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#### **Community Consultative Committee Meeting Minutes**

Meeting No: 20

Date: Wednesday 30<sup>th</sup> January 2013

**Time:** 3:50pm

Location: Narrabri Coal Operations Site Office

Present:

Terry Miller (TM) - Chairman Cr Cathy Redding (CR) James Steiger (JS) Mark Foster (MF) Peter Webb (PW)

Steve Bow (SB) (Narrabri Mine General Manager)

Danny Young (DY) (Whitehaven Coal Environmental Manager) Mereka Smith (MS) (Narrabri Mine Administration Assistant)

#### 1.0 Apologies

Shane Pegg and Steve Farrar.

#### 2.0 Previous Minutes

Moved: James Steiger Seconded: Cr Cathy Redding

#### 2.1 Business Arising from Previous Minutes

Greylands Road was open a few weeks ago following repair works from subsidence, but has now closed again due to wet weather over the weekend and waters backing up to the road as a result of subsidence in the creek. The road will be reopened once the ponded water drains away and is no longer impacting the road. Council had previously approved the Greylands road closure management plan. JS outlined his concerns if it keeps raining and the potential impacts of subsidence on subsequent creek flows. DY advised that this is the first panel of subsidence, our first viewing of the impacts and that ponding has occurred. NCO have all the relevant information now, including survey, and will discuss appropriate remediation options with the surface water experts who completed the initial assessment. CR questioned the depth of subsidence, was it actually 2.44m? And if drainage will be placed under Greylands Road. SB replied with a yes, it was 2.44m and there will be drainage installed and the road will be made higher if required. JS spoke about the flow of water and that the original study taken did not give adequate consideration of this. DY invited JS to be consulted/involved in subsequent discussions with the surface water experts as to the issue of water flow as he has background knowledge of this area. JS accepted this offer.

SB outlined Whitehaven Coal's official position towards the Training Centre is and being supportive of it in the Gunnedah Basin. Naturally from NCO's viewpoint Narrabri is preferable location. CR advised the proposal for the centre is in and currently are waiting a reply. Training Centre is a Federal Government grant and it will be a full trade training centre.

Community Newsletter – Whitehaven Management have approved and signed off. A copy was given to all CCC members present. CCC Members approved the newsletter and happy for it to be released. Newsletter will be posted to local neighbours of the mine site. Copies of the Newsletter will be placed at; Narrabri Council Chambers, Narrabri Information Centre, Narrabri Bakery, Post Offices in Narrabri and Boggabri. Newsletter will also be placed on Whitehaven website. JS asked how often the newsletter will be issued, every 6 months. SB advised this is our plan. DY outlined that we have all the formatting down for newsletter now so it shouldn't be any issue with producing one every 6 months, will just see how we go.

Cleanskin Program. Another 13 started in December 2012. Another round to be done March/April this year.TM asked if NCO will be taking on Apprenticeships. SB advised that NCO plan to head in that direction and the intent is to engage apprentices for underground positions. SB to confirm this at next meeting. TM asked if NCO do traineeships. SB advised NCO doesn't offer traineeships. DY advised that Whitehaven generally has offered cadetships over a range of disciplines including environmental, engineering, surveying, providing successful candidates with monetary support for university study and on the job training during university breaks. Cadetships are offered on an occasional basis depending on the needs of the business and are advertised in the local press and on the company website.

#### 3.0 General Business

#### 3.1 Operations Progress Report

CR asked what % is the longwall running at? SB advised that trying to run it at 100% but having a few issues. SB outlined that longwall target is to produce 600k t a month. Longwall currently at 1,700t/hr, target is 2,500t/hr. Production is down but training is up. The current longwall panel will take 4 months to complete, 3 million tonnes in that block.

November 2012 was the best month for the mine for producing coal.

# Mine Progress Report (to 31 December 2012)

Coal produced (t): December 2012 218,788 FY-to-date 1,575,761 Life-to-date 2,171,198

Coal Railed (t): December 2012 186,187 FY-to-date 1,231,158

Life-to-date 1,805,653

Average workforce numbers (December):

NCO Waged – 188

Salary – 61 Total - 179

Contactors CHPP – 36

Tech Services – 2 Operations – 150



Total - 188

Safety Update (FY to 31 December 2012):

Lost Time Injury (L.T.I.)

Total Recordable Injuries:
Planned Task Observations:
3,248
Take 5 Assessments:
30,492
Work Hours (Dec-12):
66,875
Days LTI Free:
68

SB advised another reduction in contactor numbers had occurred, reducing contractors by 30. NCO has employed 12 experienced miners. MF asked are the experienced miners coming from other mines good workers. SB advised yes and they have to go through a tough process to be selected. There is a high failure rate for experienced miners in the recruitment process.

SB outlined development crews work the roadways underground on continuous miners. There are 4 miners, 2 Narrabri and 2 contractors. Narrabri crews are now doing the gate rows. MF asked how you get the coal out. SB explained using a map that conveyor belts are used to convey the coal to the surface.

JS asked the question if there are any plans for another Vent Shaft. SB advised that the existing shaft is adequate to service the mines current needs, but that as the development extends west, there will most likely be a need for establishment of new vent shafts. SB indicated that this would have been included in the EA that was prepared for the project. DY confirmed that this was the case, with nominal additional vent shaft sites identified along the West Mains.

JS asked how long does it take to relocate the longwall? SB advised it takes 6 weeks and there will be no production on the longwall in this time. Continuous Miners will still cut coal during this time in ongoing mine development.

JS enquired how we are going with trains. SB replied with not too well at the moment. Committee had a discussion on trains, the derailment of an NCO Coal train on 28<sup>th</sup> November 2012 and the railway. TM asked about the trucking of coal. SB and DY explained in detail the trucking of the coal and why Whitehaven pulled up the trial after 1.5 days – due to safety issues. DY outlined various monitoring was undertaken in the trail. DY advised the CCC members that approval is pending from Government for emergency trucking modification. New condition relates to any future emergency where trucking is required eg. rail disruption. JS expressed concerns in regards to the trucking of coal that there was no need for it and it wasn't in your approval.

SB outlined that NCO is looking at full workforce of employees to be all NCO by first half of calendar year next year. NCO will take over the CHPP as of 1<sup>st</sup> July 2013.

JS asked how we are going with the MAC Village. SB advised average of 95 people a night.

CR asked if our experienced miners are fly in/fly out. SB advised as per Whitehaven's policy you must relocate to live within an hour away from the mine, no fly in/fly out.

TM asked if NCO can provide a figure on where our staff live from mine, eg Narrabri, Gunnedah, Boggabri. SB advised he will try and have this information for next meeting.

CR advised the Council have just finished a DVD on the Shire, runs for about 10 minutes. The Council were hoping to possibly get a list from the mine of who flys in/flys out so they could give them a copy to take home to their wives as usually the wives decide whether or not to move. SB outlined that NCO gives all potential employees information packs on the Shire, inserting the DVD into these packs would be helpful. CR to send a DVD to NCO.

JS asked where is Whitehaven building? SB advised 5 houses under construction in Rocky Creek Estate, Narrabri. Completion of these houses is not far off. JS asked if senior management will go into the houses. SB outlined that not necessarily, Whitehaven would be tailoring packages for getting employees here by offering those houses. JS asked if Whitehaven would be retaining ownership of these houses. SB replied yes, maybe years to come down the track Whitehaven may look at selling. SB to follow up if houses will be sold to employees.

SB outlined the price of coal is still down and staying down. The company is still cost cutting in all areas.

SB provided a safety update, handed around a graph for members to view. NCO does a good job at safety, currently the mines L.T.I at 5.8% and industry at 8.5%. 1 lost time injury in this financial year. NCO target is zero harm. MF asked if we complete toolbox talks. SB advised yes, lots, toolbox talks are always rolling out.

#### 3.2 Environmental Overview

As per provided report.

TM asked about the deposited dust monitoring results for June at Claremont, why high. DY advised they would have to go back and check records usually means contamination. DY advised he can bring results in from the lab for these meetings if required.

DY advised that proposals are currently being sought from groundwater experts to undertake a re-calibration of the groundwater model completed for the Narrabri project, as required under the Project Approval.

DY outlined the issues with dust from stockpile. JS expressed his concerns with the level of dust coming from the ROM when the dozers are going around the ROM pile. SB advised Komatsu are coming in to help with the issue. DY outlined they have developed trigger action response programs for the wind and dozers. DY advised the sprays are set up but when really windy nearly impossible to control dust. TM spoke about possibly installing a wind break. DY advised we are looking at all options, we understand the issues and are trying to resolve as quickly as possible.

DY advised other monitoring which took place which isn't covered in report was the trucking of coal. Attended noise monitoring was undertaken by specialist noise consultants during the trial trucking program as a means of understanding the impacts. Comparative to other freight on the road, the impact of NCO trucks was negligible.

DY handed out NSW Minerals Council factsheet "Environmental Noise and the NSW Minerals Industry" to the CCC for background info.

#### 4.0 New Business

JS expressed his concerns with the high volume of traffic travelling on the Old Gunnedah Road and that Council need to address this issue. JS was particularly concerned with the one way bridge at Tarriaro, no line marking on approach and needs more reflectors. CCC Committee would like to address the potential traffic issues on Old Gunnedah Road with the local traffic committee. Letter to come from the Chairman of Committee.

# 5.0 Complaints and Complaints Hotline

As per provided report.

# 6.0 Next Meeting

Wednesday 17<sup>th</sup> April at 3:30pm, Narrabri Mine Site Office. (early start for inspection of subsidence area)

# 7.0 Closure of Meeting

Meeting closed at 5:05pm.

# Narrabri Coal Mine Community Consultative Committee Meeting #20

# Environmental Monitoring Report November – December 2012

# **Noise Monitoring**

Attended noise monitoring was undertaken between Tuesday 18<sup>th</sup> and Thursday 20<sup>th</sup> December 2012 (Tables 1-12) to verify if noise levels were within compliance limits. The results from this monitoring are detailed in the tables below.

	Table 1: NCM Operational Noise Monitoring Results – 18 December 2012 (day)							
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources			
N1 Bow Hills	11:52 am	45	1.7/NW	n/a	Traffic (44), birds & insects (38), NCM (22)			
N3 Naroo	11:52 pm	41	1.7/NW	n/a	Traffic (40), birds & insects (33), NCM inaudible			
N5 Oakleigh	9:44 am	43	1.3/S	n/a	Birds & insects (43), traffic (25), NCM barely audible			
N6 Newhaven	3:28 pm	43	1.6/W	n/a	Birds & insects (42), <b>NCM (32)*</b>			
N7 Merriman	1:57 pm	39	2.2/WSW	n/a	Traffic (37), birds & insects (35), NCM inaudible			

<sup>\*</sup>Noise from gas drainage wells

	Table 2: NCM Operational Noise Monitoring Results – 18 December 2012 (evening)							
		Total dB(A),	Wind speed/	Temp Grad				
Location	Time	Leq (15 min)	direction	(°C/100m)	Identified Noise Sources			
N1 Bow Hills	8:59 pm	46	0.4/WSW	Lapse	Traffic (46), <b>NCM (33)</b> , insects (30)			
N3 Naroo	9:12 pm	36	0.4/WSW	Lapse	Traffic (33), NCM (32), birds & insects (25)			
N5 Oakleigh	8:18 pm	27	0.2/WSW	Lapse	Insects (26), traffic (20), NCM (15)			
N6 Newhaven	8:38 pm	33	0.2/WSW	Lapse	Insects (29), NCM (29)*, sheep (25)			
N7 Merriman	9:30 pm	45	0.2/WSW	+0.8	Traffic (43), insects (40), NCM (28)			

<sup>\*</sup>Noise from gas drainage wells (25), mine noise (25)

Table 3: NCM Operational Noise Monitoring Results – 18 December 2012 (night)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources			
N1 Bow Hills	12:05 am	39	0.8/WSW	+2.1	Traffic (38), NCM (28), insects (28)			
N3 Naroo	11:08 pm	43	Calm	+0.8	Traffic (43), <b>NCM (27)</b> , birds & insects (25)			
N5 Oakleigh	10:01 pm	31	0.3/WSW	+0.6	Traffic (29), insects (27), NCM inaudible			
N6 Newhaven	10:01 pm	34	0.3/WSW	+0.6	NCM (33)*, insects (25)			
N7 Merriman	11:05 pm	36	Calm	+0.8	Insects (34), NCM (32)			

<sup>\*</sup>Noise from gas drainage wells (29), mine noise (31)

	Table 4: NCM Operational Noise Monitoring Results – 19 December 2012 (day)							
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources			
N1 Bow Hills	7:55 am	39	3.3/NE	n/a	Birds & insects (37), traffic (32), NCM barely audible			
N3 Naroo	9:37 am	47	4.3/NNE	n/a	Traffic (45), wind (40), birds & insects (38), NCM inaudible			
N5 Oakleigh	11:10 am	45	3.6/ENE	n/a	Wind (45), traffic (35), NCM inaudible			
N6 Newhaven	8:06 am	31	3.3/NE	n/a	Birds & insects (29), traffic (26), NCM inaudible			
N7 Merriman	9:35 am	46	4.3/NNE	n/a	Birds & insects (44), traffic (41), NCM inaudible			
N4 Greylands	11:11 am	40	3.6/ENE	n/a	Wind (37), traffic (36), birds & insects (30), NCM inaudible			

Table 5: NCM Operational Noise Monitoring Results – 19 December 2012 (evening)							
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources		
N1 Bow Hills	8:33 pm	39	Calm	Lapse	Traffic (37), NCM (32), insects (30)		
N3 Naroo	8:38 pm	43	Calm	Lapse	Traffic (43), birds & insects (33), NCM (20)		
N5 Oakleigh	9:15 pm	40	0.4/NNW	+0.2	Insects (39), traffic (32), NCM (28)		
N6 Newhaven	8:01 pm	42	Calm	Lapse	Birds & insects (42), NCM (20)*		
N7 Merriman	7:55 pm	47	Calm	Lapse	Birds & insects (47), traffic (36), NCM inaudible		
N4 Greylands	9:08 pm	34	0.4/NNW	+0.2	Birds & insects (33), NCM (26)		

<sup>\*</sup>Noise from gas drainage wells

Table 6: NCM Operational Noise Monitoring Results – 19 December 2012 (night)							
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources		
N1 Bow Hills	6:00 am*	45	4.1/n	Lapse	Birds & insects (42), traffic (40), wind (37), NCM inaudible		
N3 Naroo	5:30 am*	46	3.9/N	Lapse	Traffic (44), birds (42), NCM inaudible		
N5 Oakleigh	4:56 am*	39	4.2/N	Lapse	Traffic (37), NCM (31), birds & insects (30)		
N6 Newhaven	10:01 pm	33	3.6/NNW	Lapse	Insects (30), NCM (27)**, traffic (25)		
N7 Merriman	10:01 pm	42	3.6/NNW	Lapse	Frogs & insects (41), traffic (35), NCM inaudible		
N4 Greylands	5:03 am*	41	4.2/N	Lapse	Birds & insects (40), traffic (33), wind (33), NCM inaudible		

<sup>\*</sup>morning of 20 December

<sup>\*\*</sup>Noise from gas drainage wells

	Table 7: NCM Operational Noise Monitoring Results – 20 December 2012 (day)							
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources			
N1 Bow Hills	8:45 am	43	4.8/N	n/a	Traffic (41), insects (38), NCM occasionally audible			
N3 Naroo	2:02 pm	50	2.4/NE	n/a	Wind (50)*, NCM inaudible			
N5 Oakleigh	7:10 am	46	3.9/N	n/a	Birds & insects (45), traffic (38), NCM occasionally audible			
N6 Newhaven	8:06 am	35	4.3/N	n/a	Birds & insects (35), traffic (26), NCM inaudible			
N7 Merriman	10:35 am	48	5.1/N	n/a	Traffic (46), wind (40), birds (38), NCM inaudible			

<sup>\*</sup>Survey abandoned at 2.35pm due to storms

Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources	
N1 Bow Hills	8:35 pm	45	1.5/N	Lapse	Traffic (43), birds & insects (37), <b>NCM (29)</b>	
N3 Naroo	9:12 pm	44	2.7/N	+0.2	Traffic (43), insects (37), <b>NCM (35)</b>	
N5 Oakleigh	9:15 pm	40	2.7/N	+0.2	Insects (38), traffic (33), NCM (32)	
N6 Newhaven	8:39 pm	35	1.5/N	Lapse	Birds & insects (35), traffic (20), NCM inaudible	
N7 Merriman	8:02 pm	40	0.6/NNW	Lapse	Birds & insects (38), traffic (34), cattle (30), NCM inaudible	

	Table 9: NCM Operational Noise Monitoring Results – 20 December 2012 (night)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources				
N1 Bow Hills	11:05 pm	50	3.3/N	+0.9	Insects (50), NCM (25)				
N3 Naroo	11:09 pm	38	3.8/N	+0.9	NCM (36), insects (33)				
N5 Oakleigh	12:10 am	36	5.2/N	Lapse	NCM (35) insects (27), traffic (25)				
N6 Newhaven	10:01 pm	35	2.3/N	+0.2	Insects (35), traffic (25), NCM inaudible				
N7 Merriman	10:01 pm	45	2.3/N	+0.2	Insects (45), traffic (35), NCM inaudible				

Table 10: NCM Sleep Disturbance Monitoring Results – 18 December 2012 (night)							
Location	Time	dB(A),L1 (1 min)	Wind speed / direction	Temp Grad(°C/100m)			
N1 Bow Hills	12:05 am	38	0.8/WSW	+2.1			
N3 Naroo	11:08 pm	35	Calm	+0.8			
N5 Oakleigh	10:01 pm	n/a	0.3/WSW	+0.6			
N6 Newhaven	10:01 pm	38	0.3/WSW	+0.6			
N7 Merriman	11:05 pm	39	Calm	+0.8			

	Table 11							
	NCM Sleep Disturbance Monitoring Results – 19 December 2012 (night)							
Location	Location Time dB(A),L1 (1 min) Wind speed / direction Temp Grad(°C/100m)							
N1 Bow Hills	6:00 am*	n/a	4.1/n	Lapse				
N3 Naroo	5:30 am*	n/a	3.9/N	Lapse				
N5 Oakleigh	4:56 am*	38	4.2/N	Lapse				
N6 Newhaven	10:01 pm	30	3.6/NNW	Lapse				
N7 Merriman	10:01 pm	n/a	3.6/NNW	Lapse				
N4 Greylands	5:03 am*	n/a	4.2/N	Lapse				

Table 12							
	NCM Sleep	Disturbance Monitoring Res	sults – 20 December 2012 (nig	ght)			
Location	Time	dB(A),L1 (1 min)	Wind speed / direction	Temp Grad(°C/100m)			
N1 Bow Hills	11:05 pm	35	3.3/N	+0.9			
N3 Naroo	11:06 pm	43	3.8/N	+0.9			
N5 Oakleigh	12:10 am	48	5.2/N	Lapse			
N6 Newhaven	10:01 pm	n/a	2.3/N	+0.2			
N7 Merriman	10:01 pm	n/a	2.3/N	+0.2			

The results in Tables 1 to 12 show that, under the operating and meteorological conditions at the times, for the worst case 15 minute compliance measurement periods, the mine noise was at variable levels but exceeded the operational noise criterion at the Naroo monitoring location during the night (early morning) of 20 December.

