MULTIQUIP
QUARRIES

Ardmore Park Quarry

Annual Review

1 January 2023 – 31 December 2023

Site information

Site Name	Ardmore Park Quarry
Address	5152 Oallen Ford Road, Bungonia NSW, 2580
Project Approval	PA 07_0155 (Mod 3)
Environmental Licence	EPL 13213

Company information

Name	CEAL Limited (Multiquip Quarries)
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Document information

Author (Company)	Date	Changes	Reviewer (Company)	Date	ID
Rhys Thompson (4Pillars Environmental Consulting)	22/03/2024	N/A	Stephen Wall (Multiquip Aggregates)	22/03/2024	V1
Rhys Thompson (4Pillars Environmental Consulting)	11/10/2024	Addition of map, expanding on review of truck movements and operating hours, comparison of monitoring results to predictions and previous data, updating on water year reporting, inclusion of IEA actions table, inclusion of information regarding compliance with the Water Management Plan	Stephen Wall (Multiquip Aggregates)	14/10/2024	V2

Contents

I. Title block

Name of operation	Ardmore Park Quarry Project
Address	5152 Oallen Ford Road, Bungonia, 2580, NSW
Operator	CEAL Ltd, trading as Multiquip Quarries
Project approval	PA 07_0155 (Mod 3)
Environment licence	13213
Annual review start date	1 January 2023
Annual review end date	31 December 2023

I **Stephen Wall** certify that this audit report is a true and accurate record of the compliance status of ARDMORE PARK QUARRY for the period 1 January 2023 – 31 December 2023 and that I am authorised to make this statement on behalf of MULTIQUIP QUARRIES.

Note: The Annual Review is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, $1 million and for an individual, $250,000.

The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement– maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents – maximum penalty 2 years imprisonment or $22,000, or both).

Signature of authorised reporting officer(s)	
Name of authorised reporting officer(s)	Mr Stephen Wall
Date (doc ID)	14/10/2024 (V2)

II. Statement of compliance

Were all conditions of compliance adhered to during the reporting year?	
Approval: PA 07_0155	NO

Non-compliances identified during 2023 reporting year.

Approval	Condition	Subject	Status	Reference
PA 07_0155	Schedule 2 Condition 13	Entering into Voluntary Planning Agreement with Council.		10.2
PA 07_0155	Schedule 5 Condition 4	Notification of non-compliance.		10.2
PA 07_0155	Schedule 5 Condition 8	Revision of Rehabilitation Bond.		10.2
PA 07_0155	Schedule 3 Conditions 4 and 27	Compliance with operating hours and transport limits		3.5.5

Table 1: Non-compliance risk level key.

Risk level	Colour	Description
High		Potential for significant environmental consequences regardless of likelihood.
Medium		Potential for serious environmental consequences but unlikely OR potential for moderate environmental consequences with moderate likelihood.
Low		Potential for moderate environmental consequences but is unlikely to occur OR potential for low environmental consequences but is likely.
Administrative		No potential for environmental harm

1. Introduction

1.1 Project description

Ardmore Park Quarry (**the Quarry**) is a sand and hard rock quarry owned and operated by CEAL Ltd (**CEAL**), trading as Multiquip Quarries (**Multiquip**). The project is located 4 km south of Bungonia village and 25 km south east of Goulburn in the Southern Tablelands region of New South Wales. The Quarry falls within the Goulburn-Mulwaree Council (**GMC**) local government area. The regional and local context of the Quarry are presented in Figure 1 and Figure 2, respectively. The current operational disturbance footprint (as of June 2024, added in V2 of this Annual Review) in relation to the development consent boundary is presented in Figure 3.

The Quarry operates under Project Approval 07_0155 (the **Approval** or **Project Approval**) and is designated as a State Significant Development (**SSD**), per the (now repealed) *State Environmental Planning Policy (Major Projects) 2005*, by the Department of Planning, Industry and Environment (**DPIE**), now the Department of Planning and Environment (**DPE**). The Project Approval was issued by the Minister for Planning in September 2009, with quarrying activities commencing in 2017. The 3rd Modification to the Project Approval was granted in October 2020, but the increase in scale approved under Modification 3 is yet to be implemented, pending the development and approval of required management plans and road upgrades.

The Quarry is approved under Modification 3 for an annual extraction rate of 580,000 tonnes per annum (t/pa); however, as above, the Quarry is currently limited to the previous scale of 400,000 t/pa. The permitted hours of quarrying operations are between 7 am to 6 pm between Monday to Friday, and 7 am to 1 pm on Saturday. Loading and dispatch of quarried materials are permitted between 5 am to 6 pm Monday to Friday, and 6 am to 1 pm on Saturdays. Neither quarrying nor product loading and dispatch is permitted under the Approval on Sunday or public holidays.

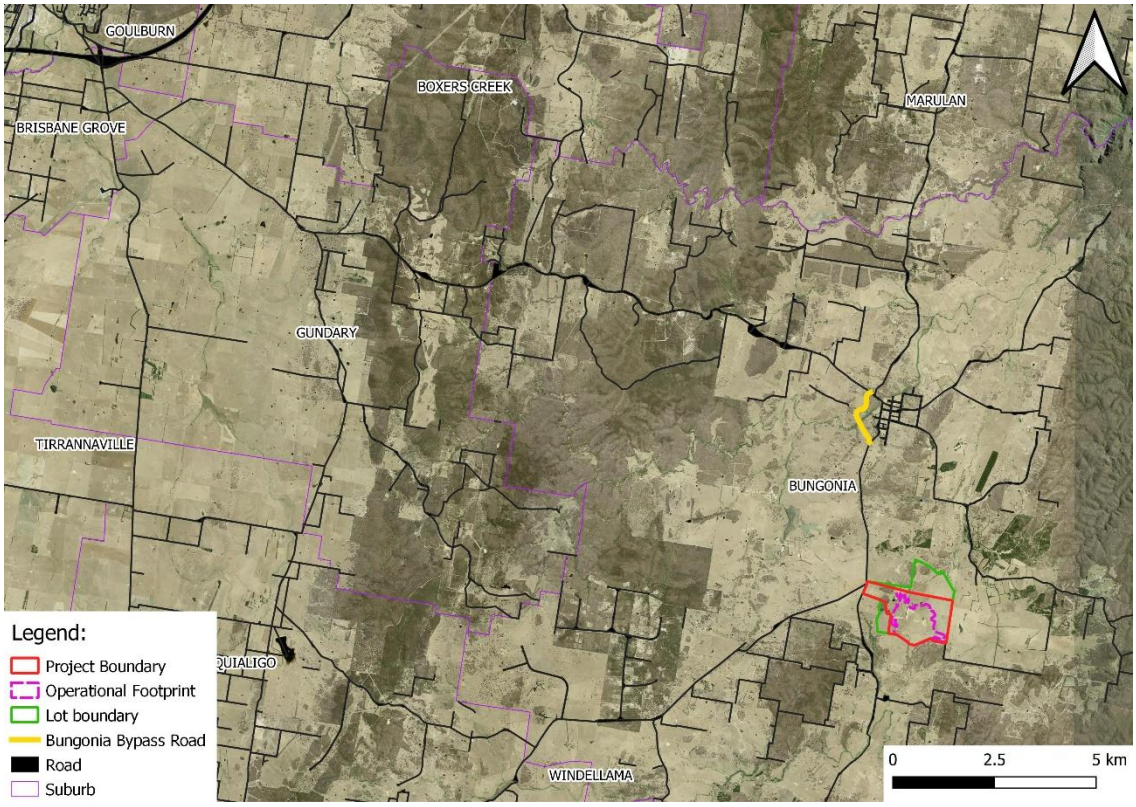

Figure 1: Regional context surrounding the operation.

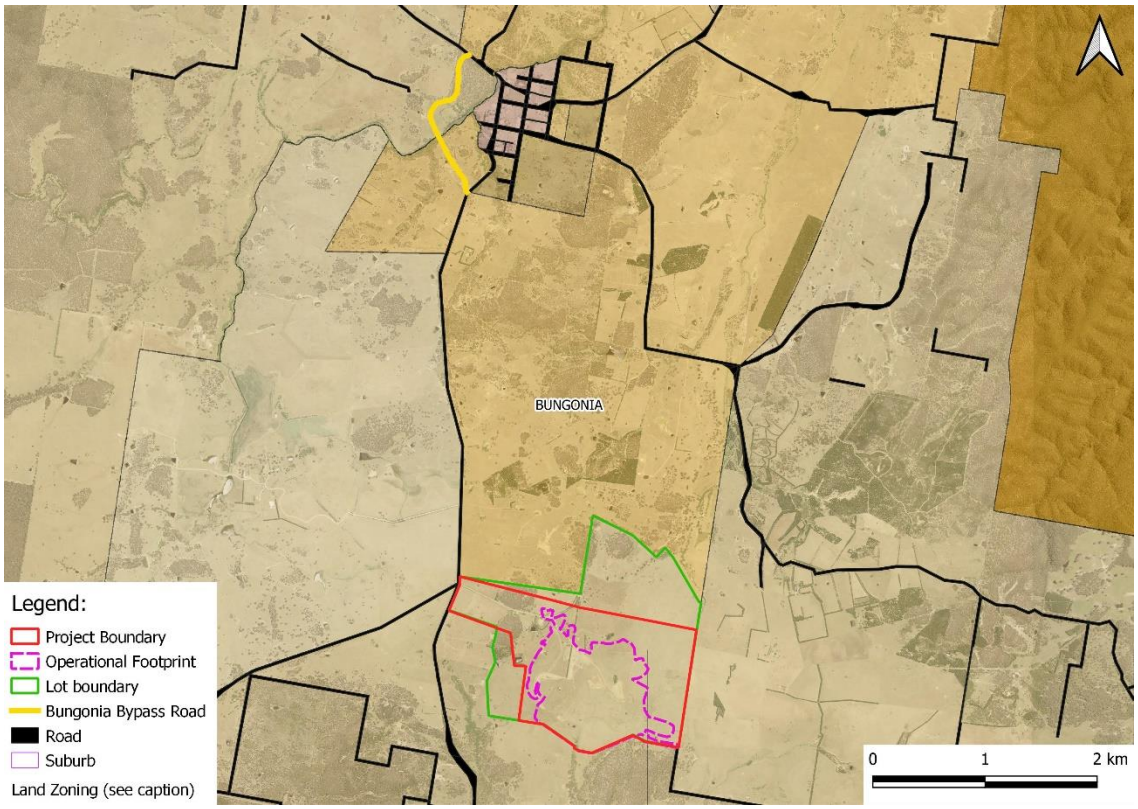

Figure 2: Near-context surrounding the operation. Zoning shown is as follows: C1, C3, RU1, RU2, RU5.

	C1	C1 National Parks and Nature Reserves		RU2	RU2 Rural Landscape
	C3	C3 Environmental Management		RU5	RU5 Village
	RU1	RU1 Primary Production			

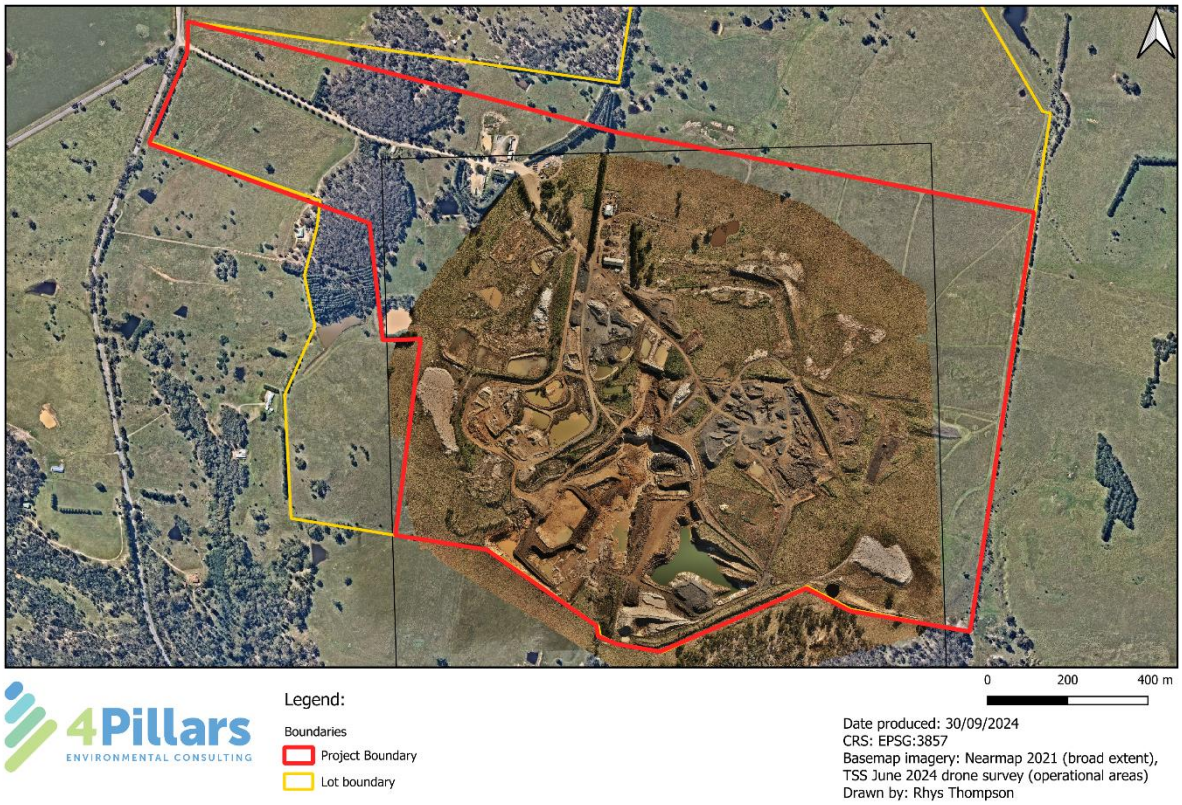

Figure 3: Operational footprint of the Project based on a June 2024 drone survey. Note, some minor georeferencing discrepancies between the drone images and underlying Nearmap basemap may be present. The Development Consent (i.e. Project Approval) boundary is represented in red ("Project Boundary"). The black square is associated with the extent of the drone image file and should be disregarded.

1.2 AR overview

Under Condition 5 of Schedule 5 of the Project Approval, Multiquip must submit an Annual Review (**AR**) to DPE at the end of March of each calendar year. The document describes quarrying and other project related activities conducted in the last 12 months (the **reporting period**). Additionally, key management priorities for the next reporting period are outlined. The reporting period adopted for the purposes of the AR is consistent with the Project Approval and Modification 3, being *the last 12 months* or *the previous calendar* year, respectively. As such, the reporting period for the 2023 AR is 1 January 2023 – 31 December 2023.

The AR functions as the primary mechanism for review of environmental performance for regulators, management, and stakeholders. It details any non-compliances within the reporting period.

This document is submitted on an annual basis to DPE and is published on Multiquip's website once approved [LINK].

1.3 Key personnel

Key personnel responsible for environmental management at the Quarry are presented in Table 2, below.

Table 2: Site contacts.

Name	Role	Email
Stephen Wall	Quarry Manager	stephen.w@multiquip.com.au
Alexander Cox	Environmental Officer (internal)	alexander.c@multiquip.com.au
4Pillars Environmental Consulting	Environmental Consultants (external)	hello@4pillars.com.au

2. Approvals

2.1 Existing approvals

The Quarry operates under an SSD project approval. In October 2020, the Minister for Planning issued a determination under Section 75J of the *Environmental Planning and Assessment Act 1979 to* approve Modification 3 to PA 07_0155 (**Mod 3**) to increase the extraction area of the quarry, and to modify the permitted operating hours for product transportation and dispatch. As noted above, Modification 3 is yet to be implemented and the Quarry is operating within the relevant constraints of Modification 2.

Further to this, the Quarry operates under Environment Protection Licence (**EPL**) 13213, which permits extractive activities and the processing of extractive materials. Several Water Access Licences (**WAL**) are held by the Quarry permitting the utilisation of water from the Goulburn Fractured Rock groundwater aquifer and other near-surface aquifers, and Bungonia Creek.

Wicket Soil Extraction was approved by GMC in 2001 (DA/001/345) and modified in 2015 (MOD/0109/1415) and 2019 (MODDA/0031/1920). The approval permits the extraction of small quantities of clay rich basalt soils used in the construction of surfaces utilised for sport activities and cricket wickets. A summary of currently active approvals is provided below in Table 3.

Table 3: Summary of Approvals and Licences.

Approval	Consent authority	Issued	Reference
Project approval	NSW Department of Planning, Industry and Environment	2009	PA 07_0155 (Modification 3)
Environment Protection Licence	NSW Environment Protection Authority	2009	13213
Water access licence	Water NSW		30111

	Water NSW		41848
	Water NSW		25390
Wicket Soil Extraction	Goulburn Mulwaree Council	2019	MODDA/0031/1920

2.2. Modifications and amendments

Project Approval PA 07_0155 has been modified on three occasions since the commencement of the Ardmore Park Quarry project to date.

- Modification 1 (2010): Realignment of the entranceway to the quarry to the intersection of Oallen Ford Road and Lumley Road.
- Modification 2 (2013): Approval for local sales of a limited number of quarried products along specified local routes, in addition to the approval principal haul route of Oallen Ford Road and Jerrara Road to the interchange at South Marulan.
- Modification 3 (2020): Approval for expansion of the extraction area by 3.5 hectares, and to increase the annual production rate from 400,000 to 580,000 t/pa. Extension of the operating hours in the morning period.

Environment Protection Licence 13213 (**the EPL**) was most recently varied during the reporting period on 10 November 2023, with the below changes:

- Added Condition U1.7 to permit a four-month continuance of discharge trial.
- Removed Condition U2 as the Reuse Options Assessment PRP was completed in May 2023.

The EPL was also varied on 28 November 2022 which was discussed in the 2022 Annual Review.

