

Compliance audit program

Wallerawang Quarry

Walker Quarries Pty Ltd

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1. Introduction

1.1. Background

Wallerawang Quarry is an open cut quartzite quarry about 10 kilometres west of Lithgow, NSW. The quarry comprised one mining authorisation as summarised in Table 1.

Table 1 Summary of mining titles comprising Wallerawang Quarry

Title	Grant	Expiry
ML 1633 (1992)	15 July 2009	15 July 2040

The title is held in the name of Walker Quarries Pty Ltd, a subsidiary of Sitegoal Pty Ltd.

Wallerawang Quarry was developed as a greenfield hard rock quarry in February 1993.

A mining lease was first granted in July 2009 with development consent (DA 344-11-2001) issued on 14 October 2004 and subsequently modified 3 times on 25 August 2017, 7 December 2018 and 26 February 2020 – approving the quarry to produce up to 500,000 tonnes of aggregates per annum. The modification extended the operation of the quarry to 15 July 2040.

As part of the compliance audit program undertaken by the Resources Regulator, an audit of the mining operations associated with the Wallerawang Quarry was undertaken on 3 May 2022.

1.2. Audit objectives

The objectives of the audit were to:

- Undertake a compliance audit of the Wallerawang Quarry operated by Walker Quarries Pty Ltd against the requirements of the *Mining Act 1992* and the conditions of the mining leases issued pursuant to that Act.
- Assess the operational performance of the Wallerawang mining operations and the ability of the titleholder and/or operator to implement management systems and controls to provide for sustainable management of the operations.

1.3. Audit scope

The scope of the audit included:

- The mining and exploration activities associated with the Wallerawang Quarry including:
 - mine development within ML1633
 - rehabilitation activities associated with mining and exploration activities.
- A review of documents and records pertaining to the mining and exploration activities.
- The assessment of compliance for the period commencing 3 May 2020 to 3 May 2022.

1.4. Audit criteria

The audit criteria against which compliance was assessed included:

- *Mining Act 1992*, specifically Sections 5, 6, 163C to 163E, 163G, 378D
- Mining Regulation 2016, specifically clauses 59 to 68
- Conditions attached to ML1633 (granted 15 July 2009)
- Commitments made in Wallerawang Quarry, Mining Operations Plan (incorporating Rehabilitation Management Plan) 4th MOP (Final Rev V1.1) dated 3 July 2020 (approved 7 July 2020)
- Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales (Version 2, March 2016)

- Rehabilitation Cost Estimation Tool Handbook (June 2017)
- ESG3: Mining Operations Plan (MOP) Guidelines, September 2013, and
- Guidelines and Format for Preparation of an Annual Environmental Management Report (January 2006).

1.5. Publishing and disclosure of information

This audit report was published on the Regulator's website consistent with:

- Section 365 of the *Mining Act 1992*
- Resources Regulator's Public comment policy
- *Government Information (Public Access) Act 2009*.

2. Audit methods

The audit process involved the interview of site personnel, a review of documentation and samples of records provided by the titleholder and/or operator and a site inspection of the operations to determine the level of compliance of the operations and assess the status of the operational performance. The audit process and methodology are described in more detail in the sections below.

2.1. Opening meeting

The opening meeting was held onsite at Wallerawang Quarry on 3 May 2022. The audit team was introduced, and the scope of their responsibilities was conveyed to the auditees. The objectives and scope of the audit were outlined. The methods to be used by the team to conduct the audit were explained, including interview of personnel, review of documentation, examination of records and a site inspection to assess specific compliance requirements.

2.2. Site interviews and inspections

2.2.1. Data collection and verification

Where possible, documents and data collected during the audit process were reviewed on site. All information obtained during the audit process was verified by the audit team where possible. For example, statements made by site personnel were verified by viewing documentation and/or site inspections where possible. Where suitable verification could not be provided, this has been identified in the audit findings as not determined.

2.2.2. Site inspections

A site inspection was undertaken of the Wallerawang Quarry including:

- access roads and haul roads
- biodiversity area along eastern boundary of ML1633
- revegetation area
- sedimentation dams and basins
- overburden emplacement areas
- northern, western extension and supplementary product stockpile areas, and
- open cut pit area and wash plant.

