NOISE RESULTS 2014

License Number: 3391

Licensee: RIX'S CREEK PTY. LIMITED

PO BOX 4

Premises: EAST MAITLAND NSW 2323
RIX'S CREEK COLLIERY

RIX'S CREEK LANE SINGLETON NSW 2330 Monitoring Frequency: Twice per year (July and December)

Sampling method: 72 hour continuous (LA10, 15 minute)

Limits:

 July
 Published:
 19 August 2014

 Sampled:
 23/6/14 - 6/7/14

 Obtained:
 1 August 2013

					Measured levels - dB(A)		dB(A)	Limit(s) - Under average conditions	Comments		
Location	Date	Start time	End time	Measurement period	L10	L90	Leq	(neutral atmosphere) and not to inversion conditions	Observations	(Potential) non- compliance/breach	
1 Singleton Heights	23/6/14 - 1/7/14	15:00	07:00	15 min Day 15 min Evening 15 min night	63.5 - 93.5 60 - 88.5 56.5 - 84.5	54 - 69 52 - 64 49 - 59.5	64 - 92 58 - 88 53 - 84	42 42 40	Mine operating	Mine operating 24 hours a day	
2 Off Bridgeman Road (Retreat)	23/6/14 - 1/7/14	15:00	07:00	15 min Day 15 min Evening 15 min night	62 - 83.5 53 - 77 44.5 - 77	45.5 - 76.5 43 - 76 37 - 76	60.5 - 80.5 55.5 - 76.5 43 - 76.5	42 42 40	Mine operating	24 hours a day	
3 Off Maison Dieu Road	2/7/14 - 8/7/14	06:45	15:00	15 min Day 15 min Evening 15 min night	37.5 - 60.5 35.5 - 52 35.5 - 53.5	30 - 53 33 -46 32 - 45.5	38.5 - 57.5 34.5 - 53.5 34 - 52.5	38 38 38	Mine operating	24 hours a day	
4 Off the New England Highway, north of premises boundary (Camberwell)	2/7/14 - 8/7/14	06:45	15:00	15 min Day 15 min Evening 15 min night	79 - 116 80.5 - 114.5 74.5 - 102	71 - 108 76.5 - 107 68 - 94.5	66 - 103.5 69.5 - 102.5 63 - 89.5	n/a n/a n/a	then previous years as i	s a day. Readings higher noise logger was placed ighway - this was due to to monitoring site.	

					Measured levels - dB(A)		Limit(s) - Under average conditions	Comments		
Location	Date	Start time	End time	Measurement period	L10	L90	Leq	(neutral atmosphere) and not to inversion conditions	Observations	(Potential) non- compliance/breach
1 Singleton Heights	8/12/14 - 12/12/2014	13:00	9:45	15 min Day 15 min Evening 15 min night	31.5 - 87 46.5 - 92.5 27 - 72	26.5 - 60 27.5 - 66.5 25.5 - 51	29.5 - 88.5 49 - 90 26 - 70	42 42 40	Mine operating 24 hours a day	
2 Off Bridgeman Road (Retreat)	1/12/14 - 5/12/14	12:45	10:15	15 min Day 15 min Evening 15 min night	57 - 87 53 - 83 45.5 - 59.5	43.5 - 64.5 48 - 64 41 - 58	56.5 - 83 53.5 - 89 45 - 80.5	42 42 40	Mine operating 24 hours a day	
3 Off Maison Dieu Road	3/12/14 - 9/12/14	10:15	10:00	15 min Day 15 min Evening 15 min night	36.1 - 70.2 34.9 - 62.5 34.3 - 70	26.3 - 62.1 25.5 - 52.6 31.8 - 57.6	35.4 - 77 34.2 - 64.3 34.1 - 67.9	38 38 38	Mine operating 24 hours a day	
4 Off the New England Highway, north of premises boundary (Camberwell)	9/12/14 - 16/12/14	10:00	12:45	15 min Day 15 min Evening 15 min night	39.7 - 76.4 39.5 - 73.7 35.3 - 64.3	30.8 - 53.9 33.7 - 57.8 30.6 - 51.1	38.9 - 72.3 37.7 - 73.6 33.6 - 60.2	n/a n/a n/a	Mine operatin	g 24 hours a day

