



# Regulating mine rehabilitation

PERFORMANCE AUDIT | 25 JUNE 2025

NEW SOUTH WALES AUDITOR-GENERAL'S REPORT



## ROLE OF THE AUDITOR-GENERAL

The roles and responsibilities of the Auditor-General and the Audit Office, are set out in the *Government Sector Audit Act 1983* and the *Local Government Act 1993*.

We conduct financial or 'attest' audits of state public sector and local government entities' financial statements. We also audit the Consolidated State Financial Statements, a consolidation of all state public sector agencies' financial statements.

Financial audits are designed to give reasonable assurance that financial statements are true and fair, enhancing their value to end users. Also, the existence of such audits provides a constant stimulus to entities to ensure sound financial management.

Following a financial audit the Audit Office issues a variety of reports to entities and reports periodically to Parliament. In combination, these reports give opinions on the truth and fairness of financial statements, and comment on entity internal controls and governance, and compliance with certain laws, regulations and government directives. They may comment on financial prudence, probity and waste, and recommend operational improvements.

We also conduct performance audits. These assess whether the activities of government entities are being carried out effectively, economically, efficiently and in compliance with relevant laws. Audits may cover all or parts of an entity's operations, or consider particular issues across a number of entities. Our performance audits may also extend to activities of non-government entities that receive money or resources, whether directly or indirectly, from or on behalf of government entities for a particular purpose.

As well as financial and performance audits, the Auditor-General carries out special reviews, compliance engagements and audits requested under section 27B(3) of the *Government Sector Audit Act 1983*, and section 421E of the *Local Government Act 1993*.



The Legislative Assembly  
Parliament House  
Sydney NSW 2000

GPO Box 12  
Sydney NSW 2001

The Legislative Council  
Parliament House  
Sydney NSW 2000

In accordance with section 38EC of the *Government Sector Audit Act 1983*, I present a report titled '**Regulating mine rehabilitation**'.

A handwritten signature in black ink, reading 'Bola Oyetunji'.

**Bola Oyetunji**

Auditor-General for New South Wales  
25 June 2025

## RECONCILIATION STATEMENT

We pay our respects and recognise Aboriginal peoples as the traditional custodians of the land in NSW who have cared for and protected the environment, waterways, and sacred sites over many millennia. We honour and thank the traditional custodians of the land on which our office is located, the Gadigal people of the Eora Nation, and the traditional custodians of all the lands on which our employees live and work. We pay our respects to their Elders past and present, and to the next generation of leaders.

We acknowledge that our long history of helping to foster accountability and transparency in the government and Parliament is also shared with the histories of colonisation and the resulting disadvantage of Aboriginal and Torres Strait Islander peoples in this state.

We embrace our role in holding government agencies to account for the delivery of effective services for Aboriginal and Torres Strait Islander peoples. We are committed to ensuring that our audits are culturally responsive, respectful and inclusive, and that we engage with Aboriginal and Torres Strait Islander peoples and communities in a meaningful and collaborative way.

We recognise the ancestral tie of Aboriginal and Torres Strait Islander peoples to this land, and we acknowledge that we have much to learn from their wisdom, rich and diverse culture, languages, knowledge and practices.

# contents

---

## Regulating mine rehabilitation

### Section 1 – Regulating mine rehabilitation

1.	Executive summary	1
	Conclusion	1
2.	Introduction	7
3.	Regulatory framework	10
	3.1. Rehabilitation reforms	10
	3.2. Strategy and structure	12
	3.3. Resourcing and capability	16
4.	Monitoring of rehabilitation progress	18
	4.1. Mine rehabilitation progress	18
	4.2. Security deposits to cover the cost of rehabilitation	22
	4.3. Validating rehabilitation progress	25
5.	Regulating rehabilitation	27
	5.1. Accountability for mine rehabilitation	27
	5.2. Enforcing compliance	29
	5.3. Compliance and enforcement approach	32

### Section 2 – Appendices

	Appendix 1 – Response from entity	35
	Appendix 2 – About the audit	37
	Appendix 3 – Performance auditing	40
	Appendix 4 – Report snapshot	42

## **Section 1 –**

Regulating mine  
rehabilitation

---

# 1. Executive summary

## Context

---

The *Mining Act 1992* (Mining Act) aims to ensure, among other things, that mining companies effectively rehabilitate disturbed land and water to a safe and stable condition. It also requires mining companies to provide security deposits to cover the costs of the rehabilitation of mine sites. The Mining Regulation 2016 (Mining Regulation) includes requirements to achieve the rehabilitation objectives of the Mining Act.

The Department of Primary Industries and Regional Development (the Department) is responsible for overseeing and enforcing mine rehabilitation requirements in the Mining Act and the Mining Regulation. These functions are delivered by a business unit in the Department known as the NSW Resources Regulator (the Regulator). The Regulator is not a statutory body, rather it is a unit within the Department whose responsibilities include delivering the Department's mine rehabilitation regulatory functions. This report refers to the Regulator in most instances because it has been delegated responsibility for rehabilitation monitoring and enforcement functions.

## Audit objective

---

This audit assessed the effectiveness of the Department in monitoring compliance with and enforcing mine rehabilitation requirements under the Mining Act and Mining Regulation.

The audit focused on the rehabilitation of large mines, that is, those holding an Environmental Protection Licence. This includes coal mines. Large mines pose the greatest rehabilitation risk, as they generally have larger areas of disturbance and greater impacts on the environment.

## Conclusion

---

The Department is not effectively monitoring and reporting on compliance with mining rehabilitation requirements under the Mining Act. However, regulatory reforms introduced in July 2021 provide the Regulator with a more robust regulatory framework for rehabilitation. These include requirements for mining companies to carry out rehabilitation as soon as reasonably practicable and to report annually on rehabilitation progress. These changes, if implemented effectively, should provide the Regulator with a consolidated view of rehabilitation progress across large mines.

Current gaps in the Department's data framework mean that it does not have a comprehensive and reliable view of rehabilitation progress and enforcement outcomes. This limits the Regulator's ability to effectively regulate mine rehabilitation. Further, there is no current plan to evaluate the effectiveness of its regulatory program.

The Regulator has received rehabilitation progress data that it requires from mining companies for most large mines for one calendar year (2023). According to that data, at December 2023, around one third of the total land disturbed by mining in NSW is undergoing rehabilitation. While the Regulator collects data on the amount of land under rehabilitation, it does not collect data on the amount of disturbed land available to mining companies for rehabilitation. Without this data, the Regulator is unable to determine whether a mining company has rehabilitated disturbed land as soon as reasonably practicable after the disturbance occurs. This audit could not report on the progress of mine rehabilitation against targets due to limitations in the Department's data management.

The total value of rehabilitation security deposits held by the Department has increased from \$3.1 billion in 2019–20 to around \$4 billion in 2023–24. Security deposits are held for each mine and if there is a shortfall in deposits held for one mine, that shortfall cannot be covered by another mining company's security deposit. Each security deposit is intended to cover the full cost of rehabilitation in the event of default by a mining company. The Regulator updates its rehabilitation cost estimate (RCE) tool around every four years but there is no allowance between reviews to account for inflation or changes to industry rates.

## Key findings

---

### **Significant regulatory reforms came into force in July 2021 that provide for a more robust regulatory framework for mine rehabilitation**

The regulatory reforms introduced new standard rehabilitation requirements in mining leases to enable the Regulator to more effectively oversee and enforce rehabilitation. The reforms require mining companies to, among other things, provide annual rehabilitation progress reports against clear rehabilitation objectives and forward plans, that outline scheduled mining activities and rehabilitation progress for the next three years, in a standard format. The reforms also provide the Regulator with legally enforceable powers to act against mining companies that do not comply with reporting and rehabilitation requirements. As part of the reforms, the Regulator also updated its Rehabilitation Cost Estimate Tool Guideline to require mining companies to submit RCEs on an annual basis.

The regulatory reforms provide the Regulator with a more robust framework to monitor and enforce rehabilitation progress. Before the reforms, mine rehabilitation obligations were set out in individual mining company's operation plans. These were ambiguous, inconsistent and often unenforceable. There were also no standard processes in place to regularly review mine rehabilitation security deposits.

The Department undertook extensive consultation when developing the rehabilitation reforms. The reforms were complex, and additional resources were required for their implementation. The Department reviewed and updated the mine rehabilitation conditions of around 700 mining leases for large mines. It also provided detailed guidance to mining companies to support rehabilitation compliance.

The Regulations came into effect in July 2021 and were operationalised for large mines in July 2022 to allow for a 12-month transition period. The 2024–25 Budget approved around \$13.7 million over four years for 11 additional staff to oversee and regulate progressive rehabilitation in line with the reforms.

### **The Regulator is implementing its operational priorities for mine rehabilitation but planning documents do not identify emerging issues, opportunities or trends**

The Regulator's strategic plan 2021–24 outlines its overall mission, vision, objectives, regulatory approach and business goals. The Regulator also has an internal business plan for each financial year that operationalises its strategic plan by outlining projects relevant to its strategies.

The Regulator is in the process of implementing all its operational priorities. It has improved the regulatory framework for rehabilitation, recommenced its targeted assessment programs (TAPs), implemented planned inspection programs, initiated projects to improve business practices, and is reviewing its RCE tool.

However, planning and risk documents do not identify emerging rehabilitation challenges, opportunities or trends in mine rehabilitation. They also do not identify how the Regulator intends to address strategic risks and challenges or leverage new or emerging opportunities.

### **The Department's data framework does not fully support the reforms and rehabilitation regulatory activities**

The Department's current data framework does not provide timely, complete and reliable information on rehabilitation progress, security deposit shortfall and enforcement action. For example:

- the Department was not initially able to provide complete and accurate data on rehabilitation progress, with the data containing duplicate entries, data discrepancies and missing values
- compliance data for some large mines provided for the audit could not easily be matched and manual filtering was needed to identify data specific to rehabilitation
- the Department highlighted limitations with extracting the data on security deposits, with significant manual consolidation required to identify shortfalls in security deposits held for large mines.

The Department is reviewing its systems with the aim of consolidating some of its data platforms, addressing data gaps and improving the user experience.

