

| OVERVIEW | | | |
|--|---|------|--------|
| Meeting | Community Consultative Committee | | |
| Date | 16/08/2018 | Time | 9.00am |
| Venue | Boggabri Coal Front Training Room | | |
| Chairperson | David Ross | | |
| Presenter | Daniel Martin | | |
| Attendees | Daniel Martin (DM), Sarah Torrance (ST), Ron Campbell (RC), Geoff Eather (GE), Hamish Russell (HR), Ray Balks (RB), Peter Forbes (PF), Lynne MacKellar (LM), David Ross (DR), Richard Gilham (RG), Anna Christie (AC), Ros Druce (RD) | | |
| Observer | Julie Heiler (JH), Libby Laird (LL), Jon-Maree Baker (JB) | | |
| Guests | James Tomlin (JT) and Laura Bellis (LB) | | |
| Apologies | Cath Collier (CC) and Mitchum Neave (MN) | | |
| Next Meeting | Thursday 8 th November 2018, 9am at the Boggabri Golf Club | | |
| ITEM | AGENDA | | |
| 1 | Apologies | | |
| 2 | Declaration of Pecuniary or other Interests | | |
| 3 | Confirmation of previous minutes | | |
| 4 | Business arising from previous minutes | | |
| 5 | Correspondence | | |
| 6 | Company reports and overview | | |
| 7 | General business/questions | | |
| 8 | Next Meeting | | |
| | | | |
| Discussion Items | | | |
| <p>1. Apologies:</p> <p>See above</p> | | | |
| <p>2. Declarations of Pecuniary Interests:</p> <p>(RG) declared that his property is located in the zone of affectation. (RC) declared that he owns a company; Namoi Waste that deals with Boggabri Coal. (DR) declared that he is paid a fee for his chairing services.</p> | | | |
| <p>3. Acceptance of previous minutes:</p> <p>Moved by (RG) that the previous minutes be accepted. (RC) Minutes moved and endorsed.</p> | | | |
| <p>4. Business from previous minutes:</p> <p>PF – BCOP have had another look for archaeological surveys/reports regarding the cleared area to the north west of the site and was unable to find anything. The clearing occurred in the early 1990s before Idemitsu's involvement.</p> <p>PF to carry over SPL overview until the November CCC meeting due to time constraints with the Hydrogeologist presentation.</p> | | | |

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| DM notified the members that the Annual Review and the Independent Biodiversity Audits have been approved this week and will be uploaded to the website by the end of August. |
| DR – with regards to finding someone at ARTC to attend the next CCC meeting, the EPA has the same action from the Namoi Regional Air Quality Advisory Committee (NRAQAC) and are finding it very difficult. Depending on how successful the EPA are will determine if Boggabri Coal CCC can also have a representative attend. |
| DR – explained to the members that the NRAQAC will be put in touch with the Hunter Valley committee once they have become more established. |
| DM – went through a couple of slides on depositional dust sampling. RD – asked how you tell the difference between dust and coal? PF – explained that the main difference will be the colouration of the collected dust. Coal will be much darker than other types of dust. RD – mentioned that vegetation around her house have black spots and grey coloured dust settling on the leaves. RD also asked how much dust needs to be collected for a sample to be tested and how she would go about getting the mines to come and take a sample? PF – Boggabri Coal Mine (BCM) would engage an expert to come and take the samples and take to the lab for analysis. PF is to discuss further with RD. |
| HR – updated the members on the status of the sub-committee formation for the bush tucker project. AC – explained that she had all the information for the project and the issue is with contacting the Gomeroi Elders to move forward. AC explained that the issue seems to be due to a miscommunication. The Elders say that they asked to visit the women’s burial ground and received no response from BCM. HR – explained that BCM did not receive any requests from the Elders. HR and AC – to discuss the situation in more detail and work on resolving the issue to move forward with the project. |
| Biodiversity Offset visit will occur on the 27 th September 2018. BCM to let AC know numbers so she can recruit the students. |
| 5. Correspondence: |
| NSW Department of Planning & Environment <ul style="list-style-type: none"> ▪ Resources Regulator targeted assessment programme inspection – Fatigue ▪ Early July there was a blast enquiry regarding blast practices ▪ Comments and responses regarding noise, air quality and blast and fume management plan submissions ▪ Approval of the Independent Biodiversity Audit Report this week ▪ Approval of the Annual Review this week |
| NSW Department Industry and Investment – Resources and Geosciences <ul style="list-style-type: none"> ▪ Nil |
| Department of the Environment and Energy <ul style="list-style-type: none"> ▪ Nil |
| Environment Protection Authority (EPA) <ul style="list-style-type: none"> ▪ Four visits from the EPA <ul style="list-style-type: none"> ▪ 15/05/2018 – Detailed Inspection ▪ 31/05/2018 – Radiation Audit |

