

Appendix 9

NOISE MONITORING RESULTS

Attended Noise Monitoring**September 2009**

8 September 2009 (Day)				
Location	Time	dB(A),Leq	Wind speed/ direction	Identified Noise Sources
Surrey	7:45 am	43	1 m/s, NW	Birds & insects (41), RCM (37)
Costa Vale	8:04 am	48	1 m/s, NW	Birds (48), RCM (33)
8 September 2009 (Evening)				
Surrey	7:59 pm	34	<0.5 m/s, NW	Cattle (33), RCM (27)
Costa Vale	7:31 pm	39	<0.5 m/s, NW	RCM (38), frogs & insects (30)
8 September 2009 (Night)				
Surrey	11:31 pm	40	Calm	Cattle (40), RCM (27)
Costa Vale	10:57 pm	32	Calm	RCM (30), insects (28)

December 2009

17 December 2009 (Evening)				
Location	Time	dB(A),Leq	Wind speed/ direction	Identified Noise Sources
Surrey	9:42 pm	41	1 m/s, NW	Dogs (40), insects (32), RCM (31)
Costa Vale	9:15 pm	30	1 m/s, NW	Insects (30), RCM inaudible
17 December 2009 (Night)				
Surrey	10:33 pm	32	<0.5 m/s, NW	RCM (31), insects (26)
Costa Vale	11:14 pm	28	<0.5 m/s, NW	Insects (28), RCM inaudible
18 December 2009 (Day)				
Surrey	7:45 am	44	1 m/s N	Birds (44), RCM (<20)
Costa Vale	8:10 am	42	2 m/s N	Birds & insects (42), RCM inaudible

March 2010

25 March 2010 (Evening)				
Location	Time	dB(A),Leq	Wind speed/ direction	Identified Noise Sources
Surrey	7:42 pm	39	Calm	Insects (39), RCM (30)
Costa Vale	8:15 pm	40	Calm	Insects (38), RCM (30)
25 March 2010 (Night)				
Surrey	10:21 pm	38	<0.5 m/s, SW	Insects (37), RCM (31)
Costa Vale	10:52 pm	34	<0.5 m/s, SW	Insects (33), RCM (25)
26 March 2010 (Day)				
Surrey	7:14 am	43	Calm	Birds & insects (42), rooster (34), RCM (24)
Costa Vale	7:45 am	50	2 m/s N	Birds & insects (50), RCM (30)

June 2010

22 June 2010 (Day)				
Location	Time	dB(A),Leq	Wind speed/ direction	Identified Noise Sources
Surrey	9:51 am	42	1.5 m/s, SE	Wind (40).Birds (37), RCM (28)
Costa Vale	9:20 am	41	1.5 m/s, SE	Birds (39), Wind (32) RCM (30)
22 June 2010 (Evening)				
Surrey	9:06 pm	45	1.5 m/s, SE	Insects (42), Wind (40), RCM inaudible
Costa Vale	8:43 pm	47	1.5 m/s, SE	Insects (45), Wind (41) RCM inaudible
22 June 2010 (Night)				
Surrey	11:48pm	40	1.0 m/s SE	Insects & Frogs (37), Wind (37) RCM inaudible
Costa Vale	10:27pm,	38	1.0 m/s SE	Wind (36), Birds (32), RCM (28)

Unattended Noise Monitoring**September 2009****Costa Vale**

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
7-Sep-09	55.7	29.7	46.2	31.0	26.2	25.0
8-Sep-09	44.5	37.5	49.3	27.5	26.0	25.3
9-Sep-09	45.7	37.5	48.1	29.0	26.5	25.0
LAeq	52	36	48			
L90				29	26	25

Surrey

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
7-Sep-09	52.8	26.7	47.6	25.5	25.0	25.0
8-Sep-09	46.8	36.2	44.8	28.0	27.0	25.0
9-Sep-09	46.8	37.2	50.1	31.0	25.7	25.0
LAeq	50	35	48			
L90				28	26	25

* Note 25 dB(A) is the lower limit of the logger as setup

December 2009**Costa Vale**

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
8-Dec-09	63.6	46.4	42.7	46.0	30.1	17.1
9-Dec-09	53.0	46.2	42.6	29.3	24.2	17.1
10-Dec-09	44.8	42.1	43.4	26.0	26.0	22.0
LAeq	59	45	43			
L90				30	26	17