### **The Regulator publishes maps to report rehabilitation information for each mine, but it does not have a comprehensive view of rehabilitation progress**

The reforms required mining companies to submit rehabilitation progress data from 2023, but some provided it voluntarily in 2022. For 2023, of around 150 large mines required to report rehabilitation performance, around 140 submitted reports on rehabilitation progress. Analysis of that data undertaken for this audit shows that at December 2023 around one third of disturbed land was under rehabilitation. The final date for the submission of 2024 rehabilitation data for some mines was the end of March 2025, which, due to timing, could not be considered in this audit.

The Department reports spatial information at an individual mine level on the Sharing and Enabling Environmental Data (SEED) portal. An in-built map in this portal enables users to view rehabilitation progress for large mines by region and mine site. The Department launched this portal in August 2024. The SEED portal is a positive step towards improving transparency and accountability for mine rehabilitation.

However, the Regulator does not yet have comprehensive information on overall rehabilitation progress because:

- the SEED portal maintains spatial data for most individual large mines for one year (2023) but is not yet able to report rehabilitation progress at an aggregate level
- it has not collected data on the amount of disturbed land available to mining companies for rehabilitation (that is, disturbed land that is not yet undergoing rehabilitation but could be rehabilitated without impacting mining operations)
- the indicators it reports are activity related and do not provide insights on regulatory effectiveness and overall rehabilitation outcomes
- there is limited information to indicate that the issues identified through its inspection programs are being resolved
- limitations in the Department's data management have prevented reporting of rehabilitation progress against targets.

### **The 2017 Mining Rehabilitation Security Deposits performance audit found there was likely to be a shortfall in security held and this is a continuing issue**

All mining companies must lodge a security deposit with the Department that covers full rehabilitation costs. The total value of security deposits held by the Department increased by around 30%, from \$3.1 billion in 2019–2020 to around \$4 billion in 2023–24, covering large mines and small mines.

Most mining companies use a tool developed by the Regulator to calculate their RCEs (the RCE tool). This tool contains unit rates and allowances relevant to rehabilitation, such as costs to move material around the site.

The rates in the RCE tool are updated around every four years to account for cost increases over time. However, there are no regular updates to the tool to account for inflation or other changes in industry rates during that period. The Regulator last reviewed the rates in its current tool between 2020 and 2021. Due to the scale of mining operations and the large quantities of material that need to be moved around a site, even small changes in unit rates can result in major changes to cost estimates. This means that total security deposits held for each mine are likely to be inadequate. It is important that the Department holds sufficient deposits for each mine because if there is a shortfall in deposits held for one mine, that shortfall cannot be covered by another mining company's security deposit.

The Regulator is currently reviewing the RCE tool that includes updating its schedule of rates and allowances. It expects the review to be completed by May 2025 and implemented by September 2025.

The Audit Office of NSW's 2017 Mining Rehabilitation Security Deposit audit report recommended that the former Department of Planning and Environment ensure its RCE tool adequately covers all works and expenses needed for rehabilitation and closure (Recommendation 2). This recommendation has not yet been implemented, given that the current tool does not account for inflation. Two other recommendations are also yet to be implemented (see below).

### **The Department has not adequately addressed some recommendations from the 2017 Mining Rehabilitation Security Deposits audit report**

In addition to the recommendation in the 2017 report that the former Department ensure its RCE tool adequately covers all works and expenses, two other recommendations have not yet been implemented. These are to:

- implement a financial assurance mechanism to manage long-term environmental risks from mining (Recommendation 4)
- develop clear policy and procedures for ensuring a mine cannot be put into suspension, or care and maintenance, indefinitely (Recommendation 3). The Department should ensure controls are in place to limit multiple approvals to extend suspensions without considering mining company compliance with rehabilitation requirements.

These recommendations are outlined on pages 4 and 5 of the [Mining Rehabilitation Security Deposits](#) report.

### **The Department has implemented some controls to mitigate risks associated with conflict of duties, however governance arrangements need to improve**

The Regulator's previous Compliance and Enforcement Approach guideline, which was in use until February 2025, stated that it 'is a stand-alone regulator ... created to ensure that the regulatory functions of the department have clear separation from industry development activities'. The Regulator recognised that the separation of functions increased transparency and community confidence in its regulatory activities.

In May 2021, the Regulator was made a part of NSW Resources, which is a unit also responsible for industry development. The Regulator revised its Compliance and Enforcement Approach guideline in February 2025 to remove the statement regarding the clear separation of duties.

Resourcing, funding decisions and key policies and plans, such as the Regulator's compliance priorities and the Suspension of Mining Operations Policy, are approved by the Deputy Secretary who is also responsible for developing industry support policies.



The Department identifies industry capture risks in its risk register. These risks include the real or perceived risk of industry capture, such as not taking appropriate or proportionate regulatory action due to interests in supporting the growth of the mining industry in NSW.

The Regulator has implemented some controls to mitigate the risks associated with the conflict of duties, including developing a range of internal policies, procedures and training to support its compliance activities. However, conflict of duties remains a risk which needs to be continuously managed.

**The Regulator does not report on regulatory activities specific to rehabilitation and there has been a decrease in some compliance and enforcement actions**

Meaningful public reporting on regulatory performance is important for accountability and continuous improvement. It ensures that those being regulated are aware of the likely responses in the case of poor performance or non-compliance and of how to meet community expectations. The Regulator reports on compliance activities under the Mining Act but it does not currently report on compliance activities specifically related to rehabilitation. For this audit, the Regulator undertook a manual process to isolate compliance data specific to rehabilitation.

The number of notices issued by the Regulator to the leaseholders of large mines declined significantly, by around 80%, in the last five years, from 60 notices in 2019–20 to 13 notices in 2023–24. The number of cautions issued to the leaseholders of large mines also declined by around 80%, from 23 cautions in 2019–20 to five cautions in 2021–22, then increased to around 35 cautions in the following two financial years. The drop in the number of notices was due to the Regulator's conscious decision to focus on implementing the rehabilitation reforms.

**The Regulator does not have an evaluation plan for its regulatory program, and it has limited information on its regulatory effectiveness**

The Audit Office of NSW' 2024 Regulation Insights report highlights some good practice principles for effective regulation based on insights generated from the last six years of audit. These include:

- providing robust reporting on meaningful regulatory information so government has oversight and can be held accountable for regulatory activities
- ensuring monitoring and enforcement activities are supported by robust information about regulatory risks and issues, and accompanied by timely, proportionate responses.

The Regulator monitors and enforces mine rehabilitation in several ways, including issuing notices, cautions, penalties and prosecutions to address non-compliance, providing TAP reports that determine whether rehabilitation measures have been implemented by mining companies, and requiring self-reporting under the Mining Regulation.

However, the Regulator does not report on the effectiveness of its regulatory program and there is no evaluation plan for a periodic review of its regulatory program.

The Regulator commenced a business improvement project for the Mining Act Inspectorate (MAI) in May 2024 to identify improvements in governance and risk management structures, key statutory processes, communications and reporting, and internal business enablers (such as systems, procedural guidance and work practices) to support effective and efficient decision-making. This project is due to be completed by June 2025 and provides an opportunity for the Regulator to address some of the gaps identified in this report.

## Recommendations

---

**By June 2026, the Department of Primary Industries and Regional Development should:**

1. develop and implement a monitoring and evaluation plan to measure the outcomes of the regulatory program for mine rehabilitation
2. address the gaps in its data framework identified in this report to ensure that
  - it provides timely access to accurate data about rehabilitation progress, security deposits and enforcement outcomes
  - data is used to inform regulatory strategy, planning and activities
3. develop and report publicly on key performance indicators and targets that
  - are consistent, measurable and demonstrate performance and outcomes against the requirements for rehabilitation set out in the *Mining Act 1992* and Mining Regulation 2016
  - describe compliance performance and trends in the emergence and resolution of non-compliance with regulatory reporting, rehabilitation and security obligations
  - inform strategic planning and continuous improvement in activities related to mine rehabilitation
4. enhance its governance and regulation for mine rehabilitation by
  - ensuring the Regulator's strategy and risk documents are evidence-based, including by taking into account new and emerging strategic risks
  - implementing controls to address all risks resulting from a conflict of duties, including ensuring the NSW Resources Regulator uses best practice regulation to meet its rehabilitation objectives under the Mining Act.

---

## 2. Introduction

### Mine rehabilitation requirements

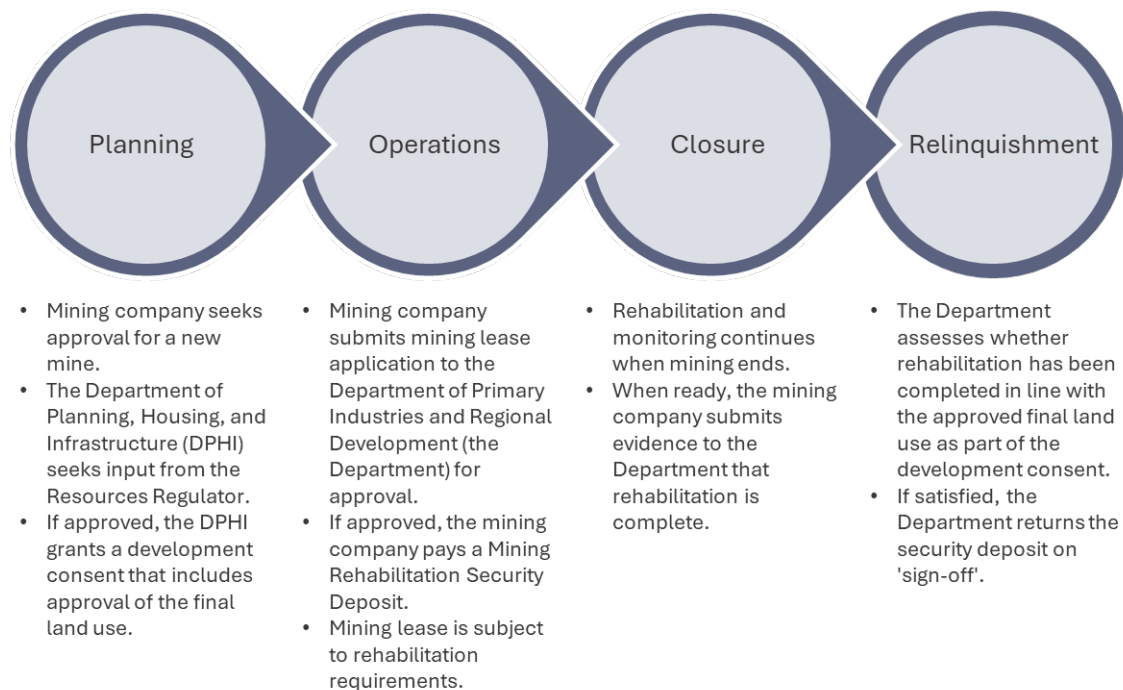
The *Mining Act 1992* (Mining Act) and Mining Regulation 2016 (Mining Regulation) provide the regulatory framework for mining in NSW. The Mining Act aims to foster social and economic benefits, while also minimising impacts on the environment.

