

ROYAL ORDNANCE, BISHOPTON



OUTLINE PLANNING APPLICATION FOR THE REGENERATION
OF THE SITE TO FORM A MIXED USE COMMUNITY GROWTH AREA

APPENDICES TO THE ENVIRONMENTAL STATEMENT

APPENDIX 10.1

NOISE AND VIBRATION BACKGROUND INFORMATION

May 2006

Phase 1

Receptor 1 - Rossland Crescent

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	50.0	61.0	-0.3	60.8	JCB	57.8
97.0	50.0	55.0	-0.3	54.8	Excavator	51.8
94.0	50.0	52.0	-0.3	51.8	Tractor & Water Bowser	48.8
84.0	50.0	42.0	-0.3	41.8	Small Dumper	38.8
84.0	50.0	42.0	-0.3	36.8	Skid shovel within buildings	33.8
96.0	50.0	54.0	-0.3	48.8	Mini excavator with breaker within buildings (with rubber tracks)	45.8
2 teams during Phase 1						59.4
Total						62.4

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	50.0	76.0	-0.3	75.8	Breaker mounted on excavator	72.8
98.0	50.0	56.0	-0.3	55.8	Tracked excavator (1)	52.8
98.0	50.0	56.0	-0.3	55.8	Tracked excavator (2)	52.8
98.0	50.0	56.0	-0.3	55.8	Excavator with nibbler (1)	52.8
98.0	50.0	56.0	-0.3	55.8	Excavator with nibbler (2)	52.8
106.0	50.0	64.0	-0.3	63.8	Dump trucks (1)	60.8
106.0	50.0	64.0	-0.3	63.8	Dump trucks (2)	60.8
106.0	50.0	64.0	-0.3	63.8	Dump trucks (3)	60.8
Total						73.7

Receptor 1 - Rossland Crescent**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	100	62.0	-0.5	61.5	Tracked Crusher	58.5
110.0	100	62.0	-0.5	61.5	Tracked Excavator (1)	58.5
110.0	100	62.0	-0.5	61.5	Tracked Excavator (2)	58.5
96.0	100	48.0	-0.5	47.5	Front Loader	44.5
Total						63.3

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	25.0	67.0	-0.1	66.9	Dozer	63.9
103.0	25.0	67.0	-0.1	66.9	Roller	63.9
97.0	25.0	61.0	-0.1	60.9	Excavator (1)	57.9
97.0	25.0	61.0	-0.1	60.9	Excavator (2)	57.9
97.0	25.0	61.0	-0.1	60.9	Excavator (3)	57.9
103.0	25.0	67.0	-0.1	66.9	Dozer (1)	63.9
103.0	25.0	67.0	-0.1	66.9	Dozer (2)	63.9
103.0	25.0	67.0	-0.1	66.9	Dozer (3)	63.9
109.0	25.0	73.0	-0.1	72.9	Breaker/Nibbler on Excavator	69.9
Total						73.8

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	25.0	52.0	-0.1	51.9	Generator	48.9
102.0	25.0	66.0	-0.1	65.9	Fuel Tanker	62.9
97.0	25.0	61.0	-0.1	60.9	Tracked Excavator	57.9
104.0	25.0	68.0	-0.1	67.9	Road Sweeper	64.9
104.0	25.0	68.0	-0.1	67.9	Tractor & Water Bowser	64.9
Total						69.5

Receptor 2 - Sachelcourt Avenue

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	50.0	61.0	-0.3	60.8	JCB	57.8
97.0	50.0	55.0	-0.3	54.8	Excavator	51.8
94.0	50.0	52.0	-0.3	51.8	Tractor & Water Bowser	48.8
84.0	50.0	42.0	-0.3	41.8	Small Dumper	38.8
84.0	50.0	42.0	-0.3	36.8	Skid shovel within buildings	33.8
96.0	50.0	54.0	-0.3	48.8	Mini excavator with breaker within buildings (with rubber tracks)	45.8
2 teams during Phase 1						59.4
Total						62.4

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	50.0	76.0	-0.3	75.8	Breaker mounted on excavator	72.8
98.0	50.0	56.0	-0.3	55.8	Tracked excavator (1)	52.8
98.0	50.0	56.0	-0.3	55.8	Tracked excavator (2)	52.8
98.0	50.0	56.0	-0.3	55.8	Excavator with nibbler (1)	52.8
98.0	50.0	56.0	-0.3	55.8	Excavator with nibbler (2)	52.8
106.0	50.0	64.0	-0.3	63.8	Dump trucks (1)	60.8
106.0	50.0	64.0	-0.3	63.8	Dump trucks (2)	60.8
106.0	50.0	64.0	-0.3	63.8	Dump trucks (3)	60.8
Total						73.7

Receptor 2 - Sachelcourt Avenue**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	100	62.0	-0.5	61.5	Tracked Crusher	58.5
110.0	100	62.0	-0.5	61.5	Tracked Excavator (1)	58.5
110.0	100	62.0	-0.5	61.5	Tracked Excavator (2)	58.5
96.0	100	48.0	-0.5	47.5	Front Loader	44.5
Total						63.3

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	25.0	67.0	-0.1	66.9	Dozer	63.9
103.0	25.0	67.0	-0.1	66.9	Roller	63.9
97.0	25.0	61.0	-0.1	60.9	Excavator (1)	57.9
97.0	25.0	61.0	-0.1	60.9	Excavator (2)	57.9
97.0	25.0	61.0	-0.1	60.9	Excavator (3)	57.9
103.0	25.0	67.0	-0.1	66.9	Dozer (1)	63.9
103.0	25.0	67.0	-0.1	66.9	Dozer (2)	63.9
103.0	25.0	67.0	-0.1	66.9	Dozer (3)	63.9
109.0	25.0	73.0	-0.1	72.9	Breaker/Nibbler on Excavator	69.9
Total						73.8

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	25.0	52.0	-0.1	51.9	Generator	48.9
102.0	25.0	66.0	-0.1	65.9	Fuel Tanker	62.9
97.0	25.0	61.0	-0.1	60.9	Tracked Excavator	57.9
104.0	25.0	68.0	-0.1	67.9	Road Sweeper	64.9
104.0	25.0	68.0	-0.1	67.9	Tractor & Water Bowser	64.9
Total						69.5

Receptor 3 - Gatehead

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1280.0	32.9	-6.4	26.5	JCB	23.5
97.0	1280.0	26.9	-6.4	20.5	Excavator	17.5
94.0	1280.0	23.9	-6.4	17.5	Tractor & Water Bowser	14.5
84.0	1280.0	13.9	-6.4	7.5	Small Dumper	4.5
84.0	1280.0	13.9	-6.4	2.5	Skid shovel within buildings	-0.5
96.0	1280.0	25.9	-6.4	14.5	Mini excavator with breaker within buildings (with rubber tracks)	11.5
						25.1
2 teams during Phase 1						25.1
Total						28.1

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	1280.0	47.9	-6.4	41.5	Breaker mounted on excavator	38.5
98.0	1280.0	27.9	-6.4	21.5	Tracked excavator (1)	18.5
98.0	1280.0	27.9	-6.4	21.5	Tracked excavator (2)	18.5
98.0	1280.0	27.9	-6.4	21.5	Excavator with nibbler (1)	18.5
98.0	1280.0	27.9	-6.4	21.5	Excavator with nibbler (2)	18.5
106.0	1280.0	35.9	-6.4	29.5	Dump trucks (1)	26.5
106.0	1280.0	35.9	-6.4	29.5	Dump trucks (2)	26.5
106.0	1280.0	35.9	-6.4	29.5	Dump trucks (3)	26.5
Total						39.4

Receptor 3 - Gatehead**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	1280	39.9	-6.4	33.5	Tracked Crusher	30.5
110.0	1280	39.9	-6.4	33.5	Tracked Excavator (1)	30.5
110.0	1280	39.9	-6.4	33.5	Tracked Excavator (2)	30.5
96.0	1280	25.9	-6.4	19.5	Front Loader	16.5
Total						35.3

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1280.0	32.9	-6.4	26.5	Dozer	23.5
103.0	1280.0	32.9	-6.4	26.5	Dozer & Roller	23.5
97.0	1280.0	26.9	-6.4	20.5	Excavator (1)	17.5
97.0	1280.0	26.9	-6.4	20.5	Excavator (2)	17.5
97.0	1280.0	26.9	-6.4	20.5	Excavator (3)	17.5
103.0	1280.0	32.9	-6.4	26.5	Dozer (1)	23.5
103.0	1280.0	32.9	-6.4	26.5	Dozer (2)	23.5
103.0	1280.0	32.9	-6.4	26.5	Dozer (3)	23.5
109.0	1280.0	38.9	-6.4	32.5	Breaker/Nibbler on Excavator	29.5
Total						33.3

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	1280.0	17.9	-6.4	11.5	Generator	8.5
102.0	1280.0	31.9	-6.4	25.5	Fuel Tanker	22.5
97.0	1280.0	26.9	-6.4	20.5	Tracked Excavator	17.5
104.0	1280.0	33.9	-6.4	27.5	Road Sweeper	24.5
104.0	1280.0	33.9	-6.4	27.5	Tractor & Water Bowser	24.5
Total						29

Receptor 4 - Boghill Cottage

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2110.0	28.5	-10.6	18.0	JCB	15.0
97.0	2110.0	22.5	-10.6	12.0	Excavator	9.0
94.0	2110.0	19.5	-10.6	9.0	Tractor & Water Bowser	6.0
84.0	2110.0	9.5	-10.6	-1.0	Small Dumper	-4.0
84.0	2110.0	9.5	-10.6	-6.0	Skid shovel within buildings	-9.0
96.0	2110.0	21.5	-10.6	6.0	Mini excavator with breaker within buildings (with rubber tracks)	3.0
2 teams during Phase 1						16.6
Total						19.6

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	2110.0	43.5	-10.6	33.0	Breaker mounted on excavator	30.0
98.0	2110.0	23.5	-10.6	13.0	Tracked excavator (1)	10.0
98.0	2110.0	23.5	-10.6	13.0	Tracked excavator (2)	10.0
98.0	2110.0	23.5	-10.6	13.0	Excavator with nibbler (1)	10.0
98.0	2110.0	23.5	-10.6	13.0	Excavator with nibbler (2)	10.0
106.0	2110.0	31.5	-10.6	21.0	Dump trucks (1)	18.0
106.0	2110.0	31.5	-10.6	21.0	Dump trucks (2)	18.0
106.0	2110.0	31.5	-10.6	21.0	Dump trucks (3)	18.0
Total						30.9

Receptor 4 - Boghill Cottage

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	2110	35.5	-10.6	25.0	Tracked Crusher	22.0
110.0	2110	35.5	-10.6	25.0	Tracked Excavator (1)	22.0
110.0	2110	35.5	-10.6	25.0	Tracked Excavator (2)	22.0
96.0	2110	21.5	-10.6	11.0	Front Loader	8.0
Total						26.8

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2110.0	28.5	-10.6	18.0	Dozer	15.0
103.0	2110.0	28.5	-10.6	18.0	Dozer & Roller	15.0
97.0	2110.0	22.5	-10.6	12.0	Excavator (1)	9.0
97.0	2110.0	22.5	-10.6	12.0	Excavator (2)	9.0
97.0	2110.0	22.5	-10.6	12.0	Excavator (3)	9.0
103.0	2110.0	28.5	-10.6	18.0	Dozer (1)	15.0
103.0	2110.0	28.5	-10.6	18.0	Dozer (2)	15.0
103.0	2110.0	28.5	-10.6	18.0	Dozer (3)	15.0
109.0	2110.0	34.5	-10.6	24.0	Breaker/Nibbler on Excavator	21.0
Total						24.8

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	2110.0	13.5	-10.6	3.0	Generator	0.0
102.0	2110.0	27.5	-10.6	17.0	Fuel Tanker	14.0
97.0	2110.0	22.5	-10.6	12.0	Tracked Excavator	9.0
104.0	2110.0	29.5	-10.6	19.0	Road Sweeper	16.0
104.0	2110.0	29.5	-10.6	19.0	Tractor & Water Bowser	16.0
Total						20.5

Receptor 5 - Turningshaw Farm

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2700.0	26.4	-13.5	12.9	JCB	9.9
97.0	2700.0	20.4	-13.5	6.9	Excavator	3.9
94.0	2700.0	17.4	-13.5	3.9	Tractor & Water Bowser	0.9
84.0	2700.0	7.4	-13.5	-6.1	Small Dumper	-9.1
84.0	2700.0	7.4	-13.5	-11.1	Skid shovel within buildings	-14.1
96.0	2700.0	19.4	-13.5	0.9	Mini excavator with breaker within buildings (with rubber tracks)	-2.1
						11.5
2 teams during Phase 1						11.5
Total						14.5

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	2700.0	41.4	-13.5	27.9	Breaker mounted on excavator	24.9
98.0	2700.0	21.4	-13.5	7.9	Tracked excavator (1)	4.9
98.0	2700.0	21.4	-13.5	7.9	Tracked excavator (2)	4.9
98.0	2700.0	21.4	-13.5	7.9	Excavator with nibbler (1)	4.9
98.0	2700.0	21.4	-13.5	7.9	Excavator with nibbler (2)	4.9
106.0	2700.0	29.4	-13.5	15.9	Dump trucks (1)	12.9
106.0	2700.0	29.4	-13.5	15.9	Dump trucks (2)	12.9
106.0	2700.0	29.4	-13.5	15.9	Dump trucks (3)	12.9
Total						25.8

Receptor 5 - Turningshaw Farm**Crushing**

Power (dB)	Distance (m)	Sound Pressure		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Level (dB)	Air Attenuation			
110.0	2700	33.4	-13.5	19.9	Tracked Crusher	16.9
110.0	2700	33.4	-13.5	19.9	Tracked Excavator (1)	16.9
110.0	2700	33.4	-13.5	19.9	Tracked Excavator (2)	16.9
96.0	2700	19.4	-13.5	5.9	Front Loader	2.9
Total						21.7

Ground Works

Power (dB)	Distance (m)	Sound Pressure		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Level (dB)	Air Attenuation			
103.0	2700.0	26.4	-13.5	12.9	Dozer	9.9
103.0	2700.0	26.4	-13.5	12.9	Dozer & Roller	9.9
97.0	2700.0	20.4	-13.5	6.9	Excavator (1)	3.9
97.0	2700.0	20.4	-13.5	6.9	Excavator (2)	3.9
97.0	2700.0	20.4	-13.5	6.9	Excavator (3)	3.9
103.0	2700.0	26.4	-13.5	12.9	Dozer (1)	9.9
103.0	2700.0	26.4	-13.5	12.9	Dozer (2)	9.9
103.0	2700.0	26.4	-13.5	12.9	Dozer (3)	9.9
109.0	2700.0	32.4	-13.5	18.9	Breaker/Nibbler on Excavator	15.9
Total						19.8

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Level (dB)	Air Attenuation			
88.0	2700.0	11.4	-13.5	-2.1	Generator	-5.1
102.0	2700.0	25.4	-13.5	11.9	Fuel Tanker	8.9
97.0	2700.0	20.4	-13.5	6.9	Tracked Excavator	3.9
104.0	2700.0	27.4	-13.5	13.9	Road Sweeper	10.9
104.0	2700.0	27.4	-13.5	13.9	Tractor & Water Bowser	10.9
Total						15.4

Receptor 6 - Netherfield

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2700.0	26.4	-13.5	12.9	JCB	9.9
97.0	2700.0	20.4	-13.5	6.9	Excavator	3.9
94.0	2700.0	17.4	-13.5	3.9	Tractor & Water Bowser	0.9
84.0	2700.0	7.4	-13.5	-6.1	Small Dumper	-9.1
84.0	2700.0	7.4	-13.5	-11.1	Skid shovel within buildings	-14.1
96.0	2700.0	19.4	-13.5	0.9	Mini excavator with breaker within buildings (with rubber tracks)	-2.1
2 teams during Phase 1						11.5
Total						14.5

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	2700.0	41.4	-13.5	27.9	Breaker mounted on excavator	24.9
98.0	2700.0	21.4	-13.5	7.9	Tracked excavator (1)	4.9
98.0	2700.0	21.4	-13.5	7.9	Tracked excavator (2)	4.9
98.0	2700.0	21.4	-13.5	7.9	Excavator with nibbler (1)	4.9
98.0	2700.0	21.4	-13.5	7.9	Excavator with nibbler (2)	4.9
106.0	2700.0	29.4	-13.5	15.9	Dump trucks (1)	12.9
106.0	2700.0	29.4	-13.5	15.9	Dump trucks (2)	12.9
106.0	2700.0	29.4	-13.5	15.9	Dump trucks (3)	12.9
Total						25.8

Receptor 6 - Netherfield

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	2700	33.4	-13.5	19.9	Tracked Crusher	16.9
110.0	2700	33.4	-13.5	19.9	Tracked Excavator (1)	16.9
110.0	2700	33.4	-13.5	19.9	Tracked Excavator (2)	16.9
96.0	2700	19.4	-13.5	5.9	Front Loader	2.9
Total						21.7

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2700.0	26.4	-13.5	12.9	Dozer	9.9
103.0	2700.0	26.4	-13.5	12.9	Dozer & Roller	9.9
97.0	2700.0	20.4	-13.5	6.9	Excavator (1)	3.9
97.0	2700.0	20.4	-13.5	6.9	Excavator (2)	3.9
97.0	2700.0	20.4	-13.5	6.9	Excavator (3)	3.9
103.0	2700.0	26.4	-13.5	12.9	Dozer (1)	9.9
103.0	2700.0	26.4	-13.5	12.9	Dozer (2)	9.9
103.0	2700.0	26.4	-13.5	12.9	Dozer (3)	9.9
109.0	2700.0	32.4	-13.5	18.9	Breaker/Nibbler on Excavator	15.9
Total						19.8

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	2700.0	11.4	-13.5	-2.1	Generator	-5.1
102.0	2700.0	25.4	-13.5	11.9	Fuel Tanker	8.9
97.0	2700.0	20.4	-13.5	6.9	Tracked Excavator	3.9
104.0	2700.0	27.4	-13.5	13.9	Road Sweeper	10.9
104.0	2700.0	27.4	-13.5	13.9	Tractor & Water Bowser	10.9
Total						15.4

