

Chain Valley and Mannering Collieries

Combined Community Consultative Committee
Meeting Presentation
16th February 2022



AGENDA



- 1. Welcome and apologies**
- 2. Declarations of interest**
- 3. Confirmation of previous minutes**
- 4. Business arising**
- 5. Correspondence**
- 6. Operational Update**
- 7. Approvals Update**
- 8. Environmental Performance**
- 9. Environmental Projects**
- 10. Site Rehabilitation**
- 11. Next meeting**

WELCOME AND APOLOGIES



Welcome

Apologies

Declaration of interests

Confirmation of previous minutes

ACTIONS / BUSINESS ARISING FROM PREVIOUS MINUTES



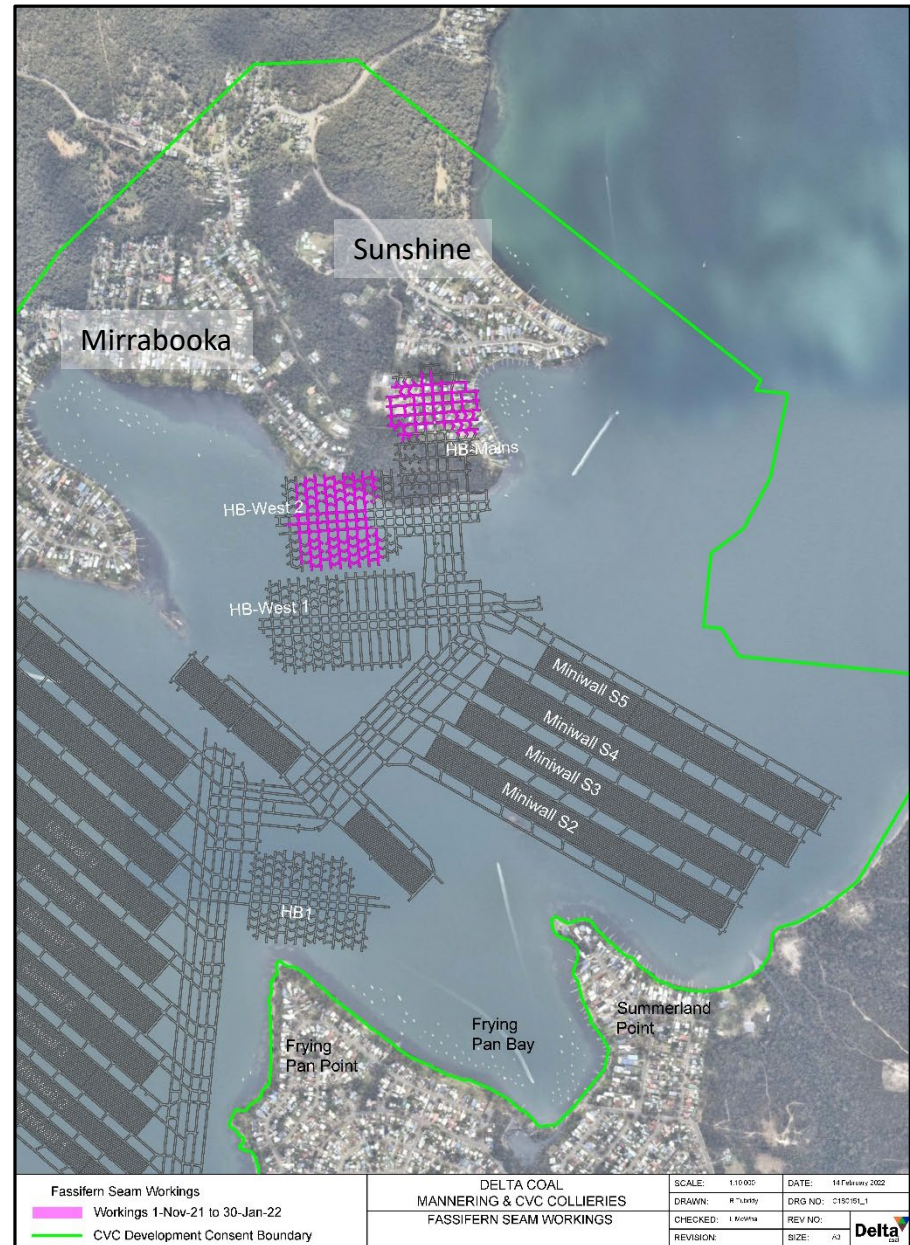
Action / Business Arising	Action Owner	Update
Benthic Communities – Species Distribution	LM	Slide 23 onward
Eastern Mining Area Update	LM	Slide 8

Correspondence since previous meeting

- Bob Brooks, request for formal letter on discontinuation with the eastern mining area within the current life of mine plan.

OPERATIONAL UPDATE

- Production areas are currently under Lake Macquarie and Morisset Peninsula.
- Current operations are first-workings only (no secondary extraction).



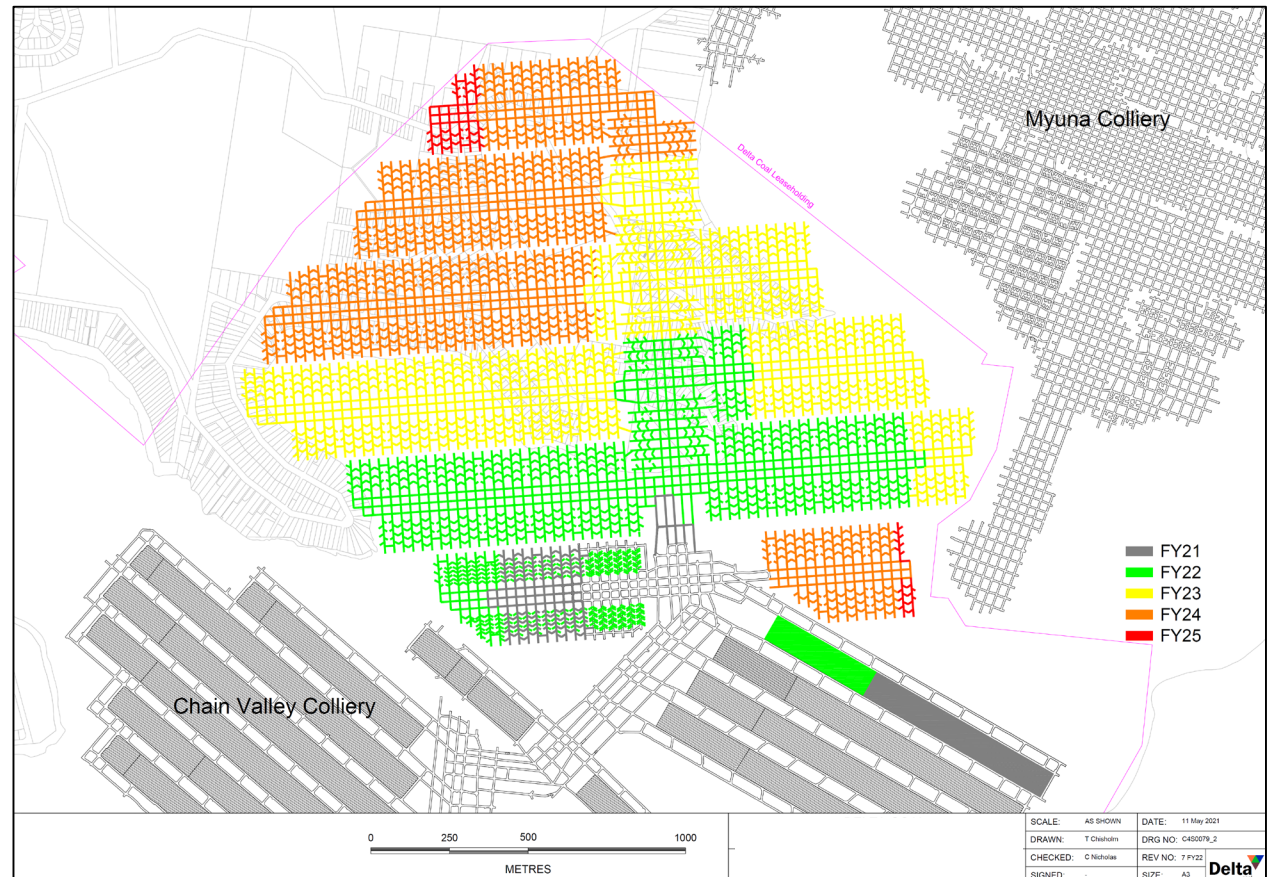
Above: Workings 1 November 2021 to 30 January 2022

PRODUCTION FORECAST



The forecasted mine design remains the same to previously presented in the Nov-21 CCC meeting.

