

Minutes of the 32nd Meeting of the Tarrawonga Coal Mine Community Consultative Committee

Meeting Held: 12th February 2014, 10am

Venue: Tarrawonga Coal Mine, Training Room

1.0 Present and Apologies

Present: Mr John Turner (JT), Independent Chairman
Mr Tim Muldoon (TM), Group Manager Community Relations and Property
Mrs Julie Heiler (JH), Community Rep
Mrs Libby Guest (LG), Community Rep
Mrs Jill Johnson (JJ), Environmental Superintendent
Mr Danny Young (DY), Environmental Manager
Clr Hans Allgayer (HA), Gunnedah Shire Rep
Mr Arron Johnson (AJ), Guest – Bis Industries
Mr Nick Toms (NT), Guest – Bis Industries
Mr Peter Gledhill (PG) – Guest – Bis Industries
Mr Anthony Margetts (AM), Operations Manager – arr. 10:25am
Clr Catherine Collyer (CC), Narrabri Shire Rep – arr. 10:35am

Apologies: Mr Peter Laird (PL), Community Rep

2.0 Introduction of New CCC Member

LG introduced herself and JT welcomed her to the Committee.

3.0 Declaration of Pecuniary or Non-Pecuniary Interests

JH leases “Velyama” from Aston Resources (now Whitehaven) and is in discussions with Whitehaven regarding water issues at her property.

4.0 Presentation from Bis Industries

NT advised that he is the Site Manager for the new Bis contract at Gunnedah. Bis replaces Toll as the coal haulage contractor for Whitehaven. NT provided a summary of his background and his role at Gunnedah. He explained the safety features on the Bis trucks including GPS tracking, daily reports on fuel burn etc, onboard computer system (which replaces hard copy timesheets and trip tracking information), Opti-alert glass to monitor driver fatigue and cameras (2 rear facing, 1 forward facing and 1 in cab). He said the cameras are used for training and incidents, are not live and do not record sound. Most Bis drivers have changed over from Toll.

AJ introduced himself as the General Manager for surface operations in NSW and QLD for Bis. He said he would be in Gunnedah every 2-3 weeks for 2-3 days at a time. The contract includes 28 new b-doubles and is a significant milestone for Bis (first on road haulage contract in NSW). He explained the cameras in more detail, advising that the SIM cards overwrite the information after a set period of time

and that the cameras are mostly used for duress (ie. if an incident occurs the driver can activate the camera to record the footage prior to and after the incident). There was an incident on the first day of Bis haulage where a driver slowed trucks down and then sped up when they tried to overtake. The footage was captured and issued to Police.

PG introduced himself as the Business Development Manager for Bis, based in Newcastle. He provided a background to Bis, advising that it was formerly Brambles Industrial Services. The trucks are speed limited and a report is issued at the end of shift by exception (speeding, harsh braking, geo-fencing – including with the school bus).

JH said it's good that Whitehaven is embracing this technology.

5.0 Previous Minutes

Minutes of the previous site meeting were adopted as a true record on the motion of JH and HA. JT noted that "Acting Chair" against JH's name needed to be removed. Minutes of the cumulative CCC meeting were adopted as a true record on the motion of JH and DY.

6.0 Business Arising

- 6.1 JH noted in relation to CC's previous comments regarding TM attending the Boggabri Business Promotions Association that she had subsequently spoken with John Shaw (President of the Association) who said he doesn't expect TM to attend each meeting and that he will be invited on an as needs basis.

TM said there were two Whitehaven representatives at the meeting last night and that Whitehaven has only missed one in 12 months.

No further action required.

- 6.2 DY said there had been no development onsite in relation to the extension approval. The site is still operating at 2Mtpa and we are expecting to expand operations into the northern extension area shortly. DoPI approved the Heritage Management Plan this week and cultural heritage salvage works as well as erosion and sediment control works are expected to commence soon.

Update on LOM project to be provided at next meeting.

- 6.3 DY advised that the Manilla Road upgrade is a matter associated with Maules Creek, not Tarrawonga. He understands that it has now been through a design process, Whitehaven has negotiated with Council regarding design and the works are now out for tender. TM said there hasn't yet been a formal signoff between Whitehaven and NSC but NSC has been involved in the design process.

JJ asked if this item could be removed from the agenda and the Committee agreed it could be.

Action item to be removed from the agenda.

- 6.4 DY said the option of an offsite camera hasn't been discussed specifically as any decisions pending the development of other cumulative management plans. Agreement with Boggabri Coal and Maules Creek has just been reached regarding air quality monitoring equipment.

JT said that at the last meeting CC indicated that EPA hadn't signed off on the external dust monitoring network.

DY said Tarrawonga is not in a position to prioritise an offsite camera at this stage until we get approval for the aspects that are actually required by the mines' approvals.

JH asked how the cameras can see where the dust is coming from (cattle, roads, mines etc). She said the mines have been pretty good (not so much today) and that there is more dust off Manilla Road than the mines.

LG asked if the monitoring equipment can tell where the dust has originated from.

DY said the PM₁₀ and deposited dust units collect dust from all sources but the proposed cumulative monitoring equipment should be able to provide a better indication of the source.

JT suggested that an update be provided when CC arrives.

Discussion returned to this action item following the discussion in item 6.12. CC said she'd had a discussion with EPA relating to a regional monitoring plan. It was supposed to be close to being signed off and EPA won't give any information until it is signed off. She said that EPA indicated cameras might be involved in the monitoring network.

CC said a workshop with the EPA is proposed for the end of February. JJ, DY and TM said they have not been made aware of any meetings relating to EPA's proposed network.

DY suggested that EPA could be invited to the next CCC meeting to discuss the proposed monitoring network. JT said he would write a letter to them as the joint CCC chairman.

JH said shouldn't the EPA be liaising with the mines? CC said she agreed. JH said the last workshop involved EPA, Council and the community but not the mines. CC said the mines were invited. DY reiterated that Whitehaven was not invited to the workshop and was not aware of it until after it had been held.

JT to invite EPA to next CCC meeting to discuss proposed offsite monitoring network.

- 6.5 JJ provided a copy of the Annual Environmental Management Plan/Annual Review to the Committee.

No further action required.

- 6.6 Boggabri Business Promotions Association minutes and agenda provided to TM.

No further action required.

- 6.7 Tarrawonga newsletter issued on the Boggabri mail run as suggested by CC at the previous meeting. CC said she didn't receive one despite being on the mail run and having a post office box. TM said copies were issued to NSC but CC said a copy wasn't passed onto her.

LG also asked for a copy of the newsletter.

JH commended the newsletter and said it was interesting and good the way it introduced staff at the site.

JT said Boggabri Coal only issues their newsletters electronically so it's good to see Whitehaven issues hard copies and also posts it on their website.

JJ to provide copy of newsletter to CC and LG.

- 6.8 DY said that Whitehaven participated in a feral animal cull by making a financial contribution to LHPA. Approximately 60 pigs and 90 goats were culled on Whitehaven owned property.

JH asked if the cull would be a regular occurrence. DY said on an as needed basis.

No further action required.

- 6.9 DY said that contractors have been advised they must notify Bob McGregor before they enter the Callandar and Tarrawonga properties.

No further action required.

- 6.10 JH said the agenda item regarding the Iron Bridge can be removed as it will not occur for some time.

No further action required.

- 6.11 DY said a meeting is planned for tomorrow with the Rural Fire Service to discuss access to mine owned land.

No further action required.

- 6.12 DY said the issue of accessing private property for hunting had been toolboxed and that an incident had recently occurred near the Rocglen site where pig chasers were caught on Whitehaven land without authority. The Police were contacted and the trespassers escorted to their parent's property. The trespassers were made aware that if they were caught again they would be subject to prosecution.

TM said Whitehaven has pursued prosecution at Narrabri in the past but the ongoing issue is catching people.

No further action required.

- 6.13 In relation to use of the Environmental Trust Fund money from the three mines, JT said committee members at the Boggabri Coal CCC meeting held the day before could not bring forward any ideas and said they needed more time to consider the options, especially because of the recent weather. It was agreed at the Boggabri Coal CCC meeting that in one month's time JT would write to all CCC members requesting advice as to any proposals they may have. One month after that there would be a follow up so that options could be discussed at the next CCC meetings. A sub-committee would then be formed if agreement could not be reached on which projects would be progressed.

CC suggested after discussions with Ken McLaren at Boggabri Coal and the Boggabri Business Promotions Association that the wider community be invited to provide proposals. The invitation for suggested projects could be included in a newsletter or press release.

JH said the Council is holding the money provided to date and any interest earned on that money should be returned to the fund. CC said that is fine and that Maules Creek had not yet provided their portion of the funding.

JH asked when we will get to spend the money. JT said he expects it will be decided at the next round of CCC meetings and, if not, after the sub-committee is formed.

LG asked what the definition of local is. There are different communities and should the money be focused immediately around the mines or in the greater Shire area? JT said that could be assessed when project proposals are received.

JH provided an overview of her proposals for flood monitoring and a camera for bushfire monitoring.

JT to project manage gathering of proposals.

7.0 General Business

7.1 Mine Progress Report

AM said the new contract with Bis appears to be running smoothly. He noted another major contract change from Orica to in house management of blasting which includes a change in product which produces little or no fume.

DY advised the Committee that the approval requires Tarrawonga to haul coal to Boggabri Coal once their CHPP and rail loop had been constructed. Given the current coal prices and associated costs with the agreement Whitehaven has determined that it would be more cost effective to continue to haul the coal into the Whitehaven CHPP at Gunnedah. A modification application has been submitted to DoPI to combine the haulage limits for Tarrawonga and Rocglen to total 3.5Mtpa for the two sites rather than specifically 2Mtpa for Tarrawonga and 1.5Mtpa for Rocglen. On this basis, the total coal hauled to the CHPP would remain unchanged but the volumes from each site could vary. Assuming Vickery is approved and the Kamilaroi Highway overpass is constructed, the approval would increase to a total of 4.5Mtpa from the three sites.

The modification application has only recently been submitted to the Department. They will review it for adequacy and it will then be placed on public exhibition.

CC asked if that meant there would be no coal transported to Boggabri Coal. DY said that is the intention at this stage. It is still an option but at this stage it is not economically viable to do so.

AM said he expects works to commence in the northern extension area in early April. Local contractors will be used for construction of erosion and sediment control structures. Blasting in this area is expected to commence in late April. Contractors may be engaged to move additional overburden.

CC said there was previously an issue with haulage movements on the haul road and asked if that was still an issue. DY said the number of movements remains the same but the modification seeks an extension to haulage hours by 1 hour per day (6am start instead of 7am).

JH asked if Tarrawonga was sourcing water from offsite. DY said not at this stage as there is still water available onsite.

7.2 Environmental Monitoring Report

DY presented the environmental monitoring results which are attached in the Environmental Monitoring Report.

DY said Tarrawonga is looking at revised noise monitoring sites to the east, south and west on the basis of additional properties now owned by the mine. The issue will be that the closest privately owned receptors are some distance from the mine so it will be unlikely that mine related noise is identifiable. Management plans will be revised in the coming months but until then monitoring will remain at Tarrawonga. Directional monitors will give a better indication of which mine is responsible for what offsite noise impacts.

TM asked if the distance dictates that mine noise will not be an issue at privately owned receptors, why are we required to monitor there. DY said we will monitor

there for 12 months to confirm mine noise is not an issue and then seek to remove the requirement for noise monitoring.

8.0 New Business

- 8.1 JH referred to previous discussions regarding blasting impacts and suggested that Whitehaven issue a newsletter explaining blasting in a simple to understand way. She said this is particularly important with Maules Creek about to commence as it will dispel any misconceptions people have before it starts.

DY said that Whitehaven now has its own drill and blast engineers and agreed that provision of information is a good idea.

LG said the newsletter could include information about under what weather circumstances Tarrawonga doesn't blast.

JT said it would be good PR for the company before Maules Creek commences.

Blasting information to be included in next newsletter.

- 8.2 JT suggested a mine tour as part of the next CCC meeting.

Mine tour as part of next CCC meeting.

- 8.3 JH asked how often the joint CCC meetings will occur. JT said once per year. JH asked if we could have our own meeting separate to the cumulative meeting, otherwise issues with the individual CCC's go unresolved for 6 months. She said the cumulative CCC meeting was done well and JT commended JJ for the comprehensive meeting minutes.

9.0 Complaints

Complaints were discussed in the Environmental Monitoring Report.

10.0 Next Meeting

The next meeting will be held at the Tarrawonga Coal Mine Training Room in May 2014 (date to be advised) at 10:00am.

Meeting closed at 11:35am.

John Turner - Chair

Tarrawonga Coal Mine Community Consultative Committee Meeting #32

Environmental Monitoring Report November 2013 – January 2014

Noise Monitoring

Noise monitoring was undertaken at the “Tarrawonga” property from the 2nd to 4th December 2013, with results outlined below. The noise criterion for the mine is 35dB(A) Leq (15 min) for all operating times.

Table 1 - TCM Noise Monitoring Results – 2 nd , 3 rd & 4 th December 2013					
Date	Time	dB(A), Leq (15 min)	Wind speed/ direction	Temp. Inversion °C/100m	Identified Noise Sources as dB(A) Leq (15 min)
2 Dec 2013	12:24 pm	42	2.1/S	-	Birds & insects (42), TCM (26)
2 Dec 2013	7:31 pm	39	0.6/SE	-	Birds & insects (38), TCM (33)
2 Dec 2013	10:05 pm	50	1.6/SE	+5.3	Insects (50), TCM (33)
3 Dec 2013	12:17 pm	37	1.5/S		Birds & insects (37), TCM (20)
3 Dec 2013	9:13 pm	33	0.9/NNW		TCM (32), insects (26)
3 Dec 2013	1:25 am	42	0.9/N	+11.4	Insects (40), TCM (37)
4 Dec 2013	7:52 am	41	1.5/SSW		TCM (40), birds & insects (34)
4 Dec 2013	7:49 pm	41	2.2/N		Birds & insects (39), TCM (37)
4 Dec 2013	12:43 am	37	3.8/N	Lapse	TCM (35), insects (32)

The results in Table 1 show that noise emissions from the mine exceeded the operational noise criterion at the “Tarrawonga” monitoring location during the night on the 3rd December 2013 and the day and evening on the 4th December 2013.

The “Tarrawonga” property retains acquisition rights in the Project Approval for the Tarrawonga Mine as a consequence of modelled noise predictions exceeding 35dB(A). Agreement has recently been reached in terms of acquisition of the property, and as a consequence, it is now considered project related. As a consequence, the noise limit of 35dB(A) no longer applies at the “Tarrawonga” receiver.

In addition to the operational noise, the noise from the mine must not exceed 45 dB(A) L1 (1 min) between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine. During the night time measurement circuit the L1 (1 min) noise from the mine exceeded 45 dB(A) at the “Tarrawonga” property on the 5th December 2013. As discussed above, the property is now considered project related and therefore the criterion does not apply.

Table 2 - TCM Sleep Disturbance Monitoring Results				
Location	Time	dB(A), L1 (1 min)	Wind speed/ direction	Temperature Inversion °C/100m
Tarrawonga (2/12)	10:05 pm	35	1.6/SE	+5.3
Tarrawonga (4/12)	1:25 am	42	0.9/N	+11.4
Tarrawonga (5/12)	12:43 am	48	3.8/N	Lapse

The real time noise monitor was relocated to the “Matong” property in November 2013 and has indicated mine noise at that location to be under compliance limits.

Road noise monitoring was undertaken on the 6th December 2013 at the “Brooklyn” and “Werona” residences on Blue Vale Road and indicated compliance with the 60 dB(A), $L_{eq(1hour)}$ day time criteria. The road noise associated with coal haulage at Residence 1 at “Brooklyn” was 50 dB(A), $L_{eq(1hour)}$, while Residence 2 at “Brooklyn” was 43 dB(A), $L_{eq(1hour)}$. Road noise at “Werona” was 45 dB(A), $L_{eq(1hour)}$.

Blast Monitoring

Blasting Results

Since the first shot there have been 464 blasts (until the end of January 2014). All blasts have been within ground vibration and air blast overpressure limits since the last meeting.

Air Quality

Air Quality (Dust Deposition) Results

MONTH	TEMPLEMORE (EB-4)	BOLLOL CREEK STN (EB-5)	AMBARDO (EB-6)	TARRAWONGA (EB-7)	THUIN (EB-8)	PINE GROVE (EB-9)	TARRAWONGA MINE (EB-10)	TARRAWONGA MINE (EB-11)	PINE GROVE (EB-12)	BOLLOL CREEK (EB-13)	TARRAWONGA MINE (EB-14)	TARRAWONGA MINE (EB-15)	JERALONG NORTH (EB 16)
February 2013					1.5		2.6	0.6	0.8	1.1	1.5	2.2	5.1
March 2013	0.8	4.4	0.2	0.3	1.3	3.1	2.2	0.6	1.1	0.7	0.8	2.4	1.4
April 2013	0.2	0.1	0.5	1.1	1.8	0.6	2.4	1.3	0.9	1.4	2.0	4.9	1.2
May 2013	3.5	3.6	1.1	3.3	4.8	0.9	0.9	1.1	1.3	1.2	2.5	8.9	1.1
June 2013	2.0	26.4	1.1	2.6	3.4	1.3	2.1	0.8	0.6	1.1	1.4	5.0	2.7
July 2013	1.5	0.5	0.5	0.2	3.1	0.5	3.6	0.5	0.4	1.5	0.9	9.5	3.4
August 2013	3.3	0.6	0.1	0.7		0.3	33.8	0.3	0.2	9.1	0.6	3.3	0.3
September 2013	2.2	1.9	0.8		3.0	0.7	43.4	1.1	0.6	1.8	1.8	5.9	1.0
October 2013	1.3	6.1	0.9	0.6	6.3	1.1	1.5	1.5	1.6	2.9	0.3	5.4	1.6
November 2013	2.4	0.3	0.8	1.1	2.0	1.1	1.2	1.1	0.4	2.9	0.6	6.5	5.2
December 2013	4.5	2.5	1.4	1.2	2.3	1.2	9.8	3.6	2.1	0.6	0.2	4.6	5.2
January 2014	0.7	6.0	0.3	0.6	1.0		0.5	3.8	2.9	0.5	2.0	2.4	13.3
ANNUAL AVERAGE	2.0	4.8	0.7	1.2	2.8	1.1	8.7	1.4	1.1	2.1	1.2	5.1	3.5

All monitoring locations remain below the limit of 4g/m²/month with the exception of EB-5, EB-10 and EB-15. As these monitors are located on mine-owned land, compliance criteria do not apply.

PM₁₀ Results

The annual average for PM₁₀ readings at “Templemore” is currently at 19.71µg/m³ (until end of December 2013) and remains well below the annual average limit of 30µg/m³. PM₁₀ levels have remained compliant since the last CCC meeting.

The fixed real time air quality monitor (TEOM) is currently providing daily reports as well as real time air quality results. As at the end of January 2014, the 24hr average PM₁₀ level was recorded at 14.8µg/m³, below the 24hr criterion of 50µg/m³. As with the real time noise monitor, an alarm system has been activated on the TEOM to alert when dust levels reach a pre-determined level based on wind direction from the mine site. This is closely to verify if dust levels from the site approach compliance limits.