3. Operations summary

3.1 Quarrying

The extraction of sand and basalt occurred throughout the reporting period. A total of 256,470 t of this material was dispatched from the quarry for sale, following quarrying, washing, and processing, as appropriate. The main products dispatched from the Quarry to customers were sand and sand related products (approx. 80%). Sand from the quarry is primarily purchased by consumers to produce ready-mix concrete for developments in the greater Sydney and Goulburn regions. A lesser proportion of rock, aggregate and road base from processed basalt was sold to customers throughout the year (approx. 20%) for landscaping, erosion control, roadmaking, and for ready-mix concrete, with rock sales shown to be decreasing slightly compared to the previous reporting period. Overall, a lower quantity of material was produced in this reporting period as compared to the previous. A summary of production is presented in Table 4.

Sand and basalt resources were predominately derived from two active mining pits in 2023, located in the south-eastern (the "White Pit") and eastern (the "Rock Pit") portions of the quarry, respectively. Removal of overburden in the approved part of the quarry continued in the reporting period, which allows access to the sand extraction pit. Limited extraction of sand was also undertaken in a third pit (the "Old Pit") in the south-west of the Quarry, following sufficient discharge of water associated with the EPL Discharge Trial allowing access to portions of this pit. As the project progresses, it is expected that the extent of the three active quarrying areas will join.

Table 4: Production summary (table taken from the October 2015 Annual Review Guideline).

Material	Approved limit (source)	Previous reporting period (actual)	This reporting period (actual)	Next reporting period (forecast)
Waste Rock / Overburden	N/A	N/A	N/A	N/A
ROM Coal / Ore	N/A	N/A	N/A	N/A
Coarse reject	N/A	29,714	25,647	~40,000 t
Fine reject (Tailings)	N/A	29,714	25,647	~40,000 t
Saleable product	580,000 t (Mod 3)	297,489	256,470	400,000 t

3.2 Compliance and returns

The Annual Return for EPL 13213 was lodged with the NSW EPA on 19 October 2023, covering the 2022-23 licence year of 21 August 2022 – 20 August 2023. Three non-compliances were raised in the Annual Return, relating to the following issues:

- Breaches of terms of the SOEE associated with the discharge trial.
- Monitoring of groundwater (flow + water quality) at one location not completed due to damage to bore.
- The EPL requires activities to be carried out in accordance with an outdated Water Management Plan, whereas activities are actually carried out in accordance with an updated plan.

Non-compliance with three conditional requirements of PA 07_0155 (Mod 3) during the reporting period were identified and are discussed in further detail in Section 10 of this Annual Review, relating to the following issues:

- Voluntary Planning Agreement with Council.
- Prompt notification of non-compliances to DPE.
- Revision of Rehabilitation Bond.

3.3 Roadworks

Council roadworks were completed during 2023, excepting black spot works. An 80 km/h speed limit was reinstated on Jerrara Road. No roadworks were undertaken by Multiquip during 2023.

3.4 Truck movements

Truck movements are tracked and recorded via the use of the on-site weighbridge. Each month, the data for the preceding month is reviewed and assessed, with a summary report completed and published on the company website. The truck movement summary for the reporting period is presented in Table 5, below.

Table 5: Truck movement summary, 2023.

Month	Total truck movements (In + Out)	Daily average truck movements (In + Out)
January	834	35
February	1220	51
March	1375	51
April	864	41
May	1079	40
June	1078	43
July	1064	41
August	900	35
September	964	37
October	1054	42
November	1042	40
December	743	32
2023 Total	12217	

3.5 Compliance with transport limits

Weighbridge records for 2023 were reviewed to determine compliance with operating hours and transport limits, which are defined in Condition 4 of Schedule 3 and Condition 27 of Schedule 3 of the Project Approval, respectively. Due to the physical distance between the weighbridge and the entrance to the Site (to Oallen Ford Road) as well as occasions where truck drivers may refuel their vehicles or take heavy vehicle breaks after crossing the weighbridge but prior to exiting the Site, there is some discrepancy between the weighbridge times and actual entrance/exit times. Considering this, a likely worst-case scenario with regard to compliance found that there were 50 days in 2023 on which a non-compliance with the transport limits was identified, with a total of 102 truck movements that were outside of the permitted hourly limits. Considering that there were 12,217 truck movements during 2023, this was a total of 0.83% of truck movements which were considered non-compliant. Within these 50 days, there were 10 weekdays where truck movements occurred after 6 pm, and five Saturdays where truck movements occurred after 1 pm, which are outside of the permitted operating hours. It should be noted that in the majority of these cases, the weighbridge entries show these truck movements occurring within 10 minutes of the hour.

There were zero instances where the limits for daily total movements (as defined in Condition 27 (a) and (b) of Schedule 3) were exceeded. Multiquip intends to notify the

Department of a non-compliance with regard to the vehicle movement activities undertaken outside of operating hours as discussed above.

4. Activities proposed in the previous AR

Activities that were expected to occur in 2023 as listed in the 2022 Annual Review are as follows, along with their status.

Table 6: Activities proposed in the 2022 Annual Review and current status.

Proposed activity	Status
Continuation of mining activities at the site. Indicatively expected to be 400,000 tpa to be increased to 580,000 tpa when appropriate documentation etc. is approved	**Completed** Mining activities continued during the reporting period, remaining below the 400,000 tpa threshold.
Close-out of NRAR Direction requiring rehabilitation and decommissioning of bores	**Completed** All applicable requirements of the NRAR Direction were complied with and a completion letter sent to NRAR on 7 March 2023.
Further rehabilitation and landscaping of visual bunds, pending approval from DPE	**Not completed / No change since previous AR** Ongoing with DPE.
Monitoring • SWL of bores monthly • Deposited dust monthly • Water sampling quarterly and annually • Particulate matter continuously (assessed monthly) • Noise twice annually • Discharge sampling (characterisation and validation) as required • Discharge water quality sampling monthly during discharge Ambient water quality sampling monthly during discharge	**Completed** All monitoring was carried out as required, including monitoring associated with the EPL discharge trial, excepting some minor non-compliances, as discussed in Section 3.2 Compliance and returns. Noise monitoring was carried out once, in August 2023. Monitoring results are presented in Section 5. Environmental performance.
Submission of modification to Project Approval (Modification 4) to ensure activities align with Approval	**Not completed / No change since previous AR** In March 2022 and following verbally, DPE provided correspondence to the effect that no action would be taken regarding the review and approval of documents until the investigation into potential non-compliances identified on site reached the appropriate stage and status. As such, a modification to the Project Approval was not submitted.
Attendance at all Community Consultative Committee (CCC) meetings	**Completed** CCC meetings were held in March, September, and December during the

Proposed activity	Status
	reporting period. Representatives from Multiquip were present at all meetings.
Submission of EPL variation to remove identified bores from EPL	**Not completed** Due to other priorities with the EPL, including the variations associated with controlled water discharges.
Close-out of Development Control Order	**Not completed** Ongoing with DPE.
Completion and lodgement of Modification 3 Environmental Management Plans	**Not completed / No change since previous AR** In March 2022, DPE provided correspondence to the effect that no further action would be taken regarding the review and approval of submitted management plans until the investigation into potential non-compliances identified on site reached the appropriate stage and status. As such, no further management plans were submitted.
Discharge of water from Old Pit until empty, and follow-up earthworks	**Partially Completed** Discharge was undertaken between 9 December 2022 and 9 August 2023, during which time 193.6 ML of water was discharged from the Old Pit. This caused the Old Pit to be almost completely empty, however some water remained, for which an extension of discharge was requested and received from the EPA.
Submission of Enforceable Undertaking	**Not completed** The EU was not approved for submission, prior to the end of the reporting period.
Finalise Voluntary Planning Agreement (VPA) with Goulburn Mulwaree Council and provide update to DPE accordingly, as per Schedule 2 Condition 13 of the Project Approval and DPE's 1 February 2023 extension approval	**Not completed** Details are provided in Section 10.2.
Review and revise Rehabilitation Bond within 3 months of submitting Independent Environmental Audit, to the satisfaction of the Planning Secretary, as per Schedule 5 Condition 8 of the Project Approval	**Partially completed** The draft Rehabilitation Bond Report and associated Rehabilitation Cost Estimation prepared by Eltirus Pty Ltd was provided to DPE on 31 March 2023, awaiting any comments to be included in a revised final version. This was not submitted within the required 3-month period, and as such a non-compliance with this requirement was concurrently notified to DPE.

5. Environmental performance

5.1 Monitoring points

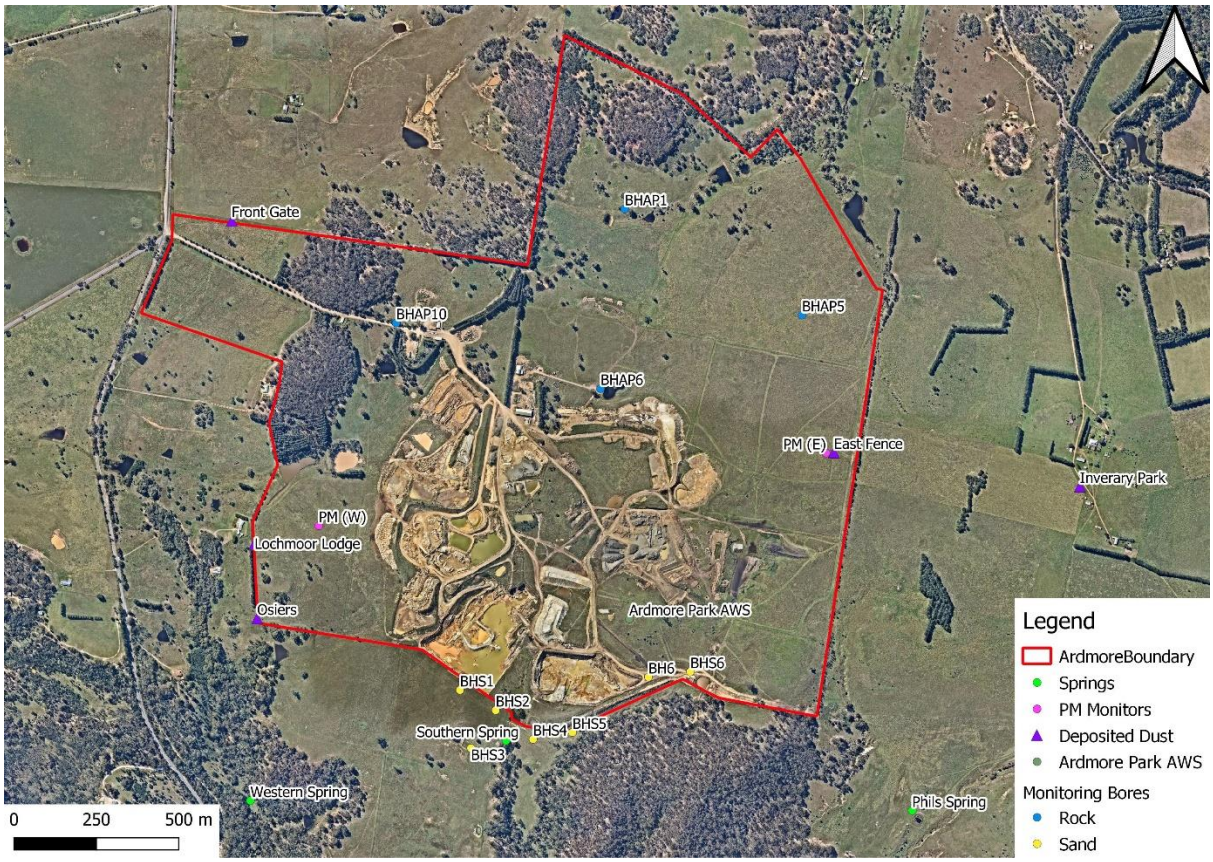

Figure 4: Monitoring locations.

5.2 Meteorological data

The average monthly temperatures recorded by the on-site weather station (location shown in Figure 4, "PM10_W") ranged between 8°C to 19°C throughout the reporting period. The temperature range observed is heavily influenced by the Quarry's elevation within the Southern Tablelands Region. Average temperature is presented in Figure 5, along with site data from 2022.

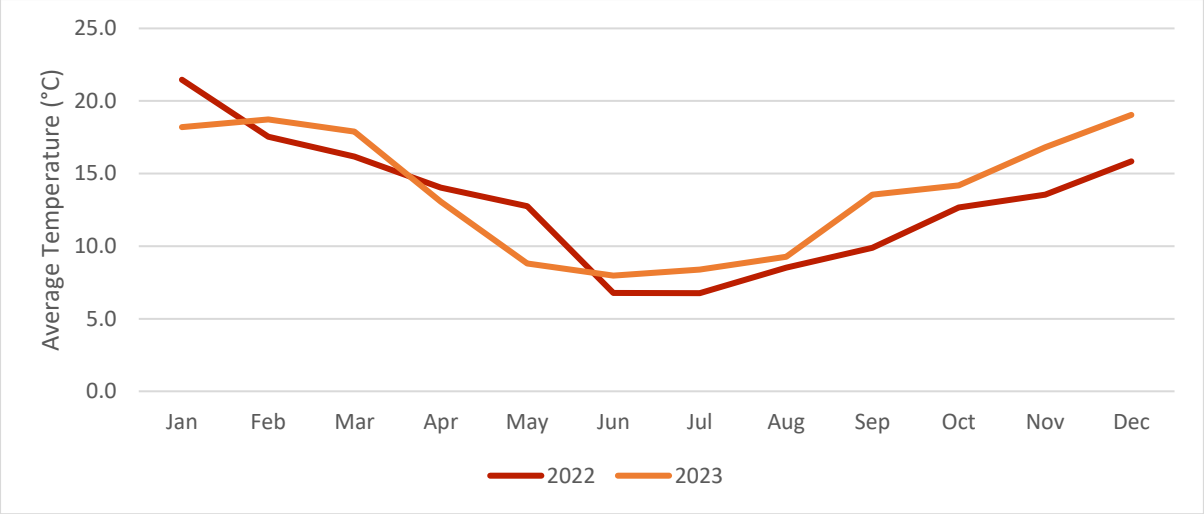

Figure 5: Average monthly temperature recorded at the site, 2023 and 2022.

Data collected during 2023 indicated an increased level of rainfall in comparison to 2022, with approximately 773 mm of rain recorded compared to 648 mm observed in the previous year (Figure 6). This was lower than 2021, when 1013 mm of rainfall was observed.

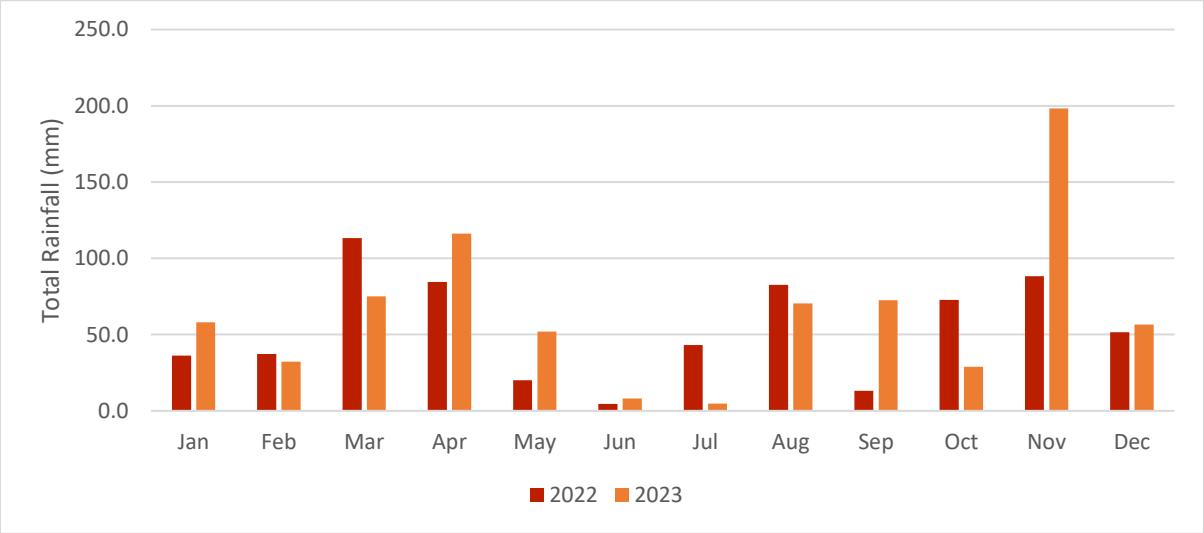

Figure 6: Total monthly rainfall recorded at on-site weather station, comparison of 2022 and 2023.

Records from the Goulburn weather station of the NSW Government's New South Wales Air Quality Monitoring Network were unavailable and could not be compared. Daily rainfall data from the on-site weather station has been presented in Figure 7, and – along with monthly data – can be used to assess trends in monitoring data.

