



COMPLIANCE AUDIT PROGRAM

MANDALONG COAL MINE

Centennial Mandalong Pty Ltd



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MANDALONG COAL MINE

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1. Introduction

1.1. Background

Mandalong Coal Mine is an underground coal mine located about five kilometres south of the village of Awaba in the Lake Macquarie region of NSW. The mine comprises of eight mining authorisations as summarised in Table 1.

Table 1. Summary of mining titles comprising Mandalong Coal Mine

TITLE	GRANT	EXPIRY
CCL762 (1973)	16 September 1991	13 October 2022
ML1443 (1992)	1 March 1999	28 February 2020
ML1543 (1992)	25 November 2003	24 November 2024
ML1553 (1992)	7 September 2004	6 September 2025
ML1722 (1992)	17 December 2015	17 December 2036
ML1744 (1992)	6 October 2016	6 October 2037
ML1793 (1992)	16 July 2019	16 July 2040
MPL191 (1973)	25 February 1981	24 February 2023

All titles are held in the name of Centennial Mandalong Pty Limited.

Mandalong Mine uses a combination of longwall and continuous mining methods to extract coal from the West Wallarah seam. The mine supplies coal for both the domestic and export markets.

As part of the compliance audit program undertaken by the NSW Resources Regulator, an audit of the mining operations associated with the Mandalong Mine was undertaken on 3 June 2021.

1.2. Audit objectives

The objectives of the audit were to:

- undertake a compliance audit of the Mandalong Mine operated by Centennial Mandalong 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 Mandalong mining operations and the ability of the title holder 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 Mandalong Mine including:
 - mine development and exploration activities within CCL762, ML1443, ML1543, ML1553, ML1722, ML1744, ML1793, MPL191
 - 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 1 June 2019 to 3 June 2021.

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 CCL762 (granted 16 September 1991, last renewed 16 May 2006)
- conditions attached to ML1443 (granted 1 March 1999, renewal pending)
- conditions attached to ML1543 (granted 25 November 2003)
- conditions attached to ML1553 (granted 7 September 2004)
- conditions attached to ML1722 (granted 17 December 2015)
- conditions attached to ML1744 (granted 6 October 2016)
- conditions attached to ML1793 (granted 16 July 2019)



- commitments made in Mining Operations Plan, Mandalong Mine, December 2016 to November 2023, Amendment C – November 2020 (approved 5 February 2021)
- 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
- guidelines and format for preparation of an annual environmental management report (January 2006).

1.5. Publishing and disclosure of information

This audit report will be published on the Regulator's website consistent with Section 365 of the *Mining Act 1992*.

This audit report may be publicly disclosed consistent with the *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 title holder 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 Mandalong Coal Mine on 3 June 2021. 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 Mandalong Coal Mine including:

- remediation and rehabilitation of subsidence induced ponding in ML1443
- remediation and rehabilitation of subsidence induced ponding over longwall panel 26 in ML1722
- rehabilitation of exploration hole 18A drilled in ML1722
- rehabilitation of exploration hole 42B drilled within ML1722
- subsidence monitoring line 'Crossline24' over LW30 to LW34

Mandalong South infrastructure construction area, including material stockpiles.

2.3. Closing meeting

The closing meeting was held at the Mandalong Coal Mine office on 3 June 2021. 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	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:
	NC1 – the absence of planning or implementation of a required operational element which has the potential to result in a significant risk.
	NC2 – an isolated lapse or absence of control in the implementation of an operational element which is unlikely to result in a significant risk.
	NC3 – an administrative or reporting non-compliance which does not have a direct environmental or safety significance.
	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.
Observation of concern	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.
	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.

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ASSESSMENT	CRITERIA
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	 The necessary evidence has not been collected to enable an assessment of compliance to be made within the scope of the audit. Reasons why the audit team could not collect the required information include: 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.
	A 'not determined' assessment was also made where the condition was outside the scope of the audit.
Not applicable	The circumstances of the authorisation or titleholder have changed and are no longer relevant (e.g. no longer mining, mining equipment and plant has been removed). An invoking element in the criteria was not activated within the scope of the audit.

2.5. Reporting

Following 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 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 Centennial Mandalong 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 2 of ML1443, ML1543, ML1553 and MPL191 and condition 3 of CCL762, ML1722, ML1744 and ML1793 require the lease holder to carry out mining operations in accordance with an approved mining operations plan (MOP).

Centennial Mandalong prepared the Mining Operations Plan Mandalong Mine, December 2016 to November 2023, Amendment C – November 2020 (Mandalong MOP) to satisfy the requirements of the MOP conditions. The Mandalong MOP was approved by the Regulator on 5 February 2021.

