## MT ARTHUR MINE COMPLEX

## **COMMUNITY CONSULTATIVE COMMITTEE MEETING**

Thursday 27th January, 2011



<u>Time</u>	lten	<u>n</u>	Person
4:00 4:01	1 2	Welcome and Apologies Declaration of Pecuniary Interest	Chairperson Chairperson
4:02	3	Confirmation of Previous Meeting Minutes	Chairperson
4:03	4	House Keeping & Safety	MAC
4:05 4:10	5 6	Action Points Since Last Meeting Overview of Operations to Date	MAC MAC
4:15	7	Overview of Monitoring Systems	MAC
4:30	8	Overview of Community Support	MAC
4:40	10	General Business	MAC
4:50	11	Next Meeting Date	Chairperson
5:00	12	Meeting Close	Chairperson

## **Environmental Monitoring Data (November – December 2010)**

This monitoring data is provided for your perusal prior to the meeting. We will discuss any exceedances or elevated results since the last meeting or by exception only.

## 1. Blasting Data (November – December 2010)

Ground Vibration Limit	10 mm/sec
Ground Vibration 5% Limit	5 mm/sec
Overpressure Limit	120 dBL
Overpressure 5% Limit	115dBL

<sup>&</sup>quot;The airblast overpressure level from blasting operations in or on the premises must not exceed: (a) 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; and

(b) 120 dB (Lin Peak) at any time.

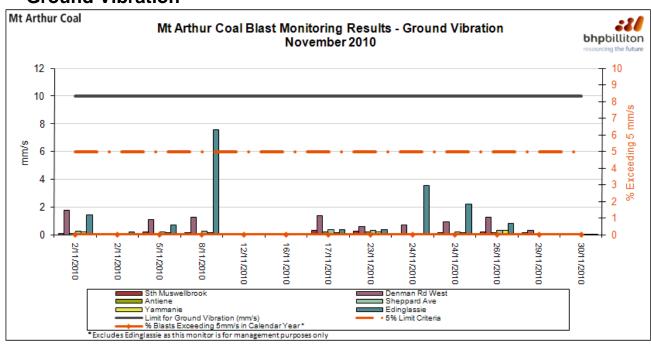
The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:

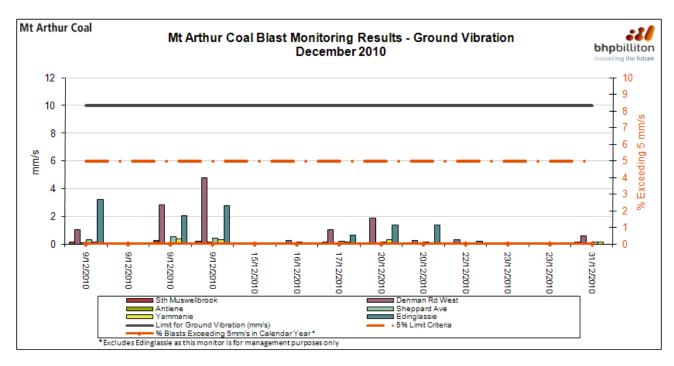
- (a) 5mm/s for more than 5% of the total number of blasts carried out on the premises during each reporting period; and
- (b) 10 mm/s at any time"

## **Blasting Summary:**

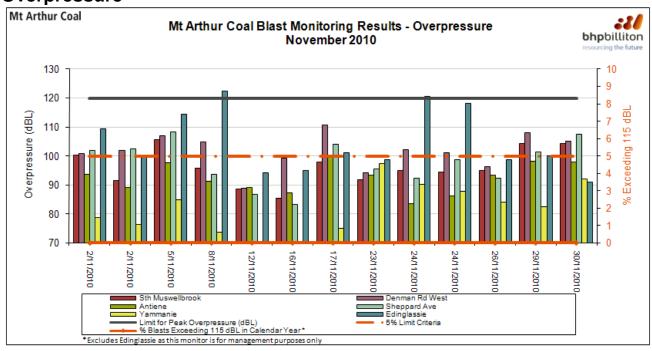
- All licensed blast monitoring stations recorded results below Development Consent criteria for November to December 2010 monitoring period;
- There were 3 road closures in the November December period;
- 30 Blasts in November December 2010;
- 14 blasts were delayed due to adverse weather conditions.

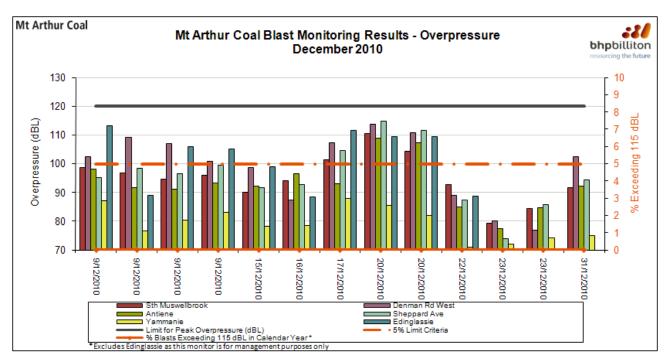
### **Ground Vibration**





## **Overpressure**



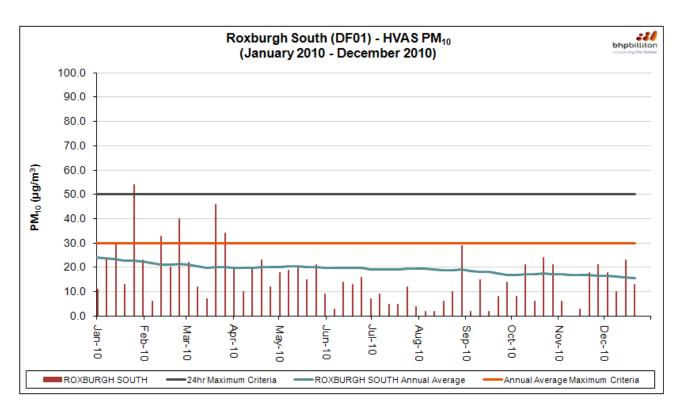


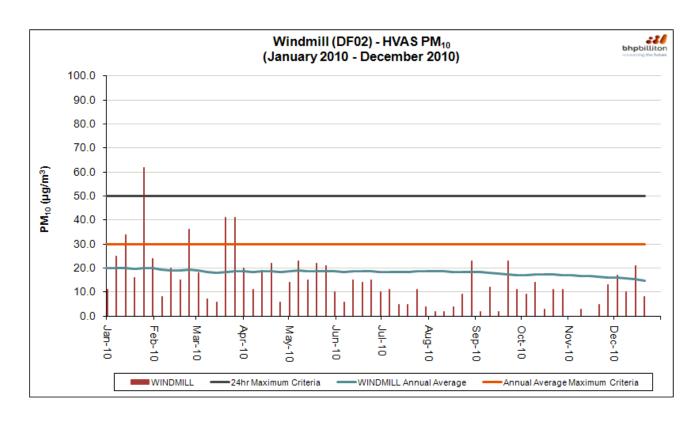
## 2. HVAS Data (November – December 2010)

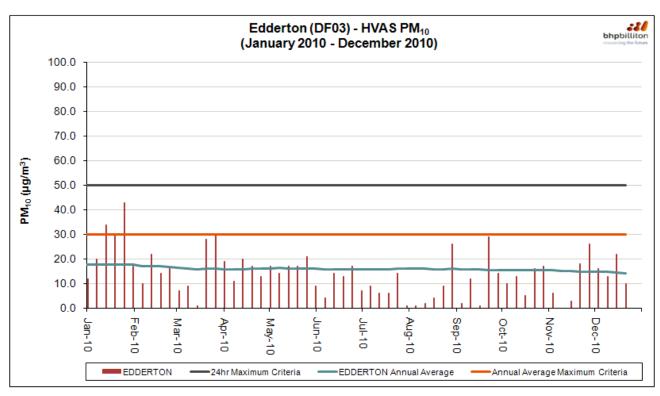
24 hr PM <sub>10</sub> Criteria	50 μg/m <sup>3</sup>
Annual Average PM <sub>10</sub> Criteria	30 μg/m <sup>3</sup>