Surrey

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
8-Dec-09	46.3	42.3	41.9	25.3	18.7	17.1
9-Dec-09	47.3	41.3	60.3	27.3	22.8	18.8
10-Dec-09	63.4	33.2	44.5	30.6	26.0	18.5
LAeq	59	40	56			
L90				27	23	19

March 2010**Costa Vale**

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
25-Mar-10	35.9	40.3	41.7	23.5	23.9	18.2
26-Mar-10	42.4	41.4	40.7	24.8	23.7	18.1
27-Mar-10	51.4	57.0	55.9	25.0	26.2	25.2
L _{Aeq}	47	52	51			
L90				25	24	18

Surrey

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
25-Mar-10	36.8	44.5	41.8	25.2	26.2	19.3
26-Mar-10	40.9	44.0	43.3	24.0	25.0	19.1
27-Mar-10	38.7	47.7	46.7	23.4	25.8	20.7
L _{Aeq}	39	46	44			
L90				24	26	19

June 2010**Costa Vale**

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
21-Jun-10	45.3	41.8	41.7	29.4	29.5	26.0
22-Jun-10	46.6	44.6	39.5	29.7	26.5	26.0
23-Jun-10	48.5	47.1	43.2	29.0	30.0	25.5
L _{Aeq}	47	45	42	--	--	--
L90	--	--	--	30	28	26

Surrey

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
21-Jun-10	42.4		35.6	20.1	21.6	23.0
22-Jun-10	43.2	42.2	38.6	23.7	34.9	19.4
23-Jun-10	62.8	40.4	39.1	28.5	26.4	26.7
L _{Aeq}	57	41	39	--	--	--
L90	--	--	--	26	25	22

Cumulative Road Noise Monitoring



21 December 2009

Ref: 06259/3370

Mr. Danny Young
Whitehaven Coal Mine
PO Box 600
GUNNEDAH NSW 2380

RE: WHITEHAVEN COAL – ROAD HAULAGE NOISE MONITORING, DECEMBER 2009

This letter report presents the results of a road noise measurements conducted for the Whitehaven Coal Mine (WCM), Tarrawonga Coal Mine (TCM) and Rocglen Coal Mine (RCM). The measurements were conducted at “Brooklyn” and “Werona” on Blue Vale Road with the intention of determining the $L_{Aeq(1\text{ hour})}$ noise contribution from mine-related vehicles, particularly coal haul trucks. There are two separate residences on “Brooklyn” and simultaneous noise measurements were made at the front of both residences. Residence 1 is closest to Blue Vale Road (approximately 90m) whilst residence 2 is approximately 480m from the road.

The approvals granted for TCM and RCM state that the cumulative noise level from traffic generated by the three mines must not exceed 60 dB(A), $L_{Aeq(1\text{hour})}$ during the day and 55 dB(A), $L_{Aeq(1\text{hour})}$ during the night at these locations. For the purposes of traffic noise assessment the DECC *Environmental Criteria for Road Traffic Noise* (ECRTN) defines day as 7am – 10pm and night as 10pm – 7am. On Sundays and public holidays the 7am transition changes to 8am.

The noise measurements were made adjacent to the front (eastern) facade of both residences at “Brooklyn” between 9:45 am and 10:15 am on Tuesday 8 December and at “Werona” between 9.30 am and 10.30 am on Friday 18 December 2009 with third-octave band Bruel & Kjaer Observer sound level meters (IEC Type 1). The sound level meters were placed on tripods and recorded continuously at 1-second statistical intervals while notes on passing vehicles were written down.

Over the course of the measurement period at “Brooklyn” there were 20 coal truck movements related to WCM, TCM and RCM associated with the mine. Other significant noise sources observed throughout the monitoring period included a contribution from birds and insects and planes. The total measured noise level for the one hour period as dB(A), L_{Aeq} , therefore, represents that from the trucks, birds, wind and other sources. At approximately 10:15 am a wind shift occurred and strong winds blew up from the North West. The survey was, consequently abandoned at that time.

Due to the discrete nature of the coal truck movements the sound level as each truck past the measurement point (that is from when each truck became audible until it was inaudible again) was readily discernable and the contribution of truck noise could be accurately determined. A breakdown of the heavy vehicle movements for “Brooklyn” is summarised in **Table 1**.

