

24 July 2020

Downer EDI Mining – Blasting Services Pty Ltd  
Lot 2, 8 Melva Place  
Mt Thorley NSW 22330

<https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers>

**Effluent Water Quality Monitoring – Downer Blasting Services (DBS), 9 Melva Place, Mount  
Thorley  
September 2020**

Effluent Water Quality Monitoring was carried out at Downer Blasting Facility, EPL Licence 12325. The sampling was conducted by independent consultancy Environmental Resources Management (ERM) on behalf of DBS.

Sampling was carried out in accordance with the Approved Methods for the Sampling and Analysis of Water Pollutants in New South Wales (DEC, 2004, Approved Methods), with reference to the following standards:

- AS/NZS 5667.1:1998(R2016) Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples; and
- AS/NZS 5667.4:1998(R2016) Guidance on sampling from lakes, natural and manmade.

Effluent is required to be sampled on a quarterly basis from the site Waste Water Treatment Plant (WWTP) as per the requirements of EPL Licence 12325.

The sample point utilised to undertake the sample was (please choose)

*Effluent discharge outlet hose located at Monitoring at co-ordinates 322450 6389500 (Easting Northing)*

Or

*If insufficient treated effluent is available to enable sampling from discharge outlet, sampling is taken from the final effluent holding tank*

The sample was transported to the Eurofins laboratory, a NATA accredited laboratory, on the same day for pH and faecal coliforms analysis.

## Results Summary

The analytical results from this event and previous monitoring events are displayed in **Table 1** below.

**Table 1 Table 1 Effluent Water Quality Monitoring Results**

Event	Purge Date	pH	Faecal coliforms (MPN or CFU/100mL)
Q2 2018	Jun-18	4.00	<2
Q3 2018	Sep-18	7.49	62.0
Q4 2018	Dec-18	7.58	~400*
Q1 2019	Mar-19	7.55	~91*
Q2 2019	Jun-19	7.96	130.0
Q3 2019	Sep-19	4.26	<9
Q4 2019	Dec-19	5.05	<17
Q1 2020	Feb-20	3.28	<9
Q2 2020*	Jun-20	7.90	>24000**
Q2 2020	July-20	6.4	840
Q3 2020	Sept-20	7.2	20

\* Q2 2020 sampling was undertaken twice following an anomalous result for faecal coliforms reported during the June sampling event.

## Discussion

There are no limits set in EPL Licence 12325 for the WWTP Effluent sample for pH or faecal coliforms.

The next sample is due to be completed in 3months

**Appendix A - Certificate of Analysis**



Certificate of Analysis

**ERM Hunter Valley**  
**Level 1 / 45 Watt Street**  
**Newcastle**  
**NSW 2300**



**NATA Accredited**  
Accreditation Number 1261  
Site Number 1254 & 14271

Accredited for compliance with ISO/IEC 17025 – Testing  
The results of the tests, calibrations and/or  
measurements included in this document are traceable  
to Australian/national standards.

**Attention:** Matthew Colthorpe

**Report** 744658-W  
Project name DBS MT THORLEY SW  
Project ID 555801  
Received Date Sep 17, 2020

<b>Client Sample ID</b>			<b>EFF01</b>
<b>Sample Matrix</b>			<b>Water</b>
<b>Eurofins Sample No.</b>			<b>M20-Se29751</b>
<b>Date Sampled</b>			<b>Sep 15, 2020</b>
<b>Test/Reference</b>	LOR	Unit	
<b>pH (at 25 °C)</b>			
	0.1	pH Units	7.2
<b>Pathogens</b>			
Thermotolerant Coliforms	1	MPN/100mL	MD120