Teralba Quarry
Environmental Monitoring Summary

August 2025

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:	R. W. Corkery & Co.
Sample Period:	August 2025
Date Last Data Received	18 September 2025
Date of Report	18 September 2025

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5 Blasting
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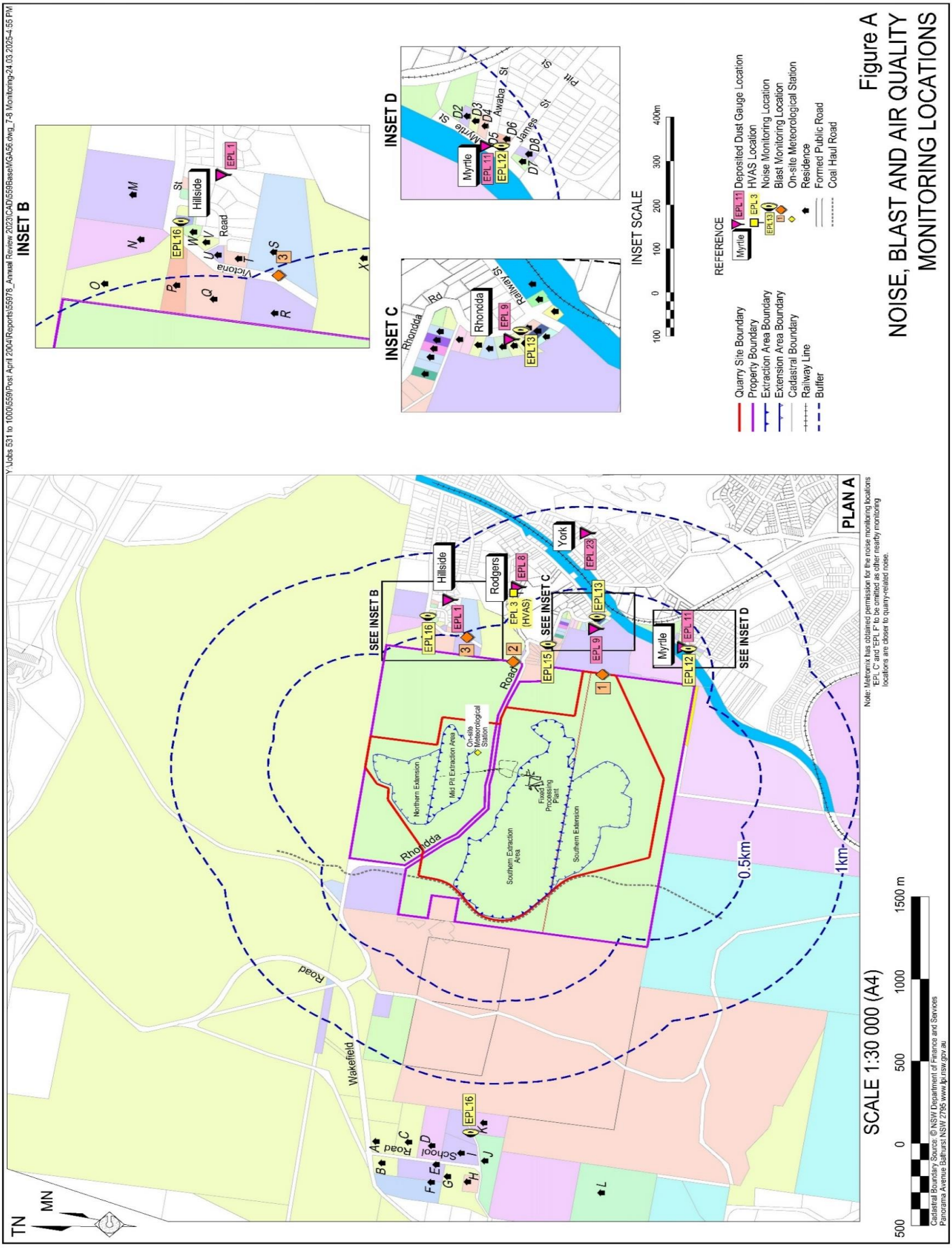