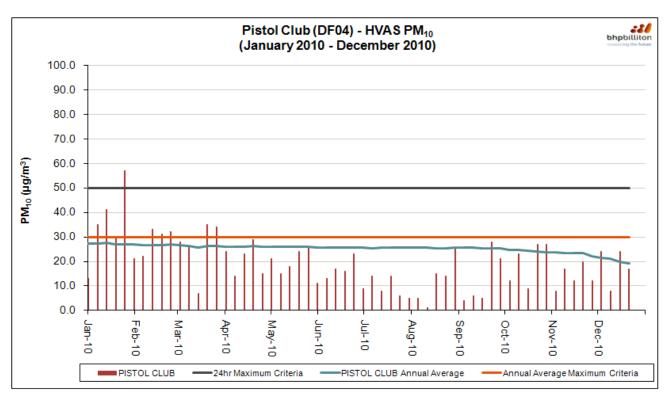
## **HVAS Summary:**

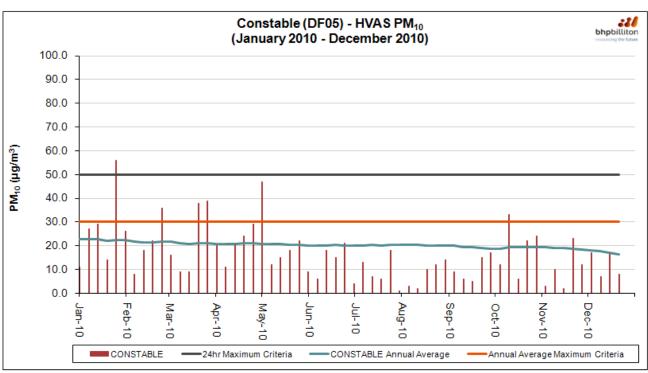
- There were no elevated results in the November to December 2010 monitoring period;
- All HVAS monitoring locations currently have annual averages below relevant Development Consent criteria.

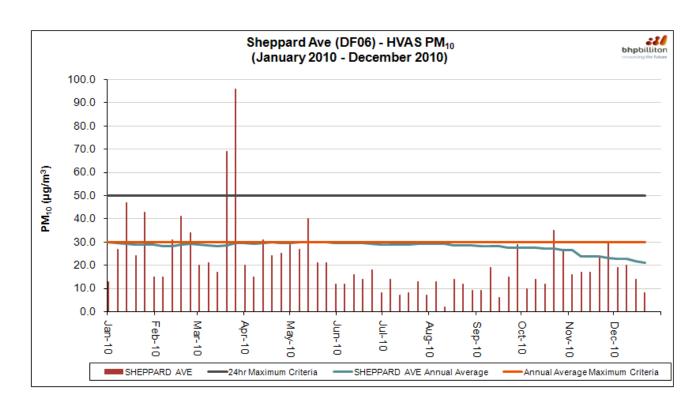


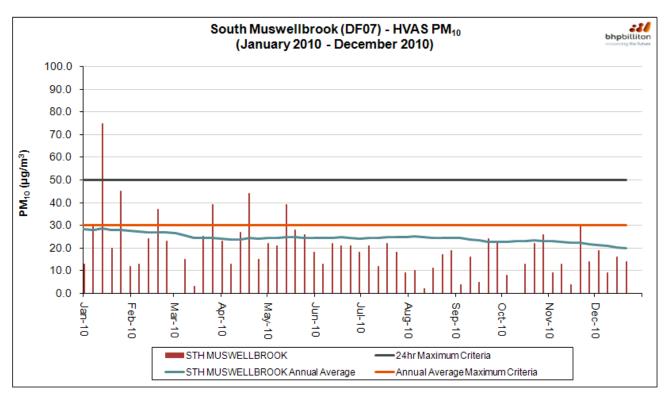


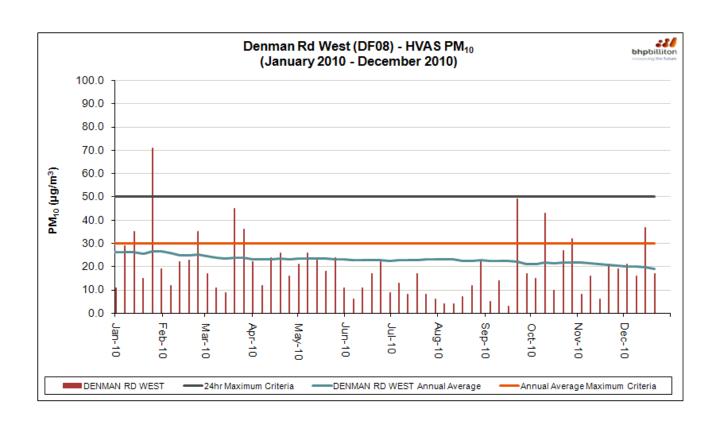










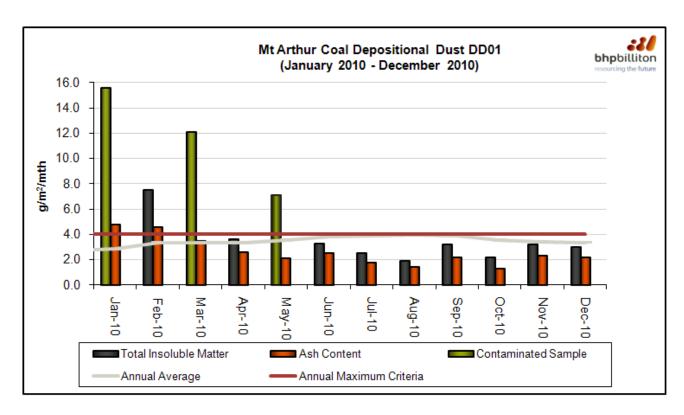


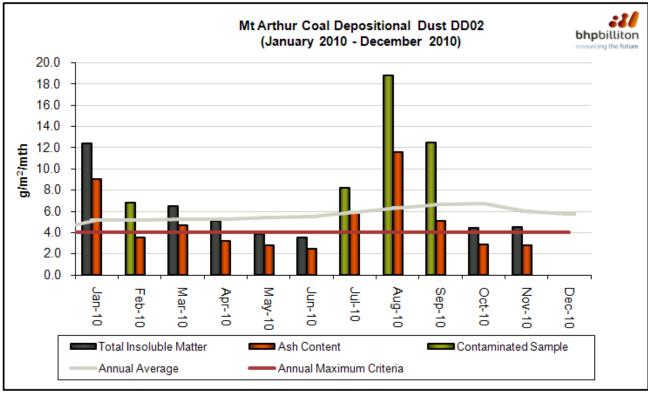
## 3. Depositional Dust Data (November – December 2010)

Depositional Dust Criteria	4 g/m <sup>2</sup> /month
Depositional Dust Chiena	4 g/111-/111011tt1

### **Depositional Dust Summary:**

- There were no depositional dust gauge results recorded in the November December 2010 monitoring period that were above development consent conditions with the exception of DD02 and DD03 in November and DD11 in December;
- Analysis of the predominant wind direction in November determined that due to the location of DD02 and DD03 Mt Arthur Coal's contribution was below consent criteria;
- Analysis of the predominant wind direction in December and using DD05 as an upwind monitor, Mt Arthur Coal's contribution was determined to be below relevant consent criteria:
- DD05 and DD16 are on Mt Arthur Coal owned land and are only used for management purposes;
- All current rolling annual averages are below relevant development consent criteria, with the exception of DD02 and DD03;
- DD02 and DD03 have not been significantly impacted by Mt Arthur Coal's operation. The predominant wind direction for each month that has recorded elevated results has shown that these gauges were upwind of Mt Arthur Coals operation, therefore other activities have impacted these elevated results;
- Results could not be determined at:
  - DD02 December (sample bottle cracked and broke during transport)
  - DD03 (sample bottle and funnel missing)
  - DD20 (compound on private property was locked)
- Contaminated Results for the period were at:
  - DD11 November (excessive bird droppings)
  - DD16 December (excessive insects)
  - DD09 December (excessive bird droppings and vegetation)
  - DD12 December (excessive insects and vegetation)
- Determination of contamination is by a NATA (National Association of Testing Authorities) accredited Laboratory. NATA is Australia's national laboratory accreditation authority.