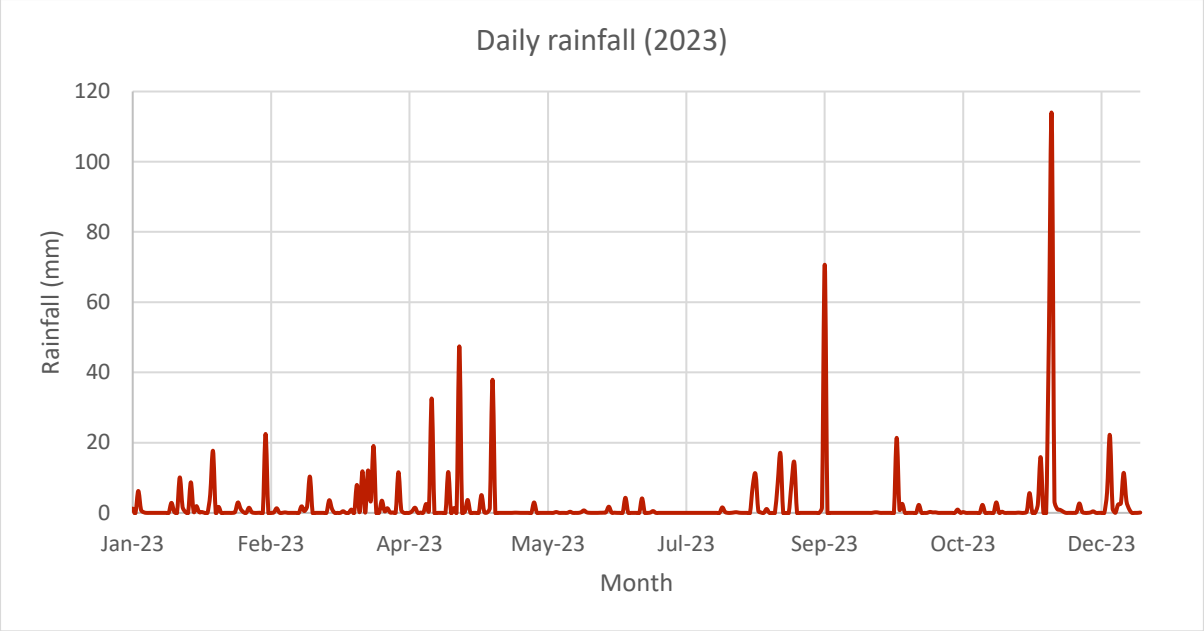

Figure 7: Daily rainfall recorded at on-site weather station.

5.3 Air quality

Air quality emissions from the Project are managed through the following actions:

- Regular application of water to haul roads using a water cart to increase soil moisture and prevent the generation of dust;
- Application of water to hard-rock processing plant feed hopper and crushers;
- Locating the crushing plant within the hard rock processing area of the quarry, a significant distance from neighbouring properties; and
- Avoiding stripping soils during windy periods.

To ensure that air quality emissions are sufficiently controlled, monitoring for deposited dust and particulate matter are undertaken.

On 27 September 2023, EPL 13213 was varied by the EPA to require a Dust Management Capacity Assessment (DMCA) to be undertaken (Conditions U3.1, U3.2 and U3.3). The intent of the DMCA was to assess the capacity of the Premises to prevent or minimise the generation and movement of dust emissions and identify options for improving dust control at the Premises. 4Pillars Environmental Consulting Pty Ltd (4Pillars) was engaged to undertake the DMCA, with the final report submitted to the EPA on 11 December 2023. A number of additional dust management measures were identified in the DMCA, to reduce dust emissions and limit the risk of air quality impacts on the environment and nearby receivers, to be implemented during 2024.

Deposited Dust

The Quarry undertakes monthly deposited dust monitoring as per the requirements of EPL 13213. The air quality monitoring network established around the Quarry includes four deposited dust gauges located at the quarry site, and at nearby receivers, to determine whether quarry activities generate dust in excess of the permitted air quality limits. The deposited dust gauges are situated in locations clear of obstructions which may interfere with the collection of fugitive dust emissions at the established monitoring

points. As per Figure 4, the "*Lochmoor Lodge*" and "*Olsiers*" dust gauges are located to the west of the extraction area. The "*Front Entrance*" dust gauge captures emissions at the entrance to the site, and the "*Inverary Park*" dust gauge monitors dust emissions at the adjacent neighbouring premises to the north-eastern side of the active extraction area.

Samples collected are analysed at a NATA-accredited laboratory, with the insoluble solids fraction of the total sample used to assess compliance with the air quality criteria specified in Condition 7 of Schedule 3 of the Approval (4 g/m^2/month total, 2 g/m^2/month incremental). Results for 2023 are presented in Figure 8.

Figure 8: 2023 Deposited dust (insoluble solids) results. Limit of 4 g/m^2/month for total impact of particulate matter emissions generated by the project is presented as a green line.

As shown in the graph, there were a total of six instances where the primary results for insoluble solids were greater than the total limit, across four months (January, February, March, April, December).

To inform an assessment of the obtained results, a review of meteorological data and the composition of the matter as analysed by the lab was undertaken, along with aerial imagery of surrounding properties, and site activities. The outcome for each of the results is summarised in Table 7. While the limit in the Project Approval is for insoluble solids, these are not necessarily directly correlated with quarrying activities, as this result includes both combustible matter and ash. Combustible matter includes organic material (e.g. pollen, grass), while the ash fraction accounts for the non-combustible mineral content (i.e. soil dust) which could be caused by soil disturbance during quarrying activities.

Table 7: Review of elevated deposited dust results, 2023.

Month	Cause	Exceedance generated by Project?
January	Composition of sample mostly insoluble (i.e. ash), so likely soil dust. Some wind experienced from the direction of the quarry, but a large proportion also from other directions. Quarry activity remained at a steady scale, no crushing undertaken.	Unable to be definitively ruled out – notified to DPE
February	High proportion of combustible matter in the sample, ash fraction below limit.	No
March	Composition of sample mostly insoluble (i.e. ash), so likely soil dust. Some wind experienced from the direction of the quarry, but a large proportion also from other directions. Quarry activity remained at a steady scale, and no notable increases in crushing occurred.	Unable to be definitively ruled out – notified to DPE
April	High proportion of combustible matter in the sample, ash fraction below limit.	No
December	High proportion of combustible matter in the sample, ash fraction below limit.	No

Overall, data for all other months, and the long-term average deposited matter results (Table 8) indicate that the project has a high degree of compliance with the performance criteria.

Table 8: Average deposited dust (insoluble solids) results for 2023.

Monitoring location	Insoluble solids (g/m2/month) 2023 Average
Inverary Park	3.7
The Osiers	0.9
Lochmoor Lodge	0.8
Front Entrance	1.5
Limit (4 g/m^2/month)	

Particulate matter

Air quality criteria for particulate matter emissions generated by the project are specified in Condition 7 of Schedule 3 of the Project Approval, with limits prescribed for Particulate matter < 10 µm (PM_{10}) and Particulate matter < 2.5 µm ($PM_{2.5}$). These limits are 25 µg/m^3 over an annual averaging period and 50 µg/m^3 over a 24 hour averaging period for PM_{10}, and 8 µg/m^3 (annual) and 25 µg/m^3 (24 hour) for $PM_{2.5}$.

Particulate matter emissions are measured by two Sensirion SPS30 Particulate Matter Sensors installed with Atmos 22 and Atmos 41 weather stations, which have been established at two locations within the Quarry Site – PM (E) and PM (W), respectively – as shown on Figure 4. These sensors are real-time optical particle counters (OPCs), which obtain measurements based on the incoming particles scattering the incoming light, the

extent of which is then detected by a photodiode and converted into real-time particle count and mass concentration values. This allows the sensors to record the levels of various particulate matter fractions simultaneously, including PM1.0 (0.3 to 1.0 µm), PM2.5 (0.3 to 2.5 µm), PM4.0 (0.3 to 4.0 µm), and PM10 (0.3 to 10.0 µm), rather than requiring manual collection and analysis of filters for individual fractions. The weather stations where the particulate matter sensors are installed record a variety of parameters including temperature, wind and gust speed, rainfall, humidity, and wind direction. All of the data is automatically and continuously uploaded to an online portal, from which it can be observed or downloaded. The particulate matter data gathered can then be compared to the obtained weather data, to determine if and how the weather conditions influence the particulate matter readings obtained.

The raw data from each unit is downloaded and analysed monthly, to allow comparisons with the prescribed criteria.

The data for 2023 as a 24 hour average is presented in Figure 9 and Figure 10 for PM_{10} and $PM_{2.5}$, respectively, with the Project Approval limits included on the graphs. As shown, while particulate matter levels recorded by both units were slightly elevated at times, they were generally stable, and remained below their respective limits throughout the year.

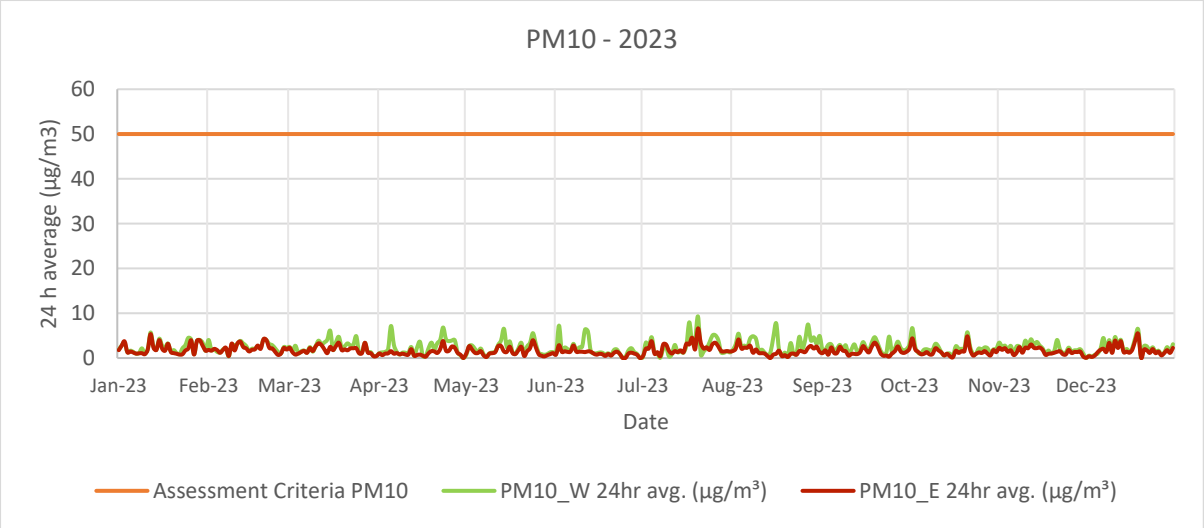

Figure 9: 2023 PM_{10} data for both units, 24-hour averaging, with Project Approval limit.

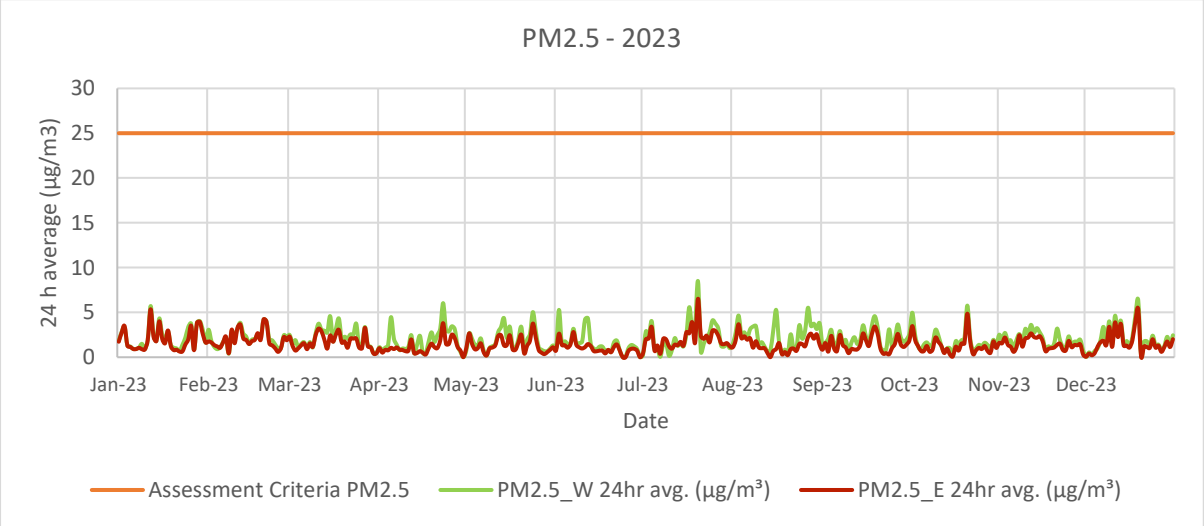

Figure 10: 2023 $PM_{2.5}$ data for both units, 24-hour averaging, with Project Approval limit.

All of the data collected was also assessed to determine the particulate levels on an annual averaging basis, for comparison with the prescribed limits, as shown in Table 9. The levels recorded at both monitoring locations were compliant with the limits.

Table 9: 2023 $PM_{2.5}$ and PM_{10} data for both units, annual averaging, with Project Approval limits.

Monitor	Pollutant (µg/m³)	
	PM2.5	PM10
PM10-E	1.5	1.7
PM10-W	2.0	2.4
Limit (Annual average)	8	25
Compliant?	Yes	Yes

5.3.1 Air quality – comparison to predictions

Condition 5b(iv) of Schedule 5 of the Project Approval requires that a comparison of monitoring results to the "*relevant predictions in the documents listed condition 2 of Schedule 2*" is included in the Annual Review. Relevant predictions relating to air quality were identified in the July 2008 *Environmental Assessment for the Modified Ardmore Park Quarry Project*, prepared by R.W. Corkery & Co Pty Limited (the 2008 EA) and the December 2017 *Environmental Assessment for Modification 3 to PA 07_0155 (Ardmore Park Quarry)*, prepared by R.W. Corkery & Co. Pty Limited (the 2017 EA). No relevant predictions for air quality were identified in the other documents listed in Condition 2 of Schedule 2.

Deposited dust

The predictions in the 2008 EA for the annual average of dust deposition were that across the residences assessed, the Background + Increment (i.e. total) values would range from 2.3-2.7 g/m^2/month, below the Project Goal of 4.0 g/m^2/month. The annual average deposited dust (insoluble solids) results for 2023 are presented in Table 8, and show the results at all four assessed dust gauges as between 0.8-3.7 g/m^2/month. Three of these locations (The Osiers – Residence 5, Lochmoor Lodge – Residence 6, and Front Entrance – roughly in line with Residence 9) had annual average deposited dust (insoluble solids) results for 2023 of 0.9, 0.8, and 1.5 g/m^2/month, respectively, which were well below the predicted Background + Increment values presented in the 2008 EA (2.3, 2.7, and 2.3 g/m^2/month, respectively). While the value for Inverary Park of 3.7 g/m^2/month was above the predicted value of 2.7 g/m^2/month, it still fell below the Project Goal.

The 2017 EA noted that the proposed modification did not provide for changes to operations likely to significantly increase air emissions. As such, no alternative values were presented for comparison.

PM10

The predictions in the 2008 EA for PM10 were that "*with respect to the 24-hour average, the maximum PM10 concentrations is predicted to be less than the site-specific goal 50 µg/m^3 at all assessment locations for the three scenarios considered*". As presented in Figure 9, the maximum 24-hour average concentration of PM10 throughout the reporting period was 9.3 µg/m3, in line with the predictions.

The 2017 EA noted that the proposed modification did not provide for changes to operations likely to significantly increase air emissions. As such, no alternative values were presented for comparison.

PM2.5

The predictions in the 2008 EA for PM2.5 were that *the worst case 24-hour average levels were predicted to be in the order of 15 µg/m³ and annual average PM2.5 predicted to be in the order of 6 µg/m²*". (Note: "m²" here is believed to be a typo and should read "m³"). As presented in Figure 9, the maximum 24-hour average concentration of PM2.5 throughout the reporting period was 8.5 µg/m³, with the maximum annual average concentration across both monitoring devices of 2.0 µg/m³ (PM10-W, Table 9). Both values are in line with the predictions.

The 2017 EA noted that the proposed modification did not provide for changes to operations likely to significantly increase air emissions. As such, no alternative values were presented for comparison.

5.3.2 Air quality – comparison to previous years

Condition 5b(iii) of Schedule 5 of the Project Approval requires that a comparison of monitoring results to the "*monitoring results of previous years*" is included in the Annual Review.

Deposited dust

Results for deposited dust levels (as insoluble solids) for the reporting period compared to previous years are presented in Figure 11. Due to issues with graphing historical data, data earlier than 2021 has not been included. While some elevated readings were observed towards the beginning of the reporting period, values were generally similar to or below what was observed in previous years.

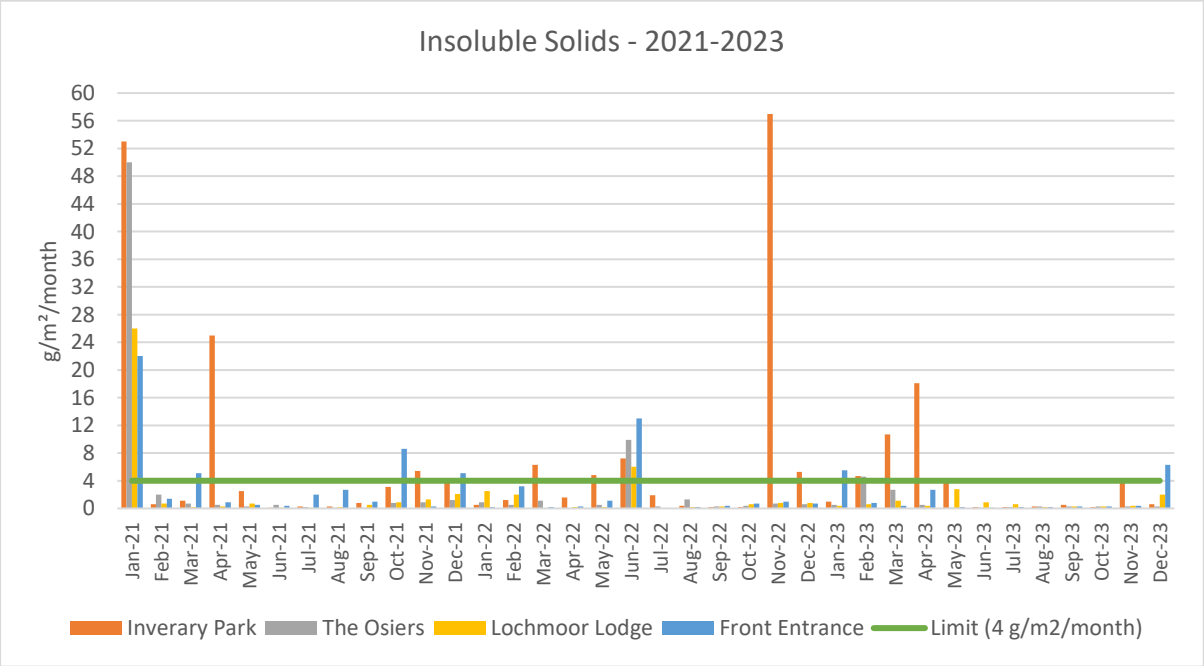

Figure 11: 2021-2023 deposited dust (insoluble solids) results. Limit of 4 g/m²/month for total impact of particulate matter emissions generated by the project is presented as a green line.

