

Teralba Quarry Environmental Monitoring Summary

December 2021

Environmental Protection Licence (EPL): 536

Licensee: Metromix Pty Limited

Licensee Address: PO Box 1295

Parramatta, NSW 2124

Premises: Metromix Pty Limited Teralba Quarry

Rhondda Road Teralba, NSW 2284

Licensee Website: https://www.metromix.com.au/

Licensee Website - Monitoring Results: https://www.metromix.com.au/resources/#quarry

EPA Public Register: https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers

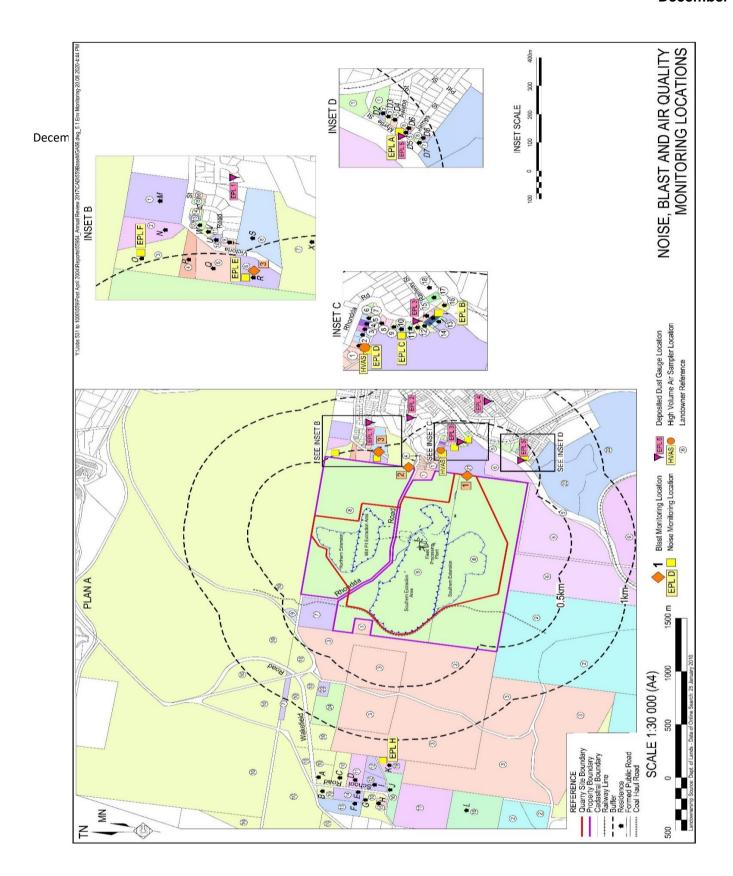
Prepared by:

Sample Period:
Data Last Received
Date of Report

R. W. Corkery & Co.
December 2021
13 January 2022
17 January 2022

Contents

- 1 Deposited Dust
- 2 Particulate Matter (PM₁₀)
- 3 Water
- 4 Meteorological Conditions
- 5 Blasting
- 6 Waste
- 7 Noise



Deposited Dust

Sample Period Start: 1/12/2021
Sample Period End: 4/01/2022
Sample Frequency: 34 days
Sample Collected By: Metromix - GS
December 2021 4/01/2022
Date Results Received by Metromix: 13/01/2022

EPA Identification No.	Location	ocation Criteria Insoluble Solids (g/m²/month) (g/m²/month)		Ash Fraction (g/m²/month)	% Ash Fraction
1	Hillside Crescent	4.0	1.1	0.4	36%
8	Rodgers Street	4.0	0.4	0.4	100%
9	Rhondda Road	4.0	0.8	0.4	50%
11	Myrtle Street	4.0	0.5	0.3	60%
23	York Street	4.0	1.2	0.7	58%

Comments

Sample exposure period was 34 days which is outside the typical exposure period of 30+/- 2 days as per AS3580.10.1. This was due to weekend and public holiday timing impacting staff availablity and laboratory operating hours. All deposited dust results remained below the approved criteria for the sample period.