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

3.1.1. Activities over the MOP term

Section 2.2. of the Mandalong MOP describes the activities that are proposed to be undertaken during the MOP term, which includes:

- Exploration activities MOP section 2.2.1 identifies that Centennial Mandalong has prepared an Exploration Activities Management Plan to outline measures that will be implemented to mitigate potential environmental impacts during exploration activities. The Exploration Activities Management Plan, Mandalong Mine (MEMS-EAMP- 8110), November 2017 was reviewed by the audit team and found to be generally consistent with the Exploration Codes of Practice published by the Regulator. Further discussion of the exploration within the mining leases is contained in Section 3.3.
- Mandalong South surface site MOP section 2.2.2.2 describes the construction activities to be undertaken at the Mandalong South surface site. The MOP identifies that a construction management plan will be developed and implemented and will include procedures for the management of surface water, topsoil, erosion and sedimentation, soil stripping and stockpiling activities. The Mandalong South surface site was inspected during the audit to confirm implementation of the procedures and controls.
- Waste management MOP section 2.2.6 describes the waste management systems in place for the Mandalong Mine. Generally, waste is removed from site by a licensed waste contractor. Documentation was available to confirm that a contract is in place for a waste

management contractor. Centennial Mandalong maintains data on the types and volumes of waste disposed of each month, including the percentage of each waste stream that is recycled.

3.1.2. Operational risks relating to rehabilitation

Section 3.4 of the Mandalong MOP describes the operational issues which could potentially affect rehabilitation at the Mandalong Mine.

MOP section 3.4.6, soil types and suitability, identifies that a stockpile inventory will be maintained to keep track of topsoil material available for planned rehabilitation activities. Centennial Mandalong provided a copy of the Mandalong South surface site stockpile inventory dated February 2021. These stockpiles were inspected during the audit.

It was noted that construction works at the MSSS have generated a small quantity of topsoil which has been stockpiled separately from the subsurface material. Erosion control measures were observed to be in place around the stockpiles (Figure 1) but not all stockpiles had been seeded with a cover crop or other vegetative material (Figure 2 and Figure 3) as listed in section 3.4.6 of the MOP. Planning for reuse or rehabilitation of the stockpiled material at MSSS has not yet been defined. This is raised as observation of concern number 1. Centennial Mandalong should review stockpile management at MSSS and seed the stockpile if required. Planning for re-use or rehabilitation of the stockpile should commence and progress reported in the annual report.

Figure 1. Mulched drainage control bund around stockpile





Figure 2. Part of stockpile not seeded or vegetated

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Figure 3. Part of the stockpile has been revegetated



Contaminated land occurring on site at closure, or contamination due to past poor practices or leaks/spills resulting in constraints to future land use, were identified as a significant risk in the MOP risk assessment. MOP section 3.4.16, contaminated land, identifies that Centennial Mandalong would complete the phase 2 assessments at the Mandalong Mine Access Site (MMAS) and the Cooranbong Entry Site (CES) during the MOP term to enable the development of appropriate remediation plans to be implemented prior to mine closure.

Centennial Mandalong provided the following reports as evidence that phase 2 studies have been undertaken for each site:

- Targeted Phase 2 Environmental Site Assessment, Mandalong Mine, Mandalong NSW, Revision 0, dated 30 October 2017, prepared by AECOM Australia Pty Ltd
- Targeted Phase 2 Environmental Site Assessment, Cooranbong Entry Site, Dora Creek NSW, Revision 0, dated 7 February 2018, prepared by AECOM Australia Pty Ltd.

3.2. Rehabilitation

Condition 2 of ML1722, ML1744 and ML1793, condition 7 of CCL762, conditions 13 and 14 of ML1553, and conditions 21 to 23 of ML1443, ML1543 and MPL191 require that any disturbance resulting from the activities carried out under the mining leases 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.

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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 and Appendix 5 of the approved MOP. There were three risks ranked as significant and 15 ranked as moderate. Keys issues relating to risks to successful rehabilitation included:

- contaminated land
- changes in the existing riparian community due to cessation of pumping from the Cooranbong workings
- uncontrolled seepage of water from sealed workings
- changes in drainage patterns because of subsidence induced impacts
- failure to recover available topsoil material or lack of available topsoil material
- Iong term stability failure of batters and slopes.