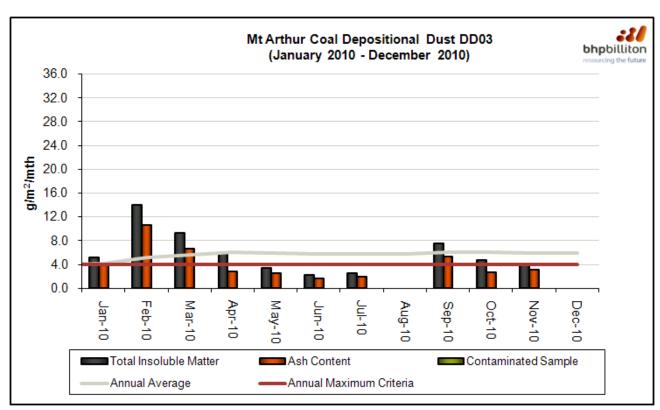




**November** – Investigation revealed that predominant wind direction for the month of November was from the east south east. This monitor is located to the east of the operation. It was therefore determined that Mt Arthur Coal's contribution was below relevant consent criteria.

**December** - No result. Independent monitoring contractor reported that sample bottle was cracked and broke during transport.

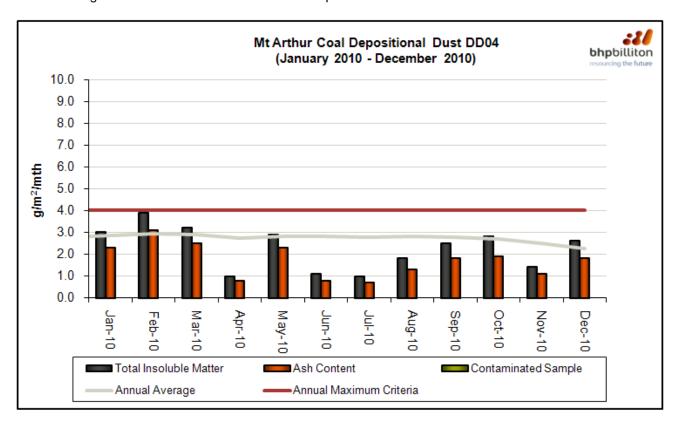
**Rolling Annual Average** is above development consent criteria. Investigations into each elevated result has revealed that Mt Arthur Coal's activities did not contribute to individual elevated results, therefore the elevated annual average did not result from Mt Arthur Coal's operation.

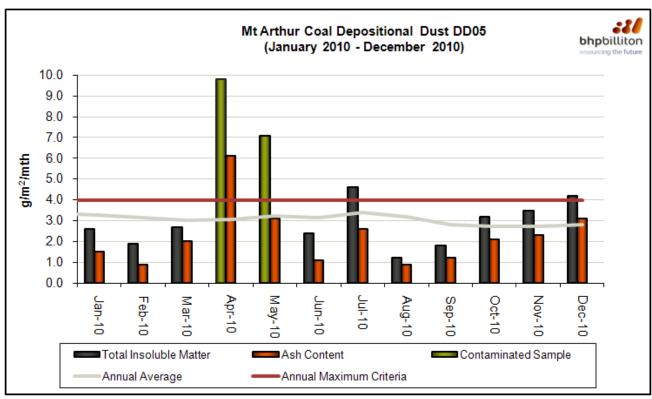


**November** – Investigation revealed that predominant wind direction for the month of November was from the east south east. This monitor is located to the east of the operation. It was therefore determined that Mt Arthur Coal's contribution was below relevant consent criteria.

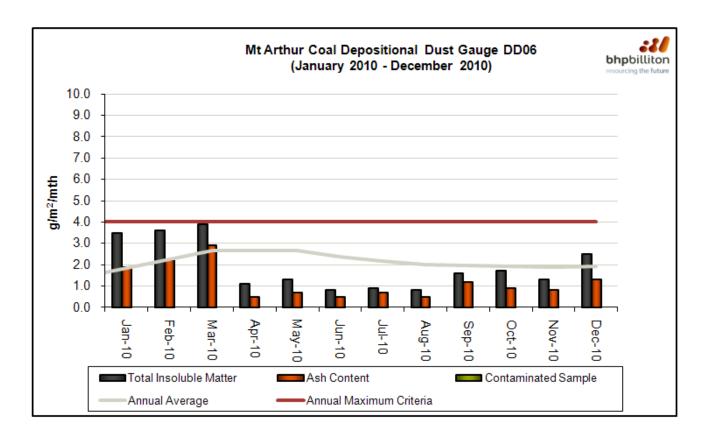
**December** – No result. Independent monitoring contractor reported that sample bottle and funnel were missing.

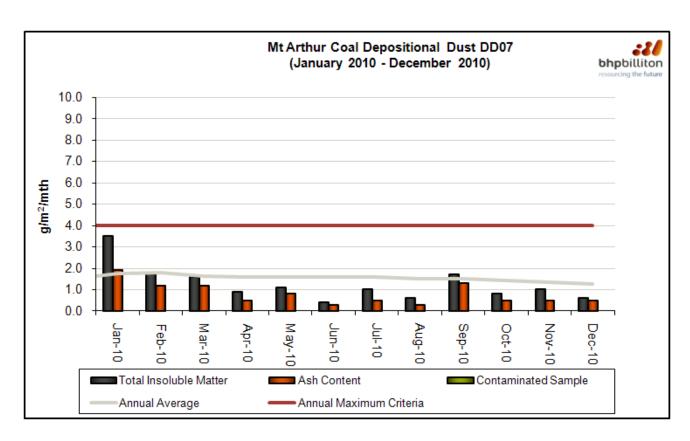
**Rolling Annual Average** is above development consent criteria. Investigations into each elevated result has revealed that Mt Arthur Coal's activities did not contribute to individual elevated results, therefore the elevated annual average did not result from Mt Arthur Coal's operation.