- 21/06/2018 – Compliance Audit
- 17/07/2018 – Unannounced visit

6. Company Reports & Reviews:

Presentation

Noise Monitoring:

AC – asked if the committee can have the noise monitoring reported using the third octave scale that is in the new Noise Policy.

BCM – to look into this reporting

Air Quality Monitoring:

Increase in annual average at both monitors likely due to dry conditions.

Showed the committee that BCM was still getting results for depositional dust gauge D4 even though it has been contaminated for many months consecutively.

PF – explained the types of things that can contaminate these dust gauges such as bird droppings, vegetation and insects.

Ground Water Monitoring:

No comments

Water Storage:

RG – asked how long will the 740ML of stored water last?

HR – BCM budgets approximately 5ML per day.

JB – asked how long is BCM expecting the 740ML to last with the hotter weather coming up in the next couple of months?

HR – BCM expects the usage to ramp up to between 7 and 9ML usage per day.

PF – explained that BCM is continually replenishing this stored water.

Exploration:

RG – Based on the map shown to the committee how much further east is the mine moving?

DM – explained that the cleared area to the east of the mine on the exploration map is as far east at the mine is approved to go.

Community Complaints:

- 31st May 2018 – Blast Complaint.

The EPA received a community complaint regarding a blast event. Details were provided to the EPA, blast was compliant with conditions.

- Currently investigating feedback from local landholders regarding impact to water supply as a result of the operation of our groundwater bores.
 - Update – Running an experiment to determine the effect on landholder water supplies as a result of the operation of BCOP borefield.

7. Groundwater Presentation – AGE Consultants

DR – requested that all questions be left for the end of the presentation to make the most of JT and LB’s time. Questions were being asked throughout JT and LB’s presentation and asked for a pause from the group to discuss how the meeting should move forward.

RD – asked that questions be allowed throughout the presentation to allow members to take in the information more effectively.

LL – asked if the questions the CCC members prepared for the hydrogeologists could be restated with answers.

AC – supported the request.

DM – stated that BCM will provide written answers to the questions the CCC members provided to the hydrogeologists.

DR – allowed for questions to be asked throughout the presentation after JT said he was fine to answer questions as they present.

A few issues that were brought up throughout the presentation.

JB – mentioned that JT presented an incorrect conclusion regarding the current drought compared to the Millennial Drought. JT stated that water levels were currently still higher than that of the millennial drought. Since the last drought, the water sharing plan was implemented and water usage has reduced by 50%. If the water sharing plan had not been implemented the region would be in a worse position than that of the millennial drought.

The CCC members asked JT and LB to clarify zones 4, 5 and 11 that surround the BTM complex.

AC – asked JT and LB if it is realistic that a constant rainfall was assumed when working on the original model and if this method will change for the updated model?

JT – explained that when creating a model you first need to accurately model the past before starting to predict future water movements. When creating a model a base case is created and then modifications are made to address regional issues that are faced like periods of low rainfall.

RD – asked if the modelling is peer reviewed.

JT – explained that some are peer reviewed.

RD – asked if Boggabri have their model peer reviewed.

DM – stated that Dr Noel Merrick from Hydrosimulations has peer reviewed the BCM model.

LL – asked if blasting makes the water flow more through the Permian Rock?

LB – Locally it improves the porosity of the rock.

PF – stated that blasting is precise. The fractures that do occur from blasting would only fracture a few meters from the blast not hundreds of meters.