Receptor 7 - Barrangarry Farm

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	200.0	49.0	-1.0	48.0	JCB	45.0
97.0	200.0	43.0	-1.0	42.0	Excavator	39.0
94.0	200.0	40.0	-1.0	39.0	Tractor & Water Bowser	36.0
84.0	200.0	30.0	-1.0	29.0	Small Dumper	26.0
84.0	200.0	30.0	-1.0	24.0	Skid shovel within buildings	21.0
96.0	200.0	42.0	-1.0	36.0	Mini excavator with breaker within buildings (with rubber tracks)	33.0
						46.6
2 teams during Phase 1						46.6
Total						49.6

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	200.0	64.0	-1.0	63.0	Breaker mounted on excavator	60.0
98.0	200.0	44.0	-1.0	43.0	Tracked excavator (1)	40.0
98.0	200.0	44.0	-1.0	43.0	Tracked excavator (2)	40.0
98.0	200.0	44.0	-1.0	43.0	Excavator with nibbler (1)	40.0
98.0	200.0	44.0	-1.0	43.0	Excavator with nibbler (2)	40.0
106.0	200.0	52.0	-1.0	51.0	Dump trucks (1)	48.0
106.0	200.0	52.0	-1.0	51.0	Dump trucks (2)	48.0
106.0	200.0	52.0	-1.0	51.0	Dump trucks (3)	48.0
Total						60.9

Receptor 7 - Barrangarry Farm

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	200	56.0	-1.0	55.0	Tracked Crusher	52.0
110.0	200	56.0	-1.0	55.0	Tracked Excavator (1)	52.0
110.0	200	56.0	-1.0	55.0	Tracked Excavator (2)	52.0
96.0	200	42.0	-1.0	41.0	Front Loader	38.0
Total						56.8

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	200.0	49.0	-1.0	48.0	Dozer	45.0
103.0	200.0	49.0	-1.0	48.0	Dozer & Roller	45.0
97.0	200.0	43.0	-1.0	42.0	Excavator (1)	39.0
97.0	200.0	43.0	-1.0	42.0	Excavator (2)	39.0
97.0	200.0	43.0	-1.0	42.0	Excavator (3)	39.0
103.0	200.0	49.0	-1.0	48.0	Dozer (1)	45.0
103.0	200.0	49.0	-1.0	48.0	Dozer (2)	45.0
103.0	200.0	49.0	-1.0	48.0	Dozer (3)	45.0
109.0	200.0	55.0	-1.0	54.0	Breaker/Nibbler on Excavator	51.0
Total						54.9

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	200.0	34.0	-1.0	33.0	Generator	30.0
102.0	200.0	48.0	-1.0	47.0	Fuel Tanker	44.0
97.0	200.0	43.0	-1.0	42.0	Tracked Excavator	39.0
104.0	200.0	50.0	-1.0	49.0	Road Sweeper	46.0
104.0	200.0	50.0	-1.0	49.0	Tractor & Water Bowser	46.0
Total						50.5

Phase 2

Receptor 1 - Rossland Crescent

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	50.0	59.5	-0.3	59.3	JCB	56.3
97.0	50.0	53.5	-0.3	53.3	Excavator	50.3
94.0	50.0	50.5	-0.3	50.3	Tractor & Water Bowser	47.3
84.0	50.0	40.5	-0.3	40.3	Small Dumper	37.3
84.0	50.0	42.0	-0.3	36.8	Skid shovel within buildings	33.8
96.0	50.0	54.0	-0.3	48.8	Mini excavator with breaker within buildings (with rubber tracks)	45.8
Total						58.0

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	50.0	76.0	-0.3	75.8	Breaker mounted on excavator	72.8
98.0	50.0	56.0	-0.3	55.8	Tracked excavator (1)	52.8
98.0	50.0	56.0	-0.3	55.8	Tracked excavator (2)	52.8
98.0	50.0	56.0	-0.3	55.8	Excavator with nibbler (1)	52.8
98.0	50.0	56.0	-0.3	55.8	Excavator with nibbler (2)	52.8
106.0	50.0	64.0	-0.3	63.8	Dump trucks (1)	60.8
106.0	50.0	64.0	-0.3	63.8	Dump trucks (2)	60.8
106.0	50.0	64.0	-0.3	63.8	Dump trucks (3)	60.8
Total						73.7

Receptor 1 - Rossland Crescent

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	100	62.0	-0.5	61.5	Tracked Crusher	58.5
110.0	100	62.0	-0.5	61.5	Tracked Excavator (1)	58.5
110.0	100	62.0	-0.5	61.5	Tracked Excavator (2)	58.5
96.0	100	48.0	-0.5	47.5	Front Loader	44.5
Total						63.3

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	25.0	67.0	-0.1	66.9	Dozer	63.9
103.0	25.0	67.0	-0.1	66.9	Dozer & Roller	63.9
97.0	25.0	61.0	-0.1	60.9	Excavator (1)	57.9
97.0	25.0	61.0	-0.1	60.9	Excavator (2)	57.9
97.0	25.0	61.0	-0.1	60.9	Excavator (3)	57.9
103.0	25.0	67.0	-0.1	66.9	Dozer (1)	63.9
103.0	25.0	67.0	-0.1	66.9	Dozer (2)	63.9
103.0	25.0	67.0	-0.1	66.9	Dozer (3)	63.9
109.0	25.0	73.0	-0.1	72.9	Breaker/Nibbler on Excavator	69.9
Total						73.8

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	25.0	52.0	-0.1	51.9	Generator	48.9
102.0	25.0	66.0	-0.1	65.9	Fuel Tanker	62.9
97.0	25.0	61.0	-0.1	60.9	Tracked Excavator	57.9
104.0	25.0	68.0	-0.1	67.9	Road Sweeper	64.9
104.0	25.0	68.0	-0.1	67.9	Tractor & Water Bowser	64.9
Total						69.5

Receptor 2 - Sachelcourt Avenue

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	260.0	46.7	-1.3	45.4	JCB	42.4
97.0	260.0	40.7	-1.3	39.4	Excavator	36.4
94.0	260.0	37.7	-1.3	36.4	Tractor & Water Bowser	33.4
84.0	260.0	27.7	-1.3	26.4	Small Dumper	23.4
84.0	260.0	27.7	-1.3	21.4	Skid shovel within buildings	18.4
96.0	260.0	39.7	-1.3	33.4	Mini excavator with breaker within buildings (with rubber tracks)	30.4
Total						44.0

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	260.0	61.7	-1.3	60.4	Breaker mounted on excavator	57.4
98.0	260.0	41.7	-1.3	40.4	Tracked excavator (1)	37.4
98.0	260.0	41.7	-1.3	40.4	Tracked excavator (2)	37.4
98.0	260.0	41.7	-1.3	40.4	Excavator with nibbler (1)	37.4
98.0	260.0	41.7	-1.3	40.4	Excavator with nibbler (2)	37.4
106.0	260.0	49.7	-1.3	48.4	Dump trucks (1)	45.4
106.0	260.0	49.7	-1.3	48.4	Dump trucks (2)	45.4
106.0	260.0	49.7	-1.3	48.4	Dump trucks (3)	45.4
Total						58.3

Receptor 2 - Sachelcourt Avenue

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	260	53.7	-1.3	52.4	Tracked Crusher	49.4
110.0	260	53.7	-1.3	52.4	Tracked Excavator (1)	49.4
110.0	260	53.7	-1.3	52.4	Tracked Excavator (2)	49.4
96.0	260	39.7	-1.3	38.4	Front Loader	35.4
Total						54.2

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	260.0	46.7	-1.3	45.4	Dozer	42.4
103.0	260.0	46.7	-1.3	45.4	Dozer & Roller	42.4
97.0	260.0	40.7	-1.3	39.4	Excavator (1)	36.4
97.0	260.0	40.7	-1.3	39.4	Excavator (2)	36.4
97.0	260.0	40.7	-1.3	39.4	Excavator (3)	36.4
103.0	260.0	46.7	-1.3	45.4	Dozer (1)	42.4
103.0	260.0	46.7	-1.3	45.4	Dozer (2)	42.4
103.0	260.0	46.7	-1.3	45.4	Dozer (3)	42.4
109.0	260.0	52.7	-1.3	51.4	Breaker/Nibbler on Excavator	48.4
Total						52.3

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	260.0	31.7	-1.3	30.4	Generator	27.4
102.0	260.0	45.7	-1.3	44.4	Fuel Tanker	41.4
97.0	260.0	40.7	-1.3	39.4	Tracked Excavator	36.4
104.0	260.0	47.7	-1.3	46.4	Road Sweeper	43.4
104.0	260.0	47.7	-1.3	46.4	Tractor & Water Bowser	43.4
Total						48.0

Receptor 3 - Gatehead

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1150.0	33.8	-5.8	28.0	JCB	25.0
97.0	1150.0	27.8	-5.8	22.0	Excavator	19.0
94.0	1150.0	24.8	-5.8	19.0	Tractor & Water Bowser	16.0
84.0	1150.0	14.8	-5.8	9.0	Small Dumper	6.0
84.0	1150.0	14.8	-5.8	4.0	Skid shovel within buildings	1.0
96.0	1150.0	26.8	-5.8	16.0	Mini excavator with breaker within buildings (with rubber tracks)	13.0
Total						26.7

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	1150.0	48.8	-5.8	43.0	Breaker mounted on excavator	40.0
98.0	1150.0	28.8	-5.8	23.0	Tracked excavator (1)	20.0
98.0	1150.0	28.8	-5.8	23.0	Tracked excavator (2)	20.0
98.0	1150.0	28.8	-5.8	23.0	Excavator with nibbler (1)	20.0
98.0	1150.0	28.8	-5.8	23.0	Excavator with nibbler (2)	20.0
106.0	1150.0	36.8	-5.8	31.0	Dump trucks (1)	28.0
106.0	1150.0	36.8	-5.8	31.0	Dump trucks (2)	28.0
106.0	1150.0	36.8	-5.8	31.0	Dump trucks (3)	28.0
Total						40.9

Receptor 3 - Gatehead

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	1150	40.8	-5.8	35.0	Tracked Crusher	32.0
110.0	1150	40.8	-5.8	35.0	Tracked Excavator (1)	32.0
110.0	1150	40.8	-5.8	35.0	Tracked Excavator (2)	32.0
96.0	1150	26.8	-5.8	21.0	Front Loader	18.0
Total						36.9

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1150.0	33.8	-5.8	28.0	Dozer	25.0
103.0	1150.0	33.8	-5.8	28.0	Dozer & Roller	25.0
97.0	1150.0	27.8	-5.8	22.0	Excavator (1)	19.0
97.0	1150.0	27.8	-5.8	22.0	Excavator (2)	19.0
97.0	1150.0	27.8	-5.8	22.0	Excavator (3)	19.0
103.0	1150.0	33.8	-5.8	28.0	Dozer (1)	25.0
103.0	1150.0	33.8	-5.8	28.0	Dozer (2)	25.0
103.0	1150.0	33.8	-5.8	28.0	Dozer (3)	25.0
109.0	1150.0	39.8	-5.8	34.0	Breaker/Nibbler on Excavator	31.0
Total						34.9

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	1150.0	18.8	-5.8	13.0	Generator	10.0
102.0	1150.0	32.8	-5.8	27.0	Fuel Tanker	24.0
97.0	1150.0	27.8	-5.8	22.0	Tracked Excavator	19.0
104.0	1150.0	34.8	-5.8	29.0	Road Sweeper	26.0
104.0	1150.0	34.8	-5.8	29.0	Tractor & Water Bowser	26.0
Total						30.6

Receptor 4 - Boghill Cottage

Building Decontamination

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
103.0	1775.0	30.0	-8.9	21.1	JCB	18.1
97.0	1775.0	24.0	-8.9	15.1	Excavator	12.1
94.0	1775.0	21.0	-8.9	12.1	Tractor & Water Bowser	9.1
84.0	1775.0	11.0	-8.9	2.1	Small Dumper	-0.9
84.0	1775.0	11.0	-8.9	-2.9	Skid shovel within buildings	-5.9
96.0	1775.0	23.0	-8.9	9.1	Mini excavator with breaker within buildings (with rubber tracks)	6.1
Total						19.8

Demolition

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
118.0	1775.0	45.0	-8.9	36.1	Breaker mounted on excavator	33.1
98.0	1775.0	25.0	-8.9	16.1	Tracked excavator (1)	13.1
98.0	1775.0	25.0	-8.9	16.1	Tracked excavator (2)	13.1
98.0	1775.0	25.0	-8.9	16.1	Excavator with nibbler (1)	13.1
98.0	1775.0	25.0	-8.9	16.1	Excavator with nibbler (2)	13.1
106.0	1775.0	33.0	-8.9	24.1	Dump trucks (1)	21.1
106.0	1775.0	33.0	-8.9	24.1	Dump trucks (2)	21.1
106.0	1775.0	33.0	-8.9	24.1	Dump trucks (3)	21.1
Total						34.0

Receptor 4 - Boghill Cottage**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	1775	37.0	-8.9	28.1	Tracked Crusher	25.1
110.0	1775	37.0	-8.9	28.1	Tracked Excavator (1)	25.1
110.0	1775	37.0	-8.9	28.1	Tracked Excavator (2)	25.1
96.0	1775	23.0	-8.9	14.1	Front Loader	11.1
Total						30.0

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1775.0	30.0	-8.9	21.1	Dozer	18.1
103.0	1775.0	30.0	-8.9	21.1	Dozer & Roller	18.1
97.0	1775.0	24.0	-8.9	15.1	Excavator (1)	12.1
97.0	1775.0	24.0	-8.9	15.1	Excavator (2)	12.1
97.0	1775.0	24.0	-8.9	15.1	Excavator (3)	12.1
103.0	1775.0	30.0	-8.9	21.1	Dozer (1)	18.1
103.0	1775.0	30.0	-8.9	21.1	Dozer (2)	18.1
103.0	1775.0	30.0	-8.9	21.1	Dozer (3)	18.1
109.0	1775.0	36.0	-8.9	27.1	Breaker/Nibbler on Excavator	24.1
Total						28.0

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	1775.0	15.0	-8.9	6.1	Generator	3.1
102.0	1775.0	29.0	-8.9	20.1	Fuel Tanker	17.1
97.0	1775.0	24.0	-8.9	15.1	Tracked Excavator	12.1
104.0	1775.0	31.0	-8.9	22.1	Road Sweeper	19.1
104.0	1775.0	31.0	-8.9	22.1	Tractor & Water Bowser	19.1
Total						23.7

Receptor 5 - Turningshaw Farm

Building Decontamination

Power (dB)	Distance (m)	Sound	Air	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time
		Pressure	Attenuation			50%
		Level (dB)				
103.0	1800.0	29.9	-9.0	20.9	JCB	17.9
97.0	1800.0	23.9	-9.0	14.9	Excavator	11.9
94.0	1800.0	20.9	-9.0	11.9	Tractor & Water Bowser	8.9
84.0	1800.0	10.9	-9.0	1.9	Small Dumper	-1.1
84.0	1800.0	10.9	-9.0	-3.1	Skid shovel within buildings	-6.1
96.0	1800.0	22.9	-9.0	8.9	Mini excavator with breaker within buildings (with rubber tracks)	5.9
Total						19.5

Demolition

Power (dB)	Distance (m)	Sound	Air	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time
		Pressure	Attenuation			50%
		Level (dB)				
118.0	1800.0	44.9	-9.0	35.9	Breaker mounted on excavator	32.9
98.0	1800.0	24.9	-9.0	15.9	Tracked excavator (1)	12.9
98.0	1800.0	24.9	-9.0	15.9	Tracked excavator (2)	12.9
98.0	1800.0	24.9	-9.0	15.9	Excavator with nibbler (1)	12.9
98.0	1800.0	24.9	-9.0	15.9	Excavator with nibbler (2)	12.9
106.0	1800.0	32.9	-9.0	23.9	Dump trucks (1)	20.9
106.0	1800.0	32.9	-9.0	23.9	Dump trucks (2)	20.9
106.0	1800.0	32.9	-9.0	23.9	Dump trucks (3)	20.9
Total						33.8

Receptor 5 - Turningshaw Farm

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	1800	36.9	-9.0	27.9	Tracked Crusher	24.9
110.0	1800	36.9	-9.0	27.9	Tracked Excavator (1)	24.9
110.0	1800	36.9	-9.0	27.9	Tracked Excavator (2)	24.9
96.0	1800	22.9	-9.0	13.9	Front Loader	10.9
Total						29.7

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1800.0	29.9	-9.0	20.9	Dozer	17.9
103.0	1800.0	29.9	-9.0	20.9	Dozer & Roller	17.9
97.0	1800.0	23.9	-9.0	14.9	Excavator (1)	11.9
97.0	1800.0	23.9	-9.0	14.9	Excavator (2)	11.9
97.0	1800.0	23.9	-9.0	14.9	Excavator (3)	11.9
103.0	1800.0	29.9	-9.0	20.9	Dozer (1)	17.9
103.0	1800.0	29.9	-9.0	20.9	Dozer (2)	17.9
103.0	1800.0	29.9	-9.0	20.9	Dozer (3)	17.9
109.0	1800.0	35.9	-9.0	26.9	Breaker/Nibbler on Excavator	23.9
Total						27.8

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	1800.0	14.9	-9.0	5.9	Generator	2.9
102.0	1800.0	28.9	-9.0	19.9	Fuel Tanker	16.9
97.0	1800.0	23.9	-9.0	14.9	Tracked Excavator	11.9
104.0	1800.0	30.9	-9.0	21.9	Road Sweeper	18.9
104.0	1800.0	30.9	-9.0	21.9	Tractor & Water Bowser	18.9
Total						23.5

Receptor 6 - Netherfield

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2080.0	28.6	-10.4	18.2	JCB	15.2
97.0	2080.0	22.6	-10.4	12.2	Excavator	9.2
94.0	2080.0	19.6	-10.4	9.2	Tractor & Water Bowser	6.2
84.0	2080.0	9.6	-10.4	-0.8	Small Dumper	-3.8
84.0	2080.0	9.6	-10.4	-5.8	Skid shovel within buildings	-8.8
96.0	2080.0	21.6	-10.4	6.2	Mini excavator with breaker within buildings (with rubber tracks)	3.2
Total						16.9

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	2080.0	43.6	-10.4	33.2	Breaker mounted on excavator	30.2
98.0	2080.0	23.6	-10.4	13.2	Tracked excavator (1)	10.2
98.0	2080.0	23.6	-10.4	13.2	Tracked excavator (2)	10.2
98.0	2080.0	23.6	-10.4	13.2	Excavator with nibbler (1)	10.2
98.0	2080.0	23.6	-10.4	13.2	Excavator with nibbler (2)	10.2
106.0	2080.0	31.6	-10.4	21.2	Dump trucks (1)	18.2
106.0	2080.0	31.6	-10.4	21.2	Dump trucks (2)	18.2
106.0	2080.0	31.6	-10.4	21.2	Dump trucks (3)	18.2
Total						31.1

