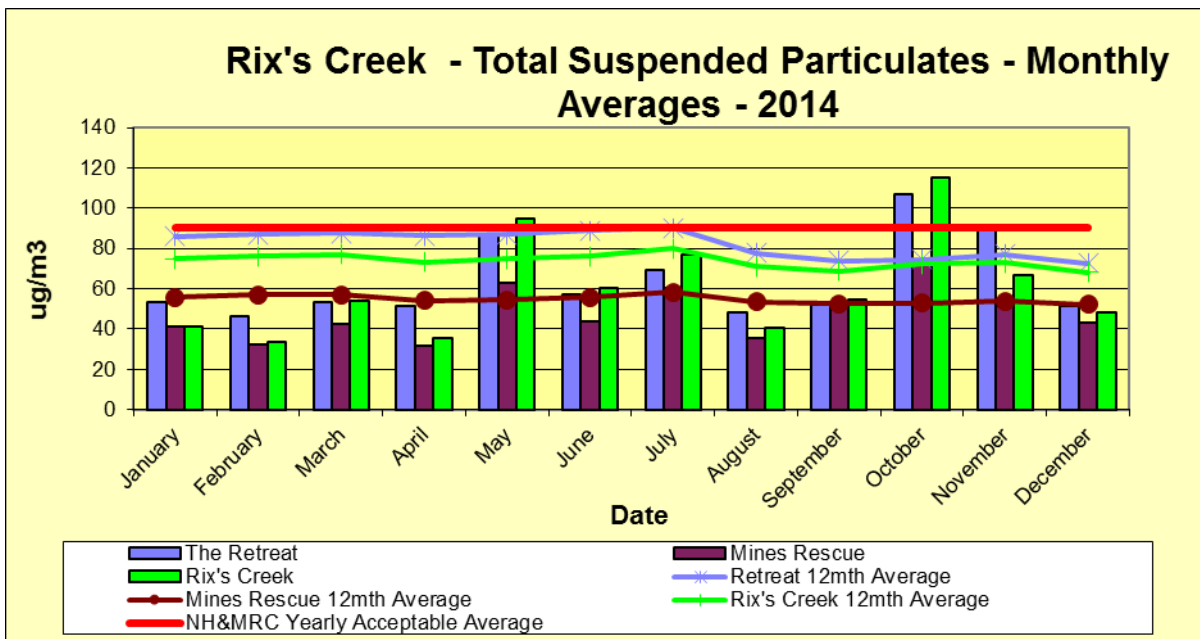


Figure 2 Total Suspended Particulates Monthly Averages & 12 Monthly Rolling Averages.

12 monthly average all similar to 2013 monthly average results. Higher results in May being a dry and windy month and also a lot of wood smoke from residential wood heating being the coldest month for the year. Also dry period in August/September/October resulted in high October results at the Retreat and Rix's Creek sites.

Particulate Matter less than 10 micron.

- All sites below annual limit of 30 ug/m³ on a twelve monthly rolling average.
- 5 times > 50 ug/m³ maximum daily goal exceeded – 4 occasions at Rix's Creek and once at Retreat.

- Rix's Creek 27 ug/m³ – last yearly average 30 ug/m³
- Mines Rescue Station 20 ug/m³ – last yearly average 20 ug/m³
- Retreat 22 ug/m³ – last yearly average 25 ug/m³

