### Minutes of Sunnyside Coal Mine Community Consultation Committee

- Meeting Held: Wednesday 11<sup>th</sup> March 2009 at 4:00pm
- Venue: The meeting was held in the Board Room at Namoi Valley Brickworks.

#### Commencement Time: 4:00pm

#### 1. Present and Apologies

Present:Mr Michael Broekman ( Chairman)<br/>Mr Bruce Reid (Community Representative)<br/>Ms Treena Daniels (Community Representative)<br/>Mr Brian Cullen (G.M Tech. Services)<br/>Mr Danny Young (Group Environmental Manager)<br/>Mr Colin Hulm (Project Manager)<br/>Cr. Steve Benham (Gunnedah Shire Rep.)<br/>Mr Tony Jones ( Community Liaison Officer)

**Apology:** An apology was received from Mr Glen Bailey. Accepted on the motion of Ms Daniels and Cr. Benham.

#### 2. Overview of CCC Process

Mr Danny Young, on behalf of the Whitehaven Group welcomed the the committee members to the first CCC meeting for the Sunnyside Coal Mine. Danny gave an overview of the role of the CCC and the Committees relationship to both the committee and the community with emphasis on the liaison role it could play. He pointed out that their local knowledge and contacts would be essential in bringing any problems to the attention of the company for resolution before they became an issue.

#### 3. Mine Progress Report

Danny and Buck outlined progress at the mine to date and explained why the early shipment of one load of Coal was essential. The construction of the haul road was discussed and details were given on progress with the haul route along the Highway and Blackjack Road. Mr Reid expressed the view that now the mine was to be a one shift operation it would be easier for the public to accept it.

#### 4. Review of Environmental Performance

Danny presented his environmental report for the period since the mine commenced development. (Copy attached)

#### 5. Complaints/Complaints Hotline

Danny advised that the complaints hot line was in operation and advised that the number is 0427 106384.

#### 6. General Business

Mr Reid raised the question of the roundabout at the corner of Blackjack and Quia Road and expressed the view that its design made it confusing and hard to negotiate.

Following the meeting he relayed a conversation he had with a truck driver who had to drive his B Double the wrong way around it to turn left from Quia Road into Blackjack Road.

It was explained that the roundabout was a requirement of Council and that the design was undertaken to meet Council requirements. On this basis, Namoi Mining had limited control over the design and function of the roadworks. It was also advised that once line-marking and signage for the roundabout was finished it should be clearer to traffic.

Ms Daniels advised that although she had relocated to Sydney for family reasons she still believed she would be a valuable committee member. Ms Daniels indicated she would continue to travel back to Gunnedah on a frequent basis thereby maintaining her links with the community. The CCC concurred and requested that she remain a member.

#### 7. Date for next meeting

Wednesday 10<sup>th</sup> June 2009 – 4:00pm, venue to be decided.

8. The committee adjourned at this point and travelled to the mine site for an inspection of progress to date.

Michael Broekman - Chairman



# SUNNYSIDE COAL MINE

## COMMUNITY CONSULTATIVE COMMITTEE

**MEETING #1** 

**ENVIRONMENTAL MONITORING REPORT** 

#### **Management Plans and Monitoring Requirements**

The project approval and Environment Protection Licence issued for the Sunnyside Coal Project includes the requirement to undertake a range of monitoring in order to assess the impacts of the operation on the adjacent environment. Direct monitoring relates to the following parameters:-

Noise Monitoring Air Quality Monitoring Blast Monitoring Surface and Groundwater Monitoring

In addition to these monitoring programs, the project approval and Environment Protection Licence requires activities on the site to be undertaken in accordance with the following management plans:

Environmental Management Strategy Environmental Monitoring Program Water Management Plan Noise Monitoring Program Air Quality Monitoring Program Blast Monitoring Program Landscape Management Plan Aboriginal Cultural Heritage Management Plan Energy Savings Action Plan Waste Management Plan

To date, the Sunnyside Coal Project has developed and received Departmental Approval for the following management plans:

Environmental Management Strategy Water Management Plan Noise Monitoring Program Air Quality Monitoring Program Blast Monitoring Program Aboriginal Cultural Heritage Management Plan

#### Waste Management Plan

The remaining plans will be submitted to the Department on a progressive basis.

In addition to the above requirement, on the grant of the Mining Lease for this project, it was a requirement that a Mining Operations Plan be developed to identify the mining methodology over the life of the mine. The Mining Operations Plan also defines rehabilitation commitments for the site and provides conceptual rehabilitation design criteria.

#### **Community Consultative Committee**

As part of the Community Consultative Committee process, Namoi Mining will present an Environmental Monitoring Report at each CCC meeting. The purpose of the report is to provide members with an up to date account of environmental performance across the site in accordance with the above mentioned management plans and monitoring programs.

#### Aboriginal Cultural Heritage Management Plan (ACHMP)

The ACHMP provides the basis for identification of known Aboriginal Sites in proximity to the areas of disturbance associated with the mine site. The ACHMP was prepared in consultation with the local Aboriginal community, with specific reference to the Red Chief Local Aboriginal Land Council, Bigundi Biame Gunnedar Traditional People, Gunida Gunyah Aboriginal Corporation and Min Min Aboriginal Corporation. With the assistance of these groups, and the Department of Environment and Climate Change, the mine lease and surrounding area was assessed for Aboriginal artefacts, and management strategies adopted to minimise impact on these sites. There were no Aboriginal sites identified within the area of disturbance associated with mining activities.

In terms of ongoing operations, a procedure has been adopted whereby soil stripping activities are undertaken in conjunction with representative Aboriginal stakeholders to monitor soil stripping for any evidence of Aboriginal artefacts. To date, no additional artefacts have been identified.

#### Site Water Management Plan

A Site Water Management Plan has been established in order to account for clean and dirty water flows from the surface of the mining lease. Dirty water flows (from areas of disturbance) are directed to purpose built sediment basins in order to settle out excess sediment before being able to release from the project site. Water is drawn from dirty water storages to enable use on site for dust suppression purposes. Dirty water will be managed in order to reduce the potential for off site discharge. In the event of off-site

discharge, water discharging from site will be sampled to ensure it meets applicable concentration thresholds pertaining to Electrical Conductivity, Total Suspended Sediment, pH and Oil and Grease.

Clean water flows from on the project site are directed away from disturbed areas and into storage dams. In the event that dirty water storage is insufficient for dust suppression requirements, additional water will be taken from the clean water storages.

Pit water will be directed to sumps within the void or to purpose built pit water storage dams. Pit water will be utilized for dust suppression purposes across the site. Preference in terms of water use will given to Pit Water, followed by dirty water, and then clean water.

In addition to sampling during discharge events, water will be sampled from water storages on site on a quarterly basis to define water quality. Sampling will also be undertaken from tributaries located off site to define water quality parameters upstream and downstream of the mine site.

#### **Noise Monitoring**

The consent for the Sunnyside operations requires noise monitoring on a monthly basis for the first 6 months of operations to determine if noise levels are within modeled expectations. Monitoring will be undertaken from the following properties:-

"Illili", "Ivanhoe", "Ferndale", Plain View", and "Lilydale"

Noise monitoring will be undertaken by specialist consultants using attended methods as well as unattended monitoring using noise loggers.



#### Noise Limits:

The noise limits applicable to operations on the Sunnyside Project Site, as prescribed in the Project Approval and Environment Protection Licence, are as follows:-

Day/Evening LAeq(15 minute)	Land
35	Any residence on, or more than 25% of, any privately owned land, except "Lilydale".

Impact Assessment Criteria dB(A).

To date, noise assessment on the project site has been undertaken in relation to sound power levels of earthmoving equipment which has confirmed machine noise levels are within prescribed rating limits for each machine. An initial round of attended and unattended monitoring was also undertaken for construction phase monitoring, all of which identified compliance within noise limits. The attended monitoring results were as follows:-

Location	Date/Time	dB(A), Leq	Wind Speed Direction	Noise Source
Ferndale	29/01/2009 12:54pm	33.1	1-2m/s, NE	Wind(30), Birds(30), SCM(<25)
Lilydale	29/01/2009 1:27pm	40.1	1-2m/s, NE	Birds(38), Insects(35), SCM(inaudible)

Attended Noise Levels – 29<sup>th</sup> January 2009

The latest round of full monitoring is being conducted during the week of 9<sup>th</sup> March 2009.

#### Air Quality Monitoring

Air quality monitoring is required on all sides of the project site to assess deposited dust and particulate matter levels that may be attributable to mining operations. Specifically, the project is required to meet the following consent criteria.

Pollutant	Averaging Period	Criterion
Total Suspended particulate (TSP) matter	Annual	90 ug/m3
Particulate matter < 10ug (PM10)	Annual	30 ug/m3

Pollutant	Averaging Period	Criterion
Particulate matter < 10ug (PM10)	24 hour	50 ug/m3

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited Dust	Annual	2g/m2/month	4g/m2/month

Dust monitors have been established on all sides of the project site, as well as two High Velocity Air Samplers (HVAS) located on the "Illili" and "Lilydale" properties.



Deposited Dust and High Velocity Air Sampler.

Deposited dust monitoring has been occurring since 2007 in order to establish background dust levels prior to the commencement of mining activities. The HVAS for PM10 measurements have only recently been established.

Deposited dust levels for the site to date are as presented in the tables below:

Month	SD1 Ferndale	SD2 Sunnyside	SD3 Plainview	SD4 Lillydale	SD5 Ivanhoe
January 2007					
February 2007					
March 2007	0.7	10.9	1.9	2.1	2.4
April 2007	1.0	6.2	2.0	1.1	1.8
May 2007	0.5	0.6	0.7	0.5	0.4
June 2007	0.3	0.4	0.6	0.3	0.3
July 2007	0.8	2.5	1.0	0.7	0.7
August 2007	0.4	0.5	0.8	0.5	0.4
September 2007	0.4	9.7	0.6	0.4	0.9
October 2007	1.8	16.7	4.7	1.3	1.2
November 2007	0.7	22.3	1.0	0.6	1.6
December 2007	1.2	52.1	1.8	2.2	8.0
Annual Average	0.8	12.2	1.5	1.0	1.8

#### BACKGROUND DUST DATA 2007

Month	SD1 Ferndale	SD2 Sunnyside	SD3 Plainview	SD4 Lillydale	SD5 Ivanhoe	SD6 IIIiii	SD7 Innisvale
January 2008	1.0	42.2	2.9	1.1	7.3		
February 2008	0.9	86.9	1.6	1.3	5.4		
March 2008	2.6	212.0	11.6	1.4	2.2		
April 2008	1.0	25.4	2.1	0.8	3.6		
May 2008	0.5	28.9	0.9	0.8	7.3		
June 2008	0.4	8.9	9.7	0.5	3.6		
July 2008	0.3	11.7	5.1	0.3	0.2		
August 2008	0.8	24.1	4.9	0.7	1.1		
September 2008	0.6	30.3	2.3	0.9	2.0		
October 2008	1.9	122.0	2.8	1.4	3.5		
November 2008	0.8	64.7	1.5	1.2	2.2		
December 2008	1.1	NLS	1.6	1.2	3.0	3.0	0.9
Annual Average	1.0	59.7	3.9	1.0	3.5		

#### **DEPOSITED DUST DATA 2008**

Month	SD1 Ferndale	SD2 Sunnyside	SD3 Plainview	SD4 Lillydale	SD5 Ivanhoe	SD6 IIIiii	SD7 Innisvale
January 2009	3.8	NLS	3.4	2.0	27.3	1.3	4.3
February 2009							
March 2009							
April 2009							
May 2009							
June 2009							
July 2009							
August 2009							
September 2009							
October 2009							
November 2009							
December 2009							
Annual Average	3.8	#DIV/0!	3.4	2.0	27.3	1.3	4.3

Deposited Dust Data 2009

The deposited dust data for the site is highly variable and clearly influenced by other factors including agricultural activity and road dust. The Sunnyside monitor was removed in December 2008 on commencement of mining at the monitor location, and was replaced with the "Innisvale" and "Illili" monitors. Generally, dust levels will be monitored taking into account weather conditions and dominant wind directions to determine dust sources.