Forecast coal production for FY21/22 was reduced from 1.5Mtpa to 1.2 Mtpa.



APPROVALS - CURRENT



Approval	Status
Chain Valley Colliery	
Environmental Protection License (EPL) 1770	Updated 30 September 2021
CVC and MC MOP 2020-2023 Amendment 2 Amendment to include the Mining Lease transfer of ML1632 to ML1785.	Approved 30 th August 2021 Expires 31/12/2023
Chain Valley Colliery Development Consent CVC SSD-5465 (MOD 4)	Approved 5 th August 2021
MWS5 and NPA Extraction Plan	Approved in March 2021
Mannering Colliery	
EPL 191 – Mannering Colliery	Updated April 2021
Mannering Colliery Project Approval PA 06_0311 (MOD 5)	Approved June 2020

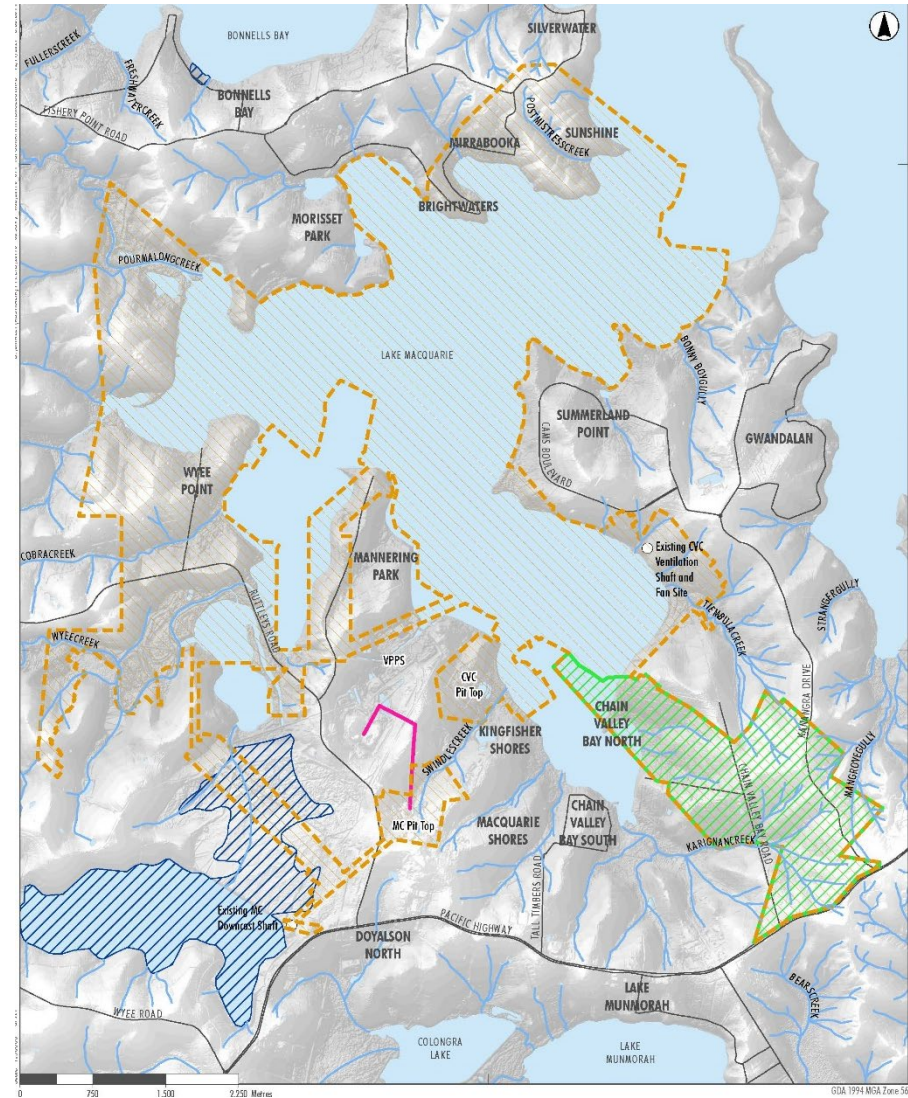
DELTA COAL CONSOLIDATION PROJECT

The submission of an Environmental Impact Statement for the Consent Consolidation has been delayed and will be submitted prior to June 2022.

- The eastern mining area (EMA) is proposed for removal from the consent consolidation project
- Delta Coal is consulting with DPIE regarding revised Secretary Environmental Assessment Requirements (SEARs) for the project.

The primary goals of the Project are now to:

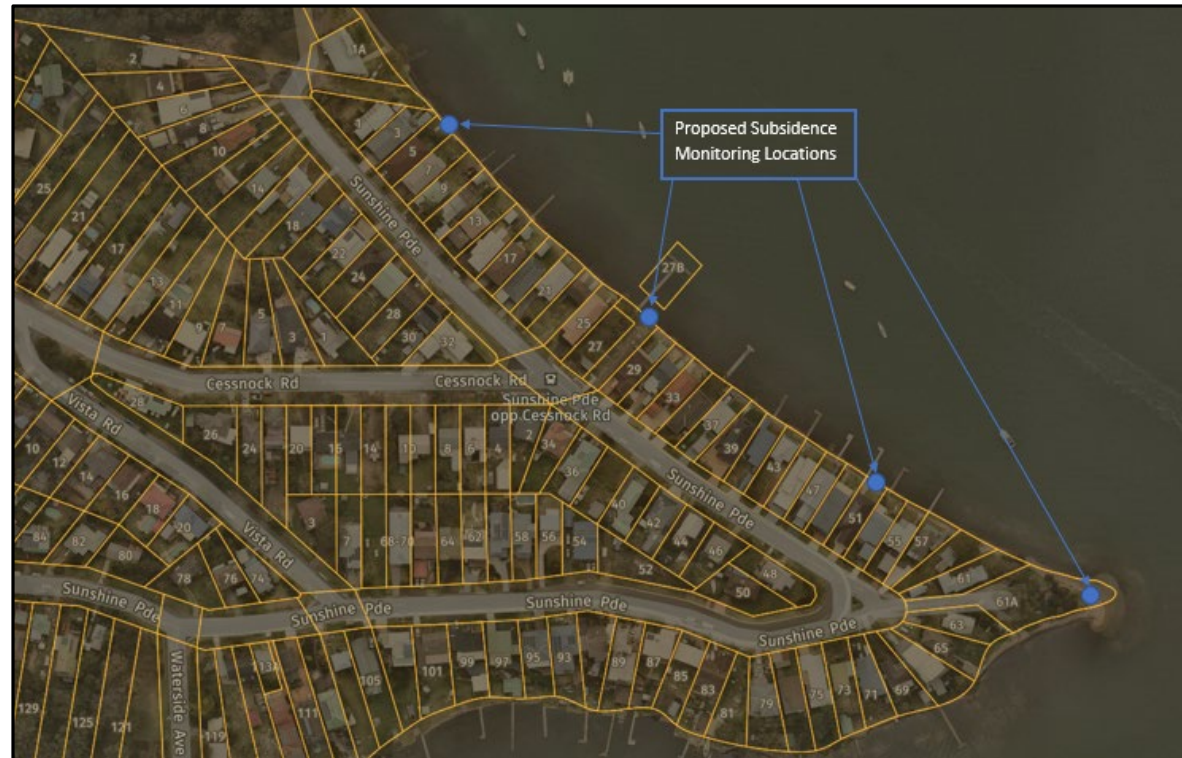
- Extend approved operations from 2027 to 2029
- Combine Consents and allow the combination of other approvals (i.e. EPL's) for administrative purposes to reflect Delta Coals operations.



