Minutes of Rocglen Coal Mine Community Consultation Committee

Meeting Held:	Wednesday 10 th February 2010
Venue:	The meeting held at Rocglen Coal Mine Training Room

Commencement Time: 3:00pm.

1. Present and Apologies

Present:	Mr John Sturgess (Chairman) Mrs Pam Burns (Community Rep) Mr Rod Barnes (Community Rep) Mr Warren Nicholls (Community Rep) Mr Tony Heinrich (Project Manager) Mr Tony Jones (Community Liaison Officer) Mr Danny Young (Environmental Manager – Whitehaven) Miss Jill Scealy (Environmental Officer – Whitehaven)

Apologies:Clr Colleen Fuller (Gunnedah Shire Rep)Mr Casper Dieben (General Manager – Operations)Mr Brian Cullen (General Manager – Technical Services)

2. **Previous Minutes**

The minutes of the previous meeting were accepted as a true record on the motion of Mrs Pam Burns and Mr Rod Barnes.

3. Business Arising from Previous Minutes

- 3.1. The final tar sealing of Wean Road is expected to be undertaken by Gunnedah Shire Council at the end of March 2010.
- 3.2. Danny Young stated that recent noise monitoring results showed compliance with noise criteria however Rod Barnes indicated that the roar from dump truck engines could still sometimes be heard at night.

4. Mine Progress Report

Tony Heinrich advised that last month 89,000 tonnes of coal was mined and approximately 500,000 BCM of overburden moved. Tony also advised that rehabilitation had commenced on the western perimeter of the southern waste emplacement.

5. Review of Environmental Performance

Danny Young presented the environmental monitoring results which are attached in the associated environmental monitoring report.

Warren Nicholls questioned whether Whitehaven believes the drop in Standing Water Level (SWL) at WB-5 and WB-8 is associated with mining operations. Danny Young explained that the drop in SWL is not believed to be associated with mining as the pit has not produced significant amounts groundwater inflow to date. The process whereby a significant drop in SWL would be investigated, as per the Groundwater Monitoring Program, was also discussed.

6. Complaints/Complaints Hotline

No formal complaints recorded.

7. General Business

- 7.1. The proposed extension to Rocglen was discussed. Whitehaven personnel indicated that the previously mentioned further diversion to Wean Road would not be pursued. The proposed modification would affect the pit boundary and northern waste emplacement but would still be within the original Wean Road diversion. Danny Young tabled a plan showing the existing and proposed limit of disturbance and advised that the modification would allow additional mining of approximately 5 million tonnes of coal (adding 3-4 years to the current mine life). Danny advised that a letter drop to surrounding residences and a community meeting would likely be conducted in the next couple of months.
- 7.2. Rod Barnes expressed concern about the evaporation and significant use of groundwater for dust suppression. Tony Heinrich detailed methods used to reduce water usage (seeding exposed soil, investigating dust suppression applications for permanent haul roads etc) and identified that Rocglen is generally conservative with water use.
- 7.3. The installation of the pipeline under Wean Road was questioned in relation to approval from Council and the lack of traffic control. Tony Jones advised that the road works had been approved through Gunnedah Shire Council and committed to investigating why traffic control personnel were not utilised.
- 7.4. Warren Nicholls raised concern about the amount of rubbish on Wean Road. Tony Heinrich advised that site personnel would be instructed via toolbox talks not to litter.
- 7.5. Warren Nicholls commented that the southern waste emplacement had continued to increase in height. Tony Heinrich indicated that

waste had not been dumped at the current top height for some time and all work has been undertaken on the lower sections of the southern and western perimeter only.

8. Next Meeting

The next meeting of the Rocglen CCC is scheduled for Wednesday 12th May 2010, at the Rocglen training room at 3:00pm.

Meeting closed 3:40pm.

Joturgess Chairman 12/5/22/0

Rocglen Coal Mine Community Consultative Committee Meeting #6

Environmental Monitoring Report October 2009 – December 2009

Noise Monitoring

Attended Noise Monitoring

Attended noise monitoring was undertaken on the 17th and 18th December 2009, as required for operational noise monitoring under the Noise Monitoring Program, with results outlined below:

Noise Monitoring Results – 17 December 2009 (Evening)						
dB(A),Leq Wind speed/						
Location	Time		direction	Identified Noise Sources		
Surrey	9:42 pm	41	1 m/s, NW	Dogs (40). insects (32), RCM (31)		
Costa Vale	9:15 pm	30	1 m/s, NW	Insects (30), RCM inaudible		

Noise Monitoring Results – 17 December 2009 (Night)						
dB(A),Leq Wind speed/						
Location	Time	e direction Identified Noise Sources				
Surrey	10:33 pm	32	<0.5 m/s, NW	RCM (31), insects (26)		
Costa Vale	11:14 pm	28	<0.5 m/s, NW	Insects (28), RCM inaudible		

Noise Monitoring Results – 18 December 2009 (Day)						
dB(A),Leq Wind speed/						
Location Time direction		Identified Noise Sources				
Surrey	7:45 am	44	1 m/s N	Birds (44), RCM (<20)		
Costa Vale	8:10 am	42	2 m/s N	Birds & insects (42), RCM inaudible		

The results indicate that, under the operational and atmospheric conditions at the time, noise emissions from Rocglen Coal Mine did not exceed the criterion of 35 dB(A) at either monitoring location.

Road Noise Monitoring

Approvals for Rocglen require monitoring of cumulative mine-related traffic associated with the Tarrawonga, Canyon and Rocglen mines. Monitoring was conducted at the "Brooklyn" (2 residences) and "Werona" properties in December 2009, with the following observations and results:

 20 truck movements were recorded during the measurement period (9:45am to 10:15am, 8th December 2009) at "Brooklyn" (1 hour noise monitoring event abandoned after 30 minutes due to unfavourable weather conditions). The total measured contribution from mine-related vehicles at Residence 1 at "Brooklyn" (approximately 90m from Blue Vale Road) was **52.0 dB(A)**,Leq (1 hour). This is below the daytime criterion of **60 dB(A)** Leq (1 hour).

- The total measured contribution from mine-related vehicles at Residence 2 (approximately 480m from Blue Vale Road) was 38.8 dB(A), L_{eq (1 hour)}. This is also below the daytime criterion of 60 dB(A) L_{eq (1 hour)}.
- Over the course of the measurement period (9:30am to 10:30am, 18th December 2009) at "Werona" there were 44 coal truck movements. The total measured contribution from mine-related vehicles at "Werona" was 49.5 dB(A),_{Leq (1 hour)}. This is below the daytime criterion of 60 dB(A) _{Leq (1 hour)}.

Unattended Noise Monitoring

Unattended noise monitoring was carried out in December 2009 at both the "Costa Vale" and "Surrey" properties with results provided in the following tables. Unattended monitoring provides noise levels from all sources and does not distinguish mine related noise from other noise factors.

COSta vale						
Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
8-Dec-09	63.6	46.4	42.7	46.0	30.1	17.1
9-Dec-09	53.0	46.2	42.6	29.3	24.2	17.1
10-Dec-09	44.8	42.1	43.4	26.0	26.0	22.0
LAeq	59	45	43			
L90				30	26	17

Costa Vale

Surrey
Juney

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
8-Dec-09	46.3	42.3	41.9	25.3	18.7	17.1
9-Dec-09	47.3	41.3	60.3	27.3	22.8	18.8
10-Dec-09	63.4	33.2	44.5	30.6	26.0	18.5
LAeq	59	40	56			
L90				27	23	19

Blast Monitoring

Blasting Results

Since the first shot there have been 41 blasts. All blasts during this report period have been compliant within the limits of 115dBL and 5mm/s.

To date, the highest overpressure recorded is 119.9 dBL recorded at "Costa Vale" on the 24th August 2009. The highest ground vibration recorded is 1.50 mm/s recorded at "Roseberry" on the 12th December 2008.

Air Quality

Deposited Dust Results

The Deposited Dust results obtained for the site to date are as follows:-

Air Quality (Dust Deposition) Results							
Month	BD2 - Glenroc	BD3 - Belah	BD4 - Surrey	BD5 - Stratford	BD6 - Roseberry	BD7 - Roseglass	BD8 - Yarrawonga
January 2009	3.2	2.4	1.1	1.4	1.6	2.0	1.4
February 2009	0.7	1.1	0.6	3.2	0.6	0.8	1.3
March 2009	1.1	0.8	1.8	1.1	1.7	1.3	2.8
April 2009	1.2	0.8	1.3	1.3	0.7	0.8	0.6
May 2009	1.1	0.4	0.5	0.4	0.6	0.9	0.6
June 2009	0.6	0.5	0.3	0.2	0.4	0.4	0.4
July 2009	0.7	0.3	0.4	0.3	0.8	0.9	0.6
August 2009	2.1	1.5	1.1	0.9	1.4	2.1	1.3
September 2009	11.8	7.6	10.6	15.9	8.4	5.3	10.3
October 2009	3.3	2.3	1.2	2.9	2.8	3.6	2.0
November 2009	1.0	1.5	2.0	2.0	1.2	1.9	2.6
December 2009	2.2	1.6	0.6	1.1	1.0	0.9	0.9
Annual Average	2.4	1.7	1.8	2.6	1.8	1.7	2.1

The deposited dust levels have remained relatively consistent over the last 12 months with the exception of September 2009 (attributable to dust storms). Deposited dust levels have returned to more normal levels since the last meeting.

All monitors remain well within the standard concentration threshold of 4g/m²/month.

PM₁₀ Results

The annual average for PM_{10} readings as determined from data from January 2009 through to December 2009 is as follows:

Glen Roc: 24.1µg/m³ Surrey/Roseberry: 19.50µg/m³

Running average PM_{10} levels remain below the annual average limit of $30\mu g/m^3$.

The 24hr criterion of $50\mu g/m^3$ was breached at the both monitor locations on the 8^{th} and 14^{th} December, as follows:

Date	Glenroc	Roseberry
8 th December 2009	90 µg/m ³	101 µg/m ³
14 th December 2009	113 µg/m ³	68 µg/m ³

Review of other PM_{10} units operated by Whitehaven confirmed a general spike in PM_{10} concentrations on these days and coincided with bushfires in the region producing significant smoke haze. It is also noteworthy that the PM_{10} unit in Tamworth operated by the DECCW experienced an increase in PM_{10} over the period 8th – 14th December with PM_{10} levels ranging from 24 µg/m³ to 325 µg/m³, which indicates general regional conditions were responsible for the higher concentrations recorded at the "Glenroc" "Roseberry" monitors.

The highest PM₁₀ readings at each site are as follows:

Glen Roc: 113 μ g/m³ (14th December 2009) Surrey: 33 μ g/m³ (31st December 2008) Roseberry: 101 μ g/m³ (8th December 2009)

Water Monitoring

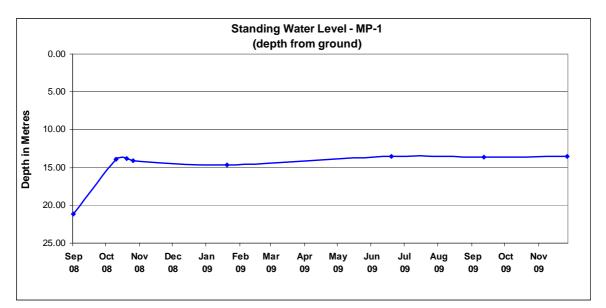
Ground Water

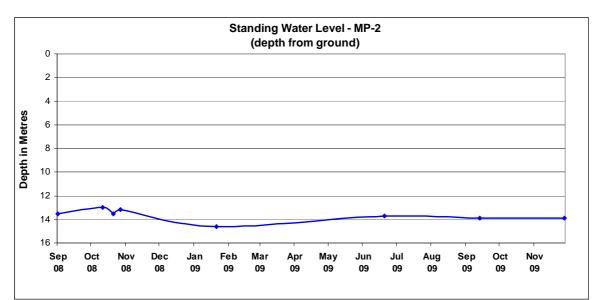
Groundwater monitoring data obtained to date is presented in the following table, including the November 2009 standing water level (SWL) and water quality data.

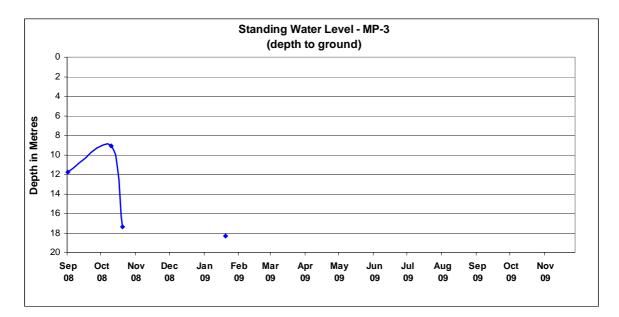
Site	Date	SWL (m)	рН	Elect. Conduct µs/cm
MP1	September 08	21.14		
	13 October 08	13.87		
	23 October 08	13.83		
	29 October 08	14.10	7.6	2360
	23 January 09	14.69		
	22 June 09	13.55	7.8	2250
	15 September 09	13.63		
	30 November 09	13.57	7.85	2250
MP2	September 08	13.53		
	13 October 08	12.98		
	23 October 08	13.56		
	29 October 08	13.20	7.3	4180
	23 January 09	14.60		
	22 June 09	13.70	7	5210
	15 September 09	13.88		
	30 November 09	13.90	6.99	4560
MP3	September 08	11.81		
	13 October 08	9.06		
	23 October 08	17.36		
	29 October 08	N/S Bore Dry		
	23 January 09	18.3 (mud)		
	22 June 09	N/S Bore Dry		
	15 September 09	Dry		
	30 November 09	Dry		

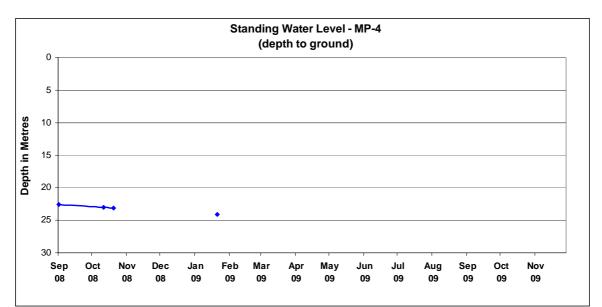
MP4	September 08	22.62		
IVIE 4	13 October 08	23.02		
	22 October 08	23.02		
	22 October 08	N/S Bore Dry		
	23 January 09	24.16 (mud)		
	22 June 09	N/S Bore Dry		
	15 September 09	Dry		
	30 November 09	Dry		
		Diy		
MP5	September 08	53.13		
	13 October 08	52.9		
	23 October 08	52.96		
	29 October 08	N/S Bore Dry		
	23 January 09	54.44 (mud)		
	22 June 09	N/S Bore Dry		
	15 September 09	Dry		
	30 November 09	54.4	Insufficient wat	er to sample
				•
WB1	13 October 08	8.95		
	28 October 08	8.85	7.9	1996
	NO ACCESS			
WB2	Sontombor 00	16.87		
WDZ	September 08 13 October 08	16.49		
			7.7	2420
	28 October 08	16.60	1.1	3430
	23 January 09	17.00	7.2	2400
	22 June 09	16.65	1.2	3160
	15 September 09	16.45	7.54	2010
	6 January 09	16.45	7.51	2010
WB3	September 08	8.82		
	13 October 08	8.87		
	29 October 08	8.95	7.2	4480
	23 January 09	23.72		
	10 February 09	9.0		
	22 June 09	8.99	7.5	4380
	15 September 09	8.76		
	30 November 09	8.8	7.74	3890
WB4	Casing Sealed	No Access		
WB5	September 09	4 00		
WDD	September 08 13 October 08	4.23 12.92		
	28 October 08	12.85	7.2	8400
	23 January 09	12.05	1.2	0400
	23 June 09	No Access	6.6	7930
	15 September 09	No Access	0.0	1300
	30 November 09	22.93	7.06	4880
				1000
WB6	September 08	23.18		
	13 October 08	23.05		
	29 October 08	No Access		
	23 January 09	23.81		
	22 June 09	23.74	Unable to sample	
	15 September 09	23.83		
	30 November 09	24.02	No sample – bo	ore equipped
14/07	Contamb = 00	AA 75	<u> </u>	
WB7	September 08 13 October 08	41.75		
		19.11		