At this time the noise levels were measured under atmospheric conditions where winds speeds were greater than 3 metres/second at 10 metres above ground level. As such the elevated noise level was measured under non-compliant atmospheric conditions as per the Project Approval.

The  $L_{1 \text{ (1 min)}}$  noise from mining did exceed the 45 dB(A) criterion under the operating and meteorological conditions at the time. The maximum L1 (1 min) noise emission was higher than the sleep disturbance criterion at the Oakleigh monitoring location during the night of 20 December. The measurement was made under non-compliant atmospheric conditions (i.e. wind speed > 3 m/s). The noise was related to emissions from dozers. L1 (1 min) noise levels above 40 dB(A) were measured at one other the monitoring location.

The December monitoring also assessed the incidence of temperature inversions by placing two temperature loggers, attached to stakes, at different elevations. At the time of measurement no significant temperature inversions were present.

The real time noise monitor is reporting results to date indicating no noise exceedance events attributable to site operations.

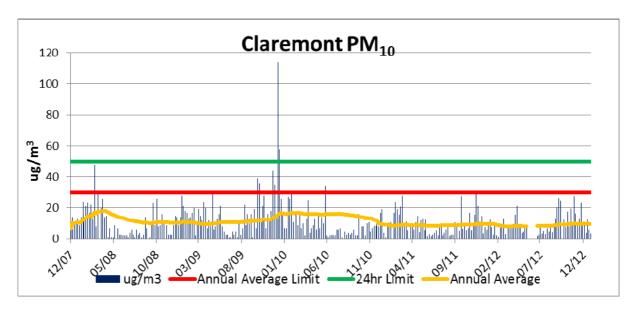
# **Deposited Dust Monitoring**

Month	ND1 Turrabaa	ND2 Claremont	ND3 Bow Hills	ND4a New Matoppo	ND5 Claremont	ND6 Willarah	ND7 Claremont	ND8 Claremont	ND11 Oakleigh
Jan-12	1.7	1.7	1.2	0.8	2.0	0.7	1.7	0.8	1.7
Feb-12	0.5	0.6	0.3	1.5	7.1	1.8	0.7	1.5	0.6
Mar-12	1.0	5.0	0.5	14.4	2.0	7.5	2.7	1.5	-
Apr-12	1.3	7.0	1.1	3.0	2.0	1.6	2.3	1.4	0.7
May-12	1.9	8.9	8.0	0.3	3.1	0.2	0.8	1.5	0.7
Jun-12	1.4	2.6	1.3	0.7	11.5	0.4	1.3	0.6	1.8
Jul-12	1.1	1.1	0.3	0.3	3.5	-	1.2	0.5	0.4
Aug-12	0.9	1.0	0.4	0.8	2.2	0.3	0.6	0.3	0.5
Sep-12	1.0	1.8	1.3	0.8	2.2	0.6	2.0	0.6	0.6
Oct-12	1.8	1.3	0.7	0.6	0.8	1.6	2.5	0.5	0.3
Nov-12	0.7	0.8	0.4	0.5	1.6	0.5	1.4	0.4	0.6
Dec-12	1.2	2.3	0.3	1.2	1.8	0.6	2.9	0.7	0.7
Annual Average	1.2	2.8	0.7	2.1	3.3	1.4	1.7	0.9	0.8

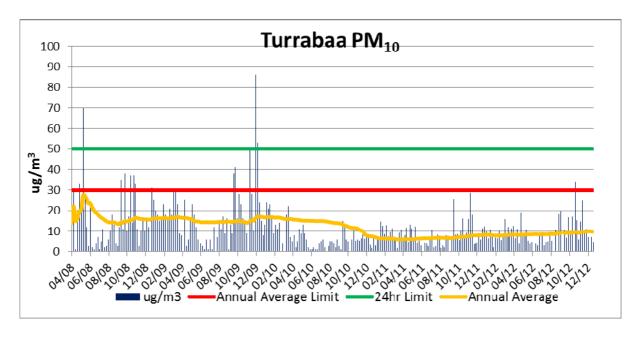
Deposited dust levels have remained at relatively low levels since the last meeting and all dust deposition annual averages are within compliance limits.

# **High Volume Air Sampling (PM<sub>10</sub>)**

 $PM_{10}$  measurements taken to the end of December 2012 for the "Claremont" High Volume Air Sampler (HVAS) are returning a running annual average of 9.67  $\mu g/m^3$  which is well below the annual average limit of 30  $\mu g/m^3$ .



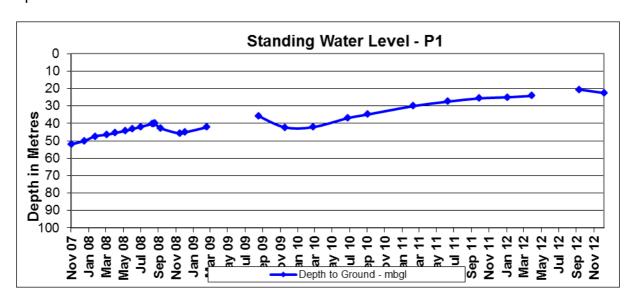
 $PM_{10}$  measurements taken to the end of December 2012 for the "Turrabaa" High Volume Air Sampler are returning a running annual average of 9.76  $\mu g/m^3$  which is also well below the annual average limit of 30  $\mu g/m^3$ 

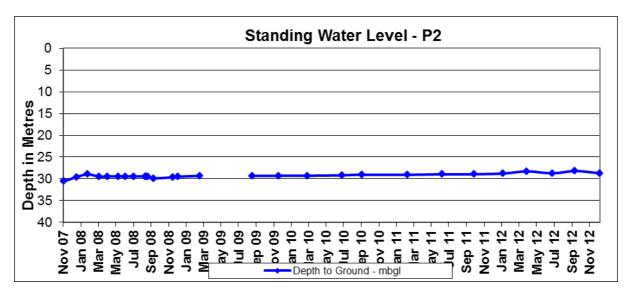


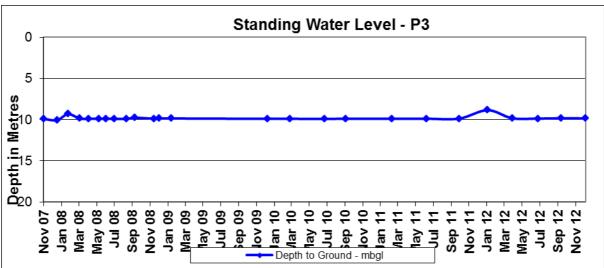
PM<sub>10</sub> levels have remained compliant since the last meeting with annual averages at both sites are displaying a stabilising trend.

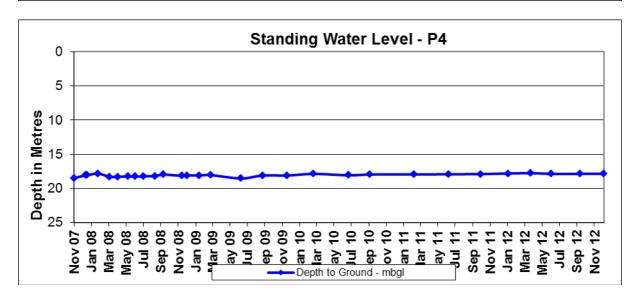
# **Groundwater Monitoring**

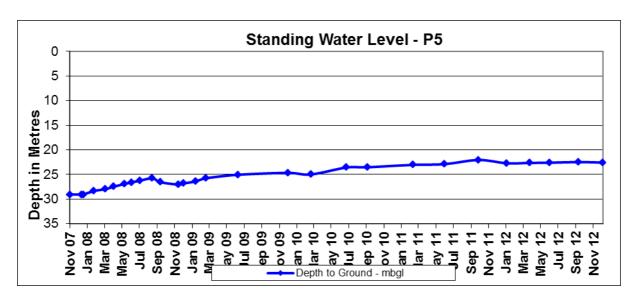
Groundwater monitoring was completed during December 2012. During the previous two monitoring rounds, groundwater was detected in 3 of the 7 groundwater wells in the rail loop. Narrabri Mine is investigating whether or not this water is associated with the mine or due to the wet weather received earlier in the year. Specialists are now been invited to tender to review the information obtained to date and confirm an appropriate monitoring regime. Monitoring well P47 has now also been included which is an additional monitoring point established under the revised Water Management Plan. Nested piezometers have been installed on the "Omeo" property and two sets are also installed on the mine site to monitor the effects of the Longwall operation. Results of these units will be made avaiable when received.

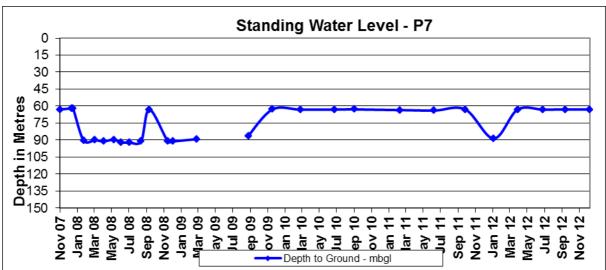


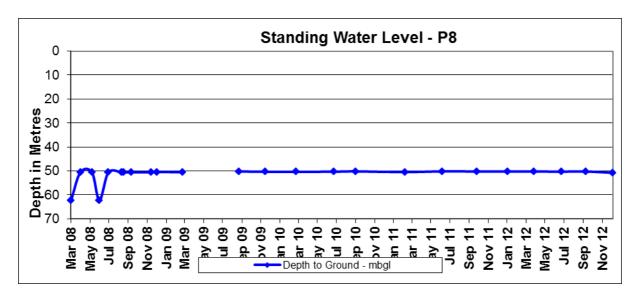


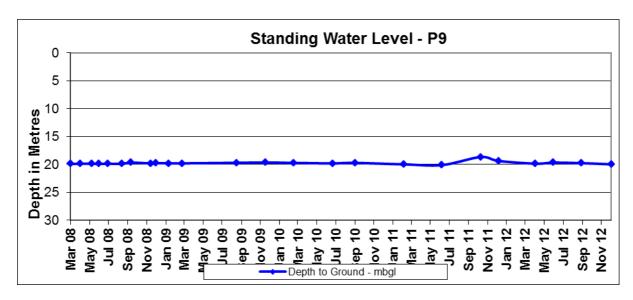


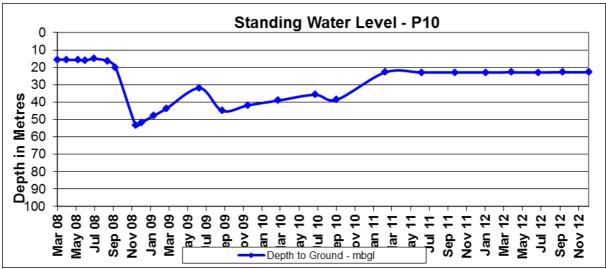


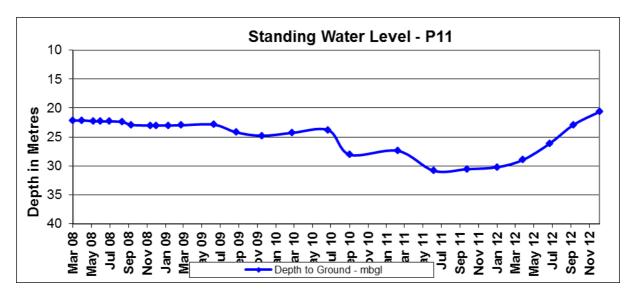


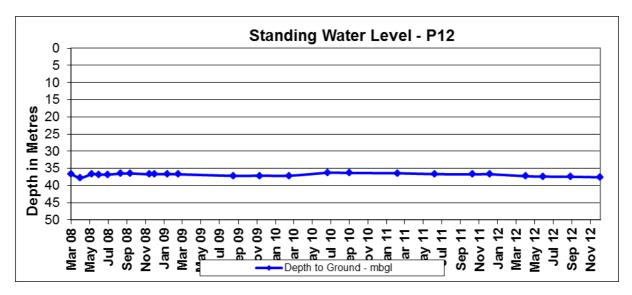


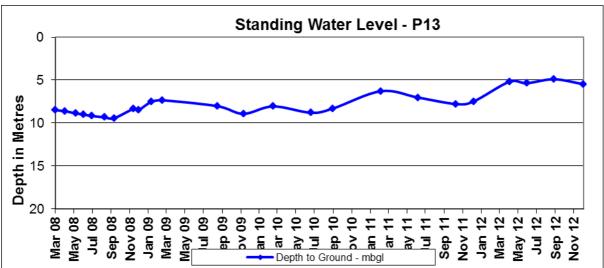


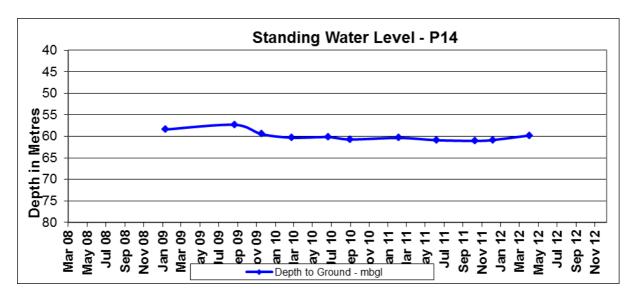


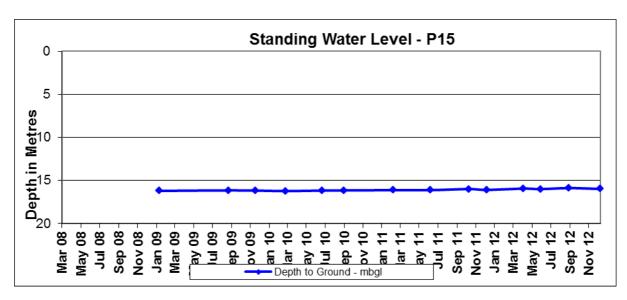


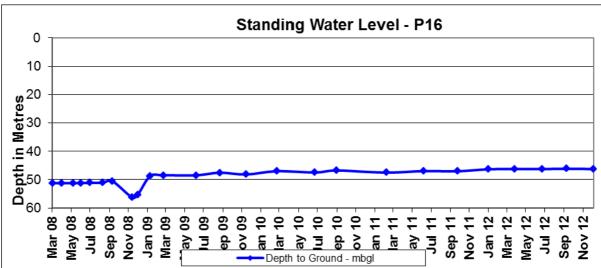


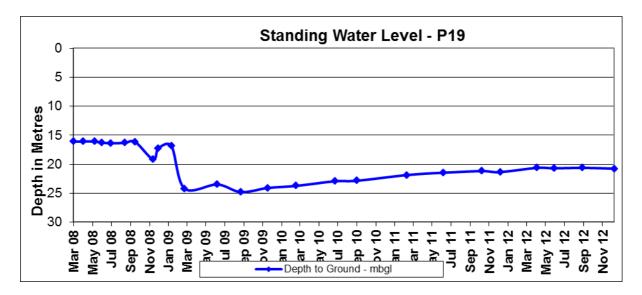


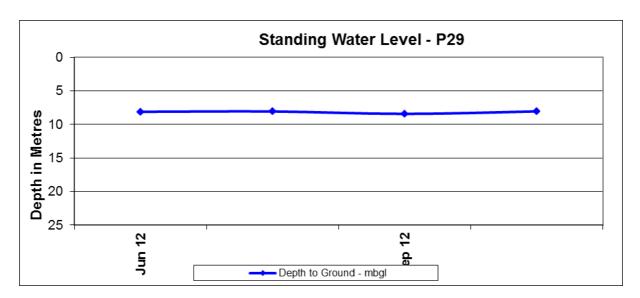


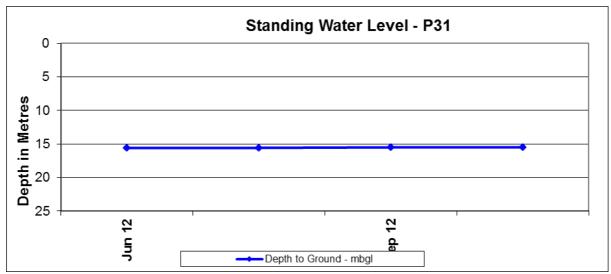


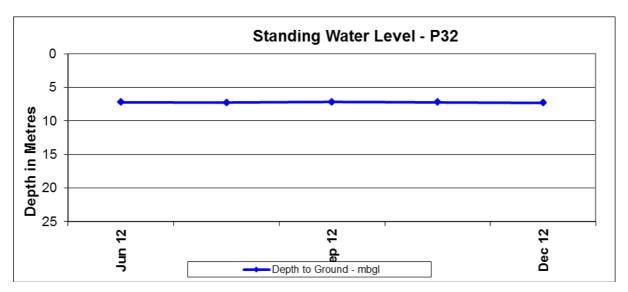


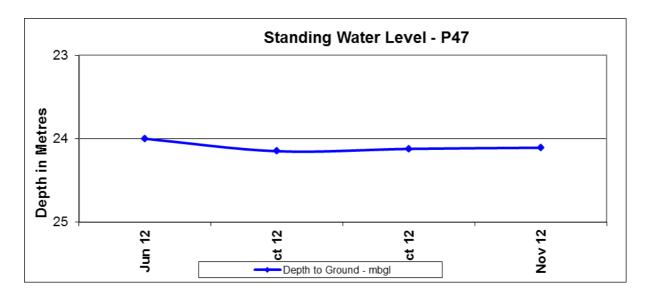












# **Surface Water Monitoring**

No wet weather discharges have occurred during November and December 2012.

# **Complaints**

Two formal complaints were received during November and December 2012. Both complaints related to visible dust being carried by high winds from the product stockpile and tripper. In both instances water was activated on the product gantry following the complaint. A Trigger Action Response Plan (TARP) has been developed for the operation which is currently being reviewed that outlines controls for dust generation during windy conditions. A review of engineering options for additional dust suppression systems is also been undertaken. Subsequent to the December complaint the complainant advised the mine that coal dust was settling at his residence. Narrabri Mine has since installed a 'first flush' system on the complainants' rainwater tanks.

