

Sunnyside Coal Mine Community Consultative Committee Meeting #8

Environmental Monitoring Report September – November 2010

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).

Monitoring was undertaken on the 3rd and 4th November 2010 with results outlined below:

Noise Monitoring Results – 3 November 2010 (Evening)				
Location	Time	dB(A),Leq (15 min)	Wind speed/ direction	Identified Noise Sources as dB(A) Leq (15 min)
Illili	8:10 pm	52	0.3m/s E	Insects (52), SCM (30)
Ferndale	8:52 pm	42	Calm	Birds & insects (41), SCM (35)
Plain View	7:35 pm	50	0.2m/s E	Birds & insects (50), traffic (40), SCM (30)
Lilydale	7:15 pm	41	0.3m/s E	Birds (40), traffic (35), SCM barely audible

Noise Monitoring Results – 4 November 2010 (Day)				
Location	Time	dB(A),Leq (15 min)	Wind speed/ direction	Identified Noise Sources
Illili	8:57 pm	57	1.0m/s E	Birds (57), traffic (35), SCM (32)
Ferndale	9:33 pm	43	1.6m/s NE	Birds & insects (42), traffic (35), SCM (30)
Plain View	8:35 pm	40	1.4m/s E	Birds & insects (37), traffic (37), SCM barely audible
Lilydale	8:15 pm	38	0.4m/s E	Birds & insects (36), traffic (35), SCM (<30)

The results indicate compliance at all receivers throughout the monitoring period. Monitoring was also conducted at the "Glendower" residence on the 3rd and 4th November 2010 to confirm if mine noise remained within compliance limits at that residence, with results confirming compliance as per the table below:

Noise Monitoring Results – 3 & 4 November 2010 – Glendower				
Date	Time	dB(A),Leq (15 min)	Wind speed/ direction	Identified Noise Sources as dB(A) Leq (15 min)
3 Nov	8:33 pm	35	0.4m/s E	SCM (33) , birds & insects (31)
4 Nov	9:15 am	49	1.2m/s E	Birds (49), traffic (35), SCM (32)

In addition to mine noise assessment, monitoring was undertaken at the “Roslyn” property adjacent to Torrens Lane to determine road noise levels from coal haulage. Over a monitoring period of 1 hour, a total of 11 heavy vehicle movements were measured, consisting of 7 full and 4 empty coal haulage trucks. The measured Leq noise level from vehicles on Torrens Lane was of 53 dB(A) Leq (1 hour), which is compliant with the noise criterion of 55 dB(A) Leq (1 hour).

Air Quality Monitoring

Deposited Dust

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

Sunnyside Mine – Deposited Dust

Month	SD1 Ferndale	SD3 Plainview	SD4 Lilydale	SD5 Ivanhoe	SD6 Illili	SD7 Innisvale
November 2009	0.6	25.7	1.5	3.0	0.9	1.5
December 2009	1.2	1.4	1.6	1.9	1.1	1.0
January 2010	1.8	7.9	3.0	1.9	1.7	1.6
February 2010	2.5	1.3	0.6	1.2	0.6	0.7
March 2010	11.9	3.0	1.9	1.8	1.8	2.5
April 2010	0.9	1.2	0.9	1.8	0.6	0.6
May 2010	1.0	1.1	0.6	1.4	2.5	0.6
June 2010	0.3	1.4	0.9	13.1	1.2	0.4
July 2010	0.4	0.4	0.2	4	1.3	0.5
August 2010	3.2	0.4	0.3	1.2	3.0	2.0
September 2010	0.7	0.6	0.9	2.5	6.3	1.8
October 2010	10.8	0.5	0.5	1.2	0.3	0.5
Annual Average	2.9	3.7	1.1	2.9	1.7	1.1

Deposited dust levels have generally remained at consistently low levels over the last 3 months with the exception of the October result at SD1 – “Ferndale”, where a result of 10.8g/m²/month was recorded. This result is considered an outlier compared to the previous months and other monitoring sites.

The annual average is below 4g/m²/month for all sites.

PM₁₀ Data

Compliance with the 24hr criterion of 50µg/m³ has been maintained during the reporting period.

PM₁₀ measurements taken for the “Illili” High Volume Air Sampler (HVAS) are returning a running annual average of 14.10µg/m³, which is well below the annual average limit of 30µg/m³.

PM₁₀ measurements taken for the “Lilydale” HVAS are returning an annual average of 10.67µg/m³, which is also well below the annual average limit of 30µg/m³.

Blast Monitoring

Since the first shot there have been 22 blasts. All blasts during this report period have been compliant within the limits of 115dB and 5mm/s.

To date, the highest overpressure recorded is 114.8 dB recorded at “Illili” on the 17th April 2010 & 23rd June 2010. The highest ground vibration recorded is 2.39mm/s recorded at “Plain View” on the 17th April 2009.

Groundwater Monitoring

No additional groundwater monitoring data is available for this reporting period due to delays with the environmental monitoring company contracted to collect and analyse the samples.

Surface Water

No wet weather discharge events have occurred since the last CCC meeting. Surface water sampling from August and November has been undertaken on site. Slightly elevated Total Suspended Solids results were recorded at SD3 (140mg/L) and SD4 (56mg/L), which is associated with the large amounts of rainfall received recently. All other parameters were within concentration criteria if a discharge event was to occur.

Complaints

One complaint was received at the last CCC meeting on the 8th September 2010. Concerns were raised in regard to ongoing noise from the mine site, particularly at night with the extended operating hours. Danny Young and Tim Muldoon met with the complainants on 13th September 2010 to discuss their concerns. At the time of their complaint it was identified that haul trucks to the ROM pad were most likely the noise source. As a means of addressing their concern the option of a private agreement in relation to noise levels was discussed. The complainant advised they would take some time to consider that proposal. A follow up meeting is to be held in the near future to further discuss the issue.

Rehabilitation

The Rehabilitation and Landscape Management Plan was submitted on the 29th October 2010 to the Department of Planning and is awaiting approval. The eastern face of the waste emplacement continues to be rehabilitated via shaping, soil replacement and cover crop establishment. Tree lines for the site’s koala corridors have been ripped, with weed control and management to occur leading up to planting koala feed tree species in Autumn 2011.