RG – stated that his family’s bores have run dry in the past from irrigation. When bores were installed they were screened from the top through to the base. He noted that he has not seen a drop in water levels in his current bores in the last 20 years. RG said he was under the understanding that the 2015 MOD 5 borefield project suggested up to a 2 meter drop in some landholder bores.

HR – explained that BCM discussed with landholders about the possible draw down effects. After years of manual dips there has been no sign of 2 meter draw downs. Level drops of about a couple inches up to approximately 40cm. By mid-October we should be able to report on the impacts.

JB – stated that all bore holders have to go through the same very conservative assessments to be grant approval to sink bores.

HR – told the group that since pumping started at Victoria Park and Coobobindi bores BCM has ceased pumping from Daisymede bore.

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| <p>RD – asked how many of the BCM bores are manually dipped and how many have real time measurements taken? HR – responded with 2 telemetric monitoring bores, 4 pressure transduced monitoring bores and 8 manually monitored bores.</p> |
| <p>DR and PF – thanked JT and LB for their presentation and taking the time to talk with the CCC. AC – thanked BCM for organising AGE to talk to the group.</p> |
| <p>8. General Business</p> |
| <p>Site Access PF – BCM has been successful in getting personnel off the back roads when travelling to and from site. The only personnel using these roads are those that live Manilla and Tamworth directions. Security was set up on BCM private road to ensure people are going the correct roads. JB – mentioned there is a lack of signage on the highway for Boggabri Coal. PF – explained that there have been issues with getting the site access signage on the highway. RC – is going to investigate as to where the issues lie with Narrabri Shire Council and signage. RG – said that he had noticed a difference in traffic numbers from Monday to Thursday. There still seems to be a considerable amount of traffic on Friday afternoons/evenings. RG – to provide rough times for this Friday traffic to BCM.</p> |
| <p>AC – asked about the arrangement where Boggabri Coal was supplying water to Tarrawonga. HR – explained the process to the members.</p> |
| <p>DR – has had it brought to his attention that within the Department of Planning and Environment CCC Guidelines the chairperson is to report annually to the Department on the operation of the committee and will be published on the Department’s website. DR informed the group that he will be asking for their input at the November meeting.</p> |
| <p>RC – informed the group that he has been approached by people concerning the drought and wondered if there was anything Boggabri Coal could do? whether it be allowing farmers to walk stock on offset properties. DM – there may be some opportunity for a very limited time. Some of the offset properties are off limits due to tree planting and other conditions of BCM’s approval and in other areas there isn’t much left on the ground. BCM has allowed some leasee’s to walk stock through areas. RC – stated it sounds like that opportunity has already been spent and asked if there are other opportunities to get behind struggling farmers with a fundraiser? Feed prices are sometimes more than doubling in price compared to only a couple of months ago. PF – informed the group that BCM is looking into a few different opportunities to get behind the farmers.</p> |
| <p>AC – said she had received a letter from the Department saying that Tarrawonga was holding up the Regional Water Strategy and asked why it was said that Maules Creek Coal Mine were holding up the process? DM – Clarified that it has been Tarrawonga. DR – informed Anna that in May at the last CCC it was said that the Regional Water Strategy was sitting with Tarrawonga still, due to a change in personnel. DM - explained to the members that the document has been given to the Department and other Regulators. In the next few weeks the Regional Water Strategy will also be given to the BTM CCC members for comment. Once the groundwater model has been accepted by the department BCM will also forward it to the CCC members.</p> |
| <p>9. Next Meeting Thursday 8/11/2018 at 9am at Boggabri Golf Club.</p> |
| <p>Meeting Closed at 12:15pm.</p> |

| Actioned against | Action to be done |
|-------------------|---|
| Peter Forbes | Discuss with Ros about getting an expert out to sample the dust that is settling at her home. |
| Peter Forbes | To provide at the next CCC an overview of SPL monitoring and equipment noise levels. |
| Hamish Russell | Discuss with Anna ways to resolve the hold up that is occurring with the bush tucker project. |
| Peter Forbes | Let Anna know how many people can attend the biodiversity offset visit occurring in September. |
| David Ross | To organise a representative from ARTC to attend the November Boggabri Coal CCC meeting. |
| Committee Members | Provide DR questions that you would like to ask the ARTC representative. |
| Ron Campbell | Investigate within the Narrabri Shire Council what the issue with site access signage on the Kamilaroi Highway. |
| Richard Gillham | Let Boggabri Coal know rough times of the Friday afternoon/evening traffic that he has been seeing. |
| Daniel Martin | Provide written responses to the CCC members questions prepared for James and Laura. |
| David Ross | Put the Regional Water Strategy on the agenda for the Nov Joint CCC meeting. |