Generally, it was noted that Centennial Mandalong has identified and implemented controls to address key risks. For example:

- it was noted that phase 2 contamination assessments have been completed for the MMAS and CES
- it was also noted that an action has been included in the MOP to investigate the potential impacts associated with the cessation of pumping water from the Cooranbong workings
- Centennial Mandalong has undertaken flood modelling based on digital terrain modelling data to identify areas where ponding of water or changes in drainage patterns require remediation.

3.2.2. Rehabilitation objectives and completion criteria

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

Rehabilitation objectives for Mandalong Mine were outlined in the development consent for both MMAS and CES. These objectives were noted to be included in section 4.3 of the Mandalong MOP. As part of the mine closure planning process, Centennial Mandalong provided more detailed rehabilitation objectives for each domain which are documented in Table 21 of the Mandalong MOP.

Tables 23 to 27 of the Mandalong MOP outline the performance indicators and the completion criteria for each domain for each stage of the rehabilitation process from decommissioning through to ecosystem sustainability. Where relevant, the completion criteria are linked to a trigger action response plan (TARP) which outlines actions required where TARP triggers are exceeded.

3.2.3. Rehabilitation progress

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

- progressive rehabilitation of exploration sites
- rehabilitation of areas affected by subsidence
- maintenance and monitoring of offset areas
- maintenance and monitoring of existing rehabilitation areas.

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

Exploration boreholes 18A and 42B had been rehabilitated to a good standard (Figure 4 and Figure 5).

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Figure 4. Rehabilitation of exploration borehole 42B including access track



Figure 5. Rehabilitation of exploration borehole 18A



- For Domain 9 conservation and biodiversity offset areas, management of weeds and feral animals was a key activity. Centennial Mandalong provided evidence to demonstrate that weed management, including weed spraying or manual removal was undertaken by a contractor, on average, four days per month. The contractor is provided with copies of the rehabilitation monitoring reports and designs the weed management program to target areas identified. No significant areas of weeds were observed during the audit site inspections.
- For Domain 8 underground mining area, as described in section 3.2.1 above, Centennial Mandalong has undertaken digital terrain modelling to identify areas where remediation works may be required. The annual reviews were noted to include a flowpath condition report that identified any areas where remediation may be required. Two areas where remediation works have been undertaken were inspected during the audit. In ML1443, a drainage line was reinstated/reshaped to reduce the ponding of water on the property (Figure 6). In ML1722, water ponding was creating access issues for the landowner so upgraded drainage works were installed to allow water to flow more effectively through the property without ponding (Figure 7).

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Figure 6. Drainage line realignment over ML1443



Figure 7. Drainage works to rectify subsidence impacts over LW26 in ML1722



Centennial Mandalong has 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:

- MSSS Rehabilitation Monitoring, 2020 Annual Report: Baseline Survey, prepared by RPS Group, dated February 2021
- Cooranbong Rehabilitation Audit of Haul Road, prepared by Centennial Mandalong, dated December 2020.

3.3. Exploration

Condition 15 of CCL762 and ML1553 includes requirements for exploratory drilling within the lease area, including:

- notification to the regional hydrologist of the intention to drill exploratory holes together with information on the location of the proposed holes
- requirements for the survey, sealing and rehabilitation of drill holes.

Both CCL762 and ML1553 are older leases associated with the Cooranbong workings. No exploration activities have been conducted on these leases in the last 10 years. No notifications have been required for these leases.

Although outside the scope of the audit, Centennial Mandalong provided evidence of notification to the Department of Planning, Industry and Environment regarding water for exploration activities in EL6317 which has a similar notification requirement. This was to demonstrate that procedures are in place to notify exploration activities when required.

Centennial Mandalong has prepared an exploration activities management plan to guide the exploration activities on both the mining leases and the exploration licences associated with the Mandalong Mine. Evidence was generally available to confirm implementation of the exploration activities management plan. For example:

- correspondence with affected landowners, including maps of exploration activities
- exploration activity approvals where required for exploration licences
- rehabilitation of holes drilled in 2020 had been completed.

Two exploration boreholes within ML1722 were inspected during the audit, both of which had been sealed and rehabilitated. No issues of concern were identified at either site.

3.4. Reporting

3.4.1. Annual rehabilitation reporting

Condition 3 of ML1443, ML1543, ML1553 and MPL191 requires the lease holder to lodge an annual environmental management report (AEMR) that contains a review and forecast of performance of, amongst other things, the accepted mining operations plan, and where relevant, progress towards final rehabilitation objectives. Condition 4 of CCL762 requires the lease holder to lodge environmental management reports annually which report on compliance with the MOP and report on progress in respect of rehabilitation completion criteria. Condition 3 of ML1722, ML1744 and ML1793 requires the lease holder to prepare a rehabilitation report that provides a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP.