PM10

Results for PM10 for the reporting period compared to previous years are presented in Figure 12. Across both units, levels were generally consistent with 2022, and lower than 2021.

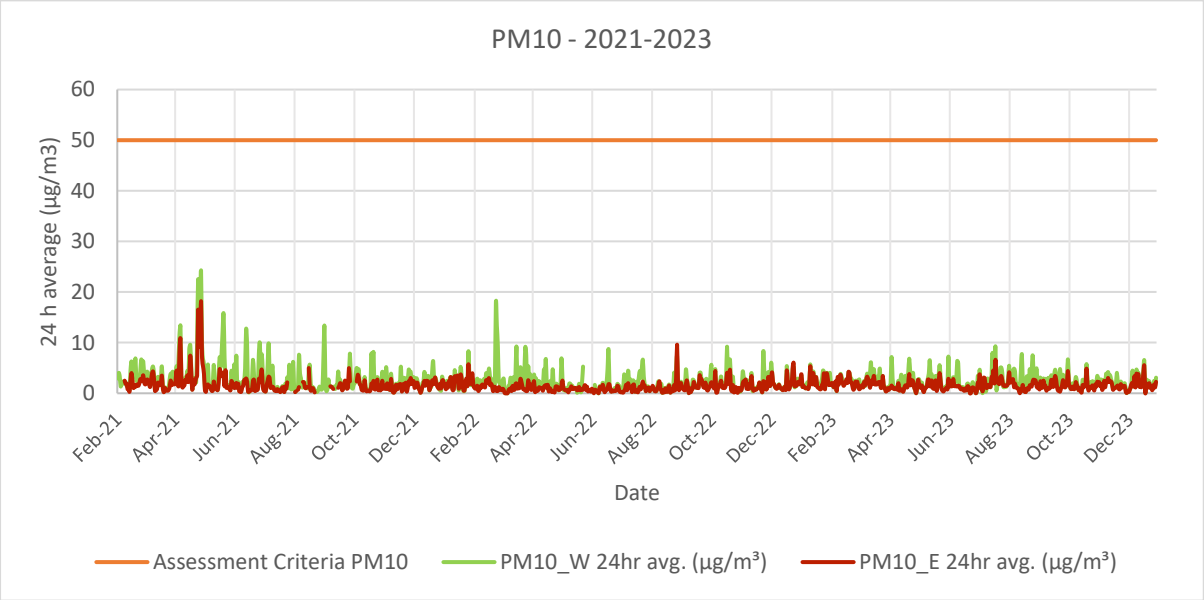

Figure 12: PM10 data for both units from 2021-2023, 24-hour averaging, with Project Approval limit.

PM2.5

Results for PM2.5 for the reporting period compared to previous years are presented in Figure 13. Across both units, levels were generally consistent with 2022, and lower than 2021.

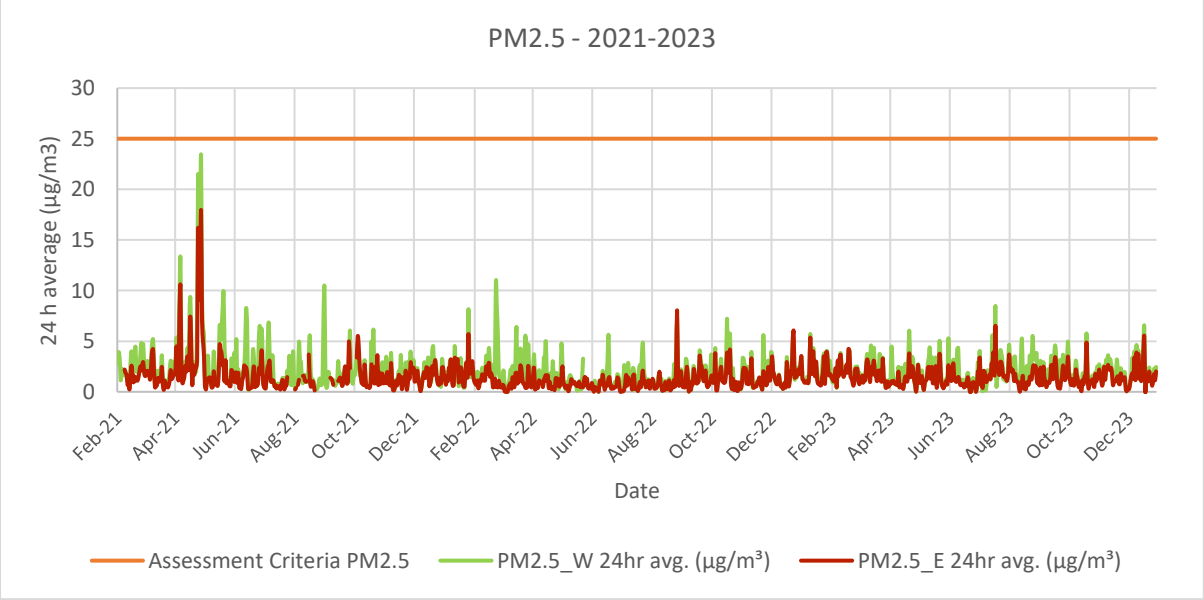

Figure 13: PM2.5 data for both units from 2021-2023, 24-hour averaging, with Project Approval limit.

5.4 Noise

Site noise is managed through the use of appropriately maintained equipment, commitment to permitted operating hours, and the construction and maintenance of bund walls around activities. Machinery is located in areas where potential transmission of noise to off-site receivers is limited. Community complaints regarding noise are investigated and acted upon, with a lack of these suggesting an appropriate level of noise generation. Compliance with noise criteria is confirmed through regular noise monitoring assessments performed by an external consultant.

Pulse White Noise Acoustics Pty Ltd were engaged to conduct attended noise monitoring in August 2023. The report prepared for this assessment was uploaded to the Multiquip website upon completion. Noise measurements are obtained from neighbouring properties, or accessible public land close to the receivers, as appropriate. The summary of noise results obtained is presented in Table 10. The project was considered compliant with noise criteria during all monitoring periods. Noise monitoring will continue throughout 2024.

Table 10: Summary of noise results, 2023.

Date	Location (EPL #)	Average Estimated Quarry L(A)eq 15 min	Compliance
09/08/2023	Damar Lodge (4)	<40	Yes
	Lochmoor (6)	<30	Yes
	5194 Oallen Ford Road	<30	Yes
	Inverary Park (3)	<30	Yes
	28 King Street	<25	Yes
	328 Jerrara Road	48	Yes
	989 Jerrara Road	47	Yes
	5477 Oallen Ford Road	41	Yes

5.4.1 Noise – comparison to predictions

Condition 5b(iv) of Schedule 5 of the Project Approval requires that a comparison of monitoring results to the "relevant predictions in the documents listed condition 2 of Schedule 2" is included in the Annual Review. Relevant predictions relating to noise were identified in the July 2008 Environmental Assessment for the Modified Ardmore Park Quarry Project, prepared by R.W. Corkery & Co Pty Limited (the 2008 EA) and the December 2017 Environmental Assessment for Modification 3 to PA 07_0155 (Ardmore Park Quarry), prepared by R.W. Corkery & Co. Pty Limited (the 2017 EA). No relevant predictions for noise were identified in the other documents listed in Condition 2 of Schedule 2.

In all cases, the noise levels recorded during the reporting period were consistent with the predictions presented in the 2008 EA, and below the assessed criteria. The 2017 EA noted that it was considered unlikely that the proposed modifications would result in increases to noise levels which would exceed criteria.

5.4.2 Noise – comparison to previous years

Condition 5b(iii) of Schedule 5 of the Project Approval requires that a comparison of monitoring results to the "*monitoring results of previous years*" is included in the Annual Review. Results of noise monitoring of quarry activities from 2021 to 2023 at monitoring locations intended to be representative of select Noise Assessment Location Residences as identified in the EPL are presented in Table 11. As shown, noise levels during monitoring have been consistently low, and compliant with required limits. As shown in the table, not all residences were directly assessed during each monitoring event, however the engaged noise consultants were confident that the results obtained were representatively sufficient to inform an assessment of compliance of the Project against the requirements. Each value presented represents the value for a single monitoring session.

Table 11: Comparison of noise results for quarry-generated noise, 2021-2023.

	Estimated Contribution of Project (L(A)eq 15 min)				
Monitoring month	**Residence 1**	**Residence 3**	**Residence 4**	**Residence 6**	**Residence 9**
Feb-21	<23	<20	<33	<33	-
Aug-21	-	<33, <32	-	<27, <27	-
Feb-22	-	<33, <33	-	<30, <30	-
Nov-22	-	<30	≤40	<35	<30
Aug-23	-	<30	≤40	<30	<30, <30

5.5 Water

5.5.1 Groundwater level

Measurement of standing water level (SWL) is carried out on a monthly basis at 10 monitoring bores on and around the site as per the requirements of EPL 13213. Monitoring data collected indicates that – while groundwater levels fluctuate from month-to-month – the standing water levels are generally stable and constant over time. A slight reduction of SWL in some bores was observed in the reporting period.

A summary of standing water level for all bores measured throughout the reporting period is presented below in Table 12, with monthly measurements presented in Figure 14.

Unusual values related to BHAP10 and BHAP6 have been attributed to a manual transposition error during recording, and the influence of the pump operating in the bore concurrent with the monitoring being carried out, respectively. The significant reduction in standing water level shown in BHAP5 between January 2023 and February 2023 is attributed to the bore rehabilitation carried out between these measurements.

As reported in the 2021 Annual Review, bore BHS6 (EPL Point 14) was damaged and could therefore not be monitored during the 2023 reporting period. An EPL variation to remove the monitoring requirements associated with this bore from the EPL was intended

to be submitted during the reporting period, but was not possible due to due to other priorities with the EPL, as discussed in Section 4.

*Table 12: Summary of bore standing water levels during 2023. "Min." refers to the lowest value recorded, i.e. the shallowest reading. "Max." refers to the highest value recorded, i.e. the deepest reading. *Considered to be a transposition error. **Considered to be influenced by pumping of bore during measurement.*

Name (EPL #)	Min. of SWL (m)	Max. of SWL (m)	Average of SWL (m)
BH6 (14)	14.46	14.63	14.56
BHAP1 (5)	6.37	7.38	6.87
BHAP10 (8)	15.27*	27.60	25.83
BHAP5 (6)	23.84	54.55	50.87
BHAP6 (7)	60.53	84.16**	66.74
BHS1 (18)	7.38	9.88	9.00
BHS2 (19)	3.12	5.41	4.47
BHS3 (20)	2.85	4.23	3.59
BHS4 (21)	5.04	6.10	5.73
BHS5 (22)	7.48	7.92	7.77

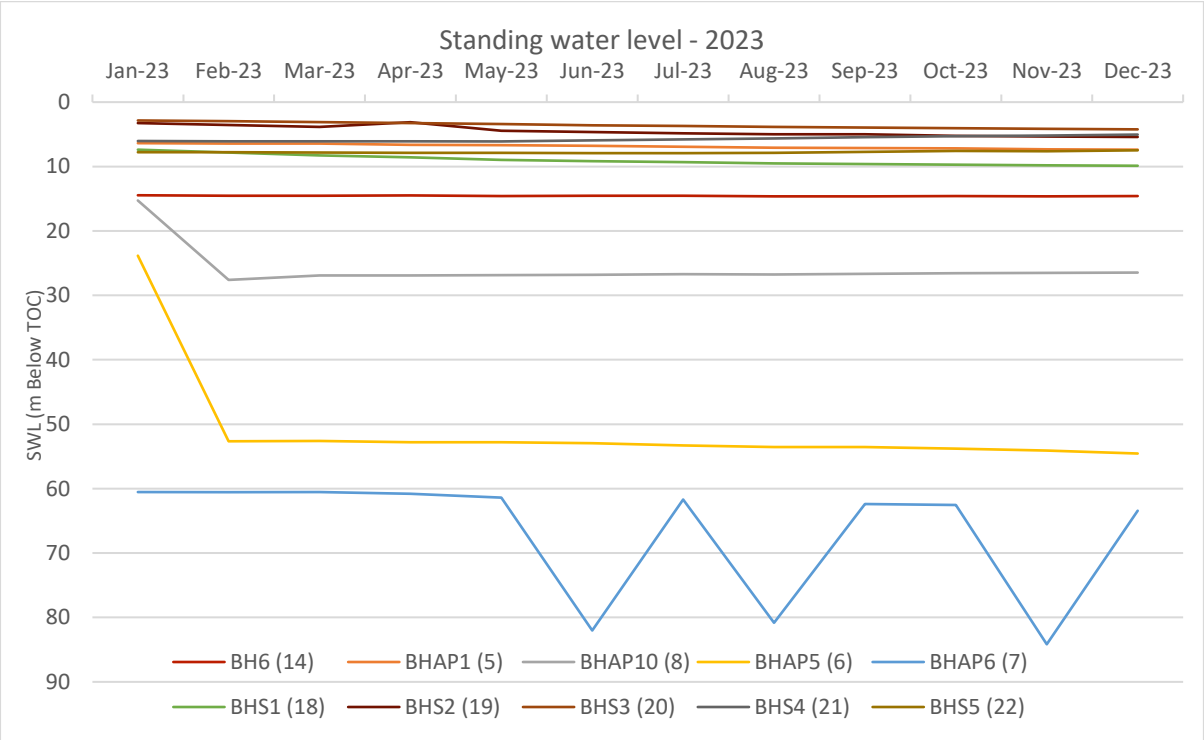

Figure 14: Monthly bore standing water level measurements during 2023.

At the beginning of this reporting period, the standing water level at BHAP6 (the production bore) continued the trend from the previous reporting period (2022) of gradually increasing, however then gradually decreased to the end of the reporting period. However, the measured height at the end of the reporting period (63.43 m, December 2023) remained higher than the measurements taken during the 2019 reporting period (e.g. 67.09 m, November 2019). Monthly measurements are presented in Figure 15.

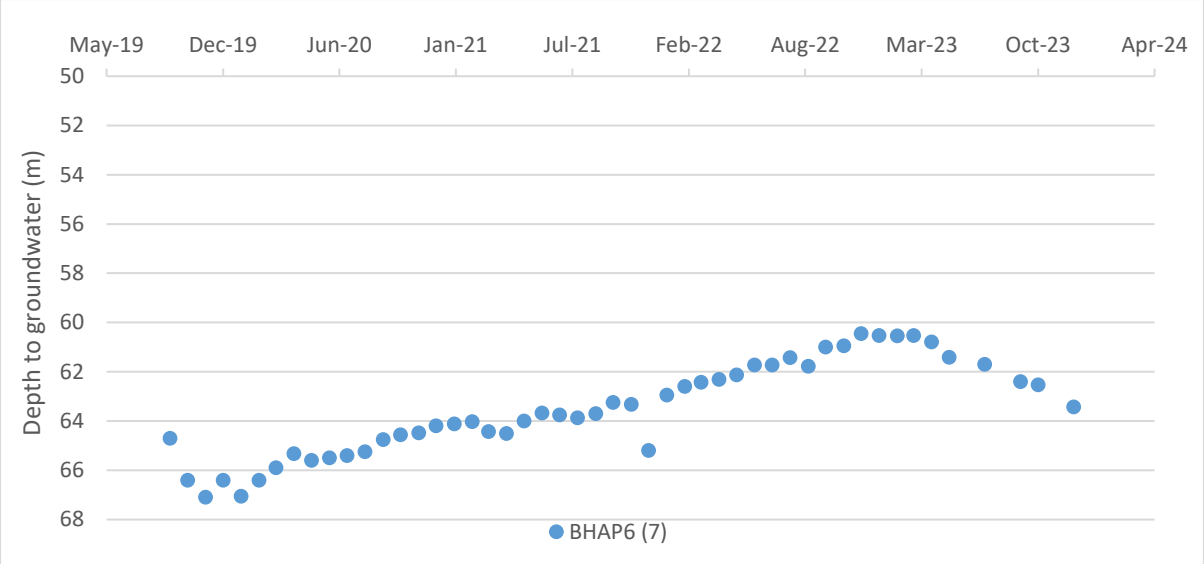

Figure 15: Standing water level BHAP6 (Production Bore). Note, measurements believed to be erroneous to being obtained while the bore was being pumped (June, August, November 2023) have been removed from the graph.

Comparison to previous years

Condition 5b(iii) of Schedule 5 of the Project Approval requires that a comparison of monitoring results to the "*monitoring results of previous years*" is included in the Annual Review. A comparison of standing water level (SWL) readings obtained during the reporting period to previous years (since 2020) is provided in Figure 16, below, and in Figure 15 for BHAP6. Although a slight decrease of SWL in some bores (BHS1, BHS2, BHS3, BH6, BHAP6) was observed during the reporting period, the levels observed remain generally consistent with data from previous years.

