

DEVELOP

Summary of Environmental Monitoring Data

1 – 28 February 2025

Woodlawn Copper Zinc Project

Document Review/Change History

Date	Review/ChangeType Created, Reviewed, Changed or Obsolete	Revision No.	Authors	
			Reviewed by	Approved by
21/03/2025	Document finalised	0	KC	KC

Compliance summary – February 2025

Medium	Parameter	Compliant with license and project approval	Comment
Air	Deposited dust	Yes	-
	Total Suspended Particulate	Yes	-
	Particulate matter in the air with a diameter of 10 micrometres or less	Yes	-
Water	Surface water	NA	Reported quarterly – next due April 25
	Ground water	NA	Reported quarterly – next due April 25
Noise	Noise monitoring	NA	Not required – site not currently operational
Vibration	Blast monitoring	Yes	-

Contents

1. EPL Licence Information.....	4
2. Introduction	5
3. Meteorological Monitoring.....	6
4. Air Quality Monitoring	7
4.1. <i>Depositional Dust</i>	8
4.1.1. Compliance comments.....	9
4.2. <i>Atmospheric dust – particulate matter</i>	9
4.2.1. Compliance comments.....	9
5. Surface water monitoring	10
6. Ground Water Monitoring	10
7. Noise Monitoring	11
8. Blast monitoring	11
8.1.1. Compliance comments.....	13
9. Complaints	13

FIGURES

Figure 3-1 Wind rose for February 2025.....	7
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TABLES

Table 1-1 EPL details	4
Table 3-2 Meteorological data: February 2025.....	6
Table 4-3 Supporting information of EPL 20821 dust monitoring requirements	7
Table 4-4 Deposited dust limits	8
Table 4-5 February 2025 DDG results	8
Table 4-6 TSP and PM10 limits.....	9
Table 4-7 PM10 and TSP results February 2025	9
Table 8-8 Blasting criteria.....	11
Table 8-9 Blast log February 2025	12

1. EPL LICENCE INFORMATION

Details of the EPL licence holder and licence versions are summarised in Table 1-1.

Table 1-1 **EPL details**

Environment Protection License Number	20821
Licensee	Tarago Operations Pty Ltd
Licensee address	Woodlawn Mine 507 Collector Road TARAGO NSW 2580
Premises	Woodlawn Mine 507 Collector Road TARAGO NSW 2580
Link to full licence on the EPA website	<p>19 December 2023 Version: https://app.epa.nsw.gov.au/prpoeoapp/ViewPOEONotice.aspx?DOCID=-1&SYSUID=1&LICID=1635655</p> <p>22 September 2023 Version: https://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=284443&SYSUID=1&LICID=20821</p> <p>18 August 2022 Version: https://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=249503&SYSUID=1&LICID=20821</p> <p>16 Feb 2022 Version: https://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=236150&SYSUID=1&LICID=20821</p> <p>18 Jan 2019 Version: https://app.epa.nsw.gov.au/prpoeoapp/ViewPOEONotice.aspx?DOCID=-1&SYSUID=1&LICID=20821</p> <p>7 May 2018 Version: https://app.epa.nsw.gov.au/prpoeoapp/ViewPOEONotice.aspx?DOCID=-1&SYSUID=1&LICID=20821</p> <p>12 May 2017 Initial issue: https://app.epa.nsw.gov.au/prpoeoapp/ViewPOEONotice.aspx?DOCID=-1&SYSUID=1&LICID=20821</p>
Complaints telephone number	1800 371 124

2. INTRODUCTION

Tarago Operations Pty Ltd, a wholly owned subsidiary of Develop Global, holds Environment Protection Licence 20821 (EPL 20821) issued by the Environment Protection Agency (EPA) under the Protection of the Environment operations Act 1997 (the Act) and operates under the conditions of Project Approval 07_0143 (MOD2) granted by the NSW Department of Planning and Infrastructure for the Woodlawn Mine Project. This report has been prepared to satisfy the reporting requirements of Section 66 (6) of the Protection of the Environment and Operations Act 1997, and also, Schedule 6, Condition 11 of the Project Approval. These documents can be found on the Develop web site (<https://develop.com.au>).

Ownership of Woodlawn mine changed on 19 May 2022 when Develop purchased the Woodlawn Mine from Heron Resources.

The EPL was first issued on 29 March 2017 and has been reviewed numerous times since as included in Table 1-1.