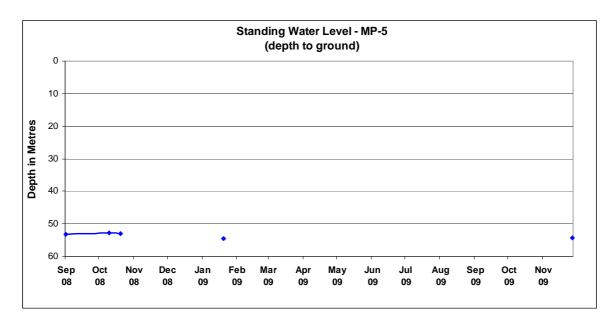
	00 October 00	10.00	7.0	0700
	28 October 08	18.90	7.2	2730
	23 January 09	21.35		
	22 June 09		7.4	2690
	15 September 09	Bore equipped		
	30 November 09	Unable to dip	7.3	2260
WB8	September 08	No Access		
	13 October 08	No Access		
	29 October 08	No Access		
	23 January 09	46.4		
	22 June 09	32.75	8.2	2240
		43.38	0.2	2240
	15 September 09			
	30 November 09	Dry		
WB9	September 08	23.88		
	13 October 08	24.09		
	28 October 08	24.50	7.5	931
	23 January 09	24.27	1.0	501
	23 June 09	23.99	7.9	1080
		23.99	7.9	1000
	15 September 09		7 4 4	4000
	30 November 09	24.05	7.14	1020
WB10	July 08	13.75		
	September 08	13.80		
	13 October 08	13.77		
	28 October 08	13.9	7.4	2235
	27 January 09	14.23	7.4	2233
	27 January 09 22 June 09	14.23	7	2220
			1	2220
	11 September 09	14.65	0.00	4000
	30 November 09	14.62	6.89	1690
WB11	July 08	18.11		
	September 08	18.61		
	13 October 08	18.13		
	28 October 08	18.4	7.5	1086
	27 January 09	18.73	110	1000
	22 June 09	18.1	8	880
	11 September 09	18.63	0	000
	30 November 09	18.6	6.65	929
WB12	July 08	12.73		
	September 08	12.80		
	13 October 08	12.83		
	28 October 08	12.95	8.1	2152
	27 January 09	13.16		
	22 June 09	12.99	8	2070
	11 September 09	13.05		
	30 November 09	12.99	8.34	1640
Production	September 08	55.24		
Bore	13 October 08	50.18		
	28 October 08	49.90	7.3	4030
	27 January 09	49.90		
	22 June 09	>50	7.1	3580
	27 August 09		7.3	3330
	30 November 09		7.2	3160

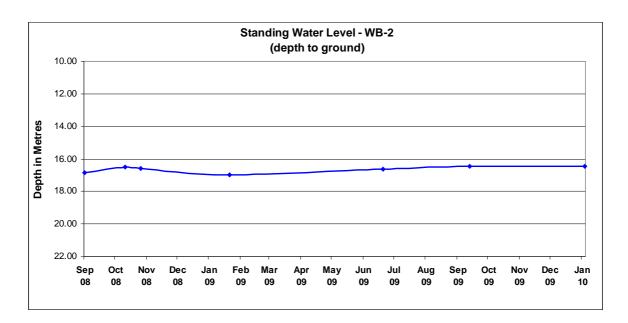


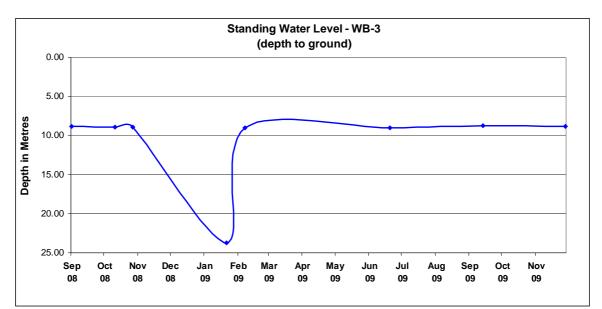


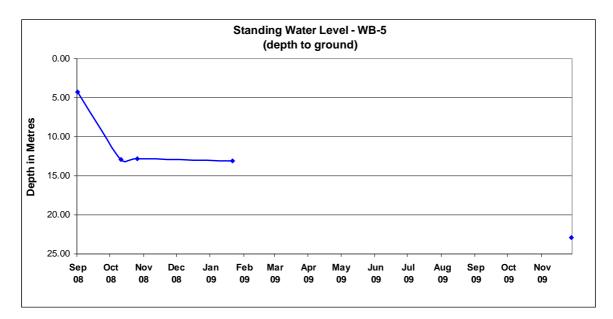


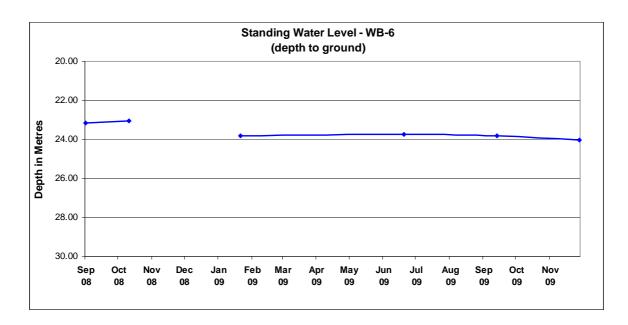


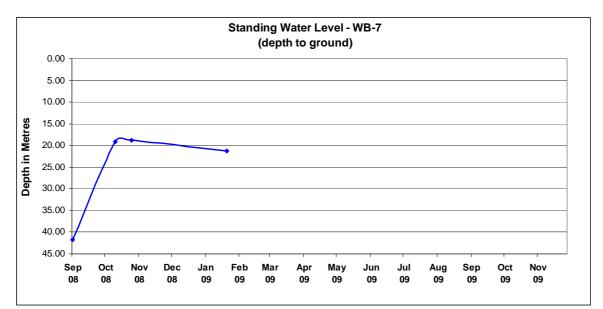


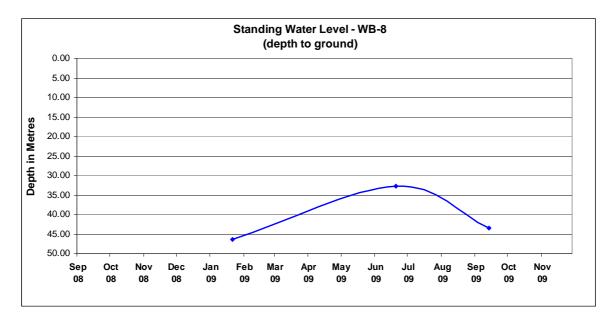


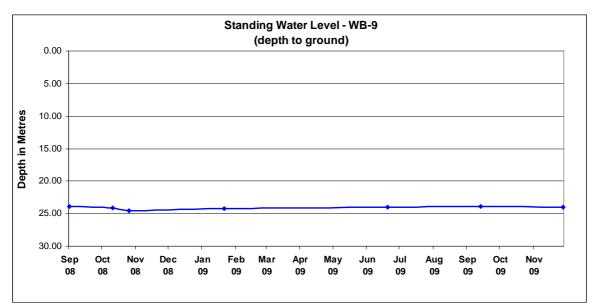


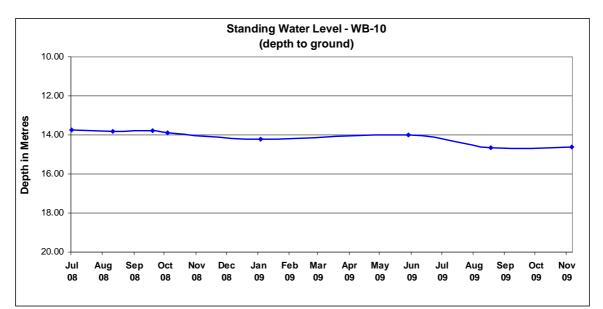


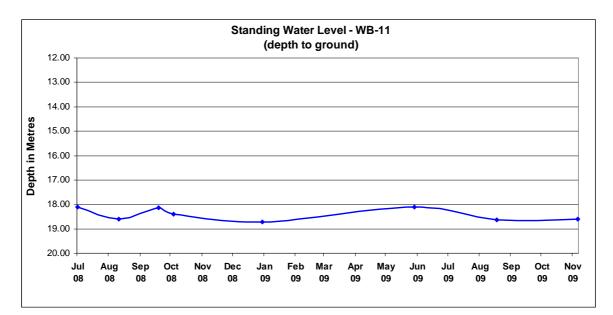


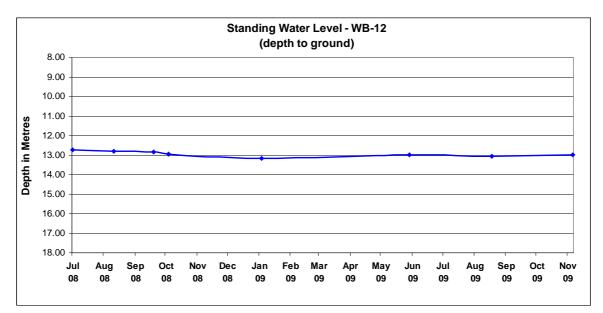












Standing water levels have remained relatively consistent since the last CCC meeting, with the exception of WB-5 and WB-8. It is believed that the drop in SWL at these two locations is related to the bores being equipped for farming purposes rather than groundwater drawdown associated with mining operations. The next round of monitoring in February will continue to observe any ongoing trends and any recharge associated with December and January rains.

Surface Water

There were two discharges from site over December 2009 and January 2010 after significant rainfall. Both of these discharges followed the receipt of more than 38.4 mm over the preceding 5 days and are therefore outside the sediment storage design capacities specified in the EPL. As a consequence, the concentration criteria in the EPL did not apply.

Surface water sampling was undertaken at selected sites in December 2009 to obtain background water quality data. The results indicated that water quality is of reasonable quality. The next round of surface water monitoring will be conducted in February 2010.

Complaints

No complains have been received since the previous CCC meeting.

Rehabilitation

Rehabilitation has started on the western perimeter of the southern waste emplacement with an area reshaped to grade, and subsoil and topsoil replaced. The Soil Conservation Service will shortly peg out contour bank locations and shape up the banks prior to seeding to a cover crop.

Minutes of Rocglen Coal Mine Community Consultative Committee

- Meeting Held: Wednesday 12th May 2010
- Venue: The meeting held at Rocglen Coal Mine Training Room

Commencement Time: 3:00pm

1. **Present and Apologies**

Present:Mr John Sturgess (Chairman)
Clr Colleen Fuller (Gunnedah Shire Rep)
Mrs Pam Burns (Community Rep)
Mr Rod Barnes (Community Rep)
Mr Warren Nicholls (Community Rep)
Mr Tony Heinrich (Project Manager)
Mr Tony Jones (Community Liaison Officer)
Mr Tim Muldoon (Community Liaison Officer)
Mr Danny Young (Environmental Manager – Whitehaven)
Miss Jill Scealy (Environmental Officer – Whitehaven)
Mr John Molloy (Visitor – Toll Resources)

Apologies:

Mr Casper Dieben (General Manager – Operations) Mr Brian Cullen (General Manager – Technical Services)

2. **Previous Minutes**

The minutes of the previous meeting were accepted as a true record on the motion of Mrs Pam Burns and Mr Warren Nicholls.

3. Business Arising from Previous Minutes

- 3.1. The final tar sealing of Wean Road has been completed. Warren Nicholls commended Whitehaven for the upgrade of Wean Road.
- 3.2. Danny Young provided an update on the proposed Rocglen Extension. Newsletters have been distributed to surrounding landholders. The draft Environmental Assessment (EA) is expected to be completed in late May/early June and will be submitted to the Department of Planning (DoP) for adequacy. Following DoP acceptance, the EA will go to public exhibition.

Danny Young stated that another letter drop to surrounding landholders will occur at the time of lodgement of the EA (late May/early June).

3.3. Tony Heinrich indicated that he had spoken with both crews about the amount of litter along Wean Road. Mr Heinrich indicated that he believed the amount of littering had decreased since these discussions.

Danny Young suggested that Whitehaven will investigate the use of contractors on an as-needs basis to collect the rubbish.

Warren Nicholls suggested that signs should be installed under the existing signs to indicate that people may be fined for littering. Whitehaven will organise these signs.

4. Mine Progress Report

Tony Heinrich advised that over the past 3 months 170,000 tonnes of coal was mined and approximately 1.2 million BCM of overburden moved.

Mr Heinrich advised that Rocglen is behind on coal production due to the depth and steepness of the seams.

5. Review of Environmental Performance

Danny Young presented the environmental monitoring results which are attached in the associated environmental monitoring report.

Rod Barnes questioned what changes in operations and conditions could have made such a difference in the level of noise at his property over two consecutive nights. Danny Young indicated that the weather conditions (in particular wind direction) would have had a significant impact on noise propagation. It was noted that on the night of noise impact, the site experienced calm to slight north-westerly winds, and cool to cold conditions which would have exacerbated noise impacts to the south-east of the mine. By the following night, the wind had shifted to the south which would have reduced potential for noise propagation to the "Surrey" residence. Tony Heinrich stated that there would have been negligible difference in operational activities between the two nights.

Warren Nicholls indicated that at times the biggest noise impacts at his property are when the wind direction is away from the property.

6. Complaints/Complaints Hotline

Two complaints have been received since the last CCC meeting, as discussed in the Environmental Monitoring Report.

7. General Business

- 7.1. Tim Muldoon mentioned a resources forum to be held in Gunnedah on the 9th September 2010. The forum is free and will be an all day event that will incorporate gas companies, coal mining companies, planning and infrastructure representatives and community members. Mr Muldoon indicated that the forum would be advertised and further details would be provided at the next CCC meeting.
- 7.2. John Molloy indicated that he would like to seek approval from Council to install approximately four hardstand bays along Blue Vale Road to allow the drivers to safely pull off the road for their scheduled breaks. Mr Molloy also noted that the bays would benefit all drivers, especially with the number of wide loads that travel on the road. Committee members did not express any objections to the suggestion.
- 7.3. Warren Nicholls referred to the newsletter regarding the proposed extension of the mine. He stated that at the last CCC meeting Whitehaven indicated that there would be no expansions. Tony Heinrich and Danny Young explained that they had indicated that there would be no expansion beyond the currently approved disturbance limit (ie. pit extensions would be within the bounds of the approved Wean Road deviation). They explained that the proposed extension would involve minor extension to the pit and changes to the northern waste emplacement. The most significant change was identified as being the extension to the northern waste emplacement to accommodate the additional overburden.

Warren Nicholls questioned whether increased mining activity (ie. working on Sundays) would be associated with the extension. Tony Heinrich stated that Rocglen is not permitted to work on Sundays. Danny Young stated that both the hours of operation and production levels will remain the same.

- 7.4. Rod Barnes made reference to the level of groundwater seepage in the pit and questioned (on behalf of a community member) the impact of mining on the Belmont bore. Tony Heinrich stated that the bore had been mined through some time ago and very little water was intersected. Danny Young committed to identifying how deep the Belmont bore was prior to being mined through.
- 7.5. Rod Barnes made reference to the recent media about the alleged 'cancer cluster' in the Hunter Valley. Tony Heinrich stated that he believed the media had since clarified that there was no known correlation between mine dust and the cancer cluster. Colleen Fuller stated that Hunter New England Health had since released a statement that they did not make the statement that there was a correlation.

Danny Young asked Rod Barnes if he had first flush diverters installed at his property. Rod Barnes indicated that he'd had diverters installed approximately 12 months ago but they were only of benefit if

he was at home at the time when it begins to rain. Some members of the Committee indicated that the diverters should work automatically.