Deposited Dust - Year to Date

	Rho	ondda Road		My	rtle Street		Hills	ide Crescent		Roo	dgers Street		Y	ork Street	
	Total			Total			Total			Total			Total		
	Insoluble	Ash		Insoluble	Ash		Insoluble	Ash		Insoluble	Ash		Insoluble	Ash	
	Solids	Fraction	% Ash	Solids	Fraction	% Ash	Solids	Fraction	% Ash	Solids	Fraction	% Ash	Solids	Fraction	% Ash
Units	g/m²/month	g/m ² /month		g/m²/month	g/m ² /month		g/m²/month	g/m²/month		g/m ² /month	g/m²/month		g/m²/month	g/m²/month	
EPA Approved Level	4.0			4.0			4.0			4.0			4.0		
December 2021	0.7	0.4	57	1.0	0.5	50	0.7	0.3	43	0.7	0.4	57	1.2	0.7	58
February	0.3	0.2	67	0.4	0.2	50	0.4	0.2	50	0.5	0.3	60	0.4	0.4	100
March	0.6	0.2	33	0.5	0.2	40	0.8	0.2	25	0.5	0.2	40	0.9	0.5	56
April	0.3	0.2	67	0.2	0.1	50	0.4	0.1	25	0.2	0.2	100	0.4	0.3	75
May	0.3	0.1	33	0.4	0.3	75	0.4	0.2	50	0.2	0.1	50	0.8	0.6	75
June	0.4	0.2	50	0.3	0.2	67	0.1	0.1	100	0.2	0.2	100	0.5	0.4	80
July	1.8	0.7	39	0.5	0.3	60	0.1	0.1	100	0.7	0.4	57	0.7	0.4	57
August	0.9	0.6	67	1.0	0.7	70	0.1	0.1	100	0.6	0.5	83	0.4	0.3	75
September	1.2	0.7	58	0.9	0.4	44	0.1	0.1	100	0.6	0.3	50	0.6	0.4	67
October	1.9	0.8	42	2.0	0.7	35	0.7	0.4	57	1.0	0.5	50	1.8	0.9	50
November	8.0	0.3	38	1.4	0.8	57	0.2	0.1	50	1.4	0.8	57	1.1	0.5	45
December	0.8	0.4	50	0.5	0.3	60	1.1	0.4	36	0.4	0.4	100	1.2	0.7	58
Annual Average	0.8	0.4	50.1	0.8	0.4	54.8	0.4	0.2	61.3	0.6	0.4	67.0	0.8	0.5	66.4
Annual Maximum	1.9	0.8	67.0	2.0	0.8	75.0	1.1	0.4	100.0	1.4	0.8	100.0	1.8	0.9	100.0
Annual Minimum	0.3	0.1	33.0	0.2	0.1	35.0	0.1	0.1	25.0	0.2	0.1	40.0	0.4	0.3	45.0

Particulate Matter (PM₁₀)

Sample Location: EPA 3 - Rodgers Road

Sample Frequency: 6 days

	Date Sample Taken (24-hr)	Collected by	Date Results Received	PM ₁₀ μg/m ³	Monthly Average Criteria (µg/m³)	Annual Average Criteria (µg/m³)
Decer	5/12/2021	CBased - TD	17/12/2021	12	50	
	11/12/2021	CBased - TD	30/12/2021	9	50	
	17/12/2021	CBased - MB	5/01/2022	12	50	
	23/12/2021	CBased - MB	5/01/2022	13	50	
	29/12/2021	CBased - MB	7/01/2022	5	50	
	Monthly Average			10.3		25/30*

*Project Approval (PA 10_0183) outlines the annual average PM₁₀ criteria to be 30μg/m³. However, EPL 536 Condition R4.5a) requires that the air quality monitoring data is assessed against the Air Impact Assessment Criteria outlined in EPA's *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*. The most up to date version of this guideline was published in 2017 and outlines the annual average PM₁₀ criteria to be 25μg/m³. Metromix has considered both criteria for its review of particulate matter monitoring.

Comments

All PM ₁₀ results remained below the approved criteria for the sample period.	