Figure A
NOISE, BLAST AND AIR QUALITY MONITORING LOCATIONS
PLAN A
INSET B
INSET C
INSET D
INSET SCALE
REFERENCE
Quarry Site Boundary
Property Boundary
Extraction Area Boundary
Extension Area Boundary
Cadastral Boundary
Railway Line
Buffer
Deposited Dust Gauge Location
HVAS Location
Noise Monitoring Location
Blast Monitoring Location
On-site Meteorological Station
Residence
Formed Public Road
Coal Haul Road
SEE INSET B
SEE INSET C
SEE INSET D
Hillside
Rodgers
York
Myrtle
Rhondda
Wakefield
Road
Northern Extension
Mid Pit Extraction Area
Southern Extraction Area
Southern Extension
Fixed Processing Plant
On-site Meteorological Station
0.5km
1km
SCALE 1:30 000 (A4)
TN
MN
Note: Metromix has obtained permission for the noise monitoring locations EPL 1, C and EPL F to be omitted as other nearby monitoring locations are closer to quarry-related noise.
Cadastral Boundary Source: © NSW Department of Finance and Services Panorama Avenue Bathurst NSW 2795 www.lpi.nsw.gov.au

Deposited Dust

Sample Period Start: 01/08/2025
Sample Period End: 1/09/2025
Sample Frequency: 30 ± 2 days
Sample Collected By: Metromix - AL
Date Received by Laboratory: 01/09/2025
Date Results Received by Metromix: 05/09/2025

EPA Identification No.	Location	Criteria (g/m^2/month)	Insoluble Solids (g/m^2/month)	Ash Fraction (g/m^2/month)	% Ash Fraction
1	Hillside Crescent	4.0	0.1	0.1	100
8	Rodgers Street	4.0	0.9	0.5	56
9	Rhondda Road	4.0	0.5	0.2	40
11	Myrtle Street	4.0	2.1	1.6	76
23	York Street	4.0	0.2	0.1	50

Comments

No exceedances of the approved criteria were detected during the sample period.

Deposited Dust - Year to Date

	Rhondda Road			Myrtle Street			Hillside Crescent			Rodgers Street			York Street		
	Total Insoluble Solids	**Ash Fraction**	**% Ash**	**Total Insoluble Solids**	**Ash Fraction**	**% Ash**	**Total Insoluble Solids**	**Ash Fraction**	**% Ash**	**Total Insoluble Solids**	**Ash Fraction**	**% Ash**	**Total Insoluble Solids**	**Ash Fraction**	**% Ash**
Units	**g/m^2/month**	**g/m^2/month**		**g/m^2/month**	**g/m^2/month**		**g/m^2/month**	**g/m^2/month**		**g/m^2/month**	**g/m^2/month**		**g/m^2/month**	**g/m^2/month**	
EPA Approved Level	**4.0**			**4.0**			**4.0**			**4.0**			**4.0**		
January	0.7	0.3	43	1.1	0.4	36	0.2	0.1	50	1.4	0.5	36	0.4	0.1	25
February	0.5	0.2	40	0.5	0.2	40	0.2	0.2	100	0.6	0.3	50	1.4	0.7	50
March	0.6	0.3	50	1.8	1.2	67	0.5	0.2	40	0.4	0.2	50	1.1	0.6	55
April	2.9	2.3	79	4.9	4.0	82	0.2	0.1	50	0.5	0.3	60	0.3	0.3	100
May	2.3	1.3	57	4.6	3.3	72	0.2	0.1	50	0.3	0.1	33	0.3	0.1	33
June	0.7	0.5	71	1.8	1.3	72	0.5	0.3	60	0.6	0.3	50	0.2	0.1	50
July	0.1	0.1	100	0.7	0.7	100	0.7	0.2	29	1.2	0.9	75	0.6	0.5	83
August	0.5	0.2	40	2.1	1.6	76	0.1	0.1	100	0.9	0.5	56	0.2	0.1	50
September															
October															
November															
December															
Annual Average	**1.0**	0.7	60	**2.2**	1.6	68	**0.3**	0.2	60	**0.7**	0.4	51	**0.6**	0.3	56
Annual Maximum	**2.9**	2.3	100	**4.9**	4.0	100	**0.7**	0.3	100	**1.4**	0.9	75	**1.4**	0.7	100
Annual Minimum	**0.1**	0.1	40	**0.5**	0.2	36	**0.1**	0.1	29	**0.3**	0.1	33	**0.2**	0.1	25

Particulate Matter (PM_{10})