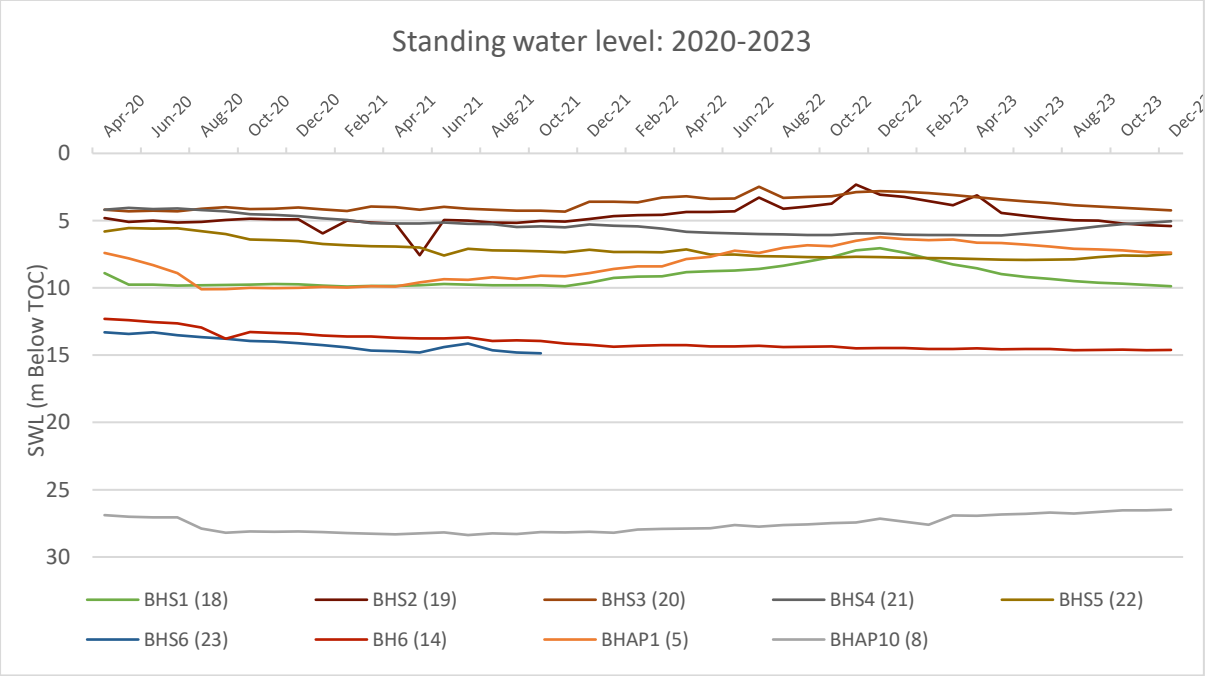

Figure 16: Standing water level since 2020. Note BHAP6 is not shown as it is presented in Figure 15, and BHAP5 is not shown due to the change in SWL observed following the relining of the bore (refer to Figure 14).

5.5.2 Water monitoring

Water monitoring across the project site is undertaken in accordance with the 2017 Water Management Plan and requirements of the EPL, with samples collected quarterly from six of the 10 bores, and annually from the remaining four bores. Samples are collected from the three springs quarterly or during periods of flow, as appropriate. This monitoring regime will continue in 2024. In 2023, all samples were obtained as required, excepting from bore BHS6, which was damaged as detailed above, and sand bores BH1-BH5, which were previously destroyed in accordance with extraction activities, and replaced with the BHS1-BHS6 bores. The monitoring schedule of all analytes is presented in Table 13, below.

Table 13: Monitoring schedule undertaken during the reporting period.

Analyte / Aquifer	Hard Rock (BHAP1, BHAP5, BHAP6, BHAP10)	Sand (BH6, BHS1-5)	Springs (Phils, Southern, Western)
Standing Water Level (SWL)	Monthly	Monthly	N/A
Flow	N/A	N/A	Monthly
pH	Quarterly - January, April, July, October	Quarterly - January, April, July, October	Quarterly - January, April, July, October
Electrical Conductivity	Quarterly - January, April, July, October	Quarterly - January, April, July, October	Quarterly - January, April, July, October
Total Dissolved Solids	Quarterly - January, April, July, October	Quarterly - January, April, July, October	Quarterly - January, April, July, October
Calcium	January, October	Quarterly - January, April, July, October	Quarterly - January, April, July, October
Chloride	January, October	Quarterly - January, April, July, October	Quarterly - January, April, July, October
Iron	January, October	Quarterly - January, April, July, October	Quarterly - January, April, July, October
Magnesium	January, October	Quarterly - January, April, July, October	Quarterly - January, April, July, October
Manganese	January, October	January, October	January, October
Potassium	January, October	Quarterly - January, April, July, October	Quarterly - January, April, July, October
Sodium	January, October	Quarterly - January, April, July, October	Quarterly - January, April, July, October
Sulfate	January, October	Quarterly - January, April, July, October	Quarterly - January, April, July, October
Alkalinity	January, October	Quarterly - January, April, July, October	Quarterly - January, April, July, October
Ionic Balance	January, October	Quarterly - January, April, July, October	Quarterly - January, April, July, October
Arsenic	January, October	January, October	January, October
Cadmium	January, October	January, October	January, October
Chromium	January, October	January, October	January, October
Copper	January, October	January, October	January, October

Lead	January, October	January, October	January, October
Mercury	January, October	January, October	January, October
Nickel	January, October	January, October	January, October
Zinc	January, October	January, October	January, October
BTEX	Not analysed	Quarterly - January, April, July, October	Quarterly - January, April, July, October
TRH	Not analysed	Quarterly - January, April, July, October	Quarterly - January, April, July, October

The below tables present a summary of the average groundwater monitoring results across 2023 calculated from the four regular quarterly sampling events. They have been summarised into general water properties (Table 14), anions and cations (Table 15), and hydrocarbons (Table 16), to allow for comparison with previous Annual Reviews.

The results are generally comparable with previous observations across all bores, excepting the following:

- Increases in sulfate, electrical conductivity, and total dissolved solids observed in BHAP1 and Western Spring.
- Reduction in some cations/anions in BHAP1 (calcium, chlorine, sodium), BHAP10 (calcium, chlorine, sodium, magnesium), BHAP5 (calcium, chlorine, sodium), and BHS5 (chlorine).

All hydrocarbon results were at levels below detection/reporting.

Sampling results for the below analytes do not indicate any evidence of impact upon groundwater quality as a result of quarrying activities.

Table 14: General properties, average across 2023.

Name	Sulfate (mg/L)	EC (µS/cm)	pH	TDS (mg/L)
BH6	4.5	797.5	7.8	636.0
BHAP1	21.0	1467.5	6.7	1191.0
BHAP10	4.0	437.0	7.2	313.3
BHAP5	6.0	701.3	7.6	412.5
BHAP6	11.0	849.5	7.7	485.0
BHS1	2.3	274.8	6.4	288.3
BHS2	4.3	371.5	6.8	233.5
BHS3	4.5	506.0	6.5	310.5
BHS4	3.0	794.3	7.7	419.0
BHS5	9.7	1049.3	7.8	598.8
BHS6				
Phils Spring	13.0	1325.0	7.8	758.0
Southern Spring	6.0	467.8	7.4	299.0
Western Spring	11.5	1250.0	8.0	755.3

Table 15: Anions and cations, average across 2023.

Name	Ca mg/L	Cl mg/L	K mg/L	Na mg/L	Mg mg/L
BH6	51.3	96.5	1.0	47.0	53.0
BHAP1	156.0	486.0	3.0	95.0	5.0
BHAP10	6.0	91.0	2.0	82.0	8.0
BHAP5	55.0	51.0	2.0	54.0	35.0
BHAP6	79.0	79.0	2.0	60.0	32.0
BHS1	8.5	69.3	2.0	22.0	11.0
BHS2	9.3	83.5	1.0	42.0	13.3
BHS3	5.8	150.3	BDL	68.8	14.3
BHS4	52.3	47.0	1.0	33.5	65.5
BHS5	53.8	140.8	BDL	74.0	70.3
BHS6					
Phils Spring	61.0	205.8	BDL	94.3	98.8
Southern Spring	19.8	69.3	BDL	42.5	26.5
Western Spring	48.25	246.5	1	111.5	72

Table 16: Hydrocarbons, average across 2023.

Name	TRH µg/L	xylene µg/L	Toluene µg/L	Benzene µg/L	Ethyl benzene µg/L
BH6	BDL	BDL	BDL	BDL	BDL
BHAP1	BDL	BDL	BDL	BDL	BDL
BHAP10	BDL	BDL	BDL	BDL	BDL
BHAP5	BDL	BDL	BDL	BDL	BDL
BHAP6	BDL	BDL	BDL	BDL	BDL
BHS1	BDL	BDL	BDL	BDL	BDL
BHS2	BDL	BDL	BDL	BDL	BDL
BHS3	BDL	BDL	BDL	BDL	BDL
BHS4	BDL	BDL	BDL	BDL	BDL
BHS5	BDL	BDL	BDL	BDL	BDL
BHS6					
Phils Spring	BDL	BDL	BDL	BDL	BDL
Southern Spring	BDL	BDL	BDL	BDL	BDL
Western Spring	BDL	BDL	BDL	BDL	BDL

Comparison to previous years

Condition 5b(iii) of Schedule 5 of the Project Approval requires that a comparison of monitoring results to the "*monitoring results of previous years*" is included in the Annual Review. A comparison of water monitoring data obtained during the reporting period to previous years (since 2021) is provided in Table 17 and Table 18, below. All readings for hydrocarbons across all monitoring points were below the laboratory detection limit (BDL), across the reporting period and the two previous years and have hence not been tabulated. Data obtained during the reporting period was found to be generally consistent with data from previous years excepting the following:

- Increases in sulfate, electrical conductivity, and total dissolved solids observed in BHAP1 and Western Spring.
- Reduction in some cations/anions in BHAP1 (calcium, chlorine, sodium), BHAP10 (calcium, chlorine, sodium, magnesium), BHAP5 (calcium, chlorine, sodium), and BHS5 (chlorine).

Table 17: Anions and cations, annual averages across 2021-2023.

Monitoring Point	Year	Ca (mg/L)	Cl (mg/L)	K (mg/L)	Na (mg/L)	Mg (mg/L)
BH6	2021	56.7	103.3	1.0	49.7	56.3
	2022	51.3	96.5	1.0	47.0	53.0
	2023	53.8	95.0	1.0	41.8	54.3
BHAP1	2021	30.0	260.0	1.0	110.0	17.0
	2022	156.0	486.0	1.0	95.0	5.0
	2023	12.7	111.5	1.0	63.5	6.7
BHAP10	2021	5.1	80.0	1.0	74.0	7.3
	2022	6.0	91.0	1.0	82.0	8.0
	2023	4.0	57.0	1.0	60.5	5.2
BHAP5	2021	10.3	32.5	1.0	15.0	35.0
	2022	55.0	51.0	1.0	54.0	35.0
	2023	9.8	27.0	1.0	12.5	36.0
BHAP6	2021	82.5	74.0	1.0	69.0	33.0
	2022	79.0	79.0	1.0	60.0	32.0
	2023	71.5	81.5	1.0	57.5	30.0
BHS1	2021	12.3	41.3	1.0	16.3	12.4
	2022	8.5	69.3	1.0	22.0	11.0
	2023	10.6	71.0	1.0	21.5	11.8
BHS2	2021	17.7	39.7	1.0	24.3	15.7
	2022	9.3	83.5	1.0	42.0	13.3
	2023	15.0	78.5	1.0	53.5	16.0
BHS3	2021	23.7	180.0	1.0	73.3	33.7
	2022	5.8	150.3	1.0	68.8	14.3
	2023	8.9	111.5	1.0	56.5	15.2
BHS4	2021	47.3	45.3	1.0	33.0	59.3
	2022	52.3	47.0	1.0	33.5	65.5
	2023	52.3	44.5	1.0	28.0	62.8
BHS5	2021	46.0	69.0	1.0	44.0	56.3
	2022	53.8	140.8	1.0	74.0	70.3
	2023	57.0	85.0	1.0	56.0	68.8
BHS6	2021	42.0	47.0	1.0	58.7	49.7
	2022					
	2023					
Phils Spring	2021	46.7	160.0	1.0	71.3	80.7
	2022	61.0	205.8	1.0	94.3	98.8
	2023	56.5	162.5	1.0	78.8	90.3
Southern Spring	2021	33.3	73.3	1.0	37.3	48.3

	2022	19.8	69.3	1.0	42.5	26.5
	2023	28.5	66.3	1.0	35.3	38.5
Western Spring	2021	44.3	340.0	1.0	210.0	71.3
	2022	48.3	246.5	1.0	111.5	72.0
	2023	25.5	132.5	1.0	67.8	38.3

Table 18: Physical properties, annual averages across 2021-2023.

Monitoring Point	Year	Sulfate (mg/L)	EC (µS/cm)	pH	TDS (mg/L)
BH6	2021	4.0	933.3	7.5	533.3
	2022	4.0	877.5	7.4	472.5
	2023	4.5	797.5	7.8	636.0
BHAP1	2021	7.5	930.0	6.5	685.0
	2022	6.5	470.0	6.7	320.0
	2023	21.0	1467.5	6.7	1191.0
BHAP10	2021	10.0	465.0	6.8	365.0
	2022	6.5	360.0	6.7	465.0
	2023	4.0	437.0	7.2	313.3
BHAP5	2021	12.5	405.0	8.5	245.0
	2022	9.0	415.0	8.4	285.0
	2023	6.0	701.3	7.6	412.5
BHAP6	2021	7.5	865.0	7.6	470.0
	2022	7.5	840.0	7.7	470.0
	2023	11.0	849.5	7.7	485.0
BHS1	2021	4.0	233.3	6.4	166.7
	2022	3.8	300.0	6.1	230.0
	2023	2.3	274.8	6.4	288.3
BHS2	2021	8.0	360.0	7.1	186.7
	2022	9.3	485.0	6.7	252.5
	2023	4.3	371.5	6.8	233.5
BHS3	2021	3.7	840.0	6.8	486.7
	2022	3.8	485.0	6.5	322.5
	2023	4.5	506.0	6.5	310.5
BHS4	2021	5.7	863.3	7.4	436.7
	2022	3.0	862.5	6.6	450.0
	2023	3.0	794.3	7.7	419.0
BHS5	2021	5.3	863.3	7.3	440.0
	2022	23.0	972.5	7.5	540.0
	2023	9.7	1049.3	7.8	598.8
BHS6	2021	4.3	860.0	7.4	476.7
	2022				
	2023				
Phils Spring	2021	13.0	1266.7	7.5	696.7
	2022	10.3	1275.0	7.4	725.0
	2023	13.0	1325.0	7.8	758.0

Southern Spring	2021	4.7	703.3	8.2	403.3
	2022	7.8	605.0	8.0	362.5
	2023	6.0	467.8	7.4	299.0
Western Spring	2021	16.7	1733.3	7.7	933.3
	2022	2.0	787.5	7.7	442.5
	2023	11.5	1250.0	8.0	755.3

5.5.3 Spring Flow

The Western Spring was visually assessed for flow monthly throughout the reporting period, with the manual estimation measurement method implemented in late 2021 at the Southern Spring continued monthly throughout 2023.

No flow was observed at the Western Spring during any of the monthly inspections, with the amount of water in the adjacent pond fluctuating slightly with rainfall. Samples were collected from this pond at the Western Spring during the year.

As identified in the Annual Review for the previous reporting period (2022), observations at the Southern Spring were impacted by discharge activities, as the outlet for the discharge was upstream of the Southern Spring monitoring / sampling location. As such it was not possible to obtain accurate estimations of flow for the Southern Spring during the reporting period. Flow was observed at the monitoring location during January to April 2023, but no flow was observed from May to December 2023.

Phil's Spring is fitted with an electronic V-Notch weir monitoring device to continuously monitor flow rates. The average mean discharge (L/day) as calculated for each month is presented in Figure 17. Flow rate across the monitoring period fluctuated, however the trend was relatively consistent with the previous reporting period. Flow rates observed were generally higher than the previous reporting periods.

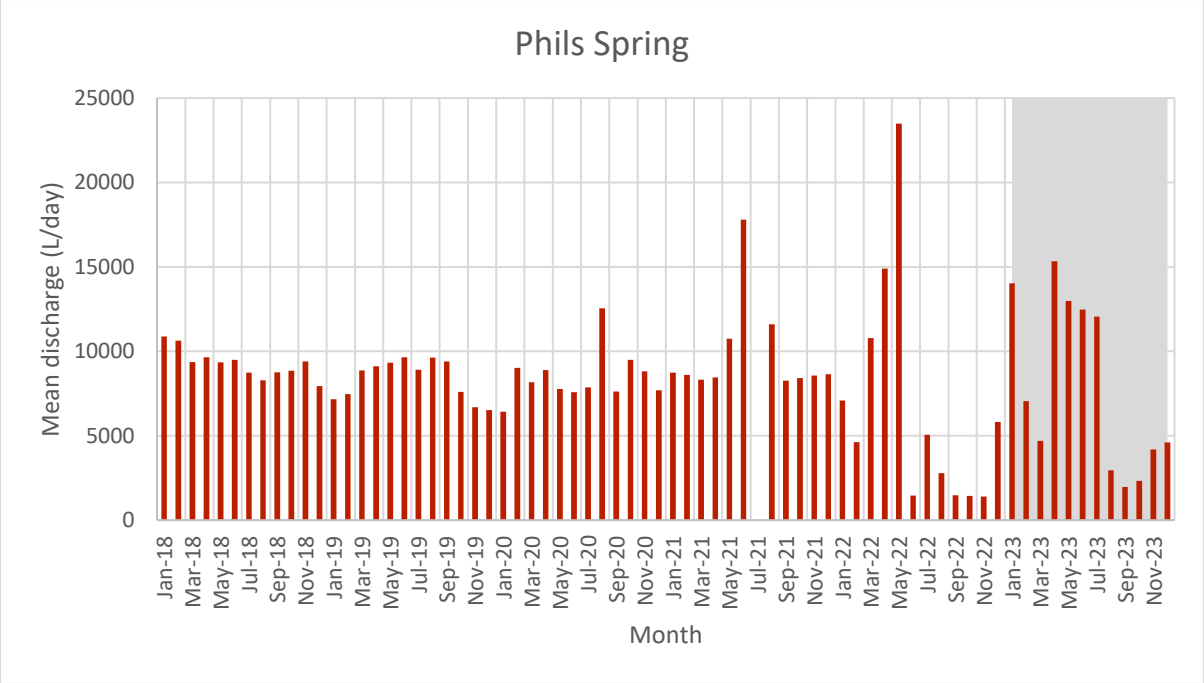

Figure 17: Mean discharge (L/day) observed at the Phils Spring monitoring location. Monitoring device was inactive between 4 June 2021 and 18 August 2021. The relevant period for this report is highlighted in grey.