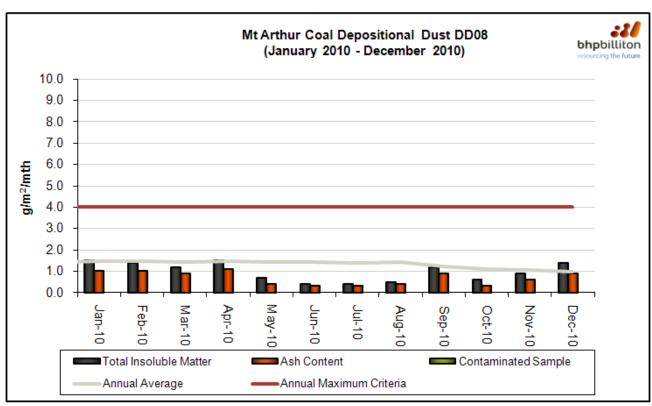


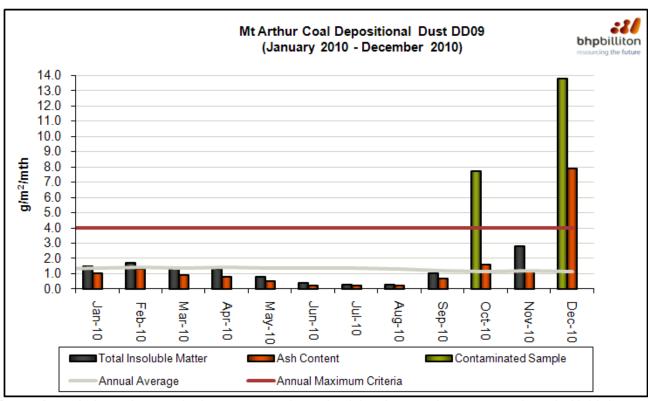


**December** – This monitor is on Mt Arthur Coal owned land and is used for management purposes only.

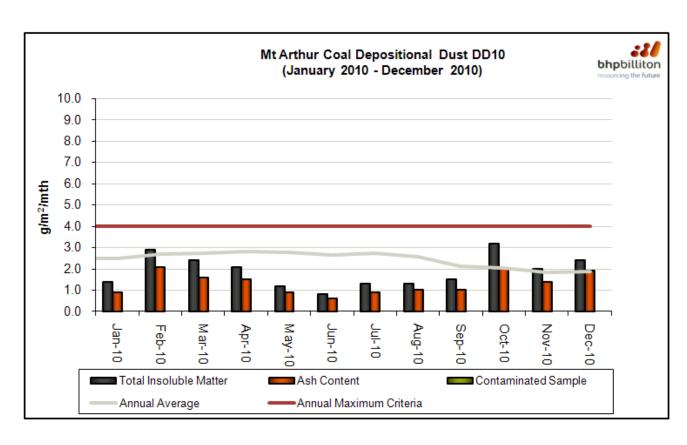


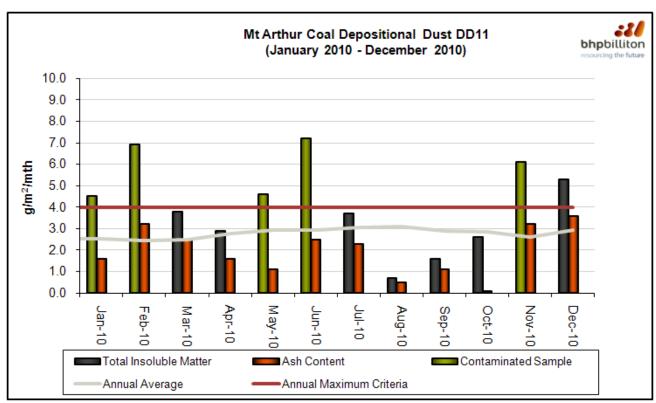






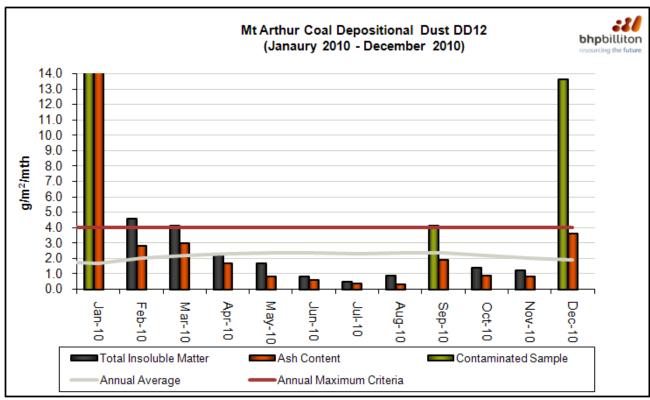
**December** – Independent monitoring contractor determined that the sample was contaminated with bird droppings and vegetation therefore excluded from results.



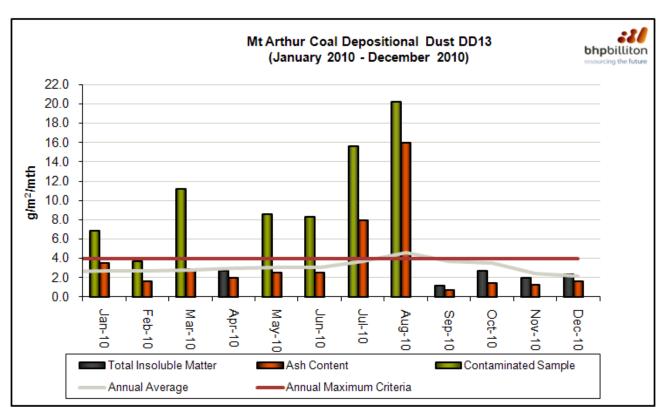


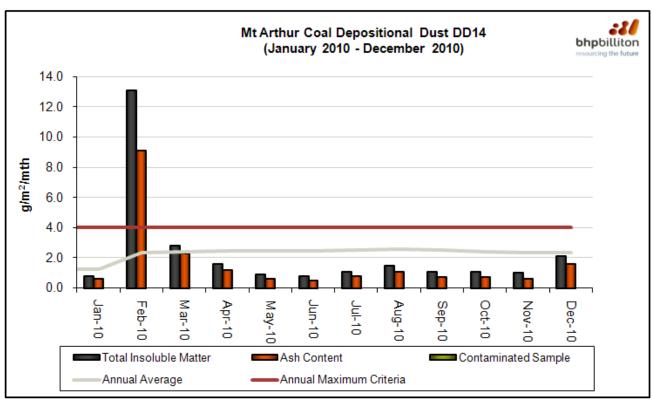
**November** – Independent monitoring contractor determined that the sample was contaminated with bird droppings therefore excluded from results.

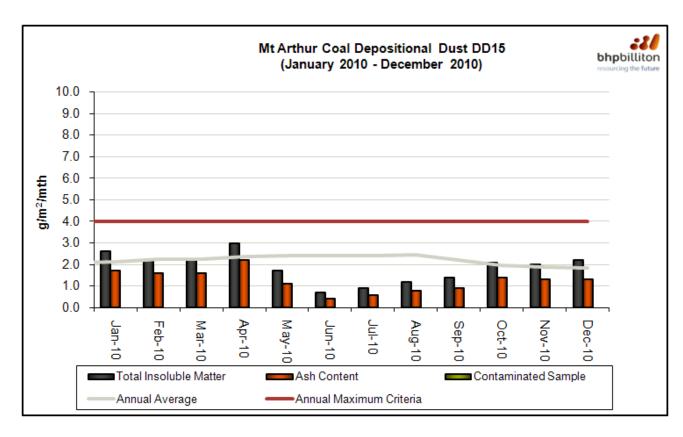
**December** – Investigation revealed that predominant wind direction for the month of December was from the east south east. Using DD05 as an upwind monitor, Mt Arthur Coal's contribution was calculated by subtracting the DD05 result from the DD11 result for this period. It was therefore determined that Mt Arthur Coal's contribution was below relevant consent criteria.

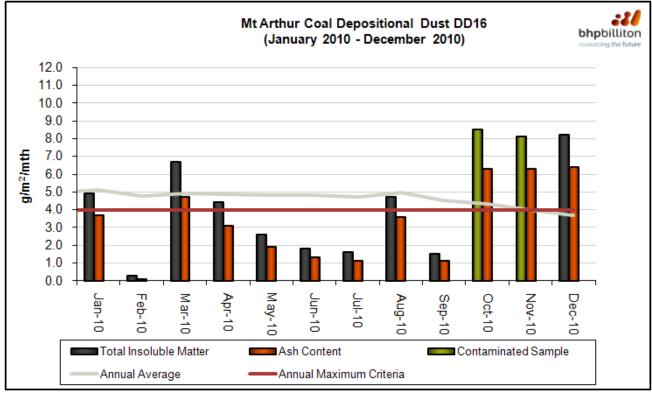


**December** – Independent monitoring contractor determined that the sample was contaminated with insects and vegetation therefore excluded from results.