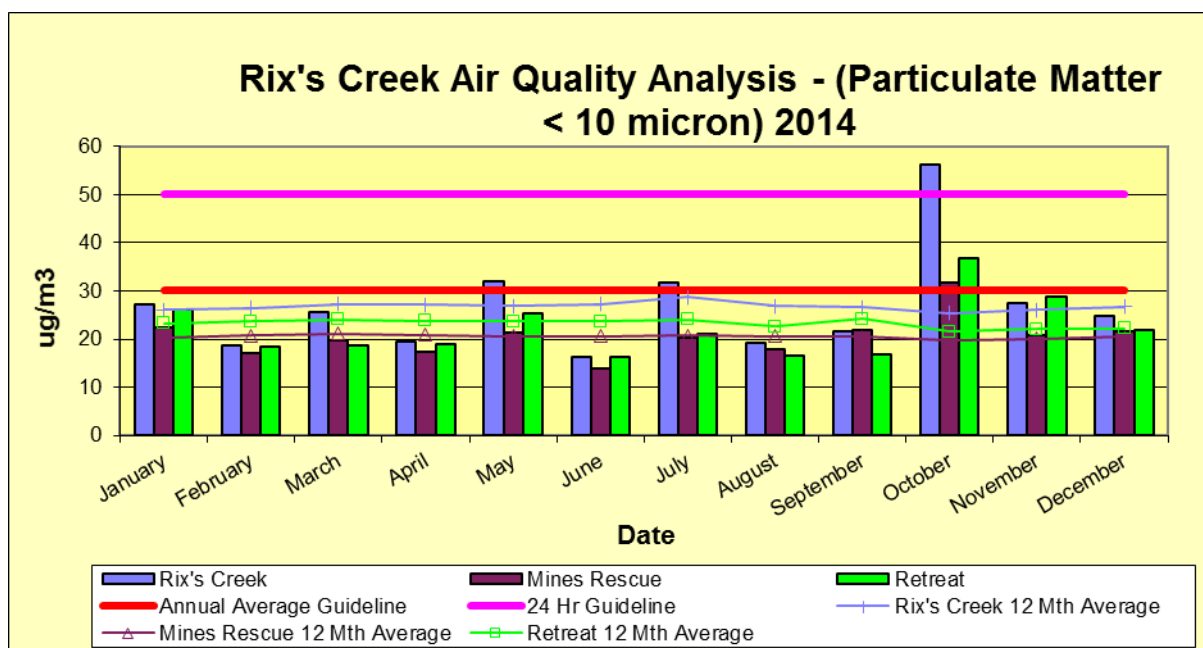


Figure 3 Particulate Matter < 10 Micron year to date

- Three complaints were received in relation to air quality:
 - 18/1/2014 – Anonymous from passing motorist on NEH – Excessive dust from dozer on highway bunds – OCE filmed no dust entering highway & continued works.
 - 20/2/2014 – Resident on Rix's Creek Lane – dust leaving haul road. Trucks were stopped until haul roads were sufficiently watered.
 - 7/7/2014 – Resident in Maison Dieu – regarding dust from West Pit operation – OCE inspected work area and continued operation as there was a high level of dust control efficiency. Complainant notified of low dust reading's at time of complaint.

- Rix's Creek has implemented further improvements such as glycerine being put back to use in May 2015, site achieving greater than 80% haul road 'wheel generated dust' efficiency (~93%) and trial to irrigate blast benches to crust the shot dirt material i.e. applied when no rain forecasted to crust the overburden surface.

WATER QUALITY

- Even with heavy rainfall during March and December the rainfall was not sufficient to produce flows in Rix's Creek. A lot of sites were dry during January, February, October and November.
- pH minimal change across all sites.
- Salinity levels increased throughout the year aligned to minimal flow and dry conditions.
- Total dissolved solids mirrors salinity.
- Total suspended solids – Similar to previous year's results.

QUESTION: What is the town water import to be included in the water balance model?

Town water is the water purchased by the company from Singleton council (the town reservoir) for the wash-down pad, administration and toilet facilities. It is essentially the only water brought onto site and is a very small amount to run these facilities. It was recommended by DoP (now DPE) after review of the 2013 AEMR.

Groundwater Monitoring

- Groundwater monitoring network currently five piezometers and one production bore. During 2014 BH1 and BH2 were both decommissioned due to dewatering ahead of the operation and bent piezometer pipe respectively. These two piezos will be replaced by two other bores in 2015 being BH6 and BH7.
- All the sites able to be monitored showed linear results similar to those dating back to 2010 (commencement of monitoring).

BLASTING

- 77 production blasts. 4 Pit 1 (North Pit) and 73 Pit 3 (West Pit).
- Three blasts (3.9%) recorded overpressure $> 115 \text{ dB}_{\text{Linear}}$ but $< 120 \text{ dB}_{\text{Linear}}$
- No blast exceeded 5 mm/sec vibration.

Complaints.

