# **NOISE RESULTS 2016**

License Number: 3391 Licensee:

RIX'S CREEK PTY. LIMITED

PO BOX 4

Monitoring Frequency: Twice per year (July and December) 72 hour continuous (LA10, 15 minute) Sampling method:

Nil

Limits:

Premises:

EAST MAITLAND NSW 2323 RIX'S CREEK COLLIERY RIX'S CREEK LANE

SINGLETON NSW 2330

5 August 2016 5/7/16 - 29/7/16 1 August 2016 July Published: Sampled: Obtained:

					Measured levels - dB(A)  Limit(s) - Under average conditions (neutral			Comments		
Location	Date	Start time	End time	Measurement period	L10	L90	Leq	atmosphere) and not to inversion conditions	Observations	(Potential) non- compliance/breach
1 Singleton Heights	18/7/2016- 22/7/2016	09:45	10:45	15 min Day 15 min Evening 15 min night	46.5 - 78.5 48.5 - 62 45.0 - 73.5	37.5 - 59.5 41 - 52 40.5 - 55.5	46.5 - 88.5 47 - 65.5 43.5 - 86	42 42 40	Mine operatin	g 24 hours a day.
2 Off Bridgeman Road (Retreat)	5/7/2016 - 8/7/2016	10:00	14:15	15 min Day 15 min Evening 15 min night	61.5 - 98 55.5 - 90.5 52.5 - 89	49 - 79.5 49 - 73 46.5 - 68.5	58 - 94 54 - 86.5 50.5 - 85.5	42 42 40	Mine operatin	g 24 hours a day.
3 Off Maison Dieu Road	12/7/2016 - 15/7/2016	07:30	13:15	15 min Day 15 min Evening 15 min night	56 - 101 52 - 95.5 53 - 99.5	48 - 81.5 45.5 - 74 47 - 78.5	54 - 97 50 - 91.5 51.5 - 95	38 38 38	Mine operatin	g 24 hours a day.
4 Off the New England Highway, north of premises boundary (Camberwell)	25/7/2016 - 29/7/2016	10:45	13:45	15 min Day 15 min Evening 15 min night	70 - 104 69.5 - 97.5 59.5 - 99.5	57 - 91.5 56 - 84.5 52.5 - 87	66 - 100 67 - 93.5 56.5 - 95.5	n/a n/a n/a	Mine operatin	g 24 hours a day.
December	Published: Sampled: Obtained:		9 February 2017 5/12/16 - 19/12/16 1 February 2017							

					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	5/12/2016 - 8/12/2016	9:45	0:00	15 min Day 15 min Evening 15 min night	38.5 - 71 41.5 - 70.5 43.5 - 58	31 - 58 35.5 - 53 30.5 - 52.5	37 - 57.5 39.5 - 67 40.5 - 59	42 42 40	Mine operatin	g 24 hours a day
2 Off Bridgeman Road (Retreat)	16/12/2016 - 19/12/2016	8:30	0:00	15 min Day 15 min Evening 15 min night	51 - 74 50 - 73.5 43 - 73	36.5 - 73 35.5 - 72 36.5 - 71.5	48.5 - 73.5 50.5 - 72.5 40 - 72	42 42 40	Mine operating	g 24 hours a day
3 Off Maison Dieu Road	12/12/2016 - 15/12/2016	7:15	0:00	15 min Day 15 min Evening 15 min night	34.5 - 64.5 36 - 54.5 28 - 45.5	27.5 - 50 28 - 45.5 27.5 - 37	33 - 60 33.5 - 51.5 28 - 47	38 38 38	Mine operatin	g 24 hours a day
4 Off the New England Highway, north of premises boundary (Camberwell)	12/12/2016 - 15/12/2016	10:45	0:00	15 min Day 15 min Evening 15 min night	50.5 - 89.5 47.5 - 85.5 50.5 - 74	35.5 - 71.5 36 - 66 34.5 - 52.5	47 - 85 44.5 - 81.5 47 - 70	n/a n/a n/a	Mine operating	g 24 hours a day

#### **1 SINGLETON HEIGHTS**

# 5.1.6 NM07 – 27 July 2016

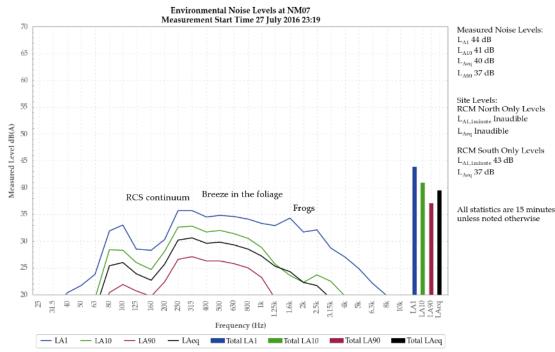


Figure 8: Environmental Noise Levels, NM07 - McMahon Way

RCN was inaudible during the measurement.