2.3. Closing meeting

The closing meeting was held at the Wallerawang Quarry office on 3 May 2022. The objectives of this meeting were to discuss any outstanding matters, present preliminary findings and outline the process for finalising the audit report.

2.4. Compliance assessment definitions

The reporting of results from the compliance audit was determined based on the definitions presented below in Table 2.

Table 2 Audit assessment categories

ASSESSMENT	CRITERIA
Compliance	Sufficient and appropriate evidence is available to demonstrate the particular requirement has been complied with.
Non-compliance	<p>Clear evidence has been collected to demonstrate the particular requirement has not been complied with. There are three subcategories of non-compliance reflecting the severity and level of risk associated with the non-compliance:</p> <p>NC1 – the absence of planning or implementation of a required operational element which has the potential to result in a significant risk.</p> <p>NC2 – an isolated lapse or absence of control in the implementation of an operational element which is unlikely to result in a significant risk.</p> <p>NC3 – an administrative or reporting non-compliance which does not have a direct environmental or safety significance.</p> <p>Note: The identification of a non-compliance in this audit may or may not constitute a breach of, or offence under, the <i>Mining Act 1992</i>. Non-compliances identified in this audit report may be further investigated by the Regulator and regulatory actions may be undertaken.</p>
Observation of concern	<p>Where an auditee may be compliant at the time of the audit but there are issues that exist that could result in the potential for future non-compliance if not addressed.</p> <p>Observation of concern was also used where an issue may not have particular compliance requirements, but which was not conducive to good management or best practice.</p>
Suggestion for improvement	Where changes in processes or activities inspected or evaluated at the time of the audit could deliver improvement in relation to risk minimisation, sustainable outcomes and management practices.
Not determined	<p>The necessary evidence has not been collected to enable an assessment of compliance to be made within the scope of the audit.</p> <p>Reasons why the audit team could not collect the required information include:</p> <ul style="list-style-type: none"> • insufficient information on the file relating to the period covered by the audit or insufficient evidence collected to reach a conclusion • the wording on the criteria (approval condition) meant that no evidence could be gathered, or it was too difficult to gather the evidence. <p>A ‘not determined’ assessment was also made where the condition was outside the scope of the audit.</p>
Not applicable	<p>The circumstances of the authorisation or licence holder have changed and are no longer relevant (e.g. no longer mining, mining equipment and plant has been removed).</p> <p>An invoking element in the criteria was not activated within the scope of the audit.</p>

2.5. Reporting

Following completion of the site audit, the audit checklists were completed, and audit notes were reviewed to compile a list of outstanding matters to be noted in the audit report. This report was prepared to provide an overview of the operational performance of the site in relation to the mining and exploration operations and identify any non-compliances or observations of concern noted by the auditors during the site inspections and interviews.

The draft audit findings were forwarded to Walker Quarries for comment. Consideration was given to the representations made during the finalisation of the audit report as discussed in the audit findings.

3. Audit findings

3.1. Mining operations plan

Condition 3 of ML1633 required the lease holder to comply with an approved mining operations plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting.

Walker Quarries prepared the ‘Wallerawang Quarry, Mining Operations Plan (incorporating Rehabilitation Management Plan) 4th MOP (Final Rev V1.1) dated 3 July 2020 (approved 7 July 2020)’ (Wallerawang MOP) to satisfy the requirements of the MOP condition. The Wallerawang MOP was approved by the Regulator on 7 July 2020.

Generally, evidence was available to confirm that the controls and mitigative strategies outlined in the Wallerawang MOP were implemented as outlined in the following sections.

3.1.1. Activities over the MOP term

Section 2.3 of the Wallerawang MOP described the activities that were proposed to be undertaken during the MOP term which included:

- Exploration activities – MOP section 2.3.1 identified that no exploration activities would be carried out within ML 1633 during the term of the MOP.
- Construction – MOP section 2.3.2 outlined the installation of a new 11kV transmission line from the Great Western Highway to a 400 kV substation to be located adjacent to the quarry office building. Evidence of the new transmission line and substation were observed while on site (see Figure 1 and Figure 2).
- Construction – MOP section 2.3.2 noted that bund walls would be constructed around the northern and eastern perimeter of the extraction area to be developed over the MOP term. Bund walls around the extraction area were observed while on site (see Figures 3 and 4).