Under the Mining Act and Mining Regulation, mining companies in NSW are required to:

- as soon as reasonably practicable, restore land and water disturbed by mining to a safe and stable condition
- provide a security deposit that covers the full cost of rehabilitation.

The lifecycle of a mine can span several decades. The mining approvals needed and the associated rehabilitation requirements over a mine's lifecycle are shown in Exhibit 1.

#### Exhibit 1: Mine lifecycle and departmental responsibilities



Source: Adapted from the Mine Rehabilitation Framework produced by the NSW Resources Regulator, Department of Primary Industries and Regional Development.

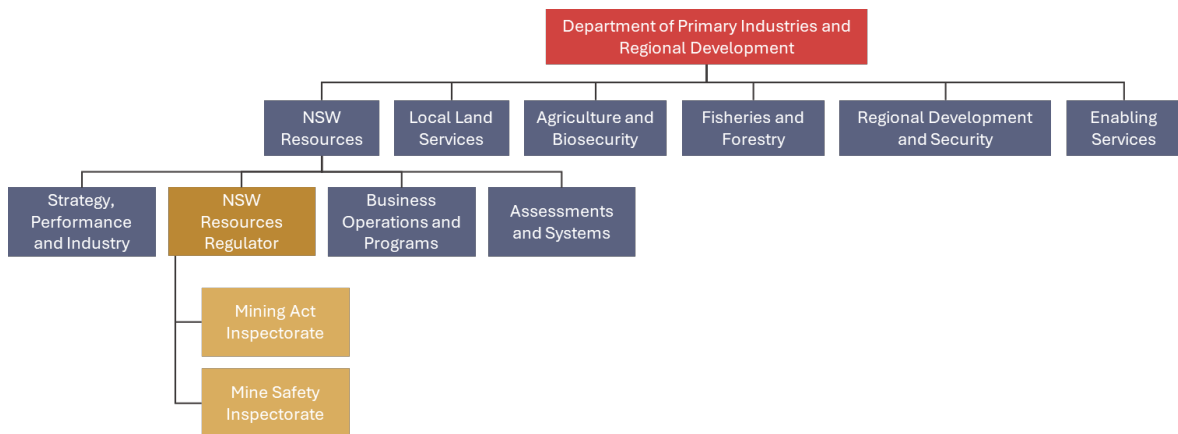
## Accountabilities and structure

The Mining Act places regulatory responsibilities for mine rehabilitation on the Minister for Natural Resources (the Minister) and the Secretary of the Department of Primary Industries and Regional Development (the Department). The Minister and the Secretary of the Department have delegated regulatory functions for mine rehabilitation to the Deputy Secretary of NSW Resources and staff of the NSW Resources Regulator (the Regulator).

The Department is responsible for overseeing and enforcing mine rehabilitation requirements in the Mining Act and the Mining Regulation. These functions are delivered by a business unit known as the NSW Resources Regulator (the Regulator) in the Department. The Regulator is not a statutory body, rather it is a unit within the Department responsible for delivering the Department's mine rehabilitation regulatory functions in line with the Mining Act and Mining Regulation.

The Department's current structure is illustrated in Exhibit 2.

### Exhibit 2: Departmental structure



Source: Adapted from the Department's organisation structure, Portfolio View, 11 October 2024.

The Regulator's key mine rehabilitation responsibilities include ensuring:

- mining companies rehabilitate land as soon as practicable after disturbance
- remediation is consistent with rehabilitation objectives and criteria set out in development consents and mining leases
- mining companies provide regular rehabilitation progress reports
- mining companies provide a Rehabilitation Security Deposit before mining begins.

The Regulator can impose penalties under the Mining Act for contravening:

- reporting requirements (s.163C)
- a direction issued by the Secretary or an inspector (s.240C)
- a requirement to provide information and records (s.248B)
- a condition of an authorisation (s.378D).

Managing environmental and safety risks from legacy mines is costly. If mined land is not rehabilitated and the Regulator exhausts its avenues to compel the responsible mining company or its directors to rehabilitate, the onus to rehabilitate could be transferred to the NSW Government through the Legacy Mines Program.

In 2022–23, the NSW Government budget allocated around \$76 million in recurrent expenditure over four years for remediation works at high-risk legacy mine sites. In 2023–24, the NSW Government budget allocated an additional \$48 million over four years to reduce risks from legacy mines. The Department advised that its expenditure on the program over four years from 2022–23 will be around \$55 million.



There are over 600 abandoned mines in NSW, but only some of these are included in the Legacy Mine Program. The Department considers abandoned mines that have a high environmental risk and/or high public safety risk for inclusion in the program. The Department advises there are currently 30 legacy mine sites under active remediation. A business unit within NSW Resources manages the Legacy Mines Program.

## **Why mine rehabilitation is important**

While the mining industry generates significant economic benefits, its activities can result in environmental harm. The consequences of poor rehabilitation planning and management include landform instability and erosion, downstream pollution, a lack of suitable soils and plant seeds, weed infestation, and hazards to public safety, stock and wildlife.

Water is a consideration in rehabilitation planning. To ensure water can be managed throughout the life of a mine and after its closure, specific infrastructure, such as tailings dams, is often required. If not appropriately controlled, water can allow pollutants to seep into surrounding areas causing environmental damage that can be difficult and costly to contain and remediate.

Ineffective rehabilitation of some mines has resulted in long-term environmental harm. Issues with abandoned mines that are being managed through the Department's Legacy Mines Program include:

- historical contamination from high concentrations of metals such as arsenic, antimony, lead and silver
- seepage from uncapped tailing storage facilities, rock piles and waste dumps
- air quality issues due to a lack of ground cover and surface contamination.

Stakeholders have also highlighted that some more recently closed coal mines continue to leak methane gas long after they close. Another more recent mine experiencing rehabilitation issues is the McKinnons gold and silver mine, located south-west of Cobar, which operated under a mining lease that expired in 2004. The original security deposit held was assessed to be inadequate by approximately \$11 million and negotiations with the mining company have failed to compel it to complete the rehabilitation.

For current mines, the benefits of progressive rehabilitation include improved flora and fauna outcomes, fewer health and safety risks, and reduced financial risk and liabilities.

Effective regulation of mine rehabilitation is critical to ensure environmental impacts are not borne by regional communities, risking intergenerational impacts and limiting future land use options. It is also important to ensure that the financial costs of poor rehabilitation by mining companies are not transferred to the State.

## **Previous Audit Office of NSW report**

In 2017, the Audit Office of NSW undertook a performance audit of Mining Rehabilitation Security Deposits. The audit report found, among other things, that the security deposits held by the NSW Government were not likely to be sufficient to cover the full cost of each mine's rehabilitation in the event of a default. This is because the rates and allowances in the cost calculation tool had not been updated since 2013 and some activities required for effective rehabilitation were not covered or not covered adequately. Additionally, the security deposits held did not include sufficient contingency, given the substantial risks and uncertainties associated with mine rehabilitation and closure.

The 2017 report also found the former department did not hold financial assurance over the risk of unexpected environmental issues arising in the long-term, after mines are closed and security deposits are returned to the mining company. The audit recommended the former Department:

- improve the quality of rehabilitation and closure plans
- improve assurance that security deposits are sufficient
- enhance oversight of mine rehabilitation
- collaborate with agencies to establish a financial assurance mechanism to cover the risk of long-term environmental degradation.

---

## 3. Regulatory framework

### 3.1. Rehabilitation reforms

**Significant regulatory reforms came into force in July 2021 that provide the Regulator with a more robust regulatory framework for mine rehabilitation**

The Department introduced mine rehabilitation reforms through the Mining Amendment (Standard Conditions of Mining Leases—Rehabilitation) Regulation 2021 (the Mining Amendment Regulation) in July 2021. The aim of the reforms was to provide greater clarity of rehabilitation obligations for mining companies and strengthen regulatory mechanisms. Before the reforms, mine rehabilitation obligations were set out in individual mining company's operation plans. These were ambiguous, inconsistent and often unenforceable. There were also no processes in place to regularly review mine rehabilitation security deposits.

The reforms introduced new standard conditions to all mining leases. These conditions established enforceable rehabilitation and reporting requirements for mining companies to:

- rehabilitate land and water as soon as reasonably practicable after disturbance occurs to ensure progressive rehabilitation
- update mining lease rehabilitation conditions to achieve approved final land use
- undertake a rehabilitation risk assessment and implement control measures
- prepare, implement and publish a rehabilitation management plan (large mines only)
- prepare a forward program over three years and report annually to the Regulator.

The Regulator also updated the Rehabilitation Cost Estimate Tool Guideline to require mining companies to submit rehabilitation cost estimates (RCEs) on an annual basis as part of their forward programs.

These new standard conditions provide the Regulator with a more robust framework to monitor and enforce rehabilitation progress. The reforms require mining companies to provide regular progress reports against clearer rehabilitation objectives and forward programs, which outline a schedule of mining activities and rehabilitation progress for the next three years, in a standard format. These changes, if implemented effectively, should provide the Regulator with a consolidated view of rehabilitation progress across large mines.