WE DO WHAT WE SAY

CCC MEETING AUGUST 2018



WE DO WHAT WE SAY

INTRODUCTIONS

- James Tomlin - Principal Hydrogeologist/Director
Australasian Groundwater and Environmental Consultants Pty Ltd
- Laura Bellis – Senior Consultant/ Hydrogeologist
Australasian Groundwater and Environmental Consultants Pty Ltd

- Observers
 - Jon-Marie Baker - Namoi Water
 - Libby Laird - Boggabri Coal CCC alternate
 - Julie Heiler – Neighbour
 - Caz Nancarrow – Community Member



AGENDA

- Confirmation of record keeping
- Apologies
- Declaration of pecuniary or other interests
- Confirmation of minutes
- Business arising from previous minutes
- Correspondence
- Company reports and overview
- General Business
- Next Meeting



BUSINESS ARISING FROM PREVIOUS MINUTES

- Peter F to have another look for any archaeological surveys/reports in the cleared area to the north west of the site.
- Peter F to provide at the next CCC an overview of SPL monitoring and equipment noise levels.



BUSINESS ARISING FROM PREVIOUS MINUTES CONT...

- BCOP to notify the CCC when the Annual Review is approved and provide a link to the report on the website – With Dept. Planning and Environment compliance unit.
- David Ross to organise a representative from ARTC to attend the November Boggabri Coal CCC meeting.
- Committee Members to provide DR with questions they would like to ask the ARTC representative.
- David R to ask the EPA for a connection between the Namoi and Hunter Valley Region Air Quality Advisory Committees
- BCOP to look into the depositional dust sampling standard and discuss at the August CCC.

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DEPOSITIONAL DUST

- Dust gauges are collected monthly and are then sent to a laboratory. The lab filters the sample through a 1mm sieve and then washes the contents onto a filter – anything soluble in water is lost. The filter is dried and the mass of “insoluble solids” is obtained and calculated as a deposition rate over the month based on the area of the collecting funnel.
- The filter is then heated in a very hot oven (850 degrees Celsius) which burns up the insoluble solids and leave a residue called “ash residue”. It does not mean that ash is analysed in the dust, it’s just what’s left of the insoluble solids after incineration. This helps tell where the dust is from eg rocks/soils generally have a high ash residue >80% so you would expect overburden/soil dust to be high ash. Coal has a low ash, so coal dust would be <30% ash, vegetation has a really low ash <10% ash.

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DEPOSITIONAL DUST

- **What's the point of the different measurements?**
 - If you want to know how much dust is in the air you breathe, you need a concentration from a High Volume Air Sampler or a TEOM or BAM and that's why we have limits like PM10 24 hr average 50ug/m³
 - If you need to know how much dust is falling on your house or car or your washing-you need a dust deposition rate from a dust gauge.
- Field staff write down what they see in the bottle each month as this helps identify if the gauge has been contaminated by things other than dust eg insects, bird droppings, leaves, vegetation etc.
- If we get high insoluble solids the lab can also look at the insoluble solids under a microscope to try and determine % of what's on the filter as contamination will make insoluble solids higher

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BUSINESS ARISING FROM PREVIOUS MINUTES CONT...

- Committee members to prepare a list of questions for the hydrogeologist and provide to DR by the 2nd July 2018.
- David R to put the Regional Water Strategy on the agenda for the Nov Joint CCC meeting.
- Hamish R to coordinate the setup of a subcommittee to plan how best to push forward the bush tucker project.
- Hamish R to provide the CCC with a balance of BCM water accounts at the August CCC meeting.
- BCOP to provide a date for a visit to the biodiversity offset and rehabilitation areas and to look at the koala strategy - 27th September 2018.
- Peter F to provide a breakdown of Idemitsu employee statistics – Later in this presentation.