Sample Location: EPA 3 - Rodgers Street
Sample Frequency: 6 days

Date Sample Taken (24-hr)	Collected by	Date Results Received	PM_{10} $\mu g/m^3$	24-Hour Average Criteria ($\mu g/m^3$)	Year to Date Average Criteria ($\mu g/m^3$)
04/08/2025	CBased - JN	13/08/2025	12.7	50	16.2
10/08/2025	CBased - LK	25/08/2025	3.8	50	15.8
16/08/2025	CBased - CO	27/08/2025	17.5	50	15.9
22/08/2025	CBased - JN	02/09/2025	3.5	50	15.6
28/08/2025	CBased - JN	05/09/2025	9.3	50	15.4
Monthly Average			9.4		25/30*

*Project Approval (PA 10_0183) outlines the annual average PM_{10} criteria to be 30µg/m^3. 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 2022 and outlines the annual average PM_{10} criteria to be 25µg/m^3. Metromix has considered both criteria for its review of particulate matter monitoring.

Comments

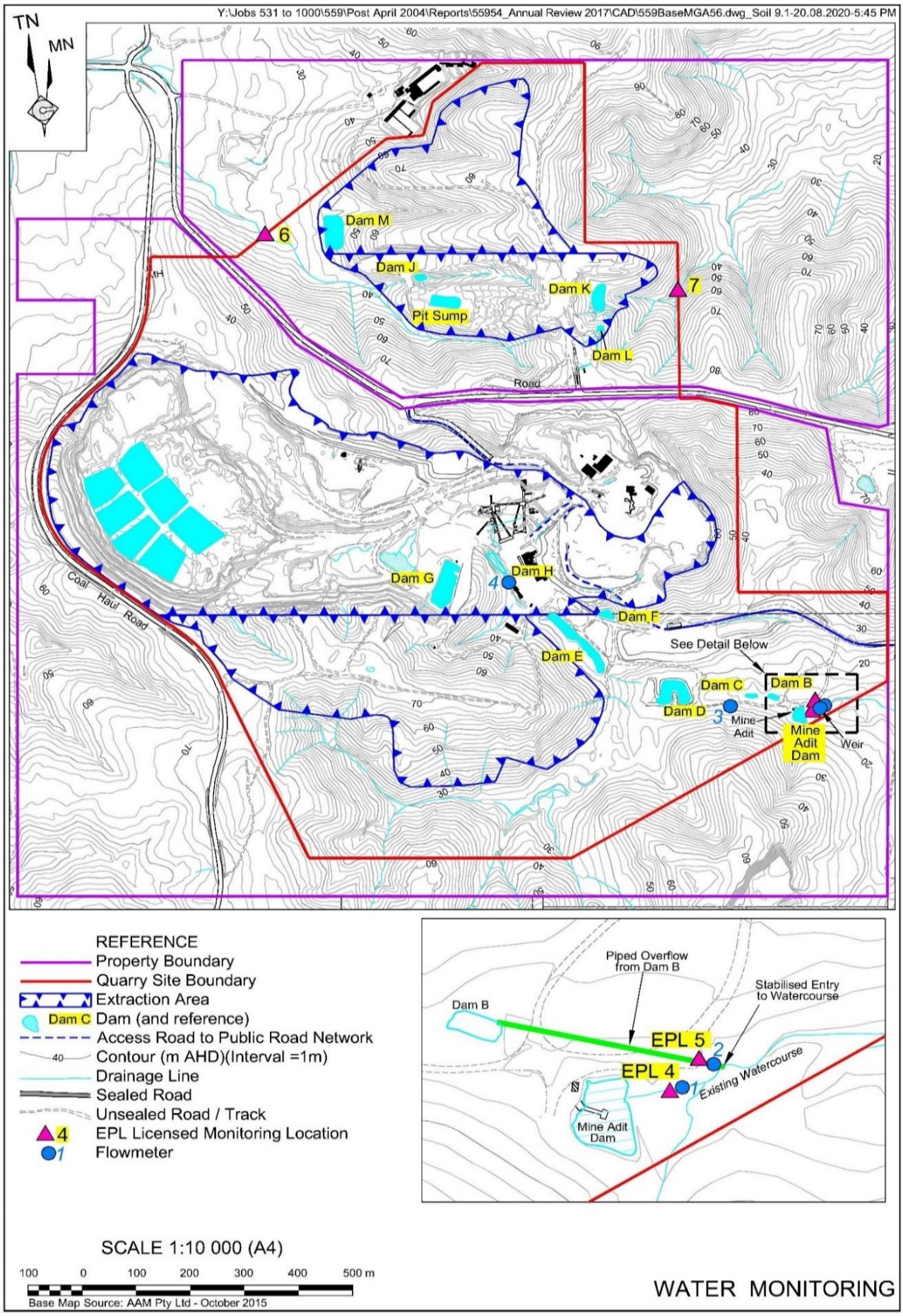
All PM10 results remained below the approved criteria for the sample period.