#### PM10 Data

Site	Date	Result	Report Average	Annual Average
Illili	24 <sup>th</sup> Jan 09	25		
	30 <sup>th</sup> Jan 09	37	31.0	31.0
Lilydale	18 <sup>th</sup> Jan 09	24		
	24 <sup>th</sup> Jan 09	25		
	30 <sup>th</sup> Jan 09	28	25.7	25.7
Criteria		<50		<30
		24hr max		Annual average max

As only measurements for January have been obtained to date, the quantification of an annual average is based on insufficient data at this time. The results indicate compliance with the 24hr maximum criteria.

#### **Blast Monitoring**

The consent for the Sunnyside project also included a requirement to monitor blast activities to assess impacts in terms of peak overpressure and ground vibration.

The consent limits specified for blasting are as follows:-

Air-blast Overpressure Level (dB(Lin Peak))	Allowable Exceedance
115	5% of the total number of blasts in a 12 month period
120	0%

Peak particle velocity (mm/s)	Allowable Exceedance		
5	5% of the total number of blasts in a 12		
	month period		
10	0%		

Blast monitoring has been identified to occur at four locations over the life of the project. Blasts will be monitored at the "Ivanhoe", "Illili", "Plain View" and "Innisvale" properties, with "Illili" and "Innisvale" monitoring being undertaken on a rotational basis. Blast results to date are as per the table below:-

SHOT NO.	DATE	MONITOR LOCATION	PEAK GROUND PRESSURE (mm/s)	PEAK OVERPRESSURE (dBL)	TIME
1	18/Nov/08	Ivanhoe	0.91	110.7	1:44:48 PM
1	18/Nov/08	Plain View	0.86	107.8	1:44:58 PM
1	18/Nov/08	IIIiIIi	0.56	107.4	1:42:25 PM
2	25/Nov/08	Innisvale	0.40	103.2	3:10:59 PM
2	25/Nov/08	Plain View	DNT	DNT	DNT
2	25/Nov/08	IIIiIIi	0.61	105.5	3:10:48 PM
3	28/Nov/08	Ivanhoe	0.65	96.7	9:59:16 AM
3	28/Nov/08	Plain View	0.50	112.3	9:59:16 AM
3	28/Nov/08	IIIiIIi	1.24	100.9	9:59:07 AM
4	28/Jan/09	IIIiIIi	0.10	112.0	9:59:26 AM
4	28/Jan/09	Ivanhoe	DNT	DNT	
4	28/Jan/09	Plain View	DNT	DNT	

Monitoring results demonstrate compliance with blast criteria.

#### **Groundwater Monitoring**

Groundwater monitoring is undertaken from a range of monitoring piezometers and water bores both within and surrounding the project site. Standing Water Level checks are undertaken on a quarterly basis, with full water quality sampling to be undertaken on a 6 monthly basis. Monitoring results to date for Standing Water Level is as per the tables attached.

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P1	GW968386	15-Jun-07		11.25	11.51
		7-Aug-07	835	11.20	11.46
		19-Dec-07	1535	11.25	11.51
		24-Jan-08	1140	11.21	11.47
		5-Mar-08	835	11.17	11.43
		7-Apr-08	1515	11.17	11.43
		8-May-08	1550	11.16	11.42
		3-Jun-08	Too Wet to Access		
		9-Jul-08	905	11.16	11.42
		11-Aug-08	845	11.15	11.41
		17-Nov-08	1655	11.19	11.45
		19-Jan-09	1355	11.22	11.48
		26-Feb-09	1645	11.00	11.30

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P2	GW968387	15-Jun-07		16.77	17.61
		7-Aug-07	850	16.77	17.61
		19-Dec-07	1545	16.70	17.54
		24-Jan-08	1155	16.69	17.53
		5-Mar-08	845	11.69	12.53
		4-Apr-08	1450	16.61	17.45
		8-May-08	1600	16.58	17.42
		3-Jun-08	Too wet to access		
		9-Jul-08	916	16.58	17.42
		11-Aug-08	856	16.56	17.40
		17-Nov-08	1703	16.50	17.34
		19-Jan-09	1404	16.50	17.34
		26-Feb-09	1630	16.25	17.10

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P3	GW968388	15-Jun-07		12.50	12.92
		7-Aug-07	945	12.72	13.14
		19-Dec-07	1620	12.99	13.41
		24-Jan-08	1235	13.08	13.50
		5-Mar-08	925	13.15	13.57
		4-Apr-08	1430	13.20	13.62
		8-May-08	1626	13.25	13.67
		3-Jun-08	942	13.29	13.71
		9-Jul-08	958	13.36	13.78
		11-Aug-08	940	13.41	13.83
		17-Nov-08	1726	13.57	13.99

19-Jan-09	1308	13.65	14.07
26-Feb-09	1430	14.10	14.40

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P4	GW968389	15-Jun-07		60.48	60.90
		7-Aug-07	925	60.53	60.95
		19-Dec-07	1645	60.57	60.99
		24-Jan-08	1255	60.98	61.40
		5-Mar-08	910	60.57	60.99
		7-Apr-08	1540	60.56	60.98
		8-May-08	1700	60.53	60.95
		3-Jun-08	958	60.98	61.40
		9-Jul-08	1038	60.98	61.40
		11-Aug-08	1000	60.57	60.99
		17-Nov-08	1735	61.23	61.65
		19-Jan-09	1318	65.03	65.45
		26-Feb-09	1505	66.37	66.67

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P5	GW968390	15-Jun-07		40.25	40.75
		7-Aug-07	915	39.69	40.19
		19-Dec-07	1635	40.42	40.92
		24-Jan-08	1250	40.40	40.90
		5-Mar-08	905	40.49	40.99
		7-Apr-08	1530	40.51	41.01
		8-May-08	1644	40.52	41.02
		3-Jun-08	953	40.52	41.02

9-Jul-08	1034	40.59	41.09
11-Aug-08	955	40.52	41.02
17-Nov-08	1731	40.90	41.40
19-Jan-09	1314	41.50	42.00
27-Feb-09	1500	41.50	42.00

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P6	GW968391	15-Jun-07		16.70	17.20
		7-Aug-07	1000	17.79	18.29
		19-Dec-07	1605	17.79	18.29
		24-Jan-08	1225	17.81	18.31
		5-Mar-08	950	17.83	18.33
		4-Apr-08	1445	17.75	18.25
		8-May-08	1618	17.76	18.26
		3-Jun-08	913	17.76	18.26
		9-Jul-08	948	17.78	18.28
		11-Aug-08	928	17.78	18.28
		17-Nov-08	1719	17.78	18.28
		19-Jan-09	1256	17.83	18.33
		2-Mar-09	1230	17.79	18.29

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P7	GW968392	15-Jun-07		12.77	13.04
		7-Aug-07	905	12.75	13.02
		20-Dec-07	1050	12.73	13.00
		24-Jan-08	1345	12.72	12.99
		5-Mar-08	855	12.74	13.01
		7-Apr-08	1520	12.70	12.97
		8-May-08	1712	12.71	12.98
		3-Jun-08	1006	12.72	12.99
		9-Jul-08	1045	12.73	13.00
		11-Aug-08	1013	12.72	12.99
		17-Nov-08	1750	12.70	12.97
		19-Jan-09	1343	13.70	13.97
		26-Feb-09	1410	12.65	12.90

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P8	GW968393	15-Jun-07		15.63	15.63
		7-Aug-07	910	15.70	15.70
		19-Dec-07	1630	21.25	21.25
		24-Jan-08	1240	21.30	21.30
		5-Mar-08	900	19.25	19.25
		7-Apr-08	1525	20.13	20.13
		8-May-08	1710	20.49	20.49
		3-Jun-08	1003	18.79	18.79
		9-Jul-08	1043	19.12	19.12
		11-Aug-08	1010	19.72	19.72
		17-Nov-08	1747	16.74	16.74
		2-Mar-09	1300	15.85	15.95

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
27356	GW027356	15-Jun-07			
		7-Aug-07	1005		
		19-Dec-07	1555		
		24-Jan-08	1220	14.30	14.61
		5-Mar-08	1000	14.25	14.56
		4-Apr-08	1447	14.11	14.42
		8-May-08	1605	15.30	15.61
		3-Jun-08	852	17.61	17.92
		9-Jul-08	925	14.12	14.43
		11-Aug-08	908	16.05	16.36
		17-Nov-08	1710	13.92	14.23
		19-Jan-09	1250	14.45	14.76
		26-Feb-09	1400	14.50	14.80

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
45098	GW045098	15-Jun-07		10.42	10.76
		7-Aug-07	935	10.58	10.92
		19-Dec-07	1615	10.69	11.03
		24-Jan-08	1230	10.76	11.10
		5-Mar-08	920	10.82	11.16
		4-Apr-08	1440	10.87	11.21
		8-May-08	1622	10.89	11.23
		3-Jun-08	919	10.91	11.25
		9-Jul-08	952	10.96	11.30
		11-Aug-08	933	11.00	11.34
		17-Nov-08	1723	11.19	11.53
		19-Jan-09	1300	11.49	11.83
		26-Feb-09	1330	No Access	

Results to date indicate minor variability in groundwater levels. Ongoing data collection will provide for longer term analysis of groundwater impact. A full water quality sampling event is scheduled for April 2009.

#### **Environmental Reporting**

Namoi Mining is obliged to provide all environmental monitoring data to the Department of Planning, as well as Gunnedah Shire Council. In addition, monitoring results must be placed on the company website for public view.