Above: Current combined MC and CVC Approval Boundaries (orange) with EMA in green (to be removed from EIS)

SUBSIDENCE MONITORING

- Subsidence monitoring points installed on foreshore in-situ rock/trees in Brightwaters, Mirrabooka and Sunshine
- Letter drop and door-knock in Jan-22 to acquire landowner consent in Sunshine
- Archaeology and ecological assessment required prior to monitoring point install in land north of Sunshine Pde (un-developed and operated by Lake Macquarie City Council)
- Baseline readings are taken upon install.



Left: subsidence monitoring markers for foreshore tree's (top) or rock/concrete (bottom)

ENVIRONMENTAL INCIDENTS / NON- COMPLIANCES

Incident:	<ul style="list-style-type: none"> • Exceedance of Mannering Colliery (EPL 191) Oil and Grease Limits
Date:	<ul style="list-style-type: none"> • 15th November 2021
Details:	<ul style="list-style-type: none"> • Result of 22 mg/L exceeding limit of 10 mg/L • Duplicate sample did not exceed limits • An on-site source could not be determined • No hydrocarbons detected in sample analysis • Significant pollen (lipids in pollen can impact sample analysis) present on the surface of Pond B during sample collection.
Actions:	<ul style="list-style-type: none"> • Follow-up sampling on 19 November 2021 - no detectable Oil and Grease • No impact observed at the discharge location or downstream locations • Duplicate sampling of oil and grease will be continued to determine repeatability of results • Incident report issued to DPIE, NSW EPA and the Resources Regulator.



Above = pollen accumulation on surface of MC final pond.

ENVIRONMENTAL INCIDENTS / NON- COMPLIANCES

Incident:	<ul style="list-style-type: none">• CVC Depositional Dust Gauge 5 (DDG005) Exceedance of depositional dust limits.
Date:	<ul style="list-style-type: none">• 22 December 2022.
Details:	<ul style="list-style-type: none">• DDG005 frequently subjected to contaminating events• Laboratory analysis confirmed contamination by vegetation, slime growth, insects and sand.
Actions:	<ul style="list-style-type: none">• Technical non-compliance reported to the NSW EPA, DPIE and Resources Regulator• Delta Coal AQGHGMP proposes the replacement of DDG005 with DDG006, currently submitted to DPIE for Planning Secretary approval.



Above = slime accumulation in dust gauge.

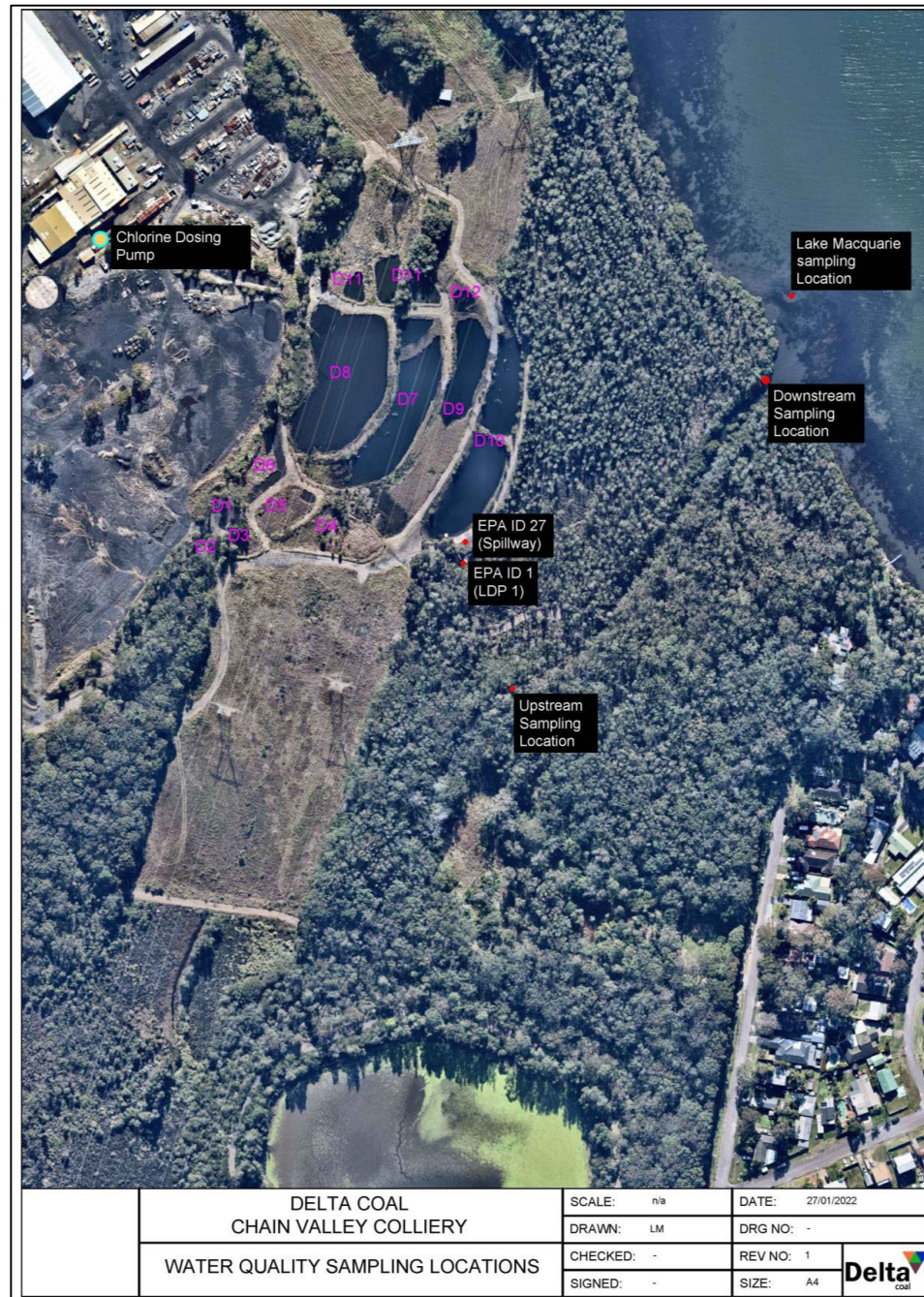
ENVIRONMENTAL INCIDENTS / NON- COMPLIANCES

Incident:	<ul style="list-style-type: none"> • Vandalism of CVC LDP1 Volumetric Flow Monitor
Date:	<ul style="list-style-type: none"> • 24 December 2022
Details:	<ul style="list-style-type: none"> • Computer and solar panel attached to LDP1 volume monitoring damaged from vandalism • Unit could not be replaced until 10 January 2022 • Volumetric monitoring of groundwater discharge to the CVC dams remained functional with minimal rainfall in the period.
Actions:	<ul style="list-style-type: none"> • Damage to unit reported to the NSW EPA, DPIE and Resources Regulator • Repairs undertaken to monitoring unit • Delta Coal looking at security cages/cabinets to protect the unit.