Figure 1 New transmission lines



Figure 2 Recently installed 400kV substation



Figure 3 Bund walls around extraction area



Figure 4 Bund walls around extraction area



- Waste management – MOP section 2.3.7 described the waste management systems in place for the Wallerawang Quarry. Walker Quarries advised that, generally, waste was removed from site by a licensed waste contractor, although this was not confirmed by the audit team on site.
- Waste rock/overburden management – MOP section 2.3.5 states that during the MOP term, the first lift of the Southern Stockpile area would be constructed as a southerly extension of the 925 m AHD hardstand of the main stockpile area, infilling the drainage line which carried runoff from the Lidsdale State Forest to the Coxs River to the southeast. As part of this work, the watercourse would be diverted and discharged into a gully and ephemeral drainage line approximately 250 m to the west of the diverted drainage line, and a sediment basin (SB8) constructed within the watercourse immediately downstream of the stockpile extension area to prevent pollution of the tributary of the Coxs River.

3.1.2. Operational risks relating to rehabilitation

Section 3.2.2 of the Wallerawang MOP described the specific risks relating to rehabilitation at the Wallerawang Quarry.

MOP section 3.2.2.6, Soil types and suitability, identified that the availability of soil resources for rehabilitation activities during the MOP term as well as in the future posed a risk to successful rehabilitation.

Section 5.4 outlined the soil and growth medium balance for the quarry. It was noted that as the impact footprint of the quarry was increased, the volume of soil recovered and stockpiled was likely to be proportionally greater than that required to be replaced, with the majority of new disturbance to be rehabilitated as final void requiring very little soil resources.

Soil stockpiles were inspected during the audit. It was noted that the available soil on site was limited and largely poor quality – approximately 100 mm depth.

Topsoil stockpiles were spray grassed with some trees growing in the stockpiles. Stockpile heights were kept below the maximum, and machines were excluded from the stockpiles to reduce compaction (see Figures 5 and 6).

It was noted that the rehabilitation risk assessment dated April 2022 identified ‘insufficient growth medium (subsoil and topsoil) for rehabilitation activities’ as a high risk for the site (as outlined in 3.2.1 below).

While Walker Quarries acknowledged the topsoil that was available was generally of poor quality, they had established, and would continue to maintain, an inventory of growth media requirements and availability for rehabilitation. The soil and growth media available for rehabilitation was reflective of the material on surrounding landforms that sustained native vegetation, and there was demonstration of its use in successful revegetation at the quarry

Figure 5 Soil stockpile with vegetation establishing



Figure 6 Erosion rilling evident on stockpile



Section 3.2.2.5 of the MOP identified stormwater runoff from stockpile areas, processing areas, haul roads and cleared areas associated with the extraction area extension as the principal potential sources of surface water pollution, erosion and sediment during the MOP term. Erosion control measures were observed in place across the site (Figures 7 to 10) with several sediment dams and sediment basins observed across the site and other drainage structures along haul roads.

Figure 7 Sediment dam 1



Figure 8 Spill drains along access tracks



Figure 9 Sediment dam 2



Figure 10 Silt pond



3.2. Rehabilitation

Condition 2 of ML1633 required any disturbance resulting from the activities carried out under the mining lease must be rehabilitated to the satisfaction of the Minister. An assessment of compliance with the MOP commitments in relation to rehabilitation of the site was undertaken during the audit as detailed in the following sections.

3.2.1. Risk assessment

To achieve successful rehabilitation outcomes, the lease holder must be able to identify and manage any risks that could compromise rehabilitation outcomes.

An environmental risk assessment was documented in section 3 of the approved MOP and an analysis of rehabilitation threats was in section 9.1 and Table 9.1. There were 4 threats ranked as high and 9 ranked as moderate relating to rehabilitation. Key issues relating to risks to successful rehabilitation included:

- Insufficient soil was available for rehabilitation, inadequate soil thickness was applied to shaped landform, and soil was not capable of sustaining identified final land use/vegetation community.
- Species mix on final landform did not conform with target vegetation communities (analogue sites) and had a detrimental effect on the vegetation communities, and habitat provided by these, on lands surrounding the quarry.
- Required mitigation of impacts on biodiversity was not achieved and mine relinquishment was not possible.
- Unable to complete rehabilitation or establish the identified final land use and geotechnical instability of the final void.
- Contaminated land was present and silt cells, material stockpiles, storage dams and unstabilised surfaces were a source of contaminated leachate.
- Final landform was an unacceptable source of sediment.
- Structure/composition of final vegetation community(ies) was altered by fire and failure of vegetation communities to establish as a consequence of limited water.