Particulate Matter (PM₁₀) - Year to Date

	1	Monthly Average	Year to Date	24-Hr Criteria	
Date	PM ₁₀ (μg/m ³)	(μg/m³)	Average (µg/m³)	(µg/m³)	Comments
3/01/2021	10		10.0	50	
9/01/2021	5		7.5	50	
15/01/2021	37		17.3	50	
December 2021	18		17.5	50	
27/01/2021	20	18.0	18.0	50	
2/02/2021	11		16.8	50	
8/02/2021	6		15.2	50	
14/02/2021	12		14.8	50	
20/02/2021	7		14.0	50	
26/02/2021	14	10.0	14.0	50	
4/03/2021	9		13.5	50	
10/03/2021	14		13.6	50	
16/03/2021	8		13.1	50	
22/03/2021	6	0.0	12.6	50	
28/03/2021	8	9.0	12.3	50	
3/04/2021	5		11.9	50	
9/04/2021	10		11.7	50	
15/04/2021	17		12.0	50	
21/04/2021	14	44.4	12.1	50 50	
27/04/2021	10	11.1	12.0	50	
3/05/2021	11		12.0	50 50	
9/05/2021	10		11.9 11.7	50 50	
15/05/2021 21/05/2021	8		11.7	50 50	
	10	0.0	11.0	50 50	
27/05/2021 2/06/2021	2 15	8.0	11.4	50 50	1
8/06/2021	12		11.4	50	
14/06/2021	6		11.2	50	
20/06/2021	12		11.2	50	
26/06/2021	2	9.2	10.9	50	
2/07/2021	9	0.2	10.8	50	
8/07/2021	6		10.7	50	
14/07/2021	8		10.6	50	
20/07/2021	6		10.5	50	
26/07/2021	9	7.5	10.4	50	
1/08/2021	35	-	11.1	50	
7/08/2021	10		11.1	50	
13/08/2021	12		11.1	50	
19/08/2021	18		11.3	50	
25/08/2021	3		11.0	50	
31/08/2021	13	15.1	11.1	50	
6/09/2021	8		11.0	50	
12/09/2021	24		11.3	50	
18/09/2021	14		11.4	50	
24/09/2021	16		11.5	50	
30/09/2021	8	13.9	11.4	50	
6/10/2021	16		11.5	50	
12/10/2021	7		11.4	50	
18/10/2021	15		11.4	50	
24/10/2021	13		11.5	50	
30/10/2021	16	13.3	11.6	50	
5/11/2021	9		11.5	50	
11/11/2021	10		11.5	50	
17/11/2021	10		11.5	50	
23/11/2021	6		11.4	50	
29/11/2021	17	10.6	11.5	50	
5/12/2021	12		11.5	50	
11/12/2021	9		11.5	50	
17/12/2021	12		11.5	50	
23/12/2021	13	40.0	11.5	50	
29/12/2021	5	10.3	11.4	50	1
Minimum	2				
Maximum	35				
Average Standard Deviation	11.1				
Standard Deviation 24-hr Criteria	6.0				
Number of Exceedences	50 0				
Annual Average Criteria	25/30*				
Amuai Average Officia	23/30				

Water

Water Monitoring

EPL Point 4 - Monthly Monitoring

					рН	EC	TSS	Oil & Grease	Comments
				Units	pH Units	μS/cm	mg/L	mg/L	
			Date Results	EPL Criterion*	6.5-8.5	NA	<50	10	
Date	Time	Sampled By	Received	ANZECC Water Quality Limits	6.5-8.5	125-2200	<50	-	
4/01/2022	07:30am	Metromix - GS	11/01/2022		7.13	1830	<5	<5	-

EPL Point 5 - Monitoring Within 12 Hours of Commencing Discharge

					рН	EC	TSS	Oil & Grease	Comments
				Units	pH Units	μS/cm	mg/L	mg/L	
			Date Results	EPL Criterion*	6.5-8.5	NA	<50	10	
Date	Time	Sampled By	Received	ANZECC Water Quality Limits	6.5-8.5	125-2200	<50	-	
No discharge occurred at this location and therefore no monitoring was required									

EPL Point 6 - Monthly Monitoring

					рН	EC	TSS	Oil & Grease	Comments
				Units	pH Units	μS/cm	mg/L	mg/L	
			Date Results	EPL Criterion*	6.5-8.5	NA	<50	10	
Date	Time	Sampled By	Received	ANZECC Water Quality Limits	6.5-8.5	125-2200	<50	-	
No discharge occurred at this location and therefore no monitoring was required									