8. Next Meeting

The next meeting of the Rocglen CCC is scheduled for Wednesday 11th August 2010, at the Rocglen training room at 3:00pm.

Meeting closed 3:50pm.

J Sturgess Chairman

Rocglen Coal Mine Community Consultative Committee Meeting #7

Environmental Monitoring Report January – March 2010

Noise Monitoring

Attended Noise Monitoring

Attended noise monitoring was undertaken on the 25th and 26th March 2010, as required for operational noise monitoring under the Noise Monitoring Program, with results outlined below:

Noise Monitoring Results – 25 March 2010 (Evening)					
dB(A),Leq Wind speed/					
Location	Time		direction	Identified Noise Sources	
Surrey	7:42 pm	39	Calm	Insects (39), RCM (30)	
Costa Vale	8:15 pm	40	Calm	Insects (38), RCM (30)	

Noise Monitoring Results – 25 March 2010 (Night)					
dB(A),Leq Wind speed/					
Location	Time		direction	Identified Noise Sources	
Surrey	10:21 pm	38	<0.5 m/s, SW	Insects (37), RCM (31)	
Costa Vale	10:52 pm	34	<0.5 m/s, SW	Insects (33), RCM (25)	

Noise Monitoring Results – 26 March 2010 (Day)				
dB(A),Leq Wind speed/				
Location	Time		direction	Identified Noise Sources
Surrey	7:14 am	43	Calm	Birds & insects (42), rooster (34), RCM (24)
Costa Vale	7:45 am	50	2 m/s N	Birds & insects (50), RCM (30)

The results indicate that, under the operational and atmospheric conditions at the time, noise emissions from the mine did not exceed the criterion of 35 dB(A) at either monitoring location.

In addition to the operational noise, the noise from the mine must not exceed 45 dB(A) $L_{1 (1 \text{ min})}$ between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine.

During the night time measurement circuit the L1 (1 min) noise from RCM did not exceed 45 dB(A) at any monitoring location.

Road Noise Monitoring

Rocglen Coal is required to monitor road noise to determine that the cumulative noise level generated from traffic generated by Tarrawonga Coal Mine, Canyon Coal Mine (mining ceased) and Rocglen Coal Mine does not exceed 60 dB(A), $L_{eq(1hour)}$ during the day and 55 dB(A), $L_{eq(1hour)}$ during the night. Monitoring was conducted at the "Brooklyn" (2 residences) and "Werona" properties on the 31st March 2010, with the following observations and results:

- 37 truck movements were recorded during the measurement period (3:40pm to 4:40pm) at "Brooklyn". The total measured contribution from mine-related vehicles at Residence 1 at "Brooklyn" (approximately 90m from Blue Vale Road) was 53.0 dB(A),_{Leq (1 hour)}. This is below the daytime criterion of 60 dB(A) Leq (1 hour).
- The total measured contribution from mine-related vehicles at Residence 2 (approximately 480m from Blue Vale Road) was **41.0 dB(A)**,L_{eq (1 hour)}. This is also below the daytime criterion of **60 dB(A)** L_{eq (1 hour)}.
- Over the course of the measurement period (2:20pm to 3:20pm) at "Werona" there were 40 coal truck movements. The total measured contribution from mine-related vehicles at "Werona" was 48.0 dB(A),_{Leq (1 hour}). This is below the daytime criterion of 60 dB(A) _{Leq (1 hour}).

Unattended Noise Monitoring

Unattended noise monitoring was carried out in March 2010 at both the "Costa Vale" and "Surrey" properties with results provided in the following tables. Unattended monitoring provides noise levels from all sources and does not distinguish mine related noise from other noise factors.

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
25-Mar-10	35.9	40.3	41.7	23.5	23.9	18.2
26-Mar-10	42.4	41.4	40.7	24.8	23.7	18.1
27-Mar-10	51.4	57.0	55.9	25.0	26.2	25.2
LAeq	47	52	51			
L90				25	24	18

Costa Vale

Current

Surrey						
Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
25-Mar-10	36.8	44.5	41.8	25.2	26.2	19.3
26-Mar-10	40.9	44.0	43.3	24.0	25.0	19.1
27-Mar-10	38.7	47.7	46.7	23.4	25.8	20.7
LAeq	39	46	44			
L90				24	26	19

Blast Monitoring

Blasting Results

Since the first shot there have been 47 blasts. All blasts during this report period have been compliant within the limits of 115dBL and 5mm/s.

To date, the highest overpressure recorded is 119.9 dBL recorded at "Costa Vale" on the 24th August 2009. The highest ground vibration recorded is 1.50 mm/s recorded at "Roseberry" on the 12th December 2008.

Air Quality

Deposited Dust Results

The Deposited Dust results obtained for the site to date are as follows:-

							r 1
Month	BD2 - Glenroc	BD3 - Belah	BD4 - Surrey	BD5 - Stratford	BD6 - Roseberry	BD7 - Roseglass	BD8 - Yarrawonga
April 2009	1.2	0.8	1.3	1.3	0.7	0.8	0.6
May 2009	1.1	0.4	0.5	0.4	0.6	0.9	0.6
June 2009	0.6	0.5	0.3	0.2	0.4	0.4	0.4
July 2009	0.7	0.3	0.4	0.3	0.8	0.9	0.6
August 2009	2.1	1.5	1.1	0.9	1.4	2.1	1.3
September 2009	11.8	7.6	10.6	15.9	8.4	5.3	10.3
October 2009	3.3	2.3	1.2	2.9	2.8	3.6	2.0
November 2009	1.0	1.5	2.0	2.0	1.2	1.9	2.6
December 2009	2.2	1.6	0.6	1.1	1.0	0.9	0.9
January 2010	1.7	2.8	1.4	2.2	2.5	1.5	1.3
February 2010	2.3	1.2	0.8	0.7	1.4	3.1	1.7
March 2010	4.3	3.7	0.9	1.1	1.2	0.7	0.8
Annual Average	2.7	2.0	1.8	2.4	1.9	1.8	1.9

Air Quality (Dust Deposition) Results

The deposited dust levels have remained relatively consistent over the last 12 months with the exception of September 2009 (attributable to dust storms). Deposited dust levels have continued to remain at relatively low levels since the last CCC meeting.

All monitors remain well within the standard concentration threshold of 4g/m²/month.

PM₁₀ Results

The annual average for PM_{10} readings as determined from data from April 2009 to March 2010 is as follows:

Glenroc: 24.02µg/m³ Surrey/Roseberry: 20.59µg/m³

Running average PM₁₀ levels remain below the annual average limit of 30µg/m³.

The 24hr criterion of $50\mu g/m^3$ was breached at Glenroc on the 25^{th} January 2010 with a reading of $55\mu g/m^3$. PM₁₀ levels were also elevated at the Roseberry property, albeit not above the 24hr threshold, with a reading of $45\mu g/m^3$. Operational activities on the day of exceedance were consistent with normal operations at site, with wind direction split between north-westerly and south-easterly dominance. PM₁₀ levels have returned to more normal levels since this event.

The highest PM₁₀ readings at each site are as follows:

Glen Roc: 113 μ g/m³ (14th December 2009) Roseberry: 101 μ g/m³ (8th December 2009)

Water Monitoring

Ground Water

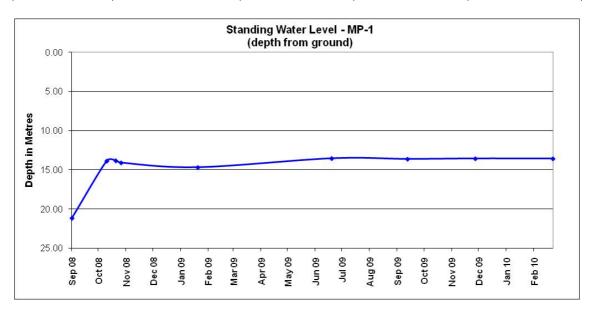
Groundwater monitoring data obtained to date is presented in the following table, including the February 2010 standing water level (SWL) and water quality data.

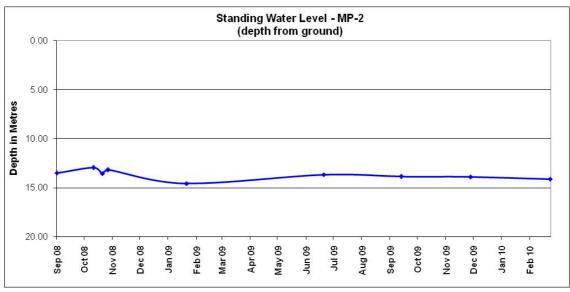
Site	Date	SWL (m)	рН	Elect. Conduct µs/cm
MP1	September 08	21.14		
	13 October 08	13.87		
	23 October 08	13.83		
	29 October 08	14.10	7.6	2360
	23 January 09	14.69		
	22 June 09	13.55	7.8	2250
	15 September 09	13.63		
	30 November 09	13.57	7.85	2250
	25 February 10	13.58		
MP2	September 08	13.53		
	13 October 08	12.98		
	23 October 08	13.56		
	29 October 08	13.20	7.3	4180
	23 January 09	14.60		
	22 June 09	13.70	7	5210
	15 September 09	13.88		
	30 November 09	13.90	6.99	4560
	25 February 10	14.14		

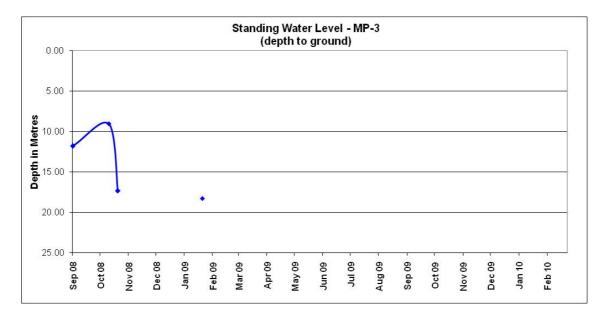
MD2	Sontomber 09	11 01		
MP3	September 08 13 October 08	11.81 9.06		
	23 October 08	17.36		
	29 October 08	N/S Bore Dry		
	23 January 09	18.3 (mud)		
	22 June 09	N/S Bore Dry		
	15 September 09	Dry		
	30 November 09	Dry		
	25 February 10	Dry		
MP4	September 08	22.62		
	13 October 08	23.02		
	22 October 08	23.17		
	29 October 08	N/S Bore Dry		
	23 January 09	24.16 (mud)		
	22 June 09	N/S Bore Dry		
	15 September 09	Dry		
	30 November 09	Dry		
	25 February 10	Dry		
		Diy		
MP5	September 08	53.13		
	13 October 08	52.9		
	23 October 08	52.96		
	29 October 08	N/S Bore Dry		
	23 January 09	54.44 (mud)		
	22 June 09	N/S Bore Dry		
	15 September 09	Dry		
	30 November 09	54.4	Insufficient w	ater to sample
	25 February 10	54.48		
14/54	10 Ostali az 00	0.05		
WB1	13 October 08	8.95	7.0	4000
	28 October 08	8.85	7.9	1996
	NO ACCESS			
WB2	September 08	16.87		
	13 October 08	16.49		
	28 October 08	16.60	7.7	3430
	23 January 09	17.00		
	22 June 09	16.65	7.2	3160
	15 September 09	16.45		
	6 January 09	16.45	7.51	2010
	25 February 10	16.48		
WB3	September 08	8.82		-
	13 October 08	8.87		
	29 October 08	8.95	7.2	4480
	23 January 09	23.72		
	10 February 09	9.0		
	22 June 09	8.99	7.5	4380
	15 September 09	8.76		
	30 November 09	8.8	7.74	3890
	25 February 10	8.69		
	Casing Sealed	No Access		
WB4				
		4 23		
WB4 WB5	September 08	4.23		
		4.23 12.92 12.85	7.2	8400

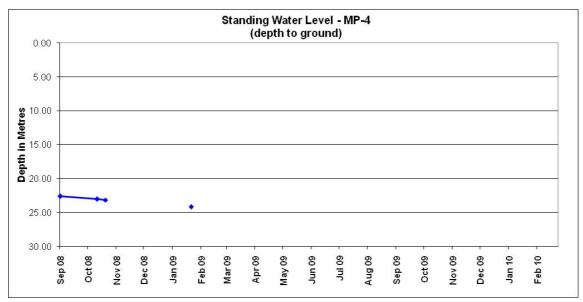
				7000
	22 June 09	No Access	6.6	7930
	15 September 09	No Access	7.00	1000
	30 November 09	22.93	7.06	4880
	25 February 10	13.14		
WB6	September 08	23.18		
	13 October 08	23.05		
	29 October 08	No Access		
	23 January 09	23.81		
	22 June 09	23.74	Unable to sample	
	15 September 09	23.83		
	30 November 09	24.02	No sample – b	ore equipped
	25 February 10	25.05		
WB7	September 08	41.75		
1107	13 October 08	19.11		
	28 October 08	18.90	7.2	2730
	23 January 09	21.35	1.2	2130
	23 January 09 22 June 09	21.55	7.4	2690
		Doro oquinnod	7.4	2090
	15 September 09	Bore equipped	7.0	0000
	30 November 09	Unable to dip	7.3	2260
	25 February 10	Unable to dip		
WB8	September 08	No Access		
	13 October 08	No Access		
	29 October 08	No Access		
	23 January 09	46.4		
	22 June 09	32.75	8.2	2240
	15 September 09	43.38		
	30 November 09	Dry		
	25 February 10	49.32		
WB9	September 08	23.88		
1125	13 October 08	24.09		
	28 October 08	24.50	7.5	931
	23 January 09	24.30	1.5	301
	23 June 09	23.99	7.9	1080
	15 September 09	23.99	1.5	1000
	30 November 09	23.94	7.14	1020
	25 February 10	25.58	7.14	1020
WB10	July 08	13.75		
	September 08	13.80		
	13 October 08	13.77		
	28 October 08	13.9	7.4	2235
	27 January 09	14.23		
	22 June 09	14.01	7	2220
	11 September 09	14.65		
	30 November 09	14.62	6.89	1690
	25 February 10	14.23		
WB11	July 08	18.11		
	September 08	18.61		
	13 October 08	18.13		
	28 October 08	18.4	7.5	1086
		18.4	1.0	1000
	27 January 09 22 June 09		8	000
		18.1	ð	880
	11 September 09	18.63	C CE	000
	30 November 09	18.6	6.65	929

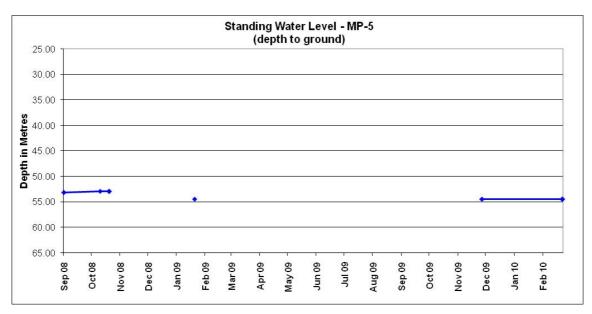
	25 February 10	18.47		
WB12	July 08	12.73		
	September 08	12.80		
	13 October 08	12.83		
	28 October 08	12.95	8.1	2152
	27 January 09	13.16		
	22 June 09	12.99	8	2070
	11 September 09	13.05		
	30 November 09	12.99	8.34	1640
	25 February 10	13.19		
Production	September 08	55.24		
Bore	13 October 08	50.18		
	28 October 08	49.90	7.3	4030
	27 January 09	49.90		
	22 June 09	>50	7.1	3580
	27 August 09		7.3	3330
	30 November 09		7.2	3160
	25 February 10	Bore equipped		

