

**Challenger Mines Pty Ltd**

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

**January 2018**

## Contents

1. INTRODUCTION .....	1
2. AIR QUALITY .....	2
3. SURFACE WATER.....	4
4. GROUND WATER.....	9

## Tables

Table 1. Dust Monitoring Summary .....	2
Table 2 Surface Water Monitoring Summary.....	8
Table 3: Ground Water Monitoring Requirements .....	10

## 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=POEOlicence&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 December 2017.

Monitoring data provided is as follows:

- Air quality
- Surface water quality
- Ground water quality

## 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

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

**Table 1. Dust Monitoring Summary**

		EPL 11	EPL 12	EPL 13	EPL 14	EPL 15
	<b>Sample Date</b>					
	<b>12/01/20189</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>
Total Insoluble Solids Per Sampling Period	g/m <sup>2</sup> /30 days	2.5	x	0.8	1.4	2.7

### 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**). This month follow up water sampling was conducted..

<b>Pollutant:</b>	Various see Table 2
<b>Unit of measure:</b>	See Table 2
<b>Monitoring location:</b>	See <b>Table2</b> and <b>Appendix A</b> .
<b>Monitoring frequency required by licence:</b>	Quarterly at EPL4,5,6 and weekly at EPL 3 during discharge

Table 2 Surface Water Monitoring Summary

Sample Date	11/01/2018			
		EPL 3	EPL 4	EPL 5
Analyte Name	Units			
pH**	No unit	7.7	7.9	8.4
Conductivity @ 25 C	µS/cm	450	460	450
Fluoride	mg/L	0.27	0.27	0.54
Sulphate, SO4	mg/L	91	91	160
Biochemical Oxygen Demand (BOD5)	mg/L	<5	<5	<5
Total Cyanide	mg/L	<0.004	<0.004	<0.004
Oil and Grease	mg/L	5	<5	<5
Chemical Oxygen Demand	mg/L	30	33	19
Total Suspended Solids Dried at 103-105°C	mg/L	11	17	<5
Anionic Surfactants as MBAS (Calc. as LAS MW 288)	mg/L	<0.1	<0.1	<0.1
Total Aluminium	mg/L	0.11	0.084	0.086
Total Arsenic	mg/L	<0.001	<0.001	<0.001
Total Cadmium	mg/L	<0.0001	<0.0001	<0.0001
Total Chromium	mg/L	<0.001	<0.001	<0.001
Total Cobalt	mg/L	<0.001	<0.001	<0.001
Total Copper	mg/L	<0.001	<0.001	0.001
Total Lead	mg/L	<0.001	<0.001	<0.001
Total Manganese	mg/L	0.085	0.11	0.006
Total Molybdenum	mg/L	0.001	0.001	0.002
Total Nickel	mg/L	<0.001	<0.001	<0.001
Total Selenium	mg/L	<0.001	<0.001	<0.001
Total Zinc	mg/L	<0.005	<0.005	<0.005
Total Mercury	mg/L	<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 (**Appendix A**).

<b>Pollutant:</b>	Various see Table 3
<b>Unit of measure:</b>	See Table 3
<b>Monitoring location:</b>	See <b>Table3</b> and <b>Appendix A</b> .
<b>Monitoring frequency required by licence:</b>	Quarterly

All groundwater bores were inspected and found to be dry this quarter no sampling required.

# **Appendix A**

## **EPL monitoring Locations for Dust, Groundwater and Surface Waters**



# EPL SAMPLING LOCATIONS FOR WATER AND DUST MONITORING