Table 1	
Coal Truck pass bys - “Brooklyn”, Blue Vale Road 8/12/09	
Time	Vehicle direction of travel
9:46	Empty coal truck to mine
9:49	Laden coal truck to CPP
9:49	Laden coal truck to CPP
9:49	Laden coal truck to CPP
9:51	Empty coal truck to mine
9:53	Laden coal truck to CPP
9:56	Empty coal truck to mine
9:58	Laden coal truck to CPP
9:59	Laden coal truck to CPP
10:01	Empty coal truck to mine
10:04	Empty coal truck to mine
10:05	Empty coal truck to mine
10:07	Empty coal truck to mine
10:07	Laden coal truck to CPP
10:08	Laden coal truck to CPP
10:10	Laden coal truck to CPP
10:10	Empty coal truck to mine
10:12	Laden coal truck to CPP
10:13	Laden coal truck to CPP
10:15	Empty coal truck to mine

Based on the 30 minute measurement the calculated contribution from mine-related vehicles at Residence 1 at “Brooklyn” was **52.0 dB(A), L_{eq} (1 hour)**. This is below the daytime criterion of **60 dB(A) L_{eq} (1 hour)**.

The calculated contribution from mine-related vehicles at Residence 2 was **38.8 dB(A), L_{eq} (1 hour)**. This is below the daytime criterion of **60 dB(A) L_{eq} (1 hour)**.

Over the course of the measurement period at “Werona” there were 40 coal truck movements related to WCM, TCM and RCM. A breakdown of the heavy vehicle movements for “Werona” is summarised in **Table 2**.

Table 2	
Coal Truck pass bys - "Werona", Blue Vale Road 18/12/09	
Time	Vehicle direction of travel
9:31	Laden coal truck to CPP
9:32	Laden coal truck to CPP
9:35	Empty coal truck to mine
9:36	Laden coal truck to CPP
9:37	Laden coal truck to CPP
9:39	Empty coal truck to mine
9:40	Empty coal truck to mine
9:41	Empty coal truck to mine
9:43	Laden coal truck to CPP
9:45	Laden coal truck to CPP
9:46	Empty coal truck to mine
9:49	Laden coal truck to CPP
9:49	Laden coal truck to CPP
9:50	Empty coal truck to mine
9:52	Laden coal truck to CPP
9:53	Empty coal truck to mine
9:54	Empty coal truck to mine
9:54	Laden coal truck to CPP
9:56	Empty coal truck to mine
9:57	Empty coal truck to mine
9:58	Empty coal truck to mine
9:58	Laden coal truck to CPP
10:00	Laden coal truck to CPP
10:03	Empty coal truck to mine
10:05	Empty coal truck to mine
10:09	Empty coal truck to mine
10:09	Empty coal truck to mine
10:09	Laden coal truck to CPP
10:10	Empty coal truck to mine
10:10	Laden coal truck to CPP
10:11	Laden coal truck to CPP
10:12	Empty coal truck to mine
10:15	Empty coal truck to mine
10:15	Laden coal truck to CPP
10:17	Empty coal truck to mine
10:20	Empty coal truck to mine
10:22	Laden coal truck to CPP
10:25	Laden coal truck to CPP
10:26	Empty coal truck to mine
10:29	Empty coal truck to mine

The total measured contribution from mine-related vehicles at "Werona" was **49.5 dB(A), L_{eq} (1 hour)**. This is below the daytime criterion of **60 dB(A) L_{eq} (1 hour)**.

We trust this report fulfils your requirements at this time, however, should you require additional information or assistance please contact the undersigned on 4954 2276.

Yours faithfully,

SPECTRUM ACOUSTICS PTY LIMITED

Author:



Ross Hodge
Acoustical Consultant

Review:



Neil Pennington
Acoustical Consultant



6 April 2010

Ref: 06259/3492

Mr. Danny Young
Whitehaven Coal Mine
PO Box 600
GUNNEDAH NSW 2380

RE: WHITEHAVEN COAL – ROAD HAULAGE NOISE MONITORING, MARCH 2010

This letter report presents the results of a road noise measurements conducted for the Tarrawonga Coal Mine (TCM) and Rocglen Coal Mine (RCM). The measurements were conducted at “Brooklyn” and “Werona” on Blue Vale Road with the intention of determining the $L_{Aeq(1\text{ hour})}$ noise contribution from mine-related vehicles, particularly coal haul trucks. There are two separate residences on “Brooklyn” and simultaneous noise measurements were made at the front of both residences. Residence 1 is closest to Blue Vale Road (approximately 90m) whilst Residence 2 is approximately 480m from the road.