Water Monitoring

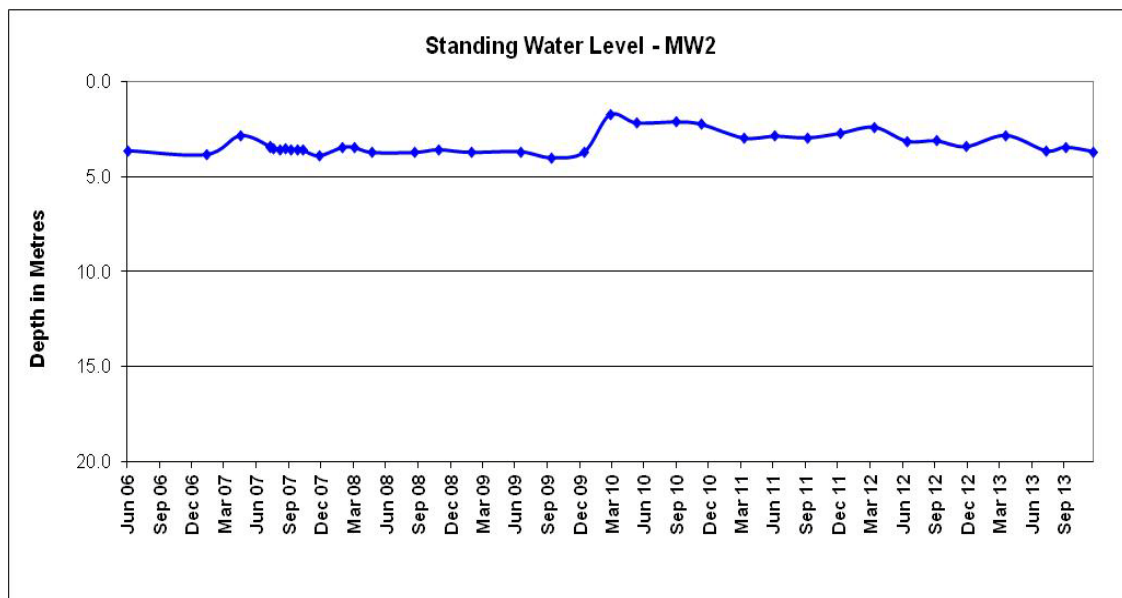
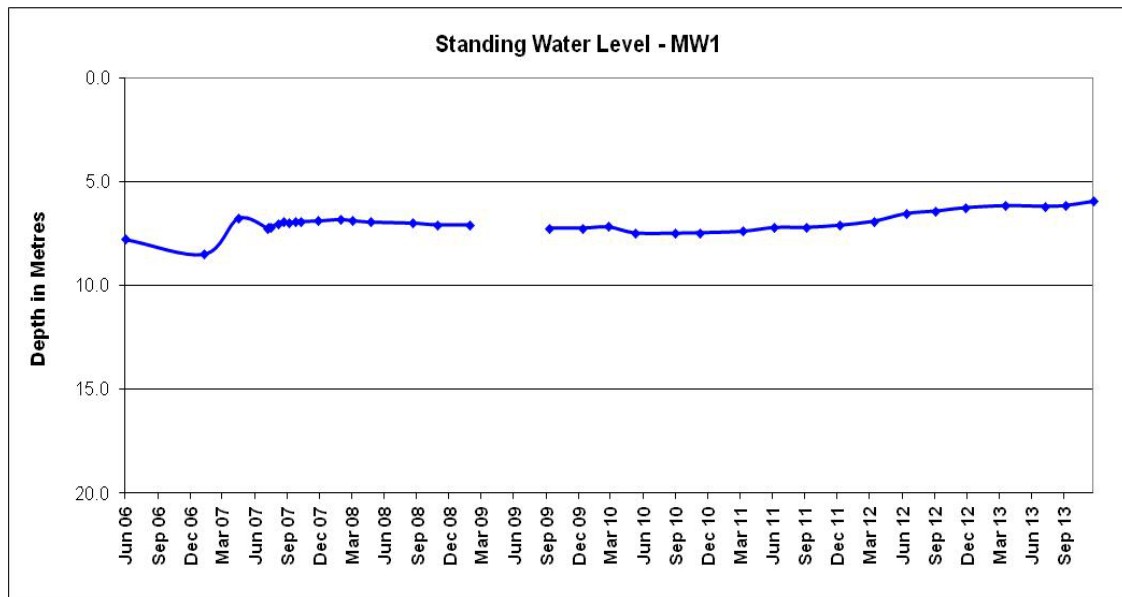
Ground Water

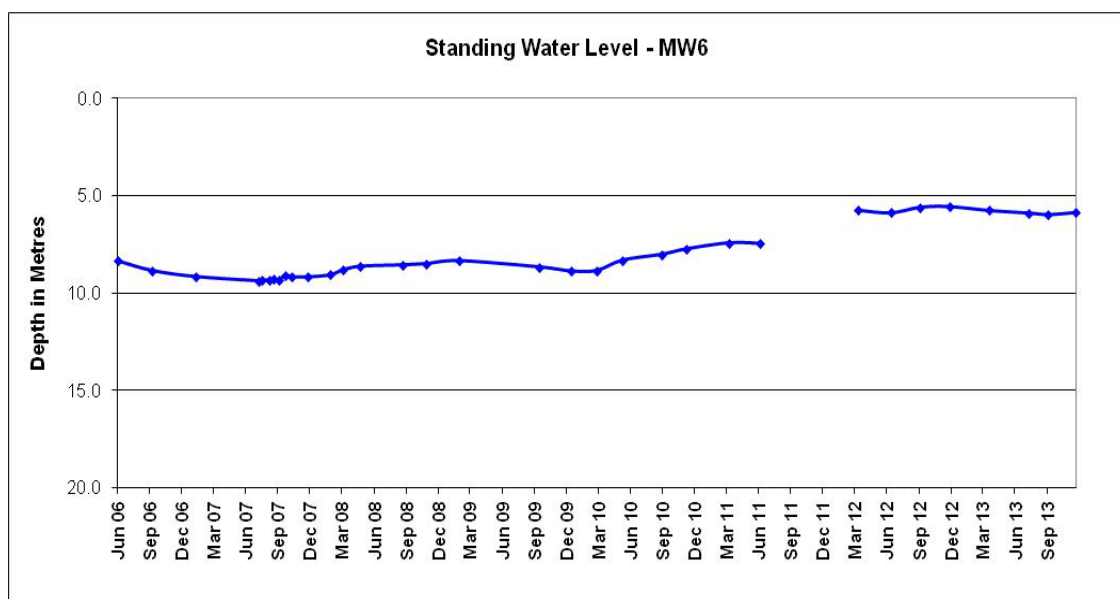
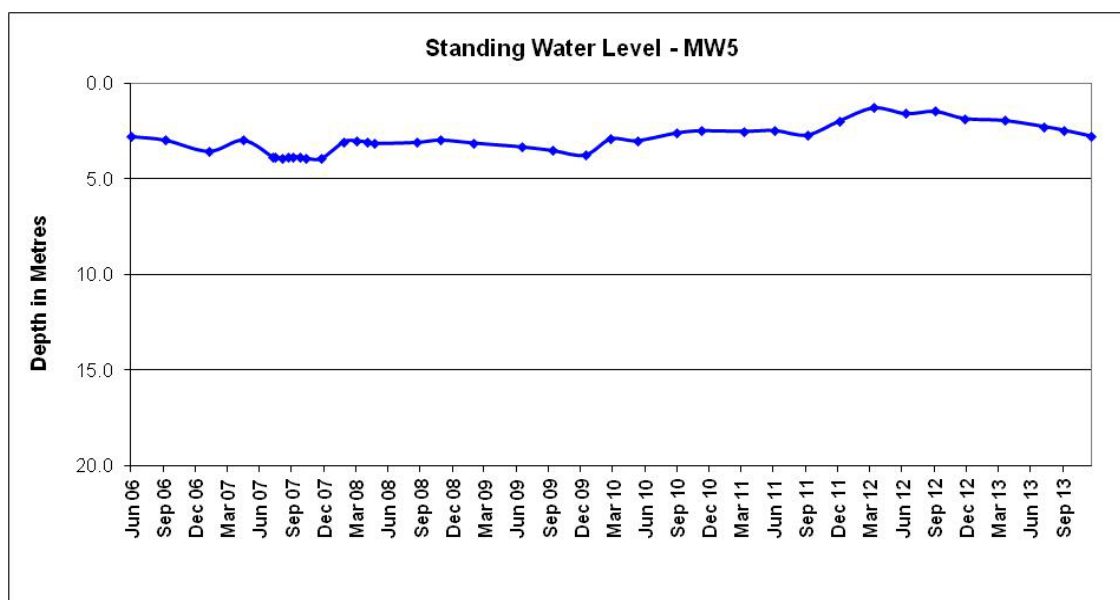
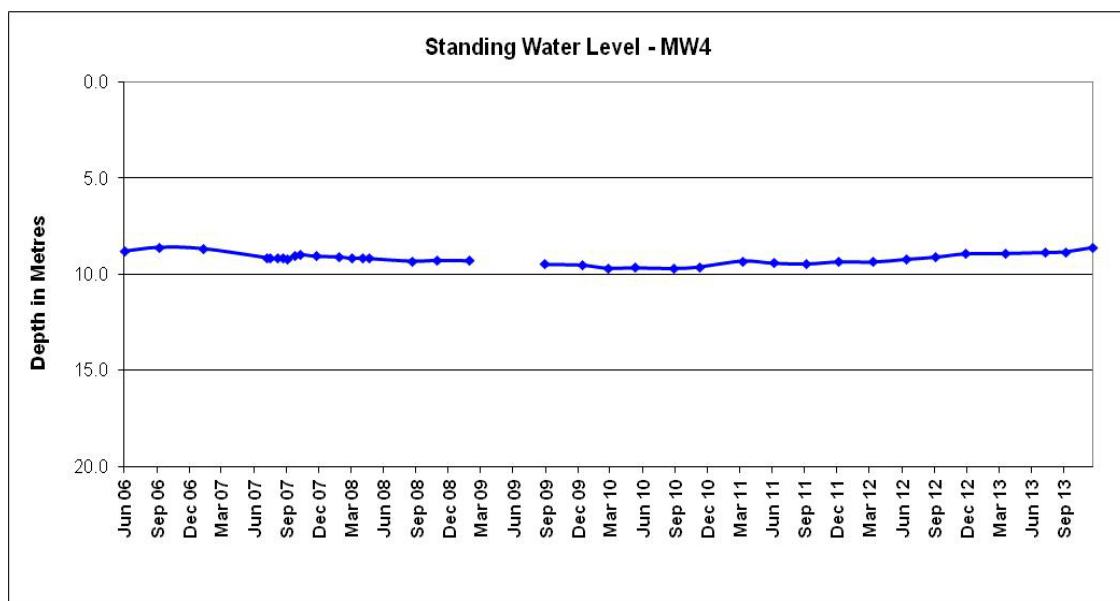
Groundwater monitoring data obtained to date, including the last round of SWL monitoring in November 2013 is provided in the table and graphs below.

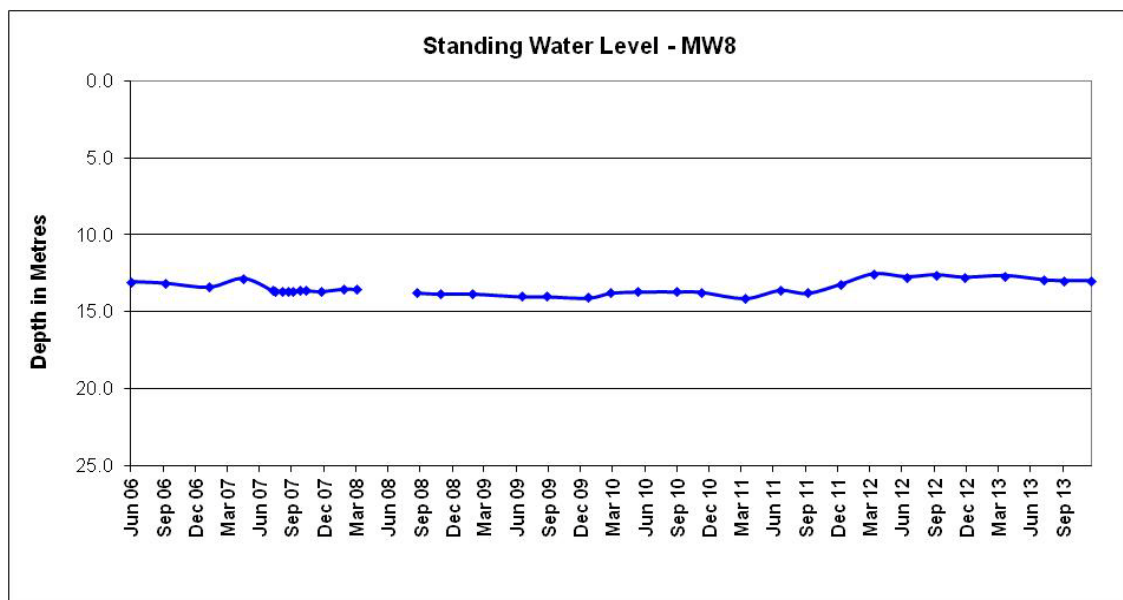
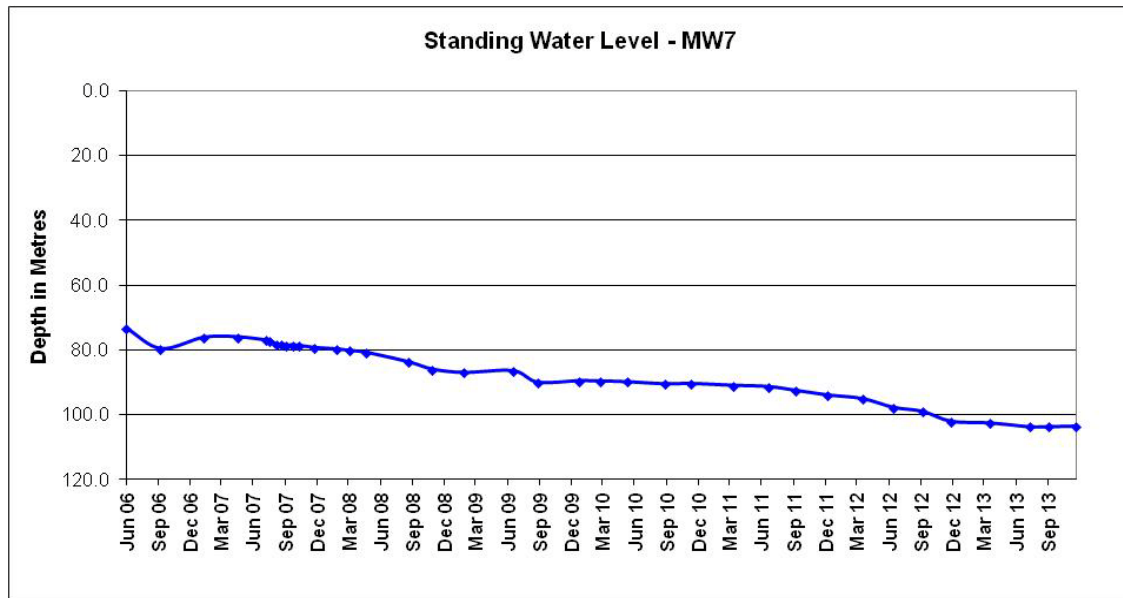
Table 4- Groundwater results Summary

Site	Date	SWL (m)	pH	Elect. Conduct
MW1	March 2012	6.9	7.44	3140
	June 2012	6.53	7.37	3730
	September 2012	6.41	7.8	3570
	November 2012	6.25	7.54	3140
	March 2013	6.15	7.52	3180
	July 2013	6.18	7.49	3110
	September 2013	6.14	7.19	3330
	November 2013	5.95	7.6	3140
MW2	March 2012	2.38	7.06	912
	June 2012	3.13	7.02	1320
	September 2012	3.11	7.47	1310
	November 2012	3.42	7.29	1060
	March 2013	2.82	7.39	1310
	July 2013	3.64	7.03	686
	September 2013	3.45	7.46	674
	November 2013	3.68	6.9	694
MW4	March 2012	9.36	7.6	2580
	June 2012	9.22	7.52	3850
	September 2012	9.11	7.98	3910
	November 2012	8.94	7.74	3420
	March 2012	8.92	7.53	3770
	July 2013	8.87	7.76	3410
	September 2013	8.83	7.99	3950
	November 2013	8.61	7.6	3720
MW5	March 2012	1.28	7.52	1110
	June 2012	1.58	7.81	977
	September 2012	1.46	7.92	2120
	November 2012	1.84	7.65	2650
	March 2013	1.94	7.54	1520
	July 2013	2.26	7.62	846
	September 2013	2.45	8.07	1810
	November 2013	2.76	7.7	2430
MW6	March 2012	5.74	7.49	1840
	June 2012	5.87	7.45	2040
	September 2012	5.58	8.08	1990
	November 2012	5.55	7.6	1817
	March 2013	5.75	7.46	343
	July 2013	5.88	7.62	452
	September 2013	5.96	7.8	496

	November 2013	5.85	7.2	
MW7	March 2012	95.05	7.25	2460
	June 2012	97.7	7.6	2900
	September 2012	98.95	7.93	2840
	November 2012	101.99	No Sample	No Sample
	March 2013	102.49	No Sample	No Sample
	July 2013	103.65	No Sample	No Sample
	September 2013	103.65	No Sample	No Sample
	November 2013	103.43	No Sample	No Sample
MW8	March 2012	12.57	Casing blocked	Casing blocked
	June 2012	12.76	Casing blocked	Casing blocked
	September 2012	12.63	Casing blocked	Casing blocked
	November 2012	12.79	Casing blocked	Casing blocked
	March 2013	12.68	Casing blocked	Casing blocked
	July 2013	12.95	Casing blocked	Casing blocked
	September 2013	13.00	Casing blocked	Casing blocked
	November 2013	13.01	Casing blocked	Casing blocked







All monitoring locations have remained relatively consistent over the past three months. The SWL at MW7, which is located at the north-eastern corner of the mine lease on mine-owned, has been stable for the last six months.

Surface Water

Routine surface water monitoring was conducted during November 2013. Total suspended solid levels were low as a consequence of no inflows due to limited rain and persistent dry weather, with pH and EC results consistent with other results in previous reporting periods.

There were no instances of wet weather discharge during the reporting period with a total of 148.8mm of rainfall received (120mm of which fell in November 2013). All dams have sufficient storage capacity in case of future large rain events.

Rehabilitation

Rehabilitation works over the period were focussed on the completion of the rock drain on the southern emplacement and development of a suitable sump (dam) and overflow drain off the emplacement and into surface water storage. Minor works were also undertaken on the western side of the topsoil storage area to upgrade existing drainage with rock armouring to minimise potential for erosion during flow events. Persistent dry weather has impacted capacity to establish adequate cover on the recently rehabilitated areas. This will be monitored over coming months with reseeded to occur where required subject to suitable conditions.

Complaints

Since the last meeting, there have been 2 complaints, as outlined on the following table.

Table 5- Complaints received during the reporting period

Method	Date/Time of Complaint	Nature of Complaint	Investigation	Action Taken / Follow-up
Phone call to Environmental Manager	7/11/13 12:25pm	Complaint in relation to a blast that had just been initiated at the Tarrawonga site. Complainant indicated that it resulted in significant dust from site being sent onto his property which he should not have to accept.	Tarrawonga site was requested to provide details of the blast. Information obtained confirmed that a review of the weather forecast was undertaken prior to setting the blast date. The forecast indicated mild conditions with light winds generally from the north-west. There was no indication in the forecast that conditions would be unsuitable for blasting. Confirmation of conditions at the blast time 11:59am indicated winds at 4m/s generally from the west. These conditions were generally lighter than earlier in the day. These conditions are suitable for blasting in accordance with the Blast Management Plan. No fume was present in the shot, with general dust travelling in an easterly direction. Both blast monitors confirmed the blast was within compliance parameters. Conditions are currently extremely dry and it is not possible to undertake blasting activities without the generation of dust. Site observations confirmed the dust plume travelled in an easterly direction but generally dispersed as it travelled across Whitehaven owned property. It is accepted that dust would have travelled to the complainant's property, however, it had substantially dissipated by the time it reached the property, as indicated by site photos taken by the Environmental Officer. Tarrawonga regrets any inconvenience caused by the blast, however was unable to undertake any additional mitigation measures in the current dry conditions.	Letter issued to complainant.
Phone call to Environmental Manager	6/01/2014 8:45pm	Complaint in relation to a mine vehicle travelling west along the Manilla-Boggabri Road near the Wean Race Course at excessive speed. The complainant's wife was heading east along the road when the mine vehicle passed, showering her in rocks and dust, and cracking her windscreen. The complaint is not in relation to the windscreen, but the general safety of other road users when these people travel at excessive speed along poor quality roads. The complainant is concerned someone will be seriously injured or killed as a result of mine personnel causing a road accident.	The complainant was asked if he had any identifying features of the vehicle involved such as a rego number or make of vehicle, however, the only identifier was that it was a utility with a beacon and high vis markings on the side. On this basis, the complainant was advised that we had no way of identifying the driver, or even if the vehicle was associated with the Tarrawonga Mine. Despite this, the complainant's concerns were noted and he was advised that the matter would be raised with the site Operations Manager to include in any toolbox sessions with operators, that it is expected that all personnel abide by relevant road rules, drive in a responsible manner and drive to road conditions. This was communicated with the Operations Manager the following morning 7 th January 2014.	No further advice required.