A 12-month transition period was provided to allow mining companies to transition to the new requirements. Regulatory reforms were operationalised for mining companies with large mines in July 2022. Mining companies were required to submit rehabilitation progress data against a forward program from July 2023.

The implementation timeframe for the reforms is set out in Exhibit 3.

**Exhibit 3: Regulatory reform implementation timeline**



Source: Audit Office analysis based on information provided by the Department.

**The Regulator paused key monitoring and compliance activities to implement the rehabilitation reforms**

The rehabilitation reforms were complex, and the Regulator underestimated the challenges of implementing the 2021 reforms. Drafting the amendments to the Regulation took time, with multiple drafts produced to ensure that it addressed issues raised by stakeholders. Greater resources than planned were also needed to implement and oversee the reforms, including resourcing required to update mine rehabilitation conditions and prepare industry to comply with the reforms.

The Department reviewed the mine rehabilitation conditions of around 700 mining leases for large mines and re-issued updated leases to most title holders before 30 June 2022, meeting its project plan timeframes to complete this work. The Department provided a register showing that it had completed updating around 600 mining leases in relation to large mines. Around 50 mining leases for large mines did not need to be updated, with 40 of these listed as leases to be renewed upon mining lease expiry or application for extension.

The Regulator advises that it paused its targeted assessment programs (TAPs) in 2021–22 to focus on implementing the reforms, including industry education. The TAPs, which it recommenced in early 2024, are a key monitoring tool for the Regulator.

In March 2024, the Department submitted a request to NSW Treasury for additional funding to support the reforms and enhance its rehabilitation compliance activities. The 2024–25 Budget approved around \$13.7 million over four years for 11 additional staff to oversee and regulate progressive rehabilitation in line with the reforms.

**The Regulator consulted extensively with stakeholders to develop rehabilitation reforms**

The Regulator undertook an extensive consultation process when developing the rehabilitation reforms. It prepared fact sheets and provided webinars before introducing reforms including:

- frequently asked questions around mining lease changes and the need for the reforms
- questions and answers from online public consultation forums
- webinars to industry providing an overview and background for the reforms, the new rehabilitation obligations, implementation and transitional arrangements, and the consultation process.

In September 2020 the Regulator wrote to a range of stakeholders, including industry bodies and some mining companies, inviting feedback by November 2020 on the draft Mining Amendment Regulation and the template documents referred to as ‘form and way’ documents, along with factsheets and frequently asked questions. It published the 20 submissions received from a range of stakeholders and provided a summary of its responses to those submissions.

The Regulator has documented and published its consultation processes. Its summary of responses indicates that it made changes to the draft regulation and rehabilitation templates and developed additional guidance in response to the submissions. It did not adopt suggestions in some submissions to include more prescriptive requirements for rehabilitation in the Mining Act, stating that the draft Mining Amendment Regulation sets out the obligations required to achieve rehabilitation as required by the Mining Act.

### **The Regulator provides detailed guidance to mine companies to support rehabilitation compliance**

The rehabilitation reforms clarified that mining companies are ‘to rehabilitate land and water in the mining area that is disturbed by activities under the mining lease as soon as reasonably practicable after the disturbance occurs’. The guidance sets out factors that the Regulator will consider when determining if rehabilitation is occurring as soon as reasonably practicable. This includes whether the mining company knows about the land and water in the mining area, the availability and suitability of rehabilitation methods, and the likelihood of harm due to rehabilitation delays.

The guidance states that rehabilitation may also include planning and management activities that are needed to achieve sustainable rehabilitation outcomes. This includes stakeholder consultation, mine and rehabilitation planning, risk assessments, research, trials and monitoring programs, and reporting risks in achieving final land use to the Regulator.

The Regulator has also published on its website a range of other detailed guidance for mining companies to assist them in complying with rehabilitation requirements. This includes:

- mine rehabilitation fact sheets
- guidelines on reporting requirements, including registration and data entry for the Regulator’s rehabilitation reporting system
- guidelines on how to fulfil other rehabilitation requirements, such as rehabilitation risk assessments, rehabilitation objectives and criteria, development of controls, and record keeping.

In August 2024, the Regulator published a guideline on achieving rehabilitation completion and sign-off. This provides information on the regulatory requirements for rehabilitation, the process for submitting a rehabilitation completion application, the Regulator’s assessment process, and post-completion requirements.

## **3.2. Strategy and structure**

### **The Regulator has identified its operational priorities for regulating mine rehabilitation and is implementing these priorities**

The Regulator’s strategic plan 2021–24 outlines its overall mission, vision, objectives, regulatory approach and business goals. The Regulator also has an internal business plan for each financial year that lists its priority projects related to rehabilitation, timeframes and accountabilities. The Regulator has advised it plans to update its strategic plan in 2025.

The Regulator’s strategy and business plans detail mine rehabilitation priorities that are focused on day-to-day operations. For example, its strategic plan 2021–24 states it would:

- improve the regulatory framework for mine rehabilitation
- focus on security deposits returned
- improve the sharing of information, learnings and expectations
- increase proactive assessments of critical controls and rehabilitation management, that is, implementing its TAPs
- focus on quality data collection and analysis
- focus on whole-of-mine life (including planning stage), not just pre-closure.



The Regulator's internal business plans operationalise its strategic plan by outlining key projects relevant to its strategy. For example, the 2024–25 business plan states that it plans to implement:

- TAPs on revegetation and tailings dam management
- planned inspection programs on reviewing progress with mine rehabilitation obligations
- projects to improve business processes and practices
- streamlined frameworks to improve compliance and enforcement decision-making
- a review of its RCE tool, which is used by mining companies to estimate their Rehabilitation Security Deposit.

The Regulator is in the process of implementing these operational priorities. It is currently streamlining its framework for compliance and enforcement decision-making, has recommenced its TAPs, implemented its planned inspection program, and initiated projects to improve business practices, as well as reviewing its RCE tool.

**Planning and risk documents do not identify emerging issues, opportunities or trends, nor how the Regulator plans to address areas of risk**

Planning and risk documents at the Department and Regulator level do not identify emerging rehabilitation challenges, opportunities or trends in mine rehabilitation. They also do not identify how the Regulator intends to address strategic risks and challenges or leverage new or emerging opportunities.

For example, the NSW Resources group and the Regulator's strategy and risk documents do not address how the Regulator will understand and address important challenges related to:

- increases in coal mine closures over the next 20 years, including risks associated with long-term environmental degradation after mines are closed and security deposits returned
- the potential impacts of climate change on rehabilitation over the long-term (such as increased erosion, increased temperatures and longer dry spells), which would affect RCEs and, in turn, the necessary value of rehabilitation security deposits and the rate of rehabilitation
- a shifting environmental risk profile and associated rehabilitation risks as the nature of mining changes over time, such as tailings dam management, associated with the long-term increase in large metalliferous mines to support the transition to renewable energy.

Some of these gaps are known to the Regulator. For example, the Regulator's internal business plans identified relevant strategic projects in 2019–20, including alternative post-closure land use and options to manage long-term environmental risks related to poor rehabilitation. However, these plans were not detailed, and the projects were among over 300 other broader projects that were not prioritised. Some strategic challenges were also identified in the Department's New Policy Proposal submission to NSW Treasury in March 2024, but they are not documented in any current strategy or plans.

The Department has advised that macro trends and strategic risks in mine rehabilitation are considered at the departmental and group level, rather than limited to the Regulator. The Department has a Statement of Intent that notes it will protect primary industries and regional economies through its regulatory and compliance functions. However, the Statement of Intent does not identify and address strategic challenges specific to mine rehabilitation.

### **The Regulator's operations are not prioritised consistently with its risks for mine rehabilitation**

The Department has identified several risks in its NSW Resources Risk Register for 2023–24 relevant to rehabilitation regulation that it considers as having a high residual risk rating, with major consequences. These are:

- regulation and enforcement – ineffective administration and maintenance of the Mining Act and the Mining Regulation
- rehabilitation – failure to comply with rehabilitation framework
- information and communications technology (ICT) – corporate ICT systems are not fit for purpose and not aligned with operation and service delivery requirements.

The Department has undertaken steps to address these risks through implementing the rehabilitation reforms and commissioning ICT improvements. Despite these measures, a greater focus on mining rehabilitation is needed to adequately mitigate the Department's high residual risk ratings in relation to the regulation of mine rehabilitation.

The Regulator commissioned a review on the structure of its governance panels, completed in June 2024. The review, among other things, recommended the Regulator's Compliance and Enforcement Approach document be reviewed to ensure it gives equal importance to all its regulatory functions. The Department updated the document in February 2025, but the content is largely the same as the previous version.

### **Regulation of rehabilitation is funded by the Minerals and Petroleum Administrative Fund**

The Department has other responsibilities in addition to regulating mine rehabilitation under the Mining Act, including licensing and fostering industry.

Regulatory activities and community and industry liaison carried out in connection with the Mining Act are funded from the Minerals and Petroleum Administrative Fund (the Administrative Fund) through an annual levy on industry, equating to one per cent of the security deposit amount. In 2023–24, around \$44 million was allocated to the Administrative Fund. Of this, the Regulator spent around \$7 million (16%) to support activities carried out under the Mining Act. The requirements of the Mining Act are broader than rehabilitation. The proportion of the \$7 million spent on mine rehabilitation is unclear, although the Regulator has advised that 70–80% of levies allocated to the Mining Act are spent on rehabilitation regulatory activities.

Of the \$44 million allocated to the Administrative Fund, the Department spent around \$40 million in 2023–24. It advises that other expenditure under the Administrative Fund includes around:

- \$17 million for the administration and assessment of exploration and mining titles, including security deposit management and support for the Mine Rehabilitation Portal and other systems
- \$7 million for policy development and support for the Mining Act
- \$5 million for corporate overheads and geological surveys
- \$3 million for governance and communications support for the Mining Act Inspectorate (MAI)
- \$1 million for the legacy mine program.

The balance remaining from the Administrative Fund in June 2024 was around \$25 million.