The approvals granted for TCM and RCM state that the cumulative noise level from traffic generated by the two mines must not exceed 60 dB(A), $L_{Aeq(1\text{ hour})}$ during the day and 55 dB(A), $L_{Aeq(1\text{ hour})}$ during the night at these locations. For the purposes of traffic noise assessment the DECCW *Environmental Criteria for Road Traffic Noise* (ECRTN) defines day as 7am – 10pm and night as 10pm – 7am. On Sundays and public holidays the daytime transition changes to 8am.

The noise measurements were made adjacent to the front (eastern) facade of both residences at “Brooklyn” between 3:40 pm and 4:40 pm and at “Werona” between 2.20 pm and 3.20 pm on Wednesday 31 March with third-octave band Bruel & Kjaer Observer sound level meters (IEC Type 1). The sound level meters were placed on tripods and recorded continuously at 1-second statistical intervals while notes on passing vehicles were written down.

Over the course of the measurement period at “Brooklyn” there were 37 coal truck movements related to TCM and RCM. Other significant noise sources observed throughout the monitoring period included a contribution from birds and insects and a dog barking. The total measured noise level for the measurement period as dB(A), L_{Aeq} , therefore, represents that from the trucks, birds, wind and other sources.

Due to the discrete nature of the coal truck movements the sound level as each truck past the measurement point (that is from when each truck became audible until it was inaudible again) was readily discernable and the contribution of truck noise could be accurately determined. A breakdown of the heavy vehicle movements for “Brooklyn” is summarised in **Table 1**.

Table 1	
Coal Truck pass bys - “Brooklyn”, Blue Vale Road 31/03/10	
Time (pm)	Vehicle direction of travel
3:39	Laden coal truck to CPP
3:40	Laden coal truck to CPP
3:40	Laden coal truck to CPP
3:44	Laden coal truck to CPP
3:45	Empty coal truck to mine
3:45	Empty coal truck to mine
3:46	Laden coal truck to CPP
3:47	Empty coal truck to mine
3:48	Laden coal truck to CPP
3:50	Empty coal truck to mine
3:52	Laden coal truck to CPP
3:53	Empty coal truck to mine
3:53	Empty coal truck to mine
3:59	Empty coal truck to mine
4:01	Laden coal truck to CPP
4:02	Empty coal truck to mine
4:04	Laden coal truck to CPP
4:07	Laden coal truck to CPP
4:10	Laden coal truck to CPP
4:11	Laden coal truck to CPP
4:12	Empty coal truck to mine
4:15	Laden coal truck to CPP
4:16	Laden coal truck to CPP
4:17	Empty coal truck to mine
4:20	Laden coal truck to CPP
4:22	Empty coal truck to mine
4:23	Empty coal truck to mine
4:24	Laden coal truck to CPP
4:24	Laden coal truck to CPP
4:29	Laden coal truck to CPP
4:30	Laden coal truck to CPP
4:31	Empty coal truck to mine
4:34	Laden coal truck to CPP
4:35	Laden coal truck to CPP
4:35	Empty coal truck to mine
4:35	Empty coal truck to mine
4:38	Laden coal truck to CPP

The total measured noise level at Residence 1 at “Brooklyn was 58 dB(A) $L_{eq}(1 \text{ hour})$, and the calculated contribution from mine-related vehicles was **53 dB(A), $L_{eq}(1 \text{ hour})$** . This is below the daytime criterion of **60 dB(A) $L_{eq}(1 \text{ hour})$** .

The calculated contribution from mine-related vehicles at Residence 2 was **41 dB(A), L_{eq} (1 hour)**. This is below the daytime criterion of **60 dB(A) L_{eq} (1 hour)**.

Over the course of the measurement period at “Werona” there were 40 coal truck movements related to TCM and RCM. A breakdown of the heavy vehicle movements for “Werona” is summarised in **Table 2**.