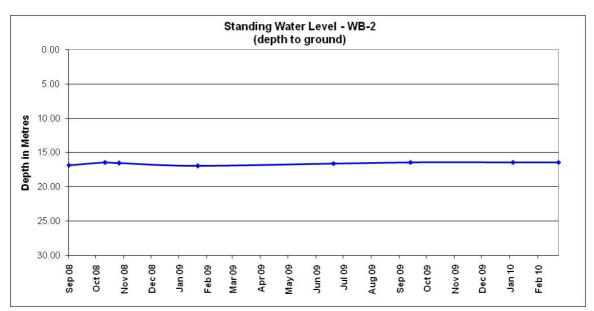


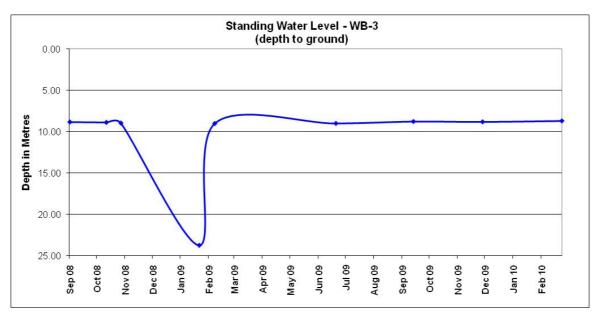


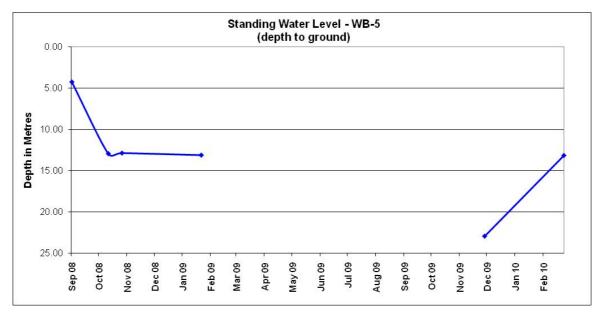


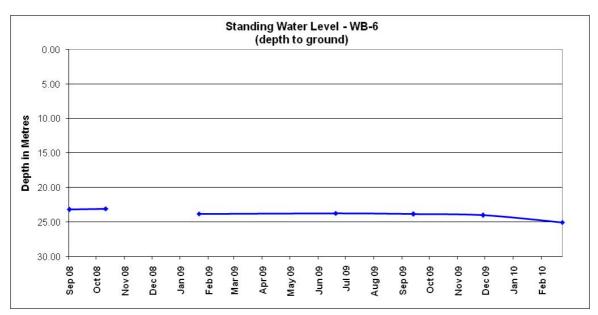


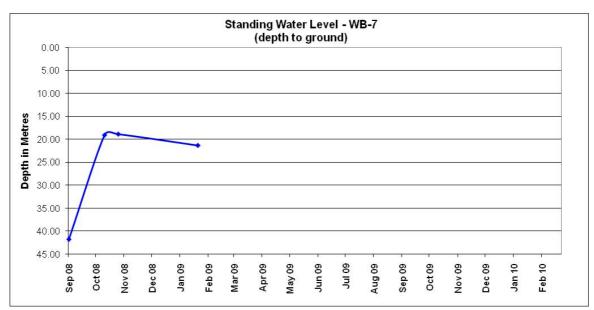


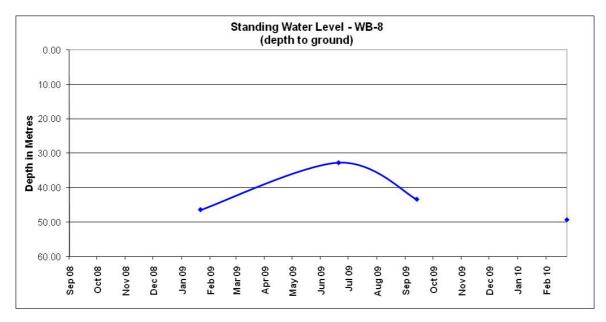


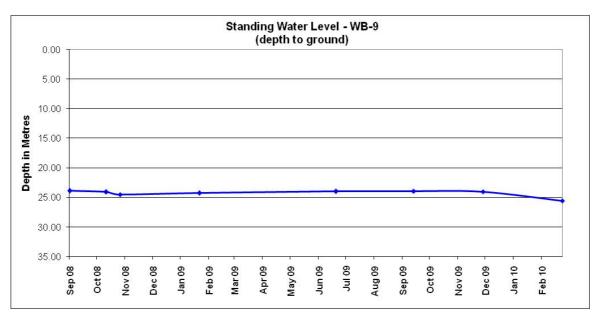


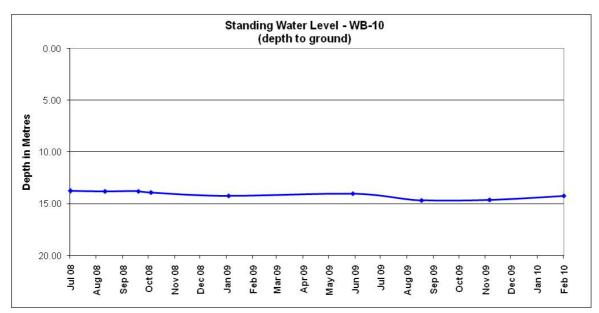


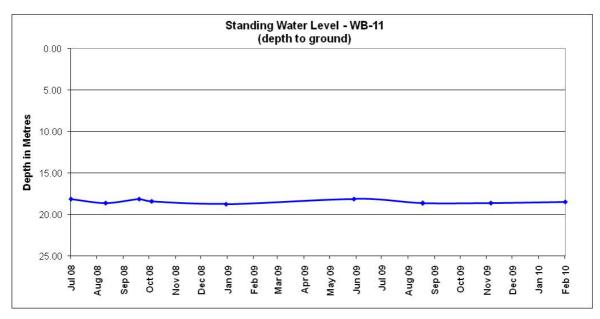


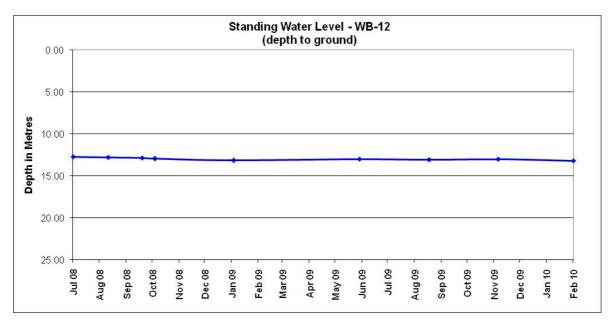












Standing water levels have remained relatively consistent since the last CCC meeting, with the exception of WB-5 which has shown a return comparable to initial standing water levels which is indicative of cessation of pumping since the last measurement, or that the last measurement was in error. The next round of monitoring in May 2010 will continue to observe any ongoing trends.

Surface Water

Four wet weather discharges have occurred from the site since the last CCC meeting, as detailed below:

- 15th January 2010 discharge from SB18
- 8th February 2010 discharge from SD3
- 15th February 2010 discharge from SD3, SB18 and SB20
- 31st March 2010 discharge from SD3

Over the period December 2009 – February 2010, the Rocglen site received over 260mm of rainfall. The storage structures on the site have been built to the 90%ile 5 day event design criteria, with this design specification built into the existing EPL 12870. Nevertheless, sampling has been undertaken during each discharge event to monitor water quality parameters.

The site over this period has been problematic based on the level of disturbance immediately upstream of SD3 through the extension of SB19 and construction of the additional sediment basin SB21. This disturbance has resulted in a number of exceedances of the EPL criteria for total suspended solids.

Following these discharges, and as conditions have allowed, actions have been taken to aid in the settling of sediment in SD3 by the application of Floc Blocs. This involved the placement of blocs on the inflow of SD3 and the pumping/recirculation of water through the bloc to activate the flocculant within the

dam. The blocs have visibly reduced the sediment level at the surface of the water.

Water sampling post application of flocculant confirmed a drop in TSS levels from >400mg/L to 58mg/L at the end of March 2010. The level of 58mg/L remained 8mg over the concentration threshold and as such additional flocculation has occurred during May, with a water sample obtained on the 7th May 2010 with a view to undertaking a controlled discharge off site if the sample is confirmed as being within threshold.

Routine surface water sampling was undertaken at selected sites in February 2010 to obtain background water quality data. There was nothing in these results that were indicative of any change in water quality since mine commencement. The next round of surface water monitoring will be conducted in May 2010.

Complaints

Two complaints have been lodged since the last CCC meeting, as detailed below:

<u>10th May 2010</u>

The complainant contacted the Environmental Manager at 11:40pm to advise that lights on the waste dump were shining in the direction of the "Surrey" property and a loud noise from the mine could be heard throughout the night.

The Environmental Manager contacted Tony Heinrich (Project Manager) to determine the activities occurring at the time of the complaint. It was noted during the morning inspection that one of the lighting plants was directed towards the east and the "Surrey" property and that issue would be rectified for the next night shift. Dumping was occurring on the higher lifts during the night due to limited available dump space. The Project Manager was advised to consider noise propagation issues given the cooler weather.

The complainant was provided with the night shift OCE's mobile number to enable direct access to the site in the event of any future lighting or noise issues.

<u>11th May 2010</u>

The complainant contacted the Environmental Manager at 10:00am to reiterate concerns in relation to lighting from the waste dump, general noise from the mine during the night and the quantity of litter being left on the roadway from Riordan Lane back towards Gunnedah along Wean Road.

The Project Manager and OCE were previously advised in relation to light and noise propagation, as well as the night shift OCE contact number provided to the complainant. Whitehaven will also investigate arrangements for a contractor to be engaged twice a month to undertake roadside collection of litter from Riordan Lane to Billynudgel Road in an effort to reduce roadside litter that may be attributed to personnel or contractors to the Rocglen mine site.

Rehabilitation

The area previously re-shaped and topsoiled on the western emplacement has had contour banks established to direct water flows back to natural surface at the northern end of the emplacement. Whilst seed was spread for cover crop establishment it has had limited strike and will be re-seeded in conjunction with the next phase of rehabilitation.

Minutes of Rocglen Coal Mine Community Consultative Committee

Meeting Held:	Wednesday 11 th August 2010
Venue:	The meeting held at Rocglen Coal Mine Training Room

Commencement Time: 3:00pm

1. Present and Apologies

Present:	Mr John Sturgess (Chairman) Mrs Pam Burns (Community Rep) Mr Rod Barnes (Community Rep) Mr Warren Nicholls (Community Rep) Mr Tony Heinrich (Project Manager) Mr Tim Muldoon (Community Liaison Officer - Whitehaven) Mr Danny Young (Environmental Manager – Whitehaven) Miss Jill Scealy (Environmental Officer – Whitehaven)
Anologies	Cir Colleen Fuller (Gunnedah Shire Ren)

Apologies:Clr Colleen Fuller (Gunnedah Shire Rep)Mr Casper Dieben (General Manager – Operations)Mr Brian Cullen (General Manager – Technical Services)

2. Previous Minutes

The minutes of the previous meeting were accepted as a true record on the motion of Mrs Pam Burns and Mr Warren Nicholls.

3. Business Arising from Previous Minutes

- 3.1. Danny Young provided an update on the proposed Rocglen Extension. The Environmental Assessment (EA) has been lodged with the Department of Planning (DoP). DoP are currently conducting the adequacy assessment which is a preliminary review to determine whether the EA meets their requirements. If it doesn't meet the requirements, it will be returned to Whitehaven for amendments. If it does meet the requirements, it will be put on public exhibition (which includes advertising and distribution to local landholders). Danny said that he can't commit to a timeframe because it is dependent on the DoP.
- 3.2. Danny Young indicated that Whitehaven staff have been conducting periodic litter collection along Wean Road. Jill Scealy stated that she has contacted Council on a number of occasions since the previous

meeting regarding the installation of 'don't litter' signs and is still awaiting installation of the signs.

- 3.3. Tim Muldoon tabled the brochure for the Regional Resource and Energy Community Discussion Day to be held in Gunnedah on the 9th September 2010. Tim noted that the forum is free and encouraged everyone to attend if possible.
- 3.4. Danny Young provided an update on behalf of Toll on the proposed installation of hardstand bays along the haul route. This work has been put on hold as a result of the ongoing wet weather and roadworks along Blue Vale Road.
- 3.5. Following a request at the last meeting, Danny Young stated that the original EA specified that the "Belmont" bore depth was 53m. Rod Barnes referred to conversations with two independent people who believed the bore used to provide good water supply. Tony Heinrich said that they might be talking about a different bore because the "Belmont" bore has been mined through and there is not a significant amount of seepage in that area.

4. Mine Progress Report

Tony Heinrich advised that over the past 3 months approximately 1.4 million BCM of overburden was moved and 200,000 tonnes of coal was mined. The current strip ratio is approximately 7:1.

5. Review of Environmental Performance

Danny Young presented the environmental monitoring results which are attached in the associated environmental monitoring report.

Rod Barnes commented that noise from the mine was still an issue.

John Sturgess asked whether there was a restriction on the species to be used during rehabilitation. Danny Young stated that the species have to be endemic to the area and the initial specialist assessments determine which species should be used.

Danny Young advised of a proposed rehabilitation trial at Rocglen utilising a compost product available from nearby chicken farms. Rod Barnes asked whether the compost trial will work and suggested that the chicken manure might burn the cover crop. Danny Young indicated that the producers believe they have the ratio mix in the compost at a level that will enhance growth and that a trial patch in the rehab area will provide confirmation of this. It was also indicated that the use of compost on direct spoil will be trialled to see if this results in good rehab response. Danny Young indicated that seeding into spoil is an approach being used in the Hunter Valley where they're pushing for the establishment of trees into waste through direct seeding. Warren Nicholls asked when tree planting would commence. Danny Young said the tubestock planting generally occurs about 6 months after cover crop establishment so it's not likely to commence until April 2011.

6. Complaints/Complaints Hotline

No complaints have been received since the last meeting.

7. General Business

- 7.1. Tim Muldoon stated that the Namoi Councils has initiated a Minerals and Energy Working Group which discusses the mining and extraction related issues across the region.
- 7.2. Rod Barnes indicated that he believed that mining was being conducted at the site on Sundays despite the Company's initial commitment that no mining would occur on Sundays. Rod said that he was able to hear heavy machinery at 9:10am on Sunday 8th August and at 5:30pm on the previous Sunday for approximately 45 minutes. Warren Nicholls supported Rod's claims as he has also heard equipment on Sundays.

Danny Young said that the consent specifies that only maintenance activities can occur on Sundays so the claims will be investigated. Tony Heinrich suggested that the equipment might have been transported to the workshop for maintenance.

Rod Barnes said that he could hear the dozer going backwards and forwards so he believed it was mining activity rather than any transport associated with maintenance (ie. transport of equipment from the pit to the workshop).

7.3. Rod Barnes questioned why there is now a driveway from the site directly onto Wean Road, rather than the previous access from Riorden Road.

Tony Heinrich stated that direct access to Wean Road was always planned and the Council had recently instructed the mine to develop the access. The Council also requested that Whitehaven strip out the gravel on Riorden Road (originally laid to allow truck access to the Rocglen haul road during construction) and rehabilitate the road to its former state.

Warren Nicholls asked whether there was any right to rejection of the request because there is no reason why the condition of the road should be worsened and Tony Heinrich agreed that it would be better to leave it as is.

John Sturgess suggested that the local landholders could approach Council if they are concerned about Council's request.

- 7.4. Rod Barnes asked whether noise monitoring is conducted on the "Penryn" property because the resident had commented on noise from the mine site. Tony Heinrich suggested that the resident should contact Danny Young to request noise monitoring.
- 7.5. Rod Barnes commented on the issue of lighting plants on the waste emplacement being directed towards his property. Warren Nicholls supported Rod's claim but indicated that he was less affected due to screening of light by established trees.

Tony Heinrich reiterated that he had spoken to the OCEs and committed to discussing the matter with them again. He also explained that the lighting plants are positioned to the west or southwest (ie. not pointed directly towards the residences) but there might be some non-directional lighting impacts. Tony provided his mobile number to Rod Barnes and Warren Nicholls and invited them to call him at anytime if they have issues with the mine.

8. Next Meeting

The next meeting of the Rocglen CCC is scheduled for Wednesday 10th November 2010, at the Rocglen training room at 3:00pm.