Receptor 6 - Netherfield**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	2080	35.6	-10.4	25.2	Tracked Crusher	22.2
110.0	2080	35.6	-10.4	25.2	Tracked Excavator (1)	22.2
110.0	2080	35.6	-10.4	25.2	Tracked Excavator (2)	22.2
96.0	2080	21.6	-10.4	11.2	Front Loader	8.2
Total						27.1

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2080.0	28.6	-10.4	18.2	Dozer	15.2
103.0	2080.0	28.6	-10.4	18.2	Dozer & Roller	15.2
97.0	2080.0	22.6	-10.4	12.2	Excavator (1)	9.2
97.0	2080.0	22.6	-10.4	12.2	Excavator (2)	9.2
97.0	2080.0	22.6	-10.4	12.2	Excavator (3)	9.2
103.0	2080.0	28.6	-10.4	18.2	Dozer (1)	15.2
103.0	2080.0	28.6	-10.4	18.2	Dozer (2)	15.2
103.0	2080.0	28.6	-10.4	18.2	Dozer (3)	15.2
109.0	2080.0	34.6	-10.4	24.2	Breaker/Nibbler on Excavator	21.2
Total						25.1

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	2080.0	13.6	-10.4	3.2	Generator	0.2
102.0	2080.0	27.6	-10.4	17.2	Fuel Tanker	14.2
97.0	2080.0	22.6	-10.4	12.2	Tracked Excavator	9.2
104.0	2080.0	29.6	-10.4	19.2	Road Sweeper	16.2
104.0	2080.0	29.6	-10.4	19.2	Tractor & Water Bowser	16.2
Total						20.8

Receptor 7 - Barrangarry Farm

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	175.0	50.1	-0.9	49.3	JCB	46.3
97.0	175.0	44.1	-0.9	43.3	Excavator	40.3
94.0	175.0	41.1	-0.9	40.3	Tractor & Water Bowser	37.3
84.0	175.0	31.1	-0.9	30.3	Small Dumper	27.3
84.0	175.0	31.1	-0.9	25.3	Skid shovel within buildings	22.3
96.0	175.0	43.1	-0.9	37.3	Mini excavator with breaker within buildings (with rubber tracks)	34.3
Total						47.9

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	175.0	65.1	-0.9	64.3	Breaker mounted on excavator	61.3
98.0	175.0	45.1	-0.9	44.3	Tracked excavator (1)	41.3
98.0	175.0	45.1	-0.9	44.3	Tracked excavator (2)	41.3
98.0	175.0	45.1	-0.9	44.3	Excavator with nibbler (1)	41.3
98.0	175.0	45.1	-0.9	44.3	Excavator with nibbler (2)	41.3
106.0	175.0	53.1	-0.9	52.3	Dump trucks (1)	49.3
106.0	175.0	53.1	-0.9	52.3	Dump trucks (2)	49.3
106.0	175.0	53.1	-0.9	52.3	Dump trucks (3)	49.3
Total						62.2

Receptor 7 - Barrangarry Farm

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	175	57.1	-0.9	56.3	Tracked Crusher	53.3
110.0	175	57.1	-0.9	56.3	Tracked Excavator (1)	53.3
110.0	175	57.1	-0.9	56.3	Tracked Excavator (2)	53.3
96.0	175	43.1	-0.9	42.3	Front Loader	39.3
Total						58.1

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	175.0	50.1	-0.9	49.3	Dozer	46.3
103.0	175.0	50.1	-0.9	49.3	Dozer & Roller	46.3
97.0	175.0	44.1	-0.9	43.3	Excavator (1)	40.3
97.0	175.0	44.1	-0.9	43.3	Excavator (2)	40.3
97.0	175.0	44.1	-0.9	43.3	Excavator (3)	40.3
103.0	175.0	50.1	-0.9	49.3	Dozer (1)	46.3
103.0	175.0	50.1	-0.9	49.3	Dozer (2)	46.3
103.0	175.0	50.1	-0.9	49.3	Dozer (3)	46.3
109.0	175.0	56.1	-0.9	55.3	Breaker/Nibbler on Excavator	52.3
Total						56.1

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	175.0	35.1	-0.9	34.3	Generator	31.3
102.0	175.0	49.1	-0.9	48.3	Fuel Tanker	45.3
97.0	175.0	44.1	-0.9	43.3	Tracked Excavator	40.3
104.0	175.0	51.1	-0.9	50.3	Road Sweeper	47.3
104.0	175.0	51.1	-0.9	50.3	Tractor & Water Bowser	47.3
Total						51.8

Phase 3

Receptor 1 - Rossland Crescent

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level		Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		(dB)	(dB)				
103.0	95.0	52.6	52.6	-0.5	52.1	JCB	49.1
97.0	95.0	46.6	46.6	-0.5	46.1	Excavator	43.1
94.0	95.0	43.6	43.6	-0.5	43.1	Tractor & Water Bowser	40.1
84.0	95.0	33.6	33.6	-0.5	33.1	Small Dumper	30.1
84.0	95.0	36.4	36.4	-0.5	31.0	Skid shovel within buildings	28.0
96.0	95.0	48.4	48.4	-0.5	43.0	Mini excavator with breaker within buildings (with rubber tracks)	40.0
Total							50.9

Demolition

Power (dB)	Distance (m)	Sound Pressure Level		Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		(dB)	(dB)				
118.0	95.0	70.4	70.4	-0.5	70.0	Breaker mounted on excavator	67.0
98.0	95.0	50.4	50.4	-0.5	50.0	Tracked excavator (1)	47.0
98.0	95.0	50.4	50.4	-0.5	50.0	Tracked excavator (2)	47.0
98.0	95.0	50.4	50.4	-0.5	50.0	Excavator with nibbler (1)	47.0
98.0	95.0	50.4	50.4	-0.5	50.0	Excavator with nibbler (2)	47.0
106.0	95.0	58.4	58.4	-0.5	58.0	Dump trucks (1)	55.0
106.0	95.0	58.4	58.4	-0.5	58.0	Dump trucks (2)	55.0
106.0	95.0	58.4	58.4	-0.5	58.0	Dump trucks (3)	55.0
Total							67.9

Receptor 1 - Rossland Crescent

Crushing

Power (dB)	Distance (m)	Sound Pressure Level		Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		(dB)	(dB)				
110.0	100	62.0	62.0	-0.5	61.5	Tracked Crusher	58.5
110.0	100	62.0	62.0	-0.5	61.5	Tracked Excavator (1)	58.5
110.0	100	62.0	62.0	-0.5	61.5	Tracked Excavator (2)	58.5
96.0	100	48.0	48.0	-0.5	47.5	Front Loader	44.5
Total							63.3

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level		Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		(dB)	(dB)				
103.0	95.0	55.4	55.4	-0.5	55.0	Dozer	52.0
103.0	95.0	55.4	55.4	-0.5	55.0	Dozer & Roller	52.0
97.0	95.0	49.4	49.4	-0.5	49.0	Excavator (1)	46.0
97.0	95.0	49.4	49.4	-0.5	49.0	Excavator (2)	46.0
97.0	95.0	49.4	49.4	-0.5	49.0	Excavator (3)	46.0
103.0	95.0	55.4	55.4	-0.5	55.0	Dozer (1)	52.0
103.0	95.0	55.4	55.4	-0.5	55.0	Dozer (2)	52.0
103.0	95.0	55.4	55.4	-0.5	55.0	Dozer (3)	52.0
109.0	95.0	61.4	61.4	-0.5	61.0	Breaker/Nibbler on Excavator	58.0
Total							61.9

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level		Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		(dB)	(dB)				
88.0	95.0	40.4	40.4	-0.5	40.0	Generator	37.0
102.0	95.0	54.4	54.4	-0.5	54.0	Fuel Tanker	51.0
97.0	95.0	49.4	49.4	-0.5	49.0	Tracked Excavator	46.0
104.0	95.0	56.4	56.4	-0.5	56.0	Road Sweeper	53.0
104.0	95.0	56.4	56.4	-0.5	56.0	Tractor & Water Bowser	53.0
Total							57.5

Receptor 2 - Sachelcourt Avenue

Building Decontamination

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
103.0	275.0	46.2	-1.4	44.8	JCB	41.8
97.0	275.0	40.2	-1.4	38.8	Excavator	35.8
94.0	275.0	37.2	-1.4	35.8	Tractor & Water Bowser	32.8
84.0	275.0	27.2	-1.4	25.8	Small Dumper	22.8
84.0	275.0	27.2	-1.4	20.8	Skid shovel within buildings Mini excavator with breaker within	17.8
96.0	275.0	39.2	-1.4	32.8	buildings (with rubber tracks)	29.8
Total						43.5

Demolition

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
118.0	275.0	61.2	-1.4	59.8	Breaker mounted on excavator	56.8
98.0	275.0	41.2	-1.4	39.8	Tracked excavator (1)	36.8
98.0	275.0	41.2	-1.4	39.8	Tracked excavator (2)	36.8
98.0	275.0	41.2	-1.4	39.8	Excavator with nibbler (1)	36.8
98.0	275.0	41.2	-1.4	39.8	Excavator with nibbler (2)	36.8
106.0	275.0	49.2	-1.4	47.8	Dump trucks (1)	44.8
106.0	275.0	49.2	-1.4	47.8	Dump trucks (2)	44.8
106.0	275.0	49.2	-1.4	47.8	Dump trucks (3)	44.8
Total						57.7

Receptor 2 - Sachelcourt Avenue**Crushing**

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
110.0	275	53.2	-1.4	51.8	Tracked Crusher	48.8
110.0	275	53.2	-1.4	51.8	Tracked Excavator (1)	48.8
110.0	275	53.2	-1.4	51.8	Tracked Excavator (2)	48.8
96.0	275	39.2	-1.4	37.8	Front Loader	34.8
Total						53.7

Ground Works

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
103.0	275.0	46.2	-1.4	44.8	Dozer	41.8
103.0	275.0	46.2	-1.4	44.8	Dozer & Roller	41.8
97.0	275.0	40.2	-1.4	38.8	Excavator (1)	35.8
97.0	275.0	40.2	-1.4	38.8	Excavator (2)	35.8
97.0	275.0	40.2	-1.4	38.8	Excavator (3)	35.8
103.0	275.0	46.2	-1.4	44.8	Dozer (1)	41.8
103.0	275.0	46.2	-1.4	44.8	Dozer (2)	41.8
103.0	275.0	46.2	-1.4	44.8	Dozer (3)	41.8
109.0	275.0	52.2	-1.4	50.8	Breaker/Nibbler on Excavator	47.8
Total						51.7

Site offices & around site

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
88.0	275.0	31.2	-1.4	29.8	Generator	26.8
102.0	275.0	45.2	-1.4	43.8	Fuel Tanker	40.8
97.0	275.0	40.2	-1.4	38.8	Tracked Excavator	35.8
104.0	275.0	47.2	-1.4	45.8	Road Sweeper	42.8
104.0	275.0	47.2	-1.4	45.8	Tractor & Water Bowser	42.8
Total						47.4

Receptor 3 - Gatehead

Building Decontamination

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
103.0	1220.0	33.3	-6.1	27.2	JCB	24.2
97.0	1220.0	27.3	-6.1	21.2	Excavator	18.2
94.0	1220.0	24.3	-6.1	18.2	Tractor & Water Bowser	15.2
84.0	1220.0	14.3	-6.1	8.2	Small Dumper	5.2
84.0	1220.0	14.3	-6.1	3.2	Skid shovel within buildings	0.2
96.0	1220.0	26.3	-6.1	15.2	Mini excavator with breaker within buildings (with rubber tracks)	12.2
Total						25.8

Demolition

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
118.0	1220.0	48.3	-6.1	42.2	Breaker mounted on excavator	39.2
98.0	1220.0	28.3	-6.1	22.2	Tracked excavator (1)	19.2
98.0	1220.0	28.3	-6.1	22.2	Tracked excavator (2)	19.2
98.0	1220.0	28.3	-6.1	22.2	Excavator with nibbler (1)	19.2
98.0	1220.0	28.3	-6.1	22.2	Excavator with nibbler (2)	19.2
106.0	1220.0	36.3	-6.1	30.2	Dump trucks (1)	27.2
106.0	1220.0	36.3	-6.1	30.2	Dump trucks (2)	27.2
106.0	1220.0	36.3	-6.1	30.2	Dump trucks (3)	27.2
Total						40.1

Receptor 3 - Gatehead

Crushing

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
110.0	1220	40.3	-6.1	34.2	Tracked Crusher	31.2
110.0	1220	40.3	-6.1	34.2	Tracked Excavator (1)	31.2
110.0	1220	40.3	-6.1	34.2	Tracked Excavator (2)	31.2
96.0	1220	26.3	-6.1	20.2	Front Loader	17.2
Total						36.0

Ground Works

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
103.0	1220.0	33.3	-6.1	27.2	Dozer	24.2
103.0	1220.0	33.3	-6.1	27.2	Dozer & Roller	24.2
97.0	1220.0	27.3	-6.1	21.2	Excavator (1)	18.2
97.0	1220.0	27.3	-6.1	21.2	Excavator (2)	18.2
97.0	1220.0	27.3	-6.1	21.2	Excavator (3)	18.2
103.0	1220.0	33.3	-6.1	27.2	Dozer (1)	24.2
103.0	1220.0	33.3	-6.1	27.2	Dozer (2)	24.2
103.0	1220.0	33.3	-6.1	27.2	Dozer (3)	24.2
109.0	1220.0	39.3	-6.1	33.2	Breaker/Nibbler on Excavator	30.2
Total						34.1

Site offices & around site

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
88.0	1220.0	18.3	-6.1	12.2	Generator	9.2
102.0	1220.0	32.3	-6.1	26.2	Fuel Tanker	23.2
97.0	1220.0	27.3	-6.1	21.2	Tracked Excavator	18.2
104.0	1220.0	34.3	-6.1	28.2	Road Sweeper	25.2
104.0	1220.0	34.3	-6.1	28.2	Tractor & Water Bowser	25.2
Total						29.7

Receptor 4 - Boghill Cottage

Building Decontamination

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
103.0	1950.0	29.2	-9.8	19.4	JCB	16.4
97.0	1950.0	23.2	-9.8	13.4	Excavator	10.4
94.0	1950.0	20.2	-9.8	10.4	Tractor & Water Bowser	7.4
84.0	1950.0	10.2	-9.8	0.4	Small Dumper	-2.6
84.0	1950.0	10.2	-9.8	-4.6	Skid shovel within buildings	-7.6
96.0	1950.0	22.2	-9.8	7.4	Mini excavator with breaker within buildings (with rubber tracks)	4.4
Total						18.1

Demolition

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
118.0	1950.0	44.2	-9.8	34.4	Breaker mounted on excavator	31.4
98.0	1950.0	24.2	-9.8	14.4	Tracked excavator (1)	11.4
98.0	1950.0	24.2	-9.8	14.4	Tracked excavator (2)	11.4
98.0	1950.0	24.2	-9.8	14.4	Excavator with nibbler (1)	11.4
98.0	1950.0	24.2	-9.8	14.4	Excavator with nibbler (2)	11.4
106.0	1950.0	32.2	-9.8	22.4	Dump trucks (1)	19.4
106.0	1950.0	32.2	-9.8	22.4	Dump trucks (2)	19.4
106.0	1950.0	32.2	-9.8	22.4	Dump trucks (3)	19.4
Total						32.3

Receptor 4 - Boghill Cottage**Crushing**

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
110.0	1950	36.2	-9.8	26.4	Tracked Crusher	23.4
110.0	1950	36.2	-9.8	26.4	Tracked Excavator (1)	23.4
110.0	1950	36.2	-9.8	26.4	Tracked Excavator (2)	23.4
96.0	1950	22.2	-9.8	12.4	Front Loader	9.4
Total						28.3

Ground Works

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
103.0	1950.0	29.2	-9.8	19.4	Dozer	16.4
103.0	1950.0	29.2	-9.8	19.4	Dozer & Roller	16.4
97.0	1950.0	23.2	-9.8	13.4	Excavator (1)	10.4
97.0	1950.0	23.2	-9.8	13.4	Excavator (2)	10.4
97.0	1950.0	23.2	-9.8	13.4	Excavator (3)	10.4
103.0	1950.0	29.2	-9.8	19.4	Dozer (1)	16.4
103.0	1950.0	29.2	-9.8	19.4	Dozer (2)	16.4
103.0	1950.0	29.2	-9.8	19.4	Dozer (3)	16.4
109.0	1950.0	35.2	-9.8	25.4	Breaker/Nibbler on Excavator	22.4
Total						26.3

Site offices & around site

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
88.0	1950.0	14.2	-9.8	4.4	Generator	1.4
102.0	1950.0	28.2	-9.8	18.4	Fuel Tanker	15.4
97.0	1950.0	23.2	-9.8	13.4	Tracked Excavator	10.4
104.0	1950.0	30.2	-9.8	20.4	Road Sweeper	17.4
104.0	1950.0	30.2	-9.8	20.4	Tractor & Water Bowser	17.4
Total						22.0

Receptor 5 - Turningshaw Farm

Building Decontamination

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
103.0	2070.0	28.7	-10.4	18.3	JCB	15.3
97.0	2070.0	22.7	-10.4	12.3	Excavator	9.3
94.0	2070.0	19.7	-10.4	9.3	Tractor & Water Bowser	6.3
84.0	2070.0	9.7	-10.4	-0.7	Small Dumper	-3.7
84.0	2070.0	9.7	-10.4	-5.7	Skid shovel within buildings Mini excavator with breaker within buildings (with rubber tracks)	-8.7
96.0	2070.0	21.7	-10.4	6.3		3.3
Total						17.0

Demolition

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
118.0	2070.0	43.7	-10.4	33.3	Breaker mounted on excavator	30.3
98.0	2070.0	23.7	-10.4	13.3	Tracked excavator (1)	10.3
98.0	2070.0	23.7	-10.4	13.3	Tracked excavator (2)	10.3
98.0	2070.0	23.7	-10.4	13.3	Excavator with nibbler (1)	10.3
98.0	2070.0	23.7	-10.4	13.3	Excavator with nibbler (2)	10.3
106.0	2070.0	31.7	-10.4	21.3	Dump trucks (1)	18.3
106.0	2070.0	31.7	-10.4	21.3	Dump trucks (2)	18.3
106.0	2070.0	31.7	-10.4	21.3	Dump trucks (3)	18.3
Total						31.2