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NSW Department of Planning & Environment

- Resources Regulator targeted assessment programme inspection – Fatigue
- Blast enquiry regarding blast practices
- Comments and responses regarding noise, air quality and blast and fume management plan submissions
- Approval of the Independent Biodiversity Audit Report this week
- Approval of the Annual Review this week

NSW Department of Planning & Environment Resources Regulator

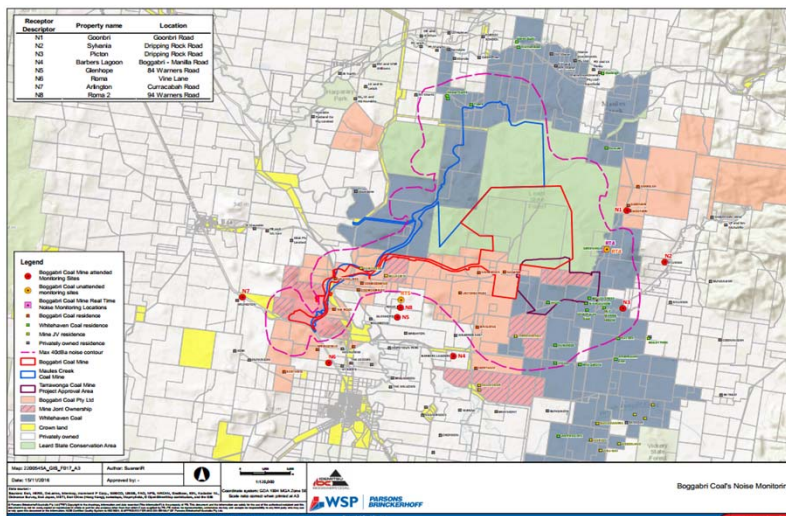
Nil

Department of the Environment and Energy

Nil

Environment Protection Authority (EPA)

- Four visits from the EPA
 - 15/05/2018 – Detailed Inspection
 - 31/05/2018 – Radiation Audit
 - 21/06/2018 – Compliance Audit
 - 17/07/2018 – Unannounced visit





ATTENDED NOISE MONITORING

Monthly monitoring conducted in May, June, July and August 2018.

Night-time monitoring

Carried out in accordance with requirements of the EPL and Australian Standards

There were no exceedances of EPL or Project Approval criteria during the monitoring

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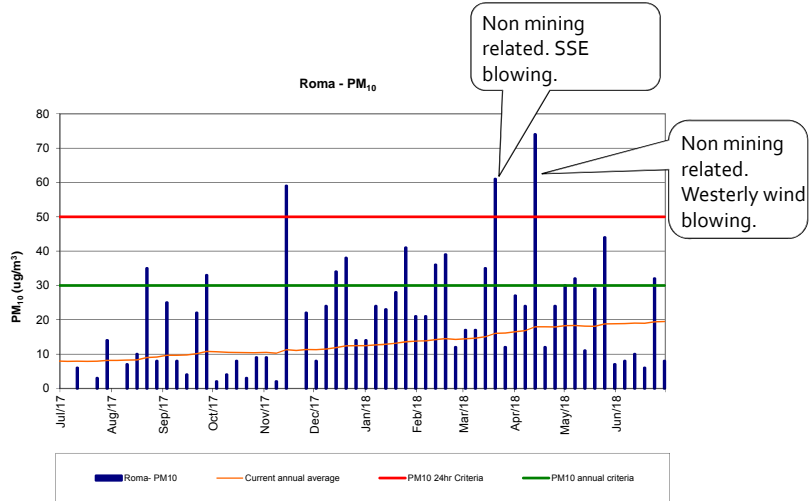