Meeting closed 3:45pm.

sturgess Chairman n 1s/1/20/0

Rocglen Coal Mine Community Consultative Committee Meeting #8

Environmental Monitoring Report April – June 2010

Noise Monitoring

Attended Noise Monitoring

Attended noise monitoring was undertaken on the 22nd June 2010, as required for operational noise monitoring under the Noise Monitoring Program, with results outlined below:

Noise Monitoring Results – 22 June 2010 (Day)						
dB(A),Leq Wind speed/						
Location	Time		direction	Identified Noise Sources		
Surrey	9:51 am	42	1.5 m/s, SE	Wind (40).Birds (37), RCM (28)		
Costa Vale	9:20 am	41	1.5 m/s, SE	Birds (39), Wind (32) RCM (30)		

Noise Monitoring Results – 22 June 2010 (Evening)					
dB(A),Leq Wind speed/					
Location	Time		direction	Identified Noise Sources	
Surrey	9:06 pm	45	1.5 m/s, SE	Insects (42), Wind (40), RCM inaudible	
Costa Vale	8:43 pm	47	1.5 m/s, SE	Insects (45), Wind (41) RCM inaudible	

Noise Monitoring Results – 22 June 2010 (Night)					
dB(A),Leq Wind speed/					
Location	Time		direction	Identified Noise Sources	
Surrey	11:48pm	40	1.0 m/s SE	Insects & Frogs (37), Wind (37) RCM inaudible	
Costa Vale	10:27pm	38	1.0 m/s SE	Wind (36), Birds (32), RCM (28)	

The results indicate that, under the operational and atmospheric conditions at the time, noise emissions from the mine did not exceed the criterion of 35 dB(A) at either monitoring location.

In addition to the operational noise, the noise from the mine must not exceed 45 dB(A) $L_{1 (1 \text{ min})}$ between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine.

During the night time measurement circuit the L1 (1 min) noise from the mine did not exceed 45 dB(A) at either monitoring location.

Despite these noise monitoring results, additional noise monitoring is proposed to take place at the "Surrey" residence to address noise concerns raised and to

attempt to monitor noise levels over a range of weather conditions. This has been arranged with Spectrum Acoustics.

Road Noise Monitoring

Rocglen Coal is required to monitor road noise to determine that the cumulative noise level generated from traffic generated by Tarrawonga Coal Mine, Canyon Coal Mine (mining ceased) and Rocglen Coal Mine does not exceed 60 dB(A), $L_{eq(1hour)}$ during the day and 55 dB(A), $L_{eq(1hour)}$ during the night. Monitoring was conducted at the "Brooklyn" (2 residences) and "Werona" properties on the 22nd June 2010, with the following observations and results:

- 30 truck movements were recorded during the measurement period (10:32am to 11:32am) at "Brooklyn". The total measured contribution from mine-related vehicles at Residence 1 at "Brooklyn" (approximately 90m from Blue Vale Road) was 49 dB(A),Leq (1 hour). This is below the daytime criterion of 60 dB(A) Leq (1 hour).
- The total measured contribution from mine-related vehicles at Residence 2 (approximately 480m from Blue Vale Road) was **45 dB(A)**,L_{eq (1 hour)}. This is also below the daytime criterion of **60 dB(A)** L_{eq (1 hour)}.
- Over the course of the measurement period (9:16am to 10:16am) at "Werona" there were 46 coal truck movements. The total measured contribution from mine-related vehicles at "Werona" was 49 dB(A),_{Leq (1 hour)}. This is below the daytime criterion of 60 dB(A) _{Leq (1 hour)}.

Unattended Noise Monitoring

Unattended noise monitoring was carried out in June 2010 at both the "Costa Vale" and "Surrey" properties with results provided in the following tables. Unattended monitoring provides noise levels from all sources and does not distinguish mine related noise from other noise sources.

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)	
21-Jun-10	45.3	41.8	41.7	29.4	29.5	26.0	
22-Jun-10	46.6	44.6	39.5	29.7	26.5	26.0	
23-Jun-10	48.5	47.1	43.2	29.0	30.0	25.5	
LAeq	47	45	42				
L90				30	28	26	

Costa Vale

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
21-Jun-10	42.4		35.6	20.1	21.6	23.0
22-Jun-10	43.2	42.2	38.6	23.7	34.9	19.4
23-Jun-10	62.8	40.4	39.1	28.5	26.4	26.7
LAeq	57	41	39			
L90				26	25	22

Blast Monitoring

Blasting Results

Since the first shot there have been 51 blasts. All blasts during this report period have been compliant within the limits of 115dBL and 5mm/s.

To date, the highest overpressure recorded is 119.9 dBL recorded at "Costa Vale" on the 24th August 2009. The highest ground vibration recorded is 1.50 mm/s recorded at "Roseberry" on the 12th December 2008.

Air Quality

Deposited Dust Results

The deposited dust results obtained for the site over the last 12 months are as follows:-

Month	BD2 - Glenroc	BD3 - Belah	BD4 - Surrey	BD5 - Stratford	BD6 - Roseberry	BD7 - Roseglass	BD8 - Yarrawonga
July 2009	0.7	0.3	0.4	0.3	0.8	0.9	0.6
August 2009	2.1	1.5	1.1	0.9	1.4	2.1	1.3
September 2009	11.8	7.6	10.6	15.9	8.4	5.3	10.3
October 2009	3.3	2.3	1.2	2.9	2.8	3.6	2.0
November 2009	1.0	1.5	2.0	2.0	1.2	1.9	2.6
December 2009	2.2	1.6	0.6	1.1	1.0	0.9	0.9
January 2010	1.7	2.8	1.4	2.2	2.5	1.5	1.3
February 2010	2.3	1.2	0.8	0.7	1.4	3.1	1.7
March 2010	4.3	3.7	0.9	1.1	1.2	0.7	0.8
April 2010	1.8	0.7	0.9	0.5	0.4	4.0	1.0
May 2010	0.5	0.9	0.4	0.4	0.3	0.5	0.2
June 2010	1.6	0.8	0.9	0.7	0.7	0.8	1.4
Annual Average	2.8	2.1	1.8	2.4	1.8	2.1	2.0

Air Quality (Dust Deposition) Results

Deposited dust levels have continued to remain at relatively low levels since the last CCC meeting. The deposited dust levels have been relatively consistent over the last 12 months with the exception of September 2009 (attributable to dust storms).

All monitors remain within the standard concentration threshold of 4g/m²/month.

PM₁₀ Results

The annual average for PM_{10} readings as determined from data from July 2009 to June 2010 is as follows:

Glenroc: 22.35µg/m³ Surrey/Roseberry: 18.48µg/m³

Running average PM₁₀ levels remain below the annual average limit of 30µg/m³.

The 24hr criterion of $50\mu g/m^3$ was not breached at either Glenroc or Roseberry during the period.

The highest PM₁₀ readings at each site are as follows:

Glenroc: 113 μg/m³ (14th December 2009) Roseberry: 101 μg/m³ (8th December 2009)

Water Monitoring

Ground Water

Groundwater monitoring data obtained to date is presented in the following table, including the May 2010 standing water level (SWL) and water quality data.

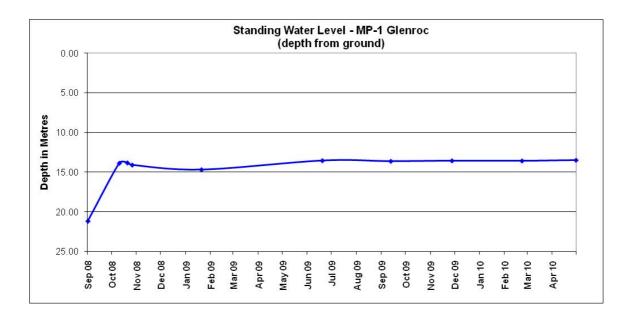
Site	Date	SWL (m)	рН	Elect. Conduct µs/cm
MP1	September 08	21.14		
	13 October 08	13.87		
	23 October 08	13.83		
	29 October 08	14.10	7.6	2360
	23 January 09	14.69		
	22 June 09	13.55	7.8	2250
	15 September 09	13.63		
	30 November 09	13.57	7.85	2250
	25 February 10	13.58		
	3 May 10	13.5	8.06*	2100
MP2	September 08	13.53		
	13 October 08	12.98		
	23 October 08	13.56		
	29 October 08	13.20	7.3	4180
	23 January 09	14.60		
	22 June 09	13.70	7	5210
	15 September 09	13.88		
	30 November 09	13.90	6.99	4560
	25 February 10	14.14		
	3 May 10	14	7.37*	4760
	-			
MP3	September 08	11.81		
	13 October 08	9.06		
	23 October 08	17.36		
	29 October 08	N/S Bore Dry		

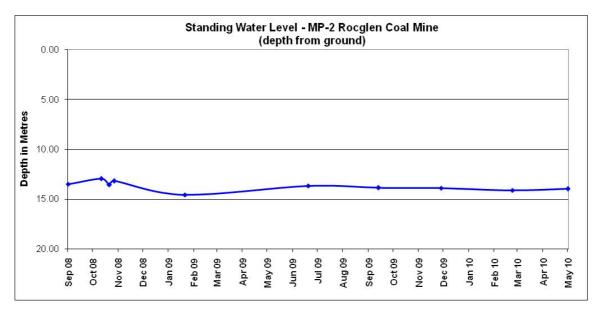
	23 January 09	18.3 (mud)		
	22 June 09	N/S Bore Dry		
	15 September 09	Dry		
	30 November 09	Dry		
	25 February 10	Dry		
	3 May 10	Dry		
	o May 10	Diy		
MP4	September 08	22.62		
	13 October 08	23.02		
	22 October 08	23.17		
	29 October 08	N/S Bore Dry		
	23 January 09	24.16 (mud)		
	22 June 09	N/S Bore Dry		
	15 September 09	Dry		
	30 November 09	Dry		
	25 February 10	Dry		
	3 May 10	Dry		
		,		
MP5	September 08	53.13		
	13 October 08	52.9		
	23 October 08	52.96		
	29 October 08	N/S Bore Dry		
	23 January 09	54.44 (mud)		
	22 June 09	N/S Bore Dry		
	15 September 09	Dry		
	30 November 09	54.4	Insufficient w	ater to sample
	25 February 10	54.48		
	3 May 10	54.6		
		0.40		
WB1	13 October 08	8.95		
	28 October 08	8.85	7.9	1996
	NO ACCESS			
WB2	September 08	16.87		
	13 October 08	16.49		
	28 October 08	16.60	7.7	3430
	23 January 09	17.00		
	22 June 09	16.65	7.2	3160
	15 September 09	16.45		
	6 January 09	16.45	7.51	2010
	25 February 10	16.48		
	3 May 10	16.56	7.84*	2190
WB3	September 08	8.82		
	13 October 08	8.87		
	29 October 08	8.95	7.2	4480
	23 January 09	23.72		
	10 February 09	9.0		
	22 June 09	8.99	7.5	4380
	15 September 09	8.76		
	30 November 09	8.8	7.74	3890
	25 February 10	8.69		
	3 May 10	18.53	7.88*	4000
WB4	Casing Sealed	No Access		
WB5	September 08	4.23		
	13 October 08	12.92		
	28 October 08	12.85	7.2	8400

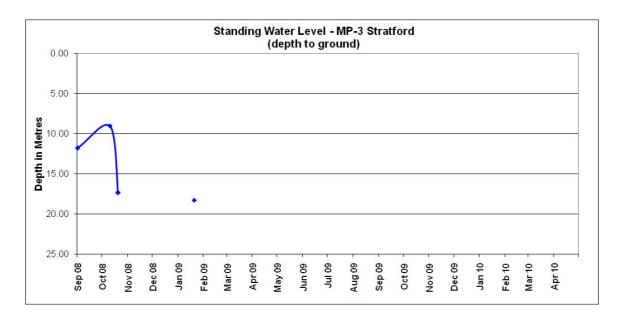
	22 Ιορμοτι 00	13.1		
	23 January 09 22 June 09	No Access	6.6	7930
	15 September 09	No Access	0.0	7930
	30 November 09	22.93	7.06	4880
	25 February 10	13.14	7.00	4000
	3 May 10	12.97	7.43*	6720
	S May TU	12.97	7.43	0720
WB6	September 08	23.18		
	13 October 08	23.05		
	29 October 08	No Access		
	23 January 09	23.81		
	22 June 09	23.74	Unable to sample	
	15 September 09	23.83	·	
	30 November 09	24.02	No sample – bo	ore equipped
	25 February 10	25.05		
	3 May 10	23.71		
WB7	September 08	41.75		
	13 October 08	19.11		
	28 October 08	18.90	7.2	2730
	23 January 09	21.35		
	22 June 09		7.4	2690
	15 September 09	Bore equipped		
	30 November 09	Unable to dip	7.3	2260
	25 February 10	Unable to dip		
	3 May 10	15	7.45*	2470
WB8	September 08	No Access		
WBO	13 October 08	No Access		
	29 October 08	No Access		
	23 January 09	46.4		
	23 January 09 22 June 09	32.75	8.2	2240
	15 September 09	43.38	0.2	2240
	30 November 09	43.38 Dry		
	25 February 10	49.32		
	3 May 10	32.59	Unable to Sample	
		02.00		
WB9	September 08	23.88		
	13 October 08	24.09		
	28 October 08	24.50	7.5	931
	23 January 09	24.27		
	22 June 09	23.99	7.9	1080
	15 September 09	23.94		
	30 November 09	24.05	7.14	1020
	25 February 10	25.58		
	3 May 10	24.26	Unable to Sample	
WB10	July 08	13.75		
	September 08	13.80		
	13 October 08	13.77		
	28 October 08	13.9	7.4	2235
	27 January 09	14.23	· · · ·	2200
	22 June 09	14.01	7	2220
	11 September 09	14.65	1	2220
	30 November 09	14.62	6.89	1690
	25 February 10	14.02	0.03	1030
	3 May 10	14.47	7.93*	2010
WB11	July 08	18.11		

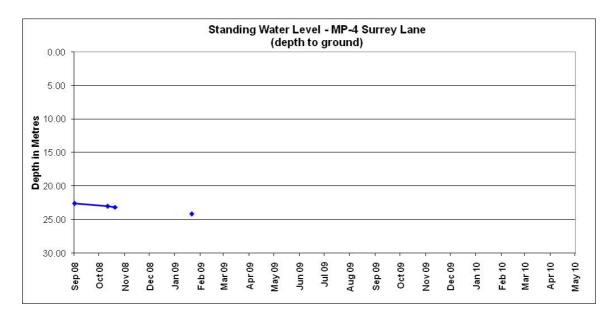
		10.01		
	September 08	18.61		
	13 October 08	18.13		
	28 October 08	18.4	7.5	1086
	27 January 09	18.73		
	22 June 09	18.1	8	880
	11 September 09	18.63		
	30 November 09	18.6	6.65	929
	25 February 10	18.47		
	3 May 10	18.24	8.37*	921
WB12	July 08	12.73		
WDIZ		12.73		
	September 08			
	13 October 08	12.83	0.4	0450
	28 October 08	12.95	8.1	2152
	27 January 09	13.16	•	0070
	22 June 09	12.99	8	2070
	11 September 09	13.05		10.10
	30 November 09	12.99	8.34	1640
	25 February 10	13.19		
	3 May 10	13.15	8.27*	1390
Production	September 08	55.24		
Bore	13 October 08	50.18		
	28 October 08	49.90	7.3	4030
	27 January 09	49.90		
	22 June 09	>50	7.1	3580
	27 August 09		7.3	3330
	30 November 09		7.2	3160
	25 February 10	Bore equipped		
	3 May 10		7.52*	3310