Any exceedance in assessment criteria as specified in the consent and or Environment Protection Licence also requires Namoi Mining to provide relevant advice to the Department of Planning and Department of Environment and Climate Change within 24 hours of being aware of the exceedance. A written report outlining the cause of the exceedance, and the response to ensure the potential for future exceedance is minimised is to be forwarded to the agencies within 6 days of the initial notification.

Namoi Mining will also be required to submit an Annual Environmental Management Report(AEMR) to the relevant agencies each year. The AEMR must include all monitoring results, discussion of results, and environmental performance over the reporting period, as well as the goals and objectives for the following year. This AEMR will also be presented to the CCC.

#### Complaints

A Sunnyside Coal Mine complaints line has been established and advertised in the local paper. Anyone with concerns or specific complaints relating to the Sunnyside operations is encouraged to contact the complaints line to lodge their concern so that the matter can be dealt with and resolved as soon as possible.

The complaints line number is: 0427 106 384.

### Minutes of Sunnyside Coal Mine Community Consultation Committee

- **Meeting Held:** Wednesday 10<sup>th</sup> June 2009 at 4:00pm
- Venue: The meeting was held in the Board Room at Namoi Valley Brickworks.

#### Commencement Time: 4:00pm

#### 1. Present and Apologies

Present:Mr Michael Broekman (Chairman)<br/>Mr Bruce Reid (Community Representative)<br/>Mr Danny Young (Group Environmental Manager)<br/>Cr. Steve Benham (Gunnedah Shire Rep.)<br/>Mr Tony Jones (Community Liaison Officer)<br/>Miss Jill Scealy (Environmental Officer)<br/>Mr Glenn Bailey (Community Representative)

Apology: An apology was received from Mrs Treena Daniels.

#### 2. **Previous Minutes**

Moved that the minutes of the previous meeting were a true and accurate record by Stephen Benham, seconded by Bruce Reid.

#### 3. Business Arising from Previous Minutes

#### 3.1 Roundabout on Quia Road

The matter of the roundabout was discussed and identified construction was to Council design requirements. Discussions between Mr Reid and semi trailer drivers has identified that truck drivers are generally ok with the design of the roundabout.

It was noted that trucks turning west off Blackjack Road were veering onto the incorrect side of the road. This was to be raised with Toll.

Mr Reid raised the point that he thought the road leading to the roundabout should be divided to avoid the possibility of vehicles travelling onto the wrong side of the roundabout.

#### 3.2 Update on Coal Haul Route Construction

It was advised that there have been protracted delays with the

RTA in providing approval to the design of the intersections with the Oxley highway. A delegation from Whitehaven and the firm project managing the road construction works was to meet with the RTA the following week to expedite progress.

In the meantime, Whitehaven proposes to obtain an agreement with the RTA and Council to enable coal haulage to commence prior to completion of the haul route construction works, subject to conditions those agencies seek to impose. Coal haulage is expected to commence in July 2009.

The road maintenance agreement to be entered into with Council for the haul route is currently being negotiated.

Bruce Reid raised concerns as to the size of drainage structures at the Oxley Highway end of Coocooboonah Lane and believed they would be insufficient to handle water flows. Tony Jones agreed, but noted that they were as per engineers design.

#### 4. Mine Progress

An update was provided on mine progress with 250533bcm of overburden moved during March-May 2009, and 25000 tonnes of coal mined.

It was explained that delays in haulage route construction works had contributed to minimal quantities of coal mined to date. It was also explained that at the current point in time, it was anticipated that the Sunnyside operation would run below the approved production rate of 1,000,000 tonnes of ROM coal per year, with production likely to equate to around 300,000 tonnes per year. This is on the basis of current production levels at other Whitehaven operations and required contract/shipment targets. On this basis, the Sunnyside operation will not, at this point in time, construct a coal bin or conveyor/feeder, with coal to be loaded to trucks via front end loader. This may change in the future, depending on demand for Sunnyside Coal.

#### 5. Environmental Report

Danny Young provided the Environmental Monitoring Results, a copy of which is attached to these minutes.

#### 6. Complaints

One complaint has been received since the last meeting. This related to noise concerns from the "Glendower" property. In response to the complaint, Mr Stubbs was advised that at the next noise monitoring event, monitoring would also be conducted at his residence to verify compliance.

#### 7. **General Business**

It was confirmed that the CCC wished to retain Treena Daniels on the committee despite her recent move to Sydney. Treena maintains links with the Gunnedah community and returns frequently to the area.

#### Date for next meeting 8.

Wednesday 10<sup>th</sup> September 2009 – 3:30pm, Namoi Valley Brickworks. Tour of mine site to follow meeting.

7

Michael Broekman - Chairman



# SUNNYSIDE COAL MINE

## COMMUNITY CONSULTATIVE COMMITTEE

## **MEETING #2**

**ENVIRONMENTAL MONITORING REPORT (Feb-May 2009)** 

#### Noise Limits:

The noise limits applicable to operations on the Sunnyside Project Site, as prescribed in the Project Approval and Environment Protection Licence, are as follows:-

Day/Evening LAeq(15 minute)	Land
35	Any residence on, or more than 25% of, any privately owned land,
	except "Lilydale".

Impact Assessment Criteria dB(A).

Noise measurements taken since the last meeting are as tabulated below:

Location	Date/Time	dB(A), Leq	Wind Speed Direction	Noise Source
Ferndale	7:43am	47	0.5m/s, SE	Traffic(46), Birds & Insects(39), <b>SCM(34)</b>
IIIiii	8:02am	39	0.5m/s, SE	Birds(36), Wind(33), <b>SCM(34).</b>
Lilydale	8:25am	48	0.5m/s, SE	Birds(47), Road Works(41), <b>SCM(inaudible)</b>
Plain View	8:58am	46	0.5m/s, SE	House construction(45), Birds(37), Road Works(36), <b>SCM</b> inaudible

#### Attended Noise Levels – 11<sup>th</sup> March 2009

### Attended Noise Levels – 27<sup>th</sup> May 2009

Location	Date/Time	dB(A), Leq	Wind Speed/Direction	Noise Source
Ferndale	12:25pm	35	1.0m/s, SW	Birds/Insects(34), Sheep(28), SCM inaudible
IIIiii	12:04pm	46	1.0m/s, SW	Birds/Insects(46), Dog(39), Traffic(32), SCM inaudible
Lilydale	11:25am	44	1.0m/s, W	Birds(43), Plane(35), <b>SCM(28)</b>
Plain View	11:45am	32	1.5m/s, WSW	Birds/Insects(29), Traffic(26), SCM(26).

The above noise monitoring results confirm full compliance with noise criteria at all receivers during the noise surveys.

The next round of noise monitoring is being conducted during the week of 15<sup>th</sup> June 2009. This will include both attended and unattended monitoring events.

#### Air Quality Monitoring

Air quality monitoring is required on all sides of the project site to assess deposited dust and particulate matter levels that may be attributable to mining operations. Specifically, the project is required to meet the following consent criteria.

Pollutant	Averaging Period	Criterion
Total Suspended particulate (TSP) matter	Annual	90 ug/m3
Particulate matter < 10ug (PM10)	Annual	30 ug/m3

Pollutant	Averaging Period	Criterion
Particulate matter < 10ug	24 hour	50 ug/m3
(PM10)		

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited Dust	Annual	2g/m2/month	4g/m2/month

Dust monitors have been established on all sides of the project site, as well as two High Velocity Air Samplers (HVAS) located on the "Illili" and "Lilydale" properties.

Deposited dust monitoring has been occurring since 2007 in order to establish background dust levels prior to the commencement of mining activities. The HVAS for PM10 measurements have only recently been established.

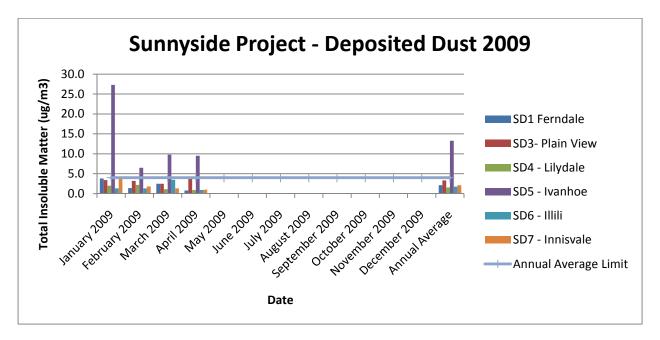
Deposited dust levels for the site for 2008 and 2009 are as presented in the tables below:

#### **DEPOSITED DUST DATA 2008**

Month	SD1 Ferndale	SD2 Sunnyside	SD3 Plainview	SD4 Lillydale	SD5 Ivanhoe	SD6 Illili	SD7 Innisvale
January 2008	1.0	42.2	2.9	1.1	7.3		
February 2008	0.9	86.9	1.6	1.3	5.4		
March 2008	2.6	212.0	11.6	1.4	2.2		
April 2008	1.0	25.4	2.1	0.8	3.6		
May 2008	0.5	28.9	0.9	0.8	7.3		
June 2008	0.4	8.9	9.7	0.5	3.6		
July 2008	0.3	11.7	5.1	0.3	0.2		
August 2008	0.8	24.1	4.9	0.7	1.1		
September 2008	0.6	30.3	2.3	0.9	2.0		
October 2008	1.9	122.0	2.8	1.4	3.5		
November 2008	0.8	64.7	1.5	1.2	2.2		
December 2008	1.1	NLS	1.6	1.2	3.0	3.0	0.9
Annual Average	1.0	59.7	3.9	1.0	3.5		

#### Deposited Dust Data 2009

Month	SD1 Ferndale	SD3 Plainview	SD4 Lillydale	SD5 Ivanhoe	SD6 IIIili	SD7 Innisvale
January 2009	3.8	3.4	2.0	27.3	1.3	4.3
February 2009	1.4	3.2	2.2	6.5	1.3	1.8
March 2009	2.5	2.5	1.1	9.8	3.5	1.3
April 2009	0.8	4.2	0.9	9.5	0.9	1.0
May 2009						
June 2009						
July 2009						
August 2009						
September 2009						
October 2009						
November 2009						
December 2009						
Annual Average	2.1	3.3	1.5	13.2	1.7	2.1



The deposited dust data for the site is highly variable and clearly influenced by other factors including agricultural activity and road dust. The Sunnyside monitor was removed in December 2008 on commencement of mining at the monitor location, and was replaced with the "Innisvale" and "Illili" monitors. The "Ivanhoe" monitor continues to return high dust readings which was also prevalent pre-mining indicating a contamination problem. Lab analysis reports from the "Ivanhoe" monitor indicates contamination from bird droppings and insects. The bird ring attached to this monitor will be removed to ascertain if this reduces bird dropping contamination in the monitor.