ATTENDED NOISE MONITORING RESULTS – 2018 YTD

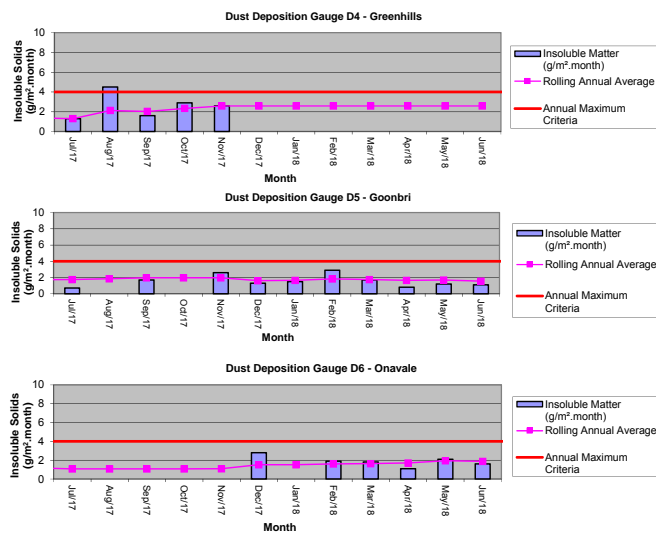
| Attended Noise Monitoring | L _{Aeq} ,15min Impact Assessment Criterion | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | June-18 | July-18 | Aug-18 | Sep-18 | Oct-18 | Nov-18 | Dec-18 |
|---------------------------|--|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|--------|--------|
| Coonbri | 0 | 0 | 32 | 0 | 28 | 29 | 32 | 31 | | | | | |
| Sylvania | 35 | 0 | 0 | 0 | <25 | 0 | 0 | <25 | | | | | |
| Picton | 35 | 0 | 0 | <20 | 0 | 0 | 0 | 0 | | | | | |
| Barbers Lagoon | 35 | 0 | <25 | <25 | 0 | 0 | 0 | 0 | | | | | |
| Glenhope 84 Warners Road | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | | | | | |
| Roma Vine Lane | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| Arlington | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| Roma 2 94 Warners Road | 0 | <25 | 0 | 25 | 0 | 0 | 0 | 0 | | | | | |