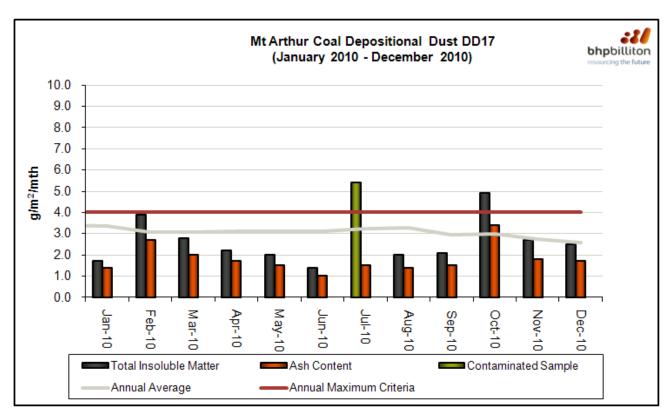


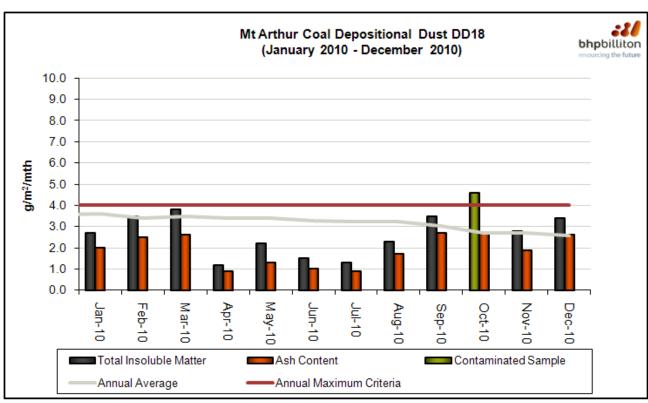


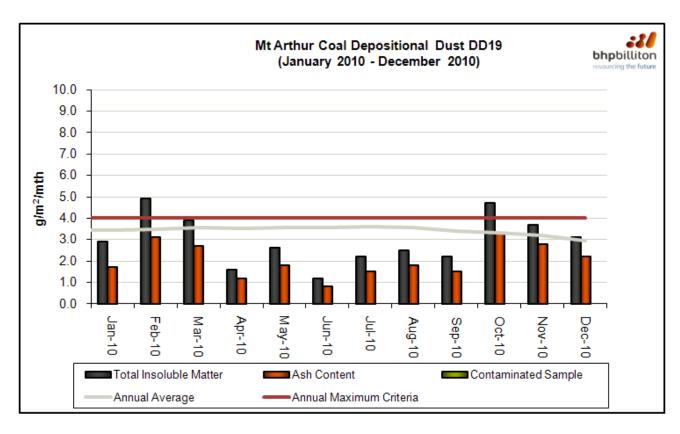


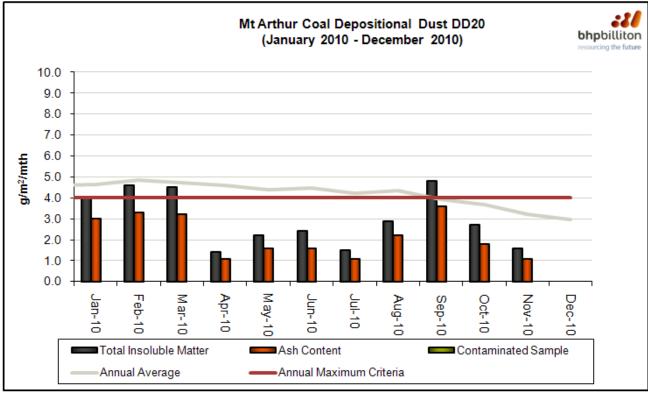
**November** – Independent monitoring contractor determined that the sample was contaminated with insects therefore excluded from results.

**December** – This monitor is on Mt Arthur Coal land and is used for management purposes only.

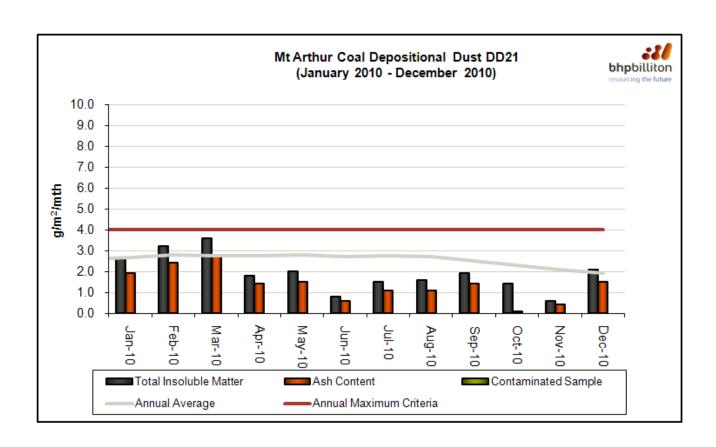








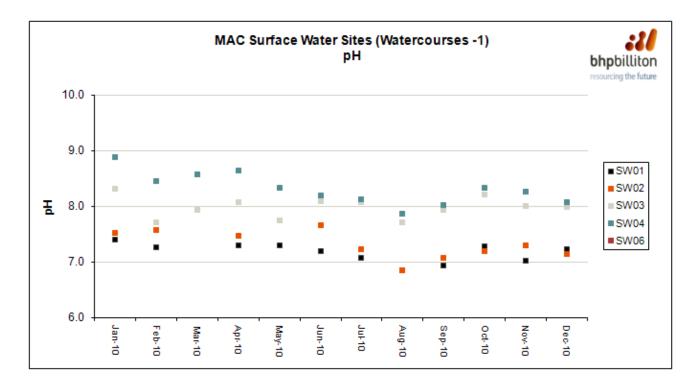
**December** – No result. Independent monitoring contractor reported that there was no access to monitor as the compound on private property was locked. Contact was attempted to be made with the owners of the property but the business was closed for the Christmas holiday period.

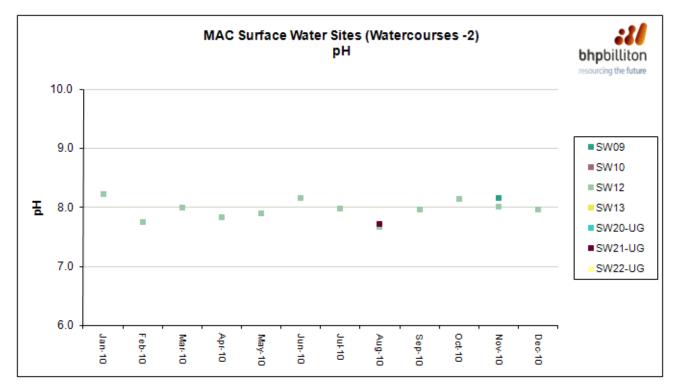


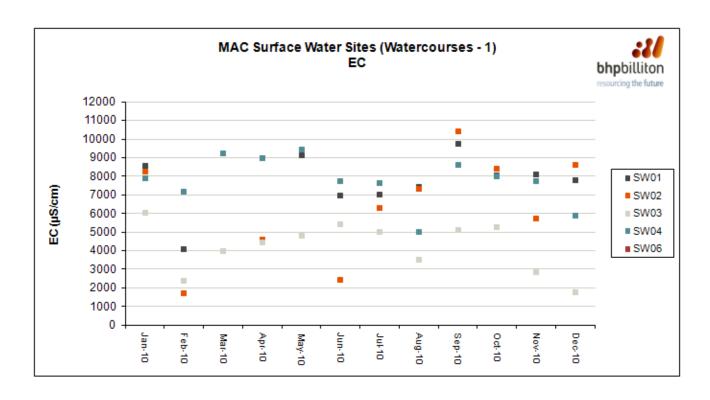
## 4. Surface Water Data (November – December 2010)