Site	Date	Result	Annual Average
Illili	24 <sup>th</sup> Jan 09	25	
	30 <sup>th</sup> Jan 09	37	
	5 <sup>th</sup> Feb 09	23	
	11 <sup>th</sup> Feb 09	No Sample	
	17 <sup>th</sup> Feb 09	7	
	23 <sup>rd</sup> Feb 09	19	
	1 <sup>st</sup> Mar 09	36	
	7 <sup>th</sup> Mar 09	31	
	13 <sup>th</sup> Mar 09	26	
	19 <sup>th</sup> Mar 09	21	
	25 <sup>th</sup> Mar 09	26	
	31 <sup>st</sup> Mar 09	12	
	6 <sup>th</sup> Apr 09	13	
	12 <sup>th</sup> Apr 09	12	
	18 <sup>th</sup> Apr 09	28	
	24 <sup>th</sup> Apr 09	22	
	30 <sup>th</sup> Apr 09	15	22.06
Lilydale	18 <sup>th</sup> Jan 09	24	

#### PM10 Data

	24 <sup>th</sup> Jan 09	25	
	30 <sup>th</sup> Jan 09	28	
	5 <sup>th</sup> Feb 09	25	
	11 <sup>th</sup> Feb 09	17	
	17 <sup>th</sup> Feb 09	4	
	23 <sup>ra</sup> Feb 09	16	
	1 <sup>st</sup> Mar 09	28	
	7 <sup>th</sup> Mar 09	20	
	13 <sup>th</sup> Mar 09	18	
	19 <sup>th</sup> Mar 09	19	
	25 <sup>th</sup> Mar 09	22	
	31 <sup>st</sup> Mar 09	8	
	6 <sup>th</sup> Apr 09	23	
	12 <sup>th</sup> Apr 09	12	
	18 <sup>th</sup> Apr 09	25	
	24 <sup>th</sup> Apr 09	16	
	30 <sup>th</sup> Apr 09	12	19.00
Criteria		<50	<30
		24hr max	Annual average max

The results of PM10 monitoring at both the "Lilydale" and "Illili" monitors confirms compliance with both 24hr and annual average criteria. To date the highest PM10 reading at "Illili" is 37ug/m3 recorded on the 30<sup>th</sup> January 2009 whilst the highest reading at "Lilydale" is 28ug/m3 also recorded on the 30<sup>th</sup> January 2009.

#### **Blast Monitoring**

The consent for the Sunnyside project also included a requirement to monitor blast activities to assess impacts in terms of peak overpressure and ground vibration.

The consent limits specified for blasting are as follows, with blast results obtained to date also displayed:-

Air-blast Overpressure Level (dB(Lin Peak))	Allowable Exceedance
115	5% of the total number of blasts in a 12 month period
120	0%

Peak particle velocity (mm/s)	Allowable Exceedance
5	5% of the total number of blasts in a 12
	month period
10	0%

SHOT NO.	DATE	MONITOR LOCATION	PEAK GROUND PRESSURE (mm/s)	PEAK OVERPRESSURE (dBL)	TIME
1	18/Nov/08	Ivanhoe	0.91	110.7	1:44:48 PM
1	18/Nov/08	Plain View	0.86	107.8	1:44:58 PM
1	18/Nov/08	IIIiIIi	0.56	107.4	1:42:25 PM
2	25/Nov/08	Innisvale	0.40	103.2	3:10:59 PM
2	25/Nov/08	Plain View	DNT	DNT	DNT
2	25/Nov/08	IIIiIIi	0.61	105.5	3:10:48 PM
3	28/Nov/08	Ivanhoe	0.65	96.7	9:59:16 AM
3	28/Nov/08	Plain View	0.50	112.3	9:59:16 AM
3	28/Nov/08	IIIiIIi	1.24	100.9	9:59:07 AM
4	28/Jan/09	IIIiIIi	0.10	112.0	9:59:26 AM
4	28/Jan/09	Ivanhoe	DNT	DNT	
4	28/Jan/09	Plain View	DNT	DNT	
5	09/Mar/09	Ivanhoe	0.28	109.4	2:04:23 PM
5	09/Mar/09	Innisvale	0.33	109.7	2:04:29 PM
6	06/Apr/09	IIIili	0.35	97.4	1:53:19 PM
6	06/Apr/09	Ivanhoe	DNT	DNT	
6	06/Apr/09	Plain View	DNT	DNT	

Monitoring results demonstrate compliance with blast criteria.

#### **Groundwater Monitoring**

Groundwater monitoring is undertaken from a range of monitoring piezometers and water bores both within and surrounding the project site. Standing Water Level checks are undertaken on a quarterly basis, with full water quality sampling to be undertaken on a 6 monthly basis. Monitoring results to date for Standing Water Level is as per the tables attached.

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P1	GW968386	15-Jun-07		11.25	11.51
		7-Aug-07	835	11.20	11.46
		19-Dec-07	1535	11.25	11.51
		24-Jan-08	1140	11.21	11.47
		5-Mar-08	835	11.17	11.43
		7-Apr-08	1515	11.17	11.43
		8-May-08	1550	11.16	11.42

3-Jun-08	Too Wet to Access		
9-Jul-08	905	11.16	11.42
11-Aug-08	845	11.15	11.41
17-Nov-08	1655	11.19	11.45
19-Jan-09	1355	11.22	11.48
26-Feb-09	1645	11.00	11.30

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P2	GW968387	15-Jun-07		16.77	17.61
		7-Aug-07	850	16.77	17.61
		19-Dec-07	1545	16.70	17.54
		24-Jan-08	1155	16.69	17.53
		5-Mar-08	845	11.69	12.53
		4-Apr-08	1450	16.61	17.45
		8-May-08	1600	16.58	17.42
		3-Jun-08	Too wet to access		
		9-Jul-08	916	16.58	17.42
		11-Aug-08	856	16.56	17.40
		17-Nov-08	1703	16.50	17.34
		19-Jan-09	1404	16.50	17.34
		26-Feb-09	1630	16.25	17.10

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P3	GW968388	15-Jun-07		12.50	12.92
		7-Aug-07	945	12.72	13.14
		19-Dec-07	1620	12.99	13.41
		24-Jan-08	1235	13.08	13.50
		5-Mar-08	925	13.15	13.57
		4-Apr-08	1430	13.20	13.62
		8-May-08	1626	13.25	13.67
		3-Jun-08	942	13.29	13.71
		9-Jul-08	958	13.36	13.78
		11-Aug-08	940	13.41	13.83
		17-Nov-08	1726	13.57	13.99
		19-Jan-09	1308	13.65	14.07
		26-Feb-09	1430	14.10	14.40

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P4	GW968389	15-Jun-07		60.48	60.90
		7-Aug-07	925	60.53	60.95
		19-Dec-07	1645	60.57	60.99
		24-Jan-08	1255	60.98	61.40
		5-Mar-08	910	60.57	60.99
		7-Apr-08	1540	60.56	60.98
		8-May-08	1700	60.53	60.95
		3-Jun-08	958	60.98	61.40
		9-Jul-08	1038	60.98	61.40
		11-Aug-08	1000	60.57	60.99
		17-Nov-08	1735	61.23	61.65
		19-Jan-09	1318	65.03	65.45
		26-Feb-09	1505	66.37	66.67

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P5	GW968390	15-Jun-07		40.25	40.75
		7-Aug-07	915	39.69	40.19
		19-Dec-07	1635	40.42	40.92
		24-Jan-08	1250	40.40	40.90
		5-Mar-08	905	40.49	40.99
		7-Apr-08	1530	40.51	41.01
		8-May-08	1644	40.52	41.02
		3-Jun-08	953	40.52	41.02
		9-Jul-08	1034	40.59	41.09
		11-Aug-08	955	40.52	41.02
		17-Nov-08	1731	40.90	41.40
		19-Jan-09	1314	41.50	42.00
		27-Feb-09	1500	41.50	42.00

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P6	GW968391	15-Jun-07		16.70	17.20
		7-Aug-07	1000	17.79	18.29
		19-Dec-07	1605	17.79	18.29
		24-Jan-08	1225	17.81	18.31
		5-Mar-08	950	17.83	18.33
		4-Apr-08	1445	17.75	18.25

8-May-08	1618	17.76	18.26
3-Jun-08	913	17.76	18.26
9-Jul-08	948	17.78	18.28
11-Aug-08	928	17.78	18.28
17-Nov-08	1719	17.78	18.28
19-Jan-09	1256	17.83	18.33
2-Mar-09	1230	17.79	18.29

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P7	GW968392	15-Jun-07		12.77	13.04
		7-Aug-07	905	12.75	13.02
		20-Dec-07	1050	12.73	13.00
		24-Jan-08	1345	12.72	12.99
		5-Mar-08	855	12.74	13.01
		7-Apr-08	1520	12.70	12.97
		8-May-08	1712	12.71	12.98
		3-Jun-08	1006	12.72	12.99
		9-Jul-08	1045	12.73	13.00
		11-Aug-08	1013	12.72	12.99
		17-Nov-08	1750	12.70	12.97
		19-Jan-09	1343	13.70	13.97
		26-Feb-09	1410	12.65	12.90

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
P8	GW968393	15-Jun-07		15.63	15.63
		7-Aug-07	910	15.70	15.70
		19-Dec-07	1630	21.25	21.25
		24-Jan-08	1240	21.30	21.30
		5-Mar-08	900	19.25	19.25
		7-Apr-08	1525	20.13	20.13
		8-May-08	1710	20.49	20.49
		3-Jun-08	1003	18.79	18.79
		9-Jul-08	1043	19.12	19.12
		11-Aug-08	1010	19.72	19.72
		17-Nov-08	1747	16.74	16.74
		2-Mar-09	1300	15.85	15.95

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
27356	GW027356	15-Jun-07			
		7-Aug-07	1005		
		19-Dec-07	1555		
		24-Jan-08	1220	14.30	14.61
		5-Mar-08	1000	14.25	14.56
		4-Apr-08	1447	14.11	14.42
		8-May-08	1605	15.30	15.61
		3-Jun-08	852	17.61	17.92
		9-Jul-08	925	14.12	14.43
		11-Aug-08	908	16.05	16.36
		17-Nov-08	1710	13.92	14.23
		19-Jan-09	1250	14.45	14.76
		26-Feb-09	1400	14.50	14.80

Site ID	Piezometer / Water Bore	Date	Time	Depth to Ground - mbgl	Depth to Stand - mbtoc
45098	GW045098	15-Jun-07		10.42	10.76
		7-Aug-07	935	10.58	10.92
		19-Dec-07	1615	10.69	11.03
		24-Jan-08	1230	10.76	11.10
		5-Mar-08	920	10.82	11.16
		4-Apr-08	1440	10.87	11.21
		8-May-08	1622	10.89	11.23
		3-Jun-08	919	10.91	11.25
		9-Jul-08	952	10.96	11.30
		11-Aug-08	933	11.00	11.34
		17-Nov-08	1723	11.19	11.53
		19-Jan-09	1300	11.49	11.83
		26-Feb-09	1330	No Access	

Results to date indicate minor variability in groundwater levels. Ongoing data collection will provide for longer term analysis of groundwater impact. A full water quality sampling event is scheduled for June 2009 which will include for water quality analysis.