Minutes of the 33rd Meeting of the Tarrawonga Coal Mine Community Consultative Committee

Meeting Held: 21st May 2014, 10am

Venue: Tarrawonga Coal Mine, Training Room

1.0 Present and Apologies

Present: Mr John Turner (JT), Independent Chairman
Mr Tim Muldoon (TM), Group Manager Community Relations and Property
Mrs Julie Heiler (JH), Community Rep
Mrs Libby Guest (LG), Community Rep
Mrs Jill Johnson (JJ), Environmental Superintendent
Clr Hans Allgayer (HA), Gunnedah Shire Rep
Mr Anthony Margetts (AM), Operations Manager
Clr Catherine Collyer (CC), Narrabri Shire Rep
Mr Lachlan Johnson (LJ), Tarrawonga Environmental Officer
Mr Daryl Campbell (DC), Community Liaison Administration Officer
Mr Jim Picton (JP), Alternate Community Rep

Apologies: Mr Peter Laird (PL), Community Rep

TM introduced Daryl Campbell, Whitehaven's Community Relations Administration Officer. TM advised that Daryl is assisting him with the administrative processes with property management and other community relations aspects.

2.0 Declaration of Pecuniary or Non-Pecuniary Interests

JH leases "Velyama" from Aston Resources (now Whitehaven) and is in discussions with Whitehaven regarding water issues at her property.

JT declared that he is paid a fee for his participation as Independent Chairman.

3.0 Previous Minutes

Minutes of the previous site meeting were adopted as a true record on the motion of JH and HA.

4.0 Business Arising

- 4.1 AM and JJ provided an update to the Life of Mine (LOM) project. The initial tree clearing and topsoil removal campaign has been completed. Blasting has commenced in the northern extension area. This is required detailed interaction with Boggabri Coal as it is in close proximity to their haul road and explosives facility. The northern extension is the only LOM project addition to the existing mining operation at this stage and the site is still restricting production to 2Mtpa.

Update on LOM project to be provided at next meeting.

- 4.2 JT tabled a letter issued to the EPA and their letter response in relation to the offsite monitoring network. The letter advised they were not in a position to attend the meeting as they're still working on the project. JH asked when the plan would be finalised. JT said the letter noted consultation before June 2014.

Update on regional monitoring network to be provided at next meeting.

- 4.3 JJ advised that following a request at the last meeting, the last newsletter was provided to LG and CC.

No further action required.

- 4.4 JT provided an update on the Environmental Trust Fund. He said he wrote a letter to DP&I regarding interpretation of the approval conditions. It was proposed at the Boggabri Coal CCC meeting the previous day that Council would be better placed for governance of the fund and that a sub-committee be formed to determine which projects should be funded. JT proposed that the sub-committee include two members from each CCC, one representative from each coal mine and NSC reps. JT said if the proposal is accepted by NSC, Council would call for applications for funding. The sub-committee would then assess the projects on merit and priority and the sub-committee would report back to each CCC prior to a final decision being made.

JT said it's interesting that the conditions require the CCC Chairman to sign off on grants.

JT called for nominations for the sub-committee. JH and LG nominated. CC and Lloyd Finlay will be the NSC reps. JH asked how long the process would take. JT said it could take another 12 months. He said it has to be done properly as its public money. JT said he would await the outcome of the Maules Creek CCC before initiating the process.

TM asked if the NSC reps on the sub-committee would be NSC reps from the CCCs or different NSC personnel. JT to investigate.

- 4.5 JJ advised that when the next newsletter is issued information will be included about blasting.

Blasting information to be included in next newsletter.

5.0 General Business

5.1 Mine Progress Report

AM said contractors, Sub Zero, have been engaged to remove the initial material in the northern extension area.

AM said the new blasting product that isn't supposed to fume has been working well but on occasion the generic product has produced minor fume (not reportable as remained onsite). LG asked about the fume. AM said when the explosive sits in the ground it is susceptible to moisture and depending on the product, the product can degrade and have a chemical reaction which creates nitrous oxide gas (faint yellow through to dark orange/purple).

JP asked AM if he is comfortable with the amount of dust in yesterday's blast. AM said the blast was in the Nagero seam and produced dust and a little bit of fume which hung over the pit. CC said it was very visible. AM said blasting is visible and you will see dust from blasting. He said when you release energy into the rock you

will create dust. But there are environmental controls in place to minimise the impact, such as the pre blast checklist which considers wind speed and direction.

5.2 Environmental Monitoring Report

JJ presented the environmental monitoring results which are attached in the Environmental Monitoring Report.

In relation to the PM10 exceedance at “Templemore” not being a non-compliance as the property is project-related, JP asked about the people east of “Templemore”. JJ said the mine can only report on the locations that they monitor and asked if JP was interested in the PM₁₀ monitor being moved to his property. JP said they’d had monitoring at the property in the past. JJ asked if it was noise or dust monitoring. JP said it was noise monitoring. JJ again offered to undertake PM10 monitoring at JP’s property. She explained the difference between deposited dust monitoring and PM₁₀ monitoring and that any results make up dust from all sources, not just mining. The samples can be analysed for their percentage of coal dust compared to other dust but the dust could come from anywhere (unsealed roads, farming practices, mining etc). JJ advised that the monitor is a permanent fixed monitor that requires mains power and runs every 6 days. JP said he would be interested in investigating the option.

JT said JP and JJ should discuss the issue outside of the CCC.

LG noted that the email complaint from the 22nd April 2014 was not responded to until the 8th May 2014. JJ explained the delay in responding was as a result of decreased resources, with staff resignations, and she would endeavour to respond more quickly in future.

JH suggested the Committee write a letter to Danny Young, thanking him for his time over the last 7 years. JP asked JH what he did besides his job, which JP believed he didn’t do very well. JH said she always thought Danny worked with honesty and integrity and suggested to JP that if he treated people with respect he would get respect back. The Committee agreed that a letter should be issued to Danny. JJ to provide contact details to JT. JT to issue letter.

JT to issue thank you letter to Danny Young.

6.0 New Business

- 6.1 JJ advised that Boggabri Coal had commenced construction of a quarry on Tarrawonga’s mining lease on the previous Friday without the knowledge of Whitehaven. The quarry is to be used for the upgrade of Goonbri Road. AM had ordered work to cease until all obligations (health, safety, environment and community) had been met. AM said statutory responsibility for the quarry and associated works would be transferred to Boggabri Coal for the duration of the project.

JJ advised that if the community and neighbours had any enquiries or issues with the quarry operation they should contact Boggabri Coal directly.

JP asked if the gravel was for Leard Forest Road. JJ said it is for the Goonbri Road Upgrade for Boggabri Coal because they’re closing Leard Forest Road. She said any Goonbri Road upgrade works associated with the Tarrawonga Life of Mine Project are not expected to occur for the next two years.

- 6.2 JH asked about NSC’s objection to the application to modify Tarrawonga’s project approval in relation to continued road haulage and whether that would mean that

all coal would have to be railed. TM said the modification hadn't been determined yet but it may potentially restrict how Tarrawonga transports coal.

Update on modification application for continued road haulage.

7.0 Complaints

Complaints were discussed in the Environmental Monitoring Report.

8.0 Next Meeting

The next meeting will be held at the Tarrawonga Coal Mine Training Room in August 2014 (date to be advised) at 10:00am.

Meeting closed at 11:40am, followed by a site tour (LJ, JJ, LG, CC, JT)

John Turner - Chair

Tarrawonga Coal Mine Community Consultative Committee Meeting #33

Environmental Monitoring Report February – April 2014

Noise Monitoring

Noise monitoring was undertaken at the “Tarrawonga” property from the 3rd to 6th March 2014, with results outlined below. The noise criterion for the mine is 35dB(A) Leq (15 min) for all operating times.

TCM Noise Monitoring Results, 3 rd – 6 th March 2014					
Date	Time	dB(A),Leq (15 min)	Wind speed/direction	Temp. Inversion °C/100m	Identified Noise Sources as dB(A) Leq (15 min)
3 Mar 2014	9:11 pm	38	0.9/SE	-	TCM (35), wind (34), insects (29)
3 Mar 2014	1:17 am	38	1.2/ESE	+3.1	TCM (35), insects (35)
4 Mar 2014	1:22 pm	30	0.9/SE	-	Birds & insects (30), TCM (21)
4 Mar 2014	7:38 pm	36	Calm	-	Birds & insects (33), TCM (33)
4 Mar 2014	10:11 pm	37	0.5/SSE	+1.7	TCM (35), insects (33)
5 Mar 2014	1:54 pm	29	0.9/SW	-	Birds & insects (28), TCM (20)
5 Mar 2014	9:24 pm	43	Calm	-	Birds & insects (43), TCM (24)
5 Mar 2014	1:21 am	37	0.1/SSE	+2.1	TCM (34), insects (34)
6 Mar 2014	10:40 am	29	1.2/NW	-	Birds & insects (27), TCM (24)

The results show that noise emissions from the mine did not exceed the operational noise criterion at the “Tarrawonga” monitoring location during the monitoring event.

In addition to the operational noise, the noise from the mine must not exceed 45 dB(A) L1 (1 min) between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine. The results of the sleep disturbance monitoring show that the measured L1 (1 min) noise level did not exceed the sleep disturbance criterion during any of the night time monitoring throughout the survey.

TCM Sleep Disturbance Monitoring Results				
Location	Time	dB(A),L1 (1 min)	Wind speed/direction	Temperature Inversion °C/100m
Tarrawonga (3/3/14)	1:17 am	42	1.2/ESE	+3.1
Tarrawonga (4/3/14)	10:11 pm	43	0.5/SSE	+1.7
Tarrawonga (5/3/14)	1:21 am	40	0.1/SSE	+2.1

The real time noise monitor was relocated to the “Matong” property in November 2013 and has indicated mine noise at that location to be generally within compliance limits. Since the weather has started to cool down, the monitor has issued a few alarms which identify noise levels nearing or reaching compliance limits. The site OCE’s action each alarm by investigating the noise source

and modifying operations if it is identified that operations from Tarrawonga are contributing to the elevated noise levels.

Blast Monitoring

Blasting Results

Since the first shot there have been 477 blasts (until the end of April 2014). All blasts have been within ground vibration and air blast overpressure limits since the last meeting.

Air Quality

Air Quality (Dust Deposition) Results

MONTH	TEMPLEMORE (EB-4)	BOLLOL CREEK STN (EB-5)	AMBARD (EB-6)	TARRAWONGA (EB-7)	THUIN (EB-8)	PINE GROVE (EB-9)	TARRAWONGA MINE (EB-10)	TARRAWONGA MINE (EB-11)	PINE GROVE (EB-12)	BOLLOL CREEK (EB-13)	TARRAWONGA MINE (EB-14)	TARRAWONGA MINE (EB-15)	JERALONG NORTH (EB-16)
May 2013	3.5	3.6	1.1	3.3	4.8	0.9	0.9	1.1	1.3	1.2	2.5	8.9	1.1
June 2013	2.0	26.4	1.1	2.6	3.4	1.3	2.1	0.8	0.6	1.1	1.4	5.0	2.7
July 2013	1.5	0.5	0.5	0.2	3.1	0.5	3.6	0.5	0.4	1.5	0.9	9.5	3.4
August 2013	3.3	0.6	0.1	0.7		0.3	33.8	0.3	0.2	9.1	0.6	3.3	0.3
September 2013	2.2	1.9	0.8		3.0	0.7	43.4	1.1	0.6	1.8	1.8	5.9	1.0
October 2013	1.3	6.1	0.9	0.6	6.3	1.1	1.5	1.5	1.6	2.9	0.3	5.4	1.6
November 2013	2.4	0.3	0.8	1.1	2.0	1.1	1.2	1.1	0.4	2.9	0.6	6.5	5.2
December 2013	4.5	2.5	1.4	1.2	2.3	1.2	9.8	3.6	2.1	0.6	0.2	4.6	5.2
January 2014	0.7	6.0	0.3	0.6	1.0		0.5	3.8	2.9	0.5	2.0	2.4	13.3
February 2014	2.7	0.4	1.1	0.5	0.6	1.4	0.6	2.1	0.4	3.6	1.3	2.0	2.6
March 2014	10.7	3.0	1.2	1.1	1.4	1.1	0.1	3.2	1.7	8.7	2.7	17.1	2.7
April 2014	3.7	2.1	1.6	0.7	1.9	0.9	1.7	2.5	2.1	2.9	7.7	2.8	0.6
ANNUAL AVERAGE	3.2	4.5	0.9	1.1	2.7	1.0	8.3	1.8	1.2	3.1	1.8	6.1	3.3

All monitoring locations remain below the limit of $4\text{g}/\text{m}^2/\text{month}$ with the exception of EB-5, EB-10 and EB-15. As these monitors are located on mine-owned land, compliance criteria do not apply.

PM₁₀ Results

The annual average for PM₁₀ readings at “Templemore” is currently at $22.36\mu\text{g}/\text{m}^3$ (until end of April 2014) and remains well below the annual average limit of $30\mu\text{g}/\text{m}^3$. PM₁₀ levels have remained compliant since the last CCC meeting with the exception of the 15th February 2014 where a result of $63.7\mu\text{g}/\text{m}^3$ was recorded.

Elevated dust levels were attributed to digging conditions on the day. The OCE noted elevated dust levels and stood the machine down and relocated it to an alternate work area. The prevailing wind direction on the day was from westerly/nor westerly direction and wind speed became elevated throughout the middle of the day reaching 6m/s. As the property is project-related the result is not a non-compliance.

The fixed real time air quality monitor (TEOM) is currently providing daily reports as well as real time air quality results from the “Flixton” property. No alarms have been recorded over the last three months.

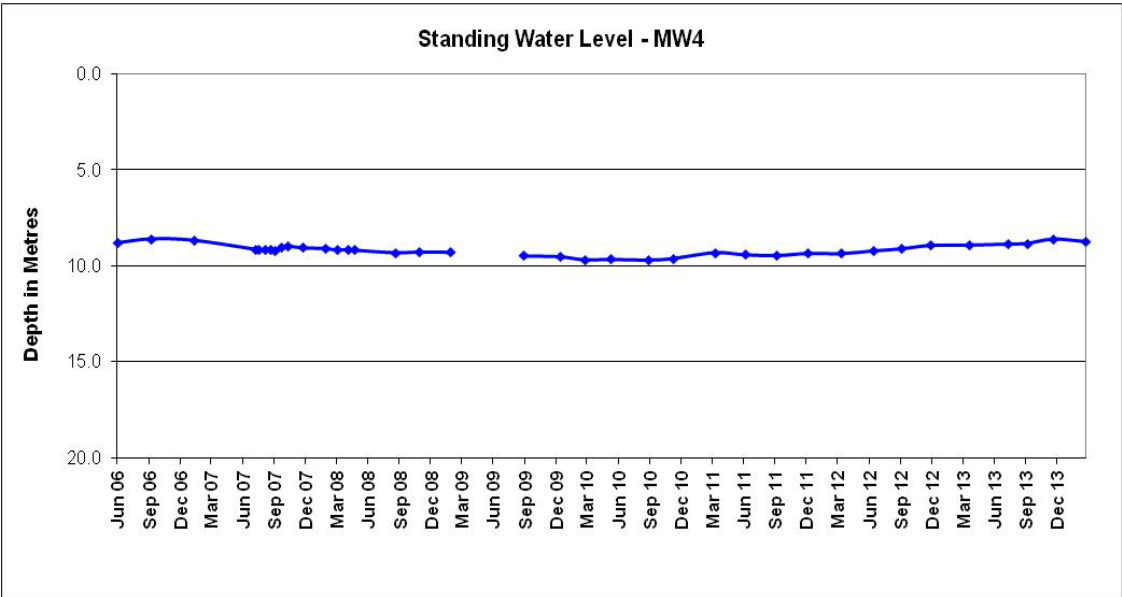
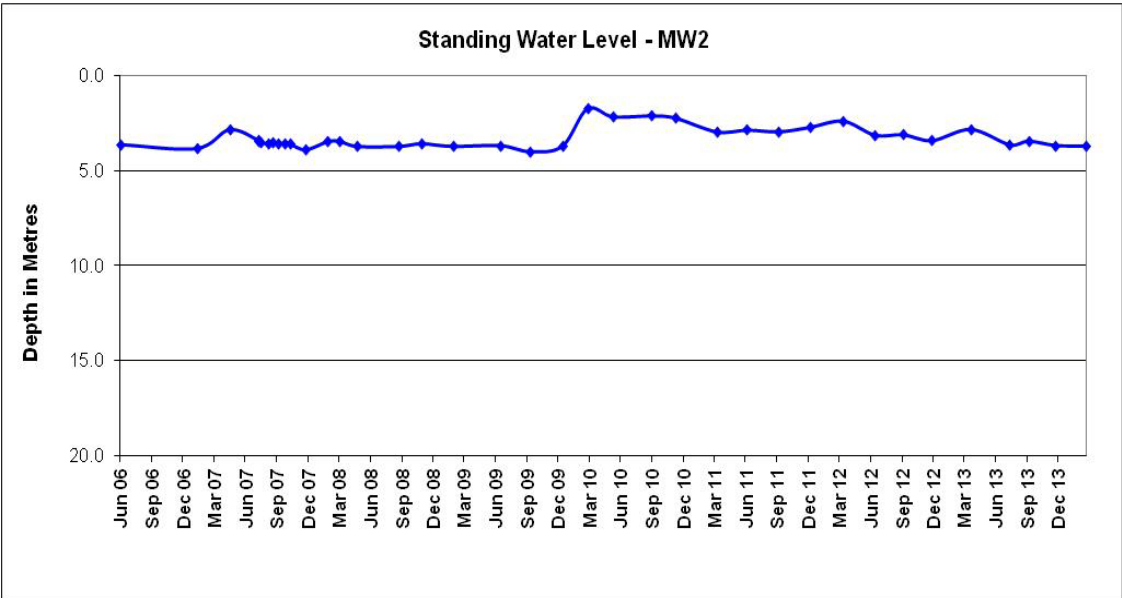
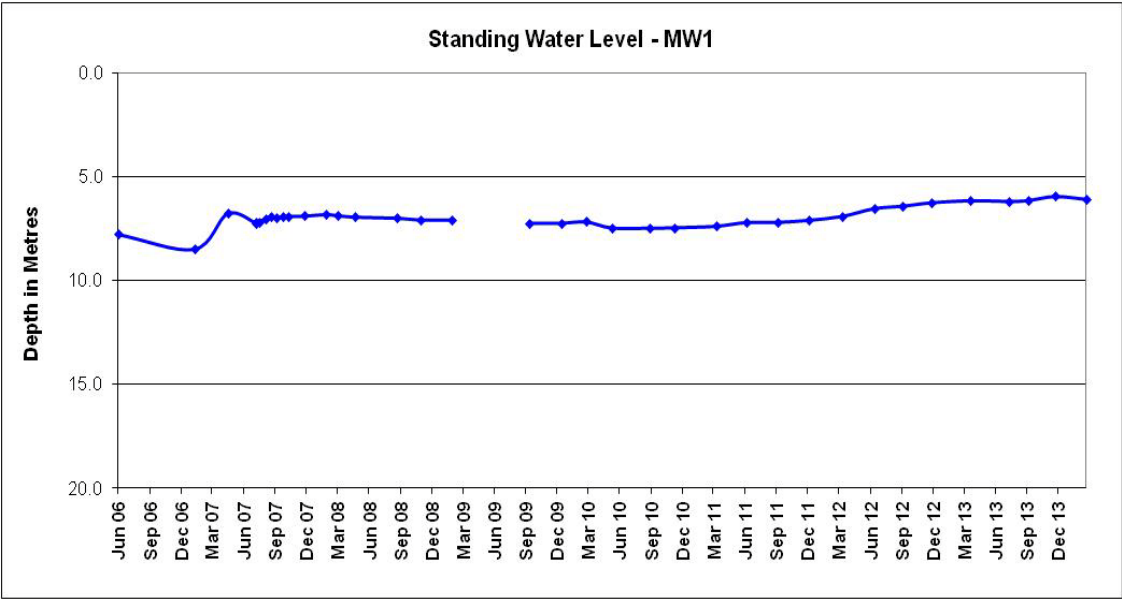
Water Monitoring