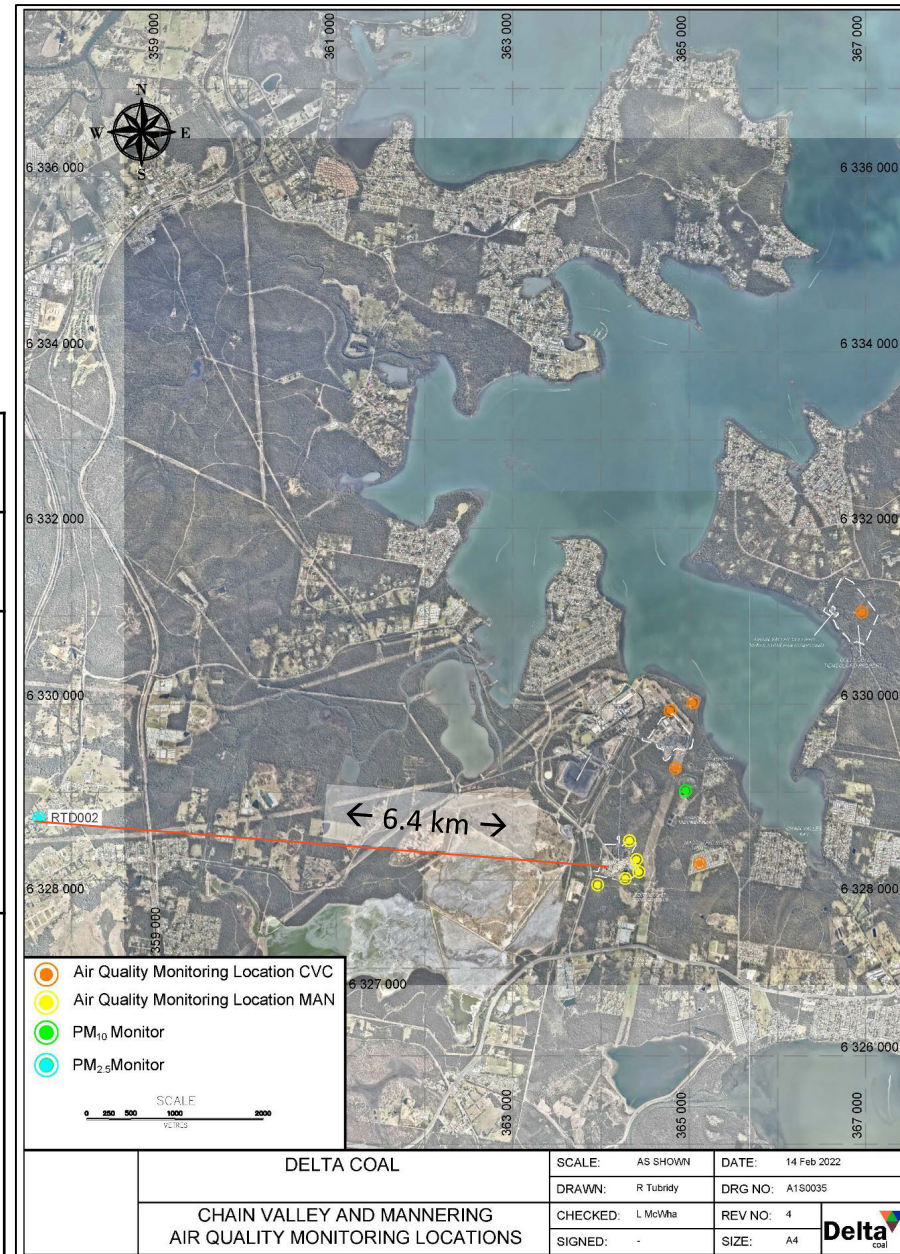
ENVIRONMENTAL INCIDENTS / NON-COMPLIANCES

Incident:	<ul style="list-style-type: none"> Faecal Coliform Exceedance at LDP1
Date:	<ul style="list-style-type: none"> 18 January 2022
Details:	<ul style="list-style-type: none"> Monthly sampling at the CVC discharge point identified an exceedance of Faecal Coliform (FC) concentrations (220 CFU/100ml) to the EPL 1770 limit (200 CFU/100ml).
Actions:	<ul style="list-style-type: none"> Reported to DPIE, NSW EPA and the Resources Regulator Alterations to chlorine dosing timing and volumes Commitment to CVC sewer connection project (PRP-8).

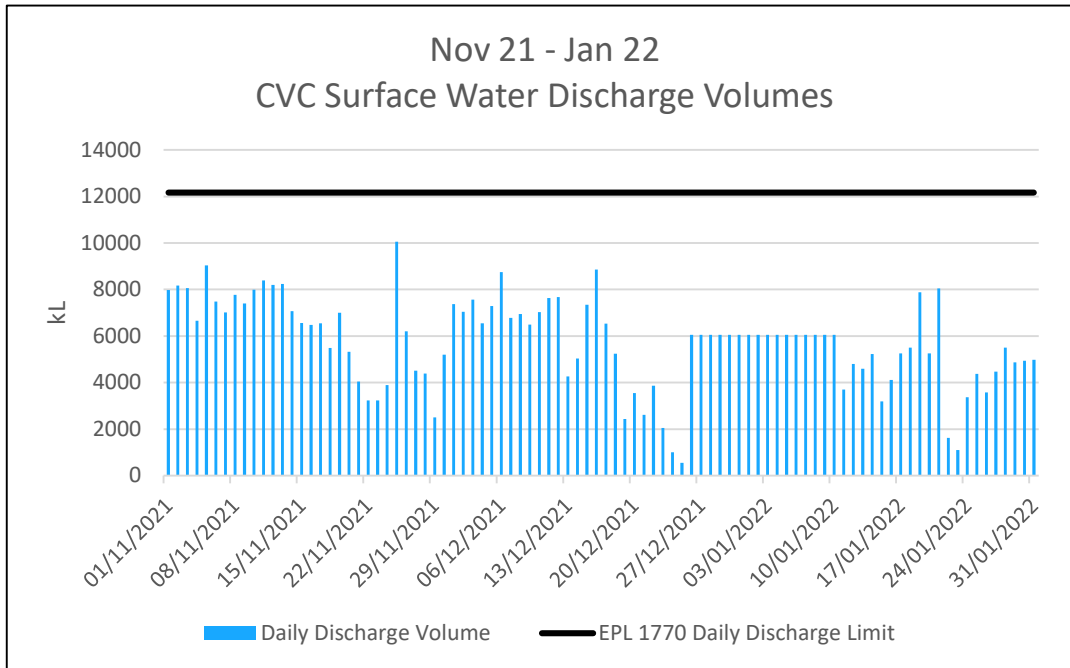


ENVIRONMENTAL INCIDENTS / NON-COMPLIANCES

Incident:	<ul style="list-style-type: none"> Exceedance of Daily Average PM_{2.5} Limits
Date:	<ul style="list-style-type: none"> 3rd, 6th, 16th, 18th, 19th, 20th and 24th January 2022
Details:	<ul style="list-style-type: none"> Delta Coal monitor PM_{2.5} (i.e. all particulate matter less than 2.5µm) utilising a particulate beta-attenuation monitor, owned and operated by Delta Electricity. As a particle size reference, the diameter of human hair is approx. 70µm.
Actions:	<ul style="list-style-type: none"> Notified to DPIE, NSW EPA and the Resources Regulator Investigation ongoing and considering: <ul style="list-style-type: none"> Potential particulate sources Meteorological conditions The functionality of the BAM unit Consideration of representativeness of the PM_{2.5} monitoring undertaken in Wyee.



SURFACE WATER DISCHARGE – CHAIN VALLEY COLLIERY



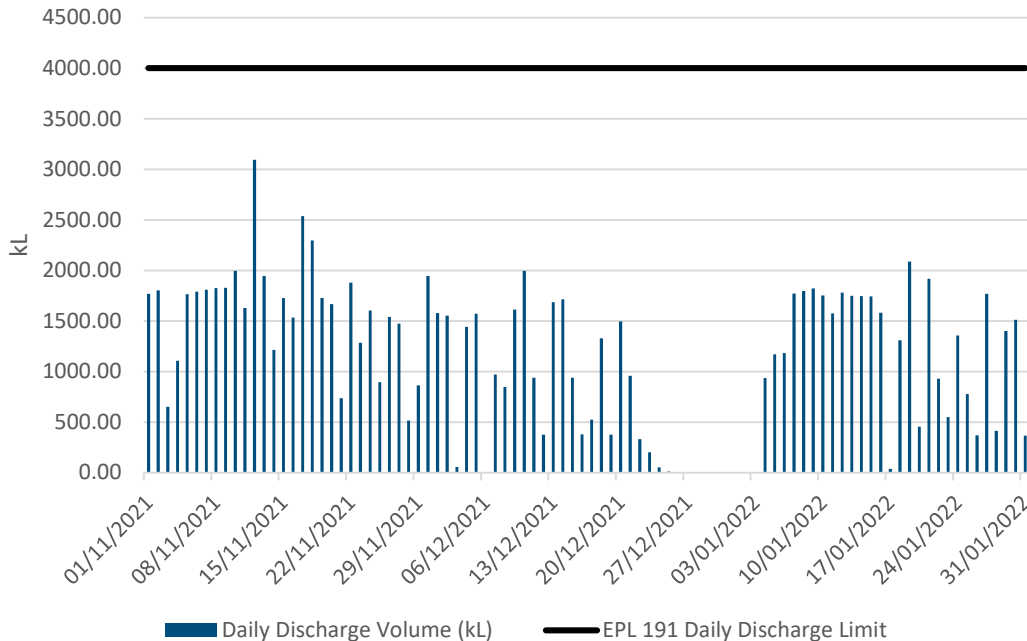
LDP1	Limits	Nov-2021	Dec-2021	Jan-2022
Faecal Coliforms (CFU/100ml)	200	<20	20	220
Total Suspended Solids (mg/kg)	50	8	6	<5
pH (pH Units)	6.5-8.5	7.82	7.70	7.35
Oil and Grease	10	<5	<5	<5