#### Complaints

Since the previous meeting there has been one formal complaint lodged pertaining to the Sunnyside operation. This complaint was lodged on the 14<sup>th</sup> May from Mr Peter Stubbs at "Glendower" and related to noise levels at his property from the mine. Monitoring at adjacent monitoring point "Illili", which is also in closer proximity to the mine site has demonstrated compliance with noise criteria, however, in view of Mr Stubbs complaint, during the next noise

monitoring event in June, the noise consultant will be requested to obtain noise levels at the "Glendower" property.

The complaints line number is: 0427 106 384.

#### Rehabilitation

Rehabilitation works undertaken to date has been in the establishment of cover crops on areas disturbed during the construction phase which included surface water management structures and the amenity bund. Further works will be undertaken on a progressive and needs basis to reduce the visual impact of the operation as much as possible.

# Minutes of Sunnyside Coal Mine Community Consultation Committee

- **Meeting Held:** Wednesday 9<sup>th</sup> September 2009 at 3:30pm
- Venue: The meeting was held in the Board Room at Namoi Valley Brickworks.

#### Commencement Time: 3:30pm

#### 1. Present and Apologies

Present:Mr Michael Broekman (Chairman)<br/>Mr Bruce Reid (Community Representative)<br/>Mr Glenn Bailey (Community Representative)<br/>Mr Danny Young (Group Environmental Manager)<br/>Miss Jill Scealy (Environmental Officer)<br/>Mr Michael Clark (Project Manager)

Apologies: Mr Stephen Benham, Mr Tony Jones, Mrs Treena Daniells.

#### 2. **Previous Minutes**

Moved that the minutes of the previous meeting were a true and accurate record by Bruce Reid, seconded by Glenn Bailey

#### 3. Business Arising from Previous Minutes

#### 3.1 Roundabout on Quia Road

Bruce Reid considers the roundabout to be unsatisfactory due to potential for accident from people travelling west through the roundabout on the wrong side. Matter of a lane dividing barrier and additional signage was discussed. Again, design of roundabout and signage is a matter for Council. Whitehaven will identify the concerns with Council and seek a formal response.

#### 3.2 Update on Coal Haul Route Construction

Intersection works with both the Oxley Highway and Blackjack Road expected to be completed within 8 weeks. Glenn Bailey raised the need for additional signage or notification as to the reasoning for road works and expected timeframe of works so the community is aware of the timeframe of the inconvenience. It was raised that additional signage would be problematic in the short term due to approval processes with the RTA, but that an appropriate notice would be placed in the local paper.

#### 4. Mine Progress

An update was provided on mine progress by Project Manager, Michael Clark, with 1.1 million bcm of overburden moved since mine commencement, and 56,628 tonnes of coal currently on the ROM pad.

Activity on site to date in accordance with project forecasts.

#### 5. Environmental Report

Danny Young provided the Environmental Monitoring Results, a copy of which is attached to these minutes.

#### 6. Complaints

One complaint has been received since the last meeting. This related to the commencement of coal haulage off site and the resulting gravel being deposited on the highway intersection as trucks turned off Coocooboonah Lane. This was resolved with Council through the use of a street sweeper to collect the gravel. The situation will be monitored regularly to ensure the roadway remains clear of gravel.

#### 7. General Business

Bruce Reid indicated that Ross Norman of "Illili" had complained of an odour emanating from the site. No complaint has been made direct from Mr Norman. The source of the odour in unknown as there has been no indication to date from site personnel or other adjacent landholders in relation to an odour issue.

Bruce Reid indicated that the blast following Ag-Quip was of a large nature and caused significant vibration and wanted to know why such a large blast was necessary. It was explained that the shot was only marginally larger than previous blasts and was well within compliance limits. Perception of the significance of the blast may have been influenced by cooler weather conditions at the time of the shot.

Bruce Reid queried the reasoning for the closure of Coocooboonah Lane. It was advised that this was undertaken in accordance with our operating consent, in conjunction with Council. The public has full use of the newly constructed haul route which will be subject to the same road rules as Coocooboonah Lane. That section of Coocooboonah Lane that has been closed does not provide access to any privately owned land. The road will continue to be maintained to ensure on reopening it is to a standard that existed pre-closure.

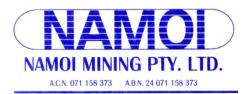
Bruce Reid queried if we needed to notify the Civil Aviation Safety Authority prior to blasting activity. It was confirmed that no such notification was necessary and that notification is provided to those parties who request it.

A letter of resignation from the CCC by Treena Daniells was tabled at the meeting. The resignation was accepted on the basis of Treena's move to Sydney. It was moved that a new CCC representative be sought through an advertisement in the paper calling for expressions of interest. Notice to be published in next week's paper. A letter is also to be drafted to Treena thanking her for her contribution to the committee.

#### 8. Date for next meeting

Wednesday 9<sup>th</sup> December 2009 – 3:30pm, Namoi Valley Brickworks.

Michael Broekman - Chairman



# **SUNNYSIDE COAL MINE**

# COMMUNITY CONSULTATIVE COMMITTEE

# **MEETING #3**

**ENVIRONMENTAL MONITORING REPORT** 

June-August 2009

#### Noise Monitoring

The noise limits applicable to operations on the Sunnyside Coal Mine , as prescribed in the Project Approval and Environment Protection Licence, are as follows:-

Day/Evening LAeq(15 minute)	Land					
35	Any residence on, or more than 25% of, any privately owned land,					
	except "Lilydale".					
	Impact Assessment Criteria dB(A).					

Noise measurements taken since the last meeting are as tabulated below. Noise monitoring activities have been extended to incorporate the "Glendower" property following a noise complaint in May 2009.

Location	Time	dB(A),Leq (15 min)	Wind speed/ direction	Identified Noise Sources as dB(A) Leq (15 min)
IIIII	4:01 pm	53	1.0 m/s SE	Birds & insects (53), SCM (32)
Ferndale	4:43 pm	49	1.0 m/s SE	Traffic (48), birds & insects (38), SCM (37), wind (32)
Plain View	3:48 pm	43	1.0 m/s SE	Birds (43), wind (33), SCM inaudible
Lilydale	3:30 pm	45	1.5 m/s S	Birds (43), traffic (38), wind (36), SCM inaudible
Glendower	4:24pm	46	1.0 m/s SE	Birds (46), <b>SCM (38)</b>

# Attended Noise Levels – 16<sup>th</sup> June 2009 (afternoon)

## Attended Noise Levels – 17<sup>th</sup> June 2009 (afternoon)

Location	Time	dB(A),Leq	Wind speed/ direction	Identified Noise Sources
Illili	7:26 am	46	<0.5 m/s SE	Birds & insects (45), SCM (39)
Ferndale	7:01 am	45	<0.5 m/s SE	Local traffic (41), birds (41), distant traffic (37), SCM (33)
Plain View	7:24 am	41	<0.5 m/s SE	Birds (41), SCM inaudible
Lilydale	7:44 am	40	<0.5 m/s SE	Traffic (38), birds (34), SCM inaudible
Glendower	7:00am	45	<0.5 m/s SE	Birds (44), <b>SCM (38)</b>

Exceedances on the 16th June 2009 were recorded at Ferndale (2 dB) and Glendower (3 dB). Monitoring during the morning of the 17th June 2009 recorded exceedances at Illili (4dB) and Glendower (3dB).

The mine noise during all exceedances was attributed to general mine hum, dozer tracks and engine revs.

The atmospheric conditions at the time of the monitoring surveys were clear and cool with light winds from the south to south east. These conditions are considered to be noise enhancing for Ferndale, Illili and Glendower.

Following the exceedances, advice was issued to the affected landholders providing an explanation of the results and actions taken in order to minimise potential for future exceedances. Written advice was provided to DoP and DECC as to the exceedances, landholder notification and actions taken to minimise potential for future exceedances.

Location	Time	dB(A),Leq (15 min)	Wind speed/ direction	Identified Noise Sources as dB(A) Leq (15 min)
IIIili	8:13 am	46	<1m/s NW	Birds (46), <b>SCM (29)</b>
Ferndale	7:54 am	49	<1m/s NW	Traffic (48), birds & insects (40), SCM (33)
Plain View	8:53 am	42	<1m/s NW	Birds (42), traffic (30), <b>SCM (27)</b>
Lilydale	8:34 am	39	<1m/s NW	Birds (39), <b>SCM (27)</b>
Glendower	7:35 am	46	1.0 m/s NW	Birds (45), <b>SCM (37)</b>

## Attended Noise Levels – 19<sup>th</sup> August 2009 (morning)

#### Attended Noise Levels – 19<sup>th</sup> August 2009 (afternoon)

		dB(A),Leq	Wind speed/	
Location	Time		direction	Identified Noise Sources
Illili	4:07 pm	29	< 0.5m/s NW	Birds & insects (29), SCM inaudible
Ferndale	4:40 pm	43	0.5m/s NW	Birds (43), SCM barely audible (est. <25)
Plain View	3:49 pm	45	1m/s NNW	Birds & dogs (45), SCM (30)
Lilydale	3:28 pm	34	1m/s NNW	Birds (33), <b>SCM (27)</b>
Glendower	4:22 pm	45	<0.5 m/s NNW	Birds (45), SCM inaudible

Noise monitoring in August 2009 indicated compliance with noise criteria at all locations except Glendower at 7:35am on the 19th August (2 dB exceedance). Again, mine noise was attributable to general mine hum and engine revs mainly from haul trucks.

Following the exceedance, advice issued to both the landholder and to the DECC and DoP. Cool, clear mornings are believed to be the main cause of the ongoing exceedance at Glendower. We have advised the agencies that monitoring during September should confirm if noise levels subside with the warmer mornings. Upon completion of the September monitoring agencies will be advised accordingly as to the outcome. If noise exceedance continues to be prevalent, alternative actions will be required.