EPL Point 7 - Monthly Monitoring

					рН	EC	TSS	Oil & Grease	Comments
				Units	pH Units	μS/cm	mg/L	mg/L	
			Date Results	EPL Criterion*	6.5-8.5	NA	<50	10	
Date	Time	Sampled By	Received	ANZECC Water Quality Limits	6.5-8.5	125-2200	<50	-	
No discharge occurred at this location and therefore no monitoring was required									

Flow Meter Records

EPA Identified Point	Location	Description	Sample Period	Daily Average Flow ML	Monthly Total Flow ML
4	Adit Dam	Adit Dam to Creek (off site)	1/12/2021 to 4/01/2022	3.82	118.47
5	Dam B	Discharge from Dam B (from Quarry)	1/12/2021 to 4/01/2022	0.00	0.00
4	Adit Dam	Water pumped from Adit Dam to Dam G (processing use)	1/12/2021 to 4/01/2022	3.47	107.70

Comments

All water monitoring results remained within the approved criteria levels during the monitoring period.

Water - Year to Date

EPL Point 4 : Monthly Monitoring

	pН	EC	TSS	Oil & Grease	Comments
Units	pH Units	μS/cm	mg/L	mg/L	-
EPL Criterion*	6.5-8.5	NA	<50	10	-
December 2021	6.5-8.5	125-2200	<50	<5	-
January	7.18	1890	6	<5	-
February	7.11	1880	<5	<5	-
March	7.16	1800	8	6	-
April	7.07	1600	6	<5	-
May	7.12	1680	8	<5	-
June	7.49	1940	26	<5	-
July	7.32	1970	<5	<5	-
August	7.34	1960	<5	<5	-
September	7.30	2050	<5	<5	-
October	7.48	2180	8	<5	-
November	7.24	2080	<5	<5	-
December	7.13	1830	<5	<5	-

EPL Point 5: Monitoring During Discharge

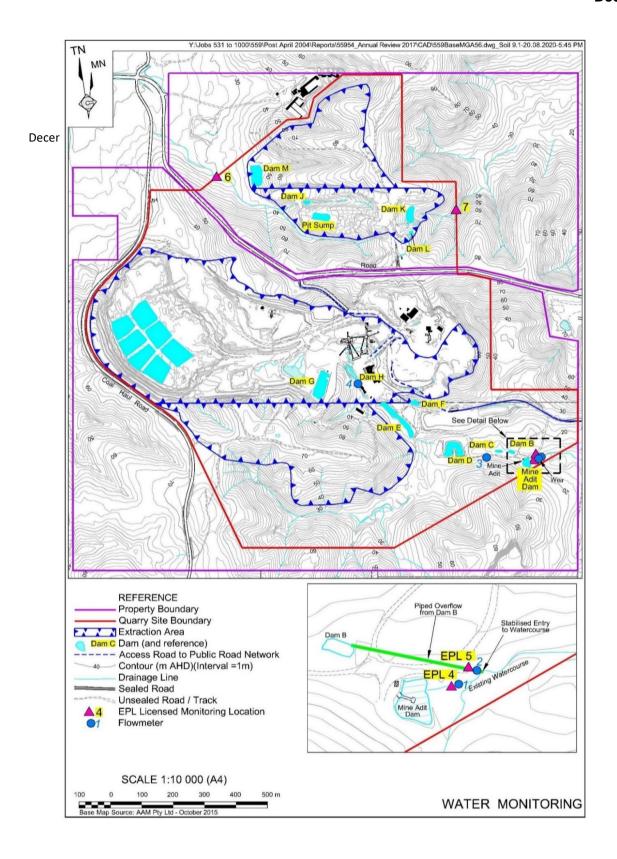
EFE FOIRE 3. N	nonitoring D	urning Discine	ai ge		
	pН	EC	TSS	Oil & Grease	Comments
Units	pH Units	μS/cm	mg/L	mg/L	-
EPL Criterion*	6.5-8.5	NA	<50	10	-
ANZECC Water Quality Limits	6.5-8.5	125-2200	<50	-	-
4/01/2021	7.24	862	6	<5	-
1/02/2021	7.40	921	<5	<5	-
11/02/2021	7.32	1140	<5	<5	-
1/04/2021	6.67	793	<5	<5	-
3/05/2021	6.83	771	<5	<5	-
25/11/2021	6.83	851	5	<5	-