Time (pm)	Vehicle direction of travel
2:18	Laden coal truck to CPP
2:22	Laden coal truck to CPP
2:23	Empty coal truck to mine
2:24	Empty coal truck to mine
2:25	Laden coal truck to CPP
2:27	Empty coal truck to mine
2:27	Empty coal truck to mine
2:29	Laden coal truck to CPP
2:31	Empty coal truck to mine
2:31	Empty coal truck to mine
2:32	Laden coal truck to CPP
2:35	Empty coal truck to mine
2:35	Empty coal truck to mine
2:39	Laden coal truck to CPP
2:40	Laden coal truck to CPP
2:41	Laden coal truck to CPP
2:41	Empty coal truck to mine
2:43	Empty coal truck to mine
2:44	Empty coal truck to mine
2:44	Laden coal truck to CPP
2:45	Empty coal truck to mine
2:46	Empty coal truck to mine
2:46	Empty coal truck to mine
2:48	Laden coal truck to CPP
2:49	Empty coal truck to mine
2:49	Empty coal truck to mine
2:50	Empty coal truck to mine
2:52	Laden coal truck to CPP
2:52	Empty coal truck to mine
2:54	Laden coal truck to CPP
2:58	Empty coal truck to mine
2:59	Empty coal truck to mine
2:59	Empty coal truck to mine
3:01	Laden coal truck to CPP
3:03	Laden coal truck to CPP
3:04	Empty coal truck to mine
3:08	Laden coal truck to CPP
3:10	Laden coal truck to CPP
3:10	Empty coal truck to mine
3:15	Laden coal truck to CPP

The total measured contribution from mine-related vehicles at "Verona" was **48 dB(A), L_{eq} (1 hour)**. This is below the daytime criterion of **60 dB(A) L_{eq} (1 hour)**.

We trust this report fulfils your requirements at this time, however, should you require additional information or assistance please contact the undersigned on 4954 2276.

Yours faithfully,

SPECTRUM ACOUSTICS PTY LIMITED

Author:



Ross Hodge
Acoustical Consultant

Review:



Neil Pennington
Acoustical Consultant



19 July 2010

Ref: 06259/3616

Mr. Danny Young
Whitehaven Coal Pty Ltd
PO Box 600
GUNNEDAH NSW 2380

RE: WHITEHAVEN COAL – ROAD TRAFFIC NOISE MONITORING, JUNE 2010

This letter report presents the results of a road noise measurements conducted for the Tarrawonga Coal Mine (TCM) and Rocglen Coal Mine (RCM). The measurements were conducted at “Brooklyn” and “Werona” on Blue Vale Road with the intention of determining the $L_{Aeq(1\text{ hour})}$ noise contribution from mine-related vehicles, particularly coal haul trucks. There are two separate residences on “Brooklyn” and simultaneous noise measurements were made at the front of both residences. Residence 1 is closest to Blue Vale Road (approximately 90m) whilst Residence 2 is approximately 480m from the road.

The approvals granted for TCM and RCM state that the cumulative noise level from traffic generated by the two mines must not exceed 60 dB(A), $L_{Aeq(1\text{ hour})}$ during the day and 55 dB(A), $L_{Aeq(1\text{ hour})}$ during the night at these locations. For the purposes of traffic noise assessment the DECCW *Environmental Criteria for Road Traffic Noise* (ECRTN) defines day as 7am – 10pm and night as 10pm – 7am. On Sundays and public holidays the daytime transition changes to 8am.

The noise measurements were made adjacent to the front (eastern) facade of both residences at “Brooklyn” between 10:32am and 11:32am and at “Werona” between 9:16am and 10:16am on Tuesday June 22 with third-octave band Bruel & Kjaer Observer sound level meters (IEC Type 1). The sound level meters were placed on tripods and recorded continuously at 1-second statistical intervals while notes on passing vehicles were written down.

Over the course of the measurement period at “Brooklyn” there were 30 coal truck movements related to TCM and RCM. Other significant noise sources observed throughout the monitoring period included a contribution from birds and insects and a dog barking. The total measured noise level for the measurement period as dB(A), L_{Aeq} , therefore, represents that from the trucks, birds, wind and other sources.

Due to the discrete nature of the coal truck movements the sound level as each truck past the measurement point (that is from when each truck became audible until it was inaudible again) was readily discernable and the contribution of truck noise could be accurately determined. A breakdown of the heavy vehicle movements for “Brooklyn” is summarised in **Table 1**.