Particulate Matter (PM_{10}) - Year to Date

Date	PM_{10} ($\mu g/m^3$)	Monthly Average ($\mu g/m^3$)	Year to Date Average ($\mu g/m^3$)	24-Hr Criteria ($\mu g/m^3$)	Comments
06/01/2025	44.6	23.6	44.6	50	
12/01/2025	14.3		29.5	50	
18/01/2025	18.7		25.9	50	
24/01/2025	21.3		24.7	50	
30/01/2025	19.2		23.6	50	
05/02/2025	32.6	29.4	25.1	50	
11/02/2025	14.7		23.6	50	
17/02/2025	55.2		27.6	50	See comment in February 2025 Monitoring Summary.
23/02/2025	14.9		26.2	50	
01/03/2025	36	17.0	27.2	50	
07/03/2025	16.4		26.2	50	
13/03/2025	10.6		24.9	50	
19/03/2025	14.3		24.1	50	
25/03/2025	7.8		22.9	50	
31/03/2025	10.1		22.0	50	
06/04/2025	19.7	13.6	21.9	50	
12/04/2025	11.2		21.3	50	
18/04/2025	16.2		21.0	50	
24/04/2025	12.9		20.6	50	
30/04/2025	8.1		19.9	50	
06/05/2025	8.2	9.4	19.4	50	
12/05/2025	4.4		18.7	50	
18/05/2025	11.1		18.4	50	
24/05/2025	7.9		17.9	50	
30/05/2025	15.3		17.8	50	
05/06/2025	10.0	12.7	17.5	50	
11/06/2025	5.8		17.1	50	
17/06/2025	15.0		17.0	50	
23/06/2025	15.0		16.9	50	
29/06/2025	17.8		17.0	50	
05/07/2025	15.6	12.0	16.9	50	
11/07/2025	11.3		16.8	50	
17/07/2025	16.8		16.8	50	
23/07/2025	3.9		16.4	50	
29/07/2025	12.2		16.3	50	
04/08/2025	12.7	9.4	16.2	50	
10/08/2025	3.8		15.8	50	
16/08/2025	17.5		15.9	50	
22/08/2025	3.5		15.6	50	
28/08/2025	9.3		15.4	50	

Minimum	3.5
Maximum	55.2
Average	15.4
Standard Deviation	10.5
24-hr Criteria	50
Number of Exceedences	1
Annual Average Criteria	25/30*
Annual Average Criteria Exceeded	No

*See explanation on previous page.


Y:\Jobs 531 to 1000\559\Post April 2004\Reports\55954_Annual Review 2017\CAD\559BaseMGA56.dwg_Soil 9.1-20.08.2020-5:45 PM
TN
MN
Dam M
Dam J
Dam K
Pit Sump
Dam L
Road
Dam G
Dam H
Dam F
Dam E
Coal Haul Road
See Detail Below
Dam C
Dam B
Dam D
Mine Adit
Mine Adit Dam
Weir
6
7
4
3
REFERENCE
Property Boundary
Quarry Site Boundary
Extraction Area
Dam C Dam (and reference)
Access Road to Public Road Network
Contour (m AHD)(Interval =1m)
Drainage Line
Sealed Road
Unsealed Road / Track
4 EPL Licensed Monitoring Location
1 Flowmeter
Piped Overflow from Dam B
Stabilised Entry to Watercourse
EPL 5
EPL 4
Existing Watercourse
Mine Adit Dam
SCALE 1:10 000 (A4)
100 0 100 200 300 400 500 m
Base Map Source: AAM Pty Ltd - October 2015
WATER MONITORING

Water

Water Monitoring

EPL Point 4 - Monthly Monitoring

Date	Time	Sampled By	Date Results Received		pH	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	-	
01/08/2025	7:00 AM	Metromix - AL	8/08/2025		7.3	1770	11	<5	

EPL Point 5 - Monitoring within 12 hrs of Discharge commencing

Date	Time	Sampled By	Date Results Received		pH	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	-	
Discharge began in May and has continued since; sampling was conducted within 12 hours of commencement in line with EPL 536 condition M2.4. See results in Water - Year to Date.									