5.5.4 Discharge-trial related monitoring

Monitoring requirements associated with the discharge trial (Condition U1 of the EPL) were included on the EPL following its variation in November 2022. This includes characterisation sampling of the on-site accumulated water prior to commencement of discharge, and monthly sampling during discharge, of both the on-site water and at three off-site locations. During the reporting period, four characterisation samples had been obtained, and seven monthly samples. This was compliant with requirements. Results from these sample are presented in Table 19 and Table 20, below.

Table 19: Results from characterisation sampling of water to be discharged, 2023.

Date	Sample	EC (µS/cm)	pH	Turbidity (NTUs)	TSS (mg/L)	COD (mg/L)	Oil and Grease (mg/L)
13/03/2023	**S1**	444	7.84	11.8	22	<10	5
25/05/2023	**S1**	488	8.07	21.3	12	11	<5
22/06/2023	**S1**	480	7.17	12.1	13	137	<5
14/07/2023	**S1**	497	7.48	13	15.4	25	6

Table 20: Results from monthly water quality sampling (sampling location S1), and ambient water quality monitoring (other sampling locations), during discharge.

Date	Sampling location	EC (µS/cm)	pH	Turbidity (NTUs)	TSS (mg/L)	COD (mg/L)	Oil and Grease (mg/L)
10/01/2023	**S1**	456	8.19	5	12	<5	2.1
10/01/2023	**DCD**	449	8.24	12	<10	<5	6.1
10/01/2023	**JC-US**	431	8.03	6	36	<5	4.5
10/01/2023	**JC-DS**	440	8.18	5	24	<5	3.5
9/02/2023	**S1**	465	8.13	<5	10	<5	3.9
9/02/2023	**DCD**	464	8.26	<5	<10	<5	2.7
9/02/2023	**JC-US**	650	7.97	10	35	<5	2.9
9/02/2023	**JC-DS**	609	8.2	8	19	<5	6.2
13/03/2023	**S1**	444	7.94	22	<10	<5	11.6
13/03/2023	**DCD**	440	8.26	13	<10	<5	3.7
13/03/2023	**JC-US**	551	7.82	8	39	<5	4.1
13/03/2023	**JC-DS**	492	8.32	<5	<10	<5	4.2
11/04/2023	**S1**	479	8.41	8	<10	<5	8.3
11/04/2023	**DCD**	477	8.45	7	<10	<5	8.4
11/04/2023	**JC-US**	292	8.18	<5	<10	<5	4.9
11/04/2023	**JC-DS**	360	8.27	<5	<10	<5	4.4
12/05/2023	**S1**	486	8.07	12	11	<5	21.3
12/05/2023	**DCD**	487	8.14	8	12	<5	14.1
12/05/2023	**JC-US**	803	7.94	<5	26	<5	11.1
12/05/2023	**JC-DS**	746	8.24	<5	15	<5	5.2
22/06/2023	**S1**	480	7.17	13	137	<5	12.1
22/06/2023	**DCD**	478	7.8	9	141	<5	5.4
22/06/2023	**JC-US**	815	7.6	55	158	<5	12.9
22/06/2023	**JC-DS**	693	7.94	5	130	<5	2
14/07/2023	**S1**	497	7.48	13	25	6	15.4
14/07/2023	**DCD**	491	8.03	<5	<10	6	6.7
14/07/2023	**JC-US**	848	7.91	5	15	<5	18
14/07/2023	**JC-DS**	826	8.22	<5	13	<5	4.4

5.5.5 Discharge-trial related photo point monitoring

The watercourse south of the Approved Extraction Area was inspected during the reporting period monthly from January to August (i.e. on eight separate occasions), with photographs obtained at five locations and compared to a baseline from August 2022. Observations made during this time were consistent that vegetation growth within the channel had increased, with no obvious erosion or scouring since the commencement of discharge. Photographs and specific observations were included in the discharge reports submitted to the EPA as a requirement of the trial.

5.6 Heritage

The Aboriginal Heritage Management Plan (**AHMP**) was updated and submitted to DPE in 2021, as detailed in the 2021 Annual Review. On 16 March 2023, DPE requested that additional information regarding the AHMP be provided. Multiquip provided this information and a revised version of the AHMP to DPE on 17 April 2023.

No artefacts or items of cultural value were recovered throughout 2023, and no areas identified in the AHMP as containing heritage items were disturbed.

5.7 Invasive species

No programs were conducted during the reporting period to manage invasive species. Historically the Quarry has been affected by foxes, deer, pigs, and rabbits. Weed control is proposed in the next reporting period (2024) for vegetation such as blackberries and Paterson's Curse.

6. Water management

Three active Water Access Licences (**WAL**s) are currently held by the Ardmore Park Quarry. Two licences (30111 and 41848) are directed to the Goulburn Fractured Rock Aquifer, subject to the Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources, with the third WAL permitting water use from Bungonia Creek (25390). A summary of each of these WALs is presented in Table 21.

Table 21: Summary of Water Access Licences (WALs).

WAL	Summary
WAL 30111 – "BHAP6" or "The Production Bore"	BHAP6 is a deep bore located at the centre of the Quarry property. Water from BHAP6 is generally used for dust suppression, amenities, truck washing, on-site concrete production, and rock washing. Although infrastructure was installed to connect the accumulated water covered by WAL 41848 to the rock washing area, use of BHAP6 increased during the reporting period.
WAL 41848 – "The Bubbler"	Water is obtained at a sled mounted pump located in the Old Pit quarry void, drawing from surface and intercepted groundwater water collected in the voids. Water from this point is utilised for sand washing, dust suppression, and rock washing, with infrastructure installed in late 2022 to allow for use of the water for rock washing as an alternative to BHAP6. In late 2022, the EPL was varied to allow discharge of water from the Old Pit offsite, which commenced on 9 December 2022 and continued throughout the reporting period. A significant proportion of this water is surface water, with the Old Pit accumulating large volumes of water during heavy rain events.
WAL 25390	No water has been used under this WAL in 2023.

Water use for 2023 is summarised below in Table 22. Water usage from WAL 30111 remained generally consistent throughout the year, was increased from previous years, however remained well within the permitted entitlements. Water usage from WAL 41848 was not possible to accurately track during the reporting period, as the WAL covers

intercepted groundwater only, while the water discharged from the Old Pit (which was tracked), included both intercepted groundwater and accumulated surface water. The majority of this water was surface water. As forecast in the 2022 Annual Review, the raw figures for WAL 41848 "use" as shown in Table 22 exceed the entitlement, as these figures do not differentiate between the high volume of accumulated surface water and infiltrated groundwater. As proposed in the 2022 Annual Review, WaterNSW has been contacted informing them of this issue and seeking their input as to a potential solution. As of the publication of this report, no response has been received.

*Table 22: Water entitlements and usage, 2023. Annual values are approximate as meter readings were not taken on the first and last day of the reporting period. Due to the use of multiple meters on WAL41848, meter readings are not presented. *One unit under the water sharing plan is equivalent to an entitlement of one ML. **As discussed above, the raw value for usage does not accurately reflect the amount of groundwater used (as surface water is also included), and as such the percentage of entitlement used is also inaccurate.*

	BHAP6 (WAL 30111)		
	First reading	Final reading	Total (m^3)
Date	5/01/2023	5/12/2023	
Reading (m^3)	132524	32982	32982
	Approx. total usage 2023 (ML)		32.98
	Entitlement units* (ML)		110
	Approx. entitlement used 2023 (%)		30.0%

WAL 41848	
Approx. total usage 2023** (ML)	165
Entitlement units* (ML)	100
Approx. entitlement used 2023** (%)	165

Meter readings for BHAP6 since February 2018 are presented in Figure 18, which shows the increase of water take in this reporting period.

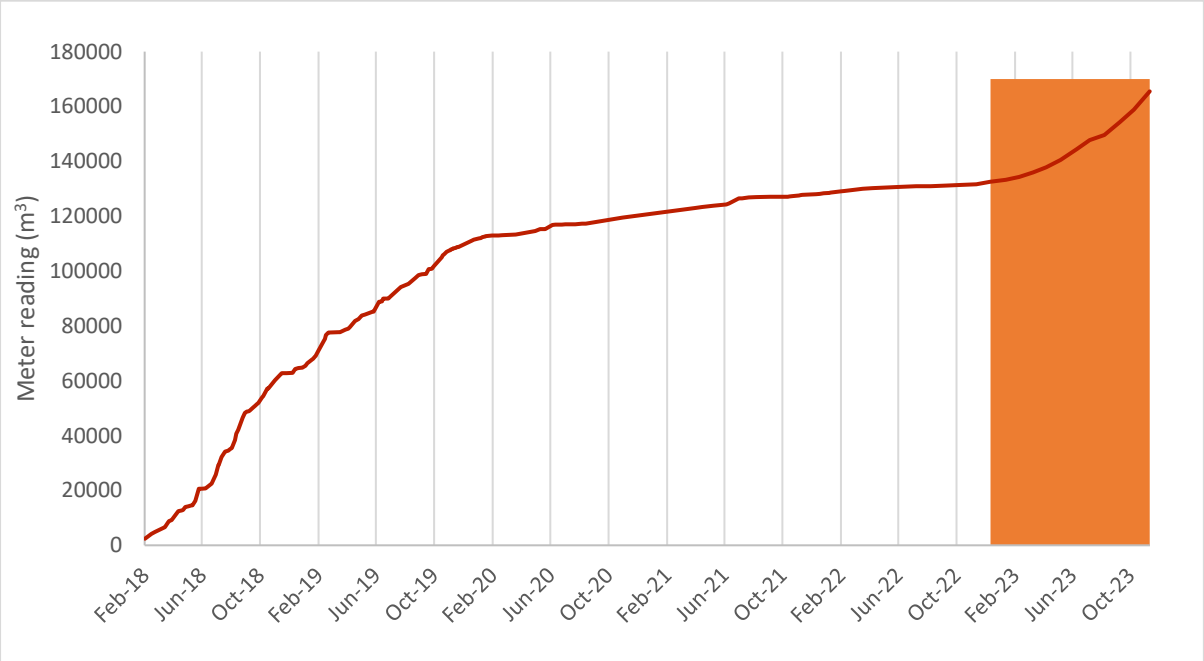

Figure 18: Meter readings (m^3) for WAL 30111. The relevant period for this report is highlighted in orange.

6.1 Water year (1 July 2022 – 30 June 2023)

The water year (1 July 2022 – 30 June 2023) is not equivalent to the reporting period of this Annual Review (1 January 2023 – 31 December 2023). The water taken during the water year from WAL 30111 is presented in Table 23, below.

*Table 23: Water entitlements and usage during the previous water year for WAL 30111. Values are approximate as meter readings were not taken on the first and last day of the water year. *One unit under the water sharing plan is equivalent to an entitlement of one ML. **Closest reading to 30 June 2023.*

	BHAP6 (WAL 30111)		
	First reading	Final reading	Total (m^3)
Date	1/07/2022	5/07/2023**	
Reading (m^3)	130704	144513	13809
	Approx. total usage in water year (ML)		13.81
	Entitlement units* (ML)		110
	Approx. entitlement used 2023 (%)		12.6%

As discussed in the previous section of this report, the groundwater usage from WAL 41848 was not possible to accurately track, as the WAL covers intercepted groundwater only, while the water taken from the Old Pit and used on site (prior to the commencement of the discharge trial) and discharged from the Old Pit (during the discharge trial), included both intercepted groundwater and accumulated surface water. The approximate total amount of water removed from the Old Pit (noting that on occasion, faults with the meters were identified), is presented in Table 24, below.

*Table 24: Water entitlements and usage during the previous water year for WAL 41848. Values are approximate as meter readings were not taken on the first and last day of the water year. *One unit under the water sharing plan is equivalent to an entitlement of one ML. **Closest reading to 30 June 2023. ***Last reliable reading prior to discharge commencement. ****As discussed above, the raw value for usage does not accurately reflect the amount of groundwater used (as surface water is also included), and as such the percentage of entitlement used is also inaccurate.*

	WAL 41848		
	Prior to discharge	During discharge	Total
Period	16/06/2022** - 4/11/2022***	9/12/2022 - 31/05/2023	16/06/2022 - 30/06/2023
Total usage (ML)	4.21	182.4171	186.6271
Entitlement units* (ML)	100	100	100
Entitlement used (%)	4%	182%****	187%****

As per the letter sent to Water NSW (referenced in the previous section), approximately 19% of the water accumulated in the Old Pit is predicted to have originated from the Goulburn Fractured Rock Groundwater Source. Considering this fraction, we would assume 35.5 ML of the total amount of water removed from the Old Pit during the water year to be sourced from groundwater, a total of 35.5% of the entitlement.

6.2 2017 Water Management Plan

Activities on Site with regard to water management are to be conducted in accordance with the 2017 Water Management Plan (WMP) prepared by RW Corkery & Co, Pty Ltd (RWC). It is noted that a revised WMP was prepared for submission to the Department, but (as discussed in Table 33) due to the correspondence that no further action would be taken regarding the review and approval of submitted management plans this was not progressed.

6.2.1 Groundwater monitoring requirements

Section 8.4 of the 2017 WMP details the groundwater monitoring required to be undertaken, as presented in Table 25, below.

Table 25: Groundwater monitoring requirements as presented in the 2017 WMP

Analyte / Aquifer	Hard Rock (BHAP1, BHAP5, BHAP6, BHAP10)	Sand (BH1-6)	Spring (Phils, Southern)
Standing Water Level	Quarterly	Quarterly	Quarterly
pH, EC, TDS	Quarterly	Quarterly	Quarterly
Organic Suite	N/A	Quarterly	Quarterly
Cation/Anion Suite	Annual	Annual	Annual
Metals Suite	Annual	Annual	Annual

All groundwater monitoring of the hard rock aquifer bores (BHAP1, BHAP5, BHAP6, BHAP10) was undertaken during the reporting period, as required. The annual monitoring event was conducted in January 2023, with subsequent quarterly monitoring events conducted in April 2023, July 2023, and October 2023. Monitoring of the standing water level (SWL) of each bore was conducted monthly, in excess of the WMP requirements.

Groundwater monitoring of the sand aquifer bore BH6 was undertaken during the reporting period, as required. The annual monitoring event was conducted in January 2023, with subsequent quarterly monitoring events conducted in April 2023, July 2023, and October 2023. Monitoring of the standing water level (SWL) of each bore was conducted monthly, in excess of the WMP requirements. Groundwater monitoring of the sand aquifer bores BH1-BH5 could not be conducted, due to the historical destruction of these bores in accordance with extraction activities. A new series of shallow sand bores (BHS1-BHS6) was installed at the quarry to replace these bores, and monitoring at these locations is conducted in accordance with the requirements of the EPL.

These updated monitoring requirements and locations are presented in a revised Water Management Plan.

All monitoring of the springs (Phils Spring, Southern Spring) was undertaken during the reporting period, as required. The annual monitoring event was conducted in January 2023, with subsequent quarterly monitoring events conducted in April 2023, July 2023, and October 2023. Monitoring of the water level of Phils Spring was determined by the remote, V-notch weir, and converted to monthly flow measurements. Flow measurement

estimates were obtained from the Southern Spring monthly, in excess of the WMP requirements.

A summary of all analytes monitored from each of the groundwater bores and springs, and their frequency during the reporting period is presented in Table 13.

Section 8.4.5 of the WMP requires photo points to be established at Phil's Spring and the Southern Spring, with photographs to be taken at least annually. Photographs were taken from these locations at multiple times throughout the reporting period, compliant with this requirement.

6.2.2 Data management protocol

Section 8.8 of the WMP includes a data management protocol, with specifics presented in Table 26, below.

Table 26: Data Management Protocol presented in Section 8.8 of the 2017 Water Management Plan.

Protocol	Response for 2023 reporting period
The water level data downloaded from the loggers in the monitoring bores and census springs will be imported into an electronic database or spreadsheet and viewed following each round of monitoring. This process will ensure that a progressive record of the data is stored and maintained, and the integrity/quality of the data can be checked on a regular basis. If a problem with the data is discovered, for example the corrected water level in the data logger does not reasonably correspond with the manual measurement taken at the time of downloading, remedial measures can be implemented immediately. If there is a problem, the worst-case scenario is that water level data may be lost for that period or part of the monitoring period since the last downloading was carried out. In this way, any problem should not be carried through in the medium to long term.	Section 8.4.2.1 of the WMP stated that automated submersible Pressure and Temperature Data Recorders ("loggers") would be installed in the bores. These loggers have since been removed, due to a number of factors. Standing Water Level (SWL) in each bore is now measured manually each month by trained environmental representatives. This data is entered into an electronic spreadsheet following each monitoring event, which is stored in a secure, cloud-based system with regular back-ups. Data is uploaded to the Multiquip website monthly. No data was lost during the reporting period.
Email a copy of the water level data to a hydrogeological consultant for assessment and keep a backup copy of the water level database in a secure off-site location.	4Pillars representatives assess the water level data following each monitoring event. All data is stored in a secure, cloud-based system with regular back-ups, as well as being uploaded to the Multiquip website monthly.
Develop and maintain a water usage record for the Quarry. This database can be part of the electronic water level monitoring database.	A water usage record has been developed and is maintained monthly, following each site inspection. This record is stored in a secure, cloud-based system with regular back-ups.
Develop and maintain an electronic water quality database or spreadsheet. This database can also be part of the electronic water level monitoring database. A suitable database and progressive charting will be developed.	An electronic water quality spreadsheet has been developed and is maintained quarterly, following each sampling event.
Develop and maintain an electronic spring flow database or spreadsheet. This database can also be part of the electronic water level and water quality monitoring database. A suitable database and progressive charting will be developed.	An electronic spring flow spreadsheet has been developed and is maintained monthly, following each site inspection. Electronic remote data from the V-notch weir installed at Phils Spring is used to populate the spreadsheet, along with manual estimate measurements from the Southern Spring and Western Spring. This data is presented in the monthly Environmental Monitoring Reports which are uploaded to the Multiquip website.
Develop and maintain an electronic rainfall database or spreadsheet. This database can also be part of the electronic water level monitoring database.	An electronic rainfall spreadsheet has been developed and is maintained monthly. Data used to populate the spreadsheet is obtained from on-site monitoring device "PM10_W".