This report summarises environmental monitoring results for the Woodlawn Mine for the period 1 – 28 February 2025.

3. METEOROLOGICAL MONITORING

Develop is required to undertake meteorological monitoring on site. Site weather is obtained from the meteorological station located at the EPL 11436 premises. The detailed August 2025 daily weather data is shown in Table 3-2. The total annual rainfall received on site to end of February 2025 has been 141.5mm.

Table 3-2 Meteorological data: February 2025

Date (Dec 24)	Temp min (°C) ¹	Temp max (°C)	Rain (mm)	No. of wet days (total)	Weather station - Hours recorded (n)	Avg wind speed (m/s)	Avg wind direction (deg)	Evapo transpiration (mm)
1	14.35	23.95	0.00	0.00	24	12.25	68.78	4.42
2	15.48	26.67	0.00	0.00	24	11.35	64.17	5.64
3	13.58	28.20	0.00	0.00	24	10.37	58.33	6.51
4	15.48	30.84	0.00	0.00	24	8.65	186.35	4.79
5	16.01	28.40	17.00	1.00	24	9.15	176.28	3.74
6	15.45	28.48	0.00	0.00	24	8.92	94.72	5.51
7	14.74	31.13	5.50	1.00	24	7.76	207.86	6.17
8	15.90	26.95	10.50	1.00	24	7.77	130.32	3.47
9	15.58	24.63	5.50	1.00	24	10.87	78.52	3.73
10	14.83	20.14	19.50	1.00	24	11.56	102.47	2.61
11	11.94	23.93	0.00	0.00	24	6.32	114.51	4.42
12	13.88	21.92	0.00	0.00	24	10.58	87.91	3.62
13	16.84	26.00	0.00	0.00	24	13.78	30.28	4.59
14	17.01	23.52	5.50	1.00	24	11.66	236.98	1.73
15	12.11	18.00	0.00	0.00	24	17.14	268.57	5.39
16	5.89	16.74	0.00	0.00	24	10.40	191.64	4.60
17	4.66	19.23	0.00	0.00	24	6.26	125.47	4.73
18	8.09	22.64	0.00	0.00	24	8.93	168.95	4.49
19	12.39	23.29	0.00	0.00	24	10.83	76.14	4.08
20	11.95	17.52	0.00	0.00	24	13.86	78.95	2.79
21	10.18	22.85	0.00	0.00	24	10.45	60.19	3.09
22	15.24	26.57	0.00	0.00	24	8.07	48.75	4.68
23	12.67	25.08	0.00	0.00	24	11.87	229.73	3.92
24	14.27	28.69	0.00	0.00	24	13.84	196.44	5.67
25	14.07	16.58	0.00	0.00	24	12.68	83.56	0.80
26	13.80	28.78	0.00	0.00	24	8.02	152.57	5.02
27	16.03	28.27	0.00	0.00	24	7.90	88.41	4.57
28	15.10	29.14	0.00	0.00	24	11.28	227.93	5.91
Average/ Total	4.66	31.13	63.50	6.00	24	10.45	129.81	4.31

The wind rose in Figure 3-1 depicts the wind speed and direction recorded at 10 m above ground level. The wind rose shows a strong easterly influence in the winds experienced across site during February 2025.