Receptor 5 - Turningshaw Farm

Crushing

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
110.0	2070	35.7	-10.4	25.3	Tracked Crusher	22.3
110.0	2070	35.7	-10.4	25.3	Tracked Excavator (1)	22.3
110.0	2070	35.7	-10.4	25.3	Tracked Excavator (2)	22.3
96.0	2070	21.7	-10.4	11.3	Front Loader	8.3
Total						27.2

Ground Works

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
103.0	2070.0	28.7	-10.4	18.3	Dozer	15.3
103.0	2070.0	28.7	-10.4	18.3	Dozer & Roller	15.3
97.0	2070.0	22.7	-10.4	12.3	Excavator (1)	9.3
97.0	2070.0	22.7	-10.4	12.3	Excavator (2)	9.3
97.0	2070.0	22.7	-10.4	12.3	Excavator (3)	9.3
103.0	2070.0	28.7	-10.4	18.3	Dozer (1)	15.3
103.0	2070.0	28.7	-10.4	18.3	Dozer (2)	15.3
103.0	2070.0	28.7	-10.4	18.3	Dozer (3)	15.3
109.0	2070.0	34.7	-10.4	24.3	Breaker/Nibbler on Excavator	21.3
Total						25.2

Site offices & around site

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
88.0	2070.0	13.7	-10.4	3.3	Generator	0.3
102.0	2070.0	27.7	-10.4	17.3	Fuel Tanker	14.3
97.0	2070.0	22.7	-10.4	12.3	Tracked Excavator	9.3
104.0	2070.0	29.7	-10.4	19.3	Road Sweeper	16.3
104.0	2070.0	29.7	-10.4	19.3	Tractor & Water Bowser	16.3
Total						20.9

Receptor 6 - Netherfield

Building Decontamination

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
103.0	2270.0	27.9	-11.4	16.5	JCB	13.5
97.0	2270.0	21.9	-11.4	10.5	Excavator	7.5
94.0	2270.0	18.9	-11.4	7.5	Tractor & Water Bowser	4.5
84.0	2270.0	8.9	-11.4	-2.5	Small Dumper	-5.5
84.0	2270.0	8.9	-11.4	-7.5	Skid shovel within buildings	-10.5
96.0	2270.0	20.9	-11.4	4.5	Mini excavator with breaker within buildings (with rubber tracks)	1.5
Total						15.2

Demolition

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
118.0	2270.0	42.9	-11.4	31.5	Breaker mounted on excavator	28.5
98.0	2270.0	22.9	-11.4	11.5	Tracked excavator (1)	8.5
98.0	2270.0	22.9	-11.4	11.5	Tracked excavator (2)	8.5
98.0	2270.0	22.9	-11.4	11.5	Excavator with nibbler (1)	8.5
98.0	2270.0	22.9	-11.4	11.5	Excavator with nibbler (2)	8.5
106.0	2270.0	30.9	-11.4	19.5	Dump trucks (1)	16.5
106.0	2270.0	30.9	-11.4	19.5	Dump trucks (2)	16.5
106.0	2270.0	30.9	-11.4	19.5	Dump trucks (3)	16.5
Total						29.4

Receptor 6 - Netherfield**Crushing**

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
110.0	2270	34.9	-11.4	23.5	Tracked Crusher	20.5
110.0	2270	34.9	-11.4	23.5	Tracked Excavator (1)	20.5
110.0	2270	34.9	-11.4	23.5	Tracked Excavator (2)	20.5
96.0	2270	20.9	-11.4	9.5	Front Loader	6.5
Total						25.4

Ground Works

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
103.0	2270.0	27.9	-11.4	16.5	Dozer	13.5
103.0	2270.0	27.9	-11.4	16.5	Dozer & Roller	13.5
97.0	2270.0	21.9	-11.4	10.5	Excavator (1)	7.5
97.0	2270.0	21.9	-11.4	10.5	Excavator (2)	7.5
97.0	2270.0	21.9	-11.4	10.5	Excavator (3)	7.5
103.0	2270.0	27.9	-11.4	16.5	Dozer (1)	13.5
103.0	2270.0	27.9	-11.4	16.5	Dozer (2)	13.5
103.0	2270.0	27.9	-11.4	16.5	Dozer (3)	13.5
109.0	2270.0	33.9	-11.4	22.5	Breaker/Nibbler on Excavator	19.5
Total						23.4

Site offices & around site

Power (dB)	Distance (m)	Sound			Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)		
88.0	2270.0	12.9	-11.4	1.5	Generator	-1.5
102.0	2270.0	26.9	-11.4	15.5	Fuel Tanker	12.5
97.0	2270.0	21.9	-11.4	10.5	Tracked Excavator	7.5
104.0	2270.0	28.9	-11.4	17.5	Road Sweeper	14.5
104.0	2270.0	28.9	-11.4	17.5	Tractor & Water Bowser	14.5
Total						19.1

Receptor 7 - Barrangarry Farm

Building Decontamination

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
103.0	320.0	44.9	-1.6	43.3	JCB	40.3
97.0	320.0	38.9	-1.6	37.3	Excavator	34.3
94.0	320.0	35.9	-1.6	34.3	Tractor & Water Bowser	31.3
84.0	320.0	25.9	-1.6	24.3	Small Dumper	21.3
84.0	320.0	25.9	-1.6	19.3	Skid shovel within buildings	16.3
96.0	320.0	37.9	-1.6	31.3	Mini excavator with breaker within buildings (with rubber tracks)	28.3
Total						41.9

Demolition

Power (dB)	Distance (m)	Sound		Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		Pressure Level (dB)	Air Attenuation			
118.0	320.0	59.9	-1.6	58.3	Breaker mounted on excavator	55.3
98.0	320.0	39.9	-1.6	38.3	Tracked excavator (1)	35.3
98.0	320.0	39.9	-1.6	38.3	Tracked excavator (2)	35.3
98.0	320.0	39.9	-1.6	38.3	Excavator with nibbler (1)	35.3
98.0	320.0	39.9	-1.6	38.3	Excavator with nibbler (2)	35.3
106.0	320.0	47.9	-1.6	46.3	Dump trucks (1)	43.3
106.0	320.0	47.9	-1.6	46.3	Dump trucks (2)	43.3
106.0	320.0	47.9	-1.6	46.3	Dump trucks (3)	43.3
Total						56.2

Receptor 7 - Barrangarry Farm

Crushing

Power (dB)	Distance (m)	Sound Pressure Level		Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		(dB)	(dB)				
110.0	320	51.9	-1.6	50.3	Tracked Crusher	47.3	
110.0	320	51.9	-1.6	50.3	Tracked Excavator (1)	47.3	
110.0	320	51.9	-1.6	50.3	Tracked Excavator (2)	47.3	
96.0	320	37.9	-1.6	36.3	Front Loader	33.3	
Total						52.1	

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level		Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		(dB)	(dB)				
103.0	320.0	44.9	-1.6	43.3	Dozer	40.3	
103.0	320.0	44.9	-1.6	43.3	Dozer & Roller	40.3	
97.0	320.0	38.9	-1.6	37.3	Excavator (1)	34.3	
97.0	320.0	38.9	-1.6	37.3	Excavator (2)	34.3	
97.0	320.0	38.9	-1.6	37.3	Excavator (3)	34.3	
103.0	320.0	44.9	-1.6	43.3	Dozer (1)	40.3	
103.0	320.0	44.9	-1.6	43.3	Dozer (2)	40.3	
103.0	320.0	44.9	-1.6	43.3	Dozer (3)	40.3	
109.0	320.0	50.9	-1.6	49.3	Breaker/Nibbler on Excavator	46.3	
Total						50.2	

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level		Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
		(dB)	(dB)				
88.0	320.0	29.9	-1.6	28.3	Generator	25.3	
102.0	320.0	43.9	-1.6	42.3	Fuel Tanker	39.3	
97.0	320.0	38.9	-1.6	37.3	Tracked Excavator	34.3	
104.0	320.0	45.9	-1.6	44.3	Road Sweeper	41.3	
104.0	320.0	45.9	-1.6	44.3	Tractor & Water Bowser	41.3	
Total						45.9	

Phase 4

Receptor 1 - Rossland Crescent

Building Decontamination

		Sound Pressure					
Power (dB)	Distance (m)	Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%	
103.0	330.0	39.0	-1.7	37.4	JCB	34.4	
97.0	330.0	33.0	-1.7	31.4	Excavator	28.4	
94.0	330.0	30.0	-1.7	28.4	Tractor & Water Bowser	25.4	
84.0	330.0	20.0	-1.7	18.4	Small Dumper	15.4	
84.0	330.0	25.6	-1.7	19.0	Skid shovel within buildings	16.0	
96.0	330.0	37.6	-1.7	31.0	Mini excavator with breaker within buildings (with rubber tracks)	28.0	
Total						36.5	

Demolition

		Sound Pressure					
Power (dB)	Distance (m)	Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%	
118.0	330.0	59.6	-1.7	58.0	Breaker mounted on excavator	55.0	
98.0	330.0	39.6	-1.7	38.0	Tracked excavator (1)	35.0	
98.0	330.0	39.6	-1.7	38.0	Tracked excavator (2)	35.0	
98.0	330.0	39.6	-1.7	38.0	Excavator with nibbler (1)	35.0	
98.0	330.0	39.6	-1.7	38.0	Excavator with nibbler (2)	35.0	
106.0	330.0	47.6	-1.7	46.0	Dump trucks (1)	43.0	
106.0	330.0	47.6	-1.7	46.0	Dump trucks (2)	43.0	
106.0	330.0	47.6	-1.7	46.0	Dump trucks (3)	43.0	
Total						55.9	

Receptor 1 - Rossland Crescent

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	330	51.6	-1.7	50.0	Tracked Crusher	47.0
110.0	330	51.6	-1.7	50.0	Tracked Excavator (1)	47.0
110.0	330	51.6	-1.7	50.0	Tracked Excavator (2)	47.0
96.0	330	37.6	-1.7	36.0	Front Loader	33.0
Total						51.8

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	330.0	44.6	-1.7	43.0	Dozer	40.0
103.0	330.0	44.6	-1.7	43.0	Dozer & Roller	40.0
97.0	330.0	38.6	-1.7	37.0	Excavator (1)	34.0
97.0	330.0	38.6	-1.7	37.0	Excavator (2)	34.0
97.0	330.0	38.6	-1.7	37.0	Excavator (3)	34.0
103.0	330.0	44.6	-1.7	43.0	Dozer (1)	40.0
103.0	330.0	44.6	-1.7	43.0	Dozer (2)	40.0
103.0	330.0	44.6	-1.7	43.0	Dozer (3)	40.0
109.0	330.0	50.6	-1.7	49.0	Breaker/Nibbler on Excavator	46.0
Total						49.9

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	330.0	29.6	-1.7	28.0	Generator	25.0
102.0	330.0	43.6	-1.7	42.0	Fuel Tanker	39.0
97.0	330.0	38.6	-1.7	37.0	Tracked Excavator	34.0
104.0	330.0	45.6	-1.7	44.0	Road Sweeper	41.0
104.0	330.0	45.6	-1.7	44.0	Tractor & Water Bowser	41.0
Total						45.5

Receptor 2 - Sachelcourt Avenue

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	250.0	47.0	-1.3	45.8	JCB	42.8
97.0	250.0	41.0	-1.3	39.8	Excavator	36.8
94.0	250.0	38.0	-1.3	36.8	Tractor & Water Bowser	33.8
84.0	250.0	28.0	-1.3	26.8	Small Dumper	23.8
84.0	250.0	28.0	-1.3	21.8	Skid shovel within buildings	18.8
96.0	250.0	40.0	-1.3	33.8	Mini excavator with breaker within buildings (with rubber tracks)	30.8
Total						44.4

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	250.0	62.0	-1.3	60.8	Breaker mounted on excavator	57.8
98.0	250.0	42.0	-1.3	40.8	Tracked excavator (1)	37.8
98.0	250.0	42.0	-1.3	40.8	Tracked excavator (2)	37.8
98.0	250.0	42.0	-1.3	40.8	Excavator with nibbler (1)	37.8
98.0	250.0	42.0	-1.3	40.8	Excavator with nibbler (2)	37.8
106.0	250.0	50.0	-1.3	48.8	Dump trucks (1)	45.8
106.0	250.0	50.0	-1.3	48.8	Dump trucks (2)	45.8
106.0	250.0	50.0	-1.3	48.8	Dump trucks (3)	45.8
Total						58.7

Receptor 2 - Sachelcourt Avenue**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	250	54.0	-1.3	52.8	Tracked Crusher	49.8
110.0	250	54.0	-1.3	52.8	Tracked Excavator (1)	49.8
110.0	250	54.0	-1.3	52.8	Tracked Excavator (2)	49.8
96.0	250	40.0	-1.3	38.8	Front Loader	35.8
Total						54.6

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	250.0	47.0	-1.3	45.8	Dozer	42.8
103.0	250.0	47.0	-1.3	45.8	Dozer & Roller	42.8
97.0	250.0	41.0	-1.3	39.8	Excavator (1)	36.8
97.0	250.0	41.0	-1.3	39.8	Excavator (2)	36.8
97.0	250.0	41.0	-1.3	39.8	Excavator (3)	36.8
103.0	250.0	47.0	-1.3	45.8	Dozer (1)	42.8
103.0	250.0	47.0	-1.3	45.8	Dozer (2)	42.8
103.0	250.0	47.0	-1.3	45.8	Dozer (3)	42.8
109.0	250.0	53.0	-1.3	51.8	Breaker/Nibbler on Excavator	48.8
Total						52.7

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	250.0	32.0	-1.3	30.8	Generator	27.8
102.0	250.0	46.0	-1.3	44.8	Fuel Tanker	41.8
97.0	250.0	41.0	-1.3	39.8	Tracked Excavator	36.8
104.0	250.0	48.0	-1.3	46.8	Road Sweeper	43.8
104.0	250.0	48.0	-1.3	46.8	Tractor & Water Bowser	43.8
Total						48.3

Receptor 3 - Gatehead

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	925.0	35.7	-4.6	31.1	JCB	28.1
97.0	925.0	29.7	-4.6	25.1	Excavator	22.1
94.0	925.0	26.7	-4.6	22.1	Tractor & Water Bowser	19.1
84.0	925.0	16.7	-4.6	12.1	Small Dumper	9.1
84.0	925.0	16.7	-4.6	7.1	Skid shovel within buildings	4.1
96.0	925.0	28.7	-4.6	19.1	Mini excavator with breaker within buildings (with rubber tracks)	16.1
Total						29.7

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	925.0	50.7	-4.6	46.1	Breaker mounted on excavator	43.1
98.0	925.0	30.7	-4.6	26.1	Tracked excavator (1)	23.1
98.0	925.0	30.7	-4.6	26.1	Tracked excavator (2)	23.1
98.0	925.0	30.7	-4.6	26.1	Excavator with nibbler (1)	23.1
98.0	925.0	30.7	-4.6	26.1	Excavator with nibbler (2)	23.1
106.0	925.0	38.7	-4.6	34.1	Dump trucks (1)	31.1
106.0	925.0	38.7	-4.6	34.1	Dump trucks (2)	31.1
106.0	925.0	38.7	-4.6	34.1	Dump trucks (3)	31.1
Total						43.9

Receptor 3 - Gatehead**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	925	42.7	-4.6	38.1	Tracked Crusher	35.1
110.0	925	42.7	-4.6	38.1	Tracked Excavator (1)	35.1
110.0	925	42.7	-4.6	38.1	Tracked Excavator (2)	35.1
96.0	925	28.7	-4.6	24.1	Front Loader	21.1
Total						39.9

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	925.0	35.7	-4.6	31.1	Dozer	28.1
103.0	925.0	35.7	-4.6	31.1	Dozer & Roller	28.1
97.0	925.0	29.7	-4.6	25.1	Excavator (1)	22.1
97.0	925.0	29.7	-4.6	25.1	Excavator (2)	22.1
97.0	925.0	29.7	-4.6	25.1	Excavator (3)	22.1
103.0	925.0	35.7	-4.6	31.1	Dozer (1)	28.1
103.0	925.0	35.7	-4.6	31.1	Dozer (2)	28.1
103.0	925.0	35.7	-4.6	31.1	Dozer (3)	28.1
109.0	925.0	41.7	-4.6	37.1	Breaker/Nibbler on Excavator	34.1
Total						37.9

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	925.0	20.7	-4.6	16.1	Generator	13.1
102.0	925.0	34.7	-4.6	30.1	Fuel Tanker	27.1
97.0	925.0	29.7	-4.6	25.1	Tracked Excavator	22.1
104.0	925.0	36.7	-4.6	32.1	Road Sweeper	29.1
104.0	925.0	36.7	-4.6	32.1	Tractor & Water Bowser	29.1
Total						33.6

Receptor 4 - Boghill Cottage

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1400.0	32.1	-7.0	25.1	JCB	22.1
97.0	1400.0	26.1	-7.0	19.1	Excavator	16.1
94.0	1400.0	23.1	-7.0	16.1	Tractor & Water Bowser	13.1
84.0	1400.0	13.1	-7.0	6.1	Small Dumper	3.1
84.0	1400.0	13.1	-7.0	1.1	Skid shovel within buildings	-1.9
96.0	1400.0	25.1	-7.0	13.1	Mini excavator with breaker within buildings (with rubber tracks)	10.1
Total						23.7

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	1400.0	47.1	-7.0	40.1	Breaker mounted on excavator	37.1
98.0	1400.0	27.1	-7.0	20.1	Tracked excavator (1)	17.1
98.0	1400.0	27.1	-7.0	20.1	Tracked excavator (2)	17.1
98.0	1400.0	27.1	-7.0	20.1	Excavator with nibbler (1)	17.1
98.0	1400.0	27.1	-7.0	20.1	Excavator with nibbler (2)	17.1
106.0	1400.0	35.1	-7.0	28.1	Dump trucks (1)	25.1
106.0	1400.0	35.1	-7.0	28.1	Dump trucks (2)	25.1
106.0	1400.0	35.1	-7.0	28.1	Dump trucks (3)	25.1
Total						38

Receptor 4 - Boghill Cottage**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	1400	39.1	-7.0	32.1	Tracked Crusher	29.1
110.0	1400	39.1	-7.0	32.1	Tracked Excavator (1)	29.1
110.0	1400	39.1	-7.0	32.1	Tracked Excavator (2)	29.1
96.0	1400	25.1	-7.0	18.1	Front Loader	15.1
Total						33.9