### **The Department has implemented some controls to mitigate risks associated with conflict of duties, however governance arrangements need to improve**

The Regulator's previous Compliance and Enforcement Approach guideline, which was in use until February 2025, states:

The NSW Resources Regulator is a stand-alone regulator ... created to ensure that the regulatory functions of the department have clear separation from industry development activities. This framework is designed to ensure a consistent and responsive regulatory approach and to provide increased transparency and community confidence in relation to our regulatory activities.

In May 2021, a departmental restructure led to the Regulator being moved into the NSW Resources group, alongside the industry support functions responsible for ‘fostering the social and economic benefits to NSW that result from the efficient development of mineral resources’. The Secretary of the Department has delegated decisions around compliance and enforcement to the Deputy Secretary responsible for the NSW Resources group and to staff within the Regulator.

The Regulator revised its Compliance and Enforcement Approach guideline in February 2025 to remove the statement regarding the clear separation of duties.

The Regulator has identified industry capture risks in its risk register associated with conflict of duties. These include the risk of the Regulator not taking appropriate or proportionate regulatory action due to interests in supporting the growth of the mining industry in NSW.

However, this audit has identified gaps in controls that give rise to risks associated with conflict of duties. These include:

- decisions regarding requests for additional resources for the Regulator, including data system updates, require the support of the Deputy Secretary who is also responsible for industry development
- key policies and plans, such as the Regulator’s compliance priorities and the Suspension of Mining Operations Policy, are approved by the Deputy Secretary who is also responsible for industry development.

The Regulator has implemented some controls to mitigate the risks associated with the conflict of duties, including:

- developing a range of internal policies, procedures and training to support its compliance activities
- publishing a stakeholder engagement policy, guidelines and other information on mine rehabilitation on its website to enhance transparency around its regulatory processes; the Regulator updated its website in late 2024 to improve accessibility.

However, conflict of duties remains a risk which needs to be continuously managed.

### **The Regulator commissioned a review of its structure and is improving business processes**

It is good practice for regulators to conduct performance evaluations as part of their governance practices.

The Regulator commissioned an external review of its MAI in July 2023. The review found:

- its current structure did not promote effective or efficient business processes
- there were unclear roles and responsibilities that reduced output and outcomes
- delivery of MAI business objectives could be improved through better prioritisation of activities, building communication and providing clarity of responsibilities between teams.

The review indicated that areas for development included priority setting, education and training, active monitoring, and performance measurement and evaluation.

In response to the review, the Regulator is developing a risk prioritisation tool and implementing regular prioritisation meetings to monitor progress with the recommendations. The Regulator also advises that it has clarified the roles and responsibilities of MAI teams.

The Regulator also commenced a business improvement project for the MAI in May 2024 to identify improvements in governance and business risk management structures, key statutory processes, communications and reporting, and internal business enablers (such as systems, procedural guidance and work practices) to support effective and efficient decision-making. This project is due to be completed by June 2025.

### 3.3. Resourcing and capability

#### **The Regulator has staff with the relevant skills and experience and is in the process of filling key roles in its organisational structure**

The Regulator advises that all relevant staff within its MAI are tertiary qualified in environmental or natural resource management. This matches the expectations the Regulator set for these roles in its role descriptions.

The Regulator provided role descriptions for Principal Compliance Manager, Principal Operations Manager and Senior Inspector Rehabilitation Technical Services. The role descriptions indicate these roles are important in the regulation of rehabilitation. The Regulator advises that it has recently filled vacant positions including the Principal Operations Manager and Principal Compliance Manager.

#### **The Regulator has provided training to staff to support regulatory activities**

The Regulator has developed a skills matrix that maps training requirements against roles, including training in relation to penalty notices, notice writing, regulatory operations manual, report/brief writing, risk assessment, and RCEs training. The Regulator advises training related to notice writing, brief writing, risk assessment and RCE tool training are to be rolled out in FY2025/26.

The Regulator's training records indicate relevant staff have participated in industry webinars for its TAPs. Inspectors are also receiving on the job training through their involvement in TAPs, which includes inspections across a large sample of mines.

The Regulator conducted an internal audit of its training needs and records in May 2023. The internal audit found there was no centralised location to record the critical training requirements of the Regulator, to track employees' current skills, training attendance or certificates, and to undertake a skills gap analysis.

In response, the Regulator developed its skills matrix and now stores training records for staff and training requirements for each role in its training register. Most MAI staff also completed mandatory training, including online Regulatory Operations Manual training in late 2024.

The Regulator has provided a project plan to update training procedures and business rules for assessing rehabilitation costs with a project end date of December 2024. This plan states the Regulator will conduct a training needs analysis for RCEs. The Regulator is yet to provide the outcomes of this. This is important because assessments of these cost estimates are used to determine the required security deposit for each mine.

#### **The Regulator screens for pecuniary interest risk and documents how it is managing conflict of interest declarations**

The Department has a code of conduct and ethics requiring staff to declare any conflicts of interest. The code also requires staff to properly document any conflict of duty that arises, and to gain approval before accepting any secondary employment. The Department's conflict of interest policy requires NSW Resources staff to make an annual declaration. The Regulator provides MAI staff with training in the code of conduct and ethics, and fraud and corruption awareness training. The Department's code also includes a policy on gifts, benefits and hospitality. This outlines circumstances and processes for staff accepting gifts and benefits.

The Department provided a conflict of interest register listing recent declarations by MAI staff. The register includes examples of how it is managing conflicts that have been declared.

The Regulator has a Rehabilitation and Securities Panel to bi-annually review the risk rankings for all sites and review security deposit re-assessments that have a significant variation. The panel meetings can include external attendees and the terms of reference requires all attendees to declare any conflicts of interest. However, this is not a standing item on the agenda, and it is unclear if this is occurring.



Applications for secondary employment by staff at the Regulator have significantly increased since 2023. The Regulator advises that most applications relate to volunteer roles or secondary employment roles with limited time commitments outside working hours. All applications are assessed to ensure they have negligible impact on the staff member's role within the Regulator.

The Department has a group integrity clearance policy in place that outlines the pre-employment and post-employment screening for pecuniary interests, such as national police checks, conflict of interest declarations, and bankruptcy and qualifications checks. The policy also requires all employees within the Regulator undergo periodic post-employment rescreening every two years. The Regulator conducted some integrity rescreening of its staff in 2024.

---

## 4. Monitoring of rehabilitation progress

### 4.1. Mine rehabilitation progress

#### **The Regulator does not have a comprehensive view of rehabilitation progress**

The 2021 reforms require mining companies with large mines to provide a rehabilitation forward program and report annually on rehabilitation progress to the Regulator.

The Regulator's guideline on annual rehabilitation reports requires reports to contain, among other things, data on areas of disturbance and rehabilitation progress.

Mining companies with large mines are required to provide the Regulator with progress data against key rehabilitation indicators annually, including:

- total disturbance
- rehabilitation – land preparation
- ecosystem and land use – establishment and development
- rehabilitation completion
- new active disturbance area
- new rehabilitation that has commenced.

The Regulator advised that mining companies were not required to submit rehabilitation key performance indicators (KPIs) in 2022, but some did so voluntarily. Of around 150 large mines required to provide rehabilitation progress data, around:

- 70 (47%) submitted progress data for 2022
- 140 (95%) submitted data for 2023
- 100 (68%) submitted data for 2024.

The limited reporting for 2024 is largely due to some mines having reporting arrangements that allow them to provide this data by March 2025. The timing of this reporting means the Regulator does not yet have a complete view of total rehabilitation progress for large mines in NSW.

#### **Around a third of land disturbed by mining is being rehabilitated in 2023**

For all large mines that provided KPI data to the Regulator on rehabilitation progress in 2023, analysis undertaken for this audit shows that the total area of disturbance recorded was around 75,400 hectares. Of this area:

- around 34% (or around 25,500 hectares) of the total area of disturbance is being rehabilitated
- less than 1% (around 450 hectares) is completed rehabilitation (that is, signed off by the Regulator).

Of these, 54 large mines that are closing or have leases expiring in the next ten years have reported:

- a total area of disturbance of around 16,700 hectares
- around 35% (or around 5,800 hectares) is being rehabilitated
- less than 1% (or around 60 hectares) is completed rehabilitation.

The reported percentage of total disturbance area being rehabilitated for these mines is around the same as those reported for other large mines.

To date, the Regulator collects data on the amount of land under rehabilitation but does not collect data on the amount of disturbed land available to mining companies for rehabilitation. That is, disturbed land that is not yet undergoing rehabilitation but could be rehabilitated without impacting mining operations.

The Regulator has advised there is likely to be a significant variation in the land available for rehabilitation at each mine site because mining companies are able to use the land for operations up to the date of development consent expiry. The Regulator has also advised that mining companies’ commercial decisions can change mine operations and rehabilitation planning.