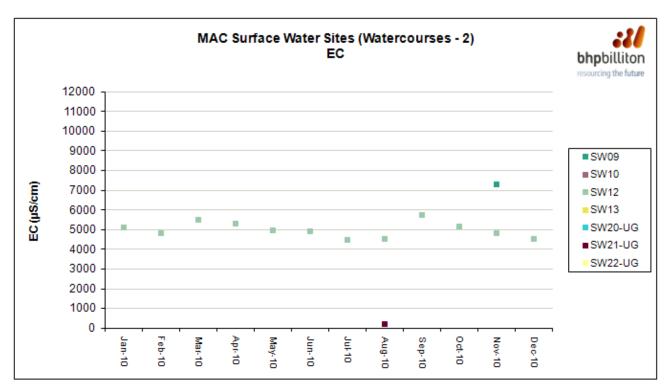
## **Surface Water Summary:**

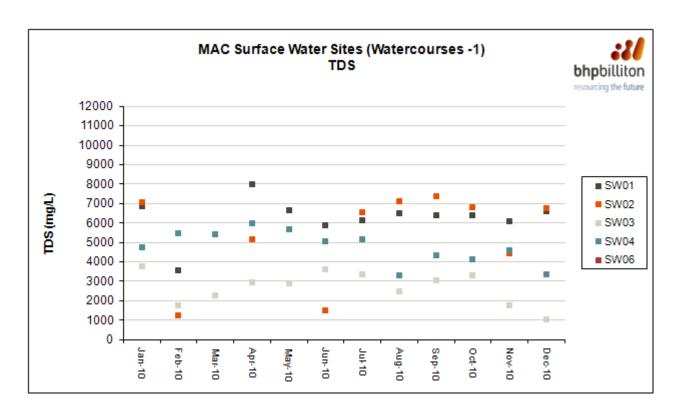
• There were no significant variations in pH or EC in the sampling period.

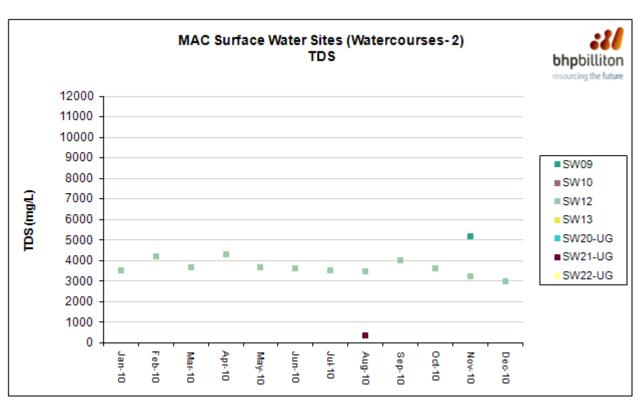


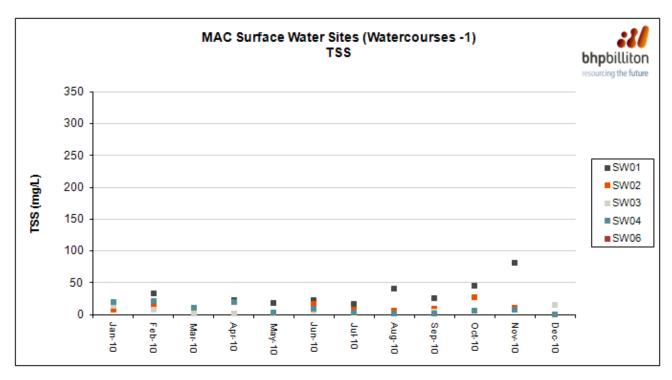


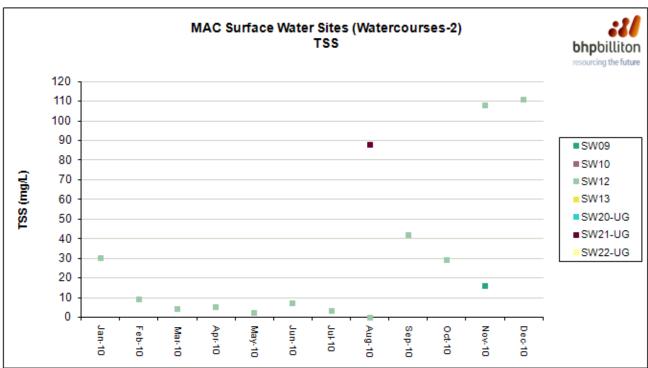


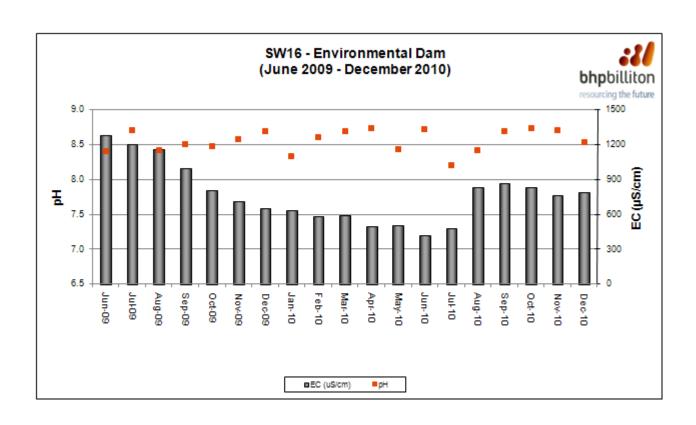




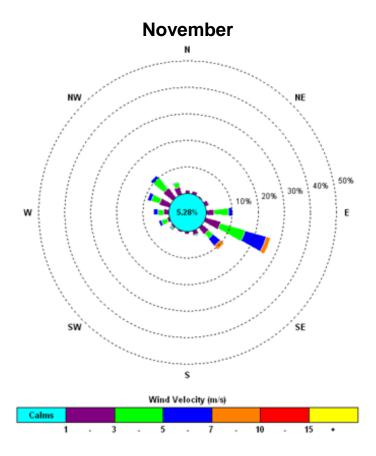


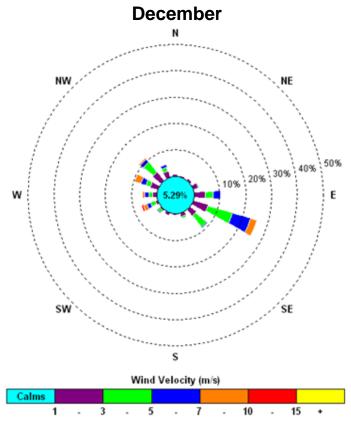






## 5. Weather Data (November – December 2010) Monthly Wind Roses for Mt Arthur Coal Industrial Area Weather Station





VAIS512

	Temperature 2m (C)		Windspeed (m/s)		Sigma Theta		Solar Radiation (W/m2)			Rainfall mm	No. of days			
	Min	Average	Max	Min	Average	Max	Min	Average	Max	Min	Average	Max		rain >1mm
January	11.4	24.0	39.7	0.0	4.4	14.0	0.0	2.5	24.0	0.0	406.9	1961.1	84.6	5
February	18.1	23.1	31.0	0.0	4.7	12.2	0.0	2.2	14.0	0.0	330.7	1961.1	32.7	4
March <sup>a</sup>														
April	6.0	17.9	28.7	0.0	3.2	13.6	0.0	2.6	14.0	0.0	258.5	1498.7	14.5	1
May	2.3	13.6	25.2	0.0	2.7	13.4	0.0	2.9	14.0	0.0	189.4	1372.4	38.9	7
June	0.0	10.7	18.8	0.0	3.1	13.6	0.0	3.0	28.6	0.0	166.2	1244.2	13.9	4
July	1.3	10.9	19.5	0.1	2.8	12.2	1.8	14.4	98.3				69.8 <sup>b</sup>	1
August	0.2	10.5	21.3	0.1	4.6	14.5	1.1	12.2	100.4	0.0	241.6	1405.8	31.0 <sup>b</sup>	0
September	4.4	14.1	26.1	0.0	3.9	13.9	2.4	13.8	103.3	0.0	305.2	1489.2	48.5 <sup>b</sup>	1
October	5.1	16.5	28.7	0.0	4.4	15.2	1.5	13.0	101.8	0.0	322.4	1790.9	72.1 <sup>b</sup>	1
November	8.3	19.1	31.0	0.0	3.6	10.0	2.1	14.7	98.1	0.0	360.4	1999.1	95.0 <sup>b</sup>	1
December	8.8	20.8	34.2	0.0	3.9	13.9	0.0	14.9	98.2	0.0	366.1	1947.9	84.1 <sup>b</sup>	4