5.1.1 RC1 – McInerneys Road

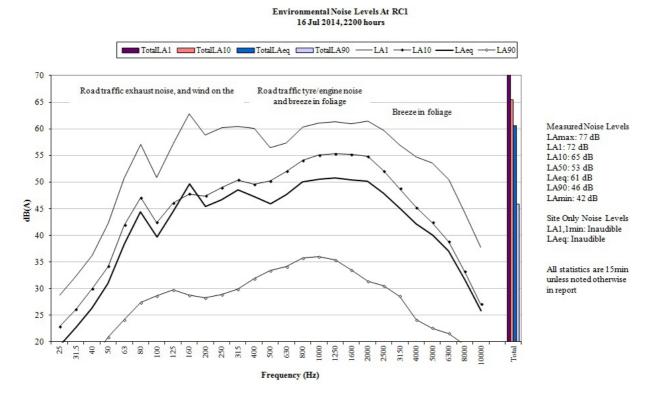


Figure 3: Environmental Noise Levels, McInerneys Road

RCM was inaudible.

Road traffic noise was responsible for all measured levels.

Breeze in foliage, breeze on the microphone and frogs and insects were also noted.

5.1.2 RC2 – Maison Dieu Road

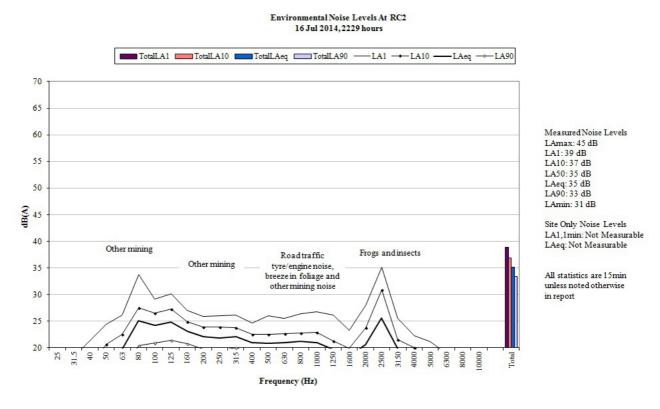


Figure 4: Environmental Noise Levels, Maison Dieu Road

RCM was briefly audible at times throughout the measurement. These levels were not measurable.

A continuum from another mine combined with frogs and insects to generate the measured L_{A1} , L_{A10} , L_{Aeq} and L_{A90} . Breeze in the foliage/on the microphone was a minor contributor to the measured L_{A1} and L_{A10} .

Cows and road traffic noise was also noted.

5.1.3 RC3 – Rodd Close

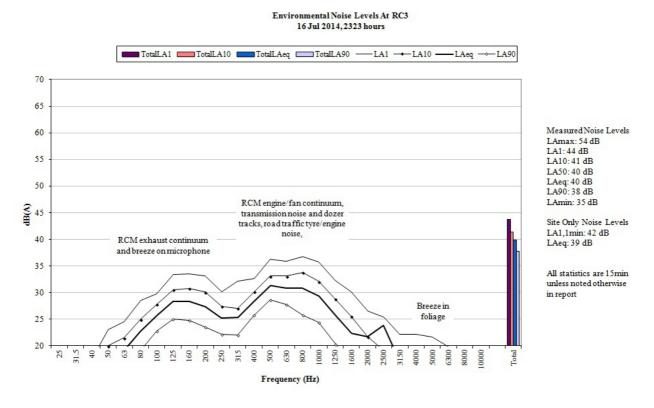


Figure 5: Environmental Noise Levels, Rodd Close

An exhaust and engine/fan continuum from RCM was audible throughout the measurement, generating the site only L_{Aeq} of 39 dB. A surge in the continuum (dumping noise) generated the site only $L_{A1,1minute}$ of 42 dB. Track noise and transmission noise was also noted. L_{Aeq} .

RCM was primarily responsible for the measured L_{Aeq} and L_{A90} . Bats, road traffic, locomotive noise and breeze in foliage were also noted.