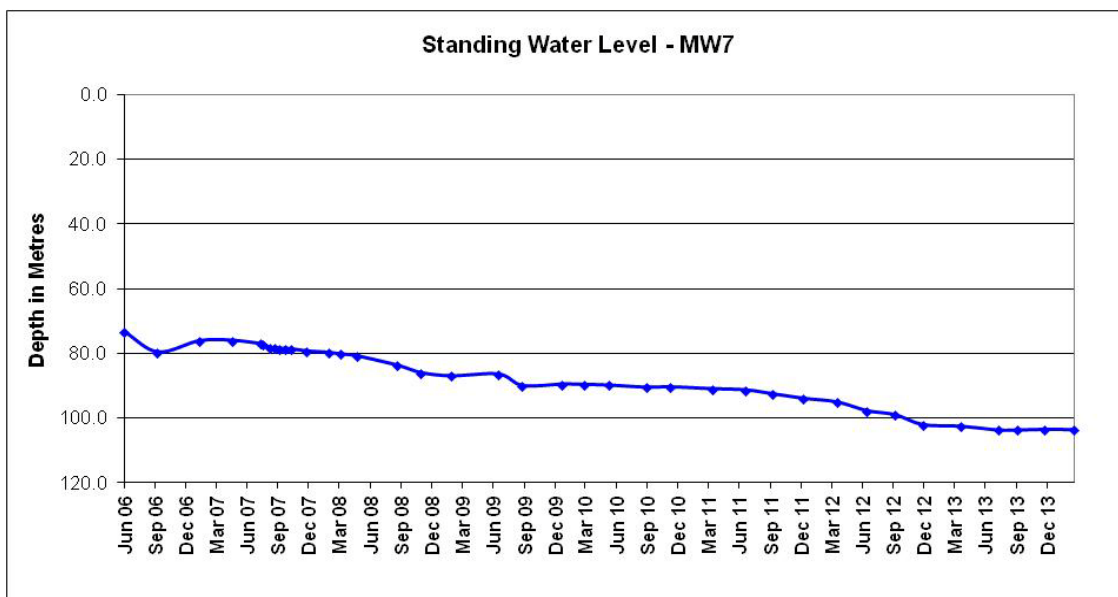
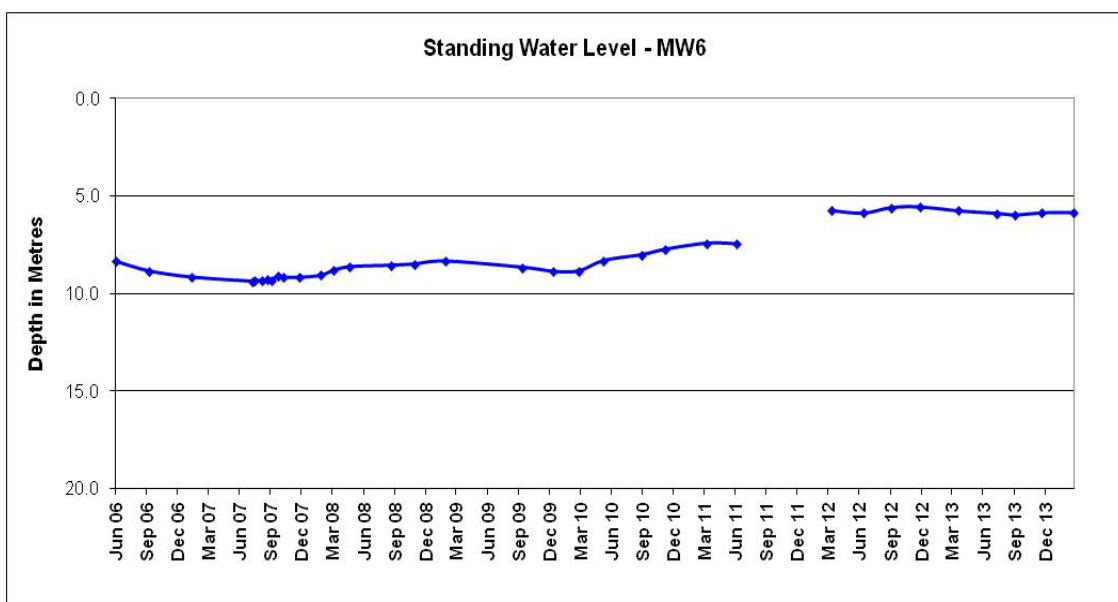
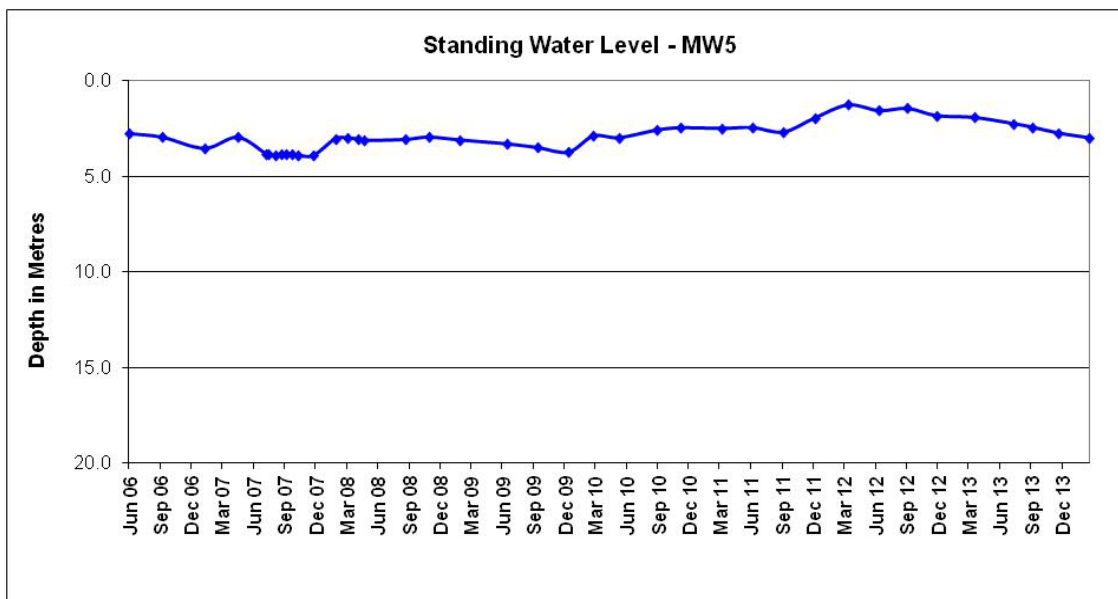
Ground Water

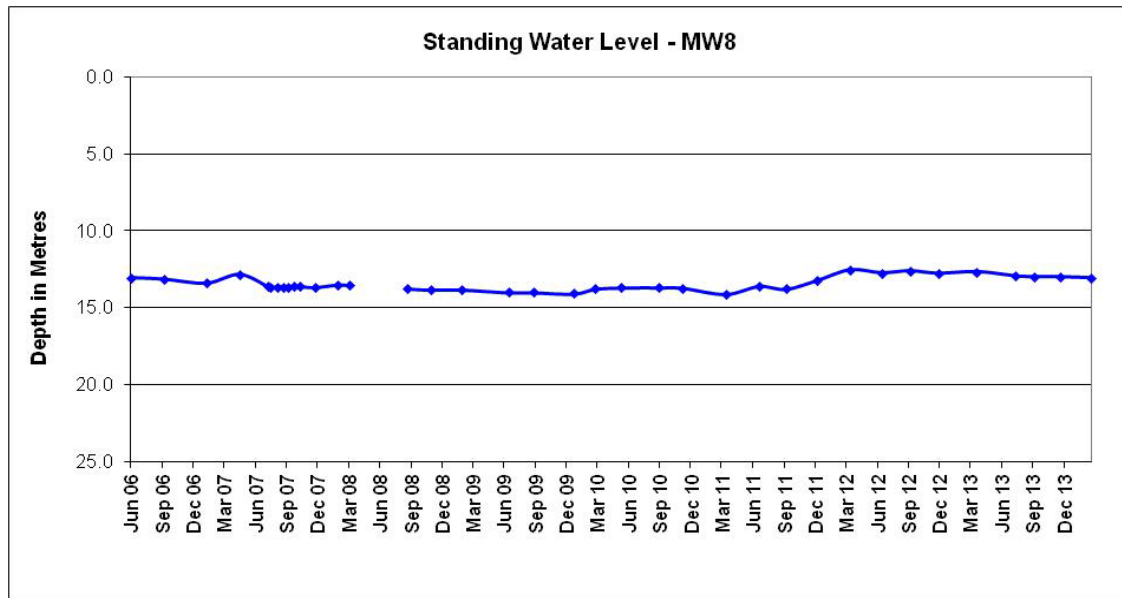
Groundwater monitoring data obtained to date, including the last round of SWL monitoring in February 2014, is provided in the table and graphs below. All monitoring locations have remained relatively consistent over the past three months.

Groundwater Results Summary

Site	Date	SWL (m)	pH	Elect. Conduct
MW1	March 2013	6.15	7.52	3180
	July 2013	6.18	7.49	3110
	September 2013	6.14	7.19	3330
	November 2013	5.95	7.6	3140
	February 2014	6.08	7.65	3440
MW2	March 2013	2.82	7.39	1310
	July 2013	3.64	7.03	686
	September 2013	3.45	7.46	674
	November 2013	3.68	6.9	694
	February 2014	3.72	7.01	694
MW4	March 2013	8.92	7.53	3770
	July 2013	8.87	7.76	3410
	September 2013	8.83	7.99	3950
	November 2013	8.61	7.6	3720
	February 2014	8.74	7.98	3890
MW5	March 2013	1.94	7.54	1520
	July 2013	2.26	7.62	846
	September 2013	2.45	8.07	1810
	November 2013	2.76	7.7	2430
	February 2014	3.01	7.77	1850
MW6	March 2013	5.75	7.46	343
	July 2013	5.88	7.62	452
	September 2013	5.96	7.8	496
	November 2013	5.85	7.2	486
	March 2014	5.84	7.51	212
MW7	March 2013	102.49	No Sample	No Sample
	July 2013	103.65	No Sample	No Sample
	September 2013	103.65	No Sample	No Sample
	November 2013	103.43	No Sample	No Sample
	February 2014	103.55	No Sample	No Sample
MW8	March 2013	12.68	Casing blocked	Casing blocked
	July 2013	12.95	Casing blocked	Casing blocked
	September 2013	13.00	Casing blocked	Casing blocked
	November 2013	13.01	Casing blocked	Casing blocked
	February 2014	13.07	Casing blocked	Casing blocked







Surface Water

Routine surface water monitoring was conducted during February 2014.

SB25 was constructed as part of the northern extension works. Associated with the dam construction was the construction of inlet and outlet drains along with the construction of a clean water diversion drain. SB25 has been constructed to a capacity of 10ML. Since completion the dam has been seeded with a cover crop.

A wet weather discharge occurred on the 28th March 2014 from SD9 following 133.8mm of rainfall over the preceding five days. All monitoring parameters were compliant with criteria.

Rehabilitation

Following above average rainfall in March and persistent mild conditions through autumn some planning and investigation has been undertaken to address shortfalls in the rehabilitation due to above average dry and hot conditions through spring and summer. It is anticipated that on ground works will commence mid year focusing on infill planting and enhancing cover crops.

Some work has been undertaken on the northern rehab to address an ongoing sodic soils issue. Following soil testing and professional agricultural advice, on-ground works have been completed to address this issue. The area will continue to be monitored to determine the success of the works.

Complaints

Since the last meeting, there have been 3 complaints, as outlined on the following table.

Complaints

Method	Date/Time of Complaint	Nature of Complaint	Investigation
Email to Environmental Manager	9/04/2014 7:48am	The complaint related to increased dust and noise levels over the two weeks; a noticeable increase in mine related dust with a particular occurrence on Saturday 5/4. Second email noted that mine related noise was distinct morning of 11/4.	Monitored dust and noise levels in particular at the complainant's property boundary have been reviewed. These levels are within the specified levels. The matter will be continued to be monitored. Environmental Manager responded via email advising Environmental Officer would review noise and dust data for last two weeks. Environmental Officer to liaise with complainant and arrange a face to face meeting at a mutually convenient time.
Email to Environmental Manager	22/04/2014 6:10pm	Complaint about the dense dust in the valley and all around the mountains to the east of the Tarrawonga mine that morning. The complainant said the dust was very heavy and thick and there was a black layer above the mine site which all seemed to be floating in an easterly direction towards the complainant's homes and working environment. The complainant also noted mine noise that she is hearing during the night at her two properties. She said it is quite loud.	Environmental Superintendent responded via email (8/5/2014) advising that the site Environmental Officer would contact the complainant to arrange a meeting to discuss the issues.
Email to Environmental Manager	28/04/2014 4:15pm	Complaint regarding noise over the last week being louder than normal and that this is a continuation from the complainant's last email. The complainant said it concerns her as she hears this noise at night and it has been loud during the days as well.	Environmental Superintendent responded via email (8/5/2014) advising that the site Environmental Officer would contact the complainant to arrange a meeting to discuss the issues.

Minutes of the 34th Meeting of the Tarrawonga Coal Mine Community Consultative Committee

Meeting Held: 7th August 2014, 10am

Venue: Tarrawonga Coal Mine, Training Room

1.0 Present and Apologies

Present: Mr John Turner (JT), Independent Chairman
Mrs Julie Heiler (JH), Community Rep
Mrs Libby Guest (LG), Community Rep
Mrs Jill Johnson (JJ), Group Environment Manager
Clr Hans Allgayer (HA), Gunnedah Shire Rep
Mr Anthony Margetts (AM), Operations Manager
Mr Lachlan Johnson (LJ), Tarrawonga Environmental Officer
Mr Daryl Campbell (DC), Community Liaison Administration Officer
Mr Jim Picton (JP), Alternate Community Rep

Apologies: Mrs Cath Collyer (CC), Narrabri Shire Rep

2.0 Declaration of Pecuniary or Non-Pecuniary Interests

JH leases "Velyama" from Aston Resources (now Whitehaven).

JT declared that he is paid a fee for his participation as Independent Chairman.

3.0 Previous Minutes

Minutes of the previous site meeting were adopted as a true record on the motion of LG and JP.

4.0 Business Arising

- 4.1 AM provided an update to the Life of Mine (LOM) project. Excavation commenced in the northern extension on the 2nd June 2014. The initial work is being undertaken by Subzero with demobilisation expected in the next couple of weeks. Whitehaven will then take over mining of the pit. Topsoil/mulch stockpiling and installation of water management structures is almost complete.

JP asked if the northern extension work would increase coal capacity. AM said it will remain at 2Mtpa. JJ said the site is permitted to increase to 3Mtpa but won't be doing so in the foreseeable future.

Further LOM updates to be included in Mine Progress Report and Environmental Monitoring Report.

- 4.2 In relation to the regional air quality monitoring network, JT said the matter now lies with NSC and that GSC had also expressed an interest. JJ said the EPA had contacted the mining companies requesting information about existing monitoring activities. A meeting between EPA and the mining companies will be held in the coming weeks.

Update on regional air quality monitoring network to be provided at the next meeting.

- 4.3 JJ advised that when the next newsletter is issued information will be included about blasting.

Blasting information to be included in next newsletter.

- 4.4 JT advised that a letter of thanks had been issued to Danny Young.

No further action required.

- 4.5 In relation to the road haulage modification application, JJ advised that Whitehaven's Managing Director had met with NSC to discuss, amongst other things, their objection to the application. The application is tied up with a backlog of applications including the Vickery Project and the issue with VPAs.

Update on modification application for continued road haulage to be provided at next meeting.

5.0 General Business

5.1 Mine Progress Report

AM said with the approval of the MOP the site is now seeing additional clearing on top of the hill (so there's more activity up higher). Activity will settle back into routine soon.

JT asked about progress of remediation. AM said recent activity has focussed on topsoil removal. JJ said rehabilitation has been held up with delays to approvals and that as the pit and dumps progress to final profile, rehabilitation will be possible. AM provided the example that the northern extension was supposed to start in September 2013 but approvals weren't finalised until April 2014.

JH asked if there is plenty of water onsite. AM said at the moment the site is in a pretty good situation. JH referred to Lake Keepit being at low levels (8%) and asked how the site will deal with reduced allocation from the river. AM said the site is investigating different options including a permanent in pit sump (the site can survive on water from the coal seam plus some surface water runoff), exploration holes in low points in the aquifer in advance of mining (which will also help to dewater the pit) and a bore field on mine owned land (less of a priority than the other options).

JP asked about the new Maules Creek road and why Whitehaven didn't relocate the Greenhills/Blair Athol road at the same time. JJ said delaying road relocation associated with Tarrawonga was a financial decision by the Company.

JP asked about a road at the back of his property called Thunderbolt's Way, which is currently a track but is a designated shire road. He said someone who works at Tarrawonga told him that it would be upgraded. JJ and AM said they hadn't heard about it and that if it was to be upgraded it wasn't related to Tarrawonga.

5.2 Environmental Monitoring Report

JJ presented the environmental monitoring results which are attached in the Environmental Monitoring Report.

LJ noted that subject to the Noise Management Plan being approved, noise monitoring locations would be moved to Barbers Lagoon, Bungalow and the Matong boundary.

LG said the deposited dust table showed monthly results over the limit of $4\text{g/m}^2/\text{month}$. JJ explained that the limit is for the annual average, rather than the monthly results.

JP said that it was dusty today and LG agreed. JP referred to the complaint his wife made on 30th July and that whoever she spoke to at the mine said the dust levels were fine. LJ said Robynne had spoken to him and that he hadn't long been out in the pit and that he thought the pit looked ok. After he received the complaint he did another site inspection and found dust lift off from drill cuttings and requested a water cart wet down the area. JP said the dust is as bad today as it was the day of the complaint. He said with the westerly wind the dust rolls down the valley and Robynne has photos to prove it.

AM explained the different things that the site does to minimise dust and provided an example that on Friday a digger was shut down. JP asked if that's because it had blown a hose. LJ said it was shut down because it was generating too much dust and that a drill rig was shut down this morning for the same reason. JH said dust is now a problem from both mines and it should be dealt with as a joint issue.