6.2.3 Triggers, Actions, Responses and Reporting

No triggers for Water Level or Water Quality in Table 6 of the WMP were observed in the reporting period, and as such no associated actions were required to be implemented.

Spring flow was observed to fluctuate, and no flow was observed in the Southern Spring from May onwards for the remainder of the reporting year. The 2017 WMP did not present a baseline flow measurement for the Southern Spring and as such no comparison was possible. It is noted that the Larry Cook and Associates Pty Ltd 2008 Groundwater Impact Assessment prepared by for the project stated that no flow was noted in the Southern Spring during its inspection in November 2004, and that the paucity of any significant flow and the setting indicated that this system from which the spring generates water was not likely to be significant. Discharge of water into the watercourse of the Southern Spring was carried out during the reporting period in accordance with the EPL-approved discharge trial.

During the reporting period, there were seven months in which the automated logger at Phils Spring presented flow values of <0.1L/s. It is noted that where manual estimate measurements were taken, only four months (out of 10 measurements) returned flow values of <0.1L/s. In accordance with the Table 6 triggers, monitoring and assessment of the flow rate was continued, and graphs prepared. A comparison of the flow rate with rainfall data was also undertaken, and while some visual correlation between the data could be observed, this was inconclusive in determining whether the flow rate was directly related to rainfall.

Available data since January 2018 from the automated logger has been reviewed and is presented in Table 27, below. When compared to this long-term data, the observations for 2023 seem reasonably consistent, although generally lower than the assumptions presented in the WMP. It is noted that the minimum flow values recorded during the reporting period and preceding year (2022) are lower than previous years, and the average flow values slightly lower than previous years.

Table 27: Automated logger data for Phils Spring.

Year	Minimum flow (L/s)	Maximum flow (L/s)	Average flow (L/s)	# months >0.1 L/s
2018	0.09	0.13	0.11	10
2019	0.08	0.11	0.10	7
2020	0.07	0.15	0.10	5
2021	0.10	0.21	0.11	6
2022	0.02	0.27	0.08	3
2023	0.02	0.18	0.09	5

No compensatory water supply or other mitigation/contingency plans was offered or implemented during the reporting period. No complaints regarding water on surrounding properties (reduction or otherwise) were received during the reporting period.

6.2.4 General Reporting Protocol

During the reporting period, reporting was undertaken in general accordance with the general reporting protocol presented in Section 8.9 of the WMP, with some deficiencies. Specifics have been provided in Table 28, below

Table 28: General Reporting Protocol presented in Section 8.9 of the 2017 Water Management Plan.

Protocol	Response for 2023 reporting period
All water level data, groundwater quality monitoring results and spring flow will be recorded, collated and duly reported in-house on at least a six-monthly basis for the first 12 months, henceforth on an annual basis. The data will be reviewed by a consulting hydrogeologist. The aim is to assess any changes in water levels, groundwater chemistry or spring flow and identify reasons for the changes if they occur. The monitoring schedule will be reviewed annually and changed if deemed appropriate by the consultant.	All data is recorded, collated, and reported monthly (SWL, spring flow), quarterly (water quality – some analytes), and annually (water quality – additional analytes). The data is assessed by 4Pillars representatives upon receipt. The monitoring schedule has changed since the preparation of the 2017 WMP, considering the destruction of a number of the listed bores in accordance with extractive activities, however, the remaining bores continue to be monitored in accordance with the 2017 WMP.
A complete set of audit results from the monitoring program will be formally reported to the Senior Hydrogeologist of the NSW Office of Water (DPI-Water) on an annual basis.	This was not completed during the reporting period. The set of data will be provided promptly, and on an ongoing basis as required.
The report will provide a summary of the water extraction records for the Quarry and monitoring results. The report will include a figure showing the locations of the monitoring sites, and a set of hydrographs with rainfall correlations.	N/A, considering the above. All data obtained during the reporting period was presented in the monthly Environmental Monitoring Reports which are uploaded to the Multiquip website, along with a figure showing the locations of the monitoring sites. Rainfall data is presented in the Annual Review.
The report will be sent in hard copy to the Senior Hydrogeologist of DPI-Water. The raw water level data can be appended to the report in electronic form. The complete report will also be submitted in electronic format to DPI-Water and to the Quarry Manager.	N/A, considering the above. The Quarry Manager is provided all prepared Environmental Monitoring Reports in electronic format.

6.2.5 Surface water quality monitoring and stream health monitoring

Surface Water Monitoring is detailed in Section 4 of the WMP.

Section 4.1 of the WMP (Water Quality Monitoring – CP3) requires the collection and laboratory analysis of water samples from dams CP3 (Dam 7) and Dam 8, if at any time the settling volume of Dam CP3 is compromised, and off-site disposal is required. Dam CP3 is still present, however due to the quarrying activities, the catchment feeding into this dam has been reduced, and little water accumulates in it. As such, there is now only a small dam still present in this location. At no time during the reporting period was the settling volume of this dam compromised, and as such the sampling and analysis requirements were not required to be implemented.

Section 4.2 of the WMP (Stream Health Monitoring (Receiving Water) requires the Quarry Manager to inspect the length of the watercourse south of Dam CP3 every six months,

obtain a series of five photographs, and determine whether "any significant signs of accelerated erosion" are identified.

As part of the monitoring associated with the discharge trial undertaken on the site, this watercourse was inspected during the reporting period monthly from January to August (i.e. on eight separate occasions), with photographs obtained at five locations and compared to a baseline from August 2022. Observations made during this time were consistent that vegetation growth within the channel had increased, with no obvious erosion or scouring since the commencement of discharge. In light of this outcome with the elevated volume of water travelling along the watercourse in association with the discharge trial, it is considered unlikely that significant signs of accelerated erosion would be associated with general quarrying activities. The Quarry Manager also regularly inspects this watercourse, and observations made correlate with those made during the discharge inspections.

This monitoring is considered compliant with the requirements of Section 4.2. of the WMP.

Section 4.3 of the WMP (Weather Monitoring) references the presence on site of an automatic weather station which measures daily rainfall, with results continuously logged and kept on file. This section details that untreated site discharges are only permissible after a rainfall event that exceeds the 95th percentile, 5-day rainfall depth (41mm). Weather monitoring was carried out as per this section. All discharges from the site were carried out in accordance with the EPL-approved discharge trial, permitted by Condition 12 of Schedule 3 of the Project Approval, which states that "the Proponent shall not discharge any water from the quarry or its associated operations except in accordance with an EPL."

As such, compliance with Section 4.3 was maintained throughout the reporting period.

6.2.6 Site auditing

Section 6 of the WMP requires that once per year, a hydrological consultant, Certified Professional in Erosion and Sediment Control (CPESC) or other appropriately qualified professional will be commissioned to inspect the site and prepare a report. The WMP does not detail submission/publication requirements for this report, and it is as such considered an internal requirement.

As mentioned above, 4Pillars attends the site each month to undertake monitoring and sampling in accordance with the requirements of the Project Approval and EPL. While a standalone annual report was not prepared as required by Section 6, the majority of the required contents of this report were included in various reports – such as the monthly Environmental Monitoring Reports which are uploaded monthly to the Multiquip website – as shown in Table 29, below. Other items were discussed with Site personnel, as required.

Table 29: Requirements of annual report to be prepared in accordance with Section 6 of the WMP.

Contents of report	Included in reports / Internally assessed
Results of an inspection of the weather station and its records.	The status of the weather station is reviewed weekly, with data downloaded monthly. Records are held in an electronic database. Relevant data is presented in the Annual Review.

Results of an inspection of the pumping records.	Meter readings from BHAP6 are taken monthly by 4Pillars during site inspections, with supplementary readings obtained by the Quarry Manger or site personnel on an ad hoc basis or as required. These readings are entered into an electronic database, with use data submitted to WaterNSW via the iWAS Portal. These records are also presented in the Annual Review. Meter readings from the discharge activities are taken at the start and finish of each day of discharge by the Quarry Manager or their delegate. These meter readings are reviewed during the presentation of discharge reports as required by the EPA.
Results of an inspection of the untreated discharge records, and comparison with rainfall data.	N/A, this kind of discharge mentioned in the WMP did not occur during the reporting period.
Results of an inspection of the volumes of water collected in Dam 8 and RE2 after rainfall events (for model calibration – Section 3.1).	N/A, the WMP states that subject to rainfall, this will only be required for two years.
Results of an inspection of the condition of all ponds and drainage structures.	Inspection of ponds and drainage structures for environmental purposes occur regularly, particularly after rain, However, if no actions are required, records are not kept of each of these inspections. Daily inspections are undertaken by the Site Supervisor which assess these structures and dams from a safety perspective. If any of these structures are observed to require maintenance, this is raised following each inspection, with action taken.
Results of an inspection of the condition of any rehabilitated areas.	Only one location has been rehabilitated, which is a bund constructed along the southern boundary of the Site. This bund is fully re-vegetated, and no formal inspections are required, though it is observed on a regular basis by the Site Supervisor and Quarry Manager. All other areas which will require rehabilitation are still in use, and as such no rehabilitation has been undertaken.
Identification of any areas of disturbed soil that could be rehabilitated.	As above, no other areas of disturbed soil are ready for rehabilitation, as either final surface levels have not yet been reached, or the areas are presently in use for stockpile storage.
Results of an inspection of the water quality monitoring results.	Water quality monitoring results are reviewed upon receipt, and compared to the limits and requirements presented in the WMP. The data is included in the monthly Environmental Monitoring Reports which are uploaded to the Multiquip website, as well as the Annual Review.
Results of an inspection of the condition of the receiving water (Section 4.2).	These observations were included in the discharge reports prepared during the reporting period, as per Section 5.5.5.

Provide recommendations to the site manager for any remedial actions necessary to ensure compliance with the operational license.	This is done on an ad-hoc basis, or via regular compliance meetings between 4Pillars and the Quarry Manager, with discussion points and recommendations circulated following each meeting.
Provide a clear statement as to whether the conditions of the operational license are being met. If they are not he/she will report on any breaches of the operation license and liaise with DPI Water to recommend any remedial actions necessary.	This is done on an ad-hoc basis, or via regular compliance meetings with the Quarry Manager, with discussion points and recommendations circulated following each meeting. Recommendations regarding notification of identified non-compliances are also discussed during these meetings.
Report on any unforeseen impacts and liaise with DPI Water to recommend any remedial actions necessary.	N/A during the reporting period.

6.2.7 Surface Water Response Plan

The Surface Water Response Plan presented in Table 3 of the WMP has been reproduced in Table 30, below, along with the status of each trigger during the reporting period. No triggers were observed during the reporting period that required actions to be implemented.

Table 30: Surface Water Response Plan presented in Table 3 of the WMP, and status during the reporting period.

Trigger	Status during reporting period
Discharge from CP1, CP2 or CP3 when combined rainfall has been less than 41mm in the previous five days.	No Action Required - no discharge from CP1, CP2, or CP3 during the reporting period.
Unable to treat water to less than 50mg/L before discharge.	No Action Required - no discharge from CP1, CP2, or CP3 during the reporting period. All discharge was from the Old Pit, and in accordance with EPL-approved discharge trial.
Water quality measurements exceed triggers described in Section 4.1.	N/A - only relevant if at any time the settling volume of Dam CP3 is compromised, and off-site disposal is required. This did not occur during the reporting period.
Significant changes to the watercourse downstream of CP3 (Section 4.2).	No Action Required - no significant changes observed.
Signs of pollutants downstream of CP3 (e.g. foams, oil and scum).	No Action Required - no pollutants observed.
Signs of wastewater effluent at soil surface.	No Action Required - no signs of wastewater effluent observed.
Re-use from ponds less than predicted, over-reliance on bore water.	No Action Required - accumulated site water was utilised for site activities (e.g. dust suppression) where possible, over borewater. Only 30% of the entitlement from WAL 30111 at BHAP6 was used during the reporting period.
Re-vegetation not occurring in required time frame.	It is assumed that "re-vegetation" here refers to within the watercourse south of the Approved Extraction Area, as the only other reference to vegetation within the WMP refers to this location, in Section 4.2. No impacts to vegetation were observed during the

	reporting period, and as such no re-vegetation was required.
Any unforeseen impact.	No Action Required- no unforeseen impacts arose that required further assessment.

7. Rehabilitation

No rehabilitation work was undertaken on previously disturbed land during the reporting period. As not all water in the Old Pit could be completely discharged, only limited backfilling of the "Old Pit" in the south-west of the Approved Extraction Area was undertaken as possible following discharge of accumulated water within the void. Backfilling of the "White Pit" in the south-east of the Approved Extraction Area with overburden was undertaken during 2023, with some areas close to attaining final landform. This will be continued in the next reporting period, alongside extractive activities. With the approval of short-term continuation of the discharge trial, it is anticipated that further backfilling of the Old Pit may be possible in mid-late 2024.

Further rehabilitation work proposed in the 24 December 2021 notification of non-compliances is pending, awaiting DPE's direction. The revised Landscape Management Plan has not been submitted, due to the correspondence from DPE that no further action would be taken regarding the review and approval of submitted management plans until the investigation into potential non-compliances identified on site reached the appropriate stage and status.

The MQA2 stockpile material was not moved during the reporting period, and as such rehabilitation in this area was not commenced.

8. Community

8.1 Community meetings

Three Community Consultative Committee (**CCC**) meetings were held by Multiquip in 2023 (March, September, December), as a forum for the provision of environmental monitoring data and to facilitate discussions relating to environmental performance. The minutes of these meetings are made available via the company website. Key concerns and questions brought up by residents and members of the CCC during 2023 related particularly to road works, the condition of the haul routes and the Council's involvement, as well as more generally regarding water management, noise, rehabilitation activities, and local heritage items. Where possible, Multiquip acts on the concerns raised, or otherwise provides comments and clarification.

8.2 Complaints

Three complaints were received by Multiquip during 2023, relating to noise (2), and traffic (1), as shown in Table 31. Where appropriate, complaints are followed-up, and corrective actions taken when required. The number of complaints is decreasing and steady, as follows: 2022 (three complaints), 2021 (six complaints), 2020 (11 complaints), 2019 (16 complaints).

Complaints are recorded in an electronic register, with details of the complainant, date, time, method of delivery, the Multiquip contact who received the complaint, the subject of the complaint, information on corrective actions and additional comments noted. A summarised complaints report – i.e. with identifying information of the complainants removed – is updated as required and published to Multiquip's website.

We understand that regulators (including the NSW EPA) may on occasion receive direct correspondence or complaints from community members regarding the quarry. Multiquip remains in liaison with regulators regarding these issues, and open to rectifying any concerns raised. In 2023, no community complaints were formally passed on to Multiquip from regulators.

Notwithstanding complaints received, monitoring undertaken demonstrates compliance with the project's performance criteria for noise.

Multiquip continues to operate a phone complaints line, however most complaints are made directly through site management personnel, due to their familiarity with complainants.

Table 31: Complaints received during 2023.

Date	Topic	Description
23/03/2023	Noise	Alleged 60 dBA noise levels at residence.
04/10/2023	Noise	Alleged 52-55 dBA noise levels at residence.
01/12/2023	Traffic	Alleged that an MQ truck drove through town rather than using the Bypass Road.

9. Independent Environmental Audit

Schedule 5 Condition 6 of the Project Approval requires that an Independent Environmental Audit (IEA) is conducted every 3 years. An IEA was conducted in 2022 by Ramboll Australia Pty Ltd and as such no IEA was required during the reporting period. The preceding IEA was published by Groundwork Plus in January 2019, covering the period of November 2015 to November 2018. The next IEA is scheduled for early 2025.

The 2022 IEA contained a number of recommendations regarding non-compliances with the Project Approval and opportunities for improvement with conditions of both the Project Approval and EPL. The current status of these recommendations has been presented in Table 32 and Table 33, below.

Table 32: Response to recommendations raised in the IEA – Non-compliances (Project Approval 07_0155).

NC#	Condition ID	Audit Recommendation	Response	Status – September 2024
NC1	Schedule 2 Condition 2	Agree resolution of non-compliances with approved project layout with the Department, which may involve a further	Awaiting outcome and further direction from DPE on this issue.	No change – awaiting outcome and further direction from the Department.

NC#	Condition ID	Audit Recommendation	Response	Status – September 2024
		modification of the Project Approval.		
NC2	Schedule 2 Condition 13	Finalise resolution of roads issues with Council to enable finalisation of VPA.	Discussions to be continued and finalised when possible.	No change – discussions are ongoing.
NC3	Schedule 3 Condition 1	Confirm that the Planning Secretary has been provided with a survey plan of the extraction area boundaries and their GPS coordinates or, if not, provide the survey plan to the Planning Secretary.	The Department (Michael Wood) was contacted via email on 14 October 2022 with a copy of the survey plan to confirm whether they had evidence of prior receipt. A response was received on 17 October 2022, stating that the documents had been received via the Major Projects Portal as part of submission PA-5, presumably in January or February 2021. Follow-up questions sent by the Department on 8 February 2021 were not replied to at the time, but were replied to via email on 18 October 2022.	Completed, no further action required.
NC4	Schedule 3 Condition 1A	Ensure boundaries of the approved areas of extraction are clearly marked in a manner that allows them to be easily identified.	Boundary on site to be clearly re-marked with stakes/bunting.	Boundaries were marked with stakes, and bund walls have since been constructed over these stakes to provide a physical delineation of the area on Site. Site staff are aware of these boundaries.