Table 1	
Coal Truck pass bys - “Brooklyn”, Blue Vale Road 22/06/10	
Time (am)	Vehicle direction of travel
10:32	Empty coal truck to mine
10:34	Empty coal truck to mine
10:36	Laden coal truck to CPP
10:38	Empty coal truck to mine
10:42	Laden coal truck to CPP
10:46	Laden coal truck to CPP
10:47	Laden coal truck to CPP
10:47	Laden coal truck to CPP
10:51	Empty coal truck to mine
10:52	Laden coal truck to CPP
10:52	Laden coal truck to CPP
11:00	Empty coal truck to mine
11:02	Laden coal truck to CPP
11:02	Empty coal truck to mine
11:02	Laden coal truck to CPP
11:02	Empty coal truck to mine
11:03	Laden coal truck to CPP
11:03	Laden coal truck to CPP
11:07	Laden coal truck to CPP
11:08	Empty coal truck to mine
11:10	Empty coal truck to mine
11:16	Empty coal truck to mine
11:17	Empty coal truck to mine
11:18	Laden coal truck to CPP
11:18	Laden coal truck to CPP
11:19	Empty coal truck to mine
11:19	Empty coal truck to mine
11:21	Empty coal truck to mine
11:22	Laden coal truck to CPP
11:29	Laden coal truck to CPP

The total measured noise level at Residence 1 at “Brooklyn” was 51 dB(A) $L_{eq}(1 \text{ hour})$, and the calculated contribution from mine-related vehicles was **49 dB(A)**, $L_{eq}(1 \text{ hour})$. This is below the daytime criterion of **60 dB(A)** $L_{eq}(1 \text{ hour})$.

The calculated contribution from mine-related vehicles at Residence 2 was **45 dB(A)**, $L_{eq}(1 \text{ hour})$. This is below the daytime criterion of **60 dB(A)** $L_{eq}(1 \text{ hour})$.

Over the course of the measurement period at “Werona” there were 46 coal truck movements related to TCM and RCM. A breakdown of the heavy vehicle movements for “Werona” is summarised in **Table 2**.

Table 2	
Coal Truck pass bys - "Werona", Blue Vale Road 22/06/10	
Time (am)	Vehicle direction of travel
9:17	Empty coal truck to mine
9:18	Empty coal truck to mine
9:20	Laden coal truck to CPP
9:25	Empty coal truck to mine
9:25	Laden coal truck to CPP
9:25	Laden coal truck to CPP
9:29	Empty coal truck to mine
9:30	Laden coal truck to CPP
9:31	Laden coal truck to CPP
9:35	Laden coal truck to CPP
9:37	Empty coal truck to mine
9:38	Empty coal truck to mine
9:40	Empty coal truck to mine
9:41	Laden coal truck to CPP
9:41	Laden coal truck to CPP
9:41	Empty coal truck to mine
9:42	Empty coal truck to mine
9:42	Empty coal truck to mine
9:44	Empty coal truck to mine
9:46	Empty coal truck to mine
9:46	Laden coal truck to CPP
9:46	Laden coal truck to CPP
9:47	Laden coal truck to CPP
9:51	Laden coal truck to CPP
9:52	Laden coal truck to CPP
9:52	Laden coal truck to CPP
9:53	Empty coal truck to mine
9:54	Empty coal truck to mine
9:56	Laden coal truck to CPP
9:56	Laden coal truck to CPP
9:57	Laden coal truck to CPP
10:00	Empty coal truck to mine
10:02	Laden coal truck to CPP
10:02	Laden coal truck to CPP
10:03	Laden coal truck to CPP
10:03	Empty coal truck to mine
10:06	Laden coal truck to CPP
10:07	Laden coal truck to CPP
10:08	Empty coal truck to mine
10:09	Empty coal truck to mine
10:12	Empty coal truck to mine
10:12	Laden coal truck to CPP
10:12	Laden coal truck to CPP
10:13	Laden coal truck to CPP
10:16	Empty coal truck to mine
10:16	Empty coal truck to mine

The total measured contribution from mine-related vehicles at "Werona" was **49 dB(A)_{L_{eq}(1 hour)}**. This is below the daytime criterion of **60 dB(A) L_{eq}(1 hour)**.

We trust this report fulfils your requirements at this time, however, should you require additional information or assistance please contact the undersigned on 4954 2276.

Yours faithfully,
SPECTRUM ACOUSTICS PTY LIMITED

Author:



Ross Hodge
Acoustical Consultant

Review:



Neil Pennington
Acoustical Consultant