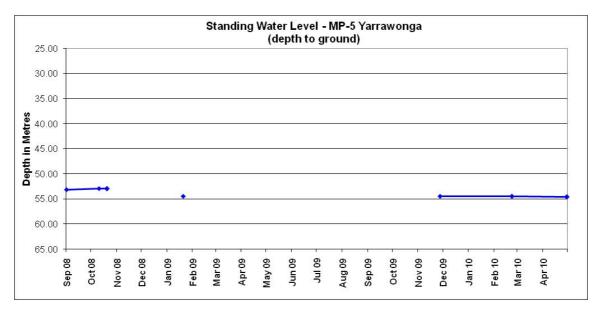
*Note pH values for May 10 are from field readings due to lab readings being unavailable

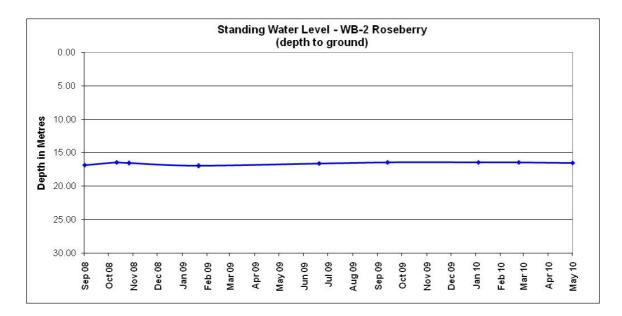


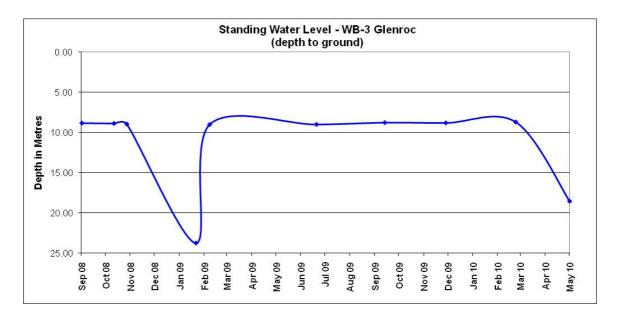


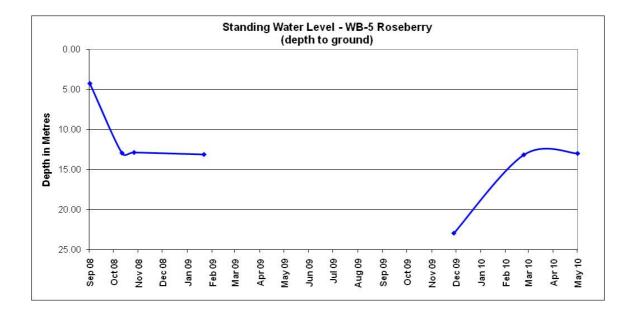


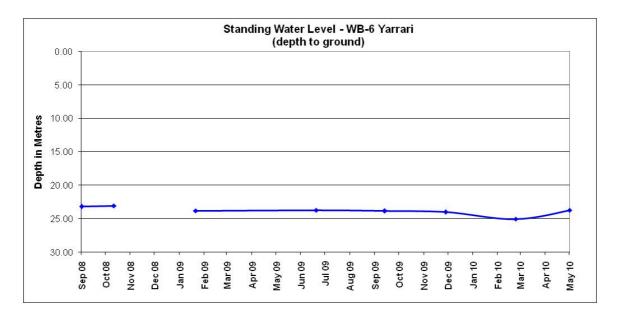


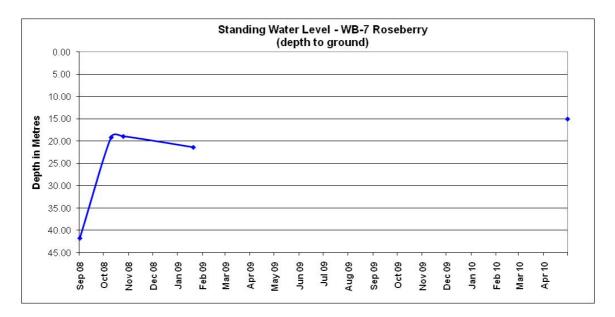


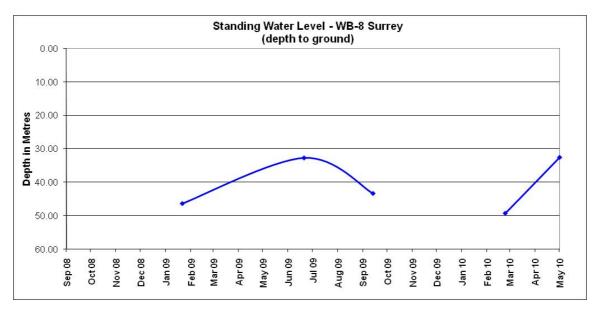


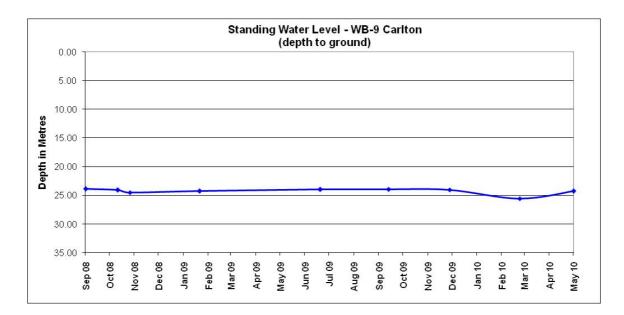


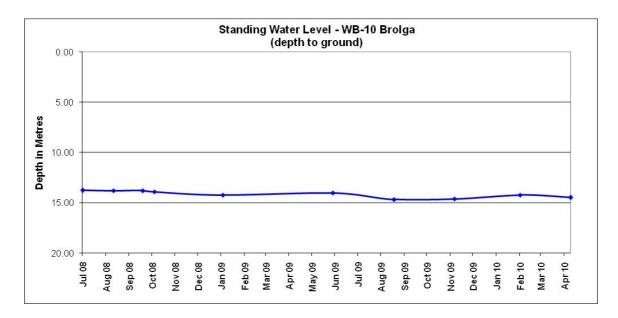


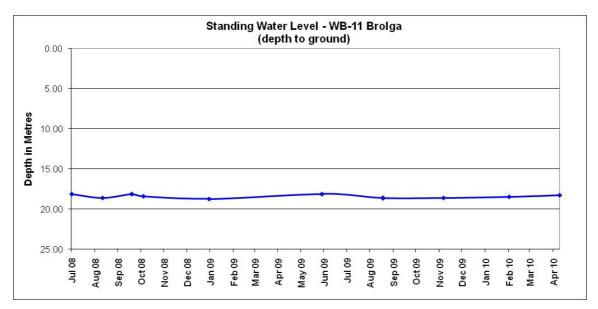


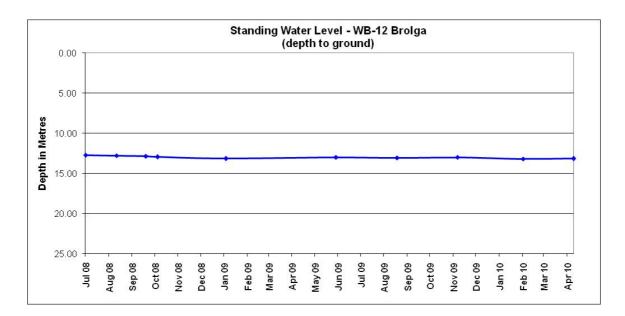












Standing water levels have remained relatively consistent since the last CCC meeting with the exception of WB3, which has dropped approximately 10m over the last 3 months, and WB8, which has recovered approximately 17m in 3 months. The drop at WB3 follows a similar pattern that presented in January/February 2009 and may be due to SWL being checked immediately following water being drawn from the bore to fill water storage points for stock/domestic purposes on "Yarrawonga" and "Glenroc". This will be checked again during August to confirm if the SWL has recovered. The recovery in WB8 on "Surrey" may also be related to timing of SWL checks and bore operation.

The next round of monitoring in August 2010 will continue to observe any ongoing trends.

Surface Water

Since the last CCC meeting there has been one wet weather discharge from site. On the 2nd June 2010, SD3 discharged following 13.8mm of rainfall on the day of the discharge and 23.4mm during the 8 days prior to the discharge. The discharge was compliant with all EPL thresholds with the exception of Total Suspended Solids (TSS). Analysis of the sampled discharge water returned a TSS level of 260mg/L, thereby exceeding the EPL concentration threshold of 50mg/L.

Water management onsite has been problematic since the start of the year as a result of consistent rainfall and the level of disturbance immediately upstream of SD3 through the extension of SB19 and construction of the additional sediment basin SB21.

Over the last 6 months, Whitehaven has made a concerted effort to reduce the suspended solids in SD3 through the use of Floc Blocs. This has involved the placement of blocs on the inflow of SD3 and the pumping/recirculation of water through the bloc to activate the flocculant within the dam. The blocs have visibly reduced the sediment level at the surface of the water.

Recent water sampling post application of the flocculant confirmed a drop in TSS levels from >260mg/L to 17mg/L at the end of July 2010. This result is well below the concentration threshold of 50mg/L allowing the opportunity to undertake a controlled discharge offsite. Investigations into further measures for controlling future discharge events have included the option for an additional water storage structure and the possibility of further trapping of sediment by placing a polymer concrete liner on the inflow to SD3.

Routine surface water sampling was undertaken at selected sites in May 2010 to obtain background water quality data. There was nothing in these results that were indicative of any change in water quality since mine commencement. The next round of surface water monitoring will be conducted in August 2010.

Complaints

No complaints have been lodged since the last CCC meeting.

Rehabilitation

Investigation has been undertaken into a compost trial to be held on the western emplacement. The trial will assist in determining volumes of subsoil and topsoil replacement required in future rehabilitation and the success of pre-mixed seed varieties in the mulch product to determine if direct seeding of eucalypts and understorey species is effective for rehabilitation purposes. If successful the compost will also reduce runoff and erosion, aid vegetation establishment and improve the soil health on rehabilitation areas.

Minutes of Rocglen Coal Mine Community Consultative Committee – Meeting #10

- **Meeting Held:** Wednesday 10th November 2010
- Venue: The meeting held at Rocglen Coal Mine Training Room

Commencement Time: 3:00pm

1. Present and Apologies

Present:Mr John Sturgess (Chairman)
Mrs Pam Burns (Community Rep)
Mr Rod Barnes (Community Rep)
Mr Warren Nicholls (Community Rep)
Mr Tony Heinrich (Project Manager)
Mr Tim Muldoon (Community Liaison Officer - Whitehaven)
Mr Danny Young (Environmental Manager – Whitehaven)
Miss Jill Scealy (Environmental Officer – Whitehaven)

Apologies: Clr Colleen Fuller (Gunnedah Shire Rep)

2. Previous Minutes

The minutes of the previous meeting were accepted as a true record on the motion of Mrs Pam Burns and Mr Warren Nicholls.

3. Business Arising from Previous Minutes

3.1. Danny Young advised that the draft Environmental Assessment (EA) was submitted to the Department of Planning (DoP) for adequacy assessment in late August/early September 2010. The EA was also issued to relevant government agencies for review with their comments provided to DoP for consideration.

The main issues identified at this stage are:

- Biodiversity offset;
- Geotechnical issues in relation to the close proximity of the final void to Wean Road; and
- Avoidance of potential groundwater inflows into the final void.

The EA will hopefully be on public exhibition by Christmas and will not be issued for public exhibition until the DoP agrees with all changes proposed by Whitehaven.

- 3.2. "Do Not Litter" signs have been installed on Wean Road.
- 3.3. Tim Muldoon advised that the Regional Resource and Energy Community Discussion Day had been cancelled following initial

concerns from Council about poor publicity after discussion with key farming groups. Subsequent to that, BHP Caroona, Shenhua Watermark and Santos advised that they would no longer be participating. Whitehaven remained committed to the event as we believed it was beneficial for the community. However, as all other stakeholders had pulled out, the event was cancelled.

- 3.4. John Molloy advised that the possible installation of hardstand bays along the haul route has been postponed due to ongoing wet weather and the priority to relocate the depot. John will discuss the hardstand bays with Council and provide an update at the next CCC meeting.
- 3.5. Tony Heinrich investigated the claim that operations were occurring on Sundays and identified that a contractor had been repairing a piece of equipment on a Sunday and then decided to spread some topsoil to allow it to dry out for proposed operations on the Monday. The contractor has been advised that no operations apart from maintenance are to occur on Sundays.
- 3.6. Danny Young advised that attended noise monitoring had been undertaken at the "Penryn" property following concerns raised by the resident. Monitoring was conducted on the 21st September 2010 with all recorded noise levels within compliance limits. Danny advised that he'd had discussions with the residents about the possible temporary use (ie. ~1 week) of a real time noise monitor at the property to gain a better understanding of the ongoing noise levels. Danny also suggested to Rod Barnes that the real time noise monitor could be trialled at his property as well if he is interested.

The monitor has audio playback capabilities to allow determination of noise sources as well as an alarm system to alert the mine when noise levels are approaching the consent criteria, thereby allowing modification of operations to reduce noise levels.

Tony Heinrich asked Warren Nicholls about the noise levels at his residence. Warren Nicholls advised that it's sometimes louder than other times but as a general rule the noise level is acceptable. Warren said he didn't believe a real time noise monitor would register much noise at his property. He indicated that the main noise source is the revs from truck engines when they're dumping.

4. Mine Progress Report

Tony Heinrich advised that over the past 3 months approximately 1.9 million BCM of overburden was moved and 324,000 tonnes of coal was mined. The current strip ratio is approximately 6:1.

5. Review of Environmental Performance

Danny Young presented the environmental monitoring results which are attached in the associated environmental monitoring report.

Warren Nicholls noted that he had seen the nursery at the CHPP and the established trees on the entrance and requested advice on how to grow his own trees. Danny Young said that he would discuss the setup with Warren.

6. Complaints/Complaints Hotline

Complaints were discussed in the Environment Monitoring Report.

7. General Business

7.1. Rod Barnes raised concern that the height of the waste emplacement was increasing. Tony Heinrich confirmed that it has not increased in height since the last meeting but it has moved in a southerly direction so it may appear to be increasing in height. Tony reiterated that we are still permitted to go up an extra 20m to correspond with the highest point in the adjacent State Forest (marked by a survey peg which is at 330mRL or 330m above sea level).

Tony drew a diagram showing how the lower and upper batters extend to a pre-determined point (with steep slopes) and are then battered back to provide for a more subtle slope. Once the waste emplacement has been battered back, it will be covered with soil and planted out with grasses and trees.

7.2. Rod Barnes asked whether the trees along each side of Wean Road will be removed as part of the extension. Tony Heinrich and Danny Young explained that the trees will be removed however this process was part of the initial approval.

Rod believes the trees are stopping some of the dust from the mine and he is concerned about the amount of dust at his property once the trees are removed. Tony Heinrich commented that the trees might also be filtering some of the dust from the unsealed section of Wean Road as it is quite a dusty road. Danny Young said that he is happy to discuss some options with Rod to offset the removal of the trees.

Pam Burns asked when the Wean Road deviation will occur. Tony Heinrich stated that Whitehaven is awaiting Council approval however the deviation is expected to commence late this year or early next year. The trees along the existing Wean Road will not be removed for approximately 12 months (when the pit advances into this area).

- 7.3. Warren Nicholls asked how long it will take until work ceases at the southern end of the waste emplacement and rehabilitation commences. Tony Heinrich advised that he expects dumping to carry on for approximately 6 weeks and then dozer work will commence for reshaping of the overburden dump depending on availability of the dozer.
- 7.4. Warren Nicholls commented that the installation of the "Do Not Litter" signs was a good thing.

7.5. Warren Nicholls referred to the recent advertisement in the paper requestion expressions of interest (EOI) from Aboriginal groups in relation to the proposed Tarrawonga extension and Bluevale/Vickery operation. Danny Young explained that the intention of the advertisement was not to show a large area of inspection but rather to show both operations in one ad and to provide context. Requesting EOI is required by legislation.

