

Challenger Mines Pty Ltd

**Environment Protection Licence 10265
Monitoring Data Summary**

October 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 October 2018 (**Reporting Period**).

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

| | |
|--|--|
| 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

| | | EPL 11 | EPL 12 | EPL 13 | EPL 14 | EPL 15 |
|---|------------------------------|---------------|---------------|---------------|---------------|---------------|
| | Sample Date | | | | | |
| | 24 /10/2019 | Result | Result | Result | Result | Result |
| Total Insoluble Solids Per Sampling Period | g/m ² /30 days | 2.5 | 0.9 | 2.6 | 1.3 | 2.8 |

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**).

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

Table 2 Surface Water Monitoring Summary

*no discharge from EPL3 no sampling was required

*EPL 5 was dry

| Sample Date | 25/10/2018 | | |
|---|------------|---------|---------|
| | | EPL 4 | EPL 6 |
| Analyte Name | Units | | |
| pH** | No unit | 7.3 | 8.6 |
| Conductivity @ 25 C | µS/cm | 540 | 480 |
| Fluoride | mg/L | 0.29 | 0.48 |
| Sulphate, SO4 | mg/L | 40 | 170 |
| Biochemical Oxygen Demand (BOD5) | mg/L | <5 | <5 |
| Total Cyanide | mg/L | <0.004 | <0.004 |
| Oil and Grease | mg/L | <5 | 27 |
| Chemical Oxygen Demand | mg/L | 15 | 33 |
| Total Suspended Solids Dried at 103-105°C | mg/L | <5 | 10 |
| Anionic Surfactants as MBAS (Calc. as LAS MW 288) | mg/L | <0.1 | <0.1 |
| Total Aluminium | mg/L | 0.013 | 0.27 |
| Total Arsenic | mg/L | <0.001 | 0.001 |
| Total Cadmium | mg/L | <0.0001 | <0.0001 |
| Total Chromium | mg/L | <0.001 | <0.001 |
| Total Cobalt | mg/L | <0.001 | <0.001 |
| Total Copper | mg/L | 0.002 | 0.001 |
| Total Lead | mg/L | 0.001 | <0.001 |
| Total Manganese | mg/L | 0.16 | 0.012 |
| Total Molybdenum | mg/L | 0.003 | 0.004 |
| Total Nickel | mg/L | <0.001 | 0.001 |
| Total Selenium | mg/L | <0.001 | <0.001 |
| Total Zinc | mg/L | <0.005 | <0.005 |
| Total Mercury | mg/L | <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**).

| | |
|--|---|
| Pollutant: | Various see Table 3 |
| Unit of measure: | See Table 3 |
| Monitoring location: | See Table3 and Appendix A . |
| Monitoring frequency required by licence: | 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