# **Environmental Incident(s)**

No environmental incidents occurred during November and December 2012.



Narrabri Coal Operations Pty Ltd ABN 15 129 850 139 10 Kurrajong Creek Road, Baan Baa NSW 2390 Locked Bag 1002, Narrabri NSW 2390 Tel: 02 6794 4755 Fax: 02 6794 4753 www.whitehavencoal.com.au

# **Community Consultative Committee Meeting Minutes**

Meeting No: 21

Date: Wednesday 17<sup>th</sup> April 2013

**Time:** 3:30pm

Location: Narrabri Mine Site Office

Present:

Terry Miller (TM) - Chairman Cr Cathy Redding (CR) James Steiger (JS) Mark Foster (MF) Peter Webb (PW) Sally Hunter (SH)

Steve Farrar (SF) (Narrabri Mine Environmental Officer)

Danny Young (DY) (Whitehaven Coal Environmental Manager)

#### 1.0 Tour of Subsidence Area

Prior to beginning Meeting #21 of the Narrabri Mine CCC the members of the committee were escorted to the subsidence area of longwall panel 1. We first stopped on Greylands Road where subsidence was observed and the ponding of panel 1 in the nearby creek was also visible. Committee members asked questions in relation to full subsidence levels. Impacts on the larger trees along Greylands Road were also evident. The members were then taken to middle of the panel, known on the mine as Windmill Road, where subsidence is still occurring as well as goaf drainage activities. Discussions were in relation to mine activities, production levels and train availability. The recent job cuts by Whitehaven at the Tarrawonga/Rocglen mines were also discussed. Narrabri Mine has not had to cut any staff as yet but contractors have been scaled back onsite.

#### 2.0 Apologies

Steve Bow and Owen Salisbury.

#### 3.0 Previous Minutes

Moved: Mark Foster Seconded: James Steiger

#### 3.1 Business Arising from Previous Minutes

Greylands Road is now open. The consultant that undertook the Surface Water Assessment of the Narrabri Mine attended site during March 2013. He inspected the ponding area with JS and mine representatives. JS questioned the timeframe saying we have been talking about it for a while but something needs to be done. DY said we recognise his concerns and the consultant will review data and provide plans/strategies.

The committee advised the mine that the Newsletter was well received but next time we should make more copies available and put in more locations, e.g. the Railway Hotel in Baan Baa.



The staff numbers on the mine were divided in to the areas they live and presented to the CCC as requested at the previous meeting. The numbers are as follows:

NCO Waged – 128

Salary – 62 Total – 190

Narrabri: 36%
Boggabri: 2%
Baan Baa: 2%
Gunnedah: 34%
Hunter: 5%
Other: 22%

The committee was surprised to see the number living locally (74%) and SH advised the mine that this sort of information should be made available to the public.

CR provided a copy of the DVD made by the Council to highlight Narrabri and asked that it be included in employee packs. SF advised he would pass it on. CR advised more copies could be made available if required.

#### 4.0 General Business

#### 4.1 Operations Progress Report

The operations update was provided as follows:

# Mine Progress Report (to 31 March 2013)

Coal produced (t): March 2013 565,307

FY-to-date 2,886,632 Life-to-date 3,482,069

Coal Railed (t): March 2013 371,643

FY-to-date 2,361,000 Life-to-date 2,935,750

Average workforce numbers (March):

NCO Waged – 128

Salary – 62 Total – 190

Contractors CHPP – 29

Tech Services – 2 Operations – 77 Total – 108



Safety Update (FY to 31 March 2013):

Lost Time Injury (LTI) 1
Total Recordable Injuries: 19
Planned Task Observations: 4,430
Take 5 Assessments: 42,734
Work Hours (Mar-13): 75,500
Days LTI Free: 173

JS asked how much coal was currently stockpiled on the surface, SF advised approx. 440kt. SF also advised that production would slow during May with the planned longwall move which will allow the surface stockpiles to be reduced.

#### 4.2 Environmental Overview

As per provided report.

DY advised that consultants contacted in relation to the groundwater model calibration required by the consent advised the mine that there is currently insufficient data to recalibrate the model given longwall mining has been going for less than a year. We sought advice from the Department of Planning and Infrastructure and they advised us that as long as it is done within 2 years from the commencement of longwall mining then the mine would satisfy the consent condition.

Review of the environmental monitoring data prompted some discussion around the results of groundwater monitoring bore P11. Question was raised as to why there is fluctuation in the standing water level. SF will confirm the type of monitoring bore at the next meeting (ie windmill/stock watering bore) which will influence standing water level if it has been pumping close to the time of the water level checks.

SF advised that the EPA undertook a site visit to tour the coal stockpiles in relation to the EPL Pollution Reduction Program (PRP). The EPA advised the mine that the EPA's ongoing Dust Stop program will now be rolled out for underground mines as the open cuts have been through the process. SF outlined the type of measures been investigated by the mine to minimise dust which include: modifications to the tripper to concentrate coal flow, chemical additives to suppress dust, OEM being used to investigate ways to minimise dust lift off from dozers, and the Trigger Action Response Plan (TARP) that has been implemented onsite requiring a response from the CHPP control room when wind levels trigger alarms.

#### 5.0 New Business

SH provided copies of the Sacred Heart School Boggabri pamphlet to also be included in employee packs. SF advised he would pass it on.

SH asked if we were still planning to undertake baseline dust monitoring at Baan Baa as highlighted in the CCC section of the Newsletter. DY advised that WHC's preference is to have the EPA or Planning responsible for any baseline network because if the mine was involved then some people may not view the results as independent. The committee resolved to send a letter to the EPA requesting them to setup the network. TM to draft the letter.

SH also mentioned the upcoming Sustainable Communities Conference in Narrabri. Funding had been requested from Narrabri Mine/WHC. SF advised that the conference did not meet the criteria for funding from the mine but no word as yet from WHC. SH advised that the proportion of local people and things such as the 'Clean Skin' programme are good examples of what the mine does in the community and the conference is a good place to get that information out.

# 6.0 Complaints and Complaints Hotline

As per provided report.

# 7.0 Next Meeting

Wednesday 17<sup>th</sup> July at 4:00pm, Narrabri Mine Site Office.

# 8.0 Closure of Meeting

Meeting closed at 5:30pm.

# Narrabri Coal Mine Community Consultative Committee Meeting #21

# **Environmental Monitoring Report January – March 2013**

# **Noise Monitoring**

Attended noise monitoring was undertaken between Friday 8<sup>th</sup> and Sunday 10<sup>th</sup> March 2013 (Tables 1-12) to verify if noise levels were within compliance limits. The results from this monitoring are detailed in the tables below.

	Table 1  NCM Operational Noise Monitoring Results – 8 March 2013 (day)									
Location	Time	Total dB(A), Leq (15 min)	Identified Noise Sources							
N1 Bow Hills	2:42 pm	39	1.8 / S	n/a	Traffic (38), birds & insects (31), NCM inaudible					
N3 Naroo	1:45 pm	39	1.8 / S	n/a	Birds & insects (36), traffic (36), NCM inaudible					
N5 Oakleigh	4:22 pm	30	2.7 / S	n/a	Traffic (29), birds & insects (23), NCM inaudible					
N6 Newhaven	3:37 pm	38	1.8 / S	n/a	Birds & insects (33), traffic (33), <b>NCM (32)</b> *					
N7 Belah Park	1:02 pm	36	1.8 / S	n/a	Birds & insects (34), traffic (32), NCM inaudible					
N4 Greylands	5:21 pm	42	2.2 / S	n/a	Birds & insects (40), traffic (36), <b>NCM inaudible</b>					

<sup>\*</sup>Noise from gas drainage wells

Table 2  NCM Operational Noise Monitoring Results – 8 March 2013 (evening)									
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources				
N1 Bow Hills	8:48 pm	42	Calm	Lapse	Traffic (41), insects (35), NCM inaudible				
N3 Naroo	8:39 pm	40	Calm	Lapse	Traffic (40), insects (27), NCM inaudible				
N5 Oakleigh	9:25 pm	37	Calm	+0.4	Traffic (36), insects (28), NCM inaudible				
N6 Newhaven	9:25 pm	38	Calm	+0.4	Insects (37), <b>NCM (32)*</b>				
N7 Belah Park	8:06 pm	42	Calm	Lapse	Frogs & insects (42), traffic (31), NCM (28)				
N4 Greylands	8:15 pm	38	Calm	Lapse	Insects & frogs (36), NCM (32), traffic (27)				

\*Noise from gas drainage wells (29), mine noise (29)

	Table 3  NCM Operational Noise Monitoring Results – 8 March 2013 (night)								
Location Time Total dB(A), Wind speed/ Temp  Leq (15 min) direction Grad   Identified Noise Sources   (°C/100m)									
N1 Bow Hills	11:10 am	37	0.9 / WSW	+1.3	Insects & frogs (36), traffic (29), <b>NCM (25)</b>				
N3 Naroo	10:33 pm	33	1.3 / SSE	+0.7	Insects (30), traffic (28), <b>NCM (26)</b>				
N5 Oakleigh	12:40 am	30	0.9 / SW	+0.7	Traffic (27), insects (26), <b>NCM (&lt;20)</b>				
N6 Newhaven	11:47 pm	47	0.9 / WSW	+1.3	Insects (46), <b>NCM (36)*</b> , traffic (30)				
N7 Belah Park	10:03 pm	41	Calm	+0.6	Frogs & insects (41), traffic (25), <b>NCM (&lt;15)</b>				
N4 Greylands	10:03 pm	33	Calm	+0.6	Frogs & insects (31), <b>NCM (30)</b> , traffic (25)				

<sup>\*</sup>Noise from gas drainage wells (33), mine noise (32)

	Table 4									
	NCM Operational Noise Monitoring Results – 9 March 2013 (day)									
	Total dB(A), Wind speed/ Temp Grad									
Location	Time	Leg (15 min) direction (°C/100m) Identified Noise So								
N1 Bow Hills	12:45 pm	43	2.7 / S	n/a	Birds & insects (41), traffic (39), NCM inaudible					
N3 Naroo	8:55 am	45	2.2 / S	n/a	Traffic (42), birds & insects (42), NCM inaudible					
N5 Oakleigh	11:05 am	39	2.2 / S	n/a	Birds & insects (36), traffic (36), NCM inaudible					
N6 Newhaven	10:39 am	35	2.7 / SSE	n/a	Birds & insects (32), <b>NCM (32)*</b>					
N7 Belah Park	9:25 am	38	1.8 / SSE	n/a	Insects (36), traffic (35), NCM barely audible					

<sup>\*</sup>Noise from gas drainage wells (29), mine noise (28)

	Table 5 NCM Operational Noise Monitoring Results – 9 March 2013 (evening)								
Location Time Total dB(A), Wind Temp Grad (°C/100m) Identified Noise Sources									
			direction						
N1 Bow Hills	6:35 pm	41	Calm	+0.4	Traffic (39), birds & insects (37), NCM inaudible				
N3 Naroo	6:40 pm	45	Calm	+0.4	Traffic (43), birds & insects (40), NCM inaudible				
N5 Oakleigh	7:15 pm	38	Calm	Lapse	Birds & insects (37), traffic (30), NCM inaudible				
N6 Newhaven	6:01 pm	37	1.8 / S	+1.4	Birds & insects (36), <b>NCM (31)*</b>				
N7 Belah Park	6:02 pm	38	1.8 / S	+1.4	Birds & insects (36), traffic (34), NCM inaudible				

\*Noise from gas drainage wells (27), mine noise (28)

	Table 6										
NCM Operational Noise Monitoring Results – 9 March 2013 (night)											
Location Time Total dB(A), Wind Temp Grad (°C/100m) Identified Noise Sources											
			direction								
N1 Bow Hills	11:05 pm	37	Calm	+1.6	Traffic (35), frogs & insects (33), NCM inaudible						
N3 Naroo	11:12 pm	38	Calm	+1.6	Traffic (32), insects (32), NCM inaudible						
N5 Oakleigh	12:15 am	38	Calm	+0.3	Traffic (35), insects (34), <b>NCM (25)</b>						
N6 Newhaven	10:02 pm	39	Calm	+0.6	Insects (39), <b>NCM (29)*</b>						
N7 Belah Park	10:01 pm	37	Calm	+0.6	Insects (37), traffic (20), NCM inaudible						

<sup>\*</sup>Noise from gas drainage wells

	Table 7  NCM Operational Noise Monitoring Results – 10 March 2013 (day)								
Location Time Total dB(A), Wind Temp Grad Leq (15 min) speed/ (°C/100m) Identified Noise Sources direction									
N1 Bow Hills	11:52 am	36	1.3 / S	n/a	Traffic (33), insects (33), NCM occasionally audible				
					(<25)				
N3 Naroo	9:15 am	40	0.9 / SW	n/a	Traffic (38), insects (36), NCM inaudible				
N5 Oakleigh	10:12 am	33	0.9 / S	n/a	Birds & insects (33), traffic (30), NCM inaudible				
N6 Newhaven	10:55 am	36	1.3 / SW	n/a	NCM (34)*, birds & insects (32),				
N7 Belah Park	8:38 am	36	1.3 / SW	n/a	Birds (34), traffic (31), <b>NCM (&lt;20)</b>				

<sup>\*</sup>Noise from gas drainage wells (32), mine noise (29)

Table 8  NCM Operational Noise Monitoring Results – 10 March 2013 (evening)									
Location Time Total dB(A), Wind Temp Grad  Leq (15 min) speed/ (°C/100m) Identified Noise Sources  direction									
N1 Bow Hills	8:36 pm	40	Calm	+1.3	Traffic (38), birds & insects (36), NCM inaudible				
N3 Naroo	8:28 pm	39	Calm	+1.0	Traffic (38), insects (33), NCM inaudible				
N5 Oakleigh	9:15 pm	39	Calm	+1.3	Traffic (39), insects (28), NCM inaudible				
N6 Newhaven	9:10 pm	35	Calm	+0.3	NCM (33)*, insects (31)				
N7 Belah Park	8:00 pm	39	Calm	Lapse	Insects (37), traffic (34), NCM (35)				

<sup>\*</sup>Noise from gas drainage wells (33), mine noise (28)

	Table 9  NCM Operational Noise Monitoring Results – 10 March 2013 (night)									
Location Time Total dB(A), Wind speed/ Temp Leq (15 min) direction Grad Identified Noise Sources  (°C/100m)										
N1 Bow Hills	11:09 pm	32	0.9 / SW	+2.5	Insects (30), traffic (27), NCM (22)					
N3 Naroo	10:02 pm	38	0.9 / S	+1.9	Traffic (36), insects (32), <b>NCM (28)</b>					
N5 Oakleigh	12:22 am	26	Calm	+2.5	Traffic (24), insects (19), NCM inaudible					
N6 Newhaven	11:14 pm	35	0.9 / SW	+2.8	NCM (32)*, insects (31)					
N7 Belah Park	10:04 pm	35	0.9 / S	+1.9	Frogs & insects (35), NCM inaudible					

<sup>\*</sup>Noise from gas drainage wells (29), mine noise (28)

Table 10										
NCM Sleep Disturbance Monitoring Results – 8 March 2013 (night)										
Location	Time	dB(A),L1 (1 min)	Wind speed / direction	Temp Grad(°C/100m)						
N1 Bow Hills	11:10 am	38	0.9 / WSW	+1.3						
N3 Naroo	10:33 pm	30	1.3 / SSE	+0.7						
N5 Oakleigh	12:40 am	25	0.9 / SW	+0.7						
N6 Newhaven	11:47 pm	41	0.9 / WSW	+1.3						
N7 Belah Park	10:03 pm	20	Calm	+0.6						

	Table 11									
NCM Sleep Disturbance Monitoring Results – 9 March 2013 (night)										
Location	Time	dB(A),L1 (1 min)	Wind speed / direction	Temp Grad(°C/100m)						
N1 Bow Hills	11:05 pm	n/a	Calm	+1.6						
N3 Naroo	11:12 pm	n/a	Calm	+1.6						
N5 Oakleigh	12:15 am	33	Calm	+0.3						
N6 Newhaven	10:02 pm	33	Calm	+0.6						
N7 Belah Park	10:01 pm	n/a	Calm	+0.6						

Table 12  NCM Sleep Disturbance Monitoring Results – 10 March 2013 (night)							
Location	Time	dB(A),L1 (1 min)	Wind speed / direction	Temp Grad(°C/100m)			
N1 Bow Hills	11:09 pm	32	0.9 / SW	+2.5			
N3 Naroo	10:02 pm	35	0.9 / S	+1.9			
N5 Oakleigh	12:22 am	n/a	Calm	+2.5			
N6 Newhaven	11:14 pm	36	0.9 / SW	+2.8			
N7 Belah Park	10:04 pm	n/a	0.9 / S	+1.9			

The results in Tables 1 to 12 show that, under the operating and meteorological conditions at the times, for the worst case 15 minute compliance measurement periods, the mine noise did not exceed the operational noise criterion at any monitoring location during any of the monitoring periods.

Mine related noise was measureable on occasion at all of the monitoring locations. The noise was audible as a general hum with occasional noise from mobile plant and reverse beepers. Dozer tracks were audible at times.

At the Newhaven monitoring location the majority of mine related noise was from the gas drainage wells in the vicinity and from the stackers/reclaimers. The monitoring location is near the boundary of the property and not at the residence. Noise levels at the residence would be significantly lower than those shown in the tables.

The L1 (1 min) noise from mining did not exceed the 45 dB(A) criterion under the operating and meteorological conditions at the time.

The March monitoring also assessed the incidence of temperature inversions by placing two temperature loggers, attached to stakes, at different elevations. At the time of measurement no significant temperature inversions were present.

The real time noise monitor is reporting results to date indicating no noise exceedance events attributable to site operations.