During the audit, it was noted that Walker Quarries had engaged Umwelt (Australia) Pty Ltd to assist in preparing a rehabilitation management plan and associated rehabilitation risk assessment, in line with the rehabilitation reforms in July 2022. A copy of the rehabilitation risk assessment (dated April 2022) was provided and identified 4 risks ranked as high and 12 ranked as moderate. Keys issues relating to risks to successful rehabilitation included:

- There was insufficient rehabilitation resources (soil, capping materials, growth medium) available for salvage and reuse in rehabilitation and insufficient growth medium (subsoil and topsoil) for rehabilitation activities.
- There was unstable/unsafe landform due to the movement/collapse of final highwalls and dispersive materials impacting on stability at moderate slopes/erosion.
- The growth medium used was inadequate to support revegetation (e.g. lack of organic matter, nutrient deficiency, lack of soil biota, adverse soil chemical properties, exposed hostile geochemical materials, and any other factors impeding the effective rooting depth).
- Clearing/disturbance was undertaken in areas outside approved extents.
- There was groundwater accumulation in void spaces and potential for spills/seepage to other land and water resources.
- The final landform was unsuitable for final land use and the physical and structural properties of substrate was not suitable for final landform/land use.
- There was a lack of availability and quality of target seed resources, including genetic integrity, and poor seed viability and/or germination and failure of rehabilitation due to inappropriate revegetation species mix for targeted final vegetation composition and land use.
- Inadequate weed (serrated tussock) and feral animal management in rehabilitation resulted in a failure to meet final land use.
- Failure of rehabilitation to adapt to variation in the climate, and weather and climatic influences (e.g. drought; intense rainfall events; bushfire; snowfall; extreme frosts and climate change)

resulted in poor vegetation survival rates or non-targeted composition of species including rehabilitation failure as a result of intense snow/frost.

Generally, it was noted that Walker Quarries identified controls to address key risks, as outlined in section 9.2 of the MOP and summarised below - however little evidence was provided to demonstrate these had been implemented.

- Suitable source of additional soil material to be identified and investigated into measures that may be implemented to ameliorate other materials to make them suitable for use as a growth medium.
- Additional soil material should be spread on the final landform and a suitably qualified soil scientist or rehabilitation specialist engaged to provide recommendations to ensure that the identified closure criteria is achieved and implemented in consultation with the Resources Regulator.
- A qualified ecologist or revegetation expert should be engaged to assess the reasons for additional management requirements and to recommend actions to ensure that the final vegetation community better reflects the target community and to align management required with that of the analogue sites, implemented in consultation with the Resources Regulator. The audit team was advised that Walker Quarries had engaged a plant doctor to collect seeds endemic to the area and to provide seedlings for revegetation – noting 1000 seedlings were planted along the western stockpile area during the audit period.
- Remediate the eroding area with additional earthworks, soil works, revegetation or other stabilisation work. If unsuccessful, engage a suitably qualified professional in sediment and erosion control to prepare an assessment report and recommendations, implemented in consultation with the Resources Regulator.
- Slopes should be reduced until all slopes are less than 18° or alternative rehabilitation outcomes/relinquishment criteria agreed to by relevant government agencies and a suitably qualified geotechnical engineer is engaged to assess the instability and provide a range of recommendations to remediate the instability.
- Implement recommendations of contamination assessment and repeat contamination assessment until contamination has been removed.

3.2.2. Rehabilitation objectives and completion criteria

The post-mining land use goals were documented in section 4.2 of the approved MOP. The approved conceptual final landform rehabilitation plan that detailed the post-mining land uses for the site was included in plan 4 of the MOP.

Rehabilitation objectives for Wallerawang Quarry were outlined in the development consent. These objectives were noted in section 4.1 (and Table 4.1) of the MOP. Table 5.2 of the MOP outlined the rehabilitation domain objectives, and Table 6.1 illustrated the performance indicators and the completion criteria for each domain for each phase of the rehabilitation process, from decommissioning through to ecosystem and land use sustainability. Where relevant, the completion criteria were linked to a trigger action response plan (TARP) that outlined actions required where TARP triggers were exceeded.