EPL Point 6 - Monthly Monitoring

Date	Time	Sampled By	Date Results Received		pH	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	-	
No discharge occurred at this location and therefore no monitoring was required.									

EPL Point 7 - Monthly Monitoring

Date	Time	Sampled By	Date Results Received		pH	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	-	
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)	01/08/2025 - 01/09/2025	3.29	102.1
5	Dam B	Discharge from Dam B (from Quarry)	01/08/2025 - 01/09/2025	0.61	19.0
4	Adit Dam	Water pumped from Adit Dam to Dam G (processing use)	01/08/2025 - 01/09/2025	3.65	113.1

Comments

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

Water - Year to Date

EPL Point 4 : Monthly Monitoring

	pH	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	-	-
January	7.2	2080	5	<5	-
February	7.3	1830	<5	<5	-
March	7.1	2020	<5	<5	-
April	7.2	1920	<5	<5	-
May	7.1	1700	11	<5	-
June	7.0	1470	11	<5	-
July	7.2	1840	26	<5	-
August	7.3	1770	11	<5	-
September					
October					
November					
December					

EPL Point 5 : Monitoring During Discharge

	pH	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	-	-
01 January	7.3	1090	<5	<5	-
3 February	7.0	1230	6	<5	-
17 February	7.3	1270	<5	<5	-
28 April	6.9	753	13	<5	-
1 May	6.9	905	8	<5	-

Flow Meter Records

EPA Identifier	Location	Description	Date	Monthly
4	Adit Dam	Water pumped from Adit Dam to Dam G (processing use)	01/01/2025 - 01/02/2025	73.6
			01/02/2025 - 01/03/2025	75.4
			01/03/2025 - 01/04/2025	86.8
			01/04/2025 - 01/05/2025	56.3
			01/05/2025 - 02/06/2025	97.3
			02/06/2025 - 01/07/2025	108.8
			01/07/2025 - 01/08/2025	118.5
			01/08/2025 - 01/09/2025	113.1

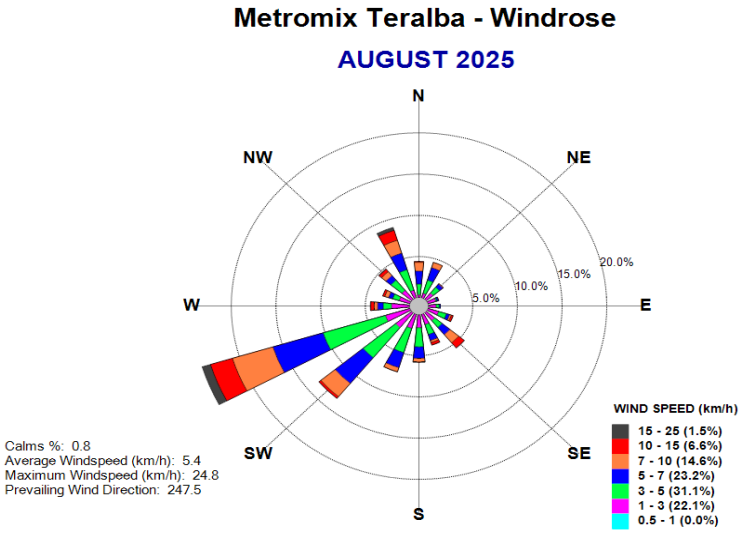
EPA Identifier	Location	Description	Date	Monthly
5	Dam B	Discharge from Dam B (from Quarry)	01/01/2025 - 01/02/2025	0.0
			01/02/2025 - 01/03/2025	0.0
			01/03/2025 - 01/04/2025	0.0
			01/04/2025 - 01/05/2025	2.5
			01/05/2025 - 02/06/2025	58.4
			02/06/2025 - 01/07/2025	6.4
			01/07/2025 - 01/08/2025	0.0
			01/08/2025 - 01/09/2025	19.0