Only Two complaints received in relation to blasting (from two associated blasts) on the 16/4/2014 and 23/6/2014. One was related to air quality and the other overpressure. This can be a credit to Rix's Creek overpressure models.

- Blast dust / fume model was updated and improved again during 2014 with the inclusion of altitude (up to 1000 m) into the model.
- Four new remote blast monitoring meters were established during 2014 with real-time results accessible via phone/computer capabilities.



New offsite blast meters located at Mines Rescue Station (Singleton Heights) and Ernst residence (Camberwell).

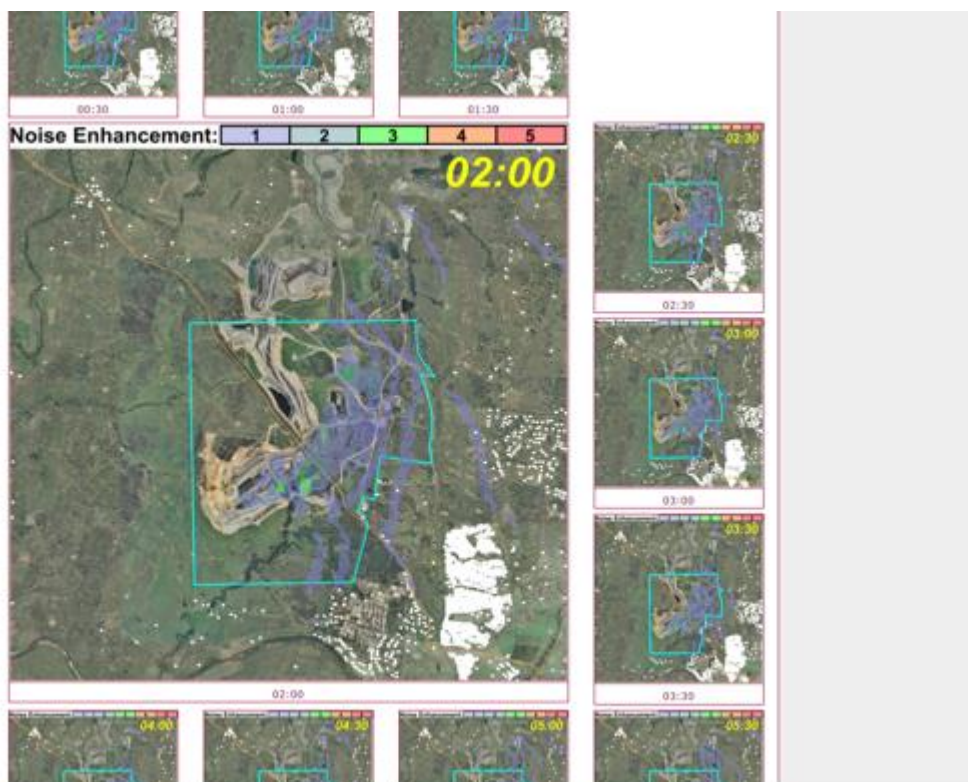
NOISE MONITORING

- Quarterly noise results (undertaken by third-party consultant) as per the site development consent:
 - Operational noise heard several times but mostly below background noise:
 - Retreat – audible and measurable mining noise from ROM Pad;
 - Maison Dieu – Mining noise audible on several occasions with some readings above background levels;
 - Singleton Heights – audible and measurable on one occasion; and
 - Camberwell – not audible.
 - As per Rix's Creek Project Specific Noise criteria there was an exceedance at the Retreat location during the third quarter of 2014. This was reported in the AEMR as per DPE request during the 2013 AEMR review.
- Aside to the consent conditions monthly attended noise monitoring was conducted by a third-party consultant during the year. This was to verify noise impacts and model future potential noise impacts from mining operations. This will continue during 2015.
- Several noise complaints second half of 2014 in Maison Dieu area – similar to second half of 2013. Method of mining and production rates same as previous years. Due to this and 'best practise' a 3D noise model has been developed for RC – the model was calibrated by a RC Graduate Student conducting night-time attended noise monitoring from August to December 2014. This work is also directing Shift-Supervisor's from off-site via noise monitoring as to what areas may be experiencing excessive noise levels from site. Of interest is low amount of complaints regarding noise have been received since the work has commenced in August 2014.
 - In total there was 15 complaints and four enquiries regarding operational noise.
- Further improvements include noise bund around CHPP, adjusting pit shape in West Pit and access continuing, new plant noise attenuated such as R9800 Excavator and 3D Predictive noise model.