3.2.3. Rehabilitation progress

Rehabilitation activities and methodologies were noted to be described in sections 7.2 and 7.3 of the MOP. Rehabilitation activities over the MOP term were to include:

- monitoring the success of revegetation on the visual amenity bund with supplementary seeding or tube-stock planting undertaken to promote the establishment and sustainable growth of groundcover, tree and shrub species associated with the two remnant vegetation communities of ML 1633
- growth medium applied to the bund wall around the extraction area (0.25 ha) and slope stabilisation works to be undertaken

- backfilling of sediment basin 1 (SB1) and sediment dam 1 (SD1) (0.6 ha)
profile and stabilise upper batter on eastern and southern void perimeter (0.5 ha) and profile, stabilise and apply soil to the eastern batter of the southern stockpile area (0.5 ha)
- maintain and monitor analogue sites.

Evidence was available to indicate that rehabilitation activities were generally progressing in line with the MOP requirements. For example:

- vegetation established on the visual amenity bund, to the north of the western stockpile area was maintained (Figures 11 and 12). Walker Quarries noted that it took 3 attempts with spray grass before strike and 1000 tubestock were planted along the right hand side.

Figure 11 Vegetation on the visual amenity bund (plate 13 of Wallerawang Quarry annual review, September 2020)



Figure 12 Rehabilitation of bund west of western stockpile area



During a site visit on 3 May 2022, backfilling and compacting on the sediment basin 1 (SB1) was observed for the extension to the stockpile area. (see Figure 13)

Figure 13 Backfilling and compacting of sediment basin 1 (SB1)



The annual environmental management reports during the audit period noted natural revegetation of the batters to the south of the weighbridge (along the haul road), east of the material stockpile area (MSA) and on the batter slopes of the silt cells and storage dams continued. These areas were observed during the site visit on 3 May 2022. (see Figure 14 and 15)

- Weed spraying continued during the audit period in areas identified in Figure 6.1 of the Annual Environmental Management Report 2021. Walker Quarries provided evidence to demonstrate that weed management, including weed spraying, was undertaken by a contractor and targeted blackberry, St John's Wort and sifton bush. The contractor was provided with copies of the biodiversity monitoring reports and advice from Walker Quarries based on daily visual

operational inspections and designed the weed management program to target areas identified. No significant areas of weeds were observed during the audit site inspections.

Figure 14 Natural revegetation of batters south of the weighbridge



Figure 15 Vegetation on batter slopes east of the main stockpile area (MSA)



During the audit, Walker Quarries noted that the requirements for ongoing rehabilitation management and maintenance was minimal as there were only small areas of the quarry that were rehabilitated or revegetated. This notwithstanding, Walker Quarries developed and implemented rehabilitation monitoring as outlined in section 4.2 below.

3.3. Exploration

Section 2.3.1 of the MOP identified that no exploration activities would be carried out within ML 1633 during the term of the MOP. Exploration was to be undertaken on land contained within exploration licence 4733 (EL4733) in accordance with the requirements of the licence. It was confirmed on site and in the audit team's review of the annual reports that no exploration activities were undertaken on ML1633 or EL4473 during the audit period.

3.4. Reporting

3.4.1. Annual rehabilitation reporting

Condition 3 of ML1633 required the lease holder to prepare a rehabilitation report that provided a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP.

Walker Quarries submitted annual environmental management reports or annual reviews for the audit scope period as follows:

- Walker Quarries Annual Review for the period 1 July 2019 to 30 June 2020, and
- Walker Quarries Annual Review for the period 1 July 2020 to 30 June 2021.

It was noted that Section 8.1 of the reports provided information on rehabilitation performance across the site during the reporting period.

The rehabilitation objectives outlined in the Wallerawang MOP were only discussed as part of the independent environmental audit completed on 19 July 2021 and summarised in Appendix 11 of the Walker Quarries Annual Review for the period 1 July 2020 to 30 June 2021. It was noted that there was no specific assessment of progress against the completion criteria defined in sections 4.3 and 5.2 of the MOP. The audit team believes this will be addressed as part of the rehabilitation reforms annual reporting process.

3.4.2. Annual exploration reporting

Section 163C of the *Mining Act 1992* and clause 59 of the *Mining Regulation 2016* require the preparation and submission of an annual report that provides full particulars of all exploration and other operations, or activities conducted during the 12-month period.