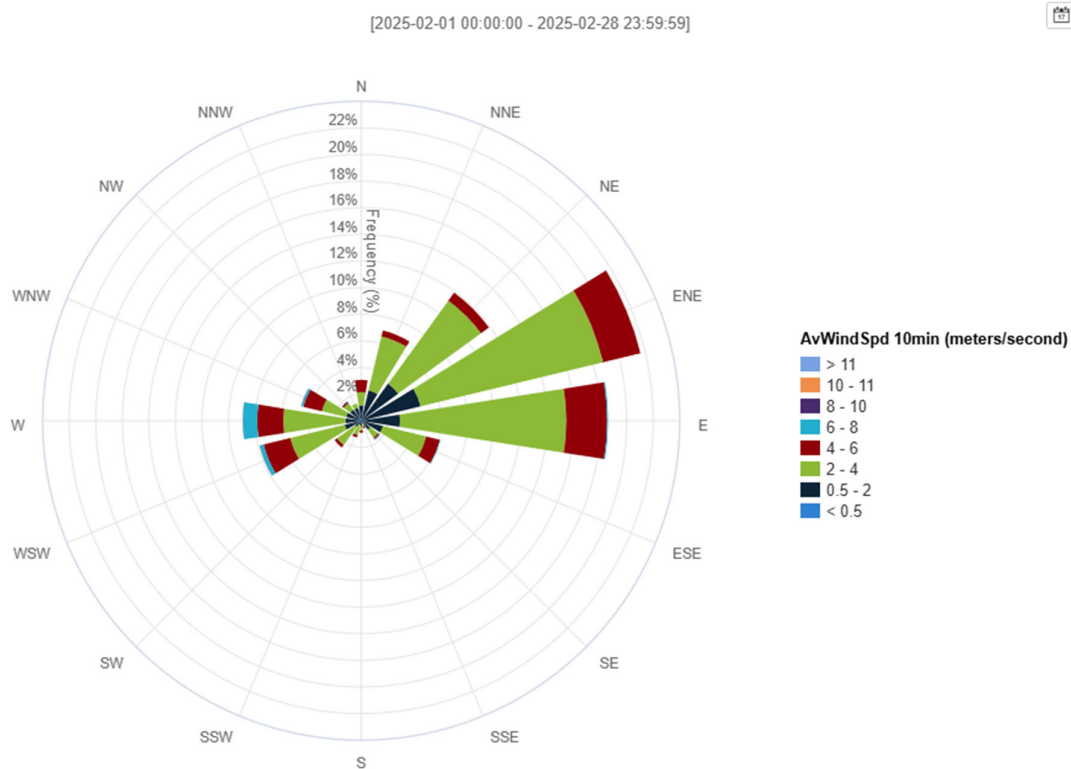


Figure 3-1 Wind rose for February 2025

4. AIR QUALITY MONITORING

Air quality monitoring is undertaken in accordance with the conditions of EPL20821. There are four dust deposition gauges and two high volume air samples monitoring for PM10 and TSP separately. Table 4-3 summarises the frequency and units for monitoring data for the reporting period.

Table 4-3 Supporting information of EPL 20821 dust monitoring requirements

Parameter	Monitoring site	Monitoring frequency	Unit of measure
Air quality monitoring: Deposited Dust (insoluble solids)	DG 22, DG28, DG33, DG34	Monthly	g/m ² /month
TSP	HVAS-1	24 hours every six days	µg/m ³
PM10	HVAS-2	24 hours every six days	µg/m ³

Explanation of units of measurement

mg/m³ = milligrams per cubic metre

g/m²/month = grams per square metre per month

µg/m³ = micrograms per cubic metre

⁴⁴Uroqj#dyhudjh#ddxolwg#ehwzhq#lhexdu|#57#,#lhexdu|#58#
#

4.1.1. Compliance comments

Depositional dust results are within the criteria set out in the PA and the rolling annual average emissions are within the criteria set out in the PA.

4.2. Atmospheric dust – particulate matter

The Project Approval requires monitoring of total suspended particulate (TSP) matter and particulate matter < 10µm (PM₁₀) to ensure particulate matter emissions generated by the project do not exceed the criteria listed at any residence on privately owned land. High volume air sampling (HVAS) equipment for atmospheric monitoring was installed on 16 October 2017 at Pylara Farm Homestead the nearest residence located to the east of Woodlawn Mine. Monitoring commenced on 17 October 2017 and is undertaken for a 24 hour cycle every 6 days.

The limits for TSP and PM₁₀ outlined in the Project Approval (PA) are detailed in Table 4-6. Results for February 2025 are shown in Table 4-7.

Table 4-6 TSP and PM₁₀ limits

Pollutant	Averaging Period	Criterion ^a
Total suspended particulate (TSP) matter	Annual	^b 90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^b 30 µg/m ³
Particulate matter < 10 µm	24 hour	^b 50 µg/m ³

^a {foxghv#(wdrugbdu|#hyhgw#xflk#iv#xvkiilhv/#uhvfuehg#exuqlj/#pxvw#wup v/#rj/#lhh#qfghgw#u#lq|#wkuh#lfw#l|#ljuhgh#e|#kh#lhfvr#hghud#

^b #rvd#p sdfw#lhh#qfuhp hqvdlqfudvhh#frqfghqvdlwqvgxh#r#kh#sunfw#sovf#edfnjuxqg#frqfghqvdlwqvgxh#r#lch#wkuh#vrxufhv,##

Table 4-7 PM₁₀ and TSP results February 2025

Date	PM ₁₀ (µg/m ³)	PM ₁₀ rolling annual average	TSP (µg/m ³)	TSP Rolling annual average
01/02/2025	10.6	7.46	13.7	12.99
07/02/2025	9.3	7.49	17.2	12.87
13/02/2025	14.1	7.57	19.2	13.01
19/02/2025	10.6	7.69	18.6	12.92
25/02/2025	11	7.12	18.9	13.13

4.2.1. Compliance comments

The PM₁₀ and TSP results for 24 hour period are within the criteria set out in the PA. The rolling annual average emissions are within the criteria set out in the PA.