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1400.0	32.1	-7.0	25.1	Dozer	22.1
103.0	1400.0	32.1	-7.0	25.1	Dozer & Roller	22.1
97.0	1400.0	26.1	-7.0	19.1	Excavator (1)	16.1
97.0	1400.0	26.1	-7.0	19.1	Excavator (2)	16.1
97.0	1400.0	26.1	-7.0	19.1	Excavator (3)	16.1
103.0	1400.0	32.1	-7.0	25.1	Dozer (1)	22.1
103.0	1400.0	32.1	-7.0	25.1	Dozer (2)	22.1
103.0	1400.0	32.1	-7.0	25.1	Dozer (3)	22.1
109.0	1400.0	38.1	-7.0	31.1	Breaker/Nibbler on Excavator	28.1
Total						32

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	1400.0	17.1	-7.0	10.1	Generator	7.1
102.0	1400.0	31.1	-7.0	24.1	Fuel Tanker	21.1
97.0	1400.0	26.1	-7.0	19.1	Tracked Excavator	16.1
104.0	1400.0	33.1	-7.0	26.1	Road Sweeper	23.1
104.0	1400.0	33.1	-7.0	26.1	Tractor & Water Bowser	23.1
Total						27.6

Receptor 5 - Turningshaw Farm

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1760.0	30.1	-8.8	21.3	JCB	18.3
97.0	1760.0	24.1	-8.8	15.3	Excavator	12.3
94.0	1760.0	21.1	-8.8	12.3	Tractor & Water Bowser	9.3
84.0	1760.0	11.1	-8.8	2.3	Small Dumper	-0.7
84.0	1760.0	11.1	-8.8	-2.7	Skid shovel within buildings	-5.7
96.0	1760.0	23.1	-8.8	9.3	Mini excavator with breaker within buildings (with rubber tracks)	6.3
Total						19.9

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	1760.0	45.1	-8.8	36.3	Breaker mounted on excavator	33.3
98.0	1760.0	25.1	-8.8	16.3	Tracked excavator (1)	13.3
98.0	1760.0	25.1	-8.8	16.3	Tracked excavator (2)	13.3
98.0	1760.0	25.1	-8.8	16.3	Excavator with nibbler (1)	13.3
98.0	1760.0	25.1	-8.8	16.3	Excavator with nibbler (2)	13.3
106.0	1760.0	33.1	-8.8	24.3	Dump trucks (1)	21.3
106.0	1760.0	33.1	-8.8	24.3	Dump trucks (2)	21.3
106.0	1760.0	33.1	-8.8	24.3	Dump trucks (3)	21.3
Total						34.2

Receptor 5 - Turningshaw Farm

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	1760	37.1	-8.8	28.3	Tracked Crusher	25.3
110.0	1760	37.1	-8.8	28.3	Tracked Excavator (1)	25.3
110.0	1760	37.1	-8.8	28.3	Tracked Excavator (2)	25.3
96.0	1760	23.1	-8.8	14.3	Front Loader	11.3
Total						30.1

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1760.0	30.1	-8.8	21.3	Dozer	18.3
103.0	1760.0	30.1	-8.8	21.3	Dozer & Roller	18.3
97.0	1760.0	24.1	-8.8	15.3	Excavator (1)	12.3
97.0	1760.0	24.1	-8.8	15.3	Excavator (2)	12.3
97.0	1760.0	24.1	-8.8	15.3	Excavator (3)	12.3
103.0	1760.0	30.1	-8.8	21.3	Dozer (1)	18.3
103.0	1760.0	30.1	-8.8	21.3	Dozer (2)	18.3
103.0	1760.0	30.1	-8.8	21.3	Dozer (3)	18.3
109.0	1760.0	36.1	-8.8	27.3	Breaker/Nibbler on Excavator	24.3
Total						28.2

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	1760.0	15.1	-8.8	6.3	Generator	3.3
102.0	1760.0	29.1	-8.8	20.3	Fuel Tanker	17.3
97.0	1760.0	24.1	-8.8	15.3	Tracked Excavator	12.3
104.0	1760.0	31.1	-8.8	22.3	Road Sweeper	19.3
104.0	1760.0	31.1	-8.8	22.3	Tractor & Water Bowser	19.3
Total						23.8

Receptor 6 - Netherfield

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2330.0	27.7	-11.7	16.0	JCB	13.0
97.0	2330.0	21.7	-11.7	10.0	Excavator	7.0
94.0	2330.0	18.7	-11.7	7.0	Tractor & Water Bowser	4.0
84.0	2330.0	8.7	-11.7	-3.0	Small Dumper	-6.0
84.0	2330.0	8.7	-11.7	-8.0	Skid shovel within buildings	-11.0
96.0	2330.0	20.7	-11.7	4.0	Mini excavator with breaker within buildings (with rubber tracks)	1.0
Total						14.6

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	2330.0	42.7	-11.7	31.0	Breaker mounted on excavator	28.0
98.0	2330.0	22.7	-11.7	11.0	Tracked excavator (1)	8.0
98.0	2330.0	22.7	-11.7	11.0	Tracked excavator (2)	8.0
98.0	2330.0	22.7	-11.7	11.0	Excavator with nibbler (1)	8.0
98.0	2330.0	22.7	-11.7	11.0	Excavator with nibbler (2)	8.0
106.0	2330.0	30.7	-11.7	19.0	Dump trucks (1)	16.0
106.0	2330.0	30.7	-11.7	19.0	Dump trucks (2)	16.0
106.0	2330.0	30.7	-11.7	19.0	Dump trucks (3)	16.0
Total						28.9

Receptor 6 - Netherfield**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	2330	34.7	-11.7	23.0	Tracked Crusher	20.0
110.0	2330	34.7	-11.7	23.0	Tracked Excavator (1)	20.0
110.0	2330	34.7	-11.7	23.0	Tracked Excavator (2)	20.0
96.0	2330	20.7	-11.7	9.0	Front Loader	6.0
Total						24.8

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2330.0	27.7	-11.7	16.0	Dozer	13.0
103.0	2330.0	27.7	-11.7	16.0	Dozer & Roller	13.0
97.0	2330.0	21.7	-11.7	10.0	Excavator (1)	7.0
97.0	2330.0	21.7	-11.7	10.0	Excavator (2)	7.0
97.0	2330.0	21.7	-11.7	10.0	Excavator (3)	7.0
103.0	2330.0	27.7	-11.7	16.0	Dozer (1)	13.0
103.0	2330.0	27.7	-11.7	16.0	Dozer (2)	13.0
103.0	2330.0	27.7	-11.7	16.0	Dozer (3)	13.0
109.0	2330.0	33.7	-11.7	22.0	Breaker/Nibbler on Excavator	19.0
Total						22.9

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	2330.0	12.7	-11.7	1.0	Generator	-2.0
102.0	2330.0	26.7	-11.7	15.0	Fuel Tanker	12.0
97.0	2330.0	21.7	-11.7	10.0	Tracked Excavator	7.0
104.0	2330.0	28.7	-11.7	17.0	Road Sweeper	14.0
104.0	2330.0	28.7	-11.7	17.0	Tractor & Water Bowser	14.0
Total						18.6

Receptor 7 - Barrangarry Farm

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	765.0	37.3	-3.8	33.5	JCB	30.5
97.0	765.0	31.3	-3.8	27.5	Excavator	24.5
94.0	765.0	28.3	-3.8	24.5	Tractor & Water Bowser	21.5
84.0	765.0	18.3	-3.8	14.5	Small Dumper	11.5
84.0	765.0	18.3	-3.8	9.5	Skid shovel within buildings	6.5
96.0	765.0	30.3	-3.8	21.5	Mini excavator with breaker within buildings (with rubber tracks)	18.5
Total						32.1

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	765.0	52.3	-3.8	48.5	Breaker mounted on excavator	45.5
98.0	765.0	32.3	-3.8	28.5	Tracked excavator (1)	25.5
98.0	765.0	32.3	-3.8	28.5	Tracked excavator (2)	25.5
98.0	765.0	32.3	-3.8	28.5	Excavator with nibbler (1)	25.5
98.0	765.0	32.3	-3.8	28.5	Excavator with nibbler (2)	25.5
106.0	765.0	40.3	-3.8	36.5	Dump trucks (1)	33.5
106.0	765.0	40.3	-3.8	36.5	Dump trucks (2)	33.5
106.0	765.0	40.3	-3.8	36.5	Dump trucks (3)	33.5
Total						46.4

Receptor 7 - Barrangarry Farm

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	765	44.3	-3.8	40.5	Tracked Crusher	37.5
110.0	765	44.3	-3.8	40.5	Tracked Excavator (1)	37.5
110.0	765	44.3	-3.8	40.5	Tracked Excavator (2)	37.5
96.0	765	30.3	-3.8	26.5	Front Loader	23.5
Total						42.3

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	765.0	37.3	-3.8	33.5	Dozer	30.5
103.0	765.0	37.3	-3.8	33.5	Dozer & Roller	30.5
97.0	765.0	31.3	-3.8	27.5	Excavator (1)	24.5
97.0	765.0	31.3	-3.8	27.5	Excavator (2)	24.5
97.0	765.0	31.3	-3.8	27.5	Excavator (3)	24.5
103.0	765.0	37.3	-3.8	33.5	Dozer (1)	30.5
103.0	765.0	37.3	-3.8	33.5	Dozer (2)	30.5
103.0	765.0	37.3	-3.8	33.5	Dozer (3)	30.5
109.0	765.0	43.3	-3.8	39.5	Breaker/Nibbler on Excavator	36.5
Total						40.4

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	765.0	22.3	-3.8	18.5	Generator	15.5
102.0	765.0	36.3	-3.8	32.5	Fuel Tanker	29.5
97.0	765.0	31.3	-3.8	27.5	Tracked Excavator	24.5
104.0	765.0	38.3	-3.8	34.5	Road Sweeper	31.5
104.0	765.0	38.3	-3.8	34.5	Tractor & Water Bowser	31.5
Total						36.1

Phase 5

Receptor 1 - Rossland Crescent

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	550.0	33.5	-2.8	30.7	JCB	27.7
97.0	550.0	27.5	-2.8	24.7	Excavator	21.7
94.0	550.0	24.5	-2.8	21.7	Tractor & Water Bowser	18.7
84.0	550.0	14.5	-2.8	11.7	Small Dumper	8.7
84.0	550.0	21.2	-2.8	13.4	Skid shovel within buildings	10.4
96.0	550.0	33.2	-2.8	25.4	Mini excavator with breaker within buildings (with rubber tracks)	22.4
Total						30.1

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	550.0	55.2	-2.8	52.4	Breaker mounted on excavator	49.4
98.0	550.0	35.2	-2.8	32.4	Tracked excavator (1)	29.4
98.0	550.0	35.2	-2.8	32.4	Tracked excavator (2)	29.4
98.0	550.0	35.2	-2.8	32.4	Excavator with nibbler (1)	29.4
98.0	550.0	35.2	-2.8	32.4	Excavator with nibbler (2)	29.4
106.0	550.0	43.2	-2.8	40.4	Dump trucks (1)	37.4
106.0	550.0	43.2	-2.8	40.4	Dump trucks (2)	37.4
106.0	550.0	43.2	-2.8	40.4	Dump trucks (3)	37.4
Total						50.3

Receptor 1 - Rossland Crescent

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	550	47.2	-2.8	44.4	Tracked Crusher	41.4
110.0	550	47.2	-2.8	44.4	Tracked Excavator (1)	41.4
110.0	550	47.2	-2.8	44.4	Tracked Excavator (2)	41.4
96.0	550	33.2	-2.8	30.4	Front Loader	27.4
Total						46.3

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	550.0	40.2	-2.8	37.4	Dozer	34.4
103.0	550.0	40.2	-2.8	37.4	Dozer & Roller	34.4
97.0	550.0	34.2	-2.8	31.4	Excavator (1)	28.4
97.0	550.0	34.2	-2.8	31.4	Excavator (2)	28.4
97.0	550.0	34.2	-2.8	31.4	Excavator (3)	28.4
103.0	550.0	40.2	-2.8	37.4	Dozer (1)	34.4
103.0	550.0	40.2	-2.8	37.4	Dozer (2)	34.4
103.0	550.0	40.2	-2.8	37.4	Dozer (3)	34.4
109.0	550.0	46.2	-2.8	43.4	Breaker/Nibbler on Excavator	40.4
Total						44.3

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	550.0	25.2	-2.8	22.4	Generator	19.4
102.0	550.0	39.2	-2.8	36.4	Fuel Tanker	33.4
97.0	550.0	34.2	-2.8	31.4	Tracked Excavator	28.4
104.0	550.0	41.2	-2.8	38.4	Road Sweeper	35.4
104.0	550.0	41.2	-2.8	38.4	Tractor & Water Bowser	35.4
Total						40

Receptor 2 - Sachelcourt Avenue

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	85.0	56.4	-0.4	56.0	JCB	53.0
97.0	85.0	50.4	-0.4	50.0	Excavator	47.0
94.0	85.0	47.4	-0.4	47.0	Tractor & Water Bowser	44.0
84.0	85.0	37.4	-0.4	37.0	Small Dumper	34.0
84.0	85.0	37.4	-0.4	32.0	Skid shovel within buildings	29.0
96.0	85.0	49.4	-0.4	44.0	Mini excavator with breaker within buildings (with rubber tracks)	41.0
Total						54.6

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	85.0	71.4	-0.4	71.0	Breaker mounted on excavator	68.0
98.0	85.0	51.4	-0.4	51.0	Tracked excavator (1)	48.0
98.0	85.0	51.4	-0.4	51.0	Tracked excavator (2)	48.0
98.0	85.0	51.4	-0.4	51.0	Excavator with nibbler (1)	48.0
98.0	85.0	51.4	-0.4	51.0	Excavator with nibbler (2)	48.0
106.0	85.0	59.4	-0.4	59.0	Dump trucks (1)	56.0
106.0	85.0	59.4	-0.4	59.0	Dump trucks (2)	56.0
106.0	85.0	59.4	-0.4	59.0	Dump trucks (3)	56.0
Total						68.9

Receptor 2 - Sachelcourt Avenue

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	100	62.0	-0.5	61.5	Tracked Crusher	58.5
110.0	100	62.0	-0.5	61.5	Tracked Excavator (1)	58.5
110.0	100	62.0	-0.5	61.5	Tracked Excavator (2)	58.5
96.0	100	48.0	-0.5	47.5	Front Loader	44.5
Total						63.3

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	85.0	56.4	-0.4	56.0	Dozer	53.0
103.0	85.0	56.4	-0.4	56.0	Dozer & Roller	53.0
97.0	85.0	50.4	-0.4	50.0	Excavator (1)	47.0
97.0	85.0	50.4	-0.4	50.0	Excavator (2)	47.0
97.0	85.0	50.4	-0.4	50.0	Excavator (3)	47.0
103.0	85.0	56.4	-0.4	56.0	Dozer (1)	53.0
103.0	85.0	56.4	-0.4	56.0	Dozer (2)	53.0
103.0	85.0	56.4	-0.4	56.0	Dozer (3)	53.0
109.0	85.0	62.4	-0.4	62.0	Breaker/Nibbler on Excavator	59.0
Total						62.9

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	85.0	41.4	-0.4	41.0	Generator	38.0
102.0	85.0	55.4	-0.4	55.0	Fuel Tanker	52.0
97.0	85.0	50.4	-0.4	50.0	Tracked Excavator	47.0
104.0	85.0	57.4	-0.4	57.0	Road Sweeper	54.0
104.0	85.0	57.4	-0.4	57.0	Tractor & Water Bowser	54.0
Total						58.5

Receptor 3 - Gatehead

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	670.0	38.5	-3.4	35.1	JCB	32.1
97.0	670.0	32.5	-3.4	29.1	Excavator	26.1
94.0	670.0	29.5	-3.4	26.1	Tractor & Water Bowser	23.1
84.0	670.0	19.5	-3.4	16.1	Small Dumper	13.1
84.0	670.0	19.5	-3.4	11.1	Skid shovel within buildings	8.1
96.0	670.0	31.5	-3.4	23.1	Mini excavator with breaker within buildings (with rubber tracks)	20.1
Total						33.8

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	670.0	53.5	-3.4	50.1	Breaker mounted on excavator	47.1
98.0	670.0	33.5	-3.4	30.1	Tracked excavator (1)	27.1
98.0	670.0	33.5	-3.4	30.1	Tracked excavator (2)	27.1
98.0	670.0	33.5	-3.4	30.1	Excavator with nibbler (1)	27.1
98.0	670.0	33.5	-3.4	30.1	Excavator with nibbler (2)	27.1
106.0	670.0	41.5	-3.4	38.1	Dump trucks (1)	35.1
106.0	670.0	41.5	-3.4	38.1	Dump trucks (2)	35.1
106.0	670.0	41.5	-3.4	38.1	Dump trucks (3)	35.1
Total						48

Receptor 3 - Gatehead**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	670	45.5	-3.4	42.1	Tracked Crusher	39.1
110.0	670	45.5	-3.4	42.1	Tracked Excavator (1)	39.1
110.0	670	45.5	-3.4	42.1	Tracked Excavator (2)	39.1
96.0	670	31.5	-3.4	28.1	Front Loader	25.1
Total						44

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	670.0	38.5	-3.4	35.1	Dozer	32.1
103.0	670.0	38.5	-3.4	35.1	Dozer & Roller	32.1
97.0	670.0	32.5	-3.4	29.1	Excavator (1)	26.1
97.0	670.0	32.5	-3.4	29.1	Excavator (2)	26.1
97.0	670.0	32.5	-3.4	29.1	Excavator (3)	26.1
103.0	670.0	38.5	-3.4	35.1	Dozer (1)	32.1
103.0	670.0	38.5	-3.4	35.1	Dozer (2)	32.1
103.0	670.0	38.5	-3.4	35.1	Dozer (3)	32.1
109.0	670.0	44.5	-3.4	41.1	Breaker/Nibbler on Excavator	38.1
Total						42

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	670.0	23.5	-3.4	20.1	Generator	17.1
102.0	670.0	37.5	-3.4	34.1	Fuel Tanker	31.1
97.0	670.0	32.5	-3.4	29.1	Tracked Excavator	26.1
104.0	670.0	39.5	-3.4	36.1	Road Sweeper	33.1
104.0	670.0	39.5	-3.4	36.1	Tractor & Water Bowser	33.1
Total						37.7

Receptor 4 - Boghill Cottage

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1100.0	34.2	-5.5	28.7	JCB	25.7
97.0	1100.0	28.2	-5.5	22.7	Excavator	19.7
94.0	1100.0	25.2	-5.5	19.7	Tractor & Water Bowser	16.7
84.0	1100.0	15.2	-5.5	9.7	Small Dumper	6.7
84.0	1100.0	15.2	-5.5	4.7	Skid shovel within buildings	1.7
96.0	1100.0	27.2	-5.5	16.7	Mini excavator with breaker within buildings (with rubber tracks)	13.7
Total						27.3