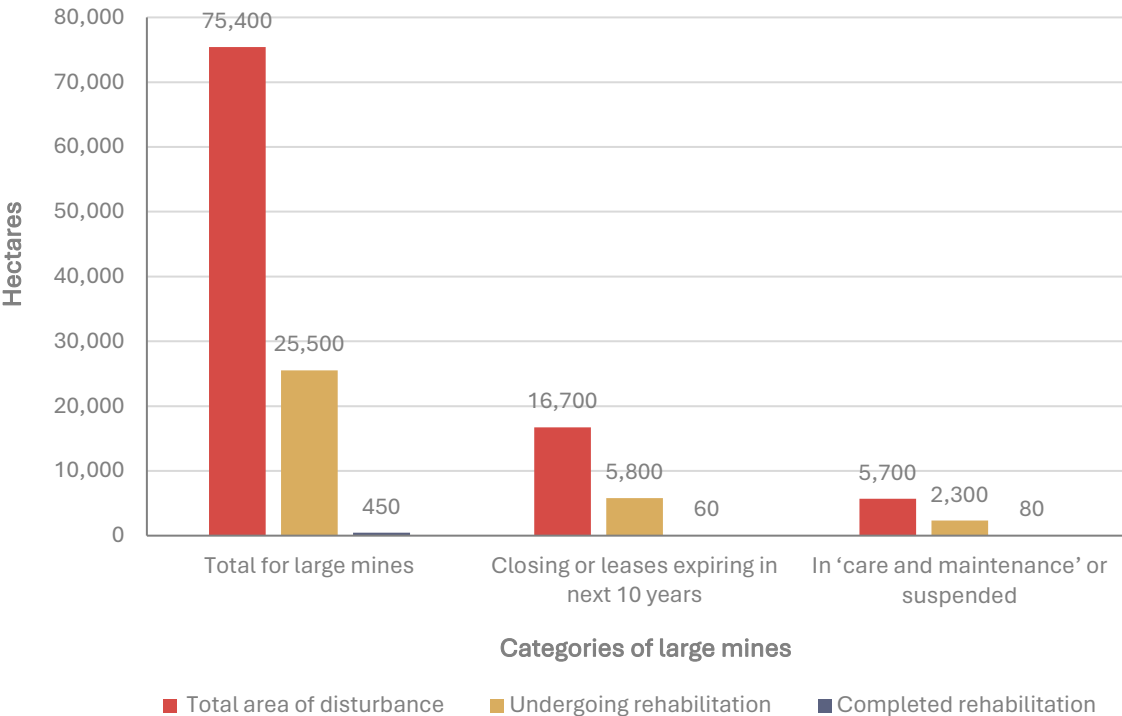
For the 23 mines under suspended operations that reported to the Regulator on rehabilitation progress, they reported:

- total area of disturbance of around 5,700 hectares
- around 40% (or around 2,300 hectares) is being rehabilitated
- around 1% (around 80 hectares) is completed rehabilitation.

Of these 23 mines, nine reported that more than 30% of the disturbed area was being rehabilitated, with one reporting 90% being rehabilitated. However, seven other mines with areas of disturbance reported no areas being rehabilitated. Current regulations require mining companies to progressively rehabilitate unless exempt in their approval to suspend operations.

The Regulator has advised that rehabilitation can take several decades, and the most aggressive rehabilitation can only occur in the later years of a mine’s life and often after closure. It also advised that completed rehabilitation is likely to be higher because of the limited time series data that is currently available.

**Exhibit 4: Reported area of disturbance and rehabilitation progress for large mines, by mine category, 2023**



Note: Data represents large mines that submitted rehabilitation progress reports to the Regulator in 2023. The area undergoing rehabilitation includes:

- land where rehabilitation preparation has commenced including areas of decommissioning, landform establishment and preparing the surface for planting
- areas which have been seeded/planted with the target vegetation species for the intended final land use
- areas that have achieved the approved rehabilitation objectives, approved completion criteria, final landform and rehabilitation plan.

Data for mines’ closing or with leases expiring in ten years’ represents mines that have leases expiring or, if provided by the Regulator, have an expected mine end date in the next ten years. Mines with leases expiring in the next ten years could apply for a new mining lease.

Source: Audit Office analysis based on unaudited data provided by the Regulator.

### **The Department's data framework does not effectively support the reforms and rehabilitation regulatory activities, and work is underway to address this**

Mining companies with large mines are required to enter spatial data on disturbance and rehabilitation progress and information on rehabilitation indicators through the Mining Rehabilitation Portal. The portal was developed in 2019 and launched in August 2022 to support the rehabilitation reforms. The Department uses a separate application, Oracle, to store data on rehabilitation security deposits.

The audit identified significant gaps in the accuracy, completeness and timeliness of the rehabilitation progress and compliance data collected by the Department. For example:

- the Department was not initially able to provide complete and accurate data on key rehabilitation progress information (such as the number of large mines that submitted rehabilitation progress data), with progress data containing duplicate entries, data discrepancies and missing values
- the Department highlighted limitations with rehabilitation security deposit data, with significant manual consolidation required to identify shortfalls in security deposits held for large mines
- compliance data for some large mines provided for the audit could not easily be matched and manual filtering was needed to identify data specific to rehabilitation
- there were discrepancies in the status of mines between the performance data provided and the risk assessment data provided.

Gaps in the quality and completeness of the Department's information and data about mining companies limit the Regulator's visibility of the activities that it regulates. These issues impede the timeliness and effectiveness of its regulatory responses.

This audit also found gaps in the completeness and reliability of enforcement activity and outcomes data. This is outlined in chapter 5 of this report.

The Department has advised it is currently reviewing its data systems with the aim of consolidating some of its platforms and improving the user experience. This includes implementing processes to automate reporting of security deposit data by large mines and improvements to its Mine Rehabilitation Portal. It has also commenced a business improvement project to improve the functionality and usability of its Assessment, Compliance and Enforcement System (ACES), which is used to store and manage compliance and enforcement data.

### **Limitations in the Department's data management have prevented reporting of rehabilitation progress against targets**

In July 2024 the Department identified that its Mine Rehabilitation Portal was producing inaccurate data on forward programs provided by mining companies. It advised that this issue was rectified in late March 2025, but a report showing progress against targets cannot yet be produced because the rectification only applies for data added post-rectification. The Department is planning further improvements to the portal, which are scheduled for completion in September 2026.

The limitations in the Department's data management have prevented it from providing timely, accurate and complete data on the progress of mine rehabilitation against KPIs outlined in mining companies' forward programs.

### **The Regulator publishes maps to report rehabilitation information for each mine, which has improved transparency**

The Regulator began publicly reporting spatial rehabilitation information for each large mine site on the NSW Government's Sharing and Enabling Environmental Data (SEED) portal in August 2024. This is a positive initiative by the Regulator to improve transparency and accountability for mine rehabilitation. The Regulator has advised that this portal is the first of its kind and NSW is the first jurisdiction to implement the reporting of spatial data to monitor progressive rehabilitation.



The SEED portal, which is a Department of Planning, Housing and Infrastructure application, contains rehabilitation progress for large mines shown by an in-built map that enables users to view rehabilitation progress by region, mine site, disturbance and rehabilitation.

Some stakeholders have indicated that there are opportunities to improve the SEED portal, including:

- improving ease of community access to rehabilitation spatial information, which is currently difficult to navigate and interpret
- publicly reporting KPI data to demonstrate overall and individual mine rehabilitation progress.

### **There is a lack of rehabilitation progress for some mines that have suspended operations**

The Department's Suspension of Mining Operations Policy allows a mining company to apply to the Department for suspension of mining operations for up to three years. Extensions to this period are possible under certain circumstances. Suspended mines are those that have been approved to voluntarily and temporarily suspend mining operations. Mines that have suspended operations are still required to progressively rehabilitate in line with the same requirements as other mines.

The policy also states that the Department may consent to a suspension of rehabilitation conditions if it is not reasonably practicable for the rehabilitation activities to be undertaken during the suspension of mining. The Regulator has advised no large mine has been given an exemption from their rehabilitation obligations, including mines that have suspended operations.

The Regulator's data on around 150 large mines indicates that 25 large mines (16%) have suspended mining operations. The Regulator considers these mines to be at higher risk of not achieving final landform and rehabilitation completion. It has indicated these sites should be subjected to greater scrutiny.

However, the Regulator's risk data and enforcement data indicate limited scrutiny is taking place on some of these sites. Its data shows that 11 of the 25 mines that have suspended operations have poor or very poor rehabilitation performance. It has only issued rehabilitation related notices to five of these 11 mines and has not inspected one of the 11 mines in the last five years.

The Regulator's risk data also indicates that for five of the 25 mines the 'security held is likely to be significantly less than liability exposed'. This means that there is likely to be insufficient funds to rehabilitate these mines in the event of a default.

### **The Regulator is not involved in decisions to suspend mining operations and there are no clear limitations on how long operations can be suspended**

The regulation of mines under suspension is important because of the potential impact on rehabilitation progress. Also, the number of mines under suspension (or 'care and maintenance') may grow as the demand for thermal coal declines. The Audit Office of NSW's 2017 audit on Mining Rehabilitation Security Deposits found that the former Department did not have a clear policy on the length of time and circumstances under which a mine's operations can remain suspended. Indefinite postponement of substantial rehabilitation and closure is therefore possible.

The 2017 audit recommended that the Department develop clear policy and procedures for ensuring a mine cannot be put into 'care and maintenance' indefinitely. The Department has implemented a Suspension of Mining Operations Policy, which allows a mining company to apply for a suspension for up to three years. This can be extended for another three years, and the mining company can apply for multiple extensions.

The policy outlines a range of economic and commercial factors the Department will consider when determining an application for a suspension. Applicants are also required to identify any issues that may delay progressive rehabilitation and outline how progressive rehabilitation obligations will be addressed if changes to the rehabilitation management plan are required.

The policy only partially addresses the recommendation from the 2017 audit because it does not establish clear limitations on how long a mine can remain in suspension. This raises risks because the Department has stated that the most aggressive rehabilitation can only occur in the later years of a mine's life and often after closure, so suspensions that postpone closure will delay most rehabilitation at a site. The Regulator provided documentation on two examples of suspensions granted under the policy. One was for an open cut coal mine that has been under suspension since 2016 and was granted another three-year extension (in 2024) because of poor market conditions.

Decisions around suspensions are delegated to the Assessments and Systems unit within NSW Resources, which is a separate unit to the Regulator. These decisions can impact rehabilitation progress, so the Regulator should be consulted on suspension policies and decisions.

The Department advises that the Assessments and Systems unit seeks specific factual advice from the MAI, where required, to inform its consideration of consent. However, there is no specific requirement in its approval process for this to occur. Further, the approval process does not consider the rehabilitation compliance record of the relevant mine or whether the current security deposit is adequate.