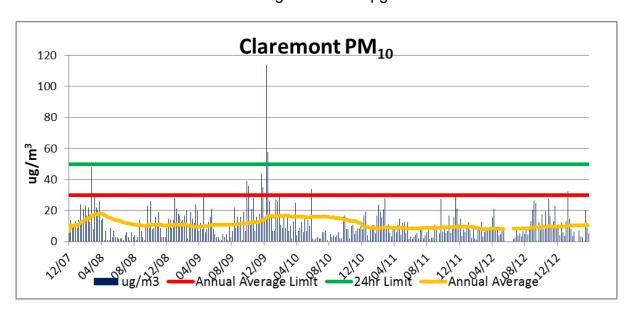
# **Deposited Dust Monitoring**

Month	ND1 Turrabaa	ND2 Claremont	ND3 Bow Hills	ND4a New Matoppo	ND5 Claremont	ND6 Willarah	ND7 Claremont	ND8 Claremont	ND11 Oakleigh
Apr-12	1.3	7.0	1.1	3.0	2.0	1.6	2.3	1.4	0.7
May-12	1.9	8.9	0.8	0.3	3.1	0.2	0.8	1.5	0.7
Jun-12	1.4	2.6	1.3	0.7	11.5	0.4	1.3	0.6	1.8
Jul-12	1.1	1.1	0.3	0.3	3.5		1.2	0.5	0.4
Aug-12	0.9	1.0	0.4	0.8	2.2	0.3	0.6	0.3	0.5
Sep-12	1.0	1.8	1.3	0.8	2.2	0.6	2.0	0.6	0.6
Oct-12	1.8	1.3	0.7	0.6	0.8	1.6	2.5	0.5	0.3
Nov-12	0.7	0.8	0.4	0.5	1.6	0.5	1.4	0.4	0.6
Dec-12	1.2	2.3	0.3	1.2	1.8	0.6	2.9	0.7	0.7
Jan-13	1.5	2.3	1.2	0.8	2.8	0.9	0.6	2.3	8.0
Feb-13	1.5	1.6	0.9	0.6	2.8	0.9	2.7	1.1	3.0
Mar-13	0.9	0.3	0.6	0.2	5.7	0.4	1.2	0.8	0.9
Annual Average	1.3	2.6	0.8	0.8	3.3	0.7	1.6	0.9	0.9

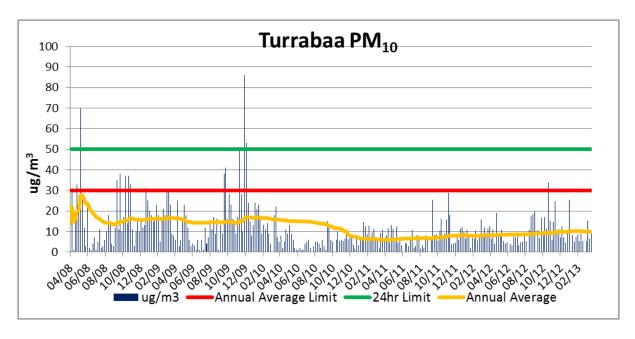
Deposited dust levels have remained at relatively low levels since the last meeting and all dust deposition annual averages are within compliance limits.

# **High Volume Air Sampling (PM**<sub>10</sub>)

PM<sub>10</sub> measurements taken to the end of March 2013 for the "Claremont" High Volume Air Sampler (HVAS) are returning a running annual average of 10.52  $\mu$ g/m³ which is well below the annual average limit of 30  $\mu$ g/m³.



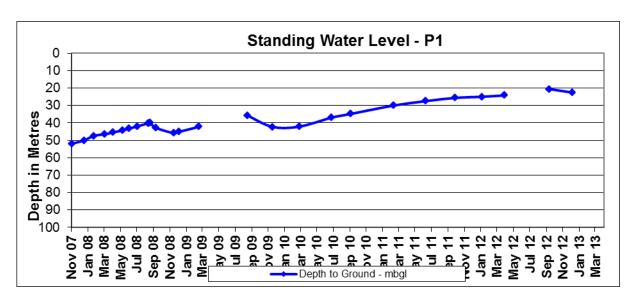
 $PM_{10}$  measurements taken to the end of March 2013 for the "Turrabaa" High Volume Air Sampler are returning a running annual average of 9.91  $\mu g/m^3$  which is also well below the annual average limit of 30  $\mu g/m^3$ 

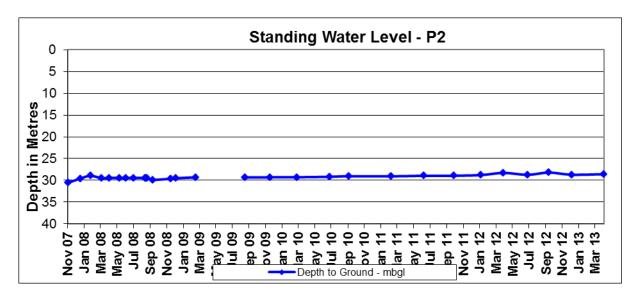


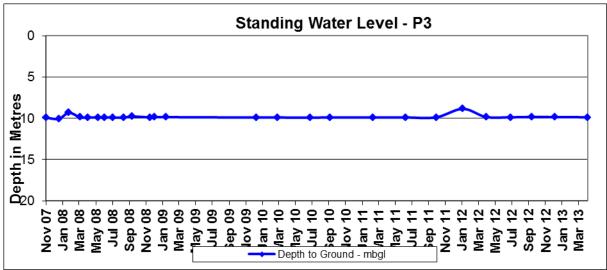
PM<sub>10</sub> levels have remained compliant since the last meeting with annual averages at both sites displaying a stabilising trend.

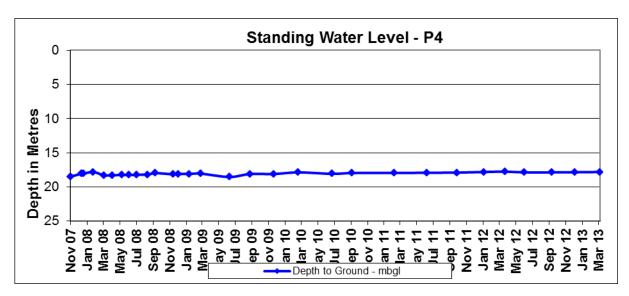
# **Groundwater Monitoring**

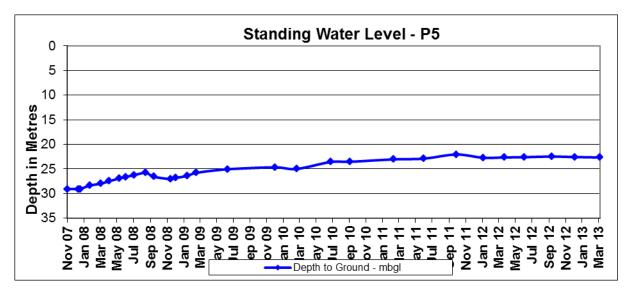
Groundwater monitoring was completed during March and April 2013. During the previous three monitoring rounds, groundwater was detected in 3 of the 7 groundwater wells in the rail loop. Narrabri Mine is investigating whether or not this water is associated with the mine or due to the wet weather received earlier in the year. Specialists are now reviewing available data. Monitoring well P47 has had a datalogger installed to monintor water levels. Nested piezometers have been installed on the "Omeo" property and two sets are also installed on the mine site to monitor the effects of the Longwall operation. Results of these units will be made available when received.

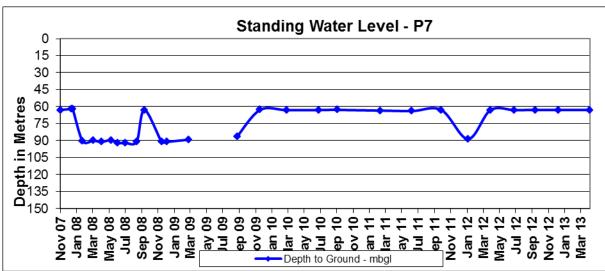


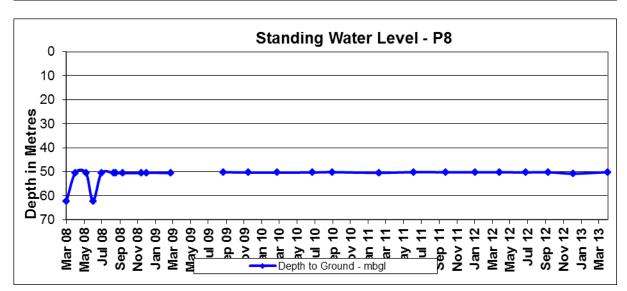


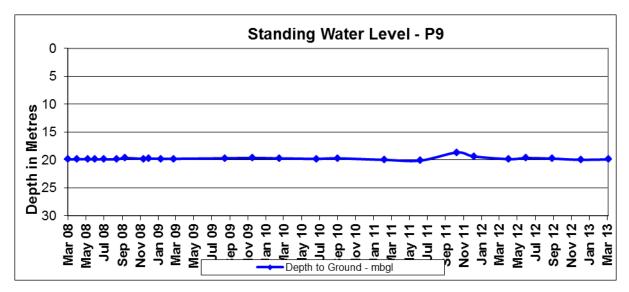


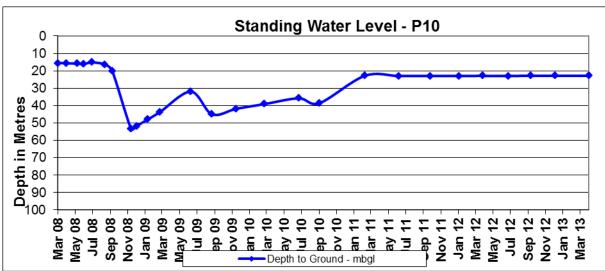


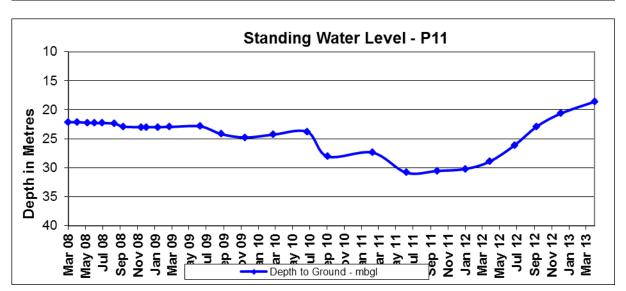


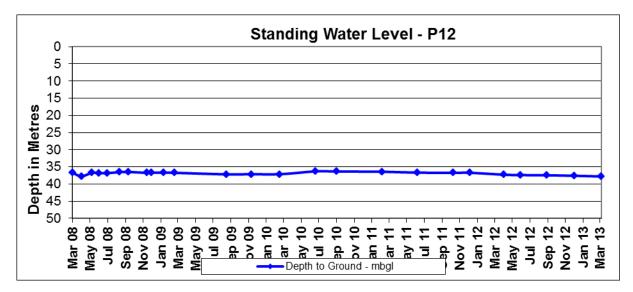


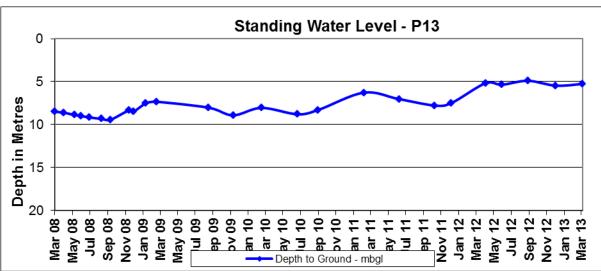


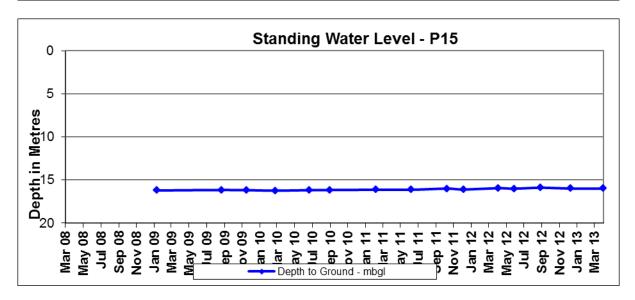


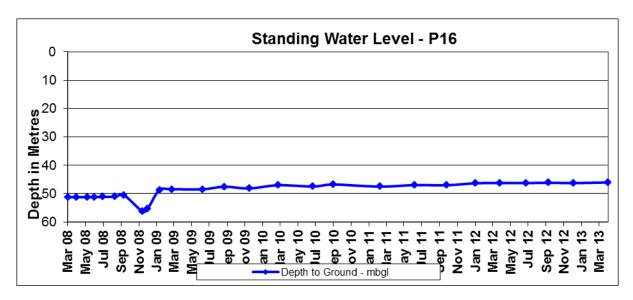


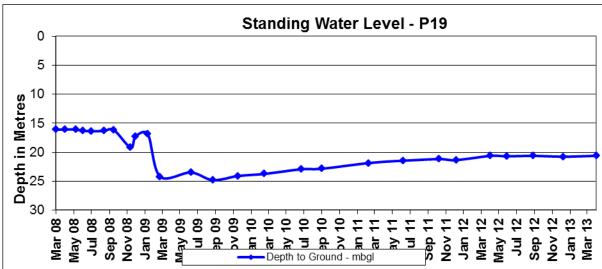


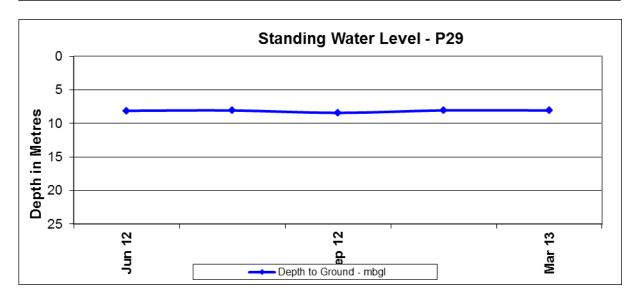


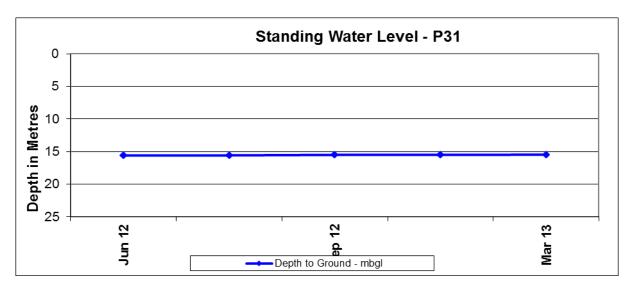


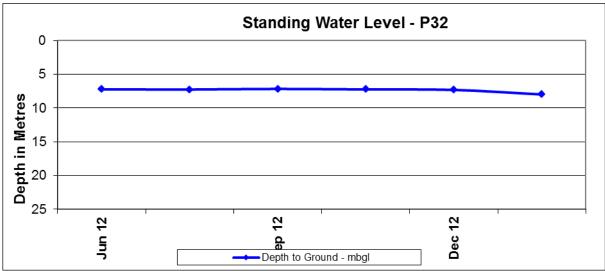












#### **Surface Water Monitoring**

No wet weather discharges from licensed discharge points occurred during January to March 2013; however flows were monitored in surrounding creek points on the 29<sup>th</sup> January and 1<sup>st</sup> March 2013.

#### Complaints

Six formal complaints were received during January to March 2013. Five of the complaints related to visible dust being generated and leaving the coal processing area. A Trigger Action Response Plan (TARP) has been implemented for the operation which outlines management measures that are implemented to control dust generation during windy conditions, which includes water sprays and positioning of the product tripper. Two of these complaints also related to noise at night but no particular date/time was provided. One complaint was received in relation to the accumulation of rubbish adjacent to the main access road on Kurrajong Creek Road. The rubbish has since been cleaned up.

# **Environmental Incident(s)**

No environmental incidents occurred during January to March 2013.



Narrabri Coal Operations Pty Ltd ABN 15 129 850 139 10 Kurrajong Creek Road, Baan Baa NSW 2390 Locked Bag 1002, Narrabri NSW 2390 Tel: 02 6794 4755 Fax: 02 6794 4753 www.whitehavencoal.com.au

# **Community Consultative Committee Meeting Minutes**

Meeting No: 22

Date: Wednesday 17<sup>th</sup> July 2013

**Time:** 4:00pm

Location: Narrabri Mine Site Office

Present:

Terry Miller (TM) - Chairman

James Stieger (JS) Mark Foster (MF)

Steve Bow (SB) (Narrabri Mine General Manager)

Owen Salisbury (OS) (Narrabri Mine Technical Services Manager)

Steve Farrar (SF) (Narrabri Mine Environmental Officer)

Natalie Cribb (NC) (Narrabri Mine

# 1.0 Apologies

Cathy Redding, Sally Hunter, Danny Young and Peter Webb.

#### 2.0 Previous Minutes

Moved: James Stieger Seconded: Mark Foster

#### 2.1 Business Arising from Previous Minutes

SF submitted report to the CCC on ponding in LW101. Review currently in progress on trees impacted in LW101.

TM advised that he had rang Kharl Turnbull at the EPA to discuss the baseline air quality monitoring network. One condition was that it be independent. EPA will call a meeting for all interested parties. Paul Bawden (NSC Planning and Development Director) is trying to get it all together. Also discussed funding of program, that Baan Baa was a neutral location and that NSC has been discussing the issue.

#### 3.0 General Business

#### 3.1 Operations Progress Report

The operations update was provided as follows:

# Mine Progress Report (to 31 March 2013)

Coal produced (t):	June 2013	46,003		
	FY 12/13	3,678,873		
	Life-to-date	4,274,310		

Coal Railed (t): June 2013 299,810

FY 12/13 3,449,000 Life-to-date 4,024,000



Average workforce numbers (March):

NCO Waged – 130

Salary – 65 Total – 195

Contractors Operations and CHPP – 116

Total - 116

Safety Update (FY 12/13):

Lost Time Injury (LTI) 1
Total Recordable Injuries: 25
Planned Task Observations: 5,370
Take 5 Assessments: 50,088
Work Hours (Jun-13): 81,559
Days LTI Free: 253

SB stated that safety statistics are excellent. SB discussed industry statistics and was pleased to report that Narrabri Coal Operations had excellent LTI results.

SB told the committee that there had been 3.67 million tonnes of coal produced. This was a bit short of the forecast budget. He went on to say that this was quite normal and was to be expected as Narrabri Coal Operations was still a new mine and there was also the problem of inexperienced operators. SB bow went on to say that despite these setbacks Narrabri Coal was still producing exceptionally well.

SB reported to the committee that the shearer would become operational in the next few days which was a good result. \$13M had been spent with the LW relocation. SB told to the committee that there would be another relocation in February 2014.

SB reported that the falling Australian dollar was good for business. Pleasing outcome and the rest of year was looking promising.

TM asked SB is the current Narrabri Coal workforce was stable?

SB replied that Narrabri Coal Operations currently has a workforce of 195 permanent staff. Workforce was still short 30 people.

JS asked SB what the workforce turnover was?

SB replied that our turnover was extremely low. SB went on to say that if staff were leaving it was simply for a career decision. SB mentioned that our recent departures – Matthew Klein (Mine Manager) and Shane Pegg (Mine Manager) were for new career opportunities. SB went on to say that The MAC camp had helped Whitehaven to build this mine.

SB told the committee that the pit was going well. Development was on track. He mentioned that eyes were currently on China as our market is greatly affected by China's market.

JS asked if there was anything happening with the southern end of the mine.

SB replied that there was nothing happing yet and there were no development plans in the near future.

Short discussion on the Maules Creek Mine. SB told the committee that the quality of the coal was excellent.

JS asked SB how the trains were going?