Flow Meter Records

EPA Identifier	Location	Description	Date	Monthly Total (ML)
4	Adit Dam	Water pumped from Adit Dam to Dam G	4/01/2021 - 1/02/2021	80.9
		(processing use)	1/02/2021 - 1/03/2021	94.8
			1/03/2021 - 1/04/2021	88.5
			1/04/2021 - 3/05/2021	91.4
			3/05/2021 - 1/06-2021	107.8
			1/06/2021 - 1/07/2021	91.8
			1/07/2021 - 2/08/2021	92.9
			2/08/2021 - 1/09/2021	99.0
			1/092021 - 1/10/2021	115.5
			1/10/2021 - 1/11/2021	116.8
			1/11/2021 - 1/12/2021	126.8
			1/12/2021 - 4/12/2022	107.7

EPA Identified	Location	Description	Date	Monthly Total (ML)
5	Dam B	Discharge from Dam B (from Quarry)	4/01/2021 - 1/02/2021	0.0
			1/02/2021 - 1/03/2021	0.0
			1/03/2021 - 1/04/2021	28.3
			1/04/2021 - 3/05/2021	3.7
			3/05/2021 - 1/06-2021	0.0
			1/06/2021 - 1/07/2021	0.0
			1/07/2021 - 2/08/2021	0.0
			2/08/2021 - 1/09/2021	0.0
			1/09/2021 - 1/10/2021	0.0
			1/10/2021 - 1/11/2021	0.0
			1/11/2021 - 1/12/2021	2.2
			1/12/2021 - 4/12/2022	0.0

EPA Identified	Location	Description	Date	Monthly Total (ML)
4	Adit Dam	Adit Dam to Creek (off site)	4/01/2021 - 1/02/2021	33.5
			1/02/2021 - 1/03/2021	94.9
			1/03/2021 - 1/04/2021	271.1
			1/04/2021 - 3/05/2021	142.1
			3/05/2021 - 1/06-2021	65.7
			1/06/2021 - 1/07/2021	74.1
			1/07/2021 - 2/08/2021	29.1
			2/08/2021 - 1/09/2021	28.1
			1/092021 - 1/10/2021	30.5
			1/10/2021 - 1/11/2021	37.6
			1/11/2021 - 1/12/2021	69.4
			1/12/2021 - 4/12/2022	118.5