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AIR QUALITY MONITORING



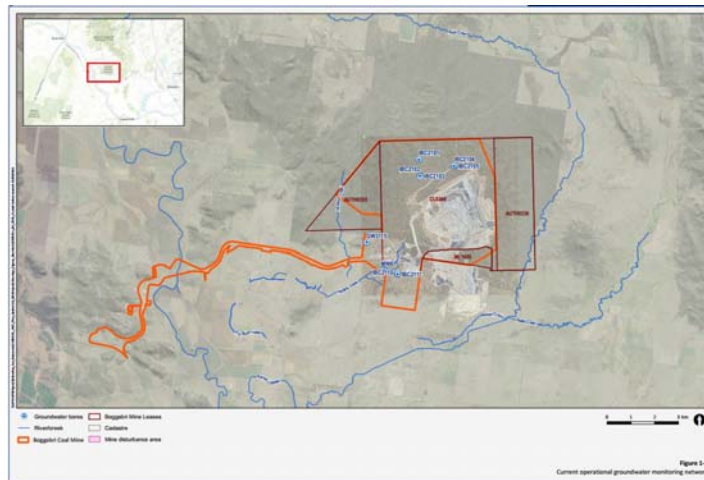
AIR QUALITY MONITORING



AIR QUALITY MONITORING

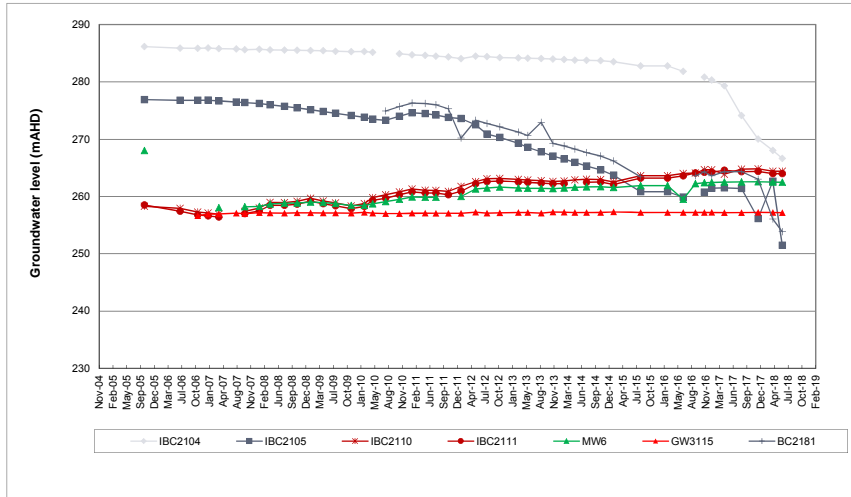
| Month | Site | D4- Greenhills | | |
|--------|------|--|------------------------|------|
| | | Insoluble Matter (g/m ³ .month) | Rolling Annual Average | Ash |
| Jul-17 | | 1.3 | 1.3 | 0.9 |
| Aug-17 | | 4.5 | 2.1 | 2.9 |
| Sep-17 | | 1.6 | 2.0 | 0.9 |
| Oct-17 | | 2.9 | 2.3 | 2.3 |
| Nov-17 | | 2.6 | 2.6 | 1.2 |
| Dec-17 | | 15.2c | 2.6 | 2.5c |
| Jan-18 | | 5.5c | 2.6 | 1.3 |
| Feb-18 | | 6.5c | 2.6 | 2.2 |
| Mar-18 | | 9.6c | 2.6 | 2.3 |
| Apr-18 | | 4.9c | 2.6 | 1.2 |
| May-18 | | 12.5c | 2.6 | 3.1 |
| Jun-18 | | 5.3c | 2.6 | 1.3 |

