

Challenger Mines Pty Ltd

**Environment Protection Licence 10265
Monthly Monitoring Data Summary**

August 2017

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1. INTRODUCTION

Environmental Protection Licence (**EPL**) holders are required under the *Protection of the Environment Operations Act 1997* to make publicly available their monitoring results for those parameters specified in the EPL. This document has been prepared to satisfy this requirement.

Challenger Mines operations are conducted in accordance with EPL 10265. The licence details are as follows:

License Holder: Challenger Mines Pty Limited

Licence Number: 10265

Premises: Challenger Mines
33 Ryans Road
Adelong 2729

Access to Licence: <http://www.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=10265&id=10265&option=licence&searchrange=licence&range=POEO&licence&prp=no&status=Issued>

Monitoring Locations: See main text and **Appendix A**

This document provides a summary of environmental monitoring data sampled as prescribed by EPL 10265 for March 2017 (**Reporting Period**). Monitoring data provided is as follows:

- Air quality
- Surface Water Quality
- Ground Water Quality

Monitoring Data Collected: August 2017

2. AIR QUALITY

Under EPL 10265 CMPL is required to undertake dust monitoring at EPA Monitoring Points 11,12,13,14, and 15 (**Appendix A**)

2.1 Dust

Pollutant:	Total Solid Particles
Unit of measure:	Grams per square metre per month
Monitoring location:	See Table 1 and Appendix A .
Monitoring frequency required by licence:	Monthly

Table 1. Dust Monitoring Summary

	Description	EPL11	EPL12	EPL13	EPL14	EPL15
	Sample Date	24/8/2017	24/8/2017	24/8/2017	24/8/2017	24/8/2017
Analyte Name	Units	Result	Result	Result	Result	Result
Sampling Period in Days	days	30	30	30	30	30
Total Insoluble Solids	mg	<1	14	9	7	43
Total Insoluble Solids Per Sampling Period	g/m ² /30 days	<0.1	0.8	0.5	0.4	2.5

3. SURFACE WATER

Under EPL 10265 CMPL is required to undertake surface water monitoring at EPA Monitoring Points 3,4,5, and 6 (**Appendix A**).

The monitoring frequency required by the CMPL licence is quarterly or weekly at EPL3 if discharging.

Weekly sampling at EPL 3 Goodwin Dam Spillway was required this month results are tabled below see Table 2

Table 2 Surface Water Monitoring

			EPL 3	EPL 3	EPL 3	EPL 3
			10/8/2017	16/8/2017	23/8/2017	30/8/2017
Analyte Name	Units	EPL LIMIT	Result	Result	Result	Result
pH**	No unit	6-8.5	8.0	8.7	8.4	9.2
Conductivity @ 25 C	µS/cm	800	420	460	440	480
Fluoride	mg/L	2	0.23	0.22	0.22	0.20
Sulfate, SO4	mg/L		160	140	150	140
Biochemical Oxygen Demand (BOD5)	mg/L	30	<5	<5	<5	<5
Total Cyanide	mg/L		<0.004	<0.004	<0.004	<0.004
Oil and Grease	mg/L	10	<5	<5	<5	<5
Chemical Oxygen Demand	mg/L		23	17	18	17
Total Suspended Solids Dried at 103-105°C	mg/L	50	<5	<5	<5	<5
Anionic Surfactants as MBAS (Calc. as LAS MW 288)	mg/L		<0.1	0.1	<0.1	<0.1
Total Aluminium	mg/L	5	0.069	0.13	0.062	0.062
Total Arsenic	mg/L	0.5	<0.001	<0.001	<0.001	<0.001
Total Cadmium	mg/L	0.01	<0.001	<0.0001	<0.0001	<0.0001
Total Chromium	mg/L	1	<0.001	0.002	<0.001	<0.001
Total Cobalt	mg/L	1	<0.001	<0.001	<0.001	<0.001
Total Copper	mg/L	0.4	0.001	0.002	0.001	0.001
Total Lead	mg/L	0.1	<0.001	<0.001	<0.001	<0.001
Total Manganese	mg/L	N/A	0.005	0.008	0.005	0.006
Total Molybdenum	mg/L	0.15	0.002	0.002	0.001	0.002
Total Nickel	mg/L	1	<0.001	<0.001	<0.001	0.001
Total Selenium	mg/L	0.02	<0.001	<0.001	<0.001	<0.001
Total Zinc	mg/L	20	<0.005	<0.005	<0.005	<0.005
Total Mercury	mg/L	0.002	<0.0001	<0.0001	<0.0001	<0.0001

4. Ground Water

Under EPL 10265 CMPL is required to undertake ground water monitoring at EPA Monitoring Points 7,8,9 and 10 quarterly (**Appendix A**).

No sampling was required this month.

Appendix A

EPL monitoring Locations for Dust, Groundwater and Surface Waters

EPL SAMPLING LOCATIONS FOR WATER AND DUST MONITORING