The Tarrawonga extension EA will commence over the next 12 months with expected approval in approximately 2 ½ years. The Bluevale operation is only in the early stages with Tarrawonga being more critical. A lot of what happens at Bluevale is dependent on Tarrawonga and the CHPP capacity.

Warren Nicholls asked if residents surrounding Rocglen could expect any impacts from the Bluevale operation. Danny Young said it didn't believe so as the mine is on the other side of Bluevale Road and the ridge.

Tony Heinrich noted that the proposed Coalworks operations would be much closer than the Bluevale site.

A figure identifying the location of all current and proposed operations was referred to in order to provide context.

Tim Muldoon advised that Whitehaven only intends to access Company owned property and would not be accessing any privately owned land to conduct Aboriginal surveys.

- 7.6. Jill Scealy tabled a letter from Gunnedah Shire Council advising that Clr Colleen Fuller had been re-appointed as the Council's delegate on the Rocglen CCC.
- 7.7. Jill Scealy tabled the 2009-2010 Annual Environmental Management Report for the information of the Committee. The report will be available from John Sturgess.
- 7.8. Tim Muldoon noted an action from the Tarrawonga CCC meeting to approach Gunnedah Shire Council for consideration of changed traffic management on the Kamilaroi Highway.

8. Next Meeting

The next meeting of the Rocglen CCC is scheduled for Wednesday 9th February 2011.

Meeting closed 3:58pm

J Sturaess Chairman

Rocglen Coal Mine Community Consultative Committee Meeting #9

Environmental Monitoring Report July – September 2010

Noise Monitoring

Attended Noise Monitoring

Attended noise monitoring was undertaken on the 21st & 22nd September 2010, as required for operational noise monitoring under the Noise Monitoring Program, with results outlined below:

Noise Monitoring Results – 21 st and 22 September 2010 (Day)					
dB(A),Leq Wind speed/					
Location	Time		direction	Identified Noise Sources	
Surrey (22/9)	7:37 AM	44	2.4m/s - SSE	Birds & insects (43), wind (35), RCM (25)	
Costa Vale (21/9)	2:36 PM	33	1.6m/s - SSE	Wind in trees (31), birds (27), RCM (25)	

Noise Monitoring Results – 21 st September 2010 (Evening)						
dB(A),Leq Wind speed/						
Location	Location Time direction Identified Noise Sources					
Surrey	9:21 PM	47	<0.5 m/s, N	Crickets (47), RCM (25)		
Costa Vale	8:51 PM	35	<0.2 m/s, N	RCM (34), insects (29)		

Noise Monitoring Results – 21 st September 2010 (Night)							
dB(A),Leq Wind speed/							
Location	Location Time direction Identified Noise Sources						
Surrey	11:23 PM	31	2m/s - S	Wind (30), frogs (25), RCM (<20)			
Costa Vale	12:04 AM	36	2m/s - S	Wind in trees (36), RCM (<20)			

The results indicate that, under the operational and atmospheric conditions at the time, noise emissions from the mine did not exceed the criterion of 35 dB(A) at either monitoring location.

In addition to the operational noise, the noise from the mine must not exceed 45 dB(A) $L_{1 (1 \text{ min})}$ between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine.

During the night time measurement circuit the L1 (1 min) noise from the mine did not exceed 45 dB(A) at either monitoring location.

Despite these noise monitoring results, additional noise monitoring was undertaken at the "Surrey" residence to address noise concerns raised by the

resident and to attempt to monitor noise levels over a range of weather conditions. The results indicated compliance within the night survey, however noise emissions exceeded the 35 dB(A) criteria by 5 dB at 7.15am on the 31/8/2010. The mine noise was from engine revs (trucks and shovels), dozer tracks and general mine hum. On review of the weather station data at the time it was identified that a temperature inversion was present which would have affected results. Additional noise monitoring was also undertaken at the "Penryn" residence on the 21/9/2010 (following a noise related complaint from the resident) with day, evening and night results all being compliant.

Road Noise Monitoring

Whitehaven Coal is required to monitor road noise to determine that the cumulative noise level generated from traffic generated by Tarrawonga Coal Mine, Canyon Coal Mine (mining ceased) and Rocglen Coal Mine does not exceed 60 dB(A), $L_{eq(1hour)}$ during the day and 55 dB(A), $L_{eq(1hour)}$ during the night. No results were obtained during this period as monitoring is only required once every 6 months. The next round of monitoring will be conducted in December 2010 with results presented in the next CCC meeting.

Unattended Noise Monitoring

Unattended noise monitoring was carried out in September 2010 at both the "Costa Vale" and "Surrey" properties with results provided in the following tables. Unattended monitoring provides noise levels from all sources and does not distinguish mine related noise from other noise sources.

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
18-Sep-10	45.3	35.2	37.8	21.5	19.1	19.1
19-Sep-10	43.6	33.8	38.4	19.4	19.1	19.1
20-Sep-10	48.4	33.9	43.7	22.5	25.5	19.1
Laeq	46	34	41			
L90				22	19	19

Costa Vale

Surrey

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
18-Sep-10	46.1	33.7	37.5	24.4	18.1	17.1
19-Sep-10	40.7	40.1	34.4	21.5	20.9	17.1
20-Sep-10	40	39.5	38.1	24.3	24.8	20.2
Laeq	43	39	37			
L90				24	21	17

Blast Monitoring

Blasting Results

Since the first shot there have been 55 blasts. All blasts during this report period have been compliant within the limits of 115dBL and 5mm/s.

To date, the highest overpressure recorded is 119.9 dBL recorded at "Costa Vale" on the 24th August 2009. The highest ground vibration recorded is 1.50 mm/s recorded at "Roseberry" on the 12th December 2008.

Air Quality

Deposited Dust Results

The deposited dust results (g/m²/month) obtained for the site over the last 12 months are as follows:

		anty (Dt	St Depe	<u> 310011) 1</u>	Counto		
Month	BD2 - Glenroc	BD3 - Belah	BD4 - Surrey	BD5 - Stratford	BD6 - Roseberry	BD7 - Roseglass	BD8 - Yarrawonga
October 2009	3.3	2.3	1.2	2.9	2.8	3.6	2.0
November 2009	1.0	1.5	2.0	2.0	1.2	1.9	2.6
December 2009	2.2	1.6	0.6	1.1	1.0	0.9	0.9
January 2010	1.7	2.8	1.4	2.2	2.5	1.5	1.3
February 2010	2.3	1.2	0.8	0.7	1.4	3.1	1.7
March 2010	4.3	3.7	0.9	1.1	1.2	0.7	0.8
April 2010	1.8	0.7	0.9	0.5	0.4	4.0	1.0
May 2010	0.5	0.9	0.4	0.4	0.3	0.5	0.2
June 2010	1.6	0.8	0.9	0.7	0.7	0.8	1.4
July 2010	0.8	0.6	0.4	0.4	0.4	0.4	0.4
August 2010	1.0	0.4	0.4	2.6	0.6	0.4	0.4
September 2010	0.5	0.7	1.1	0.6	1.8	1.5	0.8
Annual Average	1.8	1.4	0.9	1.3	1.2	1.6	1.1

Air Quality (Dust Deposition) Results

Deposited dust levels have continued to remain at relatively low levels since the last CCC meeting. The deposited dust levels have been relatively consistent over the last 12 months. The annual average has reduced at each site since the last meeting (between $0.5 - 1.1 \text{ g/m}^2/\text{month}$) based on the exclusion of the elevated results in September 2009 associated with regional dust storms.

All monitors remain within the standard concentration threshold of 4g/m²/month.

PM₁₀ Results

The annual average for PM_{10} readings as determined from data from October 2009 to September 2010 is as follows:

Glenroc: 18.32µg/m³ Surrey/Roseberry: 15.45µg/m³

Running average PM₁₀ levels remain below the annual average limit of 30µg/m³.

The 24hr criterion of $50\mu g/m^3$ was not breached at either Glenroc or Roseberry during the period.

The highest PM₁₀ readings at each site are as follows:

Glenroc: 113 μg/m³ (14th December 2009) Roseberry: 101 μg/m³ (8th December 2009)

Water Monitoring

Ground Water

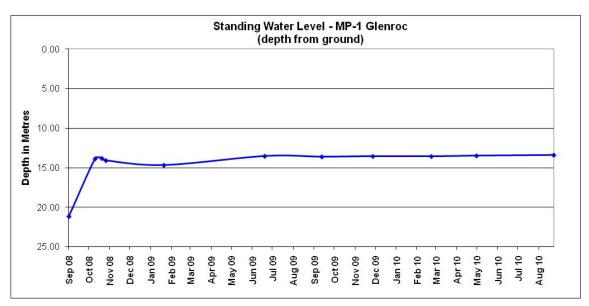
Groundwater monitoring data obtained to date is presented in the following table.

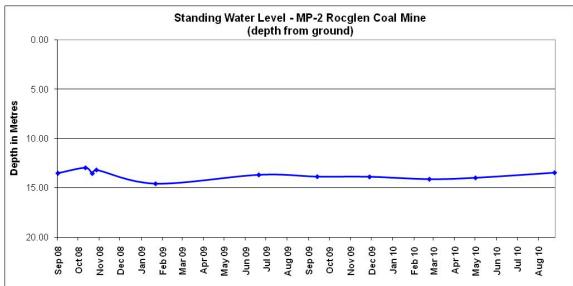
Site	Date	SWL (m)	рН	Elect. Conduct µs/cm
MP1	September 08	21.14		
	13 October 08	13.87		
	23 October 08	13.83		
	29 October 08	14.10	7.6	2360
	23 January 09	14.69		
	22 June 09	13.55	7.8	2250
	15 September 09	13.63		
	30 November 09	13.57	7.85	2250
	25 February 10	13.58		
	3 May 10	13.5	8.06	2100
	26 Aug 10	13.42	8	1650
MP2	September 08	13.53		
	13 October 08	12.98		
	23 October 08	13.56		
	29 October 08	13.20	7.3	4180
	23 January 09	14.60		
	22 June 09	13.70	7	5210
	15 September 09	13.88		
	30 November 09	13.90	6.99	4560
	25 February 10	14.14		
	3 May 10	14	7.37	4760
	26 August 10	13.48	7.07	5060
MP3	September 08	11.81		
	13 October 08	9.06		
	23 October 08	17.36		

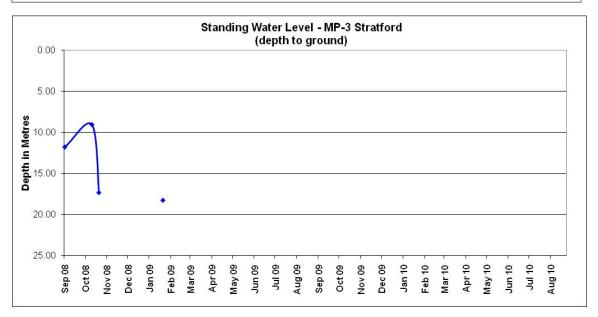
	-			Γ
	29 October 08	N/S Bore Dry		
	23 January 09	18.3 (mud)		
	22 June 09	N/S Bore Dry		
	15 September 09	Dry		
	30 November 09	Dry		
	25 February 10	Dry		
	3 May 10	Dry		
	26 August 10	Dry		
MP4	September 08	22.62		
	13 October 08	23.02		
	22 October 08	23.17		
	29 October 08	N/S Bore Dry		
	23 January 09	24.16 (mud)		
	22 June 09	N/S Bore Dry		
	15 September 09	Dry		
	30 November 09	Dry		
	25 February 10	Dry		
	3 May 10	Dry		
	26 August 10	Dry		
	Ŭ	<u>_</u>		
MP5	September 08	53.13		
	13 October 08	52.9		
	23 October 08	52.96		
	29 October 08	N/S Bore Dry		
	23 January 09	54.44 (mud)		
	22 June 09	N/S Bore Dry		
	15 September 09	Dry		
	30 November 09	54.4	Insufficient wa	ater to sample
	25 February 10	54.48		•
	3 May 10	54.6		
	26 August 10	54.69		
WB1	13 October 08	8.95		4000
	28 October 08	8.85	7.9	1996
	NO ACCESS			
WB2	September 08	16.87		
WDZ	13 October 08	16.49		
			7.7	3430
	28 October 08	16.60	1.1	3430
	23 January 09	17.00	7.0	24.00
	22 June 09	16.65	7.2	3160
	15 September 09	16.45	7 54	0040
	6 January 09	16.45	7.51	2010
	25 February 10	16.48		0.465
	3 May 10	16.56	7.84	2190
	26 August 10	19.54	7.4	3000
WB3	September 08	8.82		
1105	13 October 08	8.87		
	29 October 08	8.95	7.2	4480
		23.72	1.2	4400
	23 January 09			
	10 February 09	9.0	7 5	4000
		8.99	7.5	4380
	22 June 09			
	15 September 09	8.76		0000
	15 September 09 30 November 09	8.76 8.8	7.74	3890
	15 September 09 30 November 09 25 February 10	8.76 8.8 8.69	7.74	
	15 September 09 30 November 09	8.76 8.8		3890 4000 3260

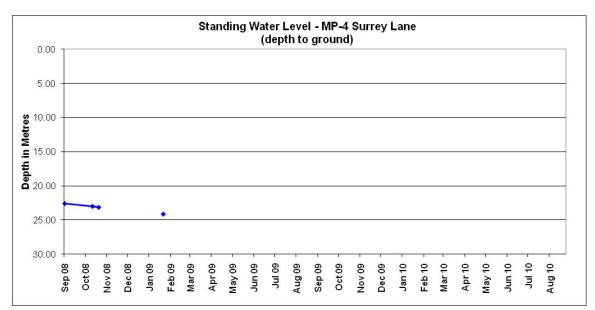
WB4	Casing Sealed	No Access		
	26 August 2010	Unable to dip	7.83	3650
	Ŭ	•		
WB5	September 08	4.23		
	13 October 08	12.92		
	28 October 08	12.85	7.2	8400
	23 January 09	13.1		
	22 June 09	No Access	6.6	7930
	15 September 09	No Access		
	30 November 09	22.93	7.06	4880
	25 February 10	13.14	7.40	0700
	3 May 10	12.97	7.43	6720
	26 August 10	13.01	7.47	7480
WB6	September 08	23.18		
WD0	13 October 08	23.05		
	29 October 08	No Access		
	23 January 09	23.81		
	22 June 09	23.74	Unable to	sample
	15 September 09	23.83		, combio
	30 November 09	24.02	No sample – b	ore equipped
	25 February 10	25.05		
	3 May 10	23.71		
	26 August 10	23.47	Bore eq	uipped
	Ŭ Ŭ			
WB7	September 08	41.75		
	13 October 08	19.11		
	28 October 08	18.90	7.2	2730
	23 January 09	21.35		
	22 June 09		7.4	2690
	15 September 09	Bore equipped		
	30 November 09	Unable to dip	7.3	2260
	25 February 10	Unable to dip		
	3 May 10	15	7.45	2470
	26 August 10	25.91	Unable to sample	 bore equipped
WB8	September 08	No Access		
WD0	13 October 08	No Access		
	29 October 08	No Access		
	23 January 09	46.4		
	22 June 09	32.75	8.2	2240
	15 September 09	43.38		
	30 November 09	Dry		
	25 February 10	49.32		
	3 May 10	32.59	Unable to Sample	
	26 August 10	32.23	Unable to Sample	
WB9	September 08	23.88		
	13 October 08	24.09		001
	28 October 08	24.50	7.5	931
	23 January 09	24.27	7.0	4000
	22 June 09	23.99	7.9	1080
	15 September 09	23.94	7 4 4	4000
	30 November 09	24.05	7.14	1020
	25 February 10 3 May 10	25.58 24.26	Unable to Sample	
	26 August 10	24.26	7.72	1057
	ZU August TU	24.09	1.12	1007