<sup>&</sup>lt;sup>a</sup> A logging problem occurred at the Industrial Area meteorological station during March 2010 which resulted in no data being recorded for the month/
<sup>b</sup> Data sourced from Denman Road West and Kircheddar meteorological stations due to problem with the rainfall sensor at the Industrial Area meteorological station.

## **Community Complaints Summary**



Date & Time	From	Issue	Investigation and Response to Complainant			
12/11/2010 12:40:00 PM	Thomas Mitchell Drive	Other Environmental	A complaint was received from a community member regarding the weed species, St Johns Wort. The complainaint reported areas of weed presence within the rail loop and also further to the north within the boundary fence line. The complainant was advised that a site wide weed audit and action plan had been developed with progressive works to commence soon on addressing high priority areas of weed presence.			
15/11/2010 8:30:00 PM	Roxburgh Road	General Dust	Complainant called to notify Mt Arthur Coal that excessive dust had accumulated at his residence. Environmental Superintendent offered to visit residence to observe dust and discuss the situation. Complainant stated that a visit from Mt Arthur Coal was already being arranged and that he would discuss dust issues further during the planned visit.			
28/11/2010 8:30:00 PM	Roxburgh Road	Operational Noise	Complainant stated that mining noise was loud at approximately 7:45 pm. However, by 8:30pm the noise had diminished and was no longer disturbing the complainant. The maximum noise level at the monitor nearest the complainant was 25 dBA between 7:00pm and 10:00pm on November 28, 2010, which encompasses the time period noted by the complainant. The noise level of 25 dBA was well below regulatory thresholds. The maximum wind speed was 3.5 m/s between 7:00pm and 10:00pm on November 28, 2010. The predominant wind direction during the time period was from the south west. After conversation with complainant, Environmental Superintendent contacted the open-cut examiner to notify of complaint and to request that open-cut examiner review operations to ensure noise levels remained low.			
28/11/2010 9:16:00 PM	Castle Rock Road	Operational Noise	Complainant left message on community hotline at 9:16pm stating that they could hear noise from Mt Arthur Coal. However, the message stated that the complainant did not want a return call that night. Consequently, Environmental Superintendent contacted complainant the following day. The complainant informed Environmental Superintendent that the noise was not particularly loud or bothersome and described the noise as a constant groan in the background. The Environmental Superintendent informed the complainant that noise levels from Mt Arthur Coal were within regulatory criteria and offered to provide results, which the complainant declined. The Environmental Superintendent also informed the complainant that the open-cut examiner had been contacted at the time the complaint was			

MAC-1402-Community Complaint Public Summary Report

Date Run: 21-Jan-11 2:06 PM

Date & Time	From	Issue	received and that that the open-cut examiner was asked to review operations and reduce noise generation. The maximum noise level at the monitor nearest the complainant was 25 dBA between 7:00pm and 10:00pm on November 28, 2010, which encompasses the time period noted by the complainant. The noise level of 25 dBA was well below regulatory thresholds. The maximum wind speed was 3.5 m/s between 7:00pm and 10:00pm on November 28, 2010. The predominant wind direction during the time period was from the south west.			
09/12/2010 2:02:00 PM	Denman Road	Blast Vibration	The complainant called regarding a blast that was felt at their residence. The Environmental Superintendent returned the complainants call. Blast results were within statutory limits. At the monitoring station closest to the complainant, blast overpressure was 100.9dBL and blast vibration was 4.78 mm/s. Weather conditions at the time of the blast were favourable with wind speed approximately 3.5 m/s from the north east. A copy of the blast monitoring results was offered to the complainant, however this was declined. The complainant appreciated the prior phone call in the morning advising of the planned blast.			
09/12/2010 2:02:00 PM	Roxburgh Road	Blast Vibration	The complainant called regarding a blast that was felt at their residence and concerns of increased frequency of blasting in the future. The Environmental Superintendent returned the complainants call to discuss further. Blast results were within statutory limits for the Windmill pit blast. At the monitoring station closest to the complainant, blast overpressure was 100.9dBL and blast vibration was 4.78 mm/s. Weather conditions at the time of the blast were favourable with wind speed approximately 3.5 m/s from the north east. A copy of the blast monitoring results was offered to the complainant, however this was declined. The complainant was advised that further blasting is planned within the Windmill pit area but improved technology and blasting techniques would be used to minimise vibration impact levels.			
31/12/2010 11:27:00 AM	South Muswellbrook	General Dust	Complainant stated that dust accumulation on the roof of their residence had increased during the past two months. Environmental Superintendent informed complainant that monitoring results were well below regulatory thresholds, wind direction was not generally conducive to the transport of dust from the mine site to the residence during the past two months, and that nothing had been identified that would have changed dust impacts during the past two months as compared to previous months. Environmental Superintendent offered to provide monitoring results, but the complainant declined. Dust monitoring data revealed that dust levels at the monitor nearest the complainant were			

Date Run: 21-Jan-11 2:06 PM

Date & Time	From	Issue	Investigation and Response to Complainant approximately 2 g/m2 in December and approximately 0.7 g/m2 in November, which are well below the regulatory threshold of 4 g/m2 per month. Wind direction during November and December was predominantly from the southeast and northwest.			
31/12/2010 12:41:00 PM	Roxburgh Road	General Dust	Complainant stated that dust was particularly bad during the morning and preceding evening. Environmental Superintendent informed complainant that open cut examiner had been contacted and would enact additional dust control measures. Complainant confirmed that by the afternoon dust was no longer a problem. Environmental Superintendent offered to provide dust monitoring results, but complainant declined. Monitoring results demonstrated compliance with applicable regulatory thresholds. The peak 24-hour average for PM10 was 28 ug/m3 during the time period associated with the complaint, which was well below the regulatory threshold of 50 ug/m3. Wind direction was variable, but was generally from the south and southwest. Wind speed also varied, peaking at nearly 10 m/s but was generally between 0 and 5 m/s.			

Date Run: 21-Jan-11 2:06 PM



### **Minutes of Meeting (12)**

Location: Mt Arthur Coal Boardroom

Date: Thursday 27 January 2011

Present: Jennifer Lecky (JL) Deputy Chairperson, Craig Flemming (CF) Muswellbrook Shire Council,

Pathum Gunasekara (PG) Muswellbrook Shire Council, Bruce McPherson (BM) Resident, Eddie Constable (EC) Resident, Steve Perkins (SP) Mt Arthur Coal, Scott Mitchell (SM) Mt Arthur Coal, Rebecca Smith (RS) Mt Arthur Coal, Rob Hayes (RH) Mt Arthur Coal, Nicole

Grant (NG) Mt Arthur Coal, Sarah Withell (SW) Mt Arthur Coal

### Meeting Commenced: 4.10pm

### 1. WELCOME AND APOLOGIES

Jennifer Lecky welcomed everyone to the Mt Arthur Coal Community Consultative Committee January 2011 meeting.