SB replied that there had been no issues. SB mentioned the rail link was being upgraded. He said that the only problems were along the Liverpool ranges. Upgrades were in the planning stages.

SB said that there would be higher production on the rails lines once Maules Creek mine was up and running. SB also mentioned that there would be trains to help support this operation. SB told the committee that Whitehaven had recently purchased a train and will need a further 3 – 4 trains.

#### 3.2 Environmental Overview

As per provided report. SF discussed the monitoring report with the CCC members.

Attended noise monitoring undertaken during May/June 2013. SF told the committee that there had only been 1 case where noise levels were exceeded. It was also pointed out that there were no known weather causes to be a contributing factor. The complainant/Landowner had been advised.

Deposit of dust: Annual averages below criteria.

SF provided a report on the Groundwater investigation for the bores around the rail loop which indicates the dams are not leaking based on the differences in water chemistry.

There were 4 formal complaints in April about Dust. Photo's were taken but there was no visible dust seen. There were no noise complaints since April.

MF asked if the previous complaints had been made by the same people/person.

SF replied that was correct but there had been no recent complaints from the said person. Recommendation was put forth for additional monitoring to occur.

Discussion was raised by JS about the dams etc. He said that the pond should be kept within the creek area. JS was concerned that all the dams would link up it's not drained.

SB replied that he could not understand the concerns. SB did not see it being a problem. He said that there would have to be a significant amount of erosion for this to occur. Despite this SB said he was more than happy for further investigation and to seek further advice.

SF told the committee that the pond was currently at Creek level and that pumping was in progress to drain levels.

SB said that we will look into this matter further to see if we did indeed need to build a larger dam.

TM asked what was the water quality?

SF replied that samples had been sent for testing. He said that monitoring for water quality was in progress.

#### 4.0 New Business

SF submitted the Annual Environmental Management Report (AEMR) / Annual Review to the CCC.

### 5.0 Complaints and Complaints Hotline

As per provided report.

# 6.0 Next Meeting

Wednesday 11<sup>th</sup> December at 4:00pm, Railway Hotel, Baan Baa.

# 7.0 Closure of Meeting

Meeting closed at 4:45pm.

# Narrabri Coal Mine Community Consultative Committee Meeting #22

# **Environmental Monitoring Report April – June 2013**

### **Noise Monitoring**

Attended noise monitoring was undertaken on Tuesday 21<sup>st</sup> May (Tables 1-4) and between Sunday 23<sup>rd</sup> and Tuesday 25<sup>th</sup> June 2013 (Tables 5-16) to verify if noise levels were within compliance limits. The results from this monitoring are detailed in the tables below.

Table 1: NCM Noise Monitoring Results – 21 May 2013 (Day)								
Location	Time	dB(A), L <sub>eq(15min)</sub>	Wind speed (m/s)/ direction°	Identified Noise Sources				
Merriman	2:28 pm	42	3.6/288	Traffic (42), birds & insects (32), NCM barely audible				
Bow Hills	2:53 pm	44	3.1/278	Traffic (44), birds & insects (25), NCM barely audible				
Oakleigh	3:22 pm	32	2.5/271	Traffic (30), rail works (27), birds & insects (20), NCM inaudible				
Naroo	1:05 pm	45	2.9/259	Birds (40), rail works (40), traffic (40), NCM inaudible				
Newhaven	1:43 pm	31	3.0/279	NCM (29), traffic (26)				
Greylands	2:07 pm	34	3.5/286	Construction noise (34), birds & insects (20), NCM inaudible				

	Table 2: NCM Noise Monitoring Results – 21 May 2013 (Evening)								
Location Time		me dB(A), Wind speed (m/s)/		Identified Noise Sources					
		Leq(15min)	direction°						
Merriman	7:33 pm	40	2.4/294	Traffic (39), NCM (30)					
Bow Hills	7:56 pm	43	2.1/289	Traffic (43), NCM (32)					
Oakleigh	9:35 pm	36	1.6/290	Traffic (34), NCM (30), insects (22)					
Naroo	9:11 pm	42	2.1/285	NCM (40), traffic (38)					
Newhaven	8:43 pm	31	1.8/262	Traffic (31), NCM barely audible					
Greylands	8:19 pm	36	2.2/272	Traffic (36), NCM inaudible					

	Table 3: NCM Noise Monitoring Results – 21 May 2013 (Night)									
Location	Time	dB(A), L <sub>eq(15min)</sub>	Wind speed (m/s)/ direction°	Temp Grad (°C/100m)	Identified Noise Sources					
Merriman	10:53 pm	34	0.9/322	+0.9	Traffic (33), NCM (25), insects (23)					
Bow Hills	11:17 pm	31	0.9/278	+0.9	Traffic (30), <b>NCM (24)</b>					
Oakleigh	12:05 am	34	0.4/156	+0.9	Traffic (32), <b>NCM (29)</b>					
Naroo	11:39 pm	38	1.1/198	+1.3	Traffic (36), NCM (34)					
Newhaven	10:08 pm	26	1.8/326	+1.4	Traffic (26), NCM inaudible					
Greylands	10:30 pm	45	1.6/325	+0.9	Train (44), insects (37), traffic (35), NCM inaudible					

Table 4: L1 (1 min) – 21 May 2013 (Night)							
		dB(A),					
Location	Time	L1 (1 min)					
Merriman	10:53 pm	31					
Bow Hills	11:17 pm	33					
Oakleigh	12:05 am	33					
Naroo	11:39 pm	41					
Newhaven	10:08 pm	n/a					
Greylands	10:30 pm	n/a					

	Table 5: NCM Operational Noise Monitoring Results – 23 June 2013 (day)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources				
N1 Bow Hills	2:45 pm	43	0.9 / S	n/a	Traffic (40), cattle (40), NCM inaudible				
N3 Naroo	12:41 pm	36	1.3 / S	n/a	Traffic (35), birds (29), NCM inaudible				
N5 Oakleigh	12:58 pm	42	1.3 / S	n/a	Birds (38), plane (36), traffic (36), NCM inaudible				
N6 Newhaven	4:21 pm	37	Calm	n/a	Birds (34), <b>NCM (34)</b> *				
N7 Merriman	2:18 pm	50	1.3 / S	n/a	Tractor (49), traffic (35), NCM (<30)				
N4 Greylands	3:58 pm	55	Calm	n/a	Cars (55), traffic (38), NCM (<30)				

<sup>\*</sup>Noise from gas drainage wells

Table 6: NCM Operational Noise Monitoring Results – 23 June 2013 (evening)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources			
N1 Bow Hills	8:22 pm	41	Calm	+6.4	Traffic (39), plane (34), NCM inaudible			
N3 Naroo	9:29 pm	49	Calm	+8.4	Traffic (49) NCM inaudible			
N5 Oakleigh	7:33 pm	40	Calm	+4.0	Traffic (37), plane (37), NCM inaudible			
N6 Newhaven	8:33 pm	36	Calm	+6.4	NCM (36)*			
N7 Merriman	9:08 pm	40	Calm	+8.4	Plane (36), traffic (35), dog (33), NCM (<30)			
N4 Greylands	9:05 pm	45	Calm	+8.4	Traffic (43), plane (38), NCM (<30)			

<sup>\*</sup>Noise from gas drainage wells

Table 7: NCM Operational Noise Monitoring Results – 23/24 June 2013 (night)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources			
N1 Bow Hills	10:07 pm	42	Calm	+5.6	Traffic (42), <b>NCM (&lt;30)</b>			
N3 Naroo	11:19 pm	34	1.3 / S	+3.8	Traffic (34), NCM inaudible			
N5 Oakleigh	12:36 am	28	Calm	+6.8	Traffic (28), NCM inaudible			
N6 Newhaven	12:03 am	35	1.3 / S	+3.6	NCM (35)*			
N7 Merriman	10:31 pm	46	0.9 / S	+4.8	Train (45), traffic (36), <b>NCM (&lt;30)</b>			
N4 Greylands	11:39 pm	32	1.3 / S	+5.2	NCM (31), traffic (<25)			

<sup>\*</sup>Noise from gas drainage wells

	Table 8: NCM Operational Noise Monitoring Results – 24 June 2013 (day)								
		Total dB(A),	Wind speed/	Temp Grad					
Location	Time	Leq (15 min)	direction	(°C/100m)	Identified Noise Sources				
N1 Bow Hills	2:20 pm	47	0.9 / NW	n/a	Traffic (39), NCM inaudible				
N3 Naroo	12:20 pm	40	1.3 / NW	n/a	Traffic (39), <b>NCM (31)</b>				
N5 Oakleigh	10:41 am	40	Calm	n/a	Birds (37), traffic (35), <b>NCM (&lt;30)</b>				
N6 Newhaven	10:35 am	40	Calm	n/a	Truck (37), <b>NCM (36)</b> *				
N7 Merriman	12:36 pm	45	1.3 / NW	n/a	Traffic (43), horse (38), NCM inaudible				

<sup>\*</sup>Noise from gas drainage wells (33), mine noise (32)

	Table 9: NCM Operational Noise Monitoring Results – 24 June 2013 (evening)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources				
N1 Bow Hills	8:10 pm	47	Calm	Lapse	Traffic (47), NCM (35)				
N3 Naroo	8:42 pm	38	Calm	+0.6	Traffic (38), NCM (35)				
N5 Oakleigh	7:33 pm	28	Calm	Lapse	Traffic (28), NCM inaudible				
N6 Newhaven	8:45 pm	40	Calm	+0.6	NCM (40)*				
N7 Merriman	9:25 pm	44	Calm	Lapse	Traffic (43), <b>NCM (34)</b>				

<sup>\*</sup>Noise from gas drainage wells

	Table 10: NCM Operational Noise Monitoring Results – 24/25 June 2013 (night)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources				
N1 Bow Hills	11:42 pm	44	Calm	+4.9	Traffic (41), NCM (39)				
N3 Naroo	12:26 am	41	0.9 / NNW	+5.1	Traffic (39), NCM (34)				
N5 Oakleigh	10:17 pm	35	Calm	+1.2	Plane (34), NCM (<25)				
N6 Newhaven	10:06 pm	42	Calm	+1.2	NCM (42)*				
N7 Merriman	11:16 pm	42	Calm	+3.8	Traffic (39), train (34), NCM (34)				

<sup>\*</sup>Noise from gas drainage wells

Table 11: NCM Operational Noise Monitoring Results – 25 June 2013 (day)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources			
N1 Bow Hills	12:33 pm	41	1.3 / NNE	n/a	Traffic (41), NCM inaudible			
N3 Naroo	2:09 pm	51	Calm	n/a	Car (48), Traffic (43), NCM inaudible			
N5 Oakleigh	12:39 pm	38	1.3 / NNE	n/a	Traffic (36), birds (32), NCM inaudible			
N6 Newhaven	10:53 am	43	1.8 / NNE	n/a	Helicopter (42), traffic (35), NCM inaudible			
N7 Merriman	1:38 pm	38	Calm	n/a	Traffic (38), NCM (<25)			

<sup>\*</sup>Noise from gas drainage wells

Table 12: NCM Operational Noise Monitoring Results – 25 June 2013 (evening)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources			
N1 Bow Hills	8:36 pm	40	Calm	+4.2	Traffic (38), birds & insects (36), NCM inaudible			
N3 Naroo	8:28 pm	39	Calm	+4.2	Traffic (38), insects (33), NCM inaudible			
N5 Oakleigh	9:15 pm	39	Calm	+5.6	Traffic (39), insects (28), NCM inaudible			
N6 Newhaven	9:10 pm	35	Calm	+5.6	NCM (33)*, insects (31)			
N7 Merriman	8:00 pm	39	Calm	+6.6	Insects (37), traffic (34), NCM (35)			

<sup>\*</sup>Noise from gas drainage wells (33), mine noise (28)

Table 13: NCM Operational Noise Monitoring Results – 25/26 June 2013 (night)									
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources				
N1 Bow Hills	11:09 pm	32	Calm	+2.0	Insects (30), traffic (27), NCM (22)				
N3 Naroo	10:02 pm	38	Calm	+6.2	Traffic (36), insects (32), <b>NCM (28)</b>				
N5 Oakleigh	12:22 am	26	Calm	+1.4	Traffic (24), insects (19), NCM inaudible				
N6 Newhaven	11:14 pm	35	Calm	+2.0	NCM (32)*, insects (31)				
N7 Merriman	10:04 pm	35	Calm	+6.2	Frogs & insects (35), NCM inaudible				

<sup>\*</sup>Noise from gas drainage wells (29), mine noise (28)

Table 14: NCM Sleep Disturbance Monitoring Results – 23/24 June 2013 (night)							
Location	Time	dB(A),L1 (1 min)	Wind speed / direction	Temp Grad(°C/100m)			
N1 Bow Hills	10:07 pm	<35	Calm	+5.6			
N3 Naroo	11:19 pm	inaudible	1.3 / S	+3.8			
N5 Oakleigh	12:36 am	25	Calm	+6.8			
N6 Newhaven	12:03 am	42*	1.3 / S	+3.6			
N7 Merriman	10:03 pm	<35	0.9 / S	+4.8			

<sup>\*</sup>Noise from gas drainage wells

Table 15: NCM Sleep Disturbance Monitoring Results – 24/25 June 2013 (night)							
Location	Time	dB(A),L1 (1 min)	Wind speed / direction	Temp Grad(°C/100m)			
N1 Bow Hills	11:42 pm	43	Calm	+4.9			
N3 Naroo	12:26 am	38	0.9 / NNW	+5.1			
N5 Oakleigh	10:17 pm	<30	Calm	+1.2			
N6 Newhaven	10:06 pm	45*	Calm	+1.2			
N7 Merriman	11:16 pm	38	Calm	+3.8			

<sup>\*</sup>Noise from gas drainage wells

Table 16: NCM Sleep Disturbance Monitoring Results – 25/26 June 2013 (night)							
Location	Time	dB(A),L1 (1 min)	Wind speed / direction	Temp Grad(°C/100m)			
N1 Bow Hills	11:09 pm	32	0.9 / SW	+2.5			
N3 Naroo	10:02 pm	35	0.9 / S	+1.9			
N5 Oakleigh	12:22 am	n/a	Calm	+2.5			
N6 Newhaven	11:14 pm	36*	0.9 / SW	+2.8			
N7 Merriman	10:04 pm	n/a	0.9 / S	+1.9			

<sup>\*</sup>Noise from gas drainage wells

The results in Tables 1 to 4 show that, under the operational and atmospheric conditions at the time, noise emission from the Narrabri Mine exceeded the criterion of 35 dB(A) at the Naroo monitoring location during the evening monitoring period on 21 May 2013. The noise attributed to the mine was mainly from dozer(s) working on the coal stockpiles. This exceedance was reported to the resident and the relevant Government agencies.

The results in Tables 5-16 show that, under the operating and meteorological conditions at the times, for the worst case 15 minute compliance measurement periods, the mine noise did not exceed the operational noise criterion at any monitoring location during any of the monitoring periods, with the following exception:

	Location	Date, time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources
1	N1 Bow Hills	24/6 11:42 pm	44	Calm	+4.9	Traffic (41), <b>NCM (39)</b>

The audible mining noise sources during this measurement were a constant midfrequency hum described as conveyor noise at 34 dB(A) and dozer track noise at 36 dB(A). At the time of measurement, the temperature inversion strength was +4.9°C/100m which is greater than the upper limit of +4°C/100m under which the noise criteria are applicable. The event, therefore, does not constitute a formal exceedance of the noise criterion.

Mine related noise was measureable on occasion at all of the monitoring locations. The noise was audible as a general hum with occasional noise from mobile plant and reverse beepers. Dozer tracks were audible at times.

At the Newhaven monitoring location the majority of mine related noise was from the gas drainage wells in the vicinity and from the stackers/reclaimers. The monitoring location is near the boundary of the property and not at the residence. Noise levels at the residence would be significantly lower than those shown in the tables.

The L1 (1 min) noise from mining did not exceed the 45 dB(A) criterion under the operating and meteorological conditions at the time.

The monitoring also assessed the incidence of temperature inversions by placing two temperature loggers, attached to stakes, at different elevations. At the time of measurement there were some significant temperature inversions present.

The real time noise monitor is reporting results to date indicating no noise exceedance events attributable to site operations.

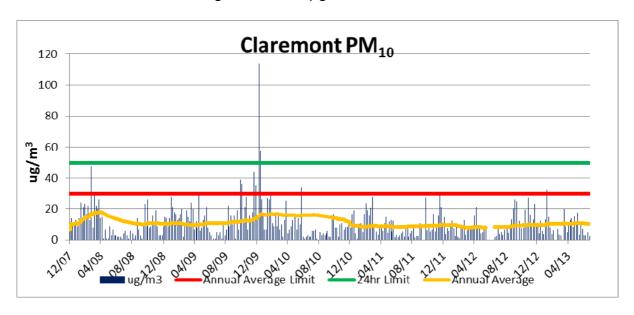
# **Deposited Dust Monitoring**

Month	ND1 Turrabaa	ND2 Claremont	ND3 Bow Hills	ND4a New Matoppo	ND5 Claremont	ND6 Willarah	ND7 Claremont	ND8 Claremont	ND11 Oakleigh
Jul-12	1.1	1.1	0.3	0.3	3.5	-	1.2	0.5	0.4
Aug-12	0.9	1.0	0.4	0.8	2.2	0.3	0.6	0.3	0.5
Sep-12	1.0	1.8	1.3	0.8	2.2	0.6	2.0	0.6	0.6
Oct-12	1.8	1.3	0.7	0.6	0.8	1.6	2.5	0.5	0.3
Nov-12	0.7	0.8	0.4	0.5	1.6	0.5	1.4	0.4	0.6
Dec-12	1.2	2.3	0.3	1.2	1.8	0.6	2.9	0.7	0.7
Jan-13	1.5	2.3	1.2	0.8	2.8	0.9	0.6	2.3	0.8
Feb-13	1.5	1.6	0.9	0.6	2.8	0.9	2.7	1.1	3.0
Mar-13	0.9	0.3	0.6	0.2	5.7	0.4	1.2	0.8	0.9
Apr-13	1.0	0.9	1.3	0.8	1.4	0.3	1.1	0.5	0.4
May-13	0.6	3.1	0.6	0.8	1.8	0.5	1.0	0.5	0.7
Jun-13	2.5	1.1	0.8	0.3	4.8	0.2	0.6	1.0	0.2
Annual Average	1.2	1.5	0.7	0.6	2.6	0.6	1.5	8.0	0.8

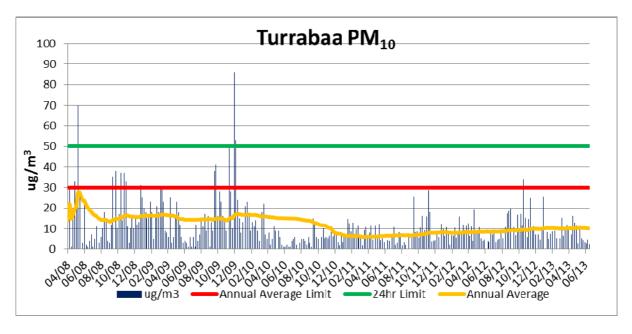
Deposited dust levels have remained at relatively low levels since the last meeting with the exception of ND5 during June 2013. This gauge is adjacent to the reject emplacement area and this is a likely source of dust. However, all dust deposition annual averages are within compliance limits.