SURFACE WATER QUALITY – MANNERING COLLIERY



Manning Colliery Monthly Average Water Quality Results – Licenced Discharge Point 1

Manning Colliery - Surface Water Daily Discharge Volumes
1 Nov 2021 - 31 Jan 2022



LDP1	Limits	Nov 2021 Average	Dec 2021 Average	Jan 2022 Average
Oil & Grease mg/L	10	5.4 [^]	<5	<5
TSS mg/L	50	9.6 [^]	6.2 [^]	7 [^]
pH	6.5-8.5	7.85	7.87	7.82

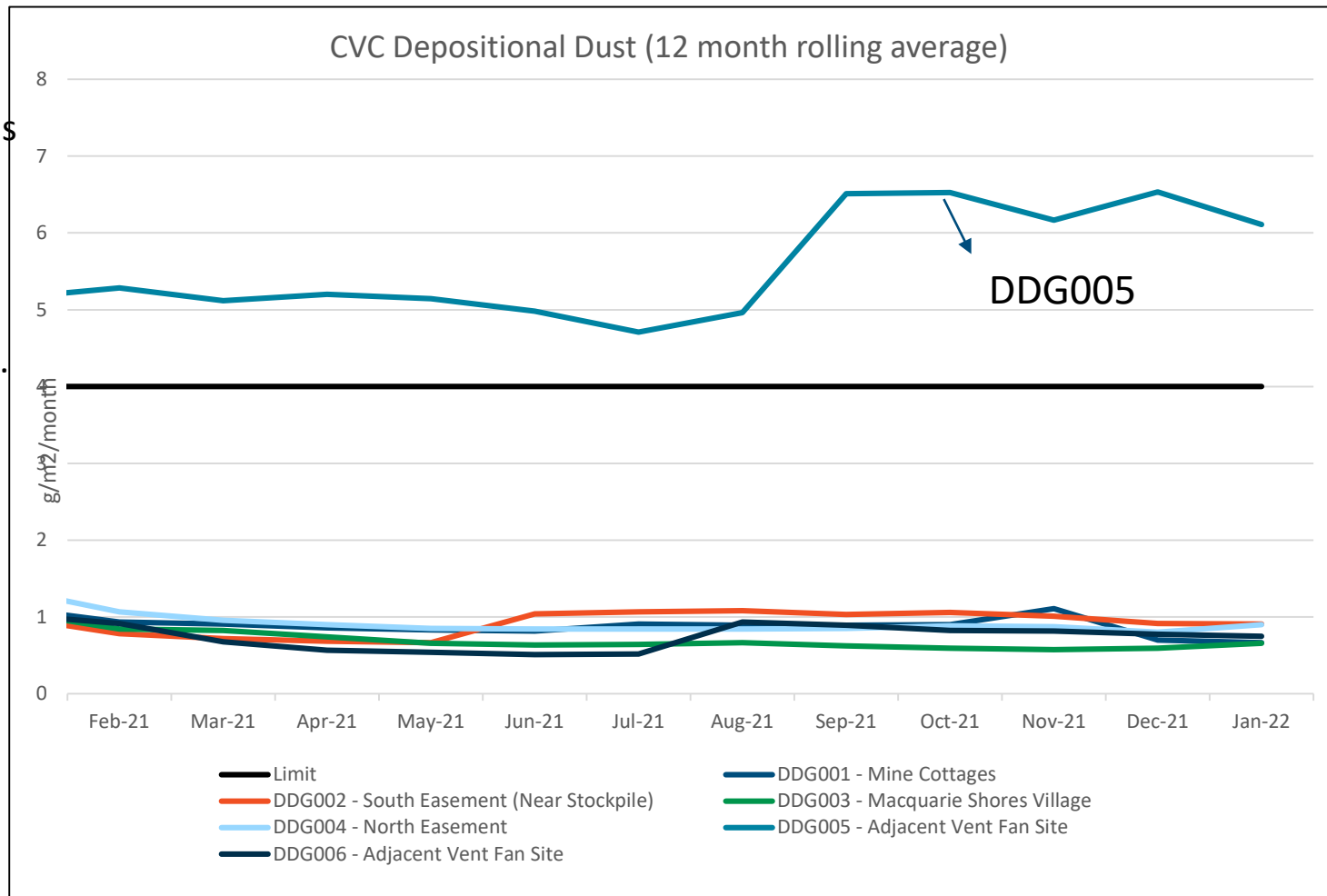
[^] Where an analyte concentration is reported as less than the limit of quantitation (LOQ), the concentration is assumed at the LOQ for the purpose of determining an average value.

DEPOSITIONAL DUST – CHAIN VALLEY COLLIERY



CVC depositional dust gauge locations are available in the CVC Air Quality Management Plan (available on the Delta Coal website).

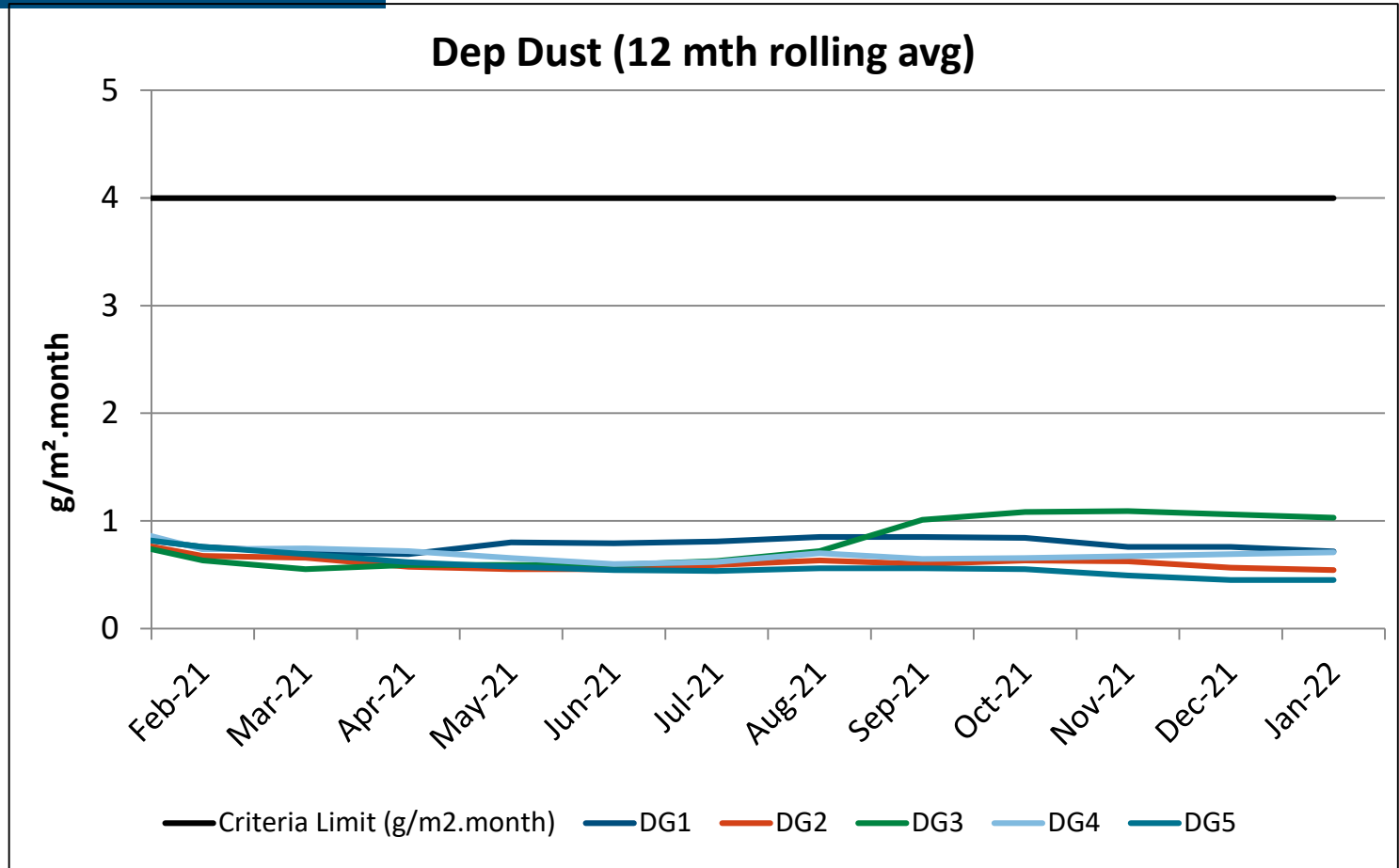
Technical non compliance of DDG005 due to ongoing gauge contamination.