Three annual exploration reports were submitted during the audit scope period for ML1633:

- Annual Exploration Report for Mining Lease 1633 – Wallerawang Quarry, for the period 15 July 2019 to 15 July 2020
- Annual Exploration Report for Mining Lease 1633 – Wallerawang Quarry, for the period 15 July 2020 to 15 July 2021, and
- Annual Exploration Report (part A and Part B) for Mining Lease 1633 – Wallerawang Quarry for the period 15 July 2021 to 15 July 2022.

The annual review reports included the annual exploration progress reports as appendices:

- Annual Exploration Progress Report (EL 4473), 13 January 2020 – 12 January 2021
- Annual Exploration Progress Report for the period 13 January 2019 to 12 January 2020, dated January 2020

The reports for 2021 and 2022 reporting periods were reviewed by the auditor and were found to be generally in accordance with the relevant departmental guidelines and templates.

3.4.3. Compliance and environmental incident reporting

Condition 5 of ML1633 required the lease holder to provide environmental incident notifications and reports to the Secretary no later than 7 days after those environmental incident notifications and reports are provided to the relevant authorities under the *Protection of the Environment Operations Act 1997*.

As noted in the Wallerawang Quarry annual reviews, and confirmed on the Environmental Protection Authority website, Walker Quarries reported no environmental incidents to the EPA under the requirements of its environmental protection licence, and as such, no incidents were reported to the Regulator during the audit period.

3.5. Other mining lease compliance requirements

3.5.1. Notice to landholders

Condition 1 of ML1633 required the lease holder to provide a notice in writing to each landholder within the lease area advising that the lease has been granted or renewed. ML1633 was not granted or renewed within the audit scope period, therefore, the notification requirements were not verified during the audit.

3.5.2. Security deposit

Under condition 7 of ML1633, the lease holder was required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining lease.

The security deposit required for the Wallerawang Quarry was \$811,000. A review of department records confirmed this amount was held.

3.5.3. Co-operation agreement

Condition 8 of ML1633 required the lease holder to make reasonable attempts to enter into a co-operation agreement with the holders of any overlapping titles.

A review of the published departmental mapping system MinView confirmed that EL4473 overlapped ML1633. EL4473 was held by Sitegoal Pty Ltd and ML1633 was held by Walker Quarries – a subsidiary of Sitegoal Pty Ltd. Sitegoal Pty Ltd were also represented on Wallerawang Quarries'

board and owned a portion of the land on which the quarry was located, therefore, a formal co-operation agreement was not required.

3.5.4. Other conditions

ML1633 included a special condition, condition 9, relating to prescribed dams and the Wallerawang dam notification area. This condition required notification of mining within the notification area of a prescribed dam. A review of the annual reviews, the Wallerawang Quarry independent environmental audit (dated 19 July 2021) and review of the notification area outlined in Figure 4.1 of the Wallerawang MOP confirmed that this condition was not triggered as no disturbance occurred within this area during the audit period. Notification was not required.

4. Compliance management

4.1. Identifying compliance obligations

Identifying compliance obligations is a critical step in the development of an effective compliance management system. Compliance obligations for a quarry can include:

- regulatory requirements (for example, environmental legislation)
- conditions imposed on the grant, renewal, or transfer of mining leases
- specific commitments made by the organisation (for example, MOP commitments)

Once identified, compliance obligations should be reviewed periodically to identify any changes in those obligations (for example, changes in legislation).

It was observed that Walker Quarries tracked compliance requirements and due dates through an environmental permit planner and monitoring program planner – both wall planners maintained by a consultant. Staff interviewed during the audit demonstrated some knowledge of most compliance obligations, particularly those associated the MOP commitments that were largely included in the planners.

It was noted that the planners did not include any obligations imposed by the *Mining Act 1992* (for example, the requirement to obtain consent prior to suspending operations (Schedule 1B of the Act)). There was only one condition related to the mining lease included in the planners.

As **suggestion for improvement no. 1**, Walker Quarries should consider reviewing and expanding the planners to incorporate a compliance management database that capture all obligations, including statutory conditions and other obligations under the *Mining Act 1992* and Regulation. Having a system with action tracking would ensure compliance obligations are identified and acted upon in a timely manner, with oversight by management.