NC#	Condition ID	Audit Recommendation	Response	Status – September 2024
NC5	Schedule 3 Condition 11	No recommendation is made as the non-compliance has been rectified.	No action required – penalty notice and works approval for WAL issued.	Completed, no further action required.
NC6	Schedule 3 Condition 24	No recommendation is made as the revised AHMP was submitted to DPE for approval.	No action required – awaiting response from DPE.	No update – the Department is not currently assessing and approving any revised plans. The revised AHMP submitted was withdrawn in August 2024.
NC7	Schedule 3 Condition 27	No recommendation is made in relation to this non- compliance	No action required – refer to NC8.	No action required.
NC8	Schedule 3 Condition 29	Publish summaries of truck movement records on the quarry website and include in the Annual Review.	A process for regularly reviewing weighbridge data has been developed, and truck movement summaries prepared. A truck movement summary report for 2022 was completed and uploaded to the website on 21/10/2022. Truck movement summaries will continue to be updated and published monthly as required by Schedule 3 Condition 29, as well as being included in the Annual Review for 2022.	Completed – truck movement summaries are prepared and uploaded monthly, and included in the Annual Review.
NC9	Schedule 3 Condition 34A	Complete vegetation of the eastern visual bund wall.	Vegetation to be completed, pending outcome and further	No further progress.

NC#	Condition ID	Audit Recommendation	Response	Status – September 2024
			direction from DPE on the issues raised in NC1.	
NC10	Schedule 3 Condition 41	Ensure annual production data is provided to the MEG using the standard form for that purpose.	Submissions to be reviewed to confirm that annual production data was provided to the MEG as required. This will be completed if not the case.	Production data is submitted as required.
NC11	Schedule 5 Condition 5	The auditors make no recommendation as the issue was noted as a non-compliance at the time and was not repeated in the following year.	No action required – future Annual Reviews to be submitted punctually.	Completed – Annual Reviews have been submitted punctually since the Audit.
NC12	Schedule 5 Condition 5A	A process or procedure should be put in place to ensure that strategies, plans, and programs are reviewed and, if revised, submitted to the Department for approval within 3 months of an event described in parts (a) – (d) of this condition.	A management plan review procedure and associated register was prepared in response to this non-compliance. The occurrence of an event listed in Schedule 5 Condition 5A (a)-(d), is considered a 'trigger' for review, which is entered into the register. The strategies, plans, and programs will then be reviewed and revised as appropriate, with changes and dates recorded in the register. Revised documents will be submitted to the Department for approval, and the status of current documents is to	No update – while the management plan review procedure and associated register were prepared in response to this non-compliance, the Department is not currently assessing and approving any revised plans.

NC#	Condition ID	Audit Recommendation	Response	Status – September 2024
			be recorded in the register.	
NC13	Schedule 5 Condition 6	Commence process to appoint independent auditors well enough in advance to allow for potential delays in the approval and appointment of auditors.	No immediate action required – this has been noted for future reference.	No update – not required at this time.
NC14	Schedule 5 Condition 8	Review the sum of the Rehabilitation Bond within 3 months of the date of this Audit Report.	The Rehabilitation Bond will be reviewed within 3 months of the date of the Audit Report (i.e. by 14 January 2023).	Completed, but overdue – The draft Rehabilitation Bond Report and associated Rehabilitation Cost Estimation prepared by Eltirus Pty Ltd was submitted to DPE on 31 March 2023. A non-compliance with this requirement was raised.

Table 33: Response to recommendations raised in the IEA – Opportunities for improvement (Project Approval 07_0155 and EPL 13213).

Condition ID	Audit Recommendation	Response – 25/10/2022	Status – September 2024
Schedule 3 Condition 7	Establish a process to ensure environmental monitoring results reports are checked prior to be being published on the website	The offending report was reviewed and the minor discrepancies identified, determined to be due to transcription errors. All dust data was audited and corrected, with the revised report submitted for upload to the website on 18/10/2022. Data is checked when obtained from the laboratory and again when transcribed into summary reports for website publication. All staff involved in data	All data is cross-checked prior to upload. No issues have been identified since the Audit.

Condition ID	Audit Recommendation	Response – 25/10/2022	Status – September 2024
		management were informed of the issue and reminded of the importance of presenting accurate data.	
Schedule 3 Condition 8 EPL Condition O3.1	Review use of water sprays on rock crushing plant to optimise dust suppression.	Site staff were reminded about the importance of dust mitigation, and use of water sprays is ongoing.	Use of water sprays is ongoing as required. A Dust Management Capacity Assessment (DMCA) report was prepared and submitted to the EPA in accordance with Condition U3 of EPL 13213, (varied on 27/09/2023), with the aim of assessing air emissions from the site and making recommendations to reduce them. Implementation of recommendations from the DMCA and discussions with the EPA are ongoing.
Schedule 3 Condition 13 EPL Condition O4.1	Ensure that annual audits as required under Section 6 of the current Water Management Plan are undertaken, prioritise submission of the revised Water Management Plan to the Department for approval and ensure a variation of the EPL is made to reflect the new Water Management Plan, when approved.	Noted. The discrepancy between the current 2017 Water Management Plan and the reference to a 2010 Water Management Plan within EPL Condition O4.1 was identified and raised as a non-compliance in the 2021-22 Annual Return, submitted to the EPA on 17 October 2022. Following completion and approval of the revised Water Management Plan, a variation to the EPL will be lodged to revise the reference in Condition O4.1.	No update – the Department is not currently assessing and approving the revised WMP. As this was expected to be a quick process, the variation of the EPL to reflect the current (but outdated) 2017 WMP was not considered a priority. An Annual Audit required by Section 6 of the 2017 WMP was not carried out in the reporting period. The set of data will be provided promptly, and on an ongoing basis as required.
Schedule 3 Condition 17	Consult with the EPA on decommissioning of BHAP1 and BHAP5 and any	The NRAR Direction was varied on 8 September 2022 to allow rehabilitation of BHAP1 and BHAP5 as an	Completed, no further action required. The works did not impact the implementation of

Condition ID	Audit Recommendation	Response – 25/10/2022	Status – September 2024
EPL Condition P1.3	necessary variation of the licence. Ensure the revised Groundwater Monitoring Program reflects changes to monitoring bores and reflects consultation with the EPA and the Department on decommissioning of BHAP1 and BHAP5	alternative to decommissioning (Specified measure 1). The EPA and DPE were consulted about the proposed works on 7 October 2022, and a response was received from the EPA on 14 October 2022. Following the works, the revised Groundwater Monitoring Program will reflect any changes to monitoring bores, and the EPL will be updated if required.	monitoring as required by the 2017 WMP.
Schedule 5 Condition 5B	Ensure that revised management plans include: • a protocol for managing and reporting any incidents; complaints; non-compliances with statutory requirements; and exceedances of the impact assessment criteria and/or performance criteria; and a protocol for periodic review of the plan.	Noted. Revised management plans will include the suggested contents.	No update – the Department is not currently assessing and approving any revised plans.
Schedule 5 Condition 10	Review the quarry website to ensure all required information is publicly available.	The quarry website is reviewed monthly following receipt of data and preparation of documents. Any missing documentation will be uploaded. The CCC minutes for the March 2022 meeting were not finalised prior to the completion of the	Ongoing as required. All information and documents are uploaded as required.

Condition ID	Audit Recommendation	Response – 25/10/2022	Status – September 2024
		IEA, and due to some issues requiring revision, are expected to be finalised at the next CCC meeting scheduled for 11 November 2022. Following this, the final minutes will be published on the website as required.	
EPL Condition A1.1	Consider whether a variation of the EPL is required to increase the scale of the activity in line with the modification of the project approval.	Noted. Current operations do not exceed 400,000 tpa, which is within the allowances of the EPL (>100000 - 500000 t annually). When operations are expected to increase >500,000 t, a variation to the EPL will be lodged.	No change – operations remain within EPL limits.
EPL Condition L4.1	Ensure a variation of this condition is made prior to product transportation commencing before 7am as permitted under MP07_0155.	Noted. As above, a variation to the EPL will be lodged at the appropriate time.	No change.
EPL Condition R1.1	Implement a crosscheck to ensure all reporting of complaints aligns.	Staff involved in complaints management were informed of the issue and continue to perform regular confirmation of complaints when summarised for website upload.	Ongoing – complaints documents are cross-checked during preparation.

10. Incidents and non-compliances

10.1 Incidents in 2023 reporting period

Elevated primary dust levels above the limit values prescribed in the Project Approval were observed on a number of occasions. Assessment of these results concluded that the levels could not be attributed to quarrying activities for most instances, and as such, the limits were not considered to have been exceeded. In January and March 2023, the quarry could not be definitively ruled out as a contributor to the elevated values, and as such notification to DPE was undertaken on 24 July 2024. Details are provided in Section 5.3.

There were no other environmental incidents at the quarry during the 2023 reporting year.

10.2 Non-compliances in 2023 reporting period

Non-compliance with four conditional requirements of PA 07_0155 (Mod 3) were identified, being Schedule 2 Condition 13, Schedule 5 Condition 4, Schedule 5 Condition 8, and Schedule 3 Conditions 4 and 27.

Schedule 2 Condition 13

Overview

Schedule 2 Condition 13 requires that:

Within six months of the date of determination of Modification 3, or other timeframe agreed by the Planning Secretary, the Proponent must enter into a Voluntary Planning Agreement with the Council in accordance with:
(a) Division 7.1 of Part 7 of the EP&A Act; and
(b) the terms of the offer in Appendix 4.

On 25 November 2022, Multiquip received a letter from the department identifying that the Voluntary Planning Agreement (VPA) had not been entered into within the specified timeframe. CEAL were advised to submit a request to the department for an extension in the timeframe to have the VPA entered into by 16 December 2022. This extension request was provided by CEAL on December 15 2022, and approved by the Department on 1 February 2023, with an extension granted until 30 June 2023, and a request to provide an update on the progress of the VPA by 31 March 2023. This update was provided by 31 March 2023 as required. The VPA was not entered into by 30 June 2023, which was non-compliant with the Condition.

Causes and consequences

Despite numerous meetings and discussions with Council, agreement about the contents of a VPA could not be reached, and as such was not entered into by the revised due date.

Environmental impacts

No environmental impacts arising as part of this non-compliance were identified.

Proposed actions

Multiquip will continue to engage proactively with Council to attempt to resolve the issue or reach agreement on a suitable alternative.

Schedule 5 Condition 4

Overview

Schedule 5 Condition 4 requires that:

Within seven days of becoming aware of a non-compliance, the Proponent must notify the Department of the non-compliance. The notification must be made in writing through the Department's Major Projects website and identify the project (including the development application number and name), set out the condition of this approval that the project is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

Non-compliance with Schedule 2 Condition 13 as discussed above was notified to DPE on 22 March 2024. As the 30 June 2023 deadline was not met for Schedule 2 Condition 13 and this due date was known, this notification should technically have been provided by 7 July 2023.

Causes and consequences

Insufficient administrative procedures were implemented to ensure that this non-compliance was identified and acted upon.

Environmental impacts

No environmental impacts arising as part of this non-compliance were identified.

Proposed actions

Regular meetings have been rescheduled between Multiquip management and engaged external environmental consultants to ensure that potential non-compliances are identified early, and notified as required.

Schedule 5 Condition 8

Overview

Schedule 5 Condition 8 requires that:

Within 3 months of submitting a copy of the audit report to the Planning Secretary, the Proponent shall review and if necessary revise the sum of the Rehabilitation Bond (see Schedule 3), to consider:

- *the effects of inflation;*
- *any changes to the total area of disturbance; and*
- *the performance of the revegetation against the completion criteria of the Rehabilitation*
- *Management Plan,*

to the satisfaction of the Planning Secretary.

The draft Rehabilitation Bond Report and associated Rehabilitation Cost Estimation was published on 7 March 2023, which was non-compliant with the required due date.

Causes and consequences

A combination of issues were faced with the preparation of the Rehabilitation Bond review and revision, which delayed the delivery of the final review. These issues included the holiday period and associated shutdowns, as well as consultant availability, and the in-depth nature of the assessment.

Environmental impacts

No environmental impacts arising as part of this non-compliance were identified.

The intent of a Rehabilitation Bond is to cover the full cost of all rehabilitation and mine closure activities required if a mining company defaults on their rehabilitation obligations (source: NSW Resources Regulator website). Multiquip Quarries are actively operating and have no intention of ceasing operations at this time or defaulting on their rehabilitation obligations. No claims have been made against the current 2017 Rehabilitation Bond.

Proposed actions

On 31 March 2023, the draft Rehabilitation Report was submitted to the Planning Secretary for their review and approval, with the final Rehabilitation Bond to be lodged with the Department in accordance with the requirements of Schedule 3 Condition 23B at such a time.

A management plan and rehabilitation bond review register was prepared to ensure all documents are reviewed and revised as needed in accordance with the requirements of Schedule 5 Conditions 5A and 8, to prevent the non-compliance reoccurring.

No further actions are proposed.

Schedule 3 Condition 4

Overview

Schedule 3 Condition 4 details operating hours for quarry operations, including transport. As detailed in Section 3.5.5, it was identified that there were 10 weekdays where truck movements occurred after 6 pm, and five Saturdays where truck movements occurred after 1 pm, which are outside of the permitted operating hours. It should be noted that in the majority of these cases, the weighbridge entries show these truck movements occurring within 10 minutes of the hour.

Proposed actions

The non-compliance will be notified to the Department. Operating hours will be reiterated to site staff. Monthly reviews of weighbridge records will include an assessment of compliance to ensure that any identified non-compliances can be acted upon promptly.

10.3 Non-compliances identified in 2022 Annual Review

Updates to the one non-compliance identified in 2022 Annual Review that arose during the reporting period are discussed below.

Schedule 3 Condition 29(g)

No longer non-compliant. Truck movements have continued to be assessed monthly, with summaries prepared and published on a three-month delay as discussed in the previous Annual Review. A summary of truck movements for 2023 has been included in *Section 3.4 Truck movements* of this Annual Review, as required by the Project Approval.

10.4 Regulatory correspondence

A summary of correspondence received in relation to official cautions, warning letters etc. is provided in Table 34, below. All issues raised by various regulatory agencies are treated seriously and acted upon. Automatic replies related to online submissions have not been included in the table.

Table 34: Summary of official correspondence received during 2023.

Date	Regulatory agency	Issue	Company Response
10/01/2023	DPE	Noting receipt of CEAL's response to Show Cause Notice.	None required.
1/02/2023	DPE	Response to extension request related to entering a VPA – approved.	Update provided on 31/03/2023, as required by approval.
20/02/2023	EPA	Notice of review of EPL 13213 – invitation to comment.	Comments provided and were involved in Environmental Risk Assessment process.
23/02/2023	DPE	Response to extension request related to Rehabilitation Bond submission – denied.	Required documentation and notification of non-compliance provided on 31/03/2023.
1/03/2023	DPE	Approval to access Stockpile MQA2 and associated conditions.	Requested documentation etc. provided on 28/04/2023.
9/03/2023	NRAR	Direction to protect water source – confirmation of receipt of 7/3/23 completion letter.	None required.
15/03/2023	DPE	Notice to Furnish Information and Records – operational activities on site.	Response provided on 31/03/2023.

Date	Regulatory agency	Issue	Company Response
16/03/2023	DPE	Request for Additional Information related to the AHMP.	Requested documentation etc. provided on 17/04/2023 and 18/04/2023.
4/04/2023	DPE	Confirmation of receipt – response to 15/3/23 Notice to Furnish Information and Documents.	None required.
5/04/2023	DPE	Response to extension request related to AHMP RFI – approved.	None required.
17/08/2023	EPA	Outcome of Environmental Risk Assessment – regulatory priority moderate.	None required.
27/09/2023	EPA	Notice of licence variation – addition of Pollution Reduction Study	Dust Management Capacity Assessment report provided on 11/12/2023.

11. Activities in the next reporting period

The following activities are proposed in 2024 (Table 35).

Table 35: Activities proposed in 2024.

Proposed activity	Timeframe
Continuation of mining activities at the site. Indicatively expected to be 400,000 tpa to be increased to 580,000 tpa when appropriate documentation etc. is approved	Ongoing
Further rehabilitation and landscaping of visual bunds, pending approval from DPE	Ongoing, pending DPE
Monitoring • SWL of bores monthly • Deposited dust monthly • Water sampling quarterly and annually • Particulate matter continuously (assessed monthly) • Noise twice annually • Discharge sampling (characterisation and validation) as required • Discharge water quality sampling monthly during discharge • Ambient water quality sampling monthly during discharge	Ongoing
Implementation of additional dust management measures arising from the DMCA, following agreement with EPA.	As required
Implementation of weed control program(s)	Ongoing throughout year

Proposed activity	Timeframe
	as appropriate (dependant on seasons)
Relocation of weather station to allow for extension of quarrying	By end of 2024
Submission of modification to Project Approval (Modification 4) to ensure activities align with Approval	TBC, pending DPE
Attendance at all Community Consultative Committee (CCC) meetings	As arising
Submission of EPL variation to remove identified bores from EPL	Mid-2024
Close-out of Development Control Order	Mid-2024 (ongoing)
Completion and lodgement of Modification 3 Environmental Management Plans	TBC, pending DPE
Continued discharge of water from Old Pit in accordance with discharge trial extension until empty, and follow-up earthworks	Early 2024
Submission of Enforceable Undertaking – associated with resolution of DCO	TBC pending close-out of DCO
Finalise Voluntary Planning Agreement (VPA) with Goulburn Mulwaree Council and provide update to DPE accordingly, as per Schedule 2 Condition 13 of the Project Approval and DPE's 1 February 2023 extension approval	Indeterminate

12. References

The Department of Planning and Environment. (2015). Annual Review Guideline. Sydney: NSW Government.