## 4.2. Security deposits to cover the cost of rehabilitation

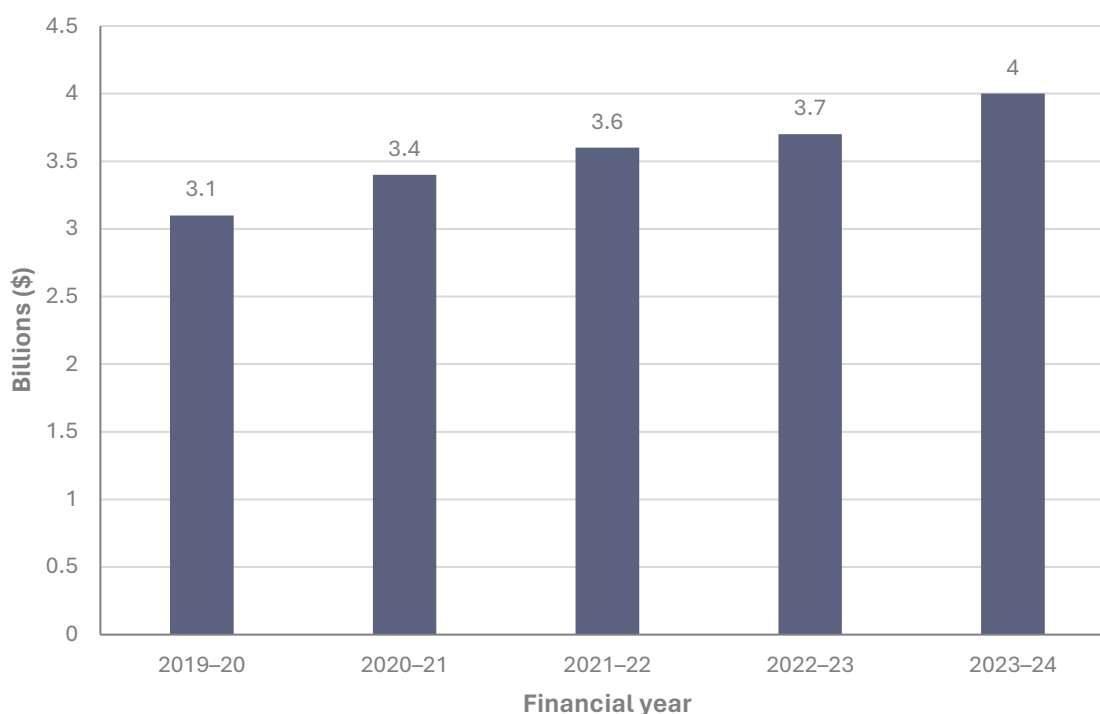
### **The amount of rehabilitation security deposits has increased but there is still a shortfall**

All mining companies must lodge a security deposit with the Department that covers the full cost of rehabilitation at each mine. The Audit Office of NSW's 2017 performance audit found it was unlikely the Government held sufficient security deposits in the event of mining companies defaulting on rehabilitation obligations and recommended the former Department improve assurance that security deposits are sufficient.

The total value of security deposits increased by around 30%, from \$3.1 billion in 2019–20 to around \$4 billion in 2023–24, covering large mines and small mines.

Over the same period, the total number of active large mines has been relatively stable. Exhibit 5 shows the increase in security deposits held over the last five years to 2023–24. The Department has advised there were a few factors contributing to the increase. These include the Regulator now assessing Rehabilitation Cost Estimates (RCE) annually and implementing changes to its RCE tool in 2022.

## Exhibit 5: Rehabilitation security deposits held by the Department, 2019–20 to 2023–24



Note: Total rehabilitation security deposits held includes deposits held for large mines and small mines.

Source: Audit Office analysis based unaudited Regulator annual reports 2019–20 to 2023–24.

While the Department is holding higher amounts of security deposits, there are still shortfalls in some of the deposits held. This is because, in some instances, the Regulator has calculated higher RCEs through its annual re-assessments, but mining companies have not yet provided the outstanding balances. It is important that the Regulator holds sufficient deposits for each mine site because if there is a shortfall in deposits held for one mine, that shortfall cannot be covered by another mining company's security deposit. The Department has developed internal procedures to assist in seeking additional deposits to cover shortfalls following reassessment.

Based on the Regulator's assessments of the RCEs submitted by mining companies and current security deposits held, at December 2024, the audit estimated there was a deficit of around \$114 million for 27 mines. There is a 42-day period for mining companies to provide additional security following notice of an increase in the required security deposit. Of the \$114 million, there was an estimated total shortfall of around \$49 million for 16 large mines that exceeded the 42-day period. The Department advises that it holds 99.5% of security deposits required. However, it is important that the regulator holds sufficient deposits for each mine site because if there is a shortfall in deposits held for one mine, that shortfall cannot be covered by another mining company's security deposit.

The Department developed procedures for claiming security deposits in November 2024. To date, it has not claimed a security deposit for a large mine. The Regulator advises that it has been working to reduce the number of mines with insufficient security deposits.

The Regulator's risk data also indicates that it is holding security deposits that are likely to be significantly less than the full cost of rehabilitation for around 20 large mines. This means that the Regulator is likely to have insufficient funds to rehabilitate these mines in the event of a default.

Further, eight of the large mines with a security deposit shortfall have a risk rating of high or critical. The Regulator's risk data lists these mines as having poor to very poor rehabilitation performance, with significant issues, including acid and metalliferous drainage. Its regulatory data indicates that only three of these mines have been issued with rehabilitation related notices.

### **The Regulator is currently reviewing its RCE tool, which uses unit rates that do not regularly account for inflation and was last reviewed between 2020 and 2021**

Most mining companies use a tool developed by the Regulator to calculate their RCEs (the RCE tool). This tool contains unit rates and allowances relevant to rehabilitation, such as costs to remove contaminated materials and mine infrastructure.

The Audit Office of NSW's 2017 performance audit on Mining Rehabilitation Security Deposits found that the rates and allowances in the former RCE tool had not been updated since 2013 and some activities required for effective rehabilitation were not covered or not covered adequately.

The Regulator implemented its current RCE tool in 2022. The tool uses unit rates that were last updated between September to December 2020, followed by a consultation period from January to November 2021. The tool included 64 additional line items and increased rates to reflect the current costs of rehabilitation at that time.

The Regulator updates the rates and allowances in the RCE tool around every four years. However, there are no allowances for inflation or other changes in industry rates during that period. Due to the scale of mining operations and the large quantities of material that need to be moved around a site, even small changes in unit rates can result in major changes to cost estimates. This means there is likely to be a larger shortfall than currently estimated in the event of default. This is important because security deposits are not transferable between mines.

The Regulator is currently reviewing the RCE tool that involves updating its schedule of rates and allowances. The Regulator expects the review to be completed by May 2025 and implemented by September 2025. The Regulator has advised the updated RCE tool will provide greater transparency, account for inflation and include a contingency to allow for variances.

### **The Regulator is not meeting its target for security deposit assessments**

The Regulator's procedures require the Regulator to assess RCEs for each large mine on an annual basis and within 30 days of submission.

As noted in chapter 5.1, the Regulator reported to the Department's executives on the percentage of annual RCEs completed within timeframes. This indicator was inconsistently reported in each financial year from 2021–22.

The Regulator did not meet its 90% target in 2024–25. From July 2024 to October 2024, the Regulator made 185 security deposit assessments for large and small mines. Around 82% of assessments were completed within 30 days of receiving the RCE. This target was reported monthly.

In 2023–24, the target was to assess 90% of large mines' annual RCEs within the 30 days of submission timeframe. This target was reported quarterly. For each quarter in 2023–24, around 80% of RCE assessments were being completed within the 30-day timeframe.

The Regulator has advised that it will have an updated timeframe of 45 days to assess 90% of large mines' annual RCEs, recognising the complexity associated with large mine RCE assessments. The Regulator advises this change will provide the Regulator with more time to address the assessment backlog and consistently meet the target.

### **Security deposits are not designed to cover long-term environmental risks**

The Audit Office of NSW's 2017 audit report stated that the RCE tool is not designed to cover the risks of unexpected environmental degradation in the long-term after a mine closes and the security deposit is returned. Even if the Regulator determines that a mine site is fully rehabilitated, for more complex sites there may still be a risk of significant environmental harm in the future. This includes the risk of saline or acid discharge and metalliferous drainage at some sites. There is also the risk of further subsidence from underground mining cracking creeks, rivers or swamps, which can be difficult to repair. In addition, there is the possibility of failure of pit walls, waste rock dump landforms, tailings dams and waste dumps depending on their design life.

Rehabilitation obligations imposed on a mining company continue to have effect after the lease expires. However, there is a greater risk of financial liabilities transferring to the state if the mining company ceases to exist.

The Regulator has taken recent steps to reduce this risk through improved rehabilitation management and monitoring requirements for large mines and regular reviews of security deposits. However, it is yet to establish a financial assurance mechanism, such as a sinking fund, to cover the risk of long-term environmental degradation after mines are closed and security deposits returned.

#### **The Department has procedures in place to manage and fund its Legacy Mines Program**

The Department's Legacy Mines Program Guidelines state that sites where mining formerly occurred will be considered for remediation as a legacy mine under the Legacy Mines Program only if they meet all the following criteria:

- the mine had a previous mining title approved under the Mining Act or the *Petroleum (Onshore) Act 1991*, or their predecessors
- no person or company had direct responsibility for the rehabilitation of the former mining activities
- there is high environmental risk and/or high public safety risk according to the Legacy Mines Programs risk assessment.

The program largely addresses the rehabilitation failures of historic mines that did not have adequate security because they were not regulated under the contemporary rehabilitation framework. However, it is also the case that a current mine will be transferred to the Legacy Mines Program if the mine defaults on its rehabilitation obligations and the Regulator exhausts all legal avenues.

Projects undertaken by the Legacy Mines Program often require support from delivery partners for both capability and capacity reasons. The Department has developed a 'Delivery partner and engagement model' for the Legacy Mines Program that outlines the scoping requirements and delivery partner responsibilities, as well as how to document responsibilities.

The Department developed a legacy mine risk assessment procedure in February 2024. This is intended to provide a risk assessment tool for prioritising legacy mines for rehabilitation.

### **4.3. Validating rehabilitation progress**

#### **The Regulator reviews rehabilitation outcome documents for large mines but there are some mines that have missing or out of date information**

The 2021 rehabilitation reforms required mining companies to provide rehabilitation outcome documents to the Regulator. For large mines, rehabilitation outcome documents include:

- a rehabilitation objectives statement, which sets out the rehabilitation objectives required to achieve the final land use for the mining area
- a rehabilitation completion criteria statement, which sets out criteria, the meeting of which will demonstrate the achievement of the rehabilitation objectives
- the final landform and rehabilitation plan, showing a map of the final land use.