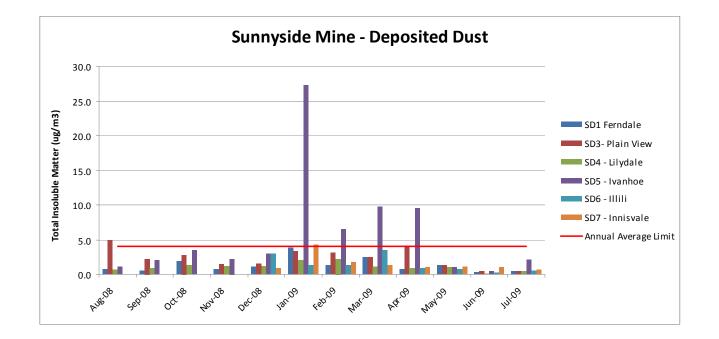
#### Air Quality Monitoring

### **Deposited Dust**

Deposited dust levels for the site for the last 12 months are shown in the following table and figure.

Month	SD1 Ferndale	SD2 Sunnyside	SD3 Plainview	SD4 Lilydale	SD5 Ivanhoe	SD6 Illili	SD7 Innisvale	Annual Average Limit
Aug-08	0.8	24.1	4.9	0.7	1.1			4.0
Sep-08	0.6	30.3	2.3	0.9	2.0			4.0
Oct-08	1.9	122.0	2.8	1.4	3.5			4.0
Nov-08	0.8	64.7	1.5	1.2	2.2			4.0
Dec-08	1.1	NLS	1.6	1.2	3.0	3.0	0.9	4.0
Jan-09	3.8	NLS	3.4	2.0	27.3	1.3	4.3	4.0
Feb-09	1.4	NLS	3.2	2.2	6.5	1.3	1.8	4.0
Mar-09	2.5	NLS	2.5	1.1	9.8	3.5	1.3	4.0
Apr-09	0.8	NLS	4.2	0.9	9.5	0.9	1.0	4.0
May-09	1.4	NLS	1.4	1.0	1.0	0.8	1.1	4.0
Jun-09	0.3	NLS	0.5	0.1	0.4	0.2	1.0	4.0
Jul-09	0.4	NLS	0.5	0.5	2.1	0.6	0.7	4.0
Annual Average	1.3	60.3	2.4	1.1	5.7	1.5	1.5	4.0

#### Sunnyside Mine – Deposited Dust



Prior to the last meeting, deposited dust data for the site was highly variable and influenced by other factors including agricultural activity and road dust. Results for the previous 3 months have shown an improvement in deposited dust levels at all sites. The annual average at all sites except Ivanhoe are below the annual average limit of 4g/m<sup>2</sup>/month. The "Ivanhoe" result has been heavily influenced by sample contamination, particularly a result of 27.3g/m2/month in January which has skewed the annual average result.

#### PM10 Data

PM10 measurements taken to date for the Illili High Velocity Air Sampler are returning a running annual average of 16.00 ug/m<sup>3</sup> which is well below the annual average limit of 30 ug/m<sup>3</sup>. The highest reading from this sampler is 40 ug/m<sup>3</sup> (12<sup>th</sup> May 2009), which is below the 24 hour maximum criteria of 50 ug/m<sup>3</sup>.

PM10 measurements taken to date for the Lilydale High Velocity Air Sampler are returning a running annual average of 13.79ug/m<sup>3</sup> which is well below the annual average limit of 30ug/m<sup>3</sup>. The highest reading from this sampler remains at 28ug/m<sup>3</sup> as measured on 30<sup>th</sup> January 2009.

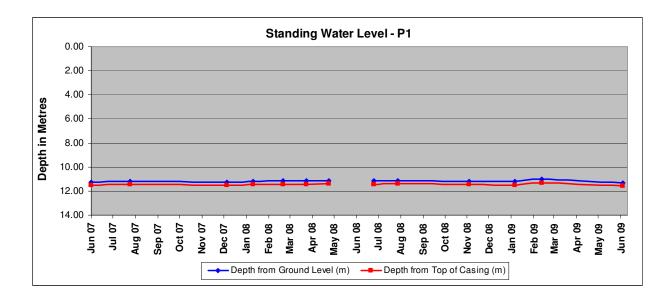
#### Blast Monitoring

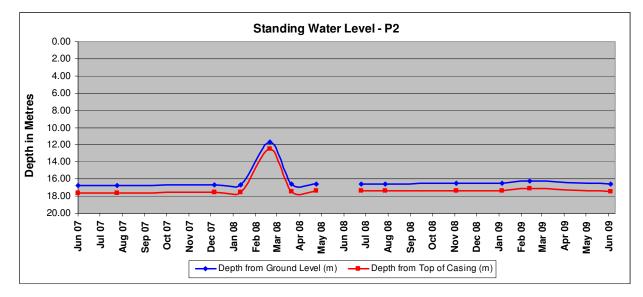
Since the first shot there have been 9 blasts. All blasts during this report period have been compliant within the limits of 115dBL and 5mm/s.

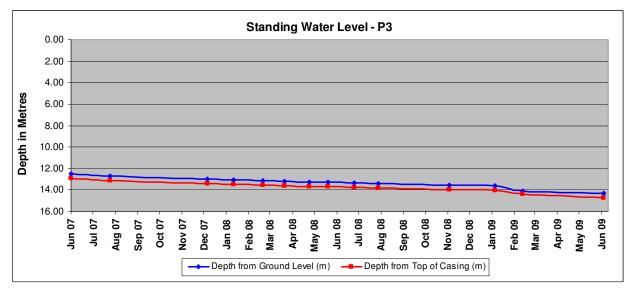
To date, the highest overpressure recorded is 112.3. dBL recorded at "Plain View" on the 28<sup>th</sup> November 2008. The highest ground vibration recorded is 1.24mm/s recorded at "Illili" on the 28<sup>th</sup> November 2008.

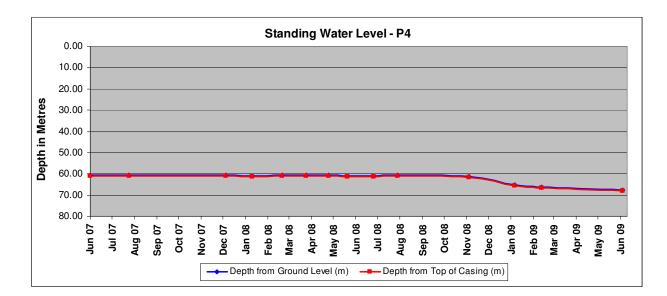
#### Groundwater Monitoring

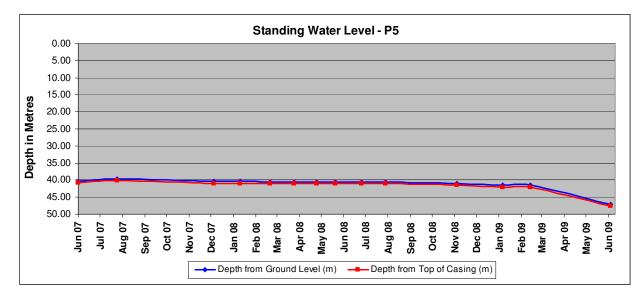
Groundwater monitoring is undertaken from a range of monitoring piezometers and water bores both within and surrounding the mine site. Standing Water Level checks are undertaken on a quarterly basis, with full water quality sampling to be undertaken on a 6 monthly basis. Monitoring results to date for Standing Water Level are shown below.

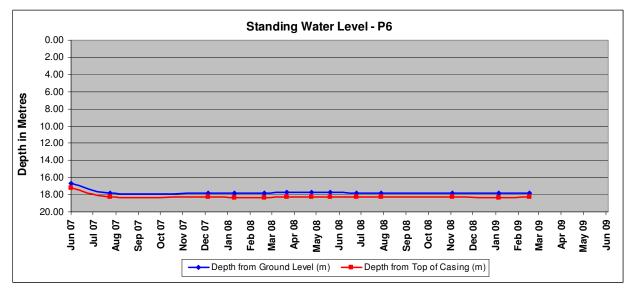


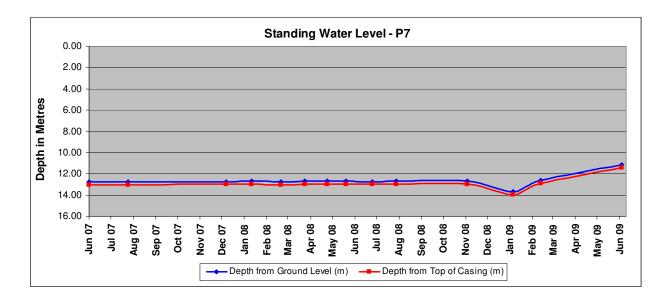


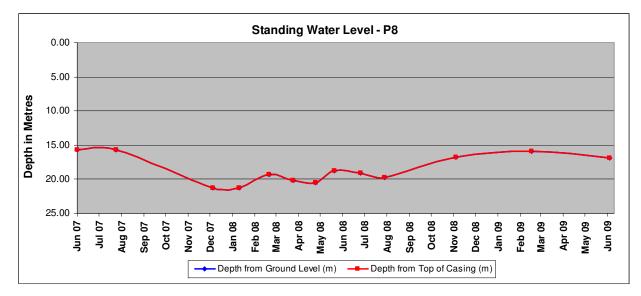


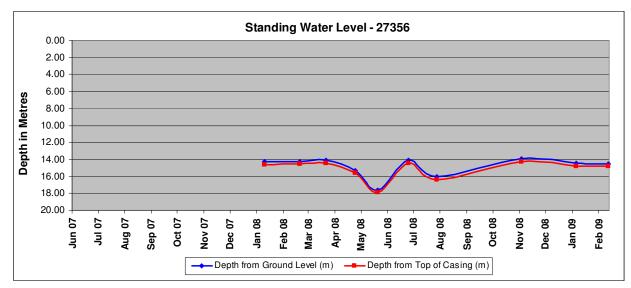


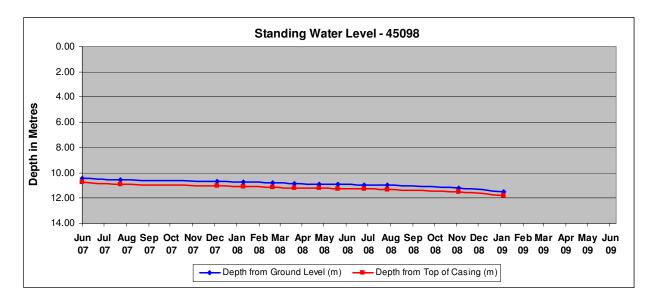












Results to date indicate minor variability in groundwater levels with no significant trend applicable at this early stage of the mine life. Significantly, the mine workings has intersected very little groundwater with no requirement to pump any water from the pit to the pit water dam at this stage. Ongoing data collection will provide for longer term analysis of groundwater impact.

The September 2009 monitoring results will be provided at the next CCC meeting.

#### Surface Water

No wet weather discharge events have occurred since the last CCC meeting.

Sunnyside Mine has recently been issued a revised Environment Protection Licence from the DECC which now includes licensed surface water discharge locations and concentration thresholds. As a consequence Sunnyside Mine is now required to sample any discharge waters from these locations to assess concentration thresholds are met.