GROUNDWATER MONITORING



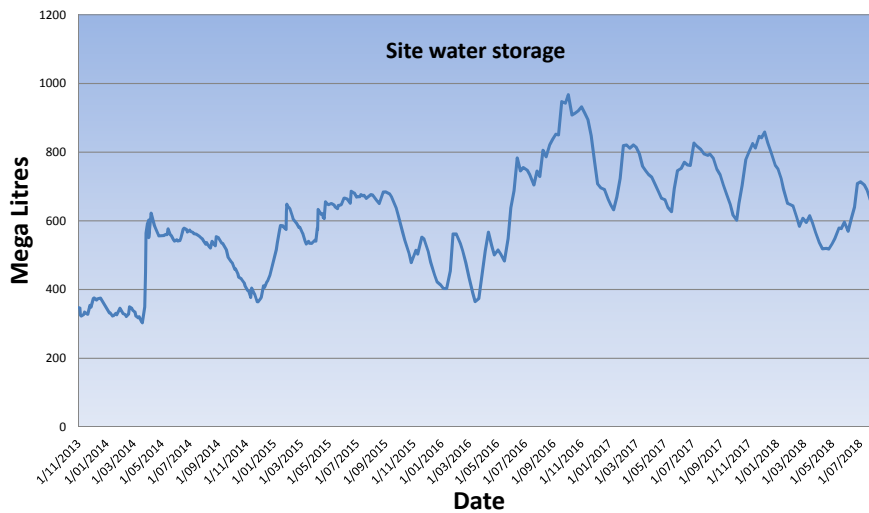
GROUNDWATER MONITORING

We DO WHAT WE SAY



Water Storage on Site

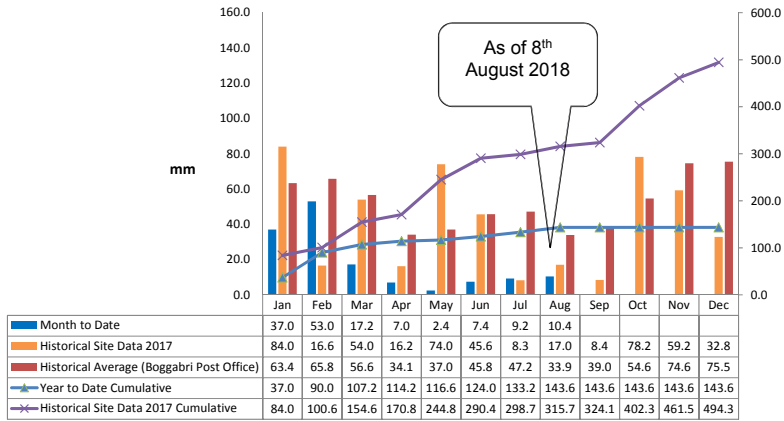
We DO WHAT WE SAY



RAINFALL 2018

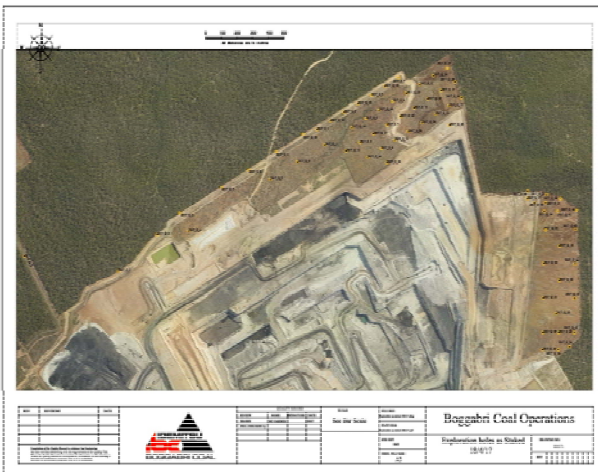
WE DO WHAT WE SAY

YTD Rainfall 2018



EXPLORATION ACTIVITIES

WE DO WHAT WE SAY

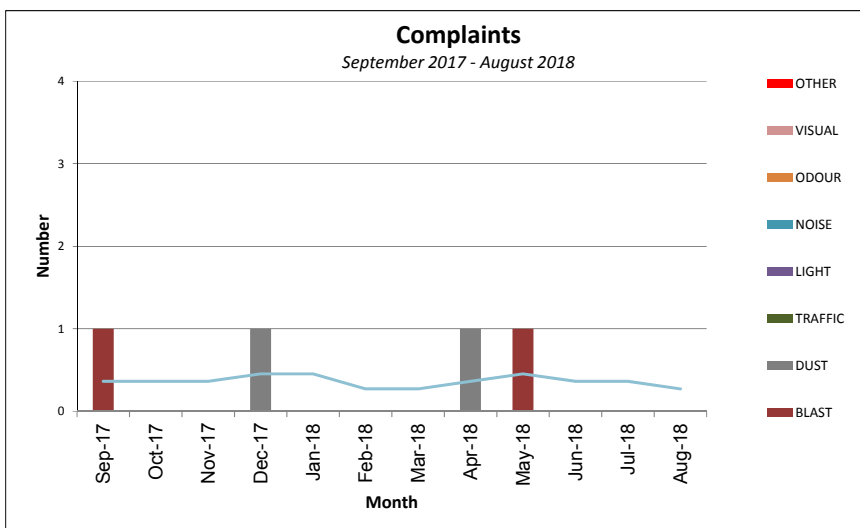


Exploration activities for 2018 are located on CL368.
 No physical activities to occur on A339, A355 or ML1755 during 2018

COMMUNITY COMPLAINTS/FEEDBACK

- 31st May 2018 – Blast Complaint.
The EPA received a community complaint in regards to a blast event. Details were provided to the EPA, blast was compliant with conditions.
- Currently investigating feedback from local landholders regarding impact to water supply as a result of the operation of our groundwater bores.
 - Update – Running an experiment to determine the effect on landholder water supplies as a result of the operation of BCOP borefield.

COMMUNITY COMPLAINTS





BOGGABRI COAL WORKFORCE STATISTICS

As of 9th August 2018

- 74 BCOP employees
 - 11% Female
 - 89% Male
- 553 BGC personnel (includes One Key Resources and subcontract maintenance personnel)
 - 14% Female
 - 77% Male
 - 9% identify as Aboriginal or Torres Strait Islander

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GENERAL BUSINESS

- **Community Sponsorships 2018 YTD**
 - Gunnedah Girls Academy - \$30,000
 - Westpac Rescue Helicopter - \$30,000
 - Boggabri Hospital - \$10,000
 - Drovers Campfire - \$10,000
 - Maules Creek Campdraft - \$8,000
 - Namoi Carp Muster - \$5,000
 - Dorothea MacKellar Memorial Society - \$5,000
 - Boggabri Rugby League - \$3,000
 - Manilla Show - \$2,500
 - Discretionary Sponsorships - \$18,500
- **Other Business**
 - Site Access Arrangements

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Q&A WITH JAMES AND LAURA

**AUSTRALASIAN GROUNDWATER AND
ENVIRONMENTAL CONSULTANTS PTY LTD**