4.2. Inspections, monitoring and evaluation

An effective inspection, monitoring and evaluation process is required to:

- monitor the implementation of the risk controls
- evaluate the effectiveness of those controls based on an assessment of inspection and monitoring data
- implement an adaptive management approach if monitoring shows that controls may be ineffective.

During the audit, it was noted that visual inspections across the site were incorporated in the daily pre-start checks although these inspections were not specific to revegetation areas. The pre-start checklists were observed by the audit team, and it was noted that there was no formal system for recording issues and action tracking. Walker Quarries engaged a consultant to undertake quarterly inspections across the site that included biodiversity monitoring and monitoring of revegetation and rehabilitation areas. The audit team noted that identified issues and actions were not formally documented, tracked or closed out.

During the audit, Walker Quarries noted that the requirements for ongoing rehabilitation management and maintenance was minimal as there were only small areas of the quarry that were rehabilitated or revegetated. However, Walker Quarries developed and implemented rehabilitation monitoring programs to monitor the progress of rehabilitation works. Examples of the rehabilitation monitoring reports were reviewed by the audit team, including:

- the Wallerawang Quarry landscape revegetation program, dated December 2020 (due for update in 2022)
- an annual weed spraying program (reported in each annual review)
- an annual vegetation monitoring program completed in accordance with the approved biodiversity management plan (BDMP)
- an Inspection Report undertaken by Umwelt, dated 3 December 2021, and
- Walker Quarries site operational meetings, March and April 2022.

As sufficient areas of rehabilitated land became available, the BDMP provided for the inclusion of vegetation monitoring on rehabilitated land. Walker Quarries advised that there was insufficient area of rehabilitated land for this monitoring to be triggered. In this regard, the inspection report (dated December 2021) supplied as part of the audit, did not assess rehabilitation.

As **suggestion for improvement no. 2**. Walker Quarries should consider entering observations from pre-start checklist inspections, inspections from external consultants, and recommendations from external consultant reports into a formal compliance database to provide a more robust system for tracking any actions required.

4.3. Record keeping

Sections 163D and 163E of the *Mining Act 1992* relate to the creation and maintenance of records required under the Act, the Regulations, or a condition of title. Records must be kept in a legible form for production to any inspector and must be maintained for 4 years after the expiry or cancellation of the title.

Generally, records were available to demonstrate compliance with most requirements, including MOP requirements. Records requested during the audit were made available for the audit team to review. Examples of records sighted during the audit included:

- rehabilitation risk assessment, completed in April 2022
- daily inspection checklists for Walker Quarries, Wallerawang Quarry completed by quarry manager
- quarterly inspection by consultant (December 2021)
- dust and water analysis and monitoring
- landscape revegetation plan
- purple copper butterfly monitoring and biodiversity monitoring reports, including annual vegetation monitoring program
- annual weed spraying program
- water and dust sampling and analysis
- production quantities
- evidence of landholder consultation
- complaints register and Wallerawang Quarry community consultative committee minutes
- Walker Quarry training matrix and training and competency requirements for staff including subcontractor documentation
- exploration reporting, and

- annual environmental reporting.

5. Audit conclusions

From the evidence reviewed during the audit, and observations made on site during the audit site inspections, it was concluded that Walker Quarries was generally compliant with the requirements of the mining lease and MOP in relation to the operations of the Wallerawang Quarry.

Walker Quarries established an informal system for compliance management but development of a more formal compliance database to monitor progress against compliance obligations and record inspection findings and recommendations would be beneficial to promote a more robust approach to compliance management on site.

Two suggestions for improvement were noted by the auditor as summarised in Table 3. Regulatory actions may be undertaken in relation to the non-compliance and observation of concern identified during the audit.

Table 3 Summary of suggestions for improvement

SUGGESTIONS FOR IMPROVEMENT	DESCRIPTION OF ISSUE
1	Walker Quarries should consider reviewing and expanding its planners to incorporate a compliance management database that captures all obligations, including statutory conditions and other obligations under the <i>Mining Act 1992</i> and Regulation. Having a system with action tracking would ensure compliance obligations are identified and acted upon in a timely manner, with oversight by management.
2	Walker Quarries should consider entering observations from pre-start checklist inspections, inspections from external consultants, and recommendations from external consultant reports into a formal compliance database to provide a more robust system for tracking any actions required.