5.1.4 RC4 – Retreat Road

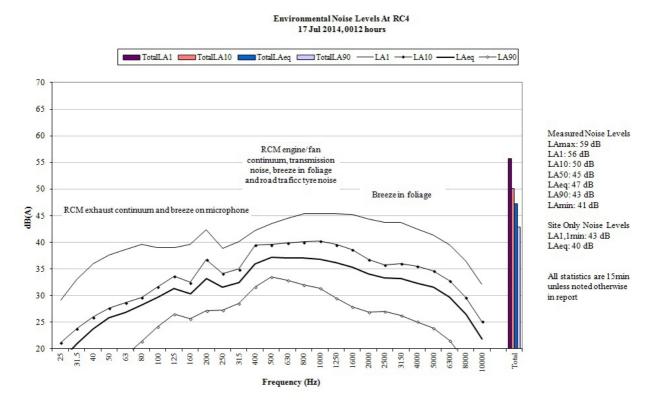


Figure 6: Environmental Noise Levels, Retreat Road

An engine/fan/CHPP continuum from RCM was audible throughout the measurement, generating the site only L_{Aeq} of 40 dB. A surge in the continuum generated the site only $L_{A1,1minute}$ of 43 dB. Low level transmission noise was briefly audible.

Breeze in the foliage and on the microphone dominated the acoustic environment, primarily responsible for the measured L_{A1} , L_{A10} , L_{Aeq} , and combining with RCM to generate the L_{A90} . Locomotive noise contributed to the measured L_{A1} , L_{A10} and L_{Aeq} . Road traffic noise contributed to the L_{A1} .

5.1.5 RC5 –Retreat Road – Measurement 2

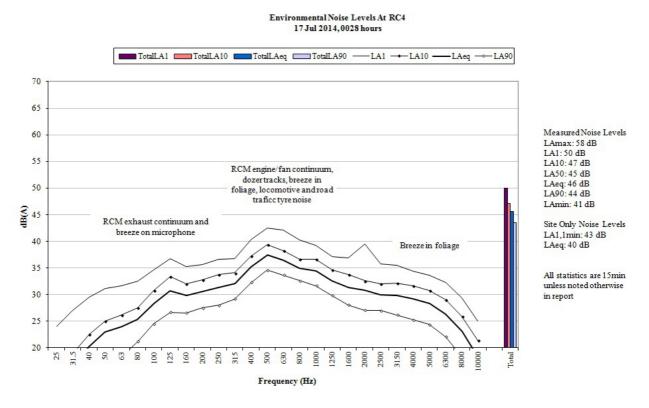


Figure 7: Environmental Noise Levels, Retreat Road

A continuum of engine/fan/CHPP noise and track noise from RCM was audible throughout the measurement, generating the site only L_{Aeq} of 40 dB. A surge in the continuum generated the site only $L_{A1,1minute}$ of 43 dB.

Breeze in the foliage and on the microphone dominated the acoustic environment, primarily responsible for the measured L_{A1} , L_{A10} , L_{Aeq} , and combining with RCM to generate the L_{A90} . Locomotive noise contributed to the measured L_{A1} , L_{A10} and L_{Aeq} . Road traffic noise contributed to the L_{A1} .

5.1.1 RC1 – McInerneys Road

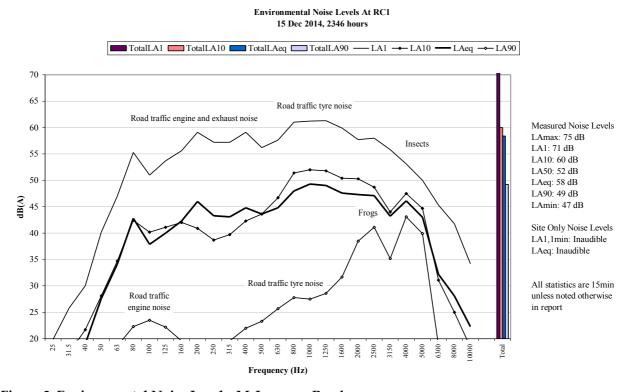


Figure 3: Environmental Noise Levels, McInerneys Road

RCM was inaudible.