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	1100.0	49.2	-5.5	43.7	Breaker mounted on excavator	40.7
98.0	1100.0	29.2	-5.5	23.7	Tracked excavator (1)	20.7
98.0	1100.0	29.2	-5.5	23.7	Tracked excavator (2)	20.7
98.0	1100.0	29.2	-5.5	23.7	Excavator with nibbler (1)	20.7
98.0	1100.0	29.2	-5.5	23.7	Excavator with nibbler (2)	20.7
106.0	1100.0	37.2	-5.5	31.7	Dump trucks (1)	28.7
106.0	1100.0	37.2	-5.5	31.7	Dump trucks (2)	28.7
106.0	1100.0	37.2	-5.5	31.7	Dump trucks (3)	28.7
Total						41.6

Receptor 4 - Boghill Cottage**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	1100	41.2	-5.5	35.7	Tracked Crusher	32.7
110.0	1100	41.2	-5.5	35.7	Tracked Excavator (1)	32.7
110.0	1100	41.2	-5.5	35.7	Tracked Excavator (2)	32.7
96.0	1100	27.2	-5.5	21.7	Front Loader	18.7
Total						37.5

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1100.0	34.2	-5.5	28.7	Dozer	25.7
103.0	1100.0	34.2	-5.5	28.7	Dozer & Roller	25.7
97.0	1100.0	28.2	-5.5	22.7	Excavator (1)	19.7
97.0	1100.0	28.2	-5.5	22.7	Excavator (2)	19.7
97.0	1100.0	28.2	-5.5	22.7	Excavator (3)	19.7
103.0	1100.0	34.2	-5.5	28.7	Dozer (1)	25.7
103.0	1100.0	34.2	-5.5	28.7	Dozer (2)	25.7
103.0	1100.0	34.2	-5.5	28.7	Dozer (3)	25.7
109.0	1100.0	40.2	-5.5	34.7	Breaker/Nibbler on Excavator	31.7
Total						35.6

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	1100.0	19.2	-5.5	13.7	Generator	10.7
102.0	1100.0	33.2	-5.5	27.7	Fuel Tanker	24.7
97.0	1100.0	28.2	-5.5	22.7	Tracked Excavator	19.7
104.0	1100.0	35.2	-5.5	29.7	Road Sweeper	26.7
104.0	1100.0	35.2	-5.5	29.7	Tractor & Water Bowser	26.7
Total						31.2

Receptor 5 - Turningshaw Farm

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1745.0	30.2	-8.7	21.4	JCB	18.4
97.0	1745.0	24.2	-8.7	15.4	Excavator	12.4
94.0	1745.0	21.2	-8.7	12.4	Tractor & Water Bowser	9.4
84.0	1745.0	11.2	-8.7	2.4	Small Dumper	-0.6
84.0	1745.0	11.2	-8.7	-2.6	Skid shovel within buildings	-5.6
96.0	1745.0	23.2	-8.7	9.4	Mini excavator with breaker within buildings (with rubber tracks)	6.4
Total						20.1

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	1745.0	45.2	-8.7	36.4	Breaker mounted on excavator	33.4
98.0	1745.0	25.2	-8.7	16.4	Tracked excavator (1)	13.4
98.0	1745.0	25.2	-8.7	16.4	Tracked excavator (2)	13.4
98.0	1745.0	25.2	-8.7	16.4	Excavator with nibbler (1)	13.4
98.0	1745.0	25.2	-8.7	16.4	Excavator with nibbler (2)	13.4
106.0	1745.0	33.2	-8.7	24.4	Dump trucks (1)	21.4
106.0	1745.0	33.2	-8.7	24.4	Dump trucks (2)	21.4
106.0	1745.0	33.2	-8.7	24.4	Dump trucks (3)	21.4
Total						34.3

Receptor 5 - Turningshaw Farm**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	1745	37.2	-8.7	28.4	Tracked Crusher	25.4
110.0	1745	37.2	-8.7	28.4	Tracked Excavator (1)	25.4
110.0	1745	37.2	-8.7	28.4	Tracked Excavator (2)	25.4
96.0	1745	23.2	-8.7	14.4	Front Loader	11.4
Total						30.3

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1745.0	30.2	-8.7	21.4	Dozer	18.4
103.0	1745.0	30.2	-8.7	21.4	Dozer & Roller	18.4
97.0	1745.0	24.2	-8.7	15.4	Excavator (1)	12.4
97.0	1745.0	24.2	-8.7	15.4	Excavator (2)	12.4
97.0	1745.0	24.2	-8.7	15.4	Excavator (3)	12.4
103.0	1745.0	30.2	-8.7	21.4	Dozer (1)	18.4
103.0	1745.0	30.2	-8.7	21.4	Dozer (2)	18.4
103.0	1745.0	30.2	-8.7	21.4	Dozer (3)	18.4
109.0	1745.0	36.2	-8.7	27.4	Breaker/Nibbler on Excavator	24.4
Total						28.3

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	1745.0	15.2	-8.7	6.4	Generator	3.4
102.0	1745.0	29.2	-8.7	20.4	Fuel Tanker	17.4
97.0	1745.0	24.2	-8.7	15.4	Tracked Excavator	12.4
104.0	1745.0	31.2	-8.7	22.4	Road Sweeper	19.4
104.0	1745.0	31.2	-8.7	22.4	Tractor & Water Bowser	19.4
Total						24

Receptor 6 - Netherfield

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2565.0	26.8	-12.8	14.0	JCB	11.0
97.0	2565.0	20.8	-12.8	8.0	Excavator	5.0
94.0	2565.0	17.8	-12.8	5.0	Tractor & Water Bowser	2.0
84.0	2565.0	7.8	-12.8	-5.0	Small Dumper	-8.0
84.0	2565.0	7.8	-12.8	-10.0	Skid shovel within buildings	-13.0
96.0	2565.0	19.8	-12.8	2.0	Mini excavator with breaker within buildings (with rubber tracks)	-1.0
Total						12.6

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	2565.0	41.8	-12.8	29.0	Breaker mounted on excavator	26.0
98.0	2565.0	21.8	-12.8	9.0	Tracked excavator (1)	6.0
98.0	2565.0	21.8	-12.8	9.0	Tracked excavator (2)	6.0
98.0	2565.0	21.8	-12.8	9.0	Excavator with nibbler (1)	6.0
98.0	2565.0	21.8	-12.8	9.0	Excavator with nibbler (2)	6.0
106.0	2565.0	29.8	-12.8	17.0	Dump trucks (1)	14.0
106.0	2565.0	29.8	-12.8	17.0	Dump trucks (2)	14.0
106.0	2565.0	29.8	-12.8	17.0	Dump trucks (3)	14.0
Total						26.9

Receptor 6 - Netherfield**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	2565	33.8	-12.8	21.0	Tracked Crusher	18.0
110.0	2565	33.8	-12.8	21.0	Tracked Excavator (1)	18.0
110.0	2565	33.8	-12.8	21.0	Tracked Excavator (2)	18.0
96.0	2565	19.8	-12.8	7.0	Front Loader	4.0
Total						22.8

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2565.0	26.8	-12.8	14.0	Dozer	11.0
103.0	2565.0	26.8	-12.8	14.0	Dozer & Roller	11.0
97.0	2565.0	20.8	-12.8	8.0	Excavator (1)	5.0
97.0	2565.0	20.8	-12.8	8.0	Excavator (2)	5.0
97.0	2565.0	20.8	-12.8	8.0	Excavator (3)	5.0
103.0	2565.0	26.8	-12.8	14.0	Dozer (1)	11.0
103.0	2565.0	26.8	-12.8	14.0	Dozer (2)	11.0
103.0	2565.0	26.8	-12.8	14.0	Dozer (3)	11.0
109.0	2565.0	32.8	-12.8	20.0	Breaker/Nibbler on Excavator	17.0
Total						20.9

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	2565.0	11.8	-12.8	-1.0	Generator	-4.0
102.0	2565.0	25.8	-12.8	13.0	Fuel Tanker	10.0
97.0	2565.0	20.8	-12.8	8.0	Tracked Excavator	5.0
104.0	2565.0	27.8	-12.8	15.0	Road Sweeper	12.0
104.0	2565.0	27.8	-12.8	15.0	Tractor & Water Bowser	12.0
Total						16.6

Receptor 7 - Barrangarry Farm

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	775.0	37.2	-3.9	33.3	JCB	30.3
97.0	775.0	31.2	-3.9	27.3	Excavator	24.3
94.0	775.0	28.2	-3.9	24.3	Tractor & Water Bowser	21.3
84.0	775.0	18.2	-3.9	14.3	Small Dumper	11.3
84.0	775.0	18.2	-3.9	9.3	Skid shovel within buildings	6.3
96.0	775.0	30.2	-3.9	21.3	Mini excavator with breaker within buildings (with rubber tracks)	18.3
Total						32

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	775.0	52.2	-3.9	48.3	Breaker mounted on excavator	45.3
98.0	775.0	32.2	-3.9	28.3	Tracked excavator (1)	25.3
98.0	775.0	32.2	-3.9	28.3	Tracked excavator (2)	25.3
98.0	775.0	32.2	-3.9	28.3	Excavator with nibbler (1)	25.3
98.0	775.0	32.2	-3.9	28.3	Excavator with nibbler (2)	25.3
106.0	775.0	40.2	-3.9	36.3	Dump trucks (1)	33.3
106.0	775.0	40.2	-3.9	36.3	Dump trucks (2)	33.3
106.0	775.0	40.2	-3.9	36.3	Dump trucks (3)	33.3
Total						46.2

Receptor 7 - Barrangarry Farm

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	775	44.2	-3.9	40.3	Tracked Crusher	37.3
110.0	775	44.2	-3.9	40.3	Tracked Excavator (1)	37.3
110.0	775	44.2	-3.9	40.3	Tracked Excavator (2)	37.3
96.0	775	30.2	-3.9	26.3	Front Loader	23.3
Total						42.2

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	775.0	37.2	-3.9	33.3	Dozer	30.3
103.0	775.0	37.2	-3.9	33.3	Dozer & Roller	30.3
97.0	775.0	31.2	-3.9	27.3	Excavator (1)	24.3
97.0	775.0	31.2	-3.9	27.3	Excavator (2)	24.3
97.0	775.0	31.2	-3.9	27.3	Excavator (3)	24.3
103.0	775.0	37.2	-3.9	33.3	Dozer (1)	30.3
103.0	775.0	37.2	-3.9	33.3	Dozer (2)	30.3
103.0	775.0	37.2	-3.9	33.3	Dozer (3)	30.3
109.0	775.0	43.2	-3.9	39.3	Breaker/Nibbler on Excavator	36.3
Total						40.2

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	775.0	22.2	-3.9	18.3	Generator	15.3
102.0	775.0	36.2	-3.9	32.3	Fuel Tanker	29.3
97.0	775.0	31.2	-3.9	27.3	Tracked Excavator	24.3
104.0	775.0	38.2	-3.9	34.3	Road Sweeper	31.3
104.0	775.0	38.2	-3.9	34.3	Tractor & Water Bowser	31.3
Total						35.9

Phase 6

Receptor 1 - Rossland Crescent

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	800.0	29.4	-4.0	25.4	JCB	22.4
97.0	800.0	23.4	-4.0	19.4	Excavator	16.4
94.0	800.0	20.4	-4.0	16.4	Tractor & Water Bowser	13.4
84.0	800.0	10.4	-4.0	6.4	Small Dumper	3.4
84.0	800.0	17.9	-4.0	8.9	Skid shovel within buildings	5.9
96.0	800.0	29.9	-4.0	20.9	Mini excavator with breaker within buildings (with rubber tracks)	17.9
Total						24.9

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	800.0	51.9	-4.0	47.9	Breaker mounted on excavator	44.9
98.0	800.0	31.9	-4.0	27.9	Tracked excavator (1)	24.9
98.0	800.0	31.9	-4.0	27.9	Tracked excavator (2)	24.9
98.0	800.0	31.9	-4.0	27.9	Excavator with nibbler (1)	24.9
98.0	800.0	31.9	-4.0	27.9	Excavator with nibbler (2)	24.9
106.0	800.0	39.9	-4.0	35.9	Dump trucks (1)	32.9
106.0	800.0	39.9	-4.0	35.9	Dump trucks (2)	32.9
106.0	800.0	39.9	-4.0	35.9	Dump trucks (3)	32.9
Total						45.8

Receptor 1 - Rossland Crescent

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	800	43.9	-4.0	39.9	Tracked Crusher	36.9
110.0	800	43.9	-4.0	39.9	Tracked Excavator (1)	36.9
110.0	800	43.9	-4.0	39.9	Tracked Excavator (2)	36.9
96.0	800	29.9	-4.0	25.9	Front Loader	22.9
Total						41.8

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	800.0	36.9	-4.0	32.9	Dozer	29.9
103.0	800.0	36.9	-4.0	32.9	Dozer & Roller	29.9
97.0	800.0	30.9	-4.0	26.9	Excavator (1)	23.9
97.0	800.0	30.9	-4.0	26.9	Excavator (2)	23.9
97.0	800.0	30.9	-4.0	26.9	Excavator (3)	23.9
103.0	800.0	36.9	-4.0	32.9	Dozer (1)	29.9
103.0	800.0	36.9	-4.0	32.9	Dozer (2)	29.9
103.0	800.0	36.9	-4.0	32.9	Dozer (3)	29.9
109.0	800.0	42.9	-4.0	38.9	Breaker/Nibbler on Excavator	35.9
Total						39.8

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	800.0	21.9	-4.0	17.9	Generator	14.9
102.0	800.0	35.9	-4.0	31.9	Fuel Tanker	28.9
97.0	800.0	30.9	-4.0	26.9	Tracked Excavator	23.9
104.0	800.0	37.9	-4.0	33.9	Road Sweeper	30.9
104.0	800.0	37.9	-4.0	33.9	Tractor & Water Bowser	30.9
Total						35.5

Receptor 2 - Sachelcourt Avenue

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	310.0	45.2	-1.6	43.6	JCB	40.6
97.0	310.0	39.2	-1.6	37.6	Excavator	34.6
94.0	310.0	36.2	-1.6	34.6	Tractor & Water Bowser	31.6
84.0	310.0	26.2	-1.6	24.6	Small Dumper	21.6
84.0	310.0	26.2	-1.6	19.6	Skid shovel within buildings	16.6
96.0	310.0	38.2	-1.6	31.6	Mini excavator with breaker within buildings (with rubber tracks)	28.6
Total						42.3

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	310.0	60.2	-1.6	58.6	Breaker mounted on excavator	55.6
98.0	310.0	40.2	-1.6	38.6	Tracked excavator (1)	35.6
98.0	310.0	40.2	-1.6	38.6	Tracked excavator (2)	35.6
98.0	310.0	40.2	-1.6	38.6	Excavator with nibbler (1)	35.6
98.0	310.0	40.2	-1.6	38.6	Excavator with nibbler (2)	35.6
106.0	310.0	48.2	-1.6	46.6	Dump trucks (1)	43.6
106.0	310.0	48.2	-1.6	46.6	Dump trucks (2)	43.6
106.0	310.0	48.2	-1.6	46.6	Dump trucks (3)	43.6
Total						56.5

Receptor 2 - Sachelcourt Avenue

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	310	52.2	-1.6	50.6	Tracked Crusher	47.6
110.0	310	52.2	-1.6	50.6	Tracked Excavator (1)	47.6
110.0	310	52.2	-1.6	50.6	Tracked Excavator (2)	47.6
96.0	310	38.2	-1.6	36.6	Front Loader	33.6
Total						52.5

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	310.0	45.2	-1.6	43.6	Dozer	40.6
103.0	310.0	45.2	-1.6	43.6	Dozer & Roller	40.6
97.0	310.0	39.2	-1.6	37.6	Excavator (1)	34.6
97.0	310.0	39.2	-1.6	37.6	Excavator (2)	34.6
97.0	310.0	39.2	-1.6	37.6	Excavator (3)	34.6
103.0	310.0	45.2	-1.6	43.6	Dozer (1)	40.6
103.0	310.0	45.2	-1.6	43.6	Dozer (2)	40.6
103.0	310.0	45.2	-1.6	43.6	Dozer (3)	40.6
109.0	310.0	51.2	-1.6	49.6	Breaker/Nibbler on Excavator	46.6
Total						50.5

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	310.0	30.2	-1.6	28.6	Generator	25.6
102.0	310.0	44.2	-1.6	42.6	Fuel Tanker	39.6
97.0	310.0	39.2	-1.6	37.6	Tracked Excavator	34.6
104.0	310.0	46.2	-1.6	44.6	Road Sweeper	41.6
104.0	310.0	46.2	-1.6	44.6	Tractor & Water Bowser	41.6
Total						46.2

Receptor 3 - Gatehead

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	610.0	39.3	-3.1	36.2	JCB	33.2
97.0	610.0	33.3	-3.1	30.2	Excavator	27.2
94.0	610.0	30.3	-3.1	27.2	Tractor & Water Bowser	24.2
84.0	610.0	20.3	-3.1	17.2	Small Dumper	14.2
84.0	610.0	20.3	-3.1	12.2	Skid shovel within buildings	9.2
96.0	610.0	32.3	-3.1	24.2	Mini excavator with breaker within buildings (with rubber tracks)	21.2
Total						34.9

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	610.0	54.3	-3.1	51.2	Breaker mounted on excavator	48.2
98.0	610.0	34.3	-3.1	31.2	Tracked excavator (1)	28.2
98.0	610.0	34.3	-3.1	31.2	Tracked excavator (2)	28.2
98.0	610.0	34.3	-3.1	31.2	Excavator with nibbler (1)	28.2
98.0	610.0	34.3	-3.1	31.2	Excavator with nibbler (2)	28.2
106.0	610.0	42.3	-3.1	39.2	Dump trucks (1)	36.2
106.0	610.0	42.3	-3.1	39.2	Dump trucks (2)	36.2
106.0	610.0	42.3	-3.1	39.2	Dump trucks (3)	36.2
Total						49.1

Receptor 3 - Gatehead**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	610	46.3	-3.1	43.2	Tracked Crusher	40.2
110.0	610	46.3	-3.1	43.2	Tracked Excavator (1)	40.2
110.0	610	46.3	-3.1	43.2	Tracked Excavator (2)	40.2
96.0	610	32.3	-3.1	29.2	Front Loader	26.2
Total						45.1