EPA Identifier	Location	Description	Date	Monthly
4	Adit Dam	Adit Dam to Creek (off site)	01/01/2025 - 01/02/2025	45.7
			01/02/2025 - 01/03/2025	32.7
			01/03/2025 - 01/04/2025	18.0
			01/04/2025 - 01/05/2025	65.9
			01/05/2025 - 02/06/2025	207.5
			02/06/2025 - 01/07/2025	73.1
			01/07/2025 - 01/08/2025	39.4
			01/08/2025 - 01/09/2025	102.1

Meteorological Conditions

Monitoring Location: Mid-Pit Entrance
Monitoring Frequency: Continuous

Windrose



Monthly Summary

Date	Mean Wind Direction (°)	Mean Wind Speed (km/h)	Daily Rainfall (mm)	Mean Sigma Theta	Max Temperature (°C) at 2m	Min Temperature (°C) at 2m
01/08/25	218	5.9	5.4	34.1	14.2	8.5
02/08/25	157	6.9	96.0	40.7	13.8	9.9
03/08/25	144	8.0	42.6	42.7	16.3	12.5
04/08/25	208	3.7	8.8	39.1	19.1	11.2
05/08/25	290	4.5	0.2	30.4	20.9	10.1
06/08/25	226	3.8	0.0	32.3	18.8	10.4
07/08/25	220	5.2	24.6	35.4	13.6	9.9
08/08/25	202	4.8	8.2	38.7	17.0	10.0
09/08/25	200	4.3	20.0	43.9	16.5	10.2
10/08/25	213	4.3	8.6	37.6	14.1	9.9
11/08/25	214	3.2	1.2	38.6	15.7	8.4
12/08/25	229	3.4	0.0	27.6	18.3	7.3
13/08/25	252	3.0	0.0	36.1	19.4	7.7
14/08/25	229	5.9	6.0	33.6	16.6	9.6
15/08/25	149	3.9	1.4	32.5	19.2	10.5
16/08/25	284	7.8	4.6	31.8	19.8	10.0
17/08/25	249	4.5	0.0	28.7	16.4	5.4
18/08/25	215	5.8	15.8	30.8	13.8	7.4
19/08/25	207	3.6	5.0	32.2	15.6	7.6
20/08/25	161	3.4	20.8	34.8	15.5	9.2
21/08/25	136	2.9	28.2	33.2	13.8	10.9
22/08/25	229	4.2	6.4	31.4	15.2	11.6
23/08/25	253	5.7	0.0	32.7	21.6	10.9
24/08/25	236	5.8	0.0	27.3	19.3	10.7
25/08/25	168	4.2	0.0	27.3	21.9	12.9
26/08/25	54	5.5	0.0	21.9	24.1	12.6
27/08/25	244	8.5	0.0	48.0	23.6	12.9
28/08/25	289	8.1	0.0	49.3	19.8	10.8
29/08/25	321	9.7	0.0	46.0	19.9	9.2
30/08/25	257	11.7	0.2	33.7	18.7	8.2
31/08/25	218	5.2	0.0	31.7	19.8	6.7

Meteorological Conditions - Year to Date

Monitored Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Rainfall (mm)	236.2	54.6	171.6	257.6	522.2	31.0	106.8	304.0					1684.0
Average Minimum Temperature (°C) at 2m	14.8	14.6	15.6	12.6	9.6	5.4	4.9	5.4					10.4
Average Maximum Temperature (°C) at 2m	42.1	36.7	36.6	30.5	25.8	21.7	22.0	24.1					29.9
Average Minimum Temperature (°C) at 10m	14.8	13.4	15.9	13.0	10.0	6.2	6.1	6.2					10.7
Average Maximum Temperature (°C) at 10m	41.0	37.4	36.0	29.5	24.7	21.1	21.4	23.2					29.3
Average Sigma Theta	35.4	33.9	33.5	30.9	33.6	31.9	32.5	35.0					33.3
Average Solar Radiation (W/m^2)	179.0	187.1	123.8	119.2	69.7	81.8	82.0	96.2					117.4
Average Relative Humidity (%)	74.0	73.0	76.0	71.0	78.0	66.0	64.0	72.0					71.8