# High Volume Air Sampling (PM<sub>10</sub>)

PM<sub>10</sub> measurements taken to the end of June 2013 for the "Claremont" High Volume Air Sampler (HVAS) are returning a running annual average of 10.54  $\mu$ g/m³ which is well below the annual average limit of 30  $\mu$ g/m³.



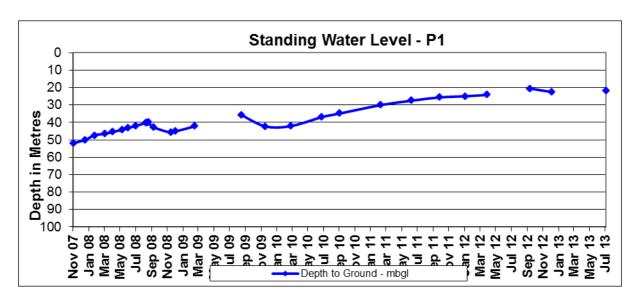
PM<sub>10</sub> measurements taken to the end of June 2013 for the "Turrabaa" High Volume Air Sampler are returning a running annual average of 10.06  $\mu$ g/m³ which is also well below the annual average limit of 30  $\mu$ g/m³.

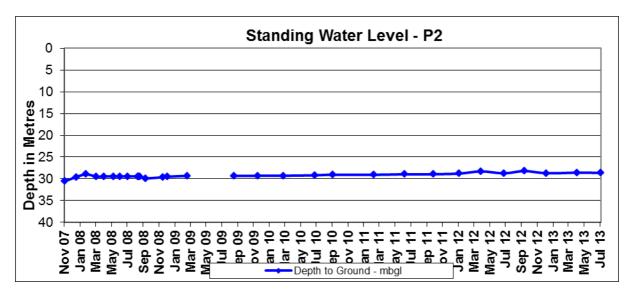


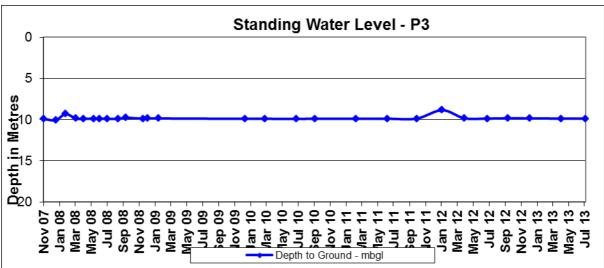
PM<sub>10</sub> levels have remained compliant since the last meeting with annual averages at both sites displaying a stabilising trend.

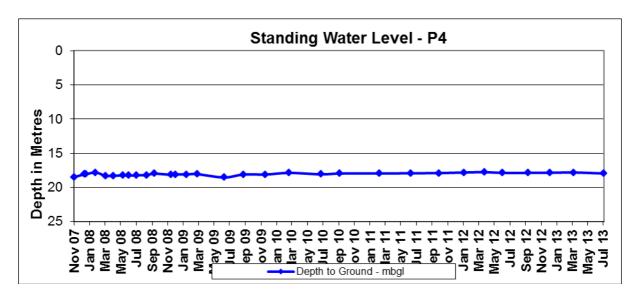
#### **Groundwater Monitoring**

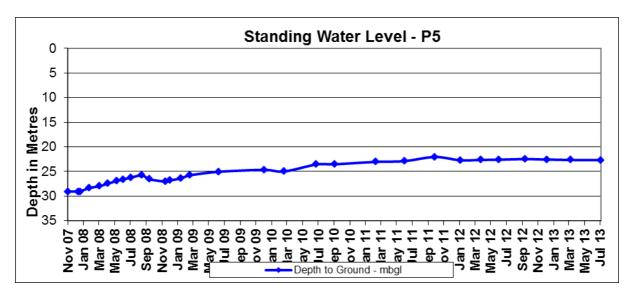
Groundwater monitoring was completed in early July 2013. During the previous four monitoring rounds, groundwater was detected in 3 of the 7 groundwater wells in the rail loop. A report indicates that this water is chemically different to that found in the rail loop dams and is therefore unlikely to be influenced by the dams. Narrabri Mine will provide the CCC with a copy of the report. Nested piezometers have been installed on the "Omeo" and "Kurrajong" properties and two sets are also installed on the mine site to monitor the effects of the Longwall operation. Results of these units will be made available when received.

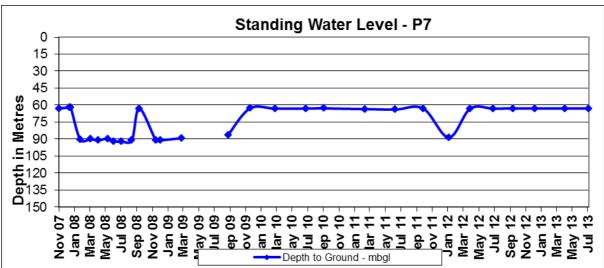


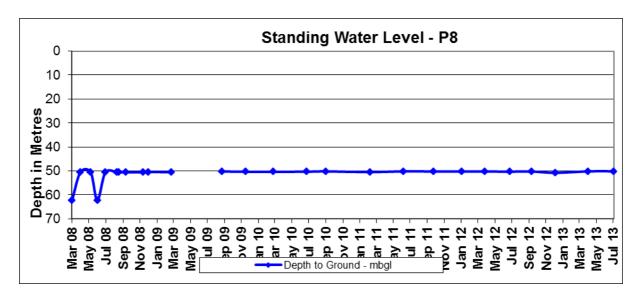


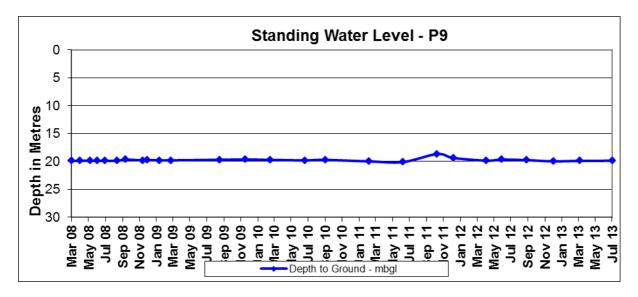


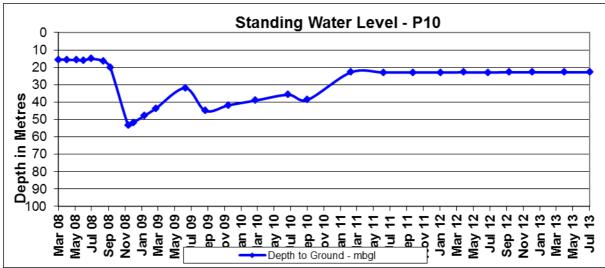


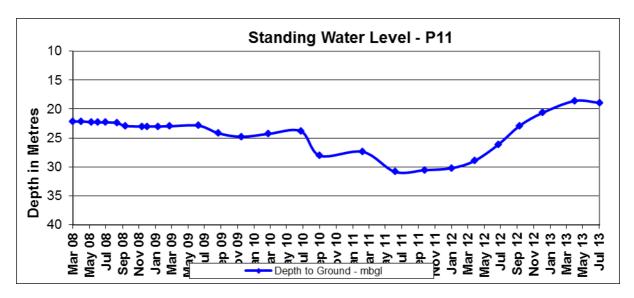


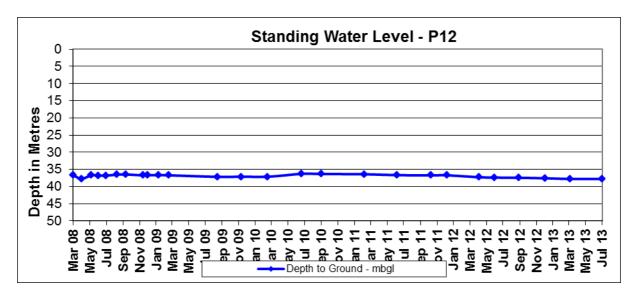


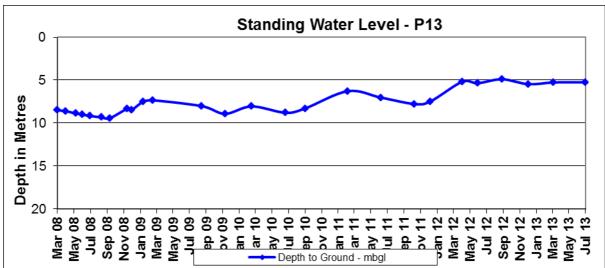


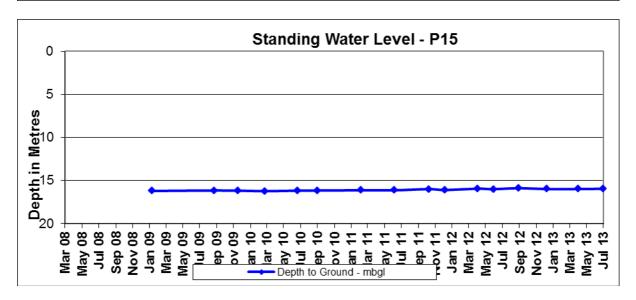


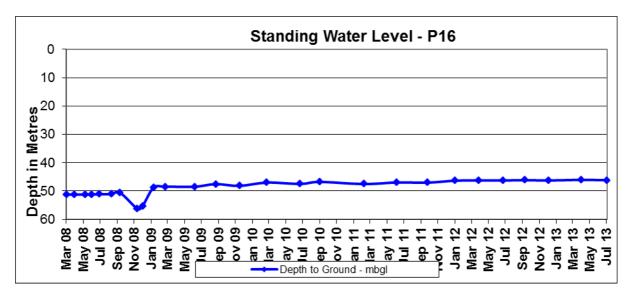


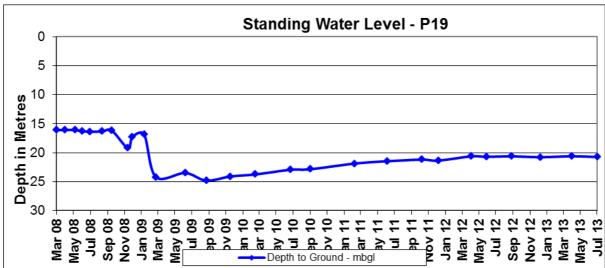


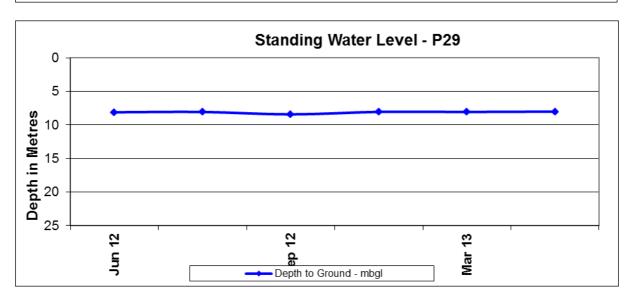


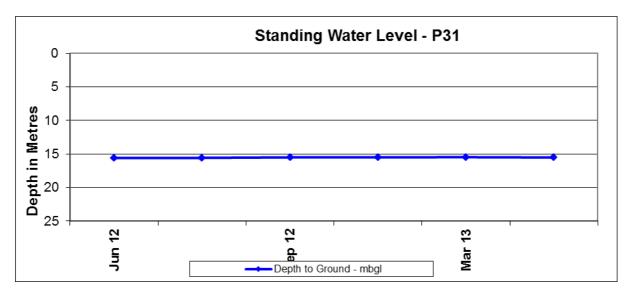


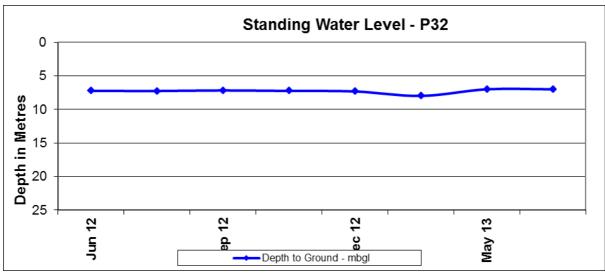


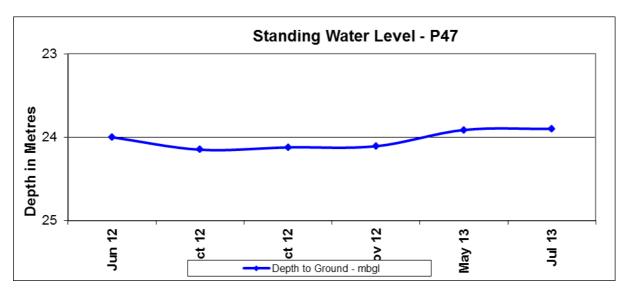












# **Surface Water Monitoring**

No wet weather discharges from licensed discharge points occurred during the April to June 2013 period.

#### **Complaints**

Four formal complaints were received during April to June 2013. All four complaints were received in April 2013 and they all related to visible dust being generated and leaving the coal processing area. A Trigger Action Response Plan (TARP) has been implemented for the operation which outlines management measures that are implemented to control dust generation during windy conditions, which includes water sprays and positioning of the product tripper. Photos were taken at the time of two of the complaints which indicated that no dust was leaving the coal processing area. No complaints have been received since April 2013.

# **Environmental Incident(s)**

With the exception of the noise monitoring non-compliance mentioned above, no environmental incidents occurred during the April to June 2013 period.



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#### **Community Consultative Committee Meeting Minutes**

Meeting No: 23

Date: Wednesday 11th December 2013

**Time:** 4:00pm

Location: Railway Hotel, Baan Baa

Present:

Terry Miller (TM) - Chairman

James Stieger (JS) Mark Foster (MF)

Steve Bow (SB) (Narrabri Mine General Manager)

Owen Salisbury (OS) (Narrabri Mine Technical Services Manager)
Danny Young (DY) (Whitehaven Group Environmental Officer)

Steve Farrar (SF) (Narrabri Mine Environmental Officer)

# 1.0 Apologies

Cathy Redding, Sally Hunter and Peter Webb.

#### 2.0 Previous Minutes

Moved: Mark Foster Seconded: James Stieger

#### 2.1 Business Arising from Previous Minutes

JS asked what the capacity of water would be with ponding in LW102. SF replied that we have the info required to calculate that, report next meeting.

TM advised that he and JS attended a meeting at NSC with the EPA in relation to a regional dust monitoring network proposed by the EPA. EPA provided a run down on network but was still waiting on locations. Planned for February 2014 start. DY added that he had spoken to EPA and they had advised him of a June 2014 start but the EPA has not approached mines in relation to funding. TM asked if the EPA has the ability to shutdown mines based on weather conditions.

#### 3.0 General Business

#### 3.1 Operations Progress Report

The operations update was provided as follows:

#### Mine Progress Report (to 30 November 2013)

Coal produced (t):	November 2013	715,868	
	FY-to-date	2,717,163	
	Life-to-date	7,005,063	

Coal Railed (t): November 2013 509,879 FY-to-date 2,261,200

Life-to-date 2,261,266



Average workforce numbers (Nov-13):

NCO Waged – 143

Salary – 86 Total – 229

Contractors Total – 102

Safety Update (FY-to-date):

Lost Time Injury (LTI) 1
Total Recordable Injuries: 12
Planned Task Observations: 1,281
Take 5 Assessments: 32,627
Work Hours (Nov-13): 69,910
Days LTI Free: 130

SB said that mine now running at capacity. TM said the ROM stockpile is getting high. JS stated that originally planned for 300kt but currently 400kt. SF said the 400kt is what is currently stored and both stockpiles not just the ROM.

MF asked how many trains per day. SB replied 3/day and sometimes 4/day. SB also stated that as of the middle of 2014 we will have larger capacity trains so while we will have the same number of trains they can carry more coal per load.

SB said as we have two weeks to go in LW102 the design is to have large stockpiles at this time and then diminish while longwall move occurs. JS asked how we can handle the coal when we start in the longer blocks as the first two are shorter. SB said next block ~2.4km long. JS asked what the contingency was as we cannot truck coal and the mine was pushed as world's best practice but stockpiles need to be bigger. SB replied that the mine requires bigger stockpiles but this would require approval.

SB stated that the mine has no FIFO people as all employees now local. Only 12 people short of full manning and the CHPP will become Narrabri Mine operated in January 2014.

SB stated that the mine is now settling down into long-term performance and we need to maintain this activity to remain viable.

JS asked about Longwall Top Coal Caving (LTCC). SB replied that the studies are still being undertaken but need to present to the WHC board and have an answer middle of 2014. MK asked what subsidence would we see if LTCC. SB replied it would likely be up to an additional metre on top of the ~2.4m we currently have.

#### 3.2 Environmental Overview

As per provided report. SF discussed the monitoring report with the CCC members.

TM asked about noise sources in relation to exceedances in September 2013. SF advised dozers, particularly dozer track noise. SF advised that limiting reversing speeds would result in a requirement for additional dozers. TM asked if there could be something used to quieten the tracks such as using plastic components. SB advised that there are dampeners available but there benefit is debateable.

TM said he attended site and noticed the bypass crusher was very dusty. SF advised that sprays are located on the transfer points. SB advised sprays located at discharge point. JS said the mine is dusty on weekends where they should shut down. SB advised that we have shut down due to weather conditions. DY also advised that the EPA has added PRP requirements on the mine's EPL in relation to dust which requires shroud on high gantry, dozer dust pickup control, and coal stream concentrating off high tripper to minimise lift off. SB said we also have sprays on dozer transfer road. JS stated that Tarrawonga has a camera for real-time monitoring and if Narrabri had this it would have been shut down. SB said maybe so, but mining output increasing and the mine will tackle the big sources of dust first being the high tripper and air off the radiator fans of the dozers.

SF asked the committee if they wanted subsidence results reported in the future. The committee agreed.

JS asked, in response to a community enquiry, if the complaints hotline message bank could be extended to allow more time to leave messages. DY said we could.

#### 4.0 New Business

TM said that litter along the roadside near the mine site exit/entry is getting bad. SB said a lot of people use the highway. JS said has noticed a lot more in his paddock and raised the possibility of placing a dumpster nearby for rubbish. SB said he would look into it. TM said is definitely noticeable between Pine Creek and the mine. JS said main offenders are smokers leaving the site. SB said he is aware of smokers near the site.