### **Apologies**

Apologies were received from Michael White (MW) Mt Arthur Coal and Raymond Webb (RW) Resident.

### 2. DECLARATION OF PECUNIARY INTEREST

No pecuniary interests were declared.

### 3. CONFIRMATION OF PREVIOUS MEETING MINUTES

Moved by JL

Seconded by BM

### 4. HOUSEKEEPING AND SAFETY

RS provided information on general housekeeping and safety at Mt Arthur Coal, this included:

- Entry/Exit
- Voice activated alarm
- Muster Area
- Amenities
- Tea/Coffee
- Emergency Procedure

### 5. ACTION POINTS FROM PREVIOUS MEETING

### Action Item 1 - Arrange map of Mt Arthur Coal for next CCC meeting

This was completed by SM and available at the meeting.

Action Item 2 - Everyone to bring AEMR to next CCC meeting to discuss any queries in data

Discussion on AEMR was opened. No questions were raised.

# bhpbilliton resourcing the future

### MT ARTHUR COAL COMMUNITY CONSULTATIVE COMMITTEE

Action Item 3 - Include notes from Monitoring System slides in the agenda for the next CCC meeting.

This was completed by RS.

### 6. OVERVIEW OF OPERATIONS TO DATE

RH presented information on the following:

- Currently active dump areas.
- Two road closures are planned for early February and none are planned for March or April.
- Production is stable and the current focus is on equipment productivity.
- New equipment is expected January 2012.
- The port is no longer a restraint on production.
- Visual bund is to be extended to Denman Road.
- A portion of Macleans Hill is planned to be mined.
- In approximately 4 weeks a campaign will begin for the further control of spontaneous combustion. The planned tailings dam will also assist with spontaneous combustion control.

### 7. MONITORING SYSTEMS

RS presented an overview of the Mt Arthur Coal monitoring results since the last meeting. Monitoring results were delivered to the CCC members prior to the meeting and were referred to during the course of the presentation.

### Blasting

- All licensed blast monitoring stations recorded results below development consent criteria for November to December 2010 monitoring period;
- There were 3 road closures in the November December period;
- 26 blasts in November December 2010;
- 14 blasts were delayed due to adverse weather conditions.

JL raised concerns about the validity of the dates in the December blast results graphs (four blasts on 9/12/2010). This has since been confirmed to be correct. Three blasts were planned for 9/12/2010, one of which was fired twice due to a misfire.

### **HVAS**

- There were no elevated results in the November to December 2010 monitoring period;
- All HVAS monitoring locations currently have annual averages below relevant development consent criteria.

### **Depositional Dust**

There were no depositional dust gauge results recorded in the November – December 2010
monitoring period that were above development consent conditions with the exception of DD02
and DD03 in November and DD11 in December;



- Analysis of the predominant wind direction in November determined that due to the location of DD02 and DD03 Mt Arthur Coal's contribution was below development consent criteria;
- Analysis of the predominant wind direction in December and using DD05 as an upwind monitor, Mt Arthur Coal's contribution was determined to be below relevant development consent criteria at DD11;
- DD05 and DD16 are on Mt Arthur Coal owned land and are only used for management purposes;
- All current rolling annual averages are below relevant development consent criteria, with the exception of DD02 and DD03;
- DD02 and DD03 have not been significantly impacted by Mt Arthur Coal's operation. The
  predominant wind direction for each month that has recorded elevated results has shown that
  these gauges were upwind of Mt Arthur Coals operation, therefore other activities have
  impacted these elevated results;
- Results could not be determined at:
  - DD02 December (sample bottle cracked and broke during transport)
  - DD03 (sample bottle and funnel missing)
  - DD20 (compound on private property was locked)
- Contaminated Results for the period were at:
  - DD11 November (excessive bird droppings)
  - DD16 December (excessive insects)
  - DD09 December (excessive bird droppings and vegetation)
  - DD12 December (excessive insects and vegetation)
- Determination of contamination is by a NATA (National Association of Testing Authorities) accredited Laboratory. NATA is Australia's national laboratory accreditation authority.

BM requested that it be clearly shown on all graphs presented if a depositional dust gauge is used for management purposes only and not for compliance purposes (Action Item 1).

CF raised concerns about the validity of the methodology used to estimate Mt Arthur Coal contribution to depositional dust results for DD11 in December. SW confirmed that this methodology will be reviewed as a part of the update to the Air Quality Management Plan currently underway.

BM queried whether additional monitoring sites would be implemented due to the extended zone of affectation. SW confirmed that this would also be reviewed as a part of the update to the Air Quality Management Plan

CF requested certificates of analysis for contaminated results (Action Item 2).

### Surface Water

• There are no significant variations in pH or EC in the sampling period.

BM raised discussion about the proposed real time surface water monitoring station. SW confirmed that a suitable site is currently being determined for this.

### 8. OVERVIEW OF COMMUNITY SUPPORT

### Sponsorship Events

- Muswellbrook Women's and Children's Refuge
  - Home establishment assistance program



- Edinglassie Rural Fire Brigade
  - Thermal imaging camera
- C.W.A Merriwa Branch
  - Coffee Making Facility
- Denman Multi Purpose Service
  - Visiting Medical Officer (VMO) recruitment
- Wybong Public Hall
  - Solar panels for the hall

### **Community Participation**

 Employees volunteered their time to wrap, pack and deliver food and toy hampers for the Muswellbrook PCYC Christmas Appeal

### Site Tour

Presentation delivered to Uni NSW students on 12 January 2011

### **Community Contributions**

- 34% Community Development
- 7% Education and Training
- 16% Health
- 1% Art/Culture
- 29% Sport/Recreation
- 13% Environment

### Sustainable Communities Project

- The consultation component of the Sustainable Communities Project was completed December 2010.
  - Mt Arthur Coal received an excellent response to the project, with around 650 people from the Muswellbrook, Denman, Aberdeen and surrounding areas contributing through personal interviews, online surveys, workshops or other activities.
  - Around 300 people also attended the whole of community barbecue at the Muswellbrook Regional Arts Centre in early December to see and hear the feedback from the rest of the community.
- Draft reports including Social Economic Impacts and Opportunities Assessment (SEIOA),
   Stakeholder Engagement and Collaboration Plan (SECP) and Communication Tools have
   been received from consultants and are currently being reviewed internally.
- Next steps:
  - Develop a five-year plan for investment through Community Development Fund;
  - Share outcomes with miners, council other community groups for stronger decision making.

JL queried whether a summary report would be produced and distributed to the community. SW acknowledged that feedback would be given but the format and timing had not yet been established.



### Complaints

- 3 Dust
- 2 Vibration
- 2 Noise
- 1 Other
- Three operational dust complaints, two from Roxburgh Rd plus one from South Muswellbrook.
- Two blast complaints from Denman Rd and Racecourse Rd, both vibration-related from a single blast in Windmill Pit.
- Two noise complaints from Castle Rock Road and Roxburgh Road related to operational noise on the evening of November 27th.
- One complaint was received from Thomas Mitchell Drive related to the presence of the weed species, St Johns Wort.

### 9. GENERAL BUSINESS

BM highlighted that the current CCC composition might not meet the requirement that local land owners are adequately represented.

EC raised concern about a reduction in the role of the CCC with reference to past and current development consents. The role of the CCC was discussed and SW confirmed that no major changes to the role of the CCC are planned under the MAC Consolidation Project Approval.

### 10. NEXT MEETING DATE

Wednesday, March 23rd 2011.

### Meeting Closed: 6:00pm

ACTION ITEM NO.	ITEM	ACTIONED BY
1	Clearly display on all graphs presented in the CCC agenda if a depositional dust gauge is used for management purposes only and not for compliance purposes.	RS
2	Provide CF with certificates of analysis for contaminated depositional dust results for November and December 2010.	RS