An engine and fan continuum, transmission and engine noise from RCS was audible during the measurement, generating a site only  $L_{\rm Aeq}$  of 37 dB. Surges in engine noise generated the  $L_{\rm A1,1minute}$  of 43 dB.

Activities at RCS, breeze in foliage and breeze on the microphone generated all measured levels.

Distant trains and frogs were also noted.

#### **2 RETREAT**

# 5.1.5 NM06 – 27 July 2016

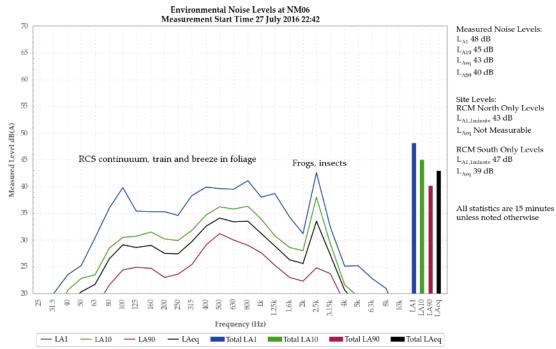


Figure 7: Environmental Noise Levels, NM06 - 427 Bridgman Road

An engine and fan continuum from RCS was audible during the measurement, generating a site only  $L_{Aeq}$  of 39 dB. Surges in engine noise generated an  $L_{A1,1minute}$  of 47 dB. RCS was noted as being the dominant noise source.

A low-level engine continuum from RCN was audible during the measurement, however was not measurable. Surges in engine noise generated an  $L_{\rm A1,1minute}$  of 43 dB.

Activities at RCS, breeze in foliage, breeze on the microphone, frogs and insects were primarily responsible for the measured  $L_{\rm A10}$  and  $L_{\rm Aeq}$ . RCS, breeze in foliage and breeze on the microphone were primarily responsible for the measured  $L_{\rm A90}$ .

Distant trains were also noted.

#### **3 MAISON DIEU**

#### 5.1.7 NM08 – 28 July 2016

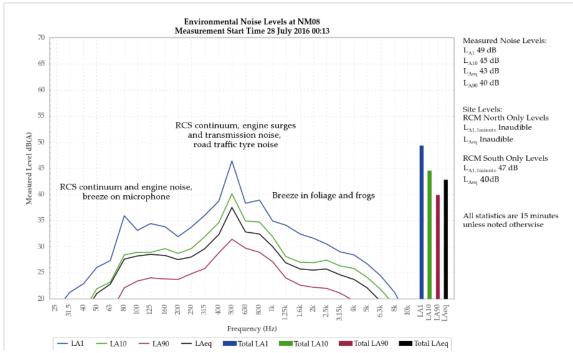


Figure 9: Environmental Noise Levels, NM08 - Cnr Belmadar Way and Maison Dieu Road

RCN was inaudible during the measurement.

A continuum, engine and transmission noise from RCS was audible during the measurement, generating a site only  $L_{\mbox{Aeq}}$  of 40 dB. Surges in engine and transmission noise generated the  $L_{\mbox{A1,1minute}}$  of 47 dB. Dozer tracks were also noted.

The continuum from RCS contributed to the  $L_{Aeq}$  and  $L_{A90}$ . RCS engine surges and road traffic tyre noise generated the  $L_{A1}$ . Breeze in foliage and breeze on the microphone contributed to the measured  $L_{A10}$ ,  $L_{Aeq}$  and  $L_{A90}$ .

Frogs, birds insects and road traffic were also noted.

#### **4 CAMBERWELL**

# 5.1.1 NM01 – 27 July 2016

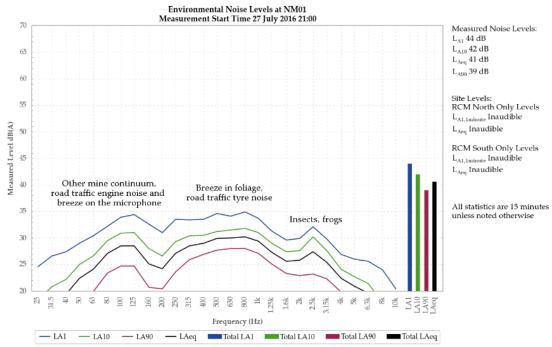


Figure 3: Environmental Noise Levels, NM01 - End of Glennie Street

RCN and RCS were inaudible during the measurement.

Another mine continuum, breeze in foliage, breeze on the microphone and road traffic tyre and engine noise generated measured levels.

Frogs and insects were also noted.