Blasting

Monitoring Frequency Each Blast

Blast Monitoring Completed By MAXAM

Shot #	Day	Month	Time	Location	Elevation (m)	Location 1		Location 2		Location 3		Comments
						Overpressure	Vibration	Overpressure	Vibration	Overpressure	Vibration	
						dB(L)	mm/s	dB(L)	mm/s	dB(L)	mm/s	
1	20	January	13:56:46	Stage 2B-1	RL48	110.4	0.22	101.7	0.06	NM	NM	
2	24	January	12:11:50	Stage 1C	RL34	105.1	0.51	99.1	0.05	NM	NM	
3AB	4	February	15:07:26	Stage 2B-1	RL48	113.6	0.14	105.7	0.06	NM	NM	
3C	5	February	10:50:25	Stage 2B-3	RL57	106.3	0.1	99.4	0.08	NM	NM	
4	13	February	12:24:26	Stage 1C	RL34	105.4	0.41	99.4	0.08	NM	NM	
5	20	February	13:06:57	Stage 2B-1	RL40	110.7	0.1	105.8	0.08	NM	NM	
6	5	March	12:47:41	Stage 1C	RL34	104.7	0.4	104	0.14	NM	NM	
7	14	March	13:28:18	Stage 2B-3	RL48	104.7	0.25	102.2	0.09	NM	NM	
8	25	March	13:30:35	Stage 1C	RL34	105.4	0.42	103.6	0.06	NM	NM	
9	2	April	13:25:48	Stage 2B-1	RL40	106.3	0.09	101.6	0.05	NM	NM	
10	14	April	10:47:19	Stage 1C	RL34	100.8	0.25	98.4	0.05	NM	NM	
11	23	April	11:39:10	Stage 2B-3	RL40	107.1	0.23	NT	NT	NM	NM	
12	6	May	12:23:17	Stage 1C	RL34	105.1	0.44	99.4	0.06	NM	NM	
13	2	Jun	13:04:52	Stage 2B-1	RL48	103.6	0.25	102.7	0.05	NM	NM	
14	4	Jun	11:14:09	Stage 1C	RL34	102.2	0.25	102.2	0.05	NM	NM	
15	18	Jun	13:00:48	Stage 1C	RL34	108.9	0.62	99.7	0.23	NM	NM	
16	4	Jul	14:21:00	Stage 2B-3	RL40	111.6	0.23	103.6	0.06	NM	NM	
17	10	Jul	13:42:59	Stage 1C	RL34	114.4	0.47	107.5	0.06	NM	NM	
18	28	Jul	14:55:09	Stage 1C	RL34	114.7	0.62	109.2	0.06	NM	NM	
19	4	Aug	13:59:31	Stage 2B-3	RL40	106.9	0.27	102.2	0.08	NM	NM	
20	28	Aug	12:48:48	Stage 1C	RL34	109.7	0.56	104.7	0.11	NM	NM	

NT Not Triggered
NM Not Monitored

Blasting Criteria

Parameter	Units of Measure	Limit	
		95% of blasts per year	100% of blasts
Airblast Overpressure (Linear Peak)	decibels (dBL)	115	120
Ground Vibration (Peak Particle Velocity)	millimeters per second	5	10

Comments

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
Item	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity
General Waste Bin (10m^3)	-	-	-	-	-	-	-	-				
General Waste Bin (4.5m^3)	-	-	-	-	-	-	-	-				
General Waste Bin (6m^3)	-	-	-	-	-	-	-	-				
General Waste Bin (20m^3)	1	-	1	1	1	-	-	2				
Paper & Cardboard Bin (3m^3)	-	1	1	1	2	1	-	1				
Shredded Paper Bin (240L)	1	2	-	-	4	4	4	4				
Co Mingled Recycling (2 x 240 L)	4	4	4	4	-	-	-	-				
Tonner Cartridges	-	27	-	-	-	-	-	-				
Waste Oil (L)	-	-	-	-	-	-	-	-				
Scrap Steel (t)	10.78	-	-	-	-	-	-	-				
Timber (m^3)	-	-	-	-	-	-	-	-				
Engine Coolant (L)	-	-	-	-	-	-	-	-				
Oil Filters (240L bin)	-	-	-	4	-	-	3	-				
Batteries	-	-	-	-	-	-	-	-				
Batteries - Office	-	-	-	-	-	-	-	-				
Oily Rags (240L bin)	-	-	-	-	-	-	-	-				
Aerosols (120L bin)	-	-	-	-	-	-	-	-				
Tyres	-	-	-	-	-	-	-	-				
Other	-	-	-	-	-	-	-	-				
Oily Water (L)	-	5.96	-	-	-	-	-	6.94				
Grease Waste (L)	-	-	-	-	-	-	-	-				