JJ said the sites are dealing with it as a joint issue and that management of dust at the site has come a long way in the last few years. The examples of stopping the digger and drill is an example that production is not always the priority. JJ also said that the nature of mining means that some dust will always be generated (it's the site's job to minimise it) and that just because dust is visible above the site doesn't mean the site is non-compliant or that it's having an effect offsite.

JJ referred to the draft licence variation EPA has issued to all open cuts in NSW in relation to stabilisation of exposed areas. AM said the waste dumps at Tarrawonga don't produce much dust due to the conglomerate material. He explained that the drills grind up the material into a fine powder and that a shot could have around 1000 holes, each with its own pile of drill cuttings. The drill pads are watered (which forms a crust) but on dry, windy days the crust is compromised which leads to dust lift off.

JP said dust may not be above recommended levels but it's still dusty and they have to live in it. He said they get emotional when they call up to complain but whoever answers the phone shouldn't take it personally.

AM said about six months ago, dust and noise discussions were introduced to the pre-start meetings which has increased the focus. He said the operators are now more inclined to contact their supervisor when it's dusty.

JP asked about the water levels at the bore at the Matong boundary. He said he hadn't noticed any impact on his bores but he would be interested to see what that bore was showing. LJ said he would look after the meeting and let JP know.

LJ said infill planting needs to be undertaken due to poor weather conditions following the last round of planting. He said work on the northern emplacement had been undertaken to address sodic soils but the area was been grazed by kangaroos.

JH said the cypress pines need to be controlled. JJ said that's possible so long as they're within the approved disturbance limit. LJ said he would investigate and provide an update at the next meeting.

HA asked what depth the Maules Creek pit would be. AM said 400-500m. HA said it's a fair hole and asked whether it will affect the water balance. He believes the bores around Tarrawonga will crash. JJ said she wasn't aware of the potential for

that impact on bores around Tarrawonga as she hadn't been directly involved with the Maules Creek project.

In relation to a complaint being received following a blast, LG asked what happens if the blast monitor is moved to the complainant's property and records exceedances. JJ said it would be very unlikely that there would be exceedances at that distance. She said there's no "one size fits all" process but noted working with the landholder and EPA and modification to blasting practices. JP said the property is a fair way away and windows rattling is an impact.

LJ said he's working with the complainant to address his concerns. JP noted the complainant's property is to the south of the mine and wondered whether it had something to do with where blasting is occurring. JJ said weather has a lot to do with it. AM said sometimes a shot is technically good and the blast monitor results are complaint but the noise bounces off the atmosphere and affects properties in a particular direction.

In relation to what can be done at a site level when exceedances occur, AM explained that an overpressure exceedance generally relates to ejection of the explosive due to inadequate stemming. He explained other options that can be implemented to manage overpressure.

JP asked about the activity at the Orica depot. AM said he believes Boggabri Coal have engaged their services.

LJ to provide details on SWL at Matong bore to JP.

LJ to investigate control of cypress pine onsite.

6.0 New Business

- 6.1 Regarding the Environmental Trust, JT said he hasn't had a reply from the NSC GM but that Cr Lloyd Finlay advised at the Maules Creek CCC meeting that he had spoken with the NSC GM and that JT would have a response within the next two weeks.

Environmental Trust fund update to be provided at next meeting.

- 6.2 JT said the Tarrawonga CCC meeting is good in terms of JJ sending minutes and agenda in the required time and that he has asked the other mines to allow adequate time. The last minute notification of this meeting as a result of a request from Maules Creek will not happen again.
- 6.3 JT said committee members have raised concern that the joint CCC meeting shouldn't replace the quarterly meetings for the individual mines. He said that it had been discussed at the Maules Creek CCC that individual meetings continue and that the joint meeting would be an additional meeting. JH and JJ suggested that all meetings be held around the same time (ie. individual meetings held as they are now – two on one day and the other on an adjoining day and then the joint meeting on the adjoining day or the next day). Committee agreed and JT said he would take it to the Boggabri Coal CCC meeting and advise everyone of an outcome.

JT to provide advice regarding timing for upcoming individual and joint CCC meetings.

- 6.4 JJ advised that Peter Laird resigned prior to the last meeting due to poor health and apologised for forgetting to raise it at the last meeting. Peter is still interested

in the site and would like to continue to receive meeting minutes and reports. JJ said she will continue to post them to Peter as they are public available on the website.

- 6.5 JH discussed the issue of people speeding on local roads and referred to a recent accident involving someone who distributes products to the mines. She understands that the mines can't control how the workers drive but she would appreciate if an awareness program could be implemented. She also said the condition of Manilla Road is poor. JP said Ken McLaren at Boggabri Coal had encouraged their workers to slow down but unless the Police are patrolling the roads people will still speed.

JH said people are choosing to use Boston Bridge instead of the Iron Bridge as they feel it's safer but are being told by the mines not to use it. JJ said she's not sure whether avoiding use of Boston Bridge was committed to in any of the site Environmental Assessments but she does recall community complaints about use of that bridge which is why the mines would be telling their workers not to use it.

AM said last month a road safety awareness video and presentation was delivered to all crews. He said the video was a Victorian road safety commercial that summarised all key commercials about road safety since the 1980's. He said the emotional factor of the video appears to have had an impact on the workers. He also provided a presentation on the times it takes to stop at various speeds and the minimal impact speeding has to the length of the trip. The Committee commended AM for the initiative and LG said they message needs to be reiterated over time. JH asked if AM could send the video to Boggabri Coal.

AM to provide road safety video to Boggabri Coal.

- 6.6 HA commented on the amount of rubbish in the area (not just associated with Tarrawonga) and asked that a bin be installed in the carpark to encourage people not to throw rubbish out of their car windows.

AM said there had been a push onsite in the last 3 months or so to reduce rubbish and a bin could carry on this initiative.

Bin to be installed in carpark.

7.0 Complaints

Complaints were discussed in the Environmental Monitoring Report.

8.0 Next Meeting

The next meeting will be held in November with the venue, date and time to be advised.

Meeting closed at 11:15am

John Turner - Chair

Tarrawonga Coal Mine Community Consultative Committee Meeting #34

Environmental Monitoring Report May – July2014

Noise Monitoring

Noise monitoring was undertaken at the “Tarrawonga” property from the 10th to 12th June 2014, with results outlined below. The noise criterion for the mine is 35dB(A) Leq (15 min) for all operating times.

Table 1 - TCM Noise Monitoring Results, 10 th – 12 th June 2014					
Date	Time	dB(A),Leq (15 min)	Wind speed/direction	Temp. Inversion °C/100m	Identified Noise Sources as dB(A) Leq (15 min)
10 June 2014	1:48pm	38	5.7/SE	-	TCM (32), wind (37),
10 June 2014	9:29pm	39	5.2/ESE	+1.2	TCM (Inaudible), Wind (39)
10 June 2014	1:36am	30	1.1/SE	+4.0	Traffic (26), TCM (28)
11 June 2014	2:27pm	32	2.1/SSE	-	Birds (30), TCM (28)
11 June 2014	9.20 pm	28	0.8/NNW	+11.2	TCM (35), insects (33)
11 June 2014	1:29am	44	Calm	+12.4	TCM (44)
12 June 2014	9:17am	44	1.3/SSE	-	Birds (36), TCM (43)
12 June 2014	9.27pm	37	1.4/N	+8.0	TCM (37)
12 Jun 2014	1.37am	43	0.6/NW	+11.2	TCM (43)

The results in Table 1 show that noise emissions from the mine did exceed the operational noise criterion at the “Tarrawonga” monitoring location during the monitoring event. The property is project owned and therefore a noise criterion does not apply.

In addition to the operational noise, the noise from the mine must not exceed 45 dB(A) L1 (1 min) between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine. The results of the sleep disturbance monitoring show that the measured L1 (1 min) noise level did exceed the sleep disturbance criterion during the nights of 11 & 12 June during monitoring survey. As the property is project owned the noise criteria does not apply.

TCM Sleep Disturbance Monitoring Results				
Location	Time	dB(A),L1 (1 min)	Wind speed/direction	Temperature Inversion °C/100m
Tarrawonga (10/6/14)	1:36 am	35	1.1/SE	+4.0
Tarrawonga (11/6/14)	1:29 am	51	Calm	+12.4
Tarrawonga (12/6/14)	1:37 am	51	0.6/NW	+11.2

The real time noise monitor was relocated to the “Matong” property in November 2013 and has indicated mine noise at that location to be generally within compliance limits. Since the weather has started to cool down, the monitor has issued a few alarms which identify noise levels nearing

or reaching compliance limits. The site OCE's action each alarm by investigating the noise source and modifying operations if it is identified that operations from Tarrawonga are contributing to the elevated noise levels.

Blast Monitoring

Blasting Results

Since the first shot there have been 500 blasts (until the end of July 2014). All blasts have been within ground vibration and air blast overpressure limits since the last meeting.

Air Quality

Air Quality (Dust Deposition) Results

MONTH	TEMPLEMORE (EB-4)	BOLLOL CREEK STN (EB-5)	AMBARD (EB-6)	TARRAWONGA (EB-7)	THUIN (EB-8)	PINE GROVE (EB-9)	TARRAWONGA MINE (EB-10)	TARRAWONGA MINE (EB-11)	PINE GROVE (EB-12)	BOLLOL CREEK (EB-13)	TARRAWONGA MINE (EB-14)	TARRAWONGA MINE (EB-15)	JERALONG NORTH (EB-16)
August 2013	3.3	0.6	0.1	0.7		0.3	33.8	0.3	0.2	9.1	0.6	3.3	0.3
September 2013	2.2	1.9	0.8		3.0	0.7	43.4	1.1	0.6	1.8	1.8	5.9	1.0
October 2013	1.3	6.1	0.9	0.6	6.3	1.1	1.5	1.5	1.6	2.9	0.3	5.4	1.6
November 2013	2.4	0.3	0.8	1.1	2.0	1.1	1.2	1.1	0.4	2.9	0.6	6.5	5.2
December 2013	4.5	2.5	1.4	1.2	2.3	1.2	9.8	3.6	2.1	0.6	0.2	4.6	5.2
January 2014	0.7	6.0	0.3	0.6	1.0		0.5	3.8	2.9	0.5	2.0	2.4	13.3
February 2014	2.7	0.4	1.1	0.5	0.6	1.4	0.6	2.1	0.4	3.6	1.3	2.0	2.6
March 2014	10.7	3.0	1.2	1.1	1.4	1.1	0.1	3.2	1.7	8.7	2.7	17.1	2.7
April 2014	3.7	2.1	1.6	0.7	1.9	0.9	1.7	2.5	2.1	2.9	7.7	2.8	0.6
May 2014	1.0	1.3	0.2	0.7	4.8	1.1	0.7	2.8	2.7	2.8	5.4	8.1	1.3
June 2014	2.1	2.6	0.2	0.4	2.2	0.5	1.9	5.6	0.9	0.8	2.6	10.8	0.5
July 2014	0.8	2.8	0.3	0.3	0.7	0.3	3.4	2.7	0.5	0.2	1.4	7.6	0.5
ANNUAL AVERAGE	2.95	2.47	0.74	0.72	2.38	0.88	8.22	2.53	1.34	3.07	2.22	6.38	2.90

All monitoring locations remain below the limit of 4g/m²/month with the exception of EB-10 and EB-15. As these monitors are located on mine-owned land, compliance criteria do not apply.

PM₁₀ Results

The annual average for PM₁₀ readings at "Templemore" is currently at 21.75µg/m³ (until end of June 2014) and remains well below the annual average limit of 30µg/m³. PM₁₀ levels have remained compliant since the last CCC meeting.

The fixed real time air quality monitor (TEOM) is currently providing daily reports as well as real time air quality results from the "Flixton" property. There have been no alarms recorded during since the last meeting.

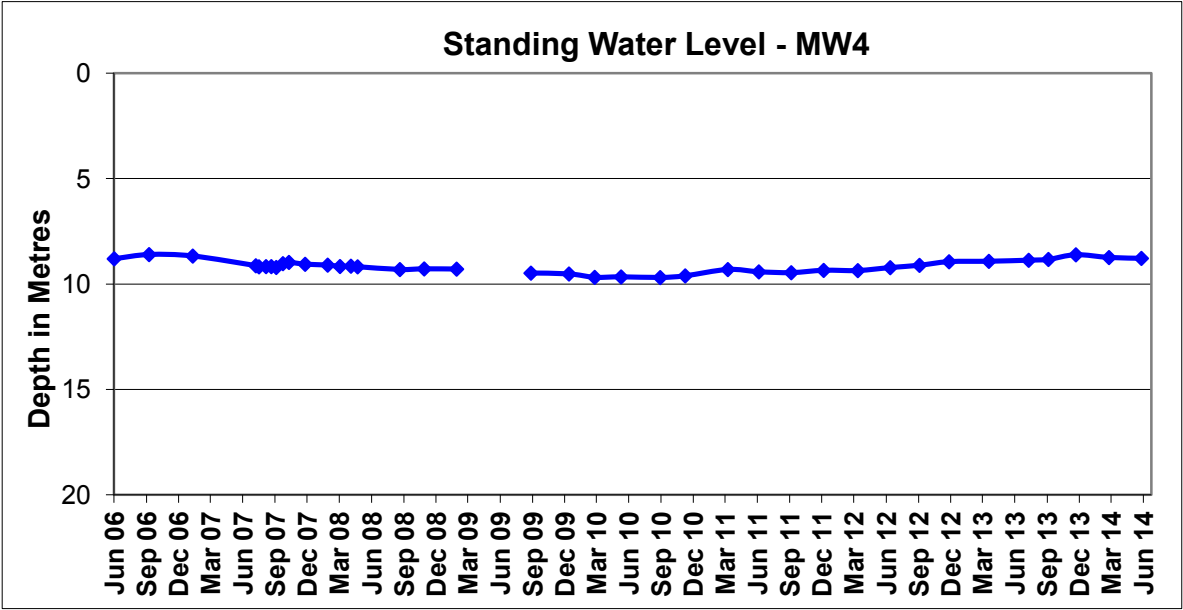
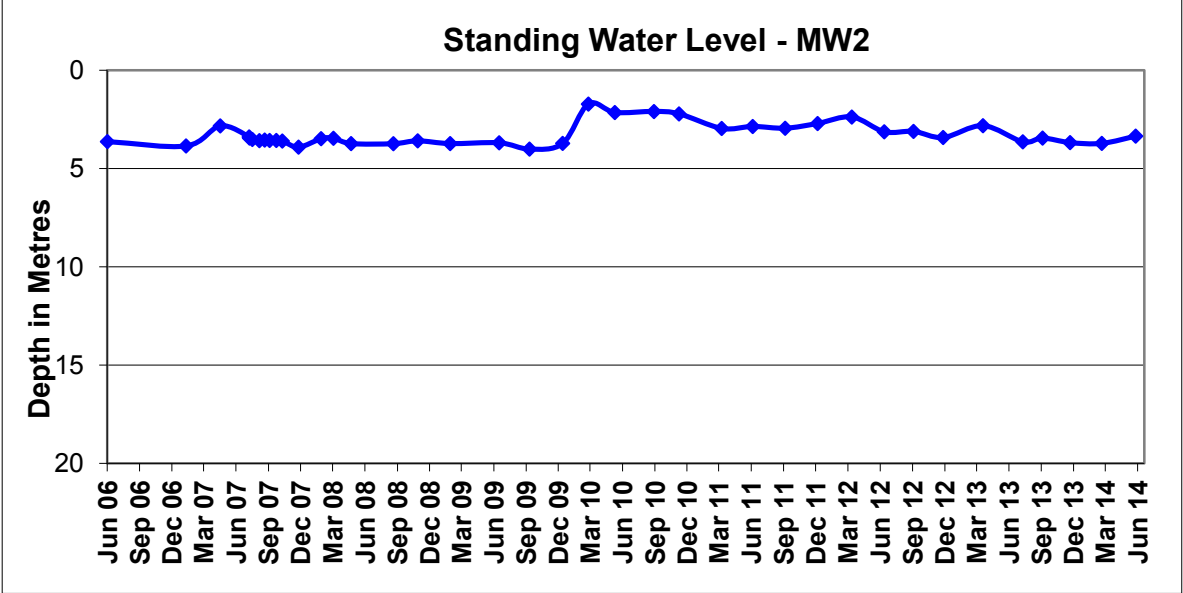
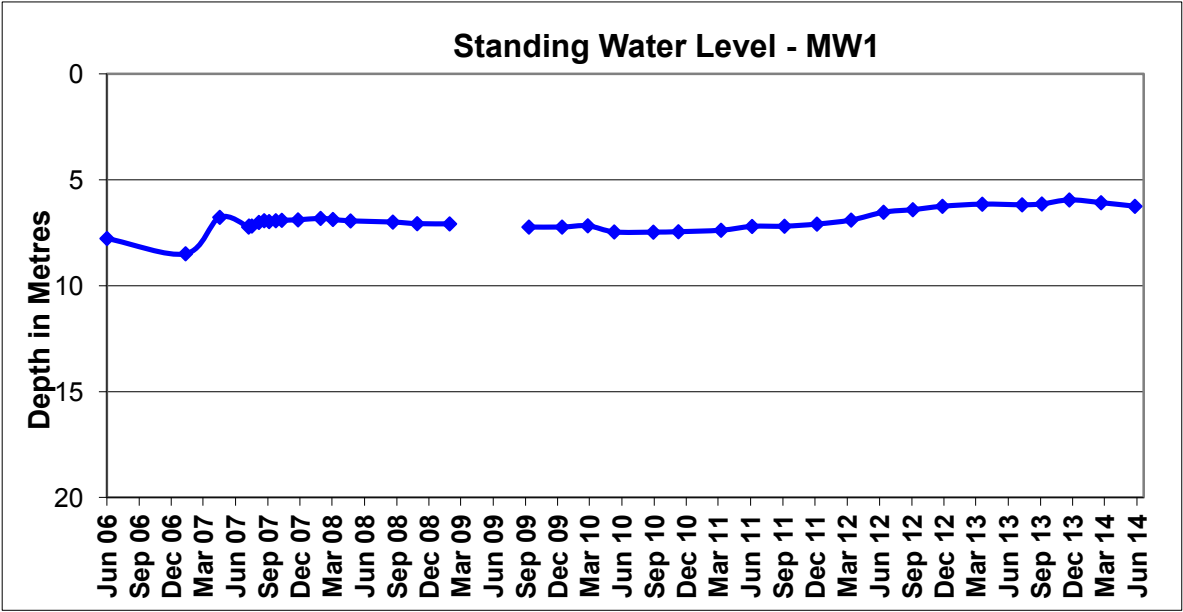
Water Monitoring