QUESTION: What is noise wall to be installed outside of CHPP in 2015?

Wall of 'cladding' or secondary wall to be erected the eastern side of CHPP to minimise noise emitted out this direction towards Singleton Heights / Retreat areas.

- Example of 3D Predictive noise model was shown:



Winds were similar to previous years with January-March being under a SE influence, April being a transition period from SE to NW and May to June being under a NW influence.

COMMUNITY RELATIONS

- 20 complaints were received for the year with 4 enquiries.
- The Bloomfield Group still apart of the Upper Hunter Mining Dialogue

REHABILITATION

Several areas were shaped to final landform, topsoiled and prepared for final rehabilitation during January to August. Biosolids was incorporated into the topsoil as per previous years. The larger areas rehabilitated included the New England Highway visual bunds, North Pit Dump areas and Tailing's Dam #2 area. Several small areas were completed across site and within close proximity of the New England Highway for visual amenity / screening purposes. Large area's in the North Pit becoming available in 2015 and 2016 as the North Pit begins to get infilled with overburden from the West Pit and area's become available.

3620 Tubestock were planted along the New England Highway, North Pit dump and ROM Pad noise bund during April.

Approximately 25 hectares of previous pasture rehabilitation on Pit 2 (South Pit) was mulched to promote species diversity and soil improvement. This area also had any surface rocks removed, erosion rills repaired and re-filled with topsoil.

Approximately 5 hectares of pasture rehabilitation was rock-rolled on the North Pit rehabilitation (via a tractor and drum-roller) to break-down surface rocks, press larger rocks into the surface and flatten high-standing pasture so weed management could be conducted more effectively especially to low ground cover weeds such as *galenia pubescens*.

QUESTION: What is the site security calculation?

The security calculation is an amount calculated via a technical spreadsheet created by DRE which allocates a dollar amount to complete rehabilitation at the site if it closed tomorrow. The bank guarantee's it can provide this amount for the company to fulfil its rehabilitation requirements.

DRAFT PROPOSED FINAL LANDFORM

A draft proposed final landform version was shown to depict a final landform design for Rix's Creek. The previous version 'Original Landform Plan' was shown at the previous meeting and has been modified due to public safety concerns of having a long term high-wall near the New England Highway. This has since been modified several times to give a better landform by the creation of a depression. There will be no high vertical walls around the depression. The sides will be shaped to an 18 degree slope and this slope will be planted to trees to stabilise the area.