DEPOSITIONAL DUST – MANNERING COLLIERY



MC depositional dust gauge locations are available in the MC Air Quality Management Plan (available on the Delta Coal website).

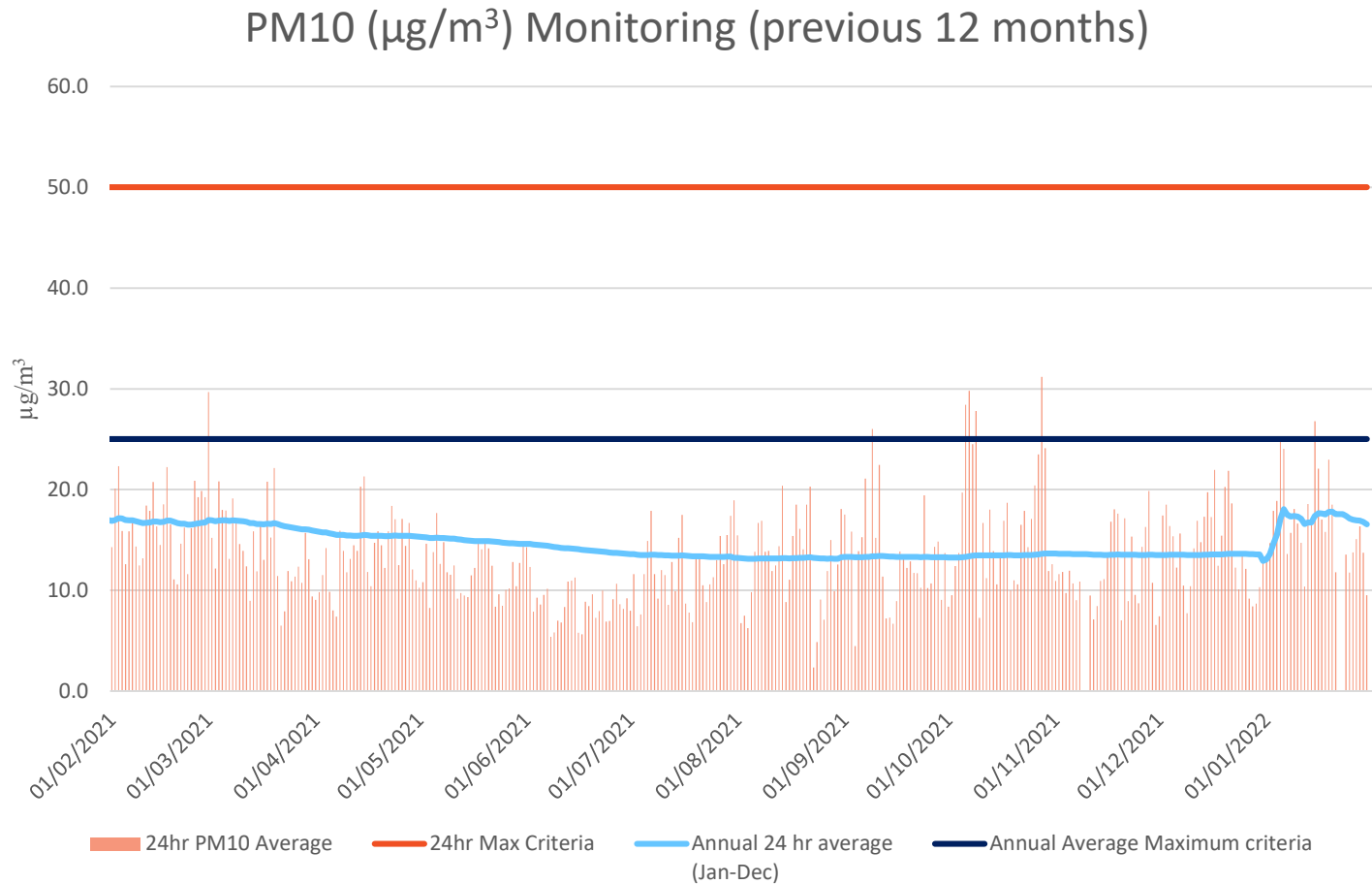


PM₁₀ MONITORING



Delta Coals tapered element oscillating microbalance (TEOM) PM10 monitor is located at the Mannering Park Sewage Treatment Plan. No exceedances of the average annual or 24hr criteria have been observed within the last 12 months.

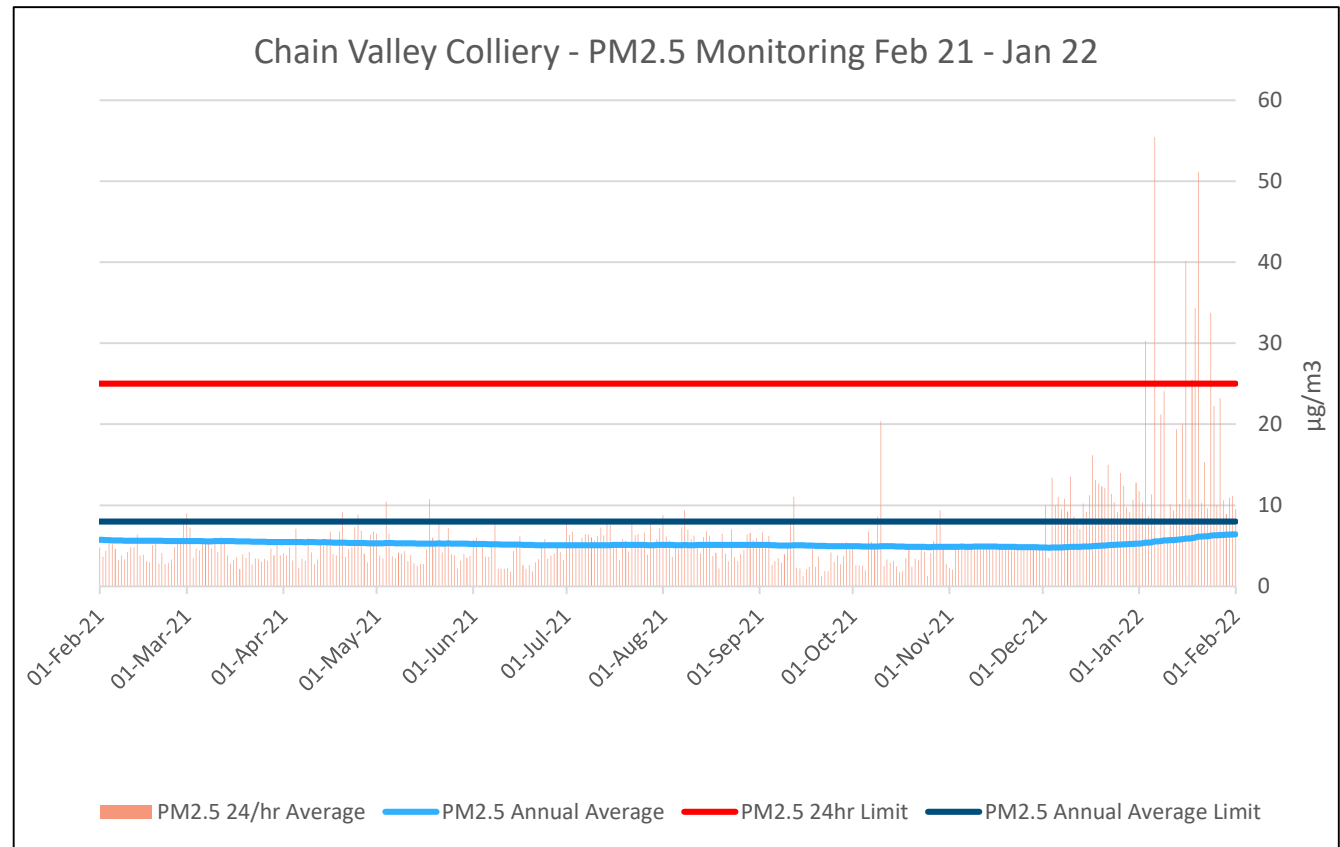
Note: annual average resets at calendar year.