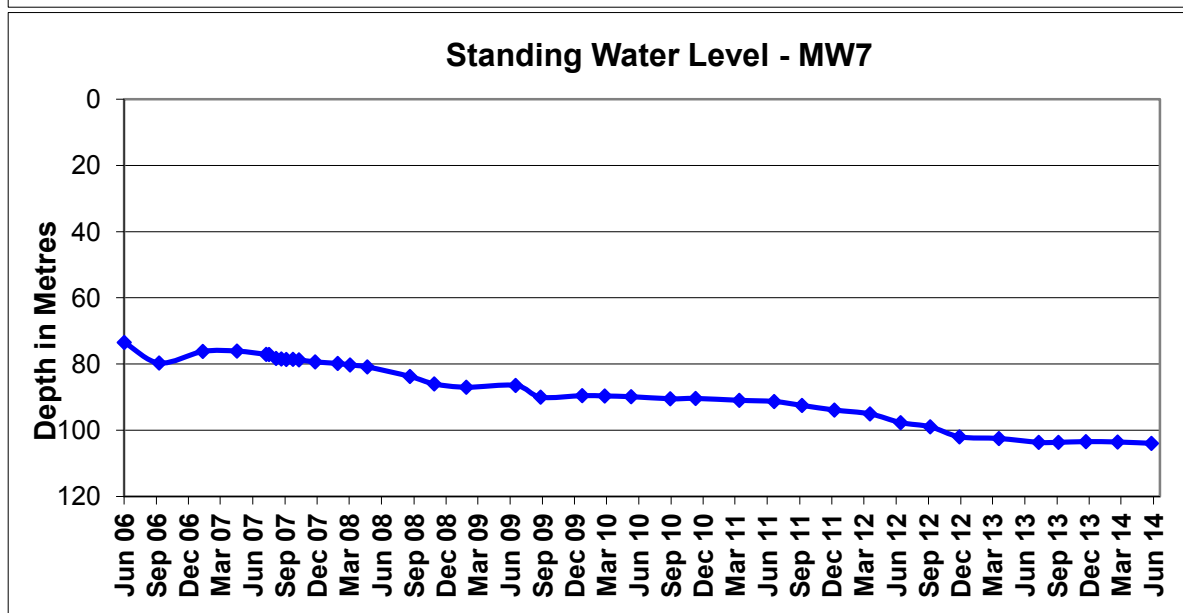
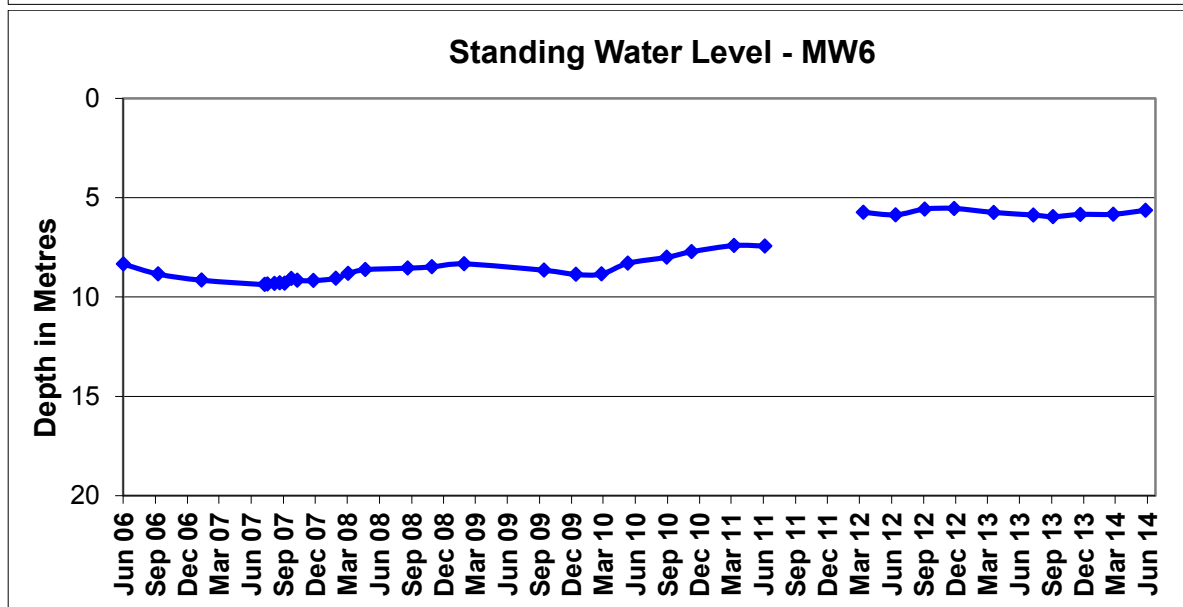
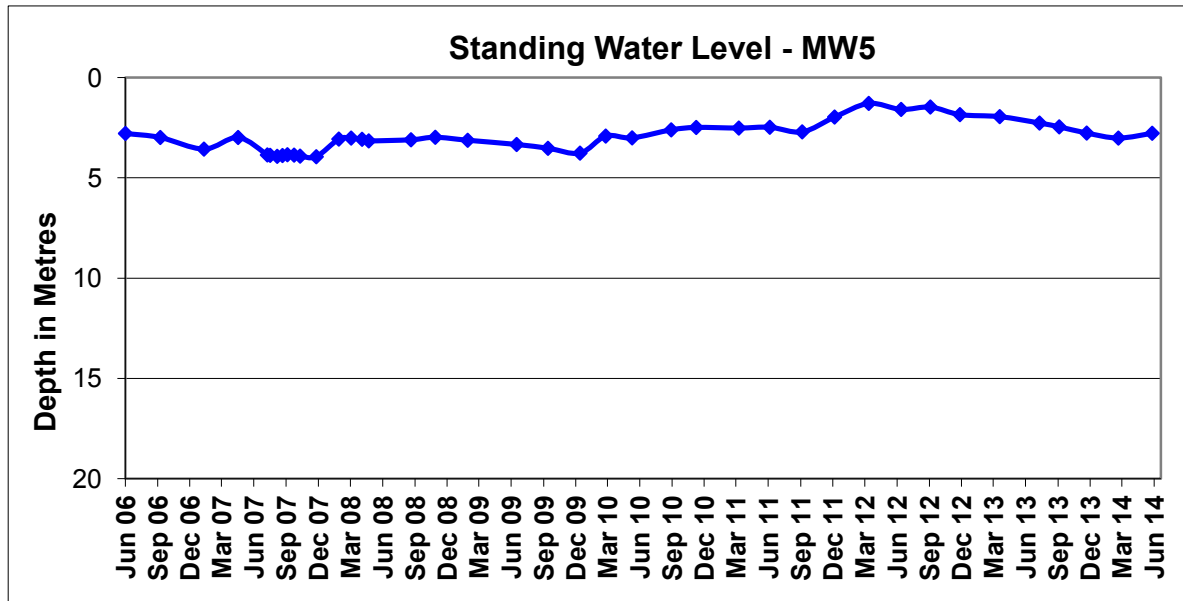
Ground Water

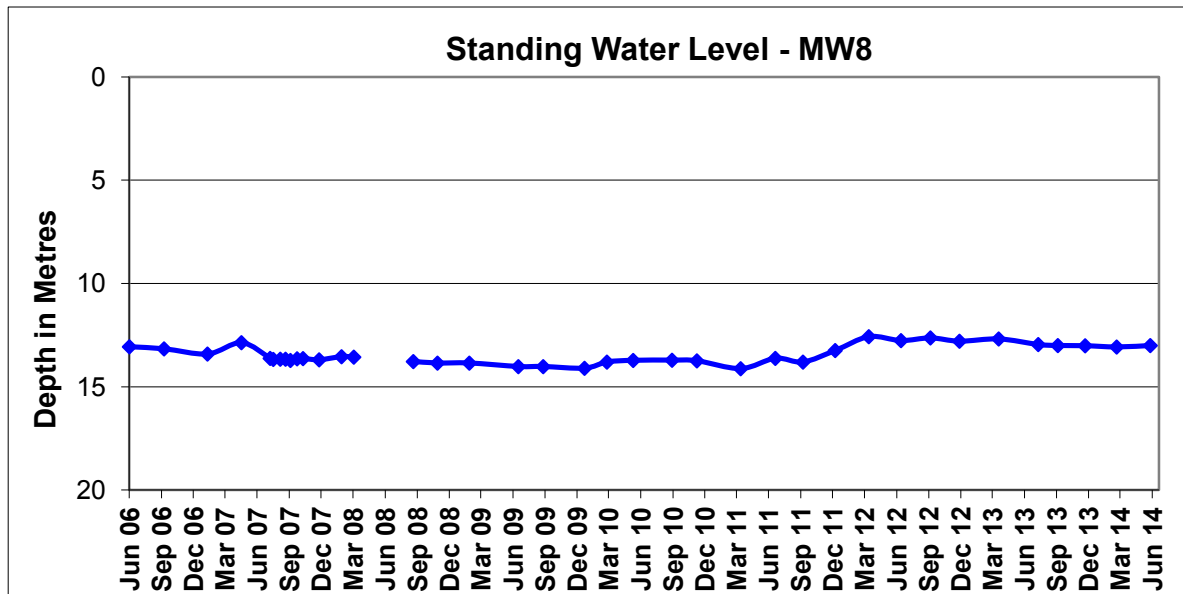
Groundwater monitoring data obtained to date, including the last round of SWL monitoring in May 2014, is provided in the table and graphs below. All monitoring locations have remained relatively consistent over the past three months.

Table 4- Groundwater results Summary

Site	Date	SWL (m)	pH	Elect. Conduct
MW1	July 2013	6.18	7.49	3110
	September 2013	6.14	7.19	3330
	November 2013	5.95	7.6	3140
	February 2014	6.08	7.65	3440
	May 2014	6.25	7.6	3140
MW2	July 2013	3.64	7.03	686
	September 2013	3.45	7.46	674
	November 2013	3.68	6.9	694
	February 2014	3.72	7.01	694
	May 2014	3.35	7.4	618
MW4	July 2013	8.87	7.76	3410
	September 2013	8.83	7.99	3950
	November 2013	8.61	7.6	3720
	February 2014	8.74	7.98	3890
	May 2014	8.78	7.6	3840
MW5	July 2013	2.26	7.62	846
	September 2013	2.45	8.07	1810
	November 2013	2.76	7.7	2430
	February 2014	3.01	7.77	1850
	May 2014	2.77	7.7	925
MW6	July 2013	5.88	7.62	452
	September 2013	5.96	7.8	496
	November 2013	5.85	7.2	486
	March 2014	5.84	7.51	212
	May 2014	5.64	7.5	360
MW7	July 2013	103.65	No Sample	No Sample
	September 2013	103.65	No Sample	No Sample
	November 2013	103.43	No Sample	No Sample
	February 2014	103.55	No Sample	No Sample
	May 2014	103.96	No Sample	No Sample
MW8	July 2013	12.95	Casing blocked	Casing blocked
	September 2013	13.00	Casing blocked	Casing blocked
	November 2013	13.01	Casing blocked	Casing blocked
	February 2014	13.07	Casing blocked	Casing blocked
	May 2014	13.00	Casing blocked	Casing blocked







Surface Water

Routine surface water monitoring was conducted during May 2014.

No wet weather discharges have occurred since the last CCC meeting.

Rehabilitation

During late autumn and throughout spring there will be rehab activities occurring on both the northern and southern emplacement areas including tree planting, infill planting and cover crop enhancement.

Soil stripping activities in the northern extension are expected to be completed during the upcoming weeks. The second stockpile will be located on top of the northern emplacement and upon completion of stripping these stockpiles will be shaped and seeded with a cover crop.

Complaints

Since the last meeting, there have been 8 complaints, as outlined on the following table.

#	Method	Date/Time of Complaint	Nature of Complaint	Investigation	Action Taken / Follow-up
5	Email to Environmental Superintendent	21/05/2014 8:19am	Complaint regarding the heavy dust within the valley and around the complainant's homes through Tuesday 20/5 and morning of Wednesday 21/5. The complainant stated it is unacceptable to live with such conditions.	The Site Environmental Officer has undertaken preliminary investigation into the source, weather conditions, monitoring data and external factors which resulted in elevated atmospheric dust conditions on the day.	Environmental Superintendent replied via email to complainant advising that the site Environmental Officer would further investigate the matter and discuss with the complainant at the planned meeting.
6	After hours call to EPA	26/5/2014 3.35pm	Complaint to EPA on the 20/5/2014 at 6:00am with the caller reporting extreme levels of dust in the valley that morning coming from the two main coal mines. The caller also said above both the mines there is a black haze, a mixture of diesel and coal dust the caller believes. The weather was not windy on the day, with only a slight breeze. The complainant also noted that there was a lot of machine noise as well that morning.	Environmental Officer replied by email to the EPA 28/5/2014 advising that the site was aware of the poor weather conditions on the day of the complaint, made every effort to minimise dust generation and initiated an investigation following an email from the complainant to the Environmental Superintendent. The EPA was advised that the Tarrawonga Environmental Officer has been attempting to make a time to meet with the complainant since their last complaints with no advice to date from the complainant as to when they would like to meet.	Continued attempts will be made to contact complainant to organise a meeting to discuss their concerns.
7	After hours call to EPA	26/5/2014 3.35pm	Complaint to EPA on 21/5/2014 regarding large amount of thick dust being generated by general mine activity plus a black inversion layer across the Tarrawonga and Boggabri Coal Mines and Leards Forest Rd at 6:30am. The complainant noted that the dust was still very heavy at the time of the call at 8:26am.	Environmental Officer replied by email to the EPA 28/5/2014 advising that the site was aware of the poor weather conditions on the day of the complaint, made every effort to minimise dust generation and initiated an investigation following an email from the complainant to the Environmental Superintendent. The EPA was advised that the Tarrawonga Environmental Officer has been attempting to make a time to meet with the complainant since their last complaints with no advice to date from the complainant as to when they would like to meet.	Continued attempts will be made to contact complainant to organise a meeting to discuss their concerns.
8	Phone call to Environmental Officer	27/6/2014 1.20pm	Complaint made to the Environmental Officer regarding Blast No. 492 in the Tarrawonga Open Cut Pit. The complainant believed that the blast caused the house to shake in an unacceptable manner and that this was the second occasion within the last 3 weeks (Boggabri Blast) that had adversely impacted the property.	The Environmental Officer spoke to the complainant and advised that the blast was within compliance limits as specified in the project approval and the EPL. The concerns of the complainant were noted.	The complainant has accepted an offer for blast monitoring to commence at his property. The monitor will be relocated once the LOM Blast Management Plan and EPL variation have been approved.
9	Phone call to the Environmental	9/7/2014 1:36pm	Complaint made relating to blast no. 494 and also blasting in general over the last few months. The house shook considerably during	The Environmental Officer discussed the matter at length with the complainant including blast timing, product etc. It was advised that the blast was within compliance limits specified in both the EPL and PA.	Further investigation into blasting impacts to be undertaken and further details to be conveyed to complainant once investigation

#	Method	Date/Time of Complaint	Nature of Complaint	Investigation	Action Taken / Follow-up
	Officer		the blast. Complainant happy to work with Tarrawonga to reach an outcome.		completed including any actions that will implemented.
10	Phone call to the Tarrawonga Complaint Hotline	31/7/14 3:56pm	Complaint made relating to dust levels emanating from Tarrawonga on day of the complaint and also the previous afternoon.	An investigation was subsequently carried out by the Environmental Officer which identified increased dust levels blowing off an exposed drill pattern.	A water cart was utilised to water down drill pattern and cuttings to reduce dust emissions.
11	Phone call to the EPA	23/7/14 7:30am (Received 1/8/14)	Complaint made regarding dust coming from Tarrawonga.	Weather data and dust inspection records were reviewed indicating that a strong inversion was present on the morning of the complaint. Dust inspection carried out later in the day identified that dust was being minimised.	Response sent to the EPA via email. The weather data and dust inspection records for the day and time of the complaint were reviewed and there was a moderate inversion at the time. The dust inspection carried out during the afternoon of the complaint showed that dust generation from mining operations was being minimised. It is difficult to address the complaint in any further detail given the delay in notification about it. Also, the site only commences operation at ~6:45am, with water carts operating prior to this, so it is possible that sources other than Tarrawonga (including unsealed local roads) were contributing to the issue.
12	Phone call to the EPA	30/7/14 3:00pm (Received 1/8/14)	Complaint made regarding dust plume coming from Tarrawonga.	Weather conditions and dust inspection records were reviewed. Elevated dust conditions had been noted; in particular moderate winds resulted in dust blowing off an exposed drill pad (noted during dust inspection).	A water cart was utilised to suppress dust emanating from an exposed drill pad and drill cuttings. This drill pad had been part of the circuit but had dried since the last pass.

Minutes of the 35th Meeting of the Tarrawonga Coal Mine Community Consultative Committee

Meeting Held: 18th November 2014, 10am

Venue: Tarrawonga Coal Mine, Training Room

1.0 Present and Apologies

Present: Mr John Turner (JT), Independent Chairman
Mrs Julie Heiler (JH), Community Rep
Mrs Libby Guest (LG), Community Rep
Mrs Jill Johnson (JJ), Group Environment Manager
Clr Hans Allgayer (HA), Gunnedah Shire Rep
Mr David Sharpe (DS), Tarrawonga Mine Planner
Mr Lachlan Johnson (LJ), Tarrawonga Environmental Officer

Apologies: Mrs Cath Collyer (CC), Narrabri Shire Rep
Mr Anthony Margetts (AM), Operations Manager

2.0 Declaration of Pecuniary or Non-Pecuniary Interests

JH leases "Velyama" from Aston Resources (now Whitehaven).

JT declared that he is paid a fee for his participation as Independent Chairman.

3.0 Previous Minutes

Minutes of the previous site meeting were adopted as a true record on the motion of LG and HA, on the basis that LG is changed to LJ in Section 5.2.

4.0 Business Arising

4.1 In relation to the regional air quality monitoring network, TM advised that the EPA is still negotiating with the mining industry and Council and that a meeting had been held recently with the Council to discuss the network, where Council suggested mirroring the Hunter Valley network. TM mentioned that NSW mining paid \$70 million in royalties last year and that some of that could be used to fund the project. At this stage the network will be managed by EPA with monitors in Narrabri, Gunnedah and Mullaley.

JJ provided detail on the meeting she had attended whereby EPA advised the three monitoring locations with details on costings. JJ said at the meeting EPA said that the community doesn't trust the mine's monitoring results and that the EPA's monitoring network will not replace any, or very few at best, of the existing monitors.

JT said he attended the meeting that TM referred to and that there seemed to be confusion at the meeting. He said the EPA said they're not ready to initiate the monitoring network and don't have the funding.

LG asked if there was anything the CCC could do to help. JT said the Councils are briefing the Minister. He said the CCC can't do anything as they're not a proactive Committee. He suggested the issue be raised at the BTM complex CCC meeting.

TM said the mine's monitoring results are regularly uploaded to Whitehaven's website.

JH said the Hunter Valley is completely different to this area in terms of aspects such as topography, weather, population and land use. She asked if we can advise the Government that the mines shouldn't have to pay for all of it.

LG said it sounds like there is already a substantial amount of money available from royalties that could be used.

HA said Gunnedah Shire Council will continue to push for the monitoring. It will just be a matter of who pays for it.

TM also mentioned that money Whitehaven has paid in Voluntary Planning Agreements.

Regional air quality monitoring network update to be provided at next meeting.

- 4.2 JJ advised that when the next newsletter is issued information will be included about blasting.

Blasting information to be included in next newsletter.

- 4.3 In relation to the road haulage modification application, JJ advised that the modification had been approved and a copy would be emailed to the CCC members. The approval now allows a combined 3.5Mtpa to be hauled from Rocglen and Tarrawonga and does not remove the option of haulage to Boggabri Coal in the future.

JJ to provide modification approval to all CCC members.

- 4.4 LJ advised that he's not sure which bore JP previously referred to so will print a plan and have Jim identify it. LJ will then provide the monitoring results to JP.

LJ to provide monitoring results to JP for a bore on Matong.

- 4.5 As AM was absent from the meeting, he was unable to advise if the road safety video had been provided to Boggabri Coal.

AM to provide road safety video to Boggabri Coal.

- 4.6 In relation to HA's suggestion for a bin to be installed in the carpark, JJ advised that the carpark is currently being upgraded and a bin will be installed at the completion of the earthworks.

DS said periodic clean-ups of the access road verges also still occur.

AM/LJ to organise bin for site carpark.

- 4.7 LJ said the Offset Management Plan and Farm Management Plan will address Cypress Pine regrowth however the plans are yet to be approved so it will take some time for them to be implemented.

JH said African Boxthorn should be considered too. TM said Whitehaven undertakes ongoing and campaign management of Boxthorn but it is a difficult task given the amount we've inherited in property purchases. HA said pressure needs to be put on landholders.

LJ to co-ordinate implementation of management plans once approved. Actions will be discussed in relevant Environment Monitoring Reports.

5.0 General Business

5.1 Mine Progress Report

DS said in the period August to October 2014, approximately 5 million BCM of overburden was moved for approximately 477,000 tonnes of ROM coal.