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	610.0	39.3	-3.1	36.2	Dozer	33.2
103.0	610.0	39.3	-3.1	36.2	Dozer & Roller	33.2
97.0	610.0	33.3	-3.1	30.2	Excavator (1)	27.2
97.0	610.0	33.3	-3.1	30.2	Excavator (2)	27.2
97.0	610.0	33.3	-3.1	30.2	Excavator (3)	27.2
103.0	610.0	39.3	-3.1	36.2	Dozer (1)	33.2
103.0	610.0	39.3	-3.1	36.2	Dozer (2)	33.2
103.0	610.0	39.3	-3.1	36.2	Dozer (3)	33.2
109.0	610.0	45.3	-3.1	42.2	Breaker/Nibbler on Excavator	39.2
Total						43.1

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	610.0	24.3	-3.1	21.2	Generator	18.2
102.0	610.0	38.3	-3.1	35.2	Fuel Tanker	32.2
97.0	610.0	33.3	-3.1	30.2	Tracked Excavator	27.2
104.0	610.0	40.3	-3.1	37.2	Road Sweeper	34.2
104.0	610.0	40.3	-3.1	37.2	Tractor & Water Bowser	34.2
Total						38.8

Receptor 4 - Boghill Cottage

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1000.0	35.0	-5.0	30.0	JCB	27.0
97.0	1000.0	29.0	-5.0	24.0	Excavator	21.0
94.0	1000.0	26.0	-5.0	21.0	Tractor & Water Bowser	18.0
84.0	1000.0	16.0	-5.0	11.0	Small Dumper	8.0
84.0	1000.0	16.0	-5.0	6.0	Skid shovel within buildings	3.0
96.0	1000.0	28.0	-5.0	18.0	Mini excavator with breaker within buildings (with rubber tracks)	15.0
Total						28.6

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	1000.0	50.0	-5.0	45.0	Breaker mounted on excavator	42.0
98.0	1000.0	30.0	-5.0	25.0	Tracked excavator (1)	22
98.0	1000.0	30.0	-5.0	25.0	Tracked excavator (2)	22
98.0	1000.0	30.0	-5.0	25.0	Excavator with nibbler (1)	22
98.0	1000.0	30.0	-5.0	25.0	Excavator with nibbler (2)	22
106.0	1000.0	38.0	-5.0	33.0	Dump trucks (1)	30
106.0	1000.0	38.0	-5.0	33.0	Dump trucks (2)	30
106.0	1000.0	38.0	-5.0	33.0	Dump trucks (3)	30
Total						42.9

Receptor 4 - Boghill Cottage

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	1000	42.0	-5.0	37.0	Tracked Crusher	34.0
110.0	1000	42.0	-5.0	37.0	Tracked Excavator (1)	34
110.0	1000	42.0	-5.0	37.0	Tracked Excavator (2)	34
96.0	1000	28.0	-5.0	23.0	Front Loader	20
Total						38.8

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	1000.0	35.0	-5.0	30.0	Dozer	27.0
103.0	1000.0	35.0	-5.0	30.0	Dozer & Roller	27.0
97.0	1000.0	29.0	-5.0	24.0	Excavator (1)	21.0
97.0	1000.0	29.0	-5.0	24.0	Excavator (2)	21.0
97.0	1000.0	29.0	-5.0	24.0	Excavator (3)	21.0
103.0	1000.0	35.0	-5.0	30.0	Dozer (1)	27.0
103.0	1000.0	35.0	-5.0	30.0	Dozer (2)	27.0
103.0	1000.0	35.0	-5.0	30.0	Dozer (3)	27.0
109.0	1000.0	41.0	-5.0	36.0	Breaker/Nibbler on Excavator	33.0
Total						36.9

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	1000.0	20.0	-5.0	15.0	Generator	12.0
102.0	1000.0	34.0	-5.0	29.0	Fuel Tanker	26.0
97.0	1000.0	29.0	-5.0	24.0	Tracked Excavator	21.0
104.0	1000.0	36.0	-5.0	31.0	Road Sweeper	28.0
104.0	1000.0	36.0	-5.0	31.0	Tractor & Water Bowser	28.0
Total						32.6

Receptor 5 - Turningshaw Farm

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2025.0	28.9	-10.1	18.7	JCB	15.7
97.0	2025.0	22.9	-10.1	12.7	Excavator	9.7
94.0	2025.0	19.9	-10.1	9.7	Tractor & Water Bowser	6.7
84.0	2025.0	9.9	-10.1	-0.3	Small Dumper	-3.3
84.0	2025.0	9.9	-10.1	-5.3	Skid shovel within buildings Mini excavator with breaker within	-8.3
96.0	2025.0	21.9	-10.1	6.7	buildings (with rubber tracks)	3.7
Total						17.4

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	2025.0	43.9	-10.1	33.7	Breaker mounted on excavator	30.7
98.0	2025.0	23.9	-10.1	13.7	Tracked excavator (1)	10.7
98.0	2025.0	23.9	-10.1	13.7	Tracked excavator (2)	10.7
98.0	2025.0	23.9	-10.1	13.7	Excavator with nibbler (1)	10.7
98.0	2025.0	23.9	-10.1	13.7	Excavator with nibbler (2)	10.7
106.0	2025.0	31.9	-10.1	21.7	Dump trucks (1)	18.7
106.0	2025.0	31.9	-10.1	21.7	Dump trucks (2)	18.7
106.0	2025.0	31.9	-10.1	21.7	Dump trucks (3)	18.7
Total						31.6

Receptor 5 - Turningshaw Farm

Crushing

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	2025	35.9	-10.1	25.7	Tracked Crusher	22.7
110.0	2025	35.9	-10.1	25.7	Tracked Excavator (1)	22.7
110.0	2025	35.9	-10.1	25.7	Tracked Excavator (2)	22.7
96.0	2025	21.9	-10.1	11.7	Front Loader	8.7
Total						27.6

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2025.0	28.9	-10.1	18.7	Dozer	15.7
103.0	2025.0	28.9	-10.1	18.7	Dozer & Roller	15.7
97.0	2025.0	22.9	-10.1	12.7	Excavator (1)	9.7
97.0	2025.0	22.9	-10.1	12.7	Excavator (2)	9.7
97.0	2025.0	22.9	-10.1	12.7	Excavator (3)	9.7
103.0	2025.0	28.9	-10.1	18.7	Dozer (1)	15.7
103.0	2025.0	28.9	-10.1	18.7	Dozer (2)	15.7
103.0	2025.0	28.9	-10.1	18.7	Dozer (3)	15.7
109.0	2025.0	34.9	-10.1	24.7	Breaker/Nibbler on Excavator	21.7
Total						25.6

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	2025.0	13.9	-10.1	3.7	Generator	0.7
102.0	2025.0	27.9	-10.1	17.7	Fuel Tanker	14.7
97.0	2025.0	22.9	-10.1	12.7	Tracked Excavator	9.7
104.0	2025.0	29.9	-10.1	19.7	Road Sweeper	16.7
104.0	2025.0	29.9	-10.1	19.7	Tractor & Water Bowser	16.7
Total						21.3

Receptor 6 - Netherfield

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2800.0	26.1	-14.0	12.1	JCB	9.1
97.0	2800.0	20.1	-14.0	6.1	Excavator	3.1
94.0	2800.0	17.1	-14.0	3.1	Tractor & Water Bowser	0.1
84.0	2800.0	7.1	-14.0	-6.9	Small Dumper	-9.9
84.0	2800.0	7.1	-14.0	-11.9	Skid shovel within buildings	-14.9
96.0	2800.0	19.1	-14.0	0.1	Mini excavator with breaker within buildings (with rubber tracks)	-2.9
Total						10.7

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	2800.0	41.1	-14.0	27.1	Breaker mounted on excavator	24.1
98.0	2800.0	21.1	-14.0	7.1	Tracked excavator (1)	4.1
98.0	2800.0	21.1	-14.0	7.1	Tracked excavator (2)	4.1
98.0	2800.0	21.1	-14.0	7.1	Excavator with nibbler (1)	4.1
98.0	2800.0	21.1	-14.0	7.1	Excavator with nibbler (2)	4.1
106.0	2800.0	29.1	-14.0	15.1	Dump trucks (1)	12.1
106.0	2800.0	29.1	-14.0	15.1	Dump trucks (2)	12.1
106.0	2800.0	29.1	-14.0	15.1	Dump trucks (3)	12.1
Total						25

Receptor 6 - Netherfield**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	2800	33.1	-14.0	19.1	Tracked Crusher	16.1
110.0	2800	33.1	-14.0	19.1	Tracked Excavator (1)	16.1
110.0	2800	33.1	-14.0	19.1	Tracked Excavator (2)	16.1
96.0	2800	19.1	-14.0	5.1	Front Loader	2.1
Total						20.9

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	2800.0	26.1	-14.0	12.1	Dozer	9.1
103.0	2800.0	26.1	-14.0	12.1	Dozer & Roller	9.1
97.0	2800.0	20.1	-14.0	6.1	Excavator (1)	3.1
97.0	2800.0	20.1	-14.0	6.1	Excavator (2)	3.1
97.0	2800.0	20.1	-14.0	6.1	Excavator (3)	3.1
103.0	2800.0	26.1	-14.0	12.1	Dozer (1)	9.1
103.0	2800.0	26.1	-14.0	12.1	Dozer (2)	9.1
103.0	2800.0	26.1	-14.0	12.1	Dozer (3)	9.1
109.0	2800.0	32.1	-14.0	18.1	Breaker/Nibbler on Excavator	15.1
Total						18.9

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	2800.0	11.1	-14.0	-2.9	Generator	-5.9
102.0	2800.0	25.1	-14.0	11.1	Fuel Tanker	8.1
97.0	2800.0	20.1	-14.0	6.1	Tracked Excavator	3.1
104.0	2800.0	27.1	-14.0	13.1	Road Sweeper	10.1
104.0	2800.0	27.1	-14.0	13.1	Tractor & Water Bowser	10.1
Total						14.6

Receptor 7 - Barragarry Farm

Building Decontamination

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	550.0	40.2	-2.8	37.4	JCB	34.4
97.0	550.0	34.2	-2.8	31.4	Excavator	28.4
94.0	550.0	31.2	-2.8	28.4	Tractor & Water Bowser	25.4
84.0	550.0	21.2	-2.8	18.4	Small Dumper	15.4
84.0	550.0	21.2	-2.8	13.4	Skid shovel within buildings	10.4
96.0	550.0	33.2	-2.8	25.4	Mini excavator with breaker within buildings (with rubber tracks)	22.4
Total						36.1

Demolition

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
118.0	550.0	55.2	-2.8	52.4	Breaker mounted on excavator	49.4
98.0	550.0	35.2	-2.8	32.4	Tracked excavator (1)	29.4
98.0	550.0	35.2	-2.8	32.4	Tracked excavator (2)	29.4
98.0	550.0	35.2	-2.8	32.4	Excavator with nibbler (1)	29.4
98.0	550.0	35.2	-2.8	32.4	Excavator with nibbler (2)	29.4
106.0	550.0	43.2	-2.8	40.4	Dump trucks (1)	37.4
106.0	550.0	43.2	-2.8	40.4	Dump trucks (2)	37.4
106.0	550.0	43.2	-2.8	40.4	Dump trucks (3)	37.4
Total						50.3

Receptor 7 - Barrangarry Farm**Crushing**

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
110.0	550	47.2	-2.8	44.4	Tracked Crusher	41.4
110.0	550	47.2	-2.8	44.4	Tracked Excavator (1)	41.4
110.0	550	47.2	-2.8	44.4	Tracked Excavator (2)	41.4
96.0	550	33.2	-2.8	30.4	Front Loader	27.4
Total						46.3

Ground Works

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
103.0	550.0	40.2	-2.8	37.4	Dozer	34.4
103.0	550.0	40.2	-2.8	37.4	Dozer & Roller	34.4
97.0	550.0	34.2	-2.8	31.4	Excavator (1)	28.4
97.0	550.0	34.2	-2.8	31.4	Excavator (2)	28.4
97.0	550.0	34.2	-2.8	31.4	Excavator (3)	28.4
103.0	550.0	40.2	-2.8	37.4	Dozer (1)	34.4
103.0	550.0	40.2	-2.8	37.4	Dozer (2)	34.4
103.0	550.0	40.2	-2.8	37.4	Dozer (3)	34.4
109.0	550.0	46.2	-2.8	43.4	Breaker/Nibbler on Excavator	40.4
Total						44.3

Site offices & around site

Power (dB)	Distance (m)	Sound Pressure Level (dB)	Air Attenuation	Resultant SPL (dB)	Proposed Plant Equipment	Percentage on-time 50%
88.0	550.0	25.2	-2.8	22.4	Generator	19.4
102.0	550.0	39.2	-2.8	36.4	Fuel Tanker	33.4
97.0	550.0	34.2	-2.8	31.4	Tracked Excavator	28.4
104.0	550.0	41.2	-2.8	38.4	Road Sweeper	35.4
104.0	550.0	41.2	-2.8	38.4	Tractor & Water Bowser	35.4
Total						40

Traffic Noise Calculations

Phase 1 of the development - 2009

Road Sections	2009 AM Base	2009 PM Base	Peak Hour	AADT 2009	Peak Hbur 2009	%HDS	Total LDVs	Total HDVs	assumed speed	spd+ngv corrected basic noise level
1	187	346	PM	4429	185	4.9	175	9	108	68.2
2	13	37	PM	474	20	4.9	19	1	50	52.6
3	35	28	AM	466	19	4.9	18	1	108	58.4
4	219	355	PM	4544	189	4.9	180	9	81	65.7
5	0	0	AM	0	0	4.9	0	0	50	0.0
6	219	353	PM	4518	188	4.9	179	9	50	62.4
7	98	392	PM	5018	209	4.9	199	10	50	62.8
8	21	35	PM	448	19	4.9	18	1	50	52.4
9	337	511	PM	6541	273	4.9	259	13	50	64.0
10	377	459	PM	5875	245	4.9	233	12	50	63.5
11	41	75	PM	960	40	4.9	38	2	50	55.7
12	551	690	PM	8832	368	4.9	350	18	50	65.3
13	408	285	AM	5426	226	4.9	215	11	50	63.2
14	707	824	PM	10547	439	4.9	418	22	50	66.1
15	238	510	PM	6528	272	4.9	259	13	50	64.0
16	595	597	PM	7642	318	4.9	303	16	50	64.7
17	0	0	AM	0	0	4.9	0	0	50	0.0
18	740	598	AM	9842	410	4.9	390	20	81	69.1
19	0	0	AM	0	0	4.9	0	0	50	0.0
20	740	598	AM	9842	410	4.9	390	20	81	69.1
21	0	0	AM	0	0	4.9	0	0	50	0.0
22	740	598	AM	9842	410	4.9	390	20	81	69.1
23	1332	1142	AM	17716	738	4.9	702	36	81	71.7
24	1118	1107	AM	14869	620	4.9	589	30	81	70.9
25	1555	1100	AM	20682	862	4.9	820	42	50	69.0
26	264	224	AM	3511	146	4.9	139	7	50	61.3
27	1246	1433	PM	18342	764	4.9	727	37	81	71.8
28	866	821	AM	11518	480	4.9	456	24	50	66.5
29	856	1205	PM	15424	643	4.9	611	31	81	71.1
30	623	871	PM	11149	465	4.9	442	23	50	66.3
31	144	100	AM	1915	80	4.9	76	4	50	58.7
32	519	789	PM	10099	421	4.9	400	21	50	65.9
33	178	208	PM	2662	111	4.9	105	5	50	60.1
34	415	669	PM	8563	357	4.9	339	17	50	65.2
35	155	257	PM	3290	137	4.9	130	7	81	64.3
36	284	508	PM	6502	271	4.9	258	13	50	64.0
37	213	181	AM	2833	118	4.9	112	6	50	60.4
38	94	133	PM	1702	71	4.9	67	3	50	58.2
39	356	321	AM	4735	197	4.9	188	10	50	62.6
40	0	0	AM	0	0	4.9	0	0	50	0.0
41	0	0	AM	0	0	4.9	0	0	50	0.0
42	0	0	AM	0	0	4.9	0	0	50	0.0
43	0	0	AM	0	0	4.9	0	0	50	0.0
44	0	0	AM	0	0	4.9	0	0	50	0.0
45	0	0	AM	0	0	4.9	0	0	50	0.0
46	0	0	AM	0	0	4.9	0	0	50	0.0
47	0	0	AM	0	0	4.9	0	0	50	0.0
48	0	0	AM	0	0	4.9	0	0	50	0.0
49	0	0	AM	0	0	4.9	0	0	50	0.0
50	0	0	AM	0	0	4.9	0	0	50	0.0
51	482	339	AM	6411	267	4.9	254	13	50	63.9
52	4220	4911	PM	62861	2619	4.9	2491	128	50	73.8
53	3620	4483	PM	57382	2391	4.9	2274	117	50	73.4