Road traffic tyre noise was responsible for the measured L_{A1} , L_{A10} and L_{Aeq} . Insects and frogs generated the measured L_{A90} .

5.1.2 RC2 – Maison Dieu Road

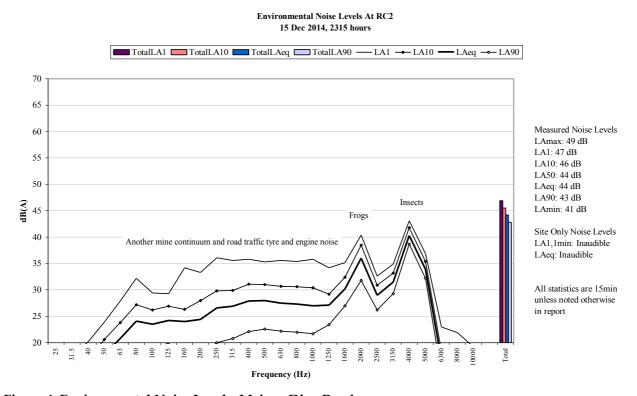


Figure 4: Environmental Noise Levels, Maison Dieu Road

RCM was inaudible.

Frogs and insects were responsible for measured levels.

A continuum and dozer tracks from another mine, a train and road traffic tyre and engine noise were also noted.

5.1.3 RC3 – Rodd Close

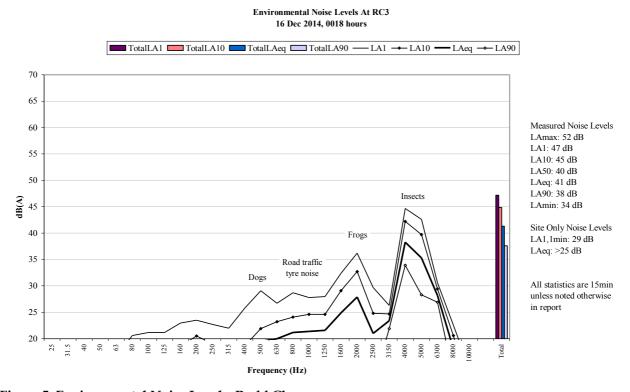


Figure 5: Environmental Noise Levels, Rodd Close

A low-level continuum from RCM was audible at times during the measurement generating the site only L_{Aeq} of less than 25 dB. A surge in the continuum generated the site only $L_{A1,1minute}$ of 29 dB.

Insects were responsible for measured levels.

Road traffic tyre noise, frogs and dogs were also noted.

5.1.4 RC4 – Retreat Road

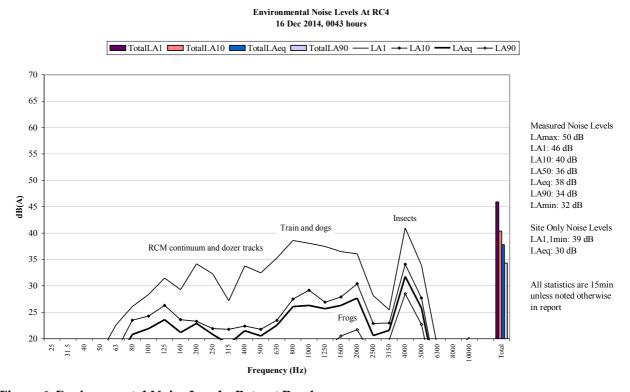


Figure 6: Environmental Noise Levels, Retreat Road

An engine and fan continuum from RCM was audible throughout the measurement generating the site only L_{Aeq} of 30 dB. A surge in the continuum generated the site only $L_{A1,1minute}$ of 39 dB. Dozer tracks were also noted.

Insects were the major contributor to the measured L_{A1} , L_{A10} and L_{Aeq} . Dogs were minor contributors to the measured L_{A1} . A train and frogs were minor contributors to the measured L_{Aeq} . Insects generated the measured L_{A90} .

Road traffic tyre noise was also noted.