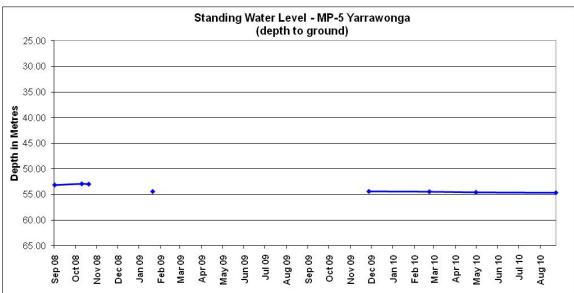
WB10	July 08	13.75		
	September 08	13.80		
	13 October 08	13.77		
	28 October 08	13.9	7.4	2235
	27 January 09	14.23	1.7	2200
	22 June 09	14.01	7	2220
	11 September 09	14.65	1	2220
	30 November 09	14.62	6.89	1690
	25 February 10	14.23	0.03	1030
	3 May 10	14.47	7.93	2010
	24 September 10	14.47	6.7	1833
		14.05	0.7	1055
WB11	July 08	18.11		
MB II	September 08	18.61		
	13 October 08	18.13		
	28 October 08	18.4	7.5	1086
	27 January 09	18.73	1.5	1000
	22 June 09	18.1	8	880
	11 September 09	18.63	0	000
	30 November 09	18.6	6.65	929
	25 February 10		0.05	929
	3 May 10	18.47 18.24	8.37	921
	24 September 10		7.59	
	24 September 10	17.65	7.59	865
WB12	July 08	12.73		
	September 08	12.80		
	13 October 08	12.83		
	28 October 08	12.95	8.1	2152
	27 January 09	13.16	0.1	2102
	22 June 09	12.99	8	2070
	11 September 09	13.05	0	2010
	30 November 09	12.99	8.34	1640
	25 February 10	13.19	0.04	
	3 May 10	13.15	8.27	1390
	24 September 10	13.22	8.71	873
		10.22	0.71	010
Production	September 08	55.24		
Bore	13 October 08	50.18		
	28 October 08	49.90	7.3	4030
	27 January 09	49.90	1.0	4030
	27 January 09 22 June 09	>50	7.1	3580
	27 August 09	~50	7.1	3330
	30 November 09	├	7.2	3160
		Boro oquippod	1.2	3100
	25 February 10	Bore equipped	7 50	2240
	3 May 10		7.52	3310
	26 August 10	Unable to dip	7.42	3340

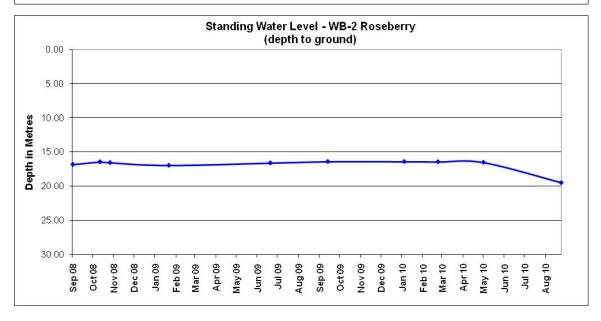


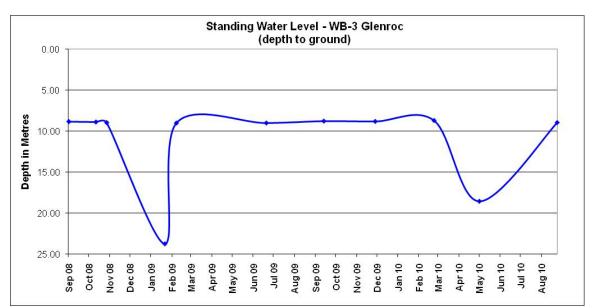


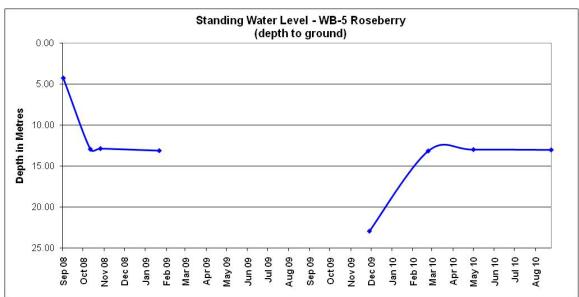


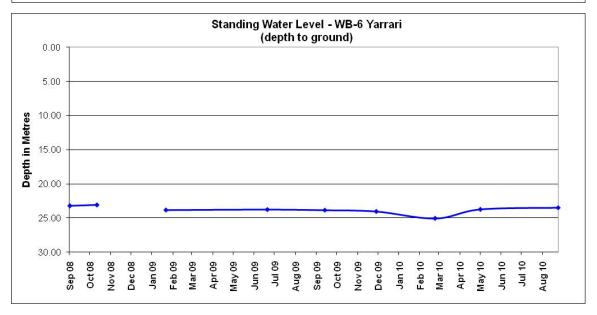


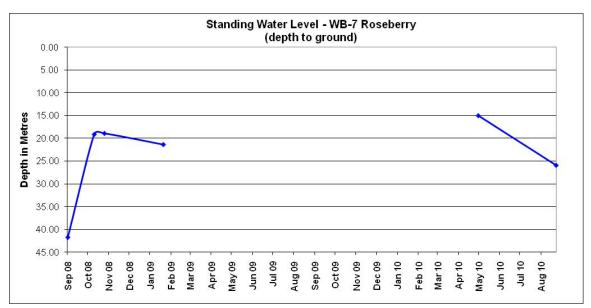


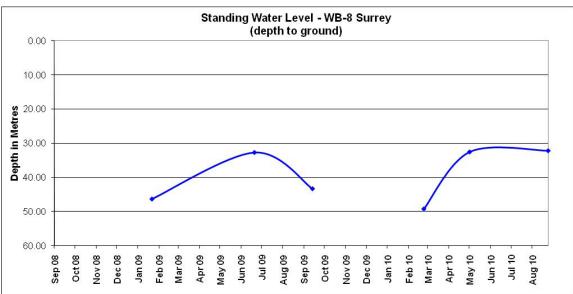


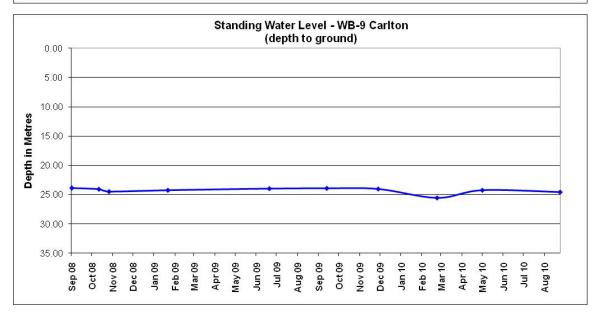


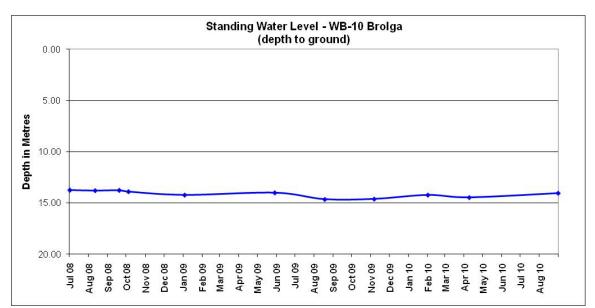


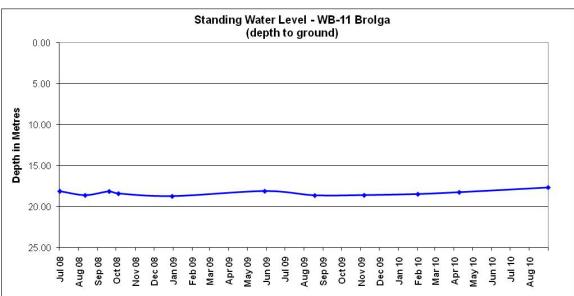


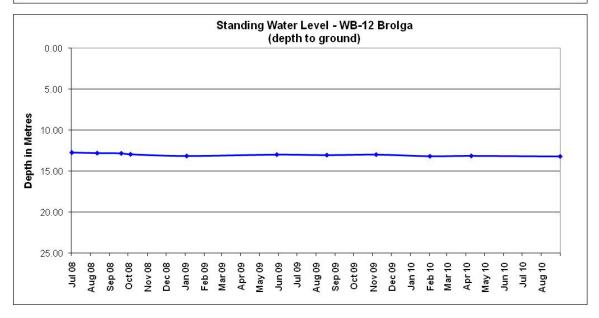












Standing water levels have remained relatively consistent since the last CCC meeting with the exception of WB7, which has dropped approximately 10.91m over the last 3 months, and WB3, which has recovered approximately 9.59 m in 3 months. The recovery of WB3 confirms that the drop between March and May 2010 is likely due to the SWL being checked immediately following water being drawn from the bore. The drop at WB7 is also likely to be a result of SWL being checked at a time when the overhanging windmill was actively drawing water. This will be checked again during November 2010 to confirm if the SWL has recovered.

The next round of monitoring in November 2010 will continue to observe any ongoing trends.

Surface Water

Since the last CCC meeting there has been four wet weather discharges from site and one controlled discharge. The details are as follows:

- Controlled discharge SD3, 26th July 2010: Whitehaven undertook a controlled discharge from SD3 following flocculation of the dam using Floc Blocks. The resultant water quality confirmed compliance with all EPL criteria, with a drop in Total Suspended Solid (TSS) levels from >260mg/L to 17mg/L. This is well within the concentration threshold of 50mg/L allowing approximately 4ML to be discharged using an on-site pump. This provided increased storage capacity in SD3 and thus aimed at prevention of future discharge.
- Wet Weather Discharge SD3, 28th July 2010: Discharge occurred after 23.2mm of rain on the 28th of July and 29.6mm of rain in July leading up to the event. Even though the efforts of flocculation and controlled discharge took place two days earlier, the high amount of rainfall and existing saturated conditions resulted in immediate inflows through SD3 and, ultimately, discharge. The discharge was compliant with all EPL criteria at both SD3 and the downstream sampling location. TSS levels remained below 50mg/L (23mg/L at SD3 & 45mg/L downstream) due to the previous flocculation efforts.
- Wet Weather Discharge SB18 & SD3, 10/11th August 2010: Discharge occurred following 20.6mm of rain on the 10th, in addition to the 85.6mm received over the previous month. The discharge was compliant with all EPL parameters except for TSS. Elevated TSS levels included 2320mg/l at SB18, 964mg/l at Driggle Draggle Creek (DDCK, downstream of SB18), 368mg/L at SD3 and 116mg/L at the Un-named Drainage Channel (UNDC, downstream of SD3). The extremely elevated results from the northern point SB18 and DDCK are likely due to difficulty when sampling due to the ill-defined nature of the channel. Low depths resulted in disturbance of sediment to the surface when obtaining a sample. The close proximity of runoff from the northern subsoil stockpile to SB18 would have also had a significant contribution to SB18's overflow of turbid water to DDCK. It should be noted that SB18 was at full capacity leading up to this discharge with no site capacity to utilise water. The discharge results from SD3 were also elevated despite ongoing efforts of flocculation in this storage. The Floc Blocks have proven to be effective with

time and no additional inflow. However for rapid response after consecutive rainfall events, the results prove the method to be ineffective. The downstream UNDC results have similar sampling issues to DDCK due to the ill-defined nature of the channel.

- Wet Weather Discharge SB18 & SD3, 20th August 2010: Further discharge occurred following 11.2mm of rainfall on the 19th and 4.2mm on the 20th of August. Again the discharge was compliant with all EPL parameters except for TSS. Elevated TSS levels included 2300mg/l at SB18, 912mg/l at DDCK, 172mg/L at SD3 and 152mg/L at UNDC. The results are again due to:
 - Difficulty when sampling due to ill-defined channels;
 - The close proximity of SB18 to the northern subsoil stockpile;
 - Full capacity at every dam on-site due to frequent rainfall, despite prioritising discharge dams for use of water for dust suppression; and
 - Insufficient time for Floc Blocks to adequately settle out the additional inflows of sediment laden water after rainfall events.
- Wet Weather Discharge SB18 & SD3, 10th September 2010: Discharge occurred after 13.4mm over the 9th & 10th and a total of 86.2mm over the previous month. All EPL parameters were compliant except for TSS. Elevated TSS levels included 1220mg/l at SB18, 680mg/l at DDCK, and 229mg/L at UNDC for reasons as stated above. SD3 measured exactly on the threshold with a TSS of 50mg/l. This would be due to a period of approximately 21 days since the previous discharge event allowing adequate time for sediment to settle within the dam. This is also evident in SB18 where TSS levels were reduced from 2300mg/l on the 20th August to 1220mg/l for this event.

Water management onsite has been problematic since the start of the year due to the level of disturbance immediately upstream of SD3 through the extension of SB19 and construction of the additional sediment basin SB21. Disturbance upstream of SB18 from the northern subsoil stockpile has also created similar problems. The frequent nature of rainfall events has made it very difficult to adequately reduce the volume of water stored on site through controlled discharge or dust suppression.

Over the last 8 months, Whitehaven has made a concerted effort to reduce the suspended solids in SD3 through the use of Floc Blocks. This has involved the placement of blocks on the inflow of SD3 and the pumping/recirculation of water through the block to activate the flocculent within the dam. The results prove the blocks are effective with time and no additional inflow, however they are ineffective when a rapid response is required such as over the events of this period.

It should also be noted that difficulties occur with the time frame of which results are obtained from the lab. A typical sample can often take a week to receive the final water quality result. Therefore efforts to complete controlled discharges are often delayed as any inflows of sediment laden water whilst waiting for results completely reverse all previous flocculation efforts.

Investigations into further measures for controlling future discharge events have included an additional water storage structure downstream of SD3. There are also

plans for an additional structure downstream of SB18. Rocglen intends to further trap sediment by placing a polymer concrete liner on the inflow to SD3. Construction for the additional storage structures and liner will begin as soon as ground conditions are dry and the relevant approvals have been received.

More recently, samples of the water from SD3 have been referred to BASF The Chemical Company in an effort to test Magnafloc LT425. This is a more active liquid flocculant that after lab testing has proven to provide extremely fast flocculation with only a very small dose rate of 0.5 - 1 litre per megalitre. The liquid floc is safe to use in dam water with no toxicity to fish or aquatic invertebrates as per information provided in the Material Safety Data Sheet (MSDS). Water treatment involves steady application of the Magnafloc mixture through the inflow of a new pump specifically purchased for the flocculation process. A trial at Tarrawonga has proven the method to only take 1 to 2 days to completely flocculate a 5 megalitre dam to noticeably clear water. Water samples taken following flocculation are currently being analysed by the laboratory. The same process will be used at Rocglen at SB18 and SD3 when ground conditions permit, with results to be provided at the next CCC meeting. If proven effective, the Magnafloc should resolve the ongoing issues due to its ability to allow fast and effective controlled discharge before and in-between rainfall events.

Routine surface water sampling was undertaken at selected sites on the 9th August 2010 to obtain background water quality data. There was nothing in these results that were indicative of any change in water quality since mine commencement. The next round of surface water monitoring will be conducted in November 2010.

<u>Complaints</u>

One complaint has been received since the last CCC meeting (up until the end of September):

22nd Sep 2010

The complainant contacted the Environmental Manager at 9:50pm due to excessive noise from the mine throughout the night.

The Environmental Manager spoke with the complainant in relation to the noise and outlined that monitoring the previous month had identified compliance with the exception of the morning monitor which was affected by temperature inversion. It was also noted that monitoring was undertaken again on the 21/9/2010, the evening and night before his complaint, for which all results remained compliant. The results are displayed in the Attended Noise Monitoring section above. The timing of noise monitoring is of concern to surrounding residents and on this basis, it is intended that real time monitors can be established from time to time to demonstrate impacts of meteorological conditions on noise propagation, as opposed to operations on site.

Rehabilitation

A compost trial will be undertaken during November as a means of assessing the value of compost on the rehabilitation, specifically as it relates to the requirement for establishment of cover crops and general rehabilitation performance. Direct comparison will be made between traditional rehabilitation areas, and the area of compost to determine the most appropriate rehabilitation methodology at the Rocglen site.