5. SURFACE WATER MONITORING

Develop carries out surface water quality monitoring at six locations designated in EPL 20821. Monitoring and reporting is undertaken for the parameters and at the frequencies prescribed in EPL 20821 Condition M2.2. The locations are:

- Site 115 - Allianoyonyiga Creek
- Site 105 - Crisps Creek
- Site 100 - Woodlawn/Wileroo Boundary South, below Waste Rock Dam
- Site 109 - Pylara Boundary below South Tailings Dam
- Site 300 - Processing Plant Pollution Control Dam
- Tailings Storage Facility 4 (TSF4)

Of the six surface monitoring locations designated in the EPL, two monitor water quality within the process water circuit, and the remaining 4 are for monitoring ephemeral analogue sites. The purpose of the surface water monitoring program is to ensure that mining operations have minimal impact on water quality.

Surface water quality results for the quarter January to March 2025 will be reported in the April 2025 report.

6. GROUND WATER MONITORING

Groundwater monitoring is carried out quarterly at 11 ground water monitoring points in accordance with the requirements of EPL 20821. Monitoring and reporting is undertaken for the parameters and at the frequencies prescribed in EPL 20821 Condition M2.2. The purpose of the groundwater monitoring program is to ensure water quality impacts associated with the mining operation are minimised. There are three analogue groundwater locations and eight groundwater monitoring points listed in the EPL. The locations are:

- MB4 – upgradient from the processing plant site
- MB5 - southern face of the rehabilitated waste rock dump
- MB6 - adjacent to mine entry
- MB8 - adjacent to Collector Road and downstream of processing plant site
- MB11 - below ED2 dam wall
- MB12 - below ED2 dam wall
- MB13 - western premises boundary
- MB14 - background ground water quality site
- MB15 - measure seepage from Rehabilitated Waste Rock Dump
- MB16 - measures seepage from Rehabilitated Waste Rock Dump
- MB17 - measures seepage from Rehabilitated Waste Rock Dump

Ground water monitoring results for the quarter January to March 2025 will be reported in the April 2025 report.

7. NOISE MONITORING

The EPL stipulates that noise from the premises must not exceed an L Aeq, 15 minute noise level of 35dB(A) at any sensitive receivers under the following meteorological conditions:

- Wind speeds up to 3 m/s at 10m above ground level or
- Temperature inversion conditions of up to 3°C/100m and wind speeds up to 2 m/s at 10 m above ground level.

Following the announcement by Heron Resources on 25 March 2020 that Woodlawn mine would enter care and maintenance, there has been no operational activities undertaken on the site. Since the purchase of Woodlawn Mine by Develop in May 2022, there have been no surface mining operations carried out. Consequently, noise monitoring was not undertaken during February 2025.

8. BLAST MONITORING

EPL 20821 stipulates the criteria to be met to ensure that air-blast overpressure level from blasting at the Woodlawn project does not exceed the criteria detailed in Table 8-8 at any residence on privately owned land.

Table 8-8 **Blasting criteria**

Location	Time of blasting	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on any privately-owned land	Any time	120	10	0%
	Day	115	5	5% of the total number of blasts over a period of 12 months
	Evening	-	2	5% of the total number of blasts over a period of 12 months
	Night, and all day on Sundays and public holidays	-	1	0%

All blast data and blast events that trigger the monitoring equipment is recorded with the data retained on site. Blasting activities have recommenced from 8 August 2024. The blast log for February 2025 is contained in Table 8-9. UM15923 was not running between 10am 3 February 2025 and 11am 4 February 2025 due to battery changeover.