The contractor that was engaged to commence the Northern Extension finished in August and the site has return to Whitehaven undertaking all operations.

5.2 Environmental Monitoring Report

JJ presented the environmental monitoring results which are attached in the Environmental Monitoring Report.

6.0 New Business

6.1 JJ provided a copy of the 2013 – 2014 AEMR to the CCC.

6.2 In relation to the Environmental Trust, JT advised that the sub-committee would be meeting the following day to settle the criteria for application and to commence proceedings to implement the application process with Narrabri Shire Council.

Update on Trust Fund to be provided at next meeting.

6.3 JH asked about the \$1.4 million VPA funding. TM said he would check whether NSC had received it.

TM to investigate status of VPA funding.

7.0 Complaints

Complaints were discussed in the Environmental Monitoring Report.

8.0 Next Meeting

The next meeting will be held in February with the venue, date and time to be advised.

Meeting closed at 10:50 am

John Turner - Chair

Tarrawonga Coal Mine Community Consultative Committee Meeting #35

Environmental Monitoring Report August – November 2014

Noise Monitoring

Noise monitoring was undertaken at the “Tarrawonga” property from the 9th to 12th September 2014, with results outlined below. The noise criterion for the mine is 35dB(A) Leq (15 min) for all operating times.

Table 1 - TCM Noise Monitoring Results, 10 th – 12 th June 2014					
Date	Time	dB(A),Leq (15 min)	Wind speed/direction	Temp. Inversion °C/100m	Identified Noise Sources as dB(A) Leq (15 min)
9 September 2014	3:42	37	3.8/NW	-	TCM (36), cattle (30), birds and insects (25)
9 September 2014	9:29pm	35	1.5/N	+7.0	TCM (32), frogs & insects (32)
9 September 2014	10:05pm	38	1.5/N	+10.2	TCM (37), frogs (32),
10 September 2014	8:49am	41	3.9/W	-	TCM (30), Wind (41)
10 September 2014	7:01 pm	26	1.0/SW	+2.6	TCM (26)
10 September 2014	10:04pm	24	Calm	+8.6	TCM Inaudible, Domestic Noise (24)
11 September 2014	8:05am	40	1.1/SSE	-	Birds (40), TCM (25)
11 September 2014	7:05pm	29	0.7/NNW	+11.4	TCM (28), birds (22)
11 September 2014	10:00pm	25	0.8/NNW	+11.8	TCM (22), cattle (22)
12 September 2014	8:47am	42	2.1/SSE		TCM (37), birds (40)
12 September 2014	7:14pm	30	0.8/NNW	+13.0	TCM (30), frogs (30)
12 September 2014	10:06pm	37	0.4/WSW	+8.0	TCM (37), frogs (24)

The results in Table 1 show that noise emissions from the mine did exceed the operational noise criterion at the “Tarrawonga” monitoring location during the monitoring event. The property is project owned and therefore a noise criterion does not apply.

In addition to the operational noise, the noise from the mine must not exceed 45 dB(A) L1 (1 min) between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine. The results of the sleep disturbance monitoring show that the measured L1 (1 min) noise level did not exceed the sleep disturbance criterion.

TCM Sleep Disturbance Monitoring Results				
Location	Time	dB(A),L1 (1 min)	Wind speed/ direction	Temperature Inversion °C/100m
Tarrawonga (9/9/14)	10:05 pm	43	1.5/N	+10.2
Tarrawonga (10/9/14)	10:04 pm	n/a	Calm	+8.6
Tarrawonga (11/9/14)	10:00 pm	25	0.8/NNW	+11.8
Tarrawonga (12/9/14)	10:06 pm	44	0.4/WSW	+8.0

The real time noise monitor was relocated to the “Matong” property in November 2013 and has indicated mine noise at that location to be generally within compliance limits. As the weather has started to warm up and less severe inversion categories, the number of alarms received from the monitor has decreased. The site OCE’s action each alarm by investigating the noise source and modifying operations if it is identified that operations from Tarrawonga are contributing to the elevated noise levels.

Blast Monitoring

Blasting Results

Since the first shot there have been 530 blasts (until the 14/11 2014). All blasts have been within 100 percentile limit for ground vibration and air blast overpressure since the last meeting.

On 23rd September a result of 119.1dB was recorded at the Tarrawonga monitor; this remains within the 5% threshold for exceedances over 115dB. As the property is also project owned blast criterion do not apply.

Air Quality

Air Quality (Dust Deposition) Results

MONTH	TEMPLEMORE (EB-4)	BOLLOL CREEK STN (EB-5)	AMBARDO (EB-6)	TARRAWONGA (EB-7)	THUIN (EB-8)	PINE GROVE (EB-9)	TARRAWONGA MINE (EB-10)	TARRAWONGA MINE (EB-11)	PINE GROVE (EB-12)	BOLLOL CREEK (EB-13)	TARRAWONGA MINE (EB-14)	TARRAWONGA MINE (EB-15)	JERALONG NORTH (EB-16)
November 2013	2.4	0.3	0.8	1.1	2.0	1.1	1.2	1.1	0.4	2.9	0.6	6.5	5.2
December 2013	4.5	2.5	1.4	1.2	2.3	1.2	9.8	3.6	2.1	0.6	0.2	4.6	5.2
January 2014	0.7	6.0	0.3	0.6	1.0		0.5	3.8	2.9	0.5	2.0	2.4	13.3
February 2014	2.7	0.4	1.1	0.5	0.6	1.4	0.6	2.1	0.4	3.6	1.3	2.0	2.6
March 2014	10.7	3.0	1.2	1.1	1.4	1.1	0.1	3.2	1.7	8.7	2.7	17.1	2.7
April 2014	3.7	2.1	1.6	0.7	1.9	0.9	1.7	2.5	2.1	2.9	7.7	2.8	0.6
May 2014	1.0	1.3	0.2	0.4	4.8	1.1	0.7	2.8	2.7	2.8	5.4	8.1	1.3
June 2014	2.1	2.6	0.2	0.4	2.2	0.5	1.9	5.6	0.9	0.8	2.6	10.8	0.5
July 2014	0.8	2.8	0.3	0.3	0.7	0.3	3.4	2.7	0.5	0.2	1.4	7.6	0.5
August 2014	1.2	3.6	0.7	0.3	2.8	0.8	1.9	8.7	1.4	1.2	5.1	26	0.9

September 2014	2.2	2.4	0.6	0.5	1.1	0.6	1.9	1	0.5	0.7	3.7	6.8	0.6
October 2014	5	2.6	1.7	1	2.3	1.1	1.9	6.2	1	7.6	2.6	9.7	1.2
ANNUAL AVERAGE	3.08	2.47	0.84	0.68	1.9	0.9	2.1	3.6	1.38	2.71	3.0	8.7	2.90

All monitoring locations remain below the limit of 4g/m²/month (average) with the exception of EB-15. As this monitor is located on mine-owned land, compliance criteria do not apply.

PM₁₀ Results

The annual average for PM₁₀ readings at “Templemore” is currently at 25.45µg/m³ (until end of October 2014) and remains below the annual average limit of 30µg/m³. PM₁₀ levels have remained compliant since the last CCC meeting.

The fixed real time air quality monitor (TEOM) is currently providing daily reports as well as real time air quality results from the “Flixton” property.

Water Monitoring

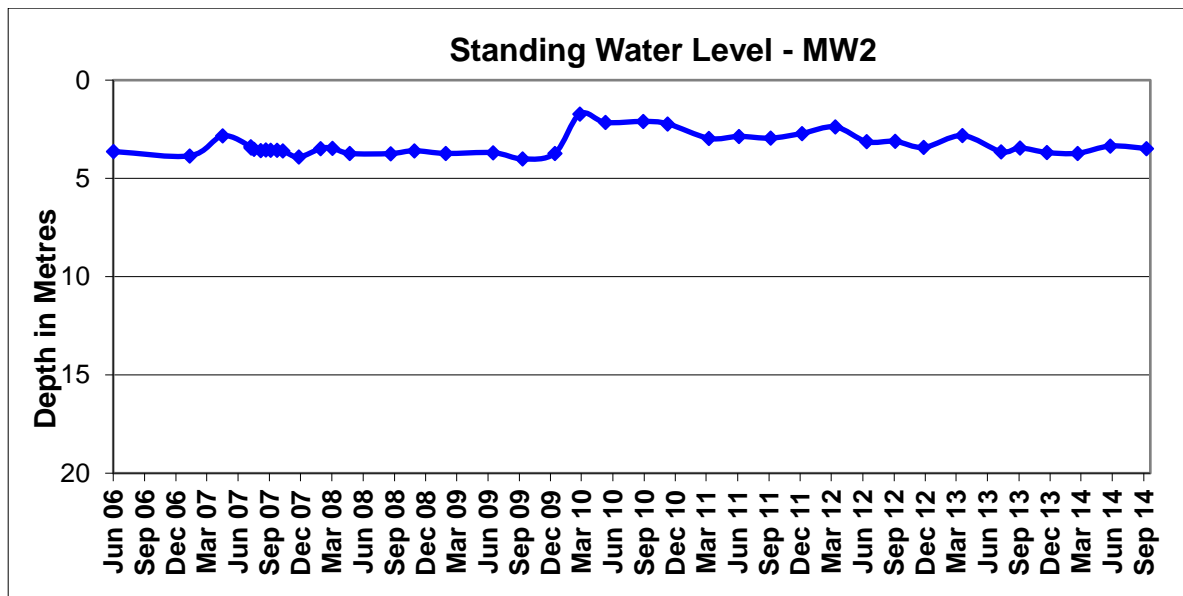
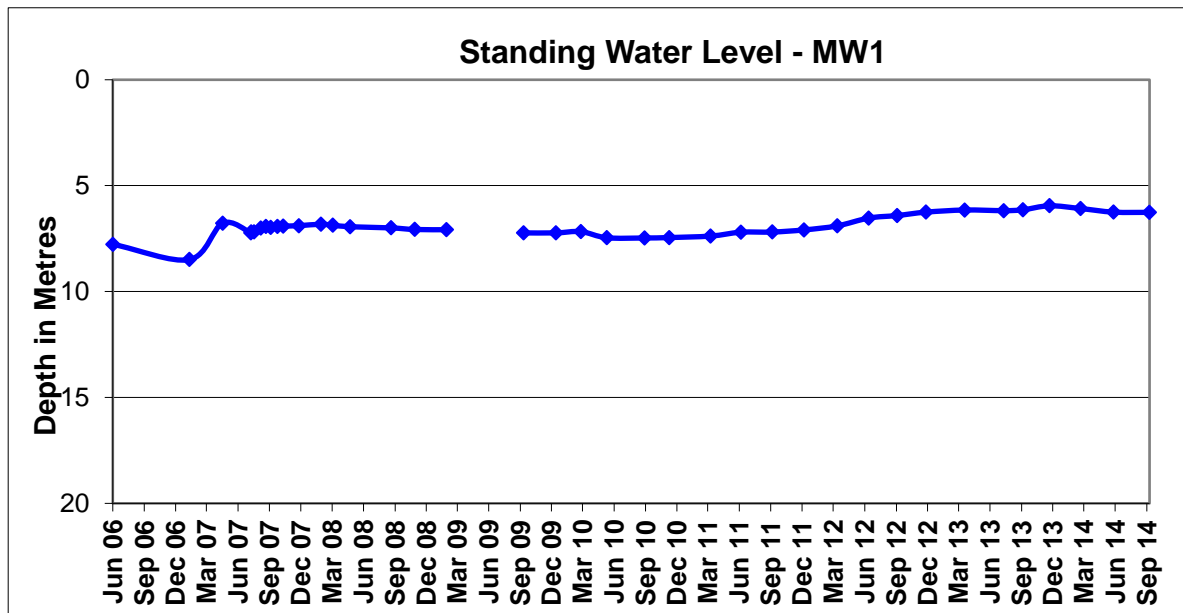
Ground Water

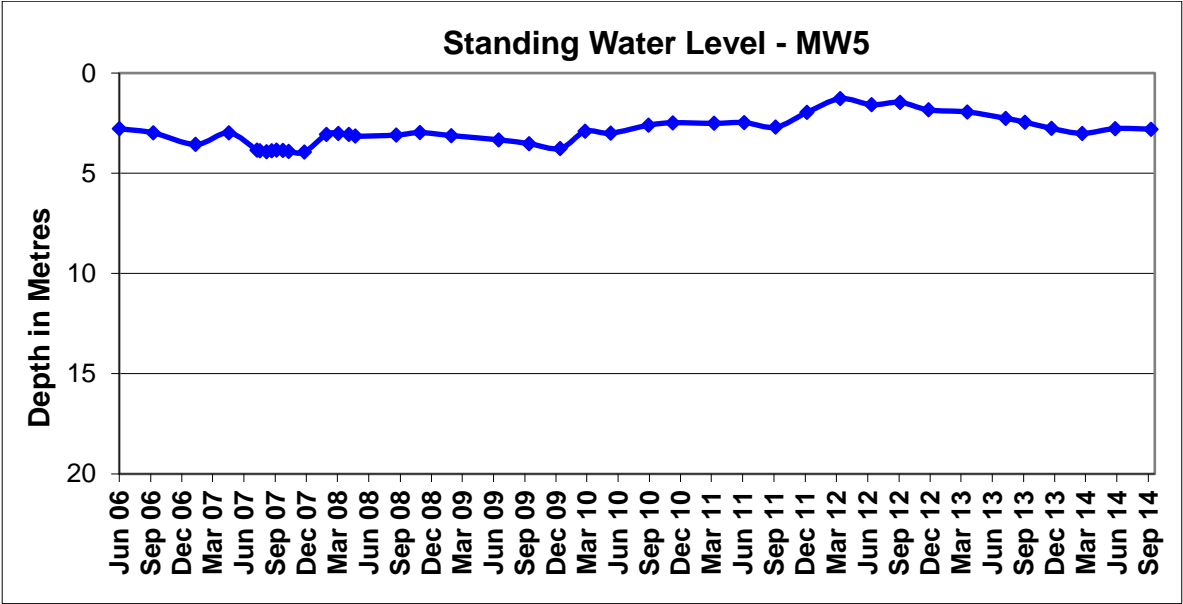
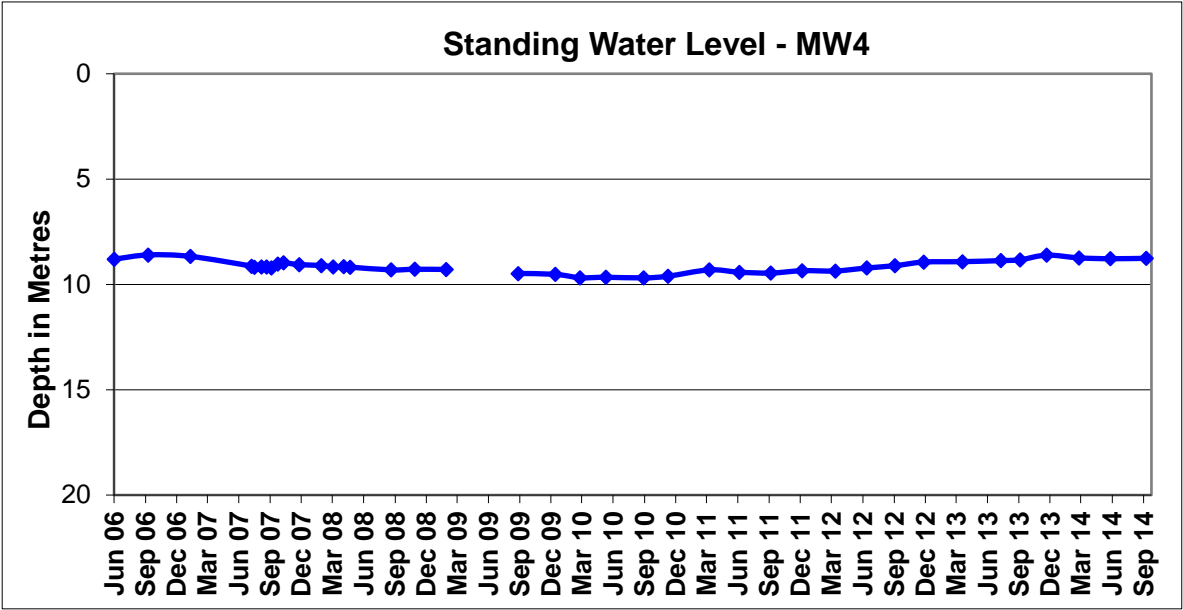
Groundwater monitoring data obtained to date, including the last round of SWL monitoring in September 2014, is provided in the table and graphs below. All monitoring locations have remained relatively consistent over the past three months.

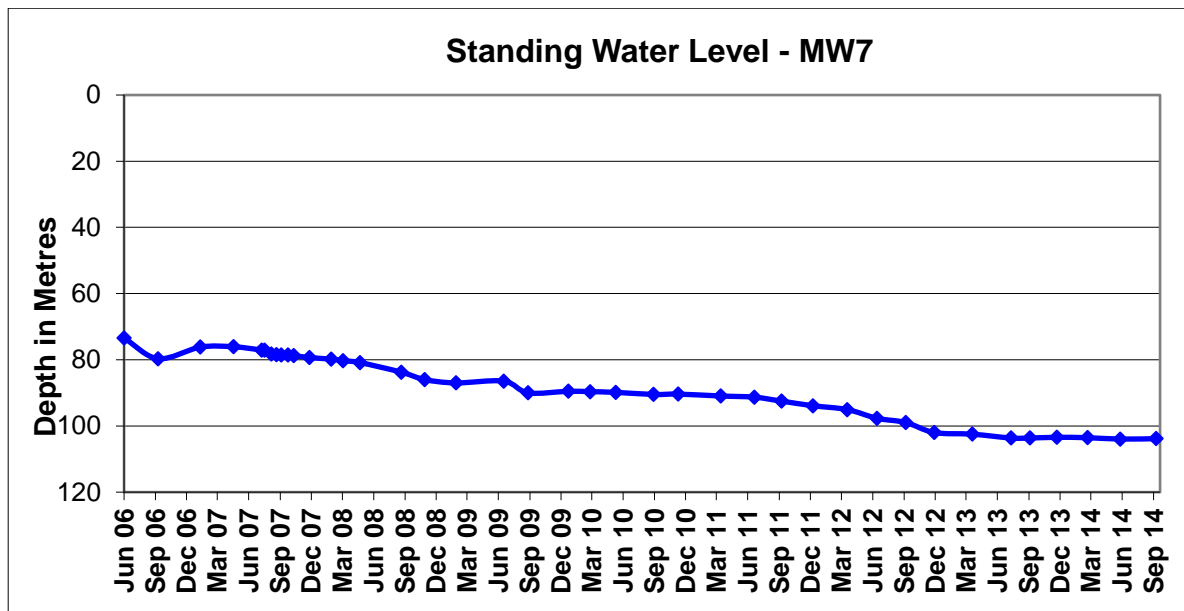
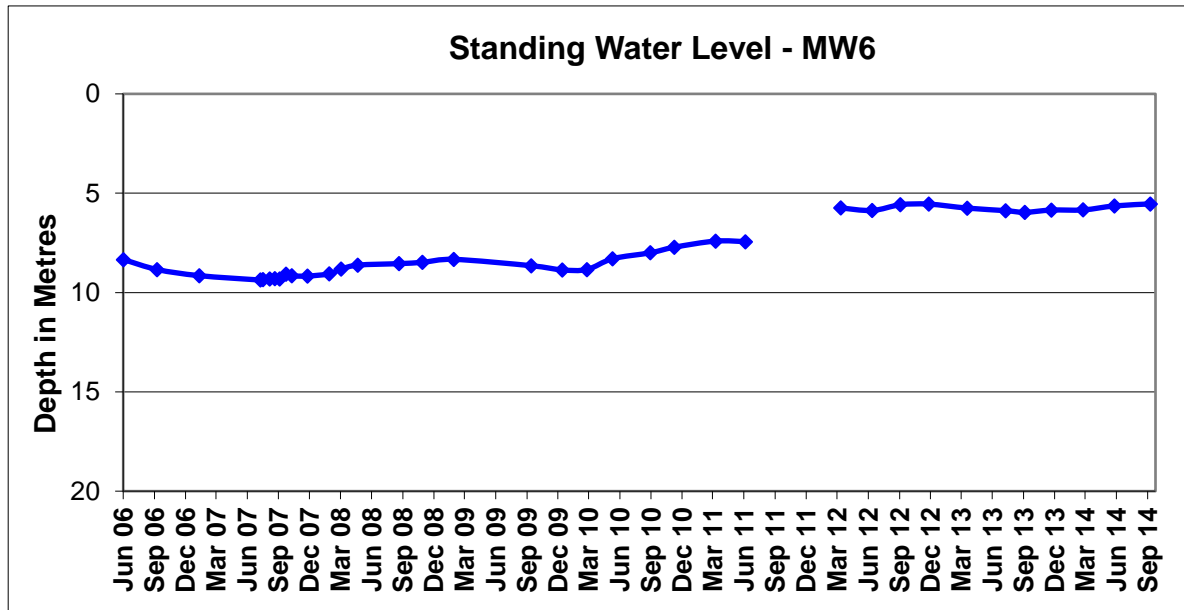
Table 4- Groundwater results Summary