TM asked if the mine could substitute the members not showing up with new ones. DY said we could readvertise and then it is up to Planning to appoint positions. JS requested that the mine contact other CCC members who don't show up to see if they are still interested, DY to follow up for next meeting.

#### 5.0 Complaints and Complaints Hotline

As per provided report.

# 6.0 Next Meeting

Wednesday 12<sup>th</sup> March 2014 at 4:00pm, Narrabri Mine Site Office.

#### 7.0 Closure of Meeting

Meeting closed at 4:46pm.

# Narrabri Mine Community Consultative Committee Meeting #23

# **Environmental Monitoring Report July – November 2013**

# **Noise Monitoring**

Attended noise monitoring was undertaken on Monday 22<sup>nd</sup> and Tuesday 23<sup>rd</sup> July 2013 (Tables 1-4); Tuesday 27<sup>th</sup> August 2013 (Tables 5-8); and Sunday 22<sup>nd</sup> to Tuesday 24<sup>th</sup> September 2013 (Tables 9-20) to verify if noise levels were within compliance limits. The results from this monitoring are detailed in the tables below.

Table 1: NCM Noise Monitoring Results – 22/23 July 2013 (Day)							
Location	Time	dB(A),	Wind speed	Identified Noise Sources			
		L <sub>eq(15min)</sub>	(m/s)/ direction°				
Merriman	4:58 pm	46	2.0/291	Traffic (45), birds & insects (38), NCM inaudible			
Bow Hills	4:34 pm	44	2.8/281	Traffic (43), birds & insects (37), NCM (30)			
Oakleigh	4:09 pm	38	3.6/279	Traffic (34), birds & insects (33), NCM (31)			
Naroo (23/7)	7:50 am	48	1.8/315	Traffic (48), birds & insects (39), NCM inaudible			
Newhaven	5:41 pm	37	1.6/246	Plane (37), birds (30), NCM (25)*			
Greylands	5:18 pm	38	2.0/284	Birds & insects (37), <b>NCM (32)</b> *			

\*noise from gas drainage wells

Table 2: NCM Noise Monitoring Results – 22 July 2013 (Evening)							
Location	Time	dB(A),	Wind speed (m/s)/	Identified Noise Sources			
		Leq(15min)	direction°				
Merriman	8:13 pm	41	2.4/233	Traffic (40), NCM (31), insects (26)			
Bow Hills	9:03 pm	38	2.8/230	Traffic (37), NCM (31)			
Oakleigh	9:29 pm	28	2.5/230	Traffic (27), NCM (20)			
Naroo	8:42 pm	45	2.3/235	Traffic (45), NCM (32)			
Newhaven	7:26 pm	31	2.0/250	NCM (31)*			
Greylands	7:49 pm	41	2.1/242	Traffic (41), <b>NCM (30)</b>			

\*noise from gas drainage wells

Table 3: NCM Noise Monitoring Results – 22 July 2013 (Night)								
Location	Time	dB(A),	Wind speed	Temp Grad	Identified Noise Sources			
		Leq(15min)	(m/s)/ direction°	(°C/100m)				
Merriman	10:50 pm	35	1.2/317	+3.7	Traffic (33), <b>NCM (31)</b>			
Bow Hills	11:19 pm	43	1.7/302	+4.3	Traffic (43), <b>NCM (33)</b>			
Oakleigh	12:15 am	35	1.1/299	+6.1	Traffic (35), <b>NCM (20)</b>			
Naroo	11:40 pm	42	1.3/280	+4.4	Traffic (42), <b>NCM (31)</b>			
Newhaven	10:05 pm	34	1.6/256	+7.0	NCM (33)*, traffic (27)			
Greylands	10:27 pm	38	1.5/320	+3.4	Traffic (37), <b>NCM (31)</b>			

\*noise from gas drainage wells

Table 4: L1 (1 min) – 22 July 2013 (Night)						
Location	Time	dB(A),				
		L1 (1 min)				
Merriman	10:50 pm	37				
Bow Hills	11:19 pm	37				
Oakleigh	12:15 am	25				
Naroo	11:40 pm	40				
Newhaven	10:05 pm	35				
Greylands	10:27 pm	34				

Table 5: NCM Noise Monitoring Results – 27 August 2013 (Day)								
Location	Time	dB(A), L <sub>eg(15min)</sub>	Wind speed (m/s)/ direction°	Identified Noise Sources				
Merriman	5:22 pm	47	2.4 / 200	Birds (44), Traffic (43), NCM inaudible				
Bow Hills	4:55 pm	44	2.6 / 204	Traffic (44), NCM (<32)				
Oakleigh	5:24 pm	40	2.4 / 200	Birds (39), wind (30), NCM (<25)				
Naroo	4:29 pm	47	3.5 / 226	Traffic (44), train (43), NCM (34)				
Newhaven	4:38 pm	37	3.5 / 226	Birds (34), NCM (34)*				
Greylands	5:00 pm	38	2.6 / 204	Birds (35), construction (34), NCM inaudible				

\*noise from gas drainage wells

	Table 6: NCM Noise Monitoring Results – 27 August 2013 (Evening)								
			Wind speed						
Location	Time	dB(A),	(m/s)/	Identified Noise Sources					
		Leq(15min)	direction°						
Merriman	8:21 pm	44	2.4 / 169	Traffic (43), insects (35), NCM inaudible					
Bow Hills	8:45 pm	41	1.2 / 104	Traffic (40), NCM (32)					
Oakleigh	9:10 pm	32	2.1 / 63	Traffic (32), NCM inaudible					
Naroo	9:34 pm	48	2.5 / 61	Traffic (46), dog (40), <b>NCM (&lt;30)</b>					
Newhaven	7:36 pm	36	3.3 / 193	NCM (36)*					
Greylands	7:57 pm	38	3.4 / 194	Traffic (35), <b>NCM (34)</b> *					

\*noise from gas drainage wells

			Wind speed	Temp Grad	27 August 2013 (Night)
Location	Time	dB(A),	(m/s)/ direction°	(°C/100m)	Identified Noise Sources
Merriman	10:44 pm	L <sub>eq(15min)</sub> 43	1.1 / 107	+5.4	Train (41), traffic (36), <b>NCM (31)</b>
Bow Hills	11:09 pm	37	1.1 / 139	+7.7	Traffic (36), insects (<30), NCM inaudible
Oakleigh	12:00 am	33	1.1 / 153	+7.7	Traffic (33), NCM inaudible
Naroo	11:36 pm	41	1.1 / 148	+8.1	Traffic (41), NCM inaudible
Newhaven	10:01 pm	33	1.9 / 71	+6.5	NCM (32)*, birds (<25)
Greylands	10:22 pm	36	1.3 / 101	+7.4	Traffic (33), NCM (32)*

\*noise from gas drainage wells

Table 8: L1 (1 min) – 27 August 2013 (Night)								
Location	Time	dB(A),L <sub>1(1 min)</sub>						
Merriman	10:44 pm	34						
Bow Hills	11:09 pm	N/A						
Oakleigh	12:00 am	N/A						
Naroo	11:36 pm	N/A						
Newhaven	10:01 pm	33						
Greylands	10:22 pm	34						

	Table 9: NCM Operational Noise Monitoring Results – 22 September 2013 (day)									
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources					
N1 Bow Hills	2:39 pm	37	1.3/73	n/a	Traffic (36), birds & insects (28), NCM inaudible					
N3 Naroo	3:51 pm	44	1.9/330	n/a	Birds (41), traffic (41), NCM (25)					
N5 Oakleigh	4:25 pm	35	1.9/0	n/a	Birds & insects (33), traffic (32), NCM inaudible					
N6 Newhaven	1:45 pm	33	1.3/134	n/a	Insects (31), NCM (29)*					
N7 Merriman	1:03 pm	37	1.3/189	n/a	Birds & insects (34), traffic (34), NCM inaudible					
N4 Greylands	3:21 pm	52	1.0/126	n/a	Birds (52), traffic (40), NCM inaudible					

<sup>\*</sup>Noise from gas drainage wells

	Table 10: NCM Operational Noise Monitoring Results – 22 September 2013 (evening)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m) <sup>1</sup>	Identified Noise Sources				
N1 Bow Hills	8:46 pm	40	0.2/121	n/a	Frogs & insects (36), NCM (36), traffic (32)				
N3 Naroo	9:29 pm	55	0.9/233	n/a	Train (54), birds (45), traffic (38) <b>NCM (&lt;30)</b>				
N5 Oakleigh	9:25 pm	33	0.9/233	n/a	NCM (31), traffic (29)				
N6 Newhaven	8:05 pm	33	0.1/269	n/a	Insects (31), NCM (29)*				
N7 Merriman	8:06 pm	33	0.1/269	n/a	Frogs & insects (33), traffic (23), NCM inaudible				
N4 Greylands	8:40 pm	37	0.3/72	n/a	Traffic (35), NCM (31)*, insects (27)				

<sup>1.</sup> see text

<sup>\*</sup>Noise from gas drainage wells

Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources
N1 Bow Hills	11:16 pm	41	0.9/344	n/a	NCM (38), birds & insects (36), traffic (34)
N3 Naroo	12:05 am	44	0.3/353	n/a	NCM (41), traffic (40), insects (35)
N5 Oakleigh	12:23 am	36	Calm	n/a	NCM (33), traffic (33), insects (20)
N6 Newhaven	10:13 pm	37	1.5/281	n/a	NCM (36)*, insects (31)
N7 Merriman	10:10 pm	37	1.5/281	n/a	NCM (34), traffic (33), insects (27)
N4 Greylands	11:39 pm	37	1.5/281	n/a	Traffic (36), NCM (31)*

<sup>\*</sup>Noise from gas drainage wells

	Table 12: NCM Operational Noise Monitoring Results – 23 September 2013 (day)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources				
N1 Bow Hills	2:36 pm	43	4.4/292	n/a	Traffic (40), birds & insects (38), wind (35), NCM inaudible				
N3 Naroo	3:15 pm	47	4.2/315	n/a	Wind (45), traffic (40), NCM (32)				
N5 Oakleigh	4:18 pm	37	3.1/311	n/a	Traffic (35), birds (32), NCM barely audible				
N6 Newhaven	n/a	n/a	n/a	n/a	n/a				
N7 Merriman	1:00 pm	42	4.2/315	n/a	Wind (40), traffic (36), birds & insects (33), NCM inaudible				

Table 13: NCM Operational Noise Monitoring Results – 23 September 2013 (evening)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources			
N1 Bow Hills	6:00 pm	42	1.9/321	n/a	Insects (40), traffic (38), NCM inaudible			
N3 Naroo	6:00 pm	45	1.9/321	n/a	Traffic (44), birds (40), NCM (31)			
N5 Oakleigh	6:45 pm	42	1.9/314	n/a	Traffic (41), insects (33), NCM (30)			
N6 Newhaven	n/a	n/a	n/a	n/a	n/a			
N7 Merriman	6:39 pm	45	1.9/314	n/a	Insects (43), traffic (41), NCM inaudible			

Table 14: NCM Operational Noise Monitoring Results – 23/24 September 2013 (night)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/	Temp Grad (°C/100m)	Identified Noise Sources			
			direction					
N1 Bow Hills	11:08 pm	41	3.2/308	n/a	Traffic (40), <b>NCM (30)</b> , insects (25)			
N3 Naroo	11:48 am	39	3.5/311	n/a	Traffic (36), NCM (35), birds (28)			
N5 Oakleigh	12:20 am	35	3.5/314	n/a	Insects (31), traffic (30), NCM (30)			
N6 Newhaven	n/a	n/a	n/a	n/a	n/a			
N7 Merriman	10:42 pm	37	2.9/308	n/a	Traffic (34), insects (33), NCM inaudible			

	Table 15: NCM Operational Noise Monitoring Results – 24 September 2013 (day)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/	Temp Grad (°C/100m)	Identified Noise Sources				
N1 Day Hills	10.10 nm	Ε0	direction	n la	Mind (FO) traffic (20) incosts (20) NICM incodible				
N1 Bow Hills	12:10 pm	50	6.1/278	n/a	Wind (50), traffic (39), insects (30), NCM inaudible				
N3 Naroo	12:48 pm	48	6.0/274	n/a	Wind (46), traffic (41), <b>NCM (35)</b>				
N5 Oakleigh	10:26 am	46	7.6/295	n/a	Wind (45), birds & insects (35), traffic (33), NCM				
					inaudible				
N6 Newhaven	n/a	n/a	n/a	n/a	n/a				
N7 Merriman	11:12 am	48	6.6/292	n/a	Wind (43), traffic (42), insects (40), NCM inaudible				

Table 16: NCM Operational Noise Monitoring Results – 24 September 2013 (evening)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources			
N1 Bow Hills	8:56 pm	42	3.1/191	n/a	Traffic (40),insects (35), NCM (34)			
N3 Naroo	9:11 pm	43	3.3/165	n/a	Traffic (43), NCM (24), insects (20)			
N5 Oakleigh	8:09 pm	46	3.5/189	n/a	Insects (45), traffic (41), NCM inaudible			
N6 Newhaven	n/a	n/a	n/a	n/a	n/a			
N7 Merriman	8:33 pm	39	3.0/170	n/a	Traffic (37), insects & frogs (31), NCM (31)			

Table 17: NCM Operational Noise Monitoring Results – 24 September 2013 (night)								
Location	Time	Total dB(A), Leq (15 min)	Wind speed/ direction	Temp Grad (°C/100m)	Identified Noise Sources			
N1 Bow Hills	11:16 pm	34	1.7/150	n/a	Traffic (31), cattle (30), frogs (27), NCM inaudible			
N3 Naroo	11:34 pm	26	1.7/155	n/a	Traffic (26), NCM inaudible			
N5 Oakleigh	10:01 am	39	2.4/116	n/a	Traffic (37), insects (35), <b>NCM (25)</b>			
N6 Newhaven	n/a	n/a	n/a	n/a	n/a			
N7 Merriman	10:26 pm	37	2.0/114	n/a	Traffic (34), NCM (34), insects (27)			

Table 18: NCM Sleep Disturbance Monitoring Results – 22/23 September 2013 (night)						
Location	Time	dB(A),L1 (1 min) Wind speed / direction		Temp Grad(°C/100m)		
N1 Bow Hills	11:16 pm	46	0.9/344	n/a		
N3 Naroo	12:05 am	50	0.6/353	n/a		
N5 Oakleigh	12:23 am	42	Calm	n/a		
N6 Newhaven	10:13 pm	39*	1.5/281	n/a		
N7 Merriman	10:10 pm	38	1.5/281	n/a		
N4 Greylands	11:39 pm	39	1.5/281	n/a		

<sup>\*</sup>Noise from gas drainage wells

Table 19: NCM Sleep Disturbance Monitoring Results – 23/24 September 2013 (night)						
Location	Time	dB(A),L1 (1 min)	I (1 min) Wind speed / direction Temp Grad			
N1 Bow Hills	11:08 pm	37	3.2/308	n/a		
N3 Naroo	11:48 am	39	3.5/311	n/a		
N5 Oakleigh	12:20 am	37	3.5/314	n/a		
N6 Newhaven	n/a	n/a	n/a	n/a		
N7 Merriman	10:42 pm	n/a	2.9/308	n/a		

Table 20: NCM Sleep Disturbance Monitoring Results – 24 September 2013 (night)						
Location	Time	dB(A),L1 (1 min)	Wind speed / direction	Temp Grad(°C/100m)		
N1 Bow Hills	11:16 pm	n/a	1.7/150	n/a		
N3 Naroo	11:34 pm	n/a	1.7/155	n/a		
N5 Oakleigh	10:01 am	30	2.4/116	n/a		
N6 Newhaven	n/a	n/a	n/a	n/a		
N7 Merriman	10:26 pm	40	2.0/114	n/a		

The results in Tables 1 to 20 show that, under the operational and atmospheric conditions at the time, noise emission from the Narrabri Mine exceeded the criterion of 35 dB(A) at the Naroo and Bow Hills monitoring locations during the evening/night monitoring periods on 22/23 September 2013 as outlined below:

		Total dB(A),	Wind speed/	Temp Grad	
Location	Date, time	Leq (15 min)	direction	(oC/100m)	Identified Noise Sources
N1 Bow Hills	22/9/13 - 8:46 pm	40	0.1/121	n/a	Frogs & insects (36), NCM (36), traffic (32)
N1 Bow Hills	22/9/13 - 11:16 pm	41	0.9/344	n/a	NCM (38), birds & insects (36), traffic (34)
N3 Naroo	23/9/13 - 12:05 am	44	0.6/353	n/a	NCM (41), traffic (40), insects (35)

The audible mining noise sources during each of these measurements were related to dozers working on the coal stockpiles (both engine and track noise).

In relation to the measured noise at Bow Hills on the evening of September 22, an exceedance of less than 2dB(A) above a statutory noise limit specified in a consent or licence condition is not considered to be a non-compliance as per the discussion in Section 11.1.3 of the NSW Industrial Noise policy.

The EPL and Project Approval for the mine both detail applicable atmospheric conditions for which compliance with the noise criteria is not applicable. Of particular relevance is that the two measured exceedances occurred at night when there is potential for temperature inversions. Due to the failure of a temperature logger it was not possible to get valid data for determining the presence, or strength, of any inversion on the night of the exceedances.

Each of the exceedances occurred when atmospheric conditions were relatively calm and cool with very light breeze and no cloud cover. Under such conditions it is Spectrum Acoustics experience at this locality that moderate to strong temperature inversions are a common feature.