Traffic Noise Calculations

Phase 1 of the development - with construction 2009

Road Sections	2009 AM Base	2009 PM Base	Peak Hour	AADT 2009	Peak Hour 2009	%HDS	Total LDVs	Total HDVs	assumed speed	spd+hgv corrected basic noise level	Difference from base
1	187	346	PM	4429	185	4.9	175	9	108	68.2	0.0
2	13	37	PM	474	20	4.9	19	1	50	52.6	0.0
3	35	28	AM	466	19	4.9	18	1	108	58.4	0.0
4	219	355	PM	4544	189	4.9	180	9	81	65.7	0.0
5	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
6	219	353	PM	4518	188	4.9	179	9	50	62.4	0.0
7	98	392	PM	5018	209	4.9	199	10	50	62.8	0.0
8	21	35	PM	448	19	4.9	18	1	50	62.4	0.0
9	337	511	PM	6541	273	4.9	259	13	50	64.0	0.0
10	377	459	PM	5875	245	4.9	233	12	50	63.5	0.0
11	41	75	PM	960	40	4.9	38	2	50	55.7	0.0
12	551	690	PM	8832	368	4.9	350	18	50	65.3	0.0
13	408	285	AM	5426	226	4.9	215	11	50	63.2	0.0
14	707	824	PM	10547	439	4.9	418	22	50	66.1	0.0
15	238	510	PM	6528	272	4.9	259	13	50	64.0	0.0
16	595	597	PM	7642	318	4.9	303	16	50	64.7	0.0
17	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
18	981	839	AM	13047	544	4.9	517	27	81	70.3	1.2
19	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
20	981	839	AM	13047	544	4.9	517	27	81	70.3	1.2
21	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
22	981	839	AM	13047	544	4.9	517	27	81	70.3	1.2
23	1573	1363	AM	20921	872	4.9	829	43	81	72.4	0.7
24	1118	1107	AM	14869	620	4.9	589	30	81	70.9	0.0
25	1555	1100	AM	20682	862	4.9	820	42	50	69.0	0.0
26	264	224	AM	3511	146	4.9	139	7	50	61.3	0.0
27	1246	1433	PM	18342	764	4.9	727	37	81	71.8	0.0
28	866	821	AM	11518	480	4.9	456	24	50	66.5	0.0
29	856	1205	PM	15424	643	4.9	611	31	81	71.1	0.0
30	623	871	PM	11149	465	4.9	442	23	50	66.3	0.0
31	144	100	AM	1915	80	4.9	76	4	50	58.7	0.0
32	519	789	PM	10099	421	4.9	400	21	50	65.9	0.0
33	178	208	PM	2662	111	4.9	105	5	50	60.1	0.0
34	415	669	PM	8563	357	4.9	339	17	50	65.2	0.0
35	155	257	PM	3290	137	4.9	130	7	81	64.3	0.0
36	284	508	PM	6502	271	4.9	258	13	50	64.0	0.0
37	213	181	AM	2833	118	4.9	112	6	50	60.4	0.0
38	94	133	PM	1702	71	4.9	67	3	50	58.2	0.0
39	356	321	AM	4735	197	4.9	188	10	50	62.6	0.0
40	241	241	AM	3205	134	99	1	132	50	62.1	62.1
41	0	0	AM	0	0	99	0	0	50	0.0	0.0
42	241	241	AM	3205	134	99	1	132	50	62.1	62.1
43	0	0	AM	0	0	99	0	0	50	0.0	0.0
44	0	0	AM	0	0	99	0	0	50	0.0	0.0
45	241	241	AM	3205	134	99	1	132	50	62.1	62.1
46	241	241	AM	3205	134	99	1	132	50	62.1	62.1
47	0	0	AM	0	0	99	0	0	50	0.0	0.0
48	241	241	AM	3205	134	99	1	132	50	62.1	62.1
49	241	241	AM	3205	134	99	1	132	50	62.1	62.1
50	241	241	AM	3205	134	99	1	132	50	62.1	62.1
51	482	339	AM	6411	267	4.9	254	13	50	63.9	0.0
52	4290	5180	PM	66304	2763	4.9	2627	135	50	74.1	0.2
53	3639	4519	PM	57843	2410	4.9	2292	118	50	73.5	0.0

Traffic Noise Calculations

Baseline - 2015

Road Sections	2015 AM Base	2015 PM Base	Peak Hour	AADT 2015	Hourly Flows	%HDVs	Total HDVs	Total LDVs	assumed speed	spd+hgv corrected basic noise level
1	173	212	PM	2714	113	4.9	108	6	108	66.1
2	94	50	AM	1250	52	4.9	50	3	50	56.8
3	33	15	AM	439	18	4.9	17	1	108	58.2
4	82	221	PM	2829	118	4.9	112	6	81	63.7
5	0	0	AM	0	0	4.9	0	0	50	0.0
6	353	420	PM	5376	224	4.9	213	11	50	63.1
7	209	315	PM	4032	168	4.9	160	8	50	61.9
8	60	47	AM	798	33	4.9	32	2	50	54.9
9	510	281	AM	6783	283	4.9	269	14	50	64.2
10	365	288	AM	4855	202	4.9	192	10	50	62.7
11	39	50	PM	640	27	4.9	25	1	50	53.9
12	516	411	AM	6863	286	4.9	272	14	50	64.2
13	331	291	AM	4402	183	4.9	174	9	50	62.3
14	755	442	AM	10042	418	4.9	398	21	50	65.9
15	262	657	PM	8410	350	4.9	333	17	50	65.1
16	623	201	AM	8286	345	4.9	328	17	50	65.0
17	0	0	AM	0	0	4.9	0	0	50	0.0
18	719	489	AM	9563	398	4.9	379	20	81	69.0
19	0	0	AM	0	0	4.9	0	0	50	0.0
20	719	489	AM	9563	0	4.9	0	0	81	0.0
21	0	0	AM	0	0	4.9	0	0	50	0.0
22	719	489	AM	9563	398	4.9	379	20	81	69.0
23	961	1005	PM	12864	536	4.9	510	26	81	70.3
24	832	749	AM	11066	461	4.9	438	23	81	69.6
25	1145	999	AM	15229	635	4.9	603	31	50	67.7
26	370	201	AM	4921	205	4.9	195	10	50	62.8
27	1345	1446	PM	18509	771	4.9	733	38	81	71.8
28	1265	1288	PM	16486	687	4.9	653	34	50	68.0
29	928	1265	PM	16192	675	4.9	642	33	81	71.3
30	146	1268	PM	16230	676	4.9	643	33	50	67.9
31	612	973	PM	12454	519	4.9	494	25	50	66.8
32	639	878	PM	11238	468	4.9	445	23	50	66.4
33	175	213	PM	2726	114	4.9	108	6	50	60.2
34	501	671	PM	8589	358	4.9	340	18	50	65.2
35	372	283	AM	4948	206	4.9	196	10	81	66.1
36	233	388	PM	4966	207	4.9	197	10	50	62.8
37	293	381	PM	4877	203	4.9	193	10	50	62.7
38	99	132	PM	1690	70	4.9	67	3	50	58.1
39	212	293	PM	3750	156	4.9	149	8	50	61.6
40	0	0	AM	0	0	4.9	0	0	50	0.0
41	0	0	AM	0	0	4.9	0	0	50	0.0
42	0	0	AM	0	0	4.9	0	0	50	0.0
43	0	0	AM	0	0	4.9	0	0	50	0.0
44	0	0	AM	0	0	4.9	0	0	50	0.0
45	0	0	AM	0	0	4.9	0	0	50	0.0
46	0	0	AM	0	0	4.9	0	0	50	0.0
47	0	0	AM	0	0	4.9	0	0	50	0.0
48	0	0	AM	0	0	4.9	0	0	50	0.0
49	0	0	AM	0	0	4.9	0	0	50	0.0
50	0	0	AM	0	0	4.9	0	0	50	0.0
51	381	389	PM	4979	207	4.9	197	10	50	62.8
52	4519	5258	PM	67302	2804	4.9	2667	137	50	74.1
53	3875	4800	PM	61440	2560	4.9	2435	125	50	73.7

Traffic Noise Calculations

With Development - 2015

Road Sections	2015 AM	2015 PM	Peak Hour	AADT 2015	Hourly Flows	%HDVs	Total LDVs	Total HDVs	assumed speed	spd+ngv corrected basic noise level	Difference from base
1	403	519	PM	6643	277	4.9	263	14	108	70.0	3.9
2	248	162	AM	3298	137	4.9	131	7	50	61.0	4.2
3	305	58	AM	4057	169	4.9	161	8	108	67.8	9.7
4	580	683	PM	8742	364	4.9	346	18	81	68.6	4.9
5	652	443	AM	8672	361	4.9	344	18	50	65.2	65.2
6	394	471	PM	6029	251	4.9	239	12	50	63.6	0.5
7	209	315	PM	4032	168	4.9	160	8	50	61.9	0.0
8	60	47	AM	798	33	4.9	32	2	50	54.9	0.0
9	545	321	AM	7249	302	4.9	287	15	50	64.4	0.3
10	669	704	PM	9011	375	4.9	357	18	50	65.4	2.7
11	171	215	PM	2752	115	4.9	109	6	50	60.2	6.3
12	647	613	AM	8605	359	4.9	341	18	50	65.2	1.0
13	348	310	AM	4628	193	4.9	183	9	50	62.5	0.2
14	903	662	AM	12010	500	4.9	476	25	50	66.6	0.8
15	346	723	PM	9254	386	4.9	367	19	50	65.5	0.4
16	765	582	AM	10175	424	4.9	403	21	50	65.9	0.9
17	1001	589	AM	13313	555	4.9	528	27	50	67.1	67.1
18	1656	924	AM	22025	918	4.9	873	45	81	72.6	3.6
19	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
20	1656	924	AM	22025	918	4.9	873	45	81	72.6	72.6
21	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
22	1656	924	AM	22025	918	4.9	873	45	81	72.6	3.6
23	1639	1283	AM	21799	908	4.9	864	45	81	72.6	2.3
24	1018	859	AM	13539	564	4.9	536	28	81	70.5	0.9
25	1200	1041	AM	15960	665	4.9	632	33	50	67.9	0.2
26	390	209	AM	5187	216	4.9	206	11	50	63.0	0.2
27	1362	1477	PM	18906	788	4.9	749	39	81	71.9	0.1
28	1269	1436	PM	18381	766	4.9	728	38	50	68.5	0.5
29	941	1432	PM	18330	764	4.9	726	37	81	71.8	0.5
30	218	1435	PM	18368	765	4.9	728	38	50	68.5	0.5
31	711	1081	PM	13837	577	4.9	548	28	50	67.3	0.5
32	870	1205	PM	15424	643	4.9	611	31	50	67.7	1.4
33	234	276	PM	3533	147	4.9	140	7	50	61.3	1.1
34	822	1056	PM	13517	563	4.9	536	28	50	67.2	2.0
35	416	325	AM	5533	231	4.9	219	11	81	66.6	0.5
36	538	634	PM	8115	338	4.9	322	17	50	64.9	2.1
37	538	582	PM	7450	310	4.9	295	15	50	64.6	1.8
38	99	132	PM	1690	70	4.9	67	3	50	58.1	0.0
39	212	312	PM	3994	166	4.9	158	8	50	61.9	0.3
40	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
41	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
42	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
43	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
44	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
45	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
46	44	40	AM	585	24	4.9	23	1	50	53.5	53.5
47	164	148	AM	2181	91	4.9	86	4	50	59.2	59.2
48	208	188	AM	2766	115	4.9	110	6	50	60.3	60.3
49	24	24	AM	321	13	4.9	13	1	50	50.9	50.9
50	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
51	440	59	AM	5852	244	4.9	232	12	50	63.5	0.7
52	4293	5546	PM	70989	2958	4.9	2813	145	50	74.4	0.2
53	3896	4838	PM	61926	2580	4.9	2454	126	50	73.8	0.0

Traffic Noise Calculations

Baseline - 2022

Road Sect	2022 AM	2022 PM Base	Peak Hour	AADT 2022	Hourly Flows	%HDVs	Total LDVs	Total HDVs	assumed speed	spd+hgv corrected basic noise level
1	211	370	PM	4736	197	4.9	188	10	108	68.5
2	13	40	PM	512	21	4.9	20	1	50	52.9
3	38	30	AM	505	21	4.9	20	1	108	58.8
4	244	400	PM	5120	213	4.9	203	10	81	66.3
5	0	0	AM	0	0	4.9	0	0	50	0.0
6	246	399	PM	5107	213	4.9	202	10	50	62.9
7	112	443	PM	5670	236	4.9	225	12	50	63.4
8	23	39	PM	499	21	4.9	20	1	50	52.8
9	378	578	PM	7398	308	4.9	293	15	50	64.5
10	399	518	PM	6630	276	4.9	263	14	50	64.1
11	45	84	PM	1075	45	4.9	43	2	50	56.2
12	624	782	PM	10010	417	4.9	397	20	50	65.8
13	463	321	AM	6158	257	4.9	244	13	50	63.7
14	802	934	PM	11955	498	4.9	474	24	50	66.6
15	269	542	PM	6938	289	4.9	275	14	50	64.3
16	675	676	PM	8653	361	4.9	343	18	50	65.2
17	0	0	AM	0	0	4.9	0	0	50	0.0
18	675	676	PM	8653	361	4.9	343	18	81	68.5
19	0	0	AM	0	0	4.9	0	0	50	0.0
20	675	676	PM	8653	361	4.9	343	18	81	68.5
21	0	0	AM	0	0	4.9	0	0	50	0.0
22	675	676	PM	8653	361	4.9	343	18	81	68.5
23	1510	960	AM	20083	837	4.9	796	41	81	72.2
24	1266	1253	AM	16838	702	4.9	667	34	81	71.4
25	1764	1623	AM	23461	978	4.9	930	48	50	69.5
26	298	252	AM	3963	165	4.9	157	8	50	61.8
27	1395	1615	PM	20672	861	4.9	819	42	81	72.3
28	947	930	AM	12595	525	4.9	499	26	50	66.8
29	968	1367	PM	17498	729	4.9	693	36	81	71.6
30	706	987	PM	12634	526	4.9	501	26	50	66.9
31	161	113	AM	2141	89	4.9	85	4	50	59.2
32	588	895	PM	11456	477	4.9	454	23	50	66.4
33	203	236	PM	3021	126	4.9	120	6	50	60.6
34	470	758	PM	9702	404	4.9	384	20	50	65.7
35	175	291	PM	3725	155	4.9	148	8	81	64.9
36	322	575	PM	7360	307	4.9	292	15	50	64.5
37	241	204	AM	3205	134	4.9	127	7	50	60.9
38	105	146	PM	1869	78	4.9	74	4	50	58.6
39	403	365	AM	5360	223	4.9	212	11	50	63.1
40	0	0	AM	0	0	4.9	0	0	50	0.0
41	0	0	AM	0	0	4.9	0	0	50	0.0
42	0	0	AM	0	0	4.9	0	0	50	0.0
43	0	0	AM	0	0	4.9	0	0	50	0.0
44	0	0	AM	0	0	4.9	0	0	50	0.0
45	0	0	AM	0	0	4.9	0	0	50	0.0
46	0	0	AM	0	0	4.9	0	0	50	0.0
47	0	0	AM	0	0	4.9	0	0	50	0.0
48	0	0	AM	0	0	4.9	0	0	50	0.0
49	0	0	AM	0	0	4.9	0	0	50	0.0
50	0	0	AM	0	0	4.9	0	0	50	0.0
51	465	497	PM	6362	265	4.9	252	13	50	63.9
52	4782	5565	PM	71232	2968	4.9	2823	145	50	74.4
53	4565	5080	PM	65024	2709	4.9	2577	133	50	74.0

Traffic Data - Bishopton

With Development - 2022

Road Sect	2022 AM	2022 PM With Dev	Peak Hour	AADT 2022	Hourly Flows	%HDVs	Total LDVs	Total HDVs	assumed speed	spd+hgv corrected basic noise level	Difference from Base
1	449	575	PM	7360	307	4.9	292	15	108	70.4	1.9
2	13	179	PM	2291	95	4.9	91	5	50	59.4	6.5
3	337	64	AM	4482	187	4.9	178	9	108	68.3	9.5
4	774	758	AM	10294	429	4.9	408	21	81	69.3	3.0
5	723	490	AM	9616	401	4.9	381	20	50	65.7	65.7
6	471	853	PM	10918	455	4.9	433	22	50	66.2	3.3
7	231	560	PM	7168	299	4.9	284	15	50	64.4	1.0
8	66	51	AM	878	37	4.9	35	2	50	55.3	2.5
9	744	555	AM	9895	412	4.9	392	20	50	65.8	1.3
10	742	829	PM	10611	442	4.9	420	22	50	66.1	2.0
11	188	237	PM	3034	126	4.9	120	6	50	60.7	4.5
12	716	678	AM	9523	397	4.9	377	19	50	65.6	-0.2
13	389	277	AM	5174	216	4.9	205	11	50	63.0	-0.8
14	999	670	AM	13287	554	4.9	526	27	50	67.1	0.5
15	383	800	PM	10240	427	4.9	406	21	50	65.9	1.7
16	953	761	AM	12675	528	4.9	502	26	50	66.9	1.7
17	1107	652	AM	14723	613	4.9	583	30	50	67.5	67.5
18	1324	1023	AM	17609	734	4.9	698	36	81	71.6	3.1
19	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
20	1324	1023	AM	17609	734	4.9	698	36	81	71.6	3.1
21	0	0	AM	0	0	4.9	0	0	50	0.0	0.0
22	1324	1023	AM	17609	734	4.9	698	36	81	71.6	3.1
23	1815	1420	AM	24140	1006	4.9	957	49	81	73.0	0.8
24	1127	1051	AM	14989	625	4.9	594	31	81	70.9	-0.5
25	1329	1275	AM	17676	736	4.9	700	36	50	68.3	-1.2
26	431	232	AM	5732	239	4.9	227	12	50	63.4	1.6
27	1509	1635	PM	20928	872	4.9	829	43	81	72.4	0.1
28	1405	1276	AM	18687	779	4.9	740	38	50	68.6	1.7
29	1045	1586	PM	20301	846	4.9	804	41	81	72.2	0.6
30	788	1196	PM	15309	638	4.9	607	31	50	67.7	0.8
31	241	207	AM	3205	134	4.9	127	7	50	60.9	1.8
32	961	1327	PM	16986	708	4.9	673	35	50	68.1	1.7
33	259	306	PM	3917	163	4.9	155	8	50	61.8	1.1
34	924	1176	PM	15053	627	4.9	596	31	50	67.6	1.9
35	445	310	AM	5919	247	4.9	235	12	81	66.9	2.0
36	595	1012	PM	12954	540	4.9	513	26	50	67.0	2.5
37	319	192	AM	4243	177	4.9	168	9	50	62.1	1.2
38	110	146	PM	1869	78	4.9	74	4	50	58.6	0.0
39	489	345	AM	6504	271	4.9	258	13	50	64.0	0.8
40	179	162	AM	2381	99	4.9	94	5	50	59.6	59.6
41	104	93	AM	1383	58	4.9	55	3	50	57.3	57.3
42	188	114	AM	2500	104	4.9	99	5	50	59.8	59.8
43	167	133	AM	2221	93	4.9	88	5	50	59.3	59.3
44	362	287	AM	4815	201	4.9	191	10	50	62.7	62.7
45	254	339	PM	4339	181	4.9	172	9	50	62.2	62.2
46	798	687	AM	10613	442	4.9	421	22	50	66.1	66.1
47	267	338	PM	4326	180	4.9	171	9	50	62.2	62.2
48	1226	1159	AM	16306	679	4.9	646	33	50	68.0	68.0
49	424	250	AM	5639	235	4.9	223	12	50	63.4	63.4
50	267	194	AM	3551	148	4.9	141	7	50	61.3	61.3
51	407	321	AM	5413	226	4.9	214	11	50	63.2	-0.7
52	4861	5869	PM	75123	3130	4.9	2977	153	50	74.6	0.2
53	4124	5120	PM	65536	2731	4.9	2597	134	50	74.0	0.0