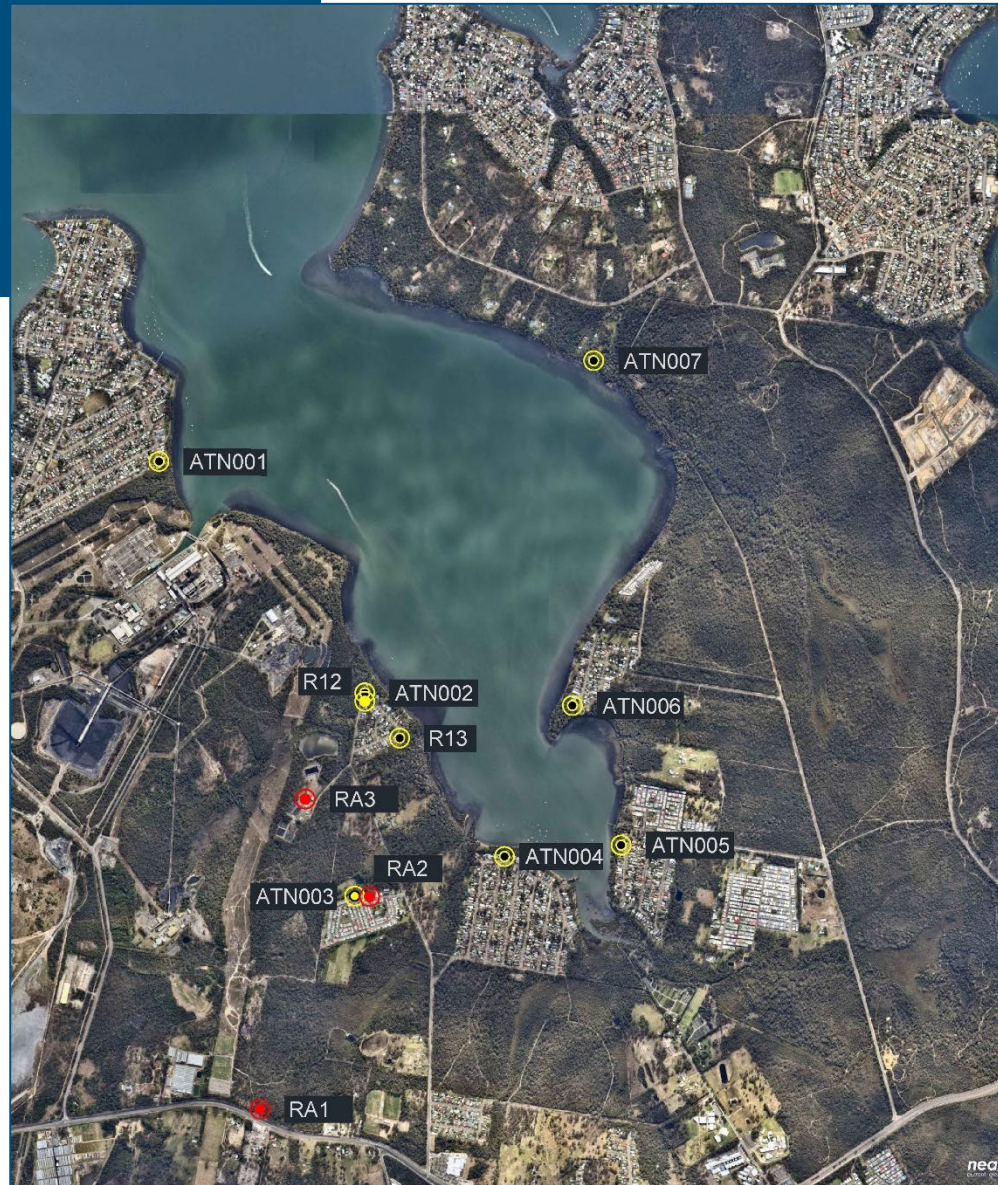
PM_{2.5} MONITORING



Delta Coal utilises Delta Electricity's Beta Attenuation Monitoring (BAM) PM_{2.5} continuous monitor located in Wye.



Noise Monitoring Locations



Red = MC Monitoring Location Yellow = CVC Monitoring Location	DELTA COAL	SCALE:	DATE: 16 February 2022
	Noise Monitoring Locations	DRAWN: S Drinkwater	DRG NO: C1_noise_mon_cvc+man
		CHECKED: -	REV NO: 0
		SIGNED: -	SIZE: A4

NOISE MONITORING MANNERING COLLIERY NOV-21 to JAN-22



Manning Colliery monthly noise monitoring locations are detailed in the Manning Colliery Noise Management Plan (available on the Delta Coal website).

There were no noise exceedances at MC for the reporting period (1 Nov 21 to 31 Jan 2022)

Date	Time	Location	Site Contributions, dB		Noise Limits, dB		Compliance status
			LAEQ	LAMAX	LAEQ	LAMAX	
January 2022							
21-Jan	8:35 PM	RA1	IA	N/A	36	N/A	Compliant
21-Jan	10:00 PM	RA1	IA	IA	36	46	Compliant
21-Jan	9:00 PM	RA2	IA	N/A	40	N/A	Compliant
21-Jan	10:45 PM	RA2	IA	IA	40	45	Compliant
21-Jan	9:27 PM	RA3	IA	N/A	39	N/A	Compliant
21-Jan	10:20 PM	RA3	IA	IA	39	49	Compliant
December 2021							
6-Dec	8:23 PM	RA1	IA	N/A	36	N/A	Compliant
6-Dec	11:30 PM	RA1	<35	<35	36	46	Compliant
6-Dec	8:45 PM	RA2	IA	N/A	40	N/A	Compliant
6-Dec	9:52 PM	RA2	IA	N/A	40	N/A	Compliant
8-Dec	1:45 AM	RA2	≤35	38	40	45	Compliant
6-Dec	7:18 PM	RA3	IA	N/A	39	N/A	Compliant
6-Dec	10:11 PM	RA3	IA	IA	39	49	Compliant
November 2021							
8-Nov	8:56 PM	RA1	IA	N/A	36	N/A	Compliant
8-Nov	10:06 PM	RA1	IA	IA	36	46	Compliant
8-Nov	9:45 PM	RA2	≤30	N/A	40	N/A	Compliant
8-Nov	10:45 PM	RA2	33	37	40	45	Compliant
8-Nov	9:17 PM	RA3	≤35	N/A	39	N/A	Compliant
8-Nov	10:26 PM	RA3	≤35	36	39	49	Compliant