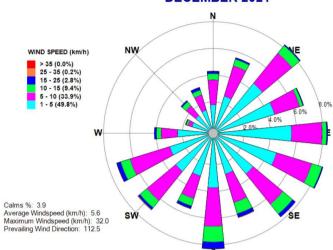


Meteorological Conditions

Monitoring Location: Mid-Pit Entrance
Monitoring Frequency: Continuous

Windrose December 2021

Metromix Teralba - Windrose DECEMBER 2021



Monthly Summary

Date	Mean Wind	Mean Wind	Daily Rainfall (mm)	Mean Sigma Theta	Max Temperature	Min Temperature
01/12/21	78.7	4.0	0.2	27.9	24	18
02/12/21	142.7	4.0	0.2	30.2	27.2	18.4
03/12/21	137.5	6.1	0	31.1	32.8	16.8
04/12/21	172.0	6.2	0.4	42.6	22	17.6
05/12/21	136.5	5.9	1.6	38.9	21.2	16.6
06/12/21	106.4	3.6	0	31.1	22.4	15.8
07/12/21	169.6	6.2	1	27.5	30.2	17
08/12/21	196.3	5.7	7.6	38.1	23.2	16.8
09/12/21	155.8	5.8	2.4	32.7	25.6	16
10/12/21	251.5	8.9	1.2	30.2	24.7	13.2
11/12/21	216.8	8.8	0	33.2	21.4	15.1
12/12/21	186.7	7.7	0	34.4	24.0	14.2
13/12/21	182.1	5.5	0	36.4	25.0	15.0
14/12/21	189.9	4.5	0	35.2	25.8	14.0
15/12/21	179.0	5.4	0	27.9	32.8	14.8
16/12/21	183.8	5.4	4.6	36.9	24.6	19.6
17/12/21	126.0	5.0	0	35.0	26.4	18.4
18/12/21	152.8	6.7	0	24.7	35.6	17.6
19/12/21	204.4	8.6	0	30.0	34.6	21.4
20/12/21	125.2	4.0	0.2	32.3	31.2	20.0
21/12/21	177.0	4.5	0	36.4	32.5	22.3
22/12/21	156.7	4.9	0	41.1	27.8	22.0
23/12/21	92.3	3.5	15.2	27.9	27.0	20.4
24/12/21	151.1	4.6	0	33.8	28.2	18.8
25/12/21	106.7	4.9	0	28.4	30.6	19.2
26/12/21	157.9	5.2	0	35.8	29.6	19.0
27/12/21	172.1	7.2	21	38.0	21.8	16.4
28/12/21	170.5	5.8	24.6	40.1	23.0	15.1
29/12/21	177.8	4.7	3.6	34.0	24.4	15.0
30/12/21	123.6	4.9	0	27.5	27.2	15.8

Meteorological Conditions - Year to Date

Monitored Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Rainfall (mm)	130.0	135.0	362.8	24.0	25.0	55.2	22.4	63.8	46.2	114.2	280.2	83.8	1342.6
Average Minimum Temperature (°C) at 2m	18.1	18.2	17.2	13.1	11.6	9.1	8.6	9.7	11.1	13.3	15.2	17.3	13.5
Average Maximum Temperature (°C) at 2m	28.6	26.4	25.5	23.3	20.7	17.4	17.5	20.4	23.3	25.3	23.68	26.9	23.3
December 2021	18.5	18.5	17.5	13.9	12.3	9.7	9.2	10.6	11.7	13.8	15.5	17.6	14.1
Average Maximum Temperature (°C) at 10m	27.3	25.4	24.7	22.5	20.0	16.9	17.0	19.8	22.4	24.3	22.8	25.7	22.4
Average Sigma Theta	30.9	32.2	31.9	27.3	27.0	28.3	29.8	28.4	29.1	31.9	32.8	33.1	30.2
Average Solar Radiation (W/m²)	214.6	183.9	137.7	148.3	104.6	88.7	101.7	127.5	172.3	199.1	162.7	215.1	154.7
Average Relative Humidity (%)	71.7	77.0	75.0	66.0	68.0	69.0	62.0	57.0	58.0	61.0	74.0	73.0	67.6

Blasting

Monitoring Frequency: Blast Monitoring Completed By: Each Blast MAXAM (Blasts 1 - 26)