#### **Complaints**

Since the previous meeting there has been one formal complaint lodged pertaining to the Sunnyside operation. The complaint was lodged by Gunnedah Shire Council, on behalf of the complainant, on the 17<sup>th</sup> August 2009 and related to the coal trucks pushing loose gravel onto the Oxley Highway at the Oxley Highway/Coocooboonah Lane intersection.

The road was cleaned by a street sweeper on the day of the complaint and arrangements were made for Council to conduct regular street sweeping as required. The intersection is also currently being upgraded.

The complaints line number is: 0427 106 384.

# Minutes of Sunnyside Coal Mine Community Consultation Committee

- **Meeting Held:** Wednesday 9<sup>th</sup> September 2009 at 3:30pm
- Venue: The meeting was held in the Board Room at Namoi Valley Brickworks.

#### Commencement Time: 3:30pm

#### 1. Present and Apologies

Present:Mr Michael Broekman (Chairman)<br/>Mr Bruce Reid (Community Representative)<br/>Mr Glenn Bailey (Community Representative)<br/>Mr Danny Young (Group Environmental Manager)<br/>Miss Jill Scealy (Environmental Officer)<br/>Mr Michael Clark (Project Manager)

Apologies: Mr Stephen Benham, Mr Tony Jones, Mrs Treena Daniells.

#### 2. **Previous Minutes**

Moved that the minutes of the previous meeting were a true and accurate record by Bruce Reid, seconded by Glenn Bailey

#### 3. Business Arising from Previous Minutes

#### 3.1 Roundabout on Quia Road

Bruce Reid considers the roundabout to be unsatisfactory due to potential for accident from people travelling west through the roundabout on the wrong side. Matter of a lane dividing barrier and additional signage was discussed. Again, design of roundabout and signage is a matter for Council. Whitehaven will identify the concerns with Council and seek a formal response.

#### 3.2 Update on Coal Haul Route Construction

Intersection works with both the Oxley Highway and Blackjack Road expected to be completed within 8 weeks. Glenn Bailey raised the need for additional signage or notification as to the reasoning for road works and expected timeframe of works so the community is aware of the timeframe of the inconvenience. It was raised that additional signage would be problematic in the short term due to approval processes with the RTA, but that an appropriate notice would be placed in the local paper.

#### 4. Mine Progress

An update was provided on mine progress by Project Manager, Michael Clark, with 1.1 million bcm of overburden moved since mine commencement, and 56,628 tonnes of coal currently on the ROM pad.

Activity on site to date in accordance with project forecasts.

#### 5. Environmental Report

Danny Young provided the Environmental Monitoring Results, a copy of which is attached to these minutes.

#### 6. Complaints

One complaint has been received since the last meeting. This related to the commencement of coal haulage off site and the resulting gravel being deposited on the highway intersection as trucks turned off Coocooboonah Lane. This was resolved with Council through the use of a street sweeper to collect the gravel. The situation will be monitored regularly to ensure the roadway remains clear of gravel.

#### 7. General Business

Bruce Reid indicated that Ross Norman of "Illili" had complained of an odour emanating from the site. No complaint has been made direct from Mr Norman. The source of the odour in unknown as there has been no indication to date from site personnel or other adjacent landholders in relation to an odour issue.

Bruce Reid indicated that the blast following Ag-Quip was of a large nature and caused significant vibration and wanted to know why such a large blast was necessary. It was explained that the shot was only marginally larger than previous blasts and was well within compliance limits. Perception of the significance of the blast may have been influenced by cooler weather conditions at the time of the shot.

Bruce Reid queried the reasoning for the closure of Coocooboonah Lane. It was advised that this was undertaken in accordance with our operating consent, in conjunction with Council. The public has full use of the newly constructed haul route which will be subject to the same road rules as Coocooboonah Lane. That section of Coocooboonah Lane that has been closed does not provide access to any privately owned land. The road will continue to be maintained to ensure on reopening it is to a standard that existed pre-closure.

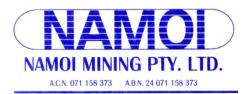
Bruce Reid queried if we needed to notify the Civil Aviation Safety Authority prior to blasting activity. It was confirmed that no such notification was necessary and that notification is provided to those parties who request it.

A letter of resignation from the CCC by Treena Daniells was tabled at the meeting. The resignation was accepted on the basis of Treena's move to Sydney. It was moved that a new CCC representative be sought through an advertisement in the paper calling for expressions of interest. Notice to be published in next week's paper. A letter is also to be drafted to Treena thanking her for her contribution to the committee.

#### 8. Date for next meeting

Wednesday 9<sup>th</sup> December 2009 – 3:30pm, Namoi Valley Brickworks.

Michael Broekman - Chairman



# **SUNNYSIDE COAL MINE**

# COMMUNITY CONSULTATIVE COMMITTEE

# **MEETING #4**

**ENVIRONMENTAL MONITORING REPORT** 

September-November 2009

#### Noise Monitoring

The noise limits applicable to operations on the Sunnyside Coal Mine, as prescribed in the Project Approval and Environment Protection Licence, are as follows:-

Day/Evening LAeq(15 minute)	Land					
35	Any residence on, or more than 25% of, any privately owned land,					
	except "Lilydale".					
	Impact Assessment Criteria dB(A).					

Noise measurements taken since the last meeting are as tabulated below.

Location	Time	dB(A),Leq (15 min)	Wind speed/ direction	Identified Noise Sources as dB(A) Leq (15 min)
Illili	4:20 pm	39	2m/s NW	Wind (38), dogs (30), SCM inaudible
Ferndale	4:41 pm	51	2m/s NW	Traffic (50), birds & insects (45), SCM faintly audible (est. <30)
Plain View	3:38 pm	49	1.5m/s NW	Birds (49), wind (35), <b>SCM (33)</b>
Lilydale	3:58 pm	41	1.5m/s NW	Birds (38), wind (37), <b>SCM (32)</b>

## Attended Noise Levels – 8<sup>th</sup> September 2009 (afternoon)

# Attended Noise Levels – 9<sup>th</sup> September 2009 (morning)

Location	Time	dB(A),Leq (15 min)	Wind speed/ direction	Identified Noise Sources
IIIili	7:32 am	36	Calm	Birds (35), <b>SCM (29)</b>
Ferndale	7:14 am	44	Calm	Birds (44), <b>SCM (30)</b>
Plain View	8:10 am	46	Calm	Birds (43), SCM (40), traffic (40)
Lilydale	8:29 am	37	Calm	Birds (35), SCM (30), traffic (30)
Glendower	7:50am	43	Calm	Birds (42), SCM (37)

Exceedances were recorded on the  $9^{th}$  September 2009 at "Plain View" (5 dB) and "Glendower" (2 dB).

Atmospheric conditions at the time of monitoring were cool, calm and clear with about 75% relative humidity. A review of the mine's weather station data indicated that a mild inversion was present at the time of monitoring which is noise enhancing for all receivers. The mine noise was attributable to general mine hum and engine revs from the haul trucks and excavator.

The affected landholders, DoP and DECCW were notified of the exceedances.

In addition to the site noise monitoring, traffic noise from the coal transport trucks (Toll) was measured at the "Roslyn" property on Torrens Road, near the Whitehaven CHPP. Sunnyside coal transport is relatively sporadic compared to other Whitehaven operations. As a result, the

noise level at "Roslyn" measured over a representative period was used to calculate the maximum number of trucks that could travel the route whilst maintaining compliance.

The sound level meter was set up in the paddock adjacent to "Roslyn", at the same distance from the road as the façade of the residence. The noise levels from 3 trucks (2 full and 1 empty) passing the site were measured between 8.55 am and 9.30 am on the 9th September 2009. The calculated average Leq (15 min) noise level for each pass-by was 45 dB(A). This indicates that up to 10 vehicle movements per hour could pass the residence before the day time noise criterion for a local road of 55 dB(A)Leq (1 hour) is exceeded.

Location	Time	dB(A),Leq (15 min)	Wind speed/ direction	Identified Noise Sources as dB(A) Leq (15 min)
Illili	4:48 pm	36	3m/s NW	Birds (36), SCM inaudible
Ferndale	5:30 pm	44	1.5m/s NW	Traffic (41), birds (40), dog (35), <b>SCM faintly audible (est.</b> <25)
Plain View	4:06 pm	38	2m/s NW	SCM (34), birds (33), traffic (30), wind (35),
Lilydale	4:24 pm	43	2.5m/s NW	Birds (42), SCM (35), traffic (32), wind (30)
Glendower	5:07 pm	43	0.5m/s NW	Birds (40), cattle (36), traffic (30), wind (30), SCM inaudible

Attended Noise Levels – 20<sup>th</sup> October 2009 (afternoon)

# Attended Noise Levels – 21<sup>st</sup> October 2009 (morning)

Location	Time	dB(A),Leq (15 min)	Wind speed/ direction	Identified Noise Sources
IIIili	7:53 am	42	0.5m/s SE	Birds (38), cattle (37), dogs (36), SCM (30)
Ferndale	8:39 am	49	1m/s SE	Birds (47), traffic (44), SCM (est. <30)
Plain View	7:29 am	42	0.5m/s SE	Birds (42), traffic (30), SCM faintly audible (est. <25)
Lilydale	7:10 am	44	0.5m/s SE	Birds (43), road works (35), traffic (33), SCM (30)
Glendower	8:21 am	46	0.5m/s SE	Birds (44), cattle (38), traffic (35), SCM (32)

Noise monitoring in October 2009 indicated compliance at all monitoring locations.

The noise levels from 15 trucks (8 full and 7 empty) passing the "Roslyn" property on Torrens Road were measured between 9.09 am and 10.34 am on the 21st October 2009. The weighted average noise level for each truck was 64.4 dB(A) Leq (pass-by) for an average duration of 36 seconds. Over the approximate 1.5 hour monitoring period this equates to a measured Leq of 54.4 dB(A). This correlates with the calculations made is September 2009 which determined that up to 10 vehicle movements per hour could pass the residence before the day time noise criterion for a local road of 55 dB(A) Leq (1 hour) is exceeded.

The latest round of noise monitoring was conducted in late November 2009. Monitoring results will be presented at the next CCC meeting.

### Air Quality Monitoring

#### **Deposited Dust**

Deposited dust levels for the site for the last 12 months are shown in the following table and figure.