Centennial Mandalong has submitted annual environmental management reports or annual reviews for the audit scope period as follows:

- Centennial Mandalong Pty Ltd, Mandalong Mine, Annual Review, March 2020
- Centennial Mandalong Pty Ltd, Mandalong Mine, Annual Review, March 2021.

It was noted that the reports provide information on the progress of rehabilitation across the site, with detailed consultants' reports included as appendices (e.g. the Flowpath condition report 2020). The

objectives of the Mandalong MOP are discussed in section 8.1 of the annual reviews, but it was noted that there is no specific assessment of progress against the completion criteria defined in section 6 of the MOP. As suggestion for improvement no. 1, Centennial Mandalong should consider providing a discussion of rehabilitation progress against the completion criteria identified in the MOP.

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 which provides full particulars of all exploration and other operations or activities conducted during the 12-month period.

Two exploration reports have been submitted during the audit scope period:

- Annual Exploration Report for Mandalong Mine Mining Titles (CCL762, ML1431, ML1443, ML1543, ML1553, ML1722, ML1744, MPL191) March 2020
- Annual Exploration Report for Mandalong Mine Mining Titles (CCL762, ML1431, ML1443, ML1543, ML1553, ML1722, ML1744, MPL191) March 2019.

The reports for 2019 and 2020 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 ML1722, ML1744 and ML1793 requires the lease holder to provide environmental incident notifications and reports to the Secretary no later than seven 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 Mandalong Mine annual reviews, Centennial Mandalong has reported environmental incidents to the Environment Protection Authority (EPA) under the requirements of its environmental protection licence. In accordance with the requirements of condition 5 of the mining leases, these incidents have also been reported to the Regulator. For example:

- discharge event from LDP003 reported 16 September 2019
- discharge event from MSSS stockpile dam reported 14 February 2020
- non-compliances detected at LDP004 reported 28 February 2020
- disturbance of threatened plant species during construction reported 16 October 2020.

3.5. Other mining lease compliance requirements

3.5.1. Notice to landholders

Condition 1 of mining leases CCL762, ML1553, ML1722, ML1744 and ML1793, and condition 46 of ML1443, ML1543 and MPL191 require 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. None of the leases have been 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 8 of ML1722, ML1744 and ML1793, condition 21 of CCL762, condition 26 of ML1553, and condition 51 of ML1443, ML1543 and MPL191, the lease holder is 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 Mandalong Mine across all its titles is \$11,960,000. A review of departmental records confirms that this amount is held.

3.5.3. Co-operation agreement

Condition 9 of ML1722, ML1744 and ML1793 requires the lease holder to make reasonable attempts to enter into a co-operation agreement with the holders of any overlapping titles.

A review of published departmental mapping systems Commonground and Minview confirmed that there were no overlapping titles.

3.5.4. Other conditions

CCL762, ML1443, ML1543, ML1553 and MPL191 are older leases that have a range of conditions that are no longer included as lease conditions on newer leases. These conditions and an assessment of compliance are provided below.

- Blasting (condition 10 on CCL762, condition 11 on ML1553 and condition 26 on ML1443) given that compliance with blasting requirements is a condition of the environmental protection licence for the site and is regulated by the NSW EPA, compliance with the blasting conditions was not determined.
- Notification of mining within the notification area of prescribed dams (condition 27 on CCL762) – Centennial Mandalong staff indicated it had been over 20 years since mining has

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been in the notification area of the prescribed dams, therefore compliance with this condition was not determined.

- Notifications required by condition 28 of CCL762 Centennial Mandalong staff advised that this primarily related to the Cooranbong colliery leases and no notifications have been required for many years, therefore compliance with this condition was not determined.
- Consultation with the Surveyor General's office where any state survey marks or trigonometrical stations are damaged or interfered with as a result of mining (condition 37 of ML1443) – Centennial Mandalong advised that permanent survey marks along Mandalong Road were affected by subsidence and were required to be reinstated. Evidence was available to demonstrate that Centennial Mandalong has consulted with a geodetic surveyor from the Regional Survey Operations team from the Spatial Services section of the Department of Customer Service. Following the reinstatement of the marks, Centennial Mandalong prepared the Mandalong Road Reinstatement Report (Traverse) which provided details of the reinstatement process.



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 mine can include:

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

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

Centennial Mandalong has established and implemented systems to manage compliance obligations. Staff interviewed during the audit demonstrated a good knowledge of most compliance obligations, particularly those associated with the mining lease conditions and the MOP commitments which had been included in the compliance database.