December 2021 1 22	Day	Month						n 2		ion 3	Comments
			Time	Location	Overpressure	Vibration	Overpressure	Vibration	Overpressure	Vibration	Comments
1 22					dB(L)	mm/s	dB(L)	mm/s	dB(L)	mm/s	
	22	January	11:52:04	Stage 2A	101.7	0.2	NT	NT	NM	NM	The trigger parameters for the blast monitors were reduced to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 111.7dBL overpressure and 0.35mm/s vibration.
2	11	February	14:50:06	Stage 2A	105.6	0.37	102.3	0.08	NM	NM	
3	17	February	12:50:00	Stage 2A	109.7	1.43	NT	NT	NM	NM	
4	11	March	13:42:00	Stage 2A	101.5	0.24	NT	NT	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 110.6dBL overpressure and 0.55mm/s vibration. The Rhondda Road monitor was tested prior to blasting and recorded readings of 102.2dBl(via clapping) and 7.31mm/s (via stomping).
6A & 6B	7	April	14:56:49	Stage 2A	NT	NT	111.2	0.16	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading.
5	14	April	13:36:13	Stage 1C	106.3	0.3	100.8	0.05	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 113.3dBL overpressure and 0.54mm/s vibration.
7	5	May	11:44:23	Stage 2A	NT	NT	101	0.12	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 108.5dBL overpressure and 0.35mm/s vibration.
8	25	May	14:38:00	Stage 2A	100.2	2.61	105.9	0.16	NM	NM	
9	3	June	12:58:38	Stage 2A	103.1	0.1	99.9	0.12	NM	NM	
10	17	June	14:04:00	Stage 1C	NT	NT	104	0.12	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 109.4dBL overpressure and 0.22mm/s vibration.
	23	June	14:17:06	Stage 2A	108.8	0.11	103.2	0.12	NM	NM	
12	30	June	15:01:11	Stage 2A	103.1	0.08	NT	NT	NM	NM	
13	14	July	13:05:06	Stage 2A	105	0.45	100.4	0.3	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 109.5dBL overpressure and 1.36mm/s vibration.
14	22	July	13:24:00	Stage 1C	NT	NT	NT	NT	NM	NM	
15	27	July	12:15:00	Stage 2A	NT	NT	NT	NT	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 107.9dBL overpressure and 0.20mm/s vibration.
1071 @ 102	9	August	12:52:17	Stage 2A	102.9	0.22	NT	NT	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 108.7dBL overpressure and 0.25mm/s vibration.
17	20	August	15:12:21	Stage 2A	103.9	0.3	NT	NT	NM	NM	
18	30	August	15:12:21	Stage 2B	NT	NT	NT	NT	NM	NM	
19	14	September	14:30:00	Stage 2A	107.5	0.3	102.4	0.1	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 114.7dBL overpressure and 0.54mm/s vibration.
20	24	September	13:57:19	Stage 1C	NT	NT	101.9	0.12	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 112.9dBL overpressure and 0.37mm/s vibration.
21	6	October	14:54:03	Stage 2A	100.4	0.43	96.1	0.23	NM	NM	
22	20	October	15:44:22	Stage 1C	103.4	0.18	NT	NT	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 108.2dBL overpressure and 0.29mm/s vibration.
23A & 23B	4	November	15:05:11	Stage 2A	108.4	1.05	102.8	0.44	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 116.9dBL overpressure and 0.13mm/s vibration.
24	23	November	11:31:04	Stage 2A	101.9	0.44	NT	NT	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 105.4dBL overpressure and 0.77mm/s vibration.
25	15	December	14:45:22	Stage 2A	107.2	0.75	NT	NT	NM	NM	
26	16	December	11:13:02	Stage 2A	NT	NT	NT	NT	NM	NM	The trigger parameters for the blast monitors were set to 100dBL and 0.13mm/s to assist in obtaining a reading. An additional monitor was placed halfway between Blast monitor 1 (McEwen St) and the blast. This monitor recorded 108.4dBL overpressure and 0.41mm/s vibration.

NT	Not Triggered
NM	Not Monitored

 NM Not Monitored						
	Blasting Criteria					
		Limit				
Parameter	Units of Measure	95% of blasts per year	100% of blasts			
Airblast Overpressure (Linear Peak)	decibels (dBL)	115	120			
Ground Vibration (Peak Particle Velocity)	millimetres per second (mm/s)	5	10			

•			
Lo	mr	ner	١t

Two blasting events occurred during the monitoring period. All blast monitoring results were within the approved criteria.

Waste Management

Waste Removal Summary

Month	January	February	March	April	May	June	July	August	September	October	November	December
Items	Quantity	Quantity	Quantity	Quantity								
December 2021												
General Waste Bin (4.5m ³)												
General Waste Bin (6m3)												
General Waste Bin (20m³)	1				1		1		1			1
Paper & Cardboard Bin (3m ³)	1	1		1	1	1	1		1			
Shredded Paper Bin (240L)									2			1
Co Mingled Recycling (2 x 240 L)	4	4	6	4	4	4	4	4	4	4	4	4
Tonner Cartridges												
Waste Oil (L)			1800			800		2000		600	900	
Scrap Steel (t)												
Timber (m ³)												
Engine Coolant (L)												
Oil Filters (240L bin)		3	1					3	3			
Batteries			15									
Oily Rags (240L bin)					1							
Aerosols (120L bin)												
Tyres												
Other												
Oily Water (L)												
Grease Waste (L)												