NOISE MONITORING CHAIN VALLEY COLLIERY Q4 2021



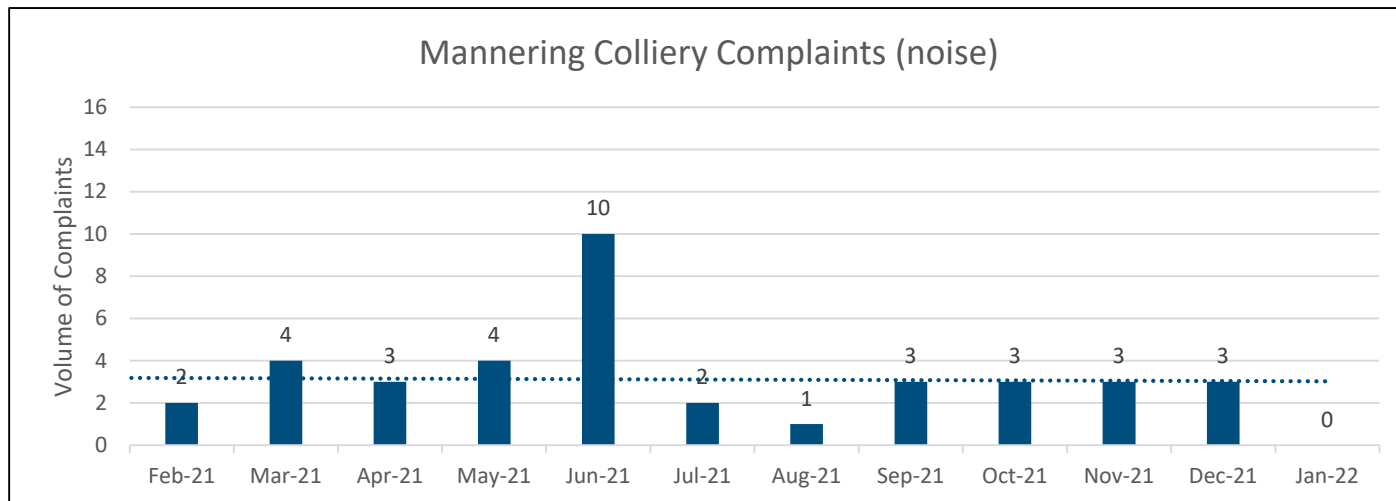
Chain Valley Colliery Q4 noise monitoring was considered an extended noise monitoring round, as required annually.

9 Locations are monitored during day, evening and night with timeframes as defined under the NSW EPA's *Noise Policy for Industry*.

Chain Valley Colliery Q4 2021 Monitoring							
Date	Time	Location	Site Contribution, dB		Noise Limits, dB		Q3 Compliance Status
			LAEQ	LAMAX	LAEQ	LAMAX	
6-Dec	Day	ATN001	IA	N/A	38	N/A	Compliant
6-Dec	Evening	ATN001	IA	N/A	38	N/A	Compliant
8-Dec	Night	ATN001	IA	IA	38	45	Compliant
6-Dec	Day	ATN002	IA	N/A	49	N/A	Compliant
6-Dec	Evening	ATN002	IA	N/A	49	N/A	Compliant
8-Dec	Night	ATN002	IA	IA	49	54	Compliant
6-Dec	Day	ATN003	IA	N/A	36	N/A	Compliant
6-Dec	Evening	ATN003	IA	N/A	36	N/A	Compliant
8-Dec	Night	ATN003	IA	IA	36	45	Compliant
6-Dec	Day	ATN004	IA	N/A	35	N/A	Compliant
6-Dec	Evening	ATN004	IA	N/A	35	N/A	Compliant
6-Dec	Night	ATN004	IA	IA	35	45	Compliant
6-Dec	Day	ATN005	IA	N/A	35	N/A	Compliant
6-Dec	Evening	ATN005	IA	N/A	35	N/A	Compliant
6-Dec	Night	ATN005	IA	IA	35	45	Compliant
6-Dec	Day	ATN006	IA	N/A	37	N/A	Compliant
6-Dec	Evening	ATN006	IA	N/A	37	N/A	Compliant
8-Dec	Night	ATN006	IA	IA	37	45	Compliant
6-Dec	Day	ATN007	42	N/A	46^	N/A	Compliant
6-Dec	Evening	ATN007	44 (42+2, LFN)	N/A	46^	N/A	Compliant
8-Dec	Night	ATN007	44 (42+2, LFN)	42	46^	46	Compliant
6-Dec	Day	R12	IA	N/A	49	N/A	Compliant
6-Dec	Evening	R12	IA	N/A	49	N/A	Compliant
8-Dec	Night	R12	IA	IA	49	53	Compliant
6-Dec	Day	R13	IA	N/A	43	N/A	Compliant
6-Dec	Evening	R13	IA	N/A	43	N/A	Compliant
8-Dec	Night	R13	IA	IA	43	49	Compliant

Community Complaints between 1 Nov-21 and 31 Jan-22

- Chain Valley Colliery:
 - Nil community complaints received in period.
- Mannering Colliery:
 - 6 noise complaints received in period;
 - All complaints received within previous 12 months pertain to Noise only;



LAKE MACQUARIE BENTHIC COMMUNITIES

Information on the benthic communities species distribution was requested at the November 2021 CCC meeting.

Benthic monitoring in Lake Macquarie is undertaken twice per year during Spring and Autumn.

- 83.5% of total organisms found comprised the adjacent 3 species
- Statistics presented are from a review of 2012-2020 benthic monitoring results.



Corbula Truncata (common name: blunt gaper), comprised **31.8%** of all benthos organisms identified in surveys between 2012 and 2020 and was the most common benthic species.



Sthenelais pettiboneae (common name: Polychaetes-thin), comprised **27.3%** of all benthos organisms identified in surveys between 2012 and 2020 and was the most common benthic species.



Soletellina (common name: sunset shells) comprised **24.4%** of all benthos organisms identified in surveys between 2012 and 2020 and was the most common benthic species.

LAKE MACQUARIE BENTHIC COMMUNITIES

A full list of identified benthos within Lake Macquarie is presented adjacent, along with comment on the frequency of occurrence:

- The three most common benthic species as previously discussed, are highlighted
- The remainder of the species identified in the adjacent table comprises 16.5% of identified organisms during surveying of benthos.

Designated name	Family or Species	Comments
Anemone	Coelenterata	Found associated with mussel shells.
Planaria (Flat worm)	Platyhelminthes	2 specimens found in 2017.
Polychaete thin	<i>Sthenelais pettiboneae</i>	Most common polychaete present.
Polychaete (thick)	Cirratulidae	Present in small numbers.
Polychaete (mud tube)	Not yet identified	Present in small numbers.
Polychaete	Terebellidae	Present at Stations C1, C6, R1 and IM2.
<i>Pectinaria</i> sp. Polychaete	Terebellidae	First found in March 2019
Gastropod	<i>Nassarius jonassii</i>	Present in small numbers.
Gastropod	<i>Lepsiella (Bedeva) hanleyi</i>	Present in small numbers.
Gastropod	Bullimorph slug	One specimen found in August 2014.
Bivalve	<i>Corbula truncata</i>	Common as live animals and dead shells.
Bivalve	<i>Soletellina alba</i>	Common
Bivalve	<i>Paphia undulata</i>	Uncommon as live animals. Common as dead shells.
Bivalve	<i>Cyamimactra mactroides</i>	Uncommon. (Brown or pink bivalve)
Bivalve	<i>Anadara trapezia</i>	Uncommon.
Bivalve	<i>Dosinia sculpta</i>	Many juveniles found in sandy sediment in September 2019.
Bivalve	<i>Trichomya hirsuta</i>	Common as dead shells. Found in large clumps at C2, C6, R3, R7, IM2 and IM3.
Bivalve	<i>Saccostrea glomerata</i>	Found on mussels at C4 and C6 in 2021.
Ophurid	Brittle star	Uncommon. Found amongst mussel clumps and on mud.
Echinoid	Sea urchin	Uncommon. Found at C5 and C7 in 2021.
Sponge	White calcareous sponge	Specimen found associated with mussels.
	Pink sponge	Small species found on mud surface.
	Red sponge	Several specimens found in 2019.
Crabs	Small	Uncommon.
Prawn	Small	One specimen taken in March 2013 at R3 and one specimen in September 2013 at C4.
Shrimp	Small	Found at IM2 in March 2014.
Fish	Small (35mm)	One specimen taken at C3 (September 2012), at R1 (September 2013) and at IM4 in March 2017. 1 specimen in C6 in 2019.

QUESTIONS

Next Meeting: 18th May 2022 at 2:00pm