Month	SD1 Ferndale	SD3 Plainview	SD4 Lilydale	SD5 Ivanhoe	SD6 Illili	SD7 Innisvale	Annual Average Limit
Dec-08	1.1	1.6	1.2	3.0	3.0	0.9	4.0
Jan-09	3.8	3.4	2.0	27.3	1.3	4.3	4.0
Feb-09	1.4	3.2	2.2	6.5	1.3	1.8	4.0
Mar-09	2.5	2.5	1.1	9.8	3.5	1.3	4.0
Apr-09	0.8	4.2	0.9	9.5	0.9	1.0	4.0
May-09	1.4	1.4	1.0	1.0	0.8	1.1	4.0
Jun-09	0.3	0.5	0.1	0.4	0.2	1.0	4.0
Jul-09	0.4	0.5	0.5	2.1	0.6	0.7	4.0
Aug-09	1.8	1.3	1.2	32.6	4.0	0.8	4.0
Sept-09	9.7	39.9	6.8	12.2	15.0	6.9	4.0
Oct-09	3.7	12.2	1.9	3.2	10.0	2.3	4.0
Nov-09	0.6	25.7	1.5	3.0	0.9	1.5	4.0
Annual Average	2.3	8.0	1.7	9.2	3.5	2.0	4.0

Results from August 2009 monitoring indicate normal deposited dust levels, with the exception of "Ivanhoe" which was influenced by sample contamination (insects, bird droppings, plant material). Deposited dust levels during September and October 2009 have been elevated at all sites. These results are attributable to the severe dust storm on the 23<sup>rd</sup> September 2009 and the dusty conditions in mid October. November 2009 results returned to normal levels with the exception of "Plain View" which was contaminated with insects, bird droppings and plant material.

The annual average for all sites remains below  $4g/m^2/month$  for all sites except "Plain View" and "Ivanhoe". The annual average for "Plain View" has been heavily affected by the weather conditions over the last 3 months, with an increase from an annual average of  $2.0g/m^2/month$  in August 2009 to  $8.0g/m^2/month$  in November 2009. The "Ivanhoe" result continues to be affected by sample contamination.

#### PM<sub>10</sub> Data

 $PM_{10}$  measurements taken to date for the "Illili" High Velocity Air Sampler are returning a running annual average of 17.60ug/m<sup>3</sup>, which is well below the annual average limit of 30ug/m<sup>3</sup>. The highest reading from this sampler is 48ug/m<sup>3</sup> (27<sup>th</sup> September 2009), which is below the 24 hour maximum criteria of 50ug/m<sup>3</sup>.

PM10 measurements taken to date for the Lilydale High Velocity Air Sampler are returning a running annual average of 14.81ug/m<sup>3</sup> which is well below the annual average limit of 30ug/m<sup>3</sup>. The highest reading from this sampler was 36ug/m<sup>3</sup>, measured on 27<sup>th</sup> September 2009.

It is believed that dust deposited on the units during the dust storm on the  $23^{rd}$  September 2009 would have been collected on start-up during the monitoring event on the  $27^{th}$  September, thereby contributing to the higher than normal readings. This is supported by elevated results at all other PM<sub>10</sub> monitors operated by the Whitehaven group.

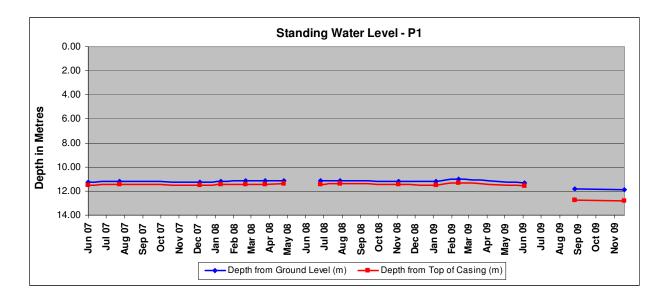
#### Blast Monitoring

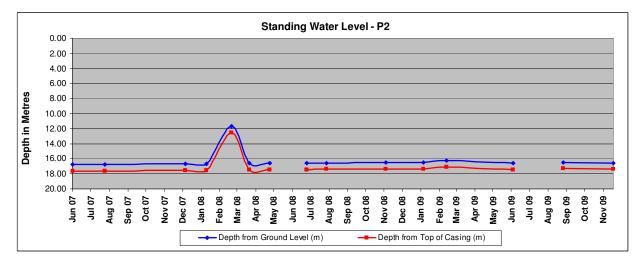
Since the first shot there have been 11 blasts. All blasts during this report period have been compliant within the limits of 115dBL and 5mm/s.

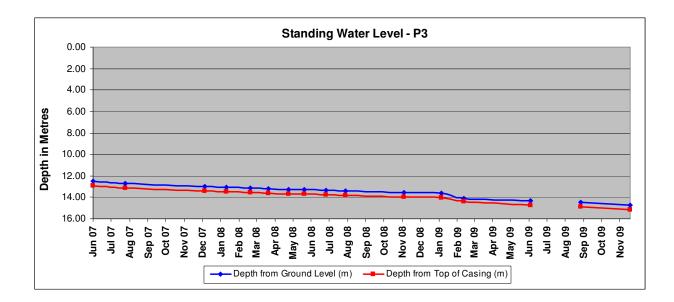
To date, the highest overpressure recorded is 112.3. dBL recorded at "Plain View" on the 28<sup>th</sup> November 2008. The highest ground vibration recorded is 1.24mm/s recorded at "Illili" on the 28<sup>th</sup> November 2008.

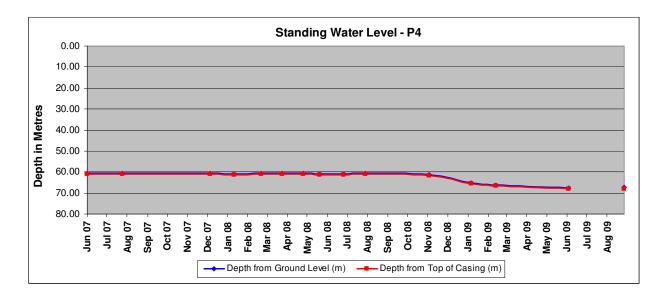
#### Groundwater Monitoring

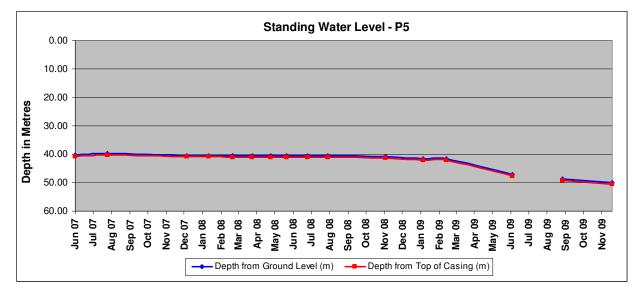
Groundwater monitoring is undertaken from a range of monitoring piezometers and water bores both within and surrounding the mine site. Standing Water Level checks are undertaken on a quarterly basis, with full water quality sampling to be undertaken on a 6 monthly basis. Monitoring results to date for Standing Water Level are shown below.

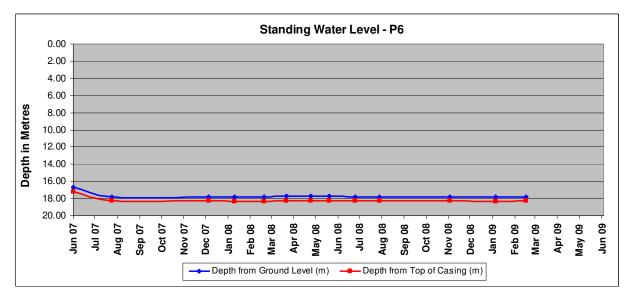


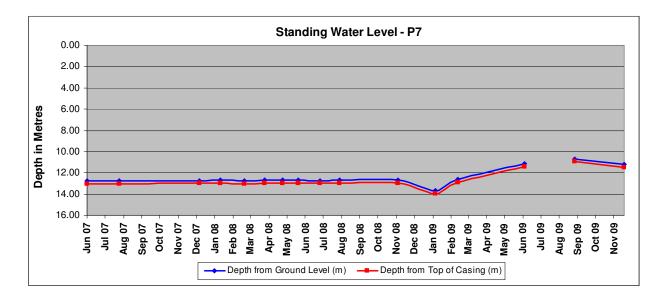


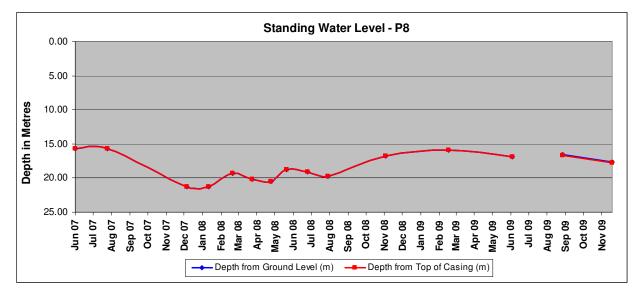


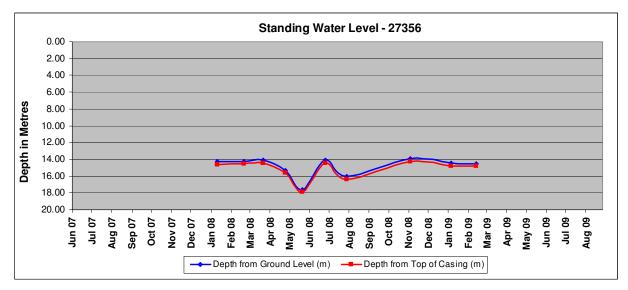


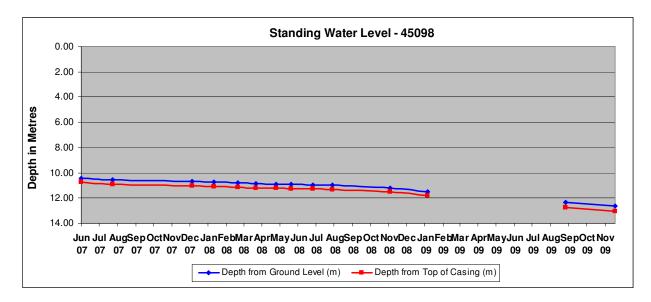












Results to date indicate minor variability in groundwater levels with no significant trend applicable at this early stage of the mine life. The slight drop in SWL associated with some monitoring sites is likely attributable to recent dry conditions rather than operations at the mine as the mine workings have intersected very little groundwater. There has been no requirement to pump any water from the pit to the pit water dam to date. Ongoing data collection will provide for longer term analysis of groundwater impact.

#### Surface Water

No wet weather discharge events have occurred since the last CCC meeting.

#### **Complaints**

Since the previous meeting there has been one formal complaint lodged pertaining to the Sunnyside operation. The complaint was lodged by DECCW, on behalf of the complainant, on the 22<sup>nd</sup> September 2009 and related to concern about the lime dust being generated on the Blackjack Road Intersection construction works.

The complaint was referred to Constructive Solutions, Project Manager for the intersection works. Loading of hydrated lime was subsequently relocated away from adjacent residential areas to minimise dust impacts and DECCW were advised on this action.

The complaints line number is: 0427 106 384.