Table 8-9 **Blast log February 2025**

Date	Time	Blast Monitor ID: UM15923		Blast Monitor ID: UM14301	
		PPV (mm/s)	Monitor location	mm/s	Monitor location
1-Feb-25	06:00	Not Detected	On Site	Not Detected	On Site
1-Feb-25	17:50	Not Detected	On Site	Not Detected	On Site
2-Feb-25	05:30	Not Detected	On Site	Not Detected	On Site
2-Feb-25	17:30	Not Detected	On Site	Not Detected	On Site
3-Feb-25	05:40	Not Detected	On Site	Not Detected	On Site
3-Feb-25	17:30	Not Running	On Site	Not Detected	On Site
4-Feb-25	03:05	Not Running	On Site	Not Detected	On Site
5-Feb-25	05:30	Not Detected	On Site	Not Detected	On Site
5-Feb-25	17:45	Not Detected	On Site	Not Detected	On Site
6-Feb-25	06:00	Not Detected	On Site	Not Detected	On Site
6-Feb-25	17:40	Not Detected	On Site	Not Detected	On Site
7-Feb-25	06:00	Not Detected	On Site	Not Detected	On Site
8-Feb-25	05:42	Not Detected	On Site	Not Detected	On Site
8-Feb-25	18:20	Not Detected	On Site	Not Detected	On Site
9-Feb-25	06:00	0.497	On Site	Not Detected	On Site
9-Feb-25	17:30	Not Detected	On Site	Not Detected	On Site
10-Feb-25	06:00	Not Detected	On Site	Not Detected	On Site
10-Feb-25	17:40	Not Detected	On Site	0.265	On Site
11-Feb-25	02:30	Not Detected	On Site	Not Detected	On Site
11-Feb-25	17:40	Not Detected	On Site	Not Detected	On Site
12-Feb-25	05:40	Not Detected	On Site	Not Detected	On Site
12-Feb-25	17:40	Not Detected	On Site	Not Detected	On Site
13-Feb-25	05:40	Not Detected	On Site	Not Detected	On Site
13-Feb-25	17:50	Not Detected	On Site	Not Detected	On Site
14-Feb-25	05:40	Not Detected	On Site	Not Detected	On Site
14-Feb-25	17:30	Not Detected	On Site	0.307	On Site
15-Feb-25	05:40	Not Detected	On Site	0.285	On Site
15-Feb-25	17:30	Not Detected	On Site	0.358	On Site
16-Feb-25	05:35	Not Detected	On Site	Not Detected	On Site
16-Feb-25	18:15	Not Detected	On Site	0.292	On Site
17-Feb-25	05:30	Not Detected	On Site	Not Detected	On Site
17-Feb-25	17:50	Not Detected	On Site	0.307	On Site
18-Feb-25	05:30	Not Detected	On Site	Not Detected	On Site
18-Feb-25	17:35	Not Detected	On Site	Not Detected	On Site
19-Feb-25	05:40	Not Detected	On Site	Not Detected	On Site
19-Feb-25	18:00	Not Detected	On Site	0.388	On Site
20-Feb-25	05:50	Not Detected	On Site	Not Detected	On Site
20-Feb-25	18:00	Not Detected	On Site	Not Detected	On Site
21-Feb-25	05:20	Not Detected	On Site	Not Detected	On Site
21-Feb-25	17:30	Not Detected	On Site	Not Detected	On Site

Date	Time	Blast Monitor ID: UM15923		Blast Monitor ID: UM14301	
		PPV (mm/s)	Monitor location	mm/s	Monitor location
22-Feb-25	5:40	Not Detected	On Site	Not Detected	On Site
22-Feb-25	18:00	Not Detected	On Site	0.28	On Site
23-Feb-25	05:40	Not Detected	On Site	Not Detected	On Site
23-Feb-25	18:00	Not Detected	On Site	Not Detected	On Site
24-Feb-25	5:35	Not Detected	On Site	Not Detected	On Site
24-Feb-25	18:00	Not Detected	On Site	Not Detected	On Site
25-Feb-25	02:45	Not Detected	On Site	Not Detected	On Site
25-Feb-25	18:00	Not Detected	On Site	Not Detected	On Site
26-Feb-25	05:40	Not Detected	On Site	Not Detected	On Site
26-Feb-25	17:55	Not Detected	On Site	Not Detected	On Site
27-Feb-25	05:30	Not Detected	On Site	0.316	On Site
27-Feb-25	17:40	Not Detected	On Site	Not Detected	On Site
28-Feb-25	5:45	Not Detected	On Site	0.371	On Site
28-Feb-25	17:40	Not Detected	On Site	Not Detected	On Site

8.1.1. Compliance comments

The blast results are within the criteria set out in the PA.

9. COMPLAINTS

A complaints register is available on the Develop website (under the link *community documents*) and is updated monthly.