It was noted that the obligations documented in the compliance database did not include any obligations imposed by the *Mining Act 1992* (e.g. the requirement to obtain consent prior to suspending operations (Schedule 1B of the Act)). As suggestion for improvement no. 2, Centennial Mandalong should consider expanding the obligations in the compliance database to include statutory conditions and other obligations under the *Mining Act 1992* and regulation.

It was also noted that, although copies of the mining leases were available on site, the depth restrictions over part of the mining lease was not well understood. As suggestion for improvement no. 3, Centennial Mandalong should consider including the area of depth restriction onto a GIS mapping layer as a control for mining and exploration activities, if not already available.

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.

Where Centennial Mandalong has external consultants undertaking monitoring programs (e.g. rehabilitation monitoring and the Flowpath modelling), recommendations from these reports are not routinely entered into the compliance database. Whilst there was evidence available to demonstrate that some of the recommendations from external reports are actioned, there is potential for these actions to be missed. As suggestion for improvement no. 4, Centennial Mandalong should consider entering the recommendations from external consultant reports into the 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 a period of four 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:

- drilling notifications
- waste records
- environmental incident reports
- rehabilitation monitoring records, including MSSS rehabilitation monitoring report
- targeted phase 2 contamination assessments
- Cooranbong rehabilitation audit of haul road
- exploration reporting
- annual environmental reporting
- documentation of reinstatement of survey marks.

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4.4. Title holder response to draft audit findings

Centennial Mandalong was provided with a copy of the draft audit report and invited to submit a response to the draft audit findings.

Centennial Mandalong's response only provided a comment on suggestion for improvement number one. Centennial Mandalong noted the recent release of the new mining rehabilitation regulation in July 2021 and proposes that it will report on the progress of rehabilitation against completion criteria as per the requirements of the new mining rehabilitation regulations, which will commence in July 2022.

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5. Audit conclusions

From the evidence reviewed during the audit, and observations made on site during the audit site inspections, it was concluded that Centennial Mandalong is generally compliant with the requirements of the mining lease and MOP in relation to the operations of the Mandalong Mine.

Centennial Mandalong has established systems for compliance management. Further development of the compliance obligations in the compliance database would be beneficial to promote a more robust approach to compliance management on site.

No non-compliances were identified during the audit. One observation of concern and four suggestions for improvement were noted by the auditor as summarised in Table 3 and Table 4. Regulatory actions may be undertaken in relation to the observation of concern identified during the audit.

Table 3. Summary of observations of concern

OBSERVATION OF CONCERN NO.	DESCRIPTION OF ISSUE	RECOMMENDATION
1	It was observed that not all the stockpiles at MSSS had been seeded with a cover crop or other vegetative material as listed in section 3.4.6 of the MOP. Planning for re-use or rehabilitation of the stockpiled material at MSSS has not yet been defined.	Centennial Mandalong should review stockpile management at MSSS and seed the stockpile, if required. Planning for re-use or rehabilitation of the stockpile should be commenced and progress reported in the annual report.

Table 4. Summary of suggestions for improvement

SUGGESTIONS FOR IMPROVEMENT	DESCRIPTION OF ISSUE
1	The objectives of the Mandalong MOP are discussed in section 8.1 of the annual reviews, but it was noted that there is no specific assessment of progress against the completion criteria defined in section 6 of the MOP. Centennial Mandalong should consider providing a discussion of rehabilitation progress against the completion criteria identified in the MOP.
2	It was noted that the obligations documented in the compliance database did not include any obligations imposed by the <i>Mining Act 1992</i> (for

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	example, the requirement to obtain consent prior to suspending operations (Schedule 1B of the Act)). Centennial Mandalong should consider expanding the compliance database obligations to include statutory conditions and other obligations under the <i>Mining Act 1992</i> and regulation.
3	It was also noted that, although copies of the mining leases were available on site, the depth restrictions over part of the mining leases were not well understood. Centennial Mandalong should consider including the area of depth restriction onto a GIS mapping layer if not already available.
4	Where Centennial Mandalong has external consultants undertaking monitoring programs (such as the Flowpath modelling and the rehabilitation monitoring), recommendations from these reports are not routinely entered into the compliance database. Whilst there was evidence available to demonstrate that some of the recommendations from external reports are actioned, there is potential for these actions to be missed. Centennial Mandalong should consider entering the recommendations from external consultant reports into the compliance database to provide a more robust system for tracking any actions required.