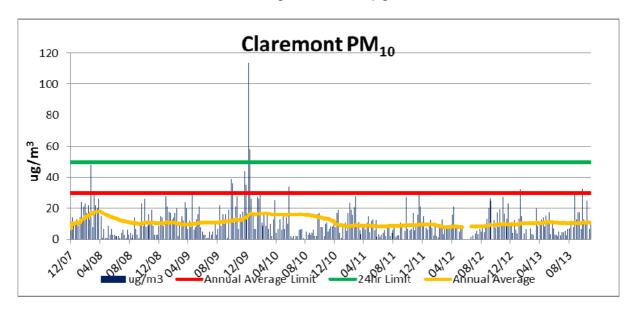
#### **Deposited Dust Monitoring**

Month	ND1 Turrabaa	ND2 Claremont	ND3 Bow Hills	ND4a New Matoppo	ND5 Claremont	ND6 Willarah	ND7 Claremont	ND8 Claremont	ND11 Oakleigh
Dec-12	1.2	2.3	0.3	1.2	1.8	0.6	2.9	0.7	0.7
Jan-13	1.5	2.3	1.2	0.8	2.8	0.9	0.6	2.3	0.8
Feb-13	1.5	1.6	0.9	0.6	2.8	0.9	2.7	1.1	3.0
Mar-13	0.9	0.3	0.6	0.2	5.7	0.4	1.2	0.8	0.9
Apr-13	1.0	0.9	1.3	0.8	1.4	0.3	1.1	0.5	0.4
May-13	0.6	3.1	0.6	0.8	1.8	0.5	1.0	0.5	0.7
Jun-13	2.5	1.1	0.8	0.3	4.8	0.2	0.6	1.0	0.2
Jul-13	2.1	0.5	0.6	0.4	5.7	0.1	0.4	0.2	0.2
Aug-13	0.5	0.9	0.5	0.5	2.4	0.2	0.4	0.5	0.2
Sep-13	0.8	0.8	0.5	1.1	0.7	0.2	1.4	0.2	0.3
Oct-13	0.8	1.7	0.3	0.9	2.7	1.0	3.0	0.4	1.4
Nov-13	0.8	0.9	0.6	0.6	2.5	0.8	2.2	0.7	1.1
Annual Average	1.2	1.4	0.7	0.7	2.9	0.5	1.5	0.7	0.8

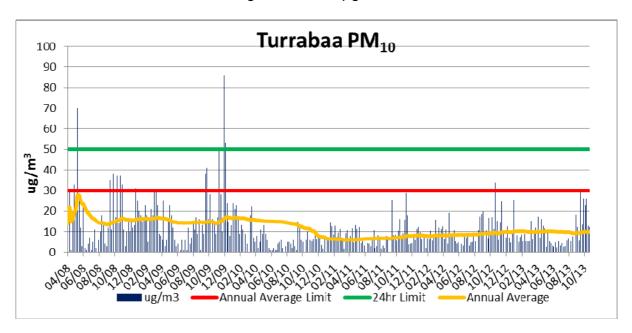
Deposited dust levels have remained at relatively low levels since the last meeting with the exception of ND5 during June and July 2013. This gauge is adjacent to the reject emplacement area and this is a likely source of dust. However, all dust deposition annual averages are within compliance limits.

# High Volume Air Sampling (PM<sub>10</sub>)

PM<sub>10</sub> measurements taken to the end of September 2013 for the "Claremont" High Volume Air Sampler (HVAS) are returning a running annual average of 10.78  $\mu$ g/m³ which is well below the annual average limit of 30  $\mu$ g/m³.



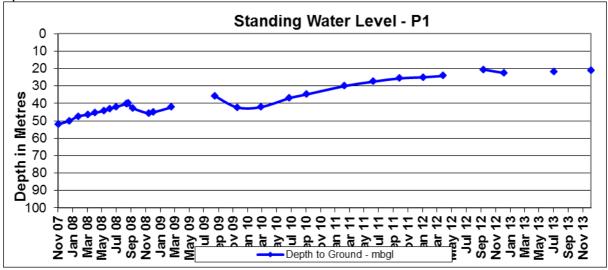
 $PM_{10}$  measurements taken to the end of September 2013 for the "Turrabaa" High Volume Air Sampler are returning a running annual average of 9.97  $\mu g/m^3$  which is also well below the annual average limit of 30  $\mu g/m^3$ .

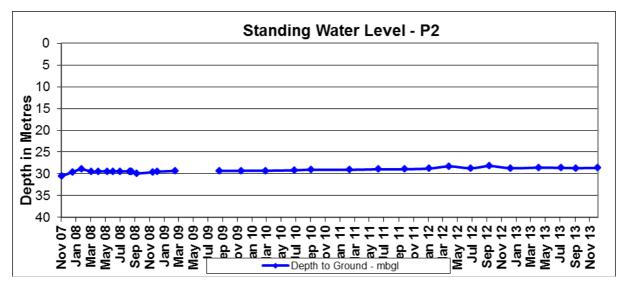


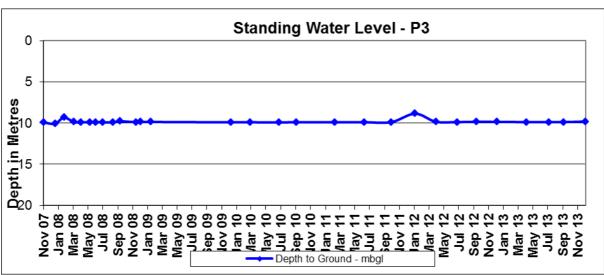
PM<sub>10</sub> levels have remained compliant since the last meeting with annual averages at both sites displaying a stabilising trend.

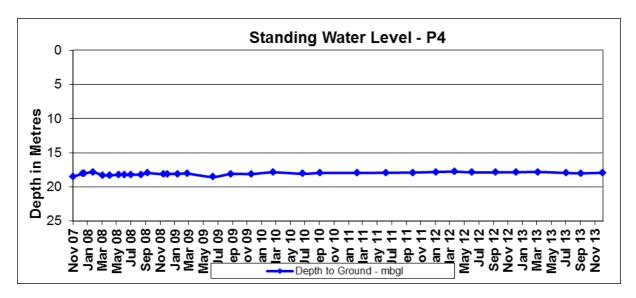
# **Groundwater Monitoring**

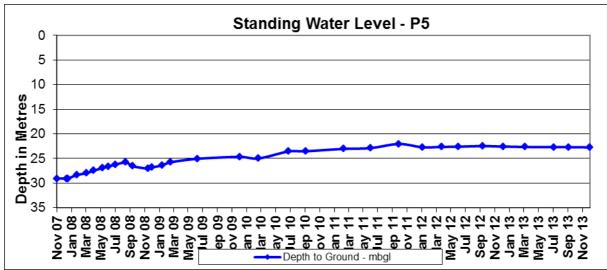
Groundwater monitoring was completed in early December 2013. Nested piezometers have been installed on the "Omeo" and "Kurrajong" properties and two sets are also installed on the mine site to monitor the effects of the Longwall operation. Results of these units is included below.

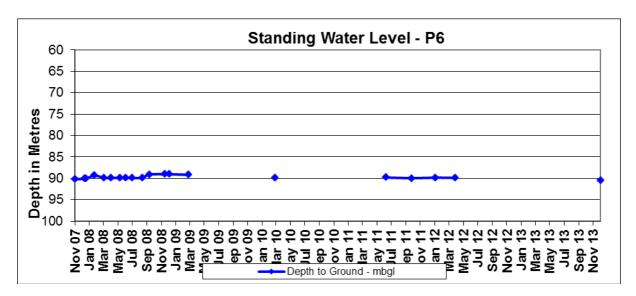


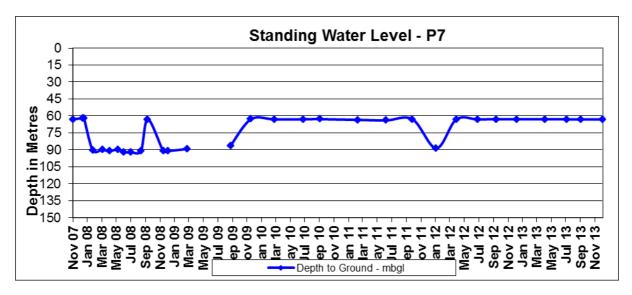


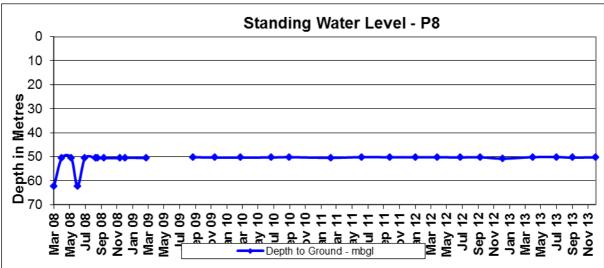


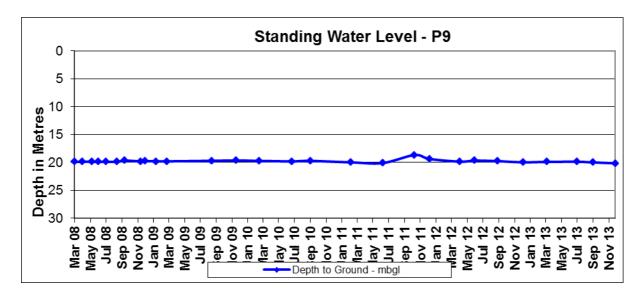


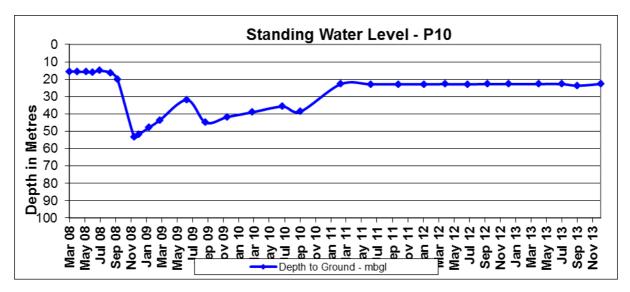


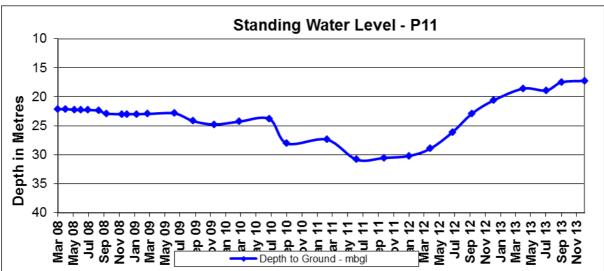


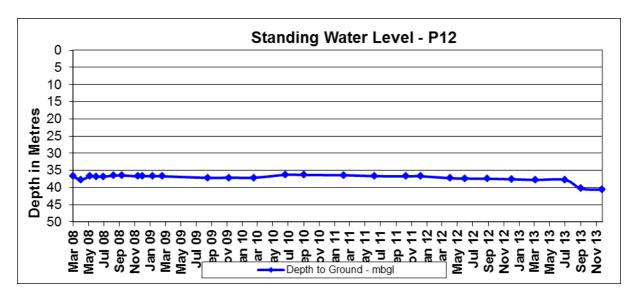


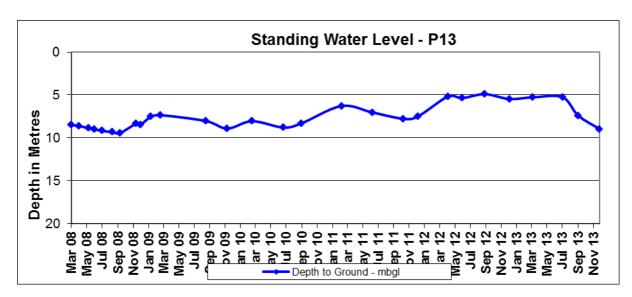


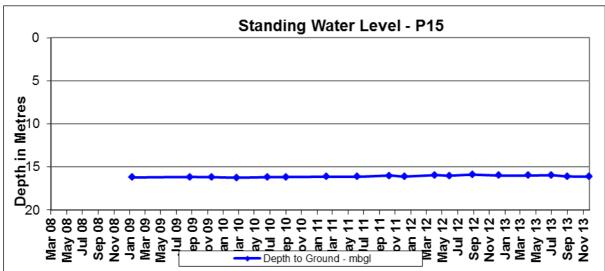


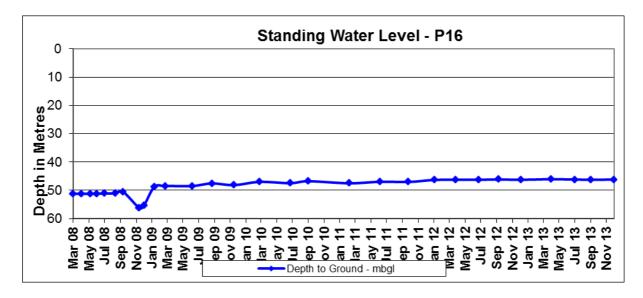


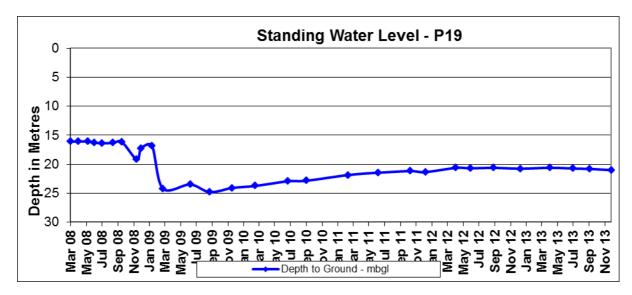


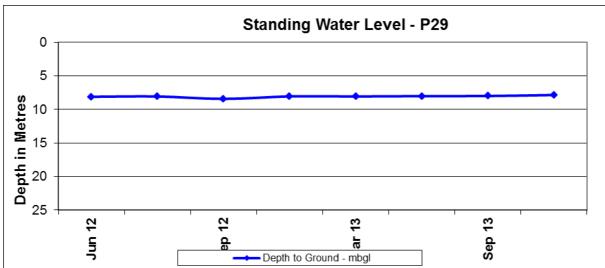


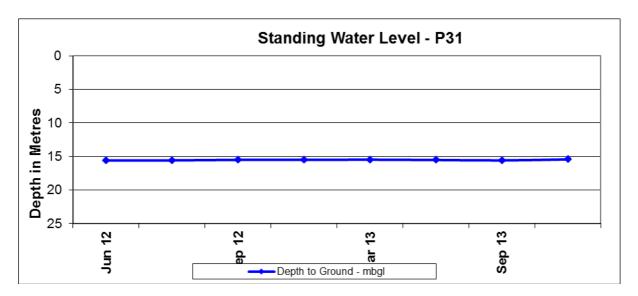


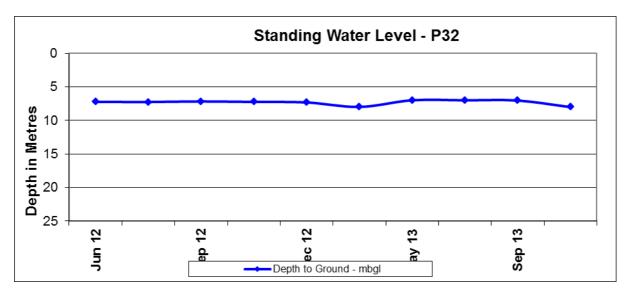


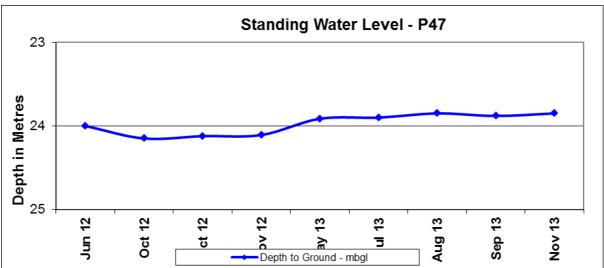


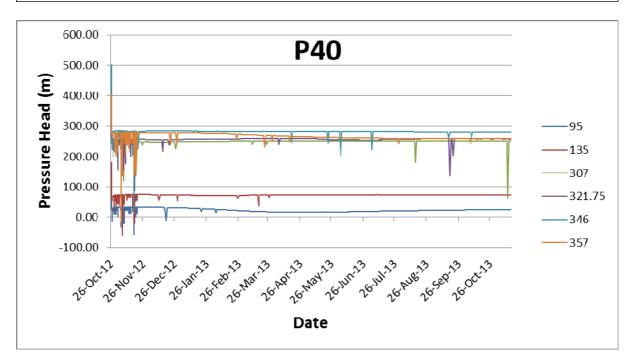


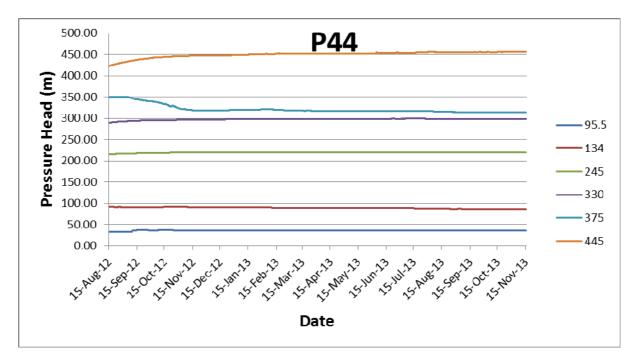


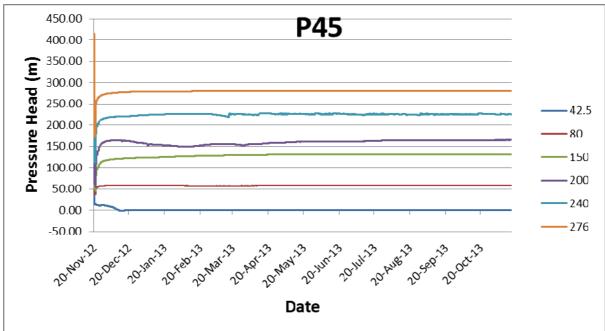


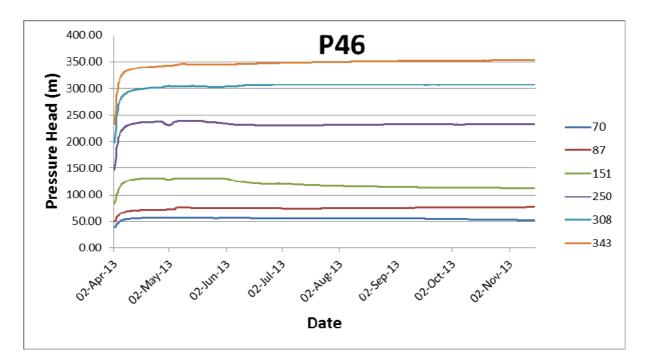












# **Surface Water Monitoring**

No wet weather discharges from licensed discharge points occurred during the July to November 2013 period.

# **Complaints**

Eighteen formal complaints were received during July to November 2013. Twelve of these complaints related to visible dust being generated and leaving the coal processing area. A Trigger Action Response Plan (TARP) has been implemented for the operation which outlines management measures that are implemented to control dust generation during windy conditions, which includes water sprays and positioning of the product tripper. The EPA has also included additional requirements on the site's EPL as part of their Pollution Reduction Program (PRP). Water suppression activated/increased in response to the complaints. Coal processing has ceased during the period as a result of windy conditions. Eight of the complaints related to noise. Narrabri Mine has since validated the noise model and results will be made available during December. Should any additional measures be required the mine will liaise with the relevant landholder(s).

#### **Environmental Incident(s)**

With the exception of the noise monitoring non-compliances mentioned above, no environmental incidents occurred during the July to November 2013 period.