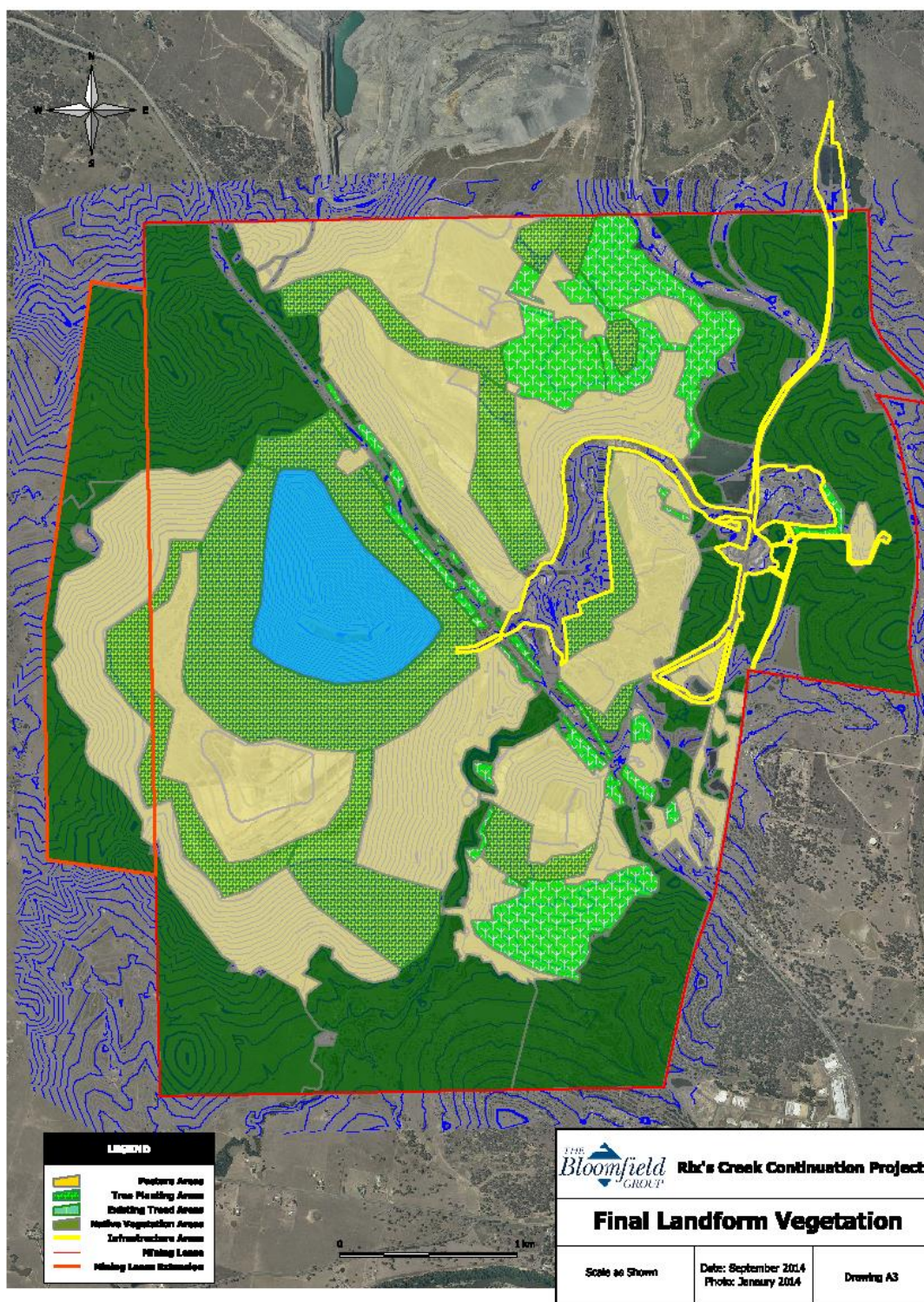


Figure 4 Proposed final landform design

RIX'S CREEK CONTINUATION PROJECT - UPDATES

- Reports still to be finalised:
 - Economic Impact; and
 - Agricultural Impact.
- EIS is currently being drafted with submission for adequacy expected during July 2015.

- EIS Outcomes to date:
 - No existing rehabilitation to be disturbed;
 - Out of pit dump elevations to go no higher than consent height limits, however, some shaping of landform to make more natural profiles;
 - Final 'depression' area minimised to make an 80 hectare water body and 60 hectares of vegetated 18 degree slopes with no exposed highwalls;
 - New western dump designed to reduce noise, air quality and visual impacts from the operation;
 - Management of the operations impact under adverse weather conditions using existing predictive models and real-time monitoring;
 - Todoroski Air Sciences (TAS) have been engaged to develop air quality predictive model;
 - Existing air quality improvements will continue with emphasis on continuing rehabilitation as close to operation as possible; and
 - Noise attenuation ongoing – new rear dump trucks, excavators and drills to be noise attenuated, modifications to operation or even shutting down may be required to stay within consent conditions. Maps were shown predicting noise contours for 2017 and 2023 to CCC members which will also be included in draft EIS.
- All of the abovementioned outcomes demonstrate the mine impacts will not increase from the existing operations impacts.
- Singleton Council are preparing a draft voluntary planning agreement which has been agreed will be focused in the Alroy Oval area.

GENERAL BUSINESS

Nil

NEXT MEETING/S:- **Tuesday September 8th 2015 @ 9 am. Site Inspection followed by presentation of environmental monitoring results from January to June 2015.**

Meeting Closed 1:15 pm.