#### **1 SINGLETON HEIGHTS**

# 5.1.5 NM07 – 8 December 2016

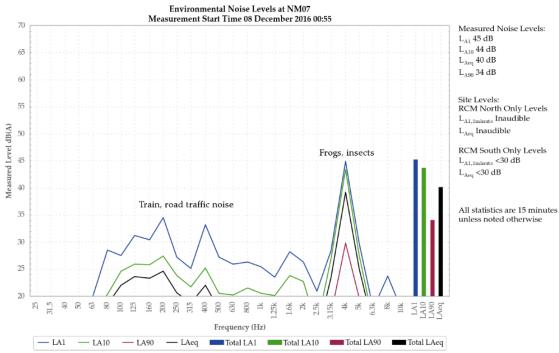


Figure 7: Environmental Noise Levels, NM07 - McMahon Way

RCN was inaudible during the measurement.

An RCS continuum was audible at very low levels at times during the measurement, generating a site only  $L_{\mbox{Aeq}}$  and  $L_{\mbox{A1,1minute}}$  of less than 30 dB.

Frogs and insects primarily generated measured levels.

A train, road traffic tyre noise, dogs and bats were also noted.

#### **2 RETREAT**

#### 5.1.4 NM05 – 7 December 2016

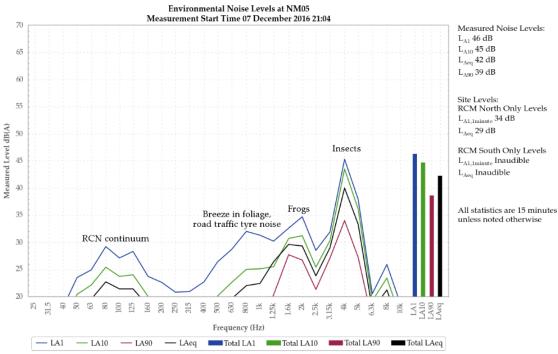


Figure 6: Environmental Noise Levels, NM05 - 728 Bridgman Road

RCS was inaudible during the measurement.

An exhaust and engine continuum from RCN was audible during the measurement, generating a site only  $L_{Aeq}$  of 29 dB. A surge in engine noise generated the  $L_{A1,1minute}$  of 34 dB.

Frogs and insects primarily generated measured levels.

Breeze in foliage and road traffic tyre noise were also noted.

#### **3 MAISON DIEU**

#### 5.1.6 NM08 – 7 December 2016

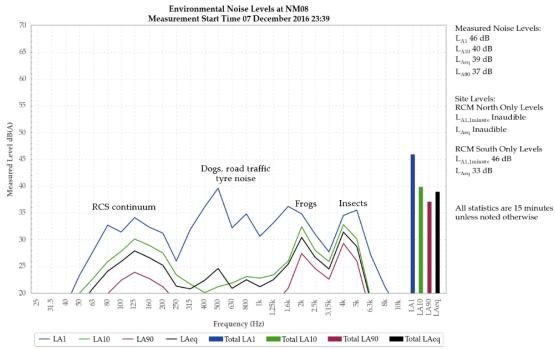


Figure 8: Environmental Noise Levels, NM08 - Cnr Belmadar Way and Maison Dieu Road

RCN was inaudible during the measurement.

A continuum from RCS was audible during the measurement, generating a site only  $L_{Aeq}$  of 33 dB. An impact noise generated a site only  $L_{A1,1minute}$  of 46 dB.

The RCS continuum, frogs and insects generated the measured  $L_{A10}$ ,  $L_{Aeq}$  and  $L_{A90}$ , and also contributed to the  $L_{A1}$ . Dogs and road traffic tyre noise were also contributors to the  $L_{A1}$ .

Breeze in foliage and bats were also noted.

#### **4 CAMBERWELL**

# 5.1.1 NM01 – 7 December 2016

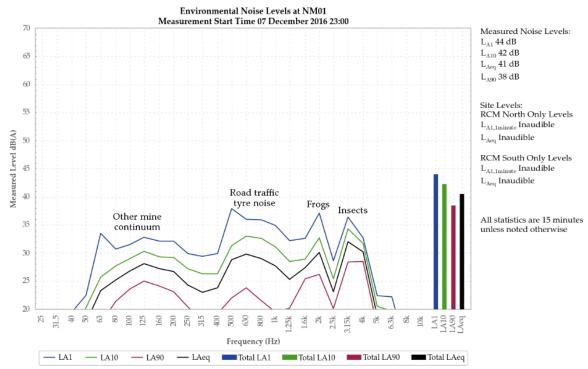


Figure 3: Environmental Noise Levels, NM01 - End of Glennie Street

RCN and RCS were inaudible during the measurement.

Another mine continuum, road traffic tyre noise, frogs and insects all contributed to measured levels.

A train was also noted.