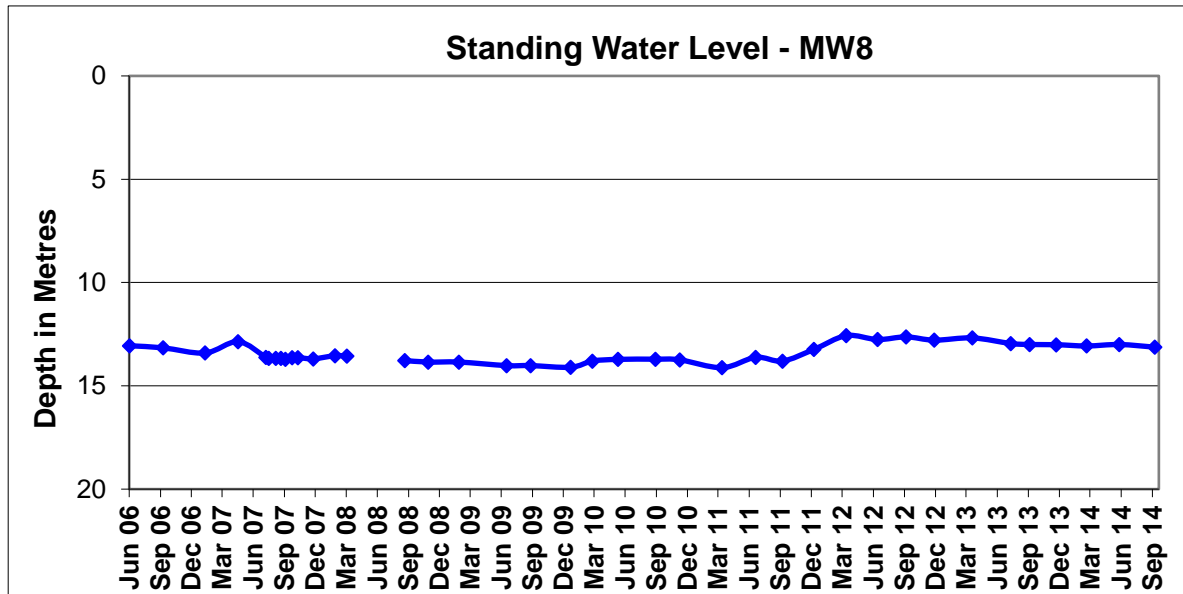
Site	Date	SWL (m)	pH	Elect. Conduct
MW1	September 2013	6.14	7.19	3330
	November 2013	5.95	7.6	3140
	February 2014	6.08	7.65	3440
	May 2014	6.25	7.6	3140
	September 2014	6.26	7.97	3320
MW2	September 2013	3.45	7.46	674
	November 2013	3.68	6.9	694
	February 2014	3.72	7.01	694
	May 2014	3.35	7.4	618
	September 2014	3.5	7.27	615
MW4	September 2013	8.83	7.99	3950
	November 2013	8.61	7.6	3720
	February 2014	8.74	7.98	3890
	May 2014	8.78	7.6	3840
	September 2014	8.76	7.83	4170
MW5	September 2013	2.45	8.07	1810
	November 2013	2.76	7.7	2430
	February 2014	3.01	7.77	1850
	May 2014	2.77	7.7	925
	September 2014	2.8	7.99	2200
MW6	September 2013	5.96	7.8	496
	November 2013	5.85	7.2	486
	March 2014	5.84	7.51	212
	May 2014	5.64	7.5	360
	September 2014	5.54	7.61	854
MW7	September 2013	103.65	No Sample	No Sample

	November 2013	103.43	No Sample	No Sample
	February 2014	103.55	No Sample	No Sample
	May 2014	103.96	No Sample	No Sample
	September 2014	103.84	No sample	No sample
MW8	September 2013	13.00	Casing blocked	Casing blocked
	November 2013	13.01	Casing blocked	Casing blocked
	February 2014	13.07	Casing blocked	Casing blocked
	May 2014	13.00	Casing blocked	Casing blocked
	September 2014	13.13	Casing blocked	Casing blocked









Surface Water

Routine surface water monitoring was conducted during May 2014.

No wet weather discharges have occurred since the last CCC meeting. Sampling was undertaken 27th August 2014 at Nagero downstream monitoring location following 37.6mm rain over a two day period.

Rehabilitation

During August 720 trees and understory species were planted on the southern rehabilitation area.

During the next 3 months an area of approximately 4 hectares in the northern extension will be shaped and top soiled ready for rehabilitation during early to mid-autumn 2015.

Soil stripping activities in the northern extension have been completed for the first year of operations in the northern extension; two stockpiles one to the west of the northern emplacement and one of top of the northern emplacement have been designated.

Complaints

Since the last meeting, there have been 8 complaints, as outlined on the following table.

Tarrawonga Coal Pty Ltd – Tarrawonga Coal Mine **2014 Complaints Register**

#	Method	Date/Time of Complaint	Nature of Complaint	Investigation	Action Taken / Follow-up
1	Phone call to Environmental Manager	6/01/2014 8:45pm	Complaint in relation to a mine vehicle travelling west along the Manilla-Boggabri Road near the Wean Race Course at excessive speed. The complainant's wife was heading east along the road when the mine vehicle passed, showering her in rocks and dust, and cracking her windscreen. The complaint is not in relation to the windscreen, but the general safety of other road users when these people travel at excessive speed along poor quality roads. The complainant is concerned someone will be seriously injured or killed as a result of mine personnel causing a road accident.	The complainant was asked if he had any identifying features of the vehicle involved such as a rego number or make of vehicle, however, the only identifier was that it was a utility with a beacon and high vis markings on the side. On this basis, the complainant was advised that we had no way of identifying the driver, or even if the vehicle was associated with the Tarrawonga Mine. Despite this, the complainant's concerns were noted and he was advised that the matter would be raised with the site Operations Manager to include in any toolbox sessions with operators, that it is expected that all personnel abide by relevant road rules, drive in a responsible manner and drive to road conditions. This was communicated with the Operations Manager the following morning 7 th January 2014.	No further advice required.
2	Email to Environmental Manager	9/04/2014 7:48am	The complaint related to increased dust and noise levels over the two weeks; a noticeable increase in mine related dust with a particular occurrence on Saturday 5/4. Second email noted that mine related noise was distinct morning of 11/4.	Monitored dust and noise levels in particular at the complainant's property boundary have been reviewed. These levels are within the specified levels. The matter will be continued to be monitored. Environmental Manager responded via email advising Environmental Officer would review noise and dust data for last two weeks. Environmental Officer to liaise with complainant and arrange a face to face meeting at a mutually convenient time.	
3	Email to Environmental Manager	22/04/2014 6:10pm	Complaint about the dense dust in the valley and all around the mountains to the east of the Tarrawonga mine that morning. The complainant said the dust was very heavy and thick and there was a black layer above the mine site which all seemed to be floating in an easterly direction towards the complainant's homes and working environment. The complainant also noted mine noise that she is	Environmental Superintendent responded via email (8/5/2014) advising that the site Environmental Officer would contact the complainant to arrange a meeting to discuss the issues.	

#	Method	Date/Time of Complaint	Nature of Complaint	Investigation	Action Taken / Follow-up
			hearing during the night at her two properties. She said it is quite loud.		
4	Email to Environmental Manager	28/04/2014 4:15pm	Complaint regarding noise over the last week being louder than normal and that this is a continuation from the complainant's last email. The complainant said it concerns her as she hears this noise at night and it has been loud during the days as well.	Environmental Superintendent responded via email (8/5/2014) advising that the site Environmental Officer would contact the complainant to arrange a meeting to discuss the issues.	
5	Email to Environmental Superintendent	21/05/2014 8:19am	Complaint regarding the heavy dust within the valley and around the complainant's homes through Tuesday 20/5 and morning of Wednesday 21/5. The complainant stated it is unacceptable to live with such conditions.	The Site Environmental Officer has undertaken preliminary investigation into the source, weather conditions, monitoring data and external factors which resulted in elevated atmospheric dust conditions on the day.	Environmental Superintendent replied via email to complainant advising that the site Environmental Officer would further investigate the matter and discuss with the complainant at the planned meeting.
6	After hours call to EPA	26/5/2014 3.35pm	Complaint to EPA on the 20/5/2014 at 6:00am with the caller reporting extreme levels of dust in the valley that morning coming from the two main coal mines. The caller also said above both the mines there is a black haze, a mixture of diesel and coal dust the caller believes. The weather was not windy on the day, with only a slight breeze. The complainant also noted that there was a lot of machine noise as well that morning.	Environmental Officer replied by email to the EPA 28/5/2014 advising that the site was aware of the poor weather conditions on the day of the complaint, made every effort to minimise dust generation and initiated an investigation following an email from the complainant to the Environmental Superintendent. The EPA was advised that the Tarrawonga Environmental Officer has been attempting to make a time to meet with the complainant since their last complaints with no advice to date from the complainant as to when they would like to meet.	Continued attempts will be made to contact complainant to organise a meeting to discuss their concerns.
7	After hours call to EPA	26/5/2014 3.35pm	Complaint to EPA on 21/5/2014 regarding large amount of thick dust being generated by general mine activity plus a black inversion layer across the Tarrawonga and Boggabri Coal Mines and Leards Forest Rd at 6:30am. The complainant noted that the dust was still very heavy at the time of the call at 8:26am.	Environmental Officer replied by email to the EPA 28/5/2014 advising that the site was aware of the poor weather conditions on the day of the complaint, made every effort to minimise dust generation and initiated an investigation following an email from the complainant to the Environmental Superintendent. The EPA was advised that the Tarrawonga Environmental Officer has been attempting to make a time to meet with the complainant since their last complaints with no advice to date from the complainant as to when they would like to meet.	Continued attempts will be made to contact complainant to organise a meeting to discuss their concerns.
8	Phone call to Environmental Officer	27/6/2014 1.20pm	Complaint made to the Environmental Officer regarding Blast No. 492 in the Tarrawonga Open Cut Pit. The complainant believed that	The Environmental Officer spoke to the complainant and advised that the blast was within compliance limits as specified in the project approval and the EPL. The concerns of the complainant were noted.	The Environmental Officer will raise the matter with the Group Environmental Manager prior to

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			the blast caused the house to shake in an unacceptable manner and that this was the second occasion within the last 3 weeks (Boggabri Blast) that had adversely impacted the property.		providing any further details to the complainant.
9	Phone call to the Environmental Officer	9/7/2014	Complaint made relating to blast no. 494 and also blasting in general over the last few months. The house shook considerably during the blast. Complainant happy to work with Tarrawonga to reach an outcome.	The Environmental Officer discussed the matter at length with the complainant including blast timing, product etc. It was advised that the blast was within compliance limits specified in both the EPL and PA.	Further investigation into blasting impacts to be undertaken and further details to be conveyed to complainant once investigation completed including any actions that will implemented.
10	Phone call to the Tarrawonga Complaint Hotline	31/7/14	Complaint made relating to dust levels emanating from Tarrawonga on day of the complaint and also the previous afternoon.	An investigation was subsequently carried out by the Environmental Officer which identified increased dust levels blowing off an exposed drill pattern.	A water cart was utilised to water down drill pattern and cuttings to reduce dust emissions.
11	Phone call to the EPA	23/7/14 (Received 1/8/14)	Complaint made regarding dust coming from Tarrawonga.	Weather data and dust inspection records were reviewed indicating that a strong inversion was present on the morning of the complaint. Dust inspection carried out later in the day identified that dust was being minimised.	Response sent to the EPA via email.
12	Phone call to the EPA	30/7/14 (Received 1/8/14)	Complaint made regarding dust plume coming from Tarrawonga.	Weather conditions and dust inspection records were reviewed. Elevated dust conditions had been noted; in particular moderate winds resulted in dust blowing off an exposed drill pad (noted during dust inspection).	A water cart was utilised to suppress dust emanating from an exposed drill pad and drill cuttings. This drill pad had been part of the circuit but had dried since the last pass.
13	Phone call to the Tarrawonga Complaint Hotline	11/9/14 11.09 (follow-up call 1700)	Complaint made regarding the dust over the mine/s at 0700 and again 0900 on the morning of the complaint.	A review of weather conditions and real time dust monitor was undertaken following the discussion with the complainant. Only light winds were occurring on the morning of the complaint and would have impacted upon dust dispersal. The real time monitor showed no sign of increased PM10 levels.	Continue to monitor dust levels and ensure dust is being minimised
14	Phone call to the EPA	11/9/14 (received 12/9/14)	Complaint made reporting thick and heavy dust in the Valley from mining operations.	A review of meteorological conditions was undertaken post receiving the complaint; conditions were stable with a moderate inversion and low winds speeds. These conditions would have impacted upon dust dispersal. A review of real time dust monitor results showed no sign of increase in PM10 levels. Operations only commenced at 6.45am following the morning pre start meeting with two water carts in operation from the commencement of the shift. Given the time of the complaint	Response provided to the EPA via email.

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				there may have been other factors contributing to dust (such as local unsealed roads).	
15	Phone call to the EPA	16/9/14 (received 17/9/14)	Complaint made regarding ongoing dust pollution from mining operations.	<p>A review of meteorological conditions, real time dust levels, operational notes and daily dust inspection records have been undertaken to outline the conditions on the day of complaint and actions implemented at site to minimise dust levels. At the commencement shift meteorological were stable with low winds and a moderate inversion in effect; three water carts were in operation from the beginning of shift. Conditions deteriorated as expected (predictive weather forecast) during the morning at which point operations planned and implemented a number of dust minimisation strategies and measures to reduce dust levels; including, restricting dump truck speeds, restricting Bis haul truck speeds on the ROM circuit, and increased water use on exposed areas such as drill patterns and unused haul roads. Consideration was also given to shutting down a digger and coal crushing plants in high risk conditions.</p> <p>An adverse weather condition alarm was issued at 1000 enacting investigation level as per the PRP – Identification of Adverse Weather Conditions for Overburden Handling.</p> <p>At approximately 1030, the RH170 excavator and associated haul trucks were shutdown to enable water carts to continue to minimise dust.</p> <p>All three water carts were hot seated during the crib break (1130 – 1230) further allowing water trucks to target hotspots and reduce dust levels.</p> <p>Following the crib break the RH170 and trucks returned to operation.</p> <p>There were no subsequent adverse weather condition triggers; however wind speeds remained relatively moderate until mid-afternoon when wind speeds declined.</p> <p>The real time dust monitor did show some signs of elevated PM10 levels in particular during the morning; however, post crib break PM10 levels began to reside with only small spikes in an otherwise downward trend. 24hr PM10 levels for the day of the complaint were 23.8 which was also the peak.</p> <p>The OCE, Environmental Officer and Operations Manager monitored operations throughout to most efficiently managed and minimise dust levels; operators were also proactively managing dust through proper of equipment and requesting water cart</p>	Response provided to the EPA via email.

#	Method	Date/Time of Complaint	Nature of Complaint	Investigation	Action Taken / Follow-up
				when required.	
16	Phone call to DP&E	16/9/2014	Complaint related to blasting in high wind conditions.	At the time of the blast the wind speed was 6.7m/s at 312°. Wind speeds were monitored throughout the morning and it is noted that moderate wind conditions were observed. Due to these conditions, the decision to fire the shot was postponed until wind conditions were assessed and considered to be within limits (per Draft Blast MP, which has had two rounds of comments from DPE and will be re-submitted for approval in the next week or two). Wind speeds observed for the 45 minute period leading up to the shot remained below the 7m/s threshold, 20 minutes prior the shot these conditions were confirmed with the Operations Manager and at the two minute countdown confirmation was provided to the shot firer & Operations Manager that wind speeds remained within limits.	Response sent via email to DP&E.
17	Phone call to the EPA	24/9/14 (received 3/10/14)	Complaint related to dust generated by blast at Tarrawonga Mine and dust conditions on the following day.	A review of blast records and meteorological data was undertaken following receipt of the complaint. Meteorological conditions were suitable for blasting at the time with clear skies, a wind speed of 1.9m/s and direction of 185°; these weather conditions were consistent throughout the morning of the blast with the wind emanating from the south and south – east. Dust inspection records for the 24th September identify no dust issues and meteorological conditions did not identify any adverse weather conditions; with a maximum speed of 2.7m/s and with prevailing winds from the north. Two water trucks were in operation throughout the day.	Response sent via email to the EPA on 9/10/14
18	Phone call to the EPA	7/10/14 (received 10/10/14)	Complaint related to high levels of dust being generated by Tarrawonga Coal; speeds high with significant gusts.	A review of meteorological conditions and operations was undertaken on receipt of the complaint. It was observed on arrival at Tarrawonga (0645) that there was increased dust surrounding the mining operations and adjacent unsealed roads and properties; it should be noted at the time of observation Tarrawonga had not commenced operations and had not been operational since the end of day shift on Saturday (4/10/14). It was also observed that there was significant dust being generated by increased traffic volumes on Goonbri Road (non-project related), dust was also being generated along other unsealed local roads. A review of meteorological conditions was undertaken upon arrival at site it was recorded that Category F Stability Class; this remained until approximately 0745. Operations were modified throughout the day to minimise dust generation; at the commencement of shift two water trucks were in operation and shortly after commencement a third water truck was utilised.	Response sent via email to the EPA on 16/10/14

#	Method	Date/Time of Complaint	Nature of Complaint	Investigation	Action Taken / Follow-up
19	Phone call to the EPA	10/10/14 (received 10/10/14)	Complaint related to dust covering the valley surrounding Tarrawonga Coal and Boggabri Coal.	A review of meteorological conditions and operations was undertaken upon receipt of the complaint. The Environmental Officer observed dust being generated by surrounding local unsealed roads in particular Goonbri Rd with non-project related traffic the major contributor. At that time a review of meteorological was also undertaken and Category F Stability Class was observed at 0705. Conditions and operations were monitored and conditions improved throughout the morning. Dust being generated from Goonbri Rd was consistent throughout the morning.	Response sent via email to the EPA on 16/10/14
20	Email to Group Environment Manager	31/10/14	Complaint related to visible dust within the Wean Valley which is impacting upon breathing.	A review of operations and dust sources was undertaken by the Environmental Officer at the time of the complaint. The review found that there was an increase in both mine and non-mine related traffic utilising local unsealed roads; in particular, Manilla and Goonbri Road. On the morning of the complaint all light vehicles travelling to Tarrawonga and Maules Creek mines were diverted via Blue Vale Road (dirt section) and Braymont Road due to protestor activity on the dedicated private haul road.	Email sent to complainant at 10:08am 31/10/14.