The Regulator has developed internal procedures to assist its inspectors with the assessment and determination of the rehabilitation outcome documents.

The Regulator advises that, at early March 2025, 91% of mine operations have an approved rehabilitation objectives statement and final landform design. This means that around 14 large mines do not yet have an approved statement. It is unclear what compliance actions the Regulator has taken to ensure all large mines have approved documentation in place. The Regulator does not report on the proportion of mines with an approved rehabilitation objectives statement. It also does not report on the outcomes of its assessments of these documents.



In addition to the outcome documents mining companies are required to provide to the Regulator, the companies are also required to make public their rehabilitation management plan, forward program and annual rehabilitation report. The Regulator has advised that it conducted a compliance audit of all large mines in 2022, including confirming whether rehabilitation management plans were published on the company website.

This audit reviewed ten mining company websites at random in February 2025 to establish whether companies were meeting these reporting requirements. Seven had all the required and up to date rehabilitation documents published on the company's website. Three had either missing or out of date documentation.

### **The Regulator seeks relevant information on rehabilitation requirements and compliance activities from most stakeholders**

The Regulator is responsible for commenting primarily on rehabilitation, including final land use upon completion of mining and for environmental assessment requirements for mine development. It provides input into the rehabilitation requirements for mine development consents and aims to ensure that all the technical challenges associated with development consents are addressed in the application. It has developed a set of procedures to support this process.

The Regulator meets with the NSW Environment Protection Authority in relation to challenging issues at some higher risk mines. The Regulator also meets with the Department of Planning, Housing and Infrastructure regarding compliance with development consent conditions in large mines. It also meets with other entities to discuss site issues including Water NSW, Local Land Services, local councils and the Department of Climate Change, Energy, the Environment and Water.

However, the Regulator has not sought input from the Natural Resources Access Regulator regarding the management of water take at mine sites that could impact on mine rehabilitation. NSW Resources advises that water management is not its responsibility and is regulated by the Natural Resources Access Regulator. However, many mines will be diverting surface and ground water into mine voids and underground workings for an extended period after they close. Input from the Natural Resources Access Regulator could assist in the management of this water take.

---

## 5. Regulating rehabilitation

### 5.1. Accountability for mine rehabilitation

#### **The Regulator has reviewed its regulatory operations but does not have an evaluation plan to support continuous improvement**

In August 2023, the Department commissioned an internal audit of the Regulator's processes for all its regulatory functions. The review found, among other things, that there was:

- a presence of controls and guidance material for staff but no formalised processes for regular review of policies and procedures
- a good record keeping system and compliance workflow system but limited adherence to internal procedures and guidelines
- educational and guidance materials to support compliance and community participation but no formal stakeholder engagement plan
- a presence of proactive and reactive compliance activities but opportunities exist to improve mine risk profiling processes.

The review recommended improvements to regulatory practices, including that the Regulator:

- maintain a document review register to facilitate regular reviews, including defining criteria for policies that require more frequent reviews
- implement processes for a compliance manager to check that all internal procedures are complied with before final sign-off in its system
- conduct periodic audits to assess compliance with internal procedures
- finalise a stakeholder engagement plan
- establish a risk-based inspection schedule and update its risk profiling procedure.

The Regulator advises it has implemented all recommendations. However, the Regulator is yet to develop and implement an evaluation plan for a periodic review of its regulatory activities. An evaluation plan would assist the Regulator in clarifying how it is going to identify the impacts of its regulatory activities on mine rehabilitation and support continuous improvement.

#### **The Regulator's performance indicators that are reported to executives provide limited information on regulatory effectiveness and rehabilitation outcomes**

Good practice for a regulator is to report against a comprehensive set of performance indicators that are quantifiable, consistently measured and set with reference to the broader policy goals it is expected to achieve.

Exhibit 6 shows the Regulator's key performance indicators (KPIs), and targets related to mine rehabilitation that were reported to the Department's executives from 2021–22 to 2023–24. The exhibit highlights significant shortcomings in the indicators reported, including:

- only one indicator (related to mine rehabilitation security deposits) is specific to mine rehabilitation, with the remaining indicators related to safety or the Mining Act, therefore covering requirements other than mine rehabilitation
- indicators are activity related and do not provide insights on regulatory effectiveness, including in relation to the 2021 reforms, and overall rehabilitation outcomes
- indicators are inconsistently reported, which risks inadequate information being provided to executives with decision-making responsibilities.

The Regulator was not able to demonstrate how it sets or amends its targets, or how it uses indicator outcomes to inform the departmental objectives, priorities and regulatory approach.

**Exhibit 6: Mine rehabilitation performance indicators reported to the Department's executives, 2021–22 to 2024–25**

2024–25, Quarter 1	2023–24, Quarter 4	2022–23, Quarter 4	2021–22, Quarter 4
<b>Investigations</b>			
<ul style="list-style-type: none"> <li>95% of Mining Act investigations conducted within published timeframes (monthly reports)</li> </ul>	<ul style="list-style-type: none"> <li>95% of critical investigations conducted within 30 days of the incident being reported</li> </ul>	<ul style="list-style-type: none"> <li>85% of Mining Act and safety investigations completed within timeframes</li> </ul>	<ul style="list-style-type: none"> <li>83% Mining Act and safety investigations completed within timeframes</li> </ul>
<b>Proactive inspections</b>			
<ul style="list-style-type: none"> <li>90% of site inspections completed for high risk mine sites as per each program plan under the Mining Act</li> </ul>	<ul style="list-style-type: none"> <li>90% of site inspections completed for identified high-risk mine sites as per each program plan under the Mining Act</li> </ul>	<ul style="list-style-type: none"> <li>95% of high-risk mine sites proactively inspected for compliance with Mining Act requirements</li> </ul>	<ul style="list-style-type: none"> <li>60% of high-risk mine sites proactively inspected for compliance with Mining Act requirements</li> </ul>
<b>Rehabilitation security deposits</b>			
<ul style="list-style-type: none"> <li>90% of RCEs determined within 30 days (monthly reports)</li> </ul>	<ul style="list-style-type: none"> <li>90% of annual assessment of RCEs completed within 30 days for large mines</li> </ul>	<ul style="list-style-type: none"> <li>80% of security deposit reviews completed within timeframes</li> </ul>	<ul style="list-style-type: none"> <li>300 security deposit re-assessments completed</li> </ul>

Source: Audit office of NSW analysis based on Department performance data, 2020–21 to 2024–25.

Some examples of rehabilitation outcome indicators that would assist in gauging the effectiveness of rehabilitation progress and reforms include the proportion of:

- controls identified in risk assessments that have been implemented by large mines
- RCEs being submitted in accordance with reporting requirements
- forward plans and progress reports submitted on time.

Some examples of indicators that would assist in informing rehabilitation regulatory effectiveness include the proportion of:

- mines with approved rehabilitation outcome documents
- penalty notices and cautions issued that have been complied with
- directions issued that have been addressed, including assessments and directions issued as part of its targeted assessment programs (TAPs).

The Regulator has advised it is developing system changes that will allow targets for rehabilitation assessments to be tracked, monitored and publicly reported in 2025.

### **The Regulator has governance arrangements to support consistent compliance and enforcement activities**

The Regulator established several committees, with the necessary delegations, to support consistent compliance and enforcement decisions, and identify areas for improvement. These committees included:

- a Compliance and Enforcement Panel to ensure accountable, consistent, transparent and proportionate decision-making is applied to compliance and enforcement outcomes consistent with the Regulator's relevant policies and guidelines
- a Review and Allocation Panel to ensure a consistent and appropriate assessment and triage of incidents, complaints and other allegations of non-compliance
- a Strategic Review Panel to case manage and provide strategic direction on 'priority' compliance matters and other sensitive and contentious issues
- a Rehabilitation and Securities Panel to bi-annually review the risk ranking for all sites and review security deposit re-assessments that have a significant variation; this is not a decision-making panel but has been established to provide recommendations to decision-makers.

The Regulator commissioned a review of the structure of its governance panels, completed in June 2024. In response to the review, it advised that it is consolidating the Compliance and Enforcement Panel, the Strategic Review Panel, and the Assessment and Review Committee into a single panel that only deals with critical, priority and other sensitive enforcement matters. It also advised that it is abolishing the Review and Allocation Panel and allocating triaging responsibilities to staff within the Mining Act Inspectorate (MAI). It planned to finalise these arrangements in May 2025.

## **5.2. Enforcing compliance**

### **The Regulator reports on its compliance activities under the Mining Act that are not specific to rehabilitation**

Meaningful public reporting on regulatory performance is important for accountability and continuous improvement. Done well, reporting can ensure that those being regulated are aware of what responses to expect in case of poor performance or non-compliance, and how to meet community expectations.

The Regulator publishes data in its quarterly reports and annual reports on compliance activities under the Mining Act. The published data captures broader requirements under the Mining Act and does not provide a breakdown of activities as they relate to rehabilitation. It also does not provide an indication of the proportion of time the Regulator is spending on rehabilitation compliance. This limits the Regulator's ability to demonstrate that it is ensuring mining companies are undertaking progressive rehabilitation. The Department advises that 70–80% of compliance activities under the Mining Act are related to mine rehabilitation.

The Regulator reports data relating to the Mining Act on:

- suspended or cancelled authorities
- breaches of conditions
- failures to comply with notices, orders, directions or undertakings
- late or unsatisfactory reporting
- enforceable undertakings
- desktop and site assessments.

**Data for this audit indicates a decline in some rehabilitation enforcement activities from 2019–20**

The Regulator has issued cautions and notices to large mines in relation to compliance activities under the Mining Act. Cautions are warnings issued to a mining company when an inspector forms a belief there is sufficient evidence to establish non-compliance. Notices are directions issued by an inspector to ensure that non-compliance is remedied; they are not a sanction for non-compliant behaviour. Penalties are issued for less serious breaches of non-compliance that warrant sanction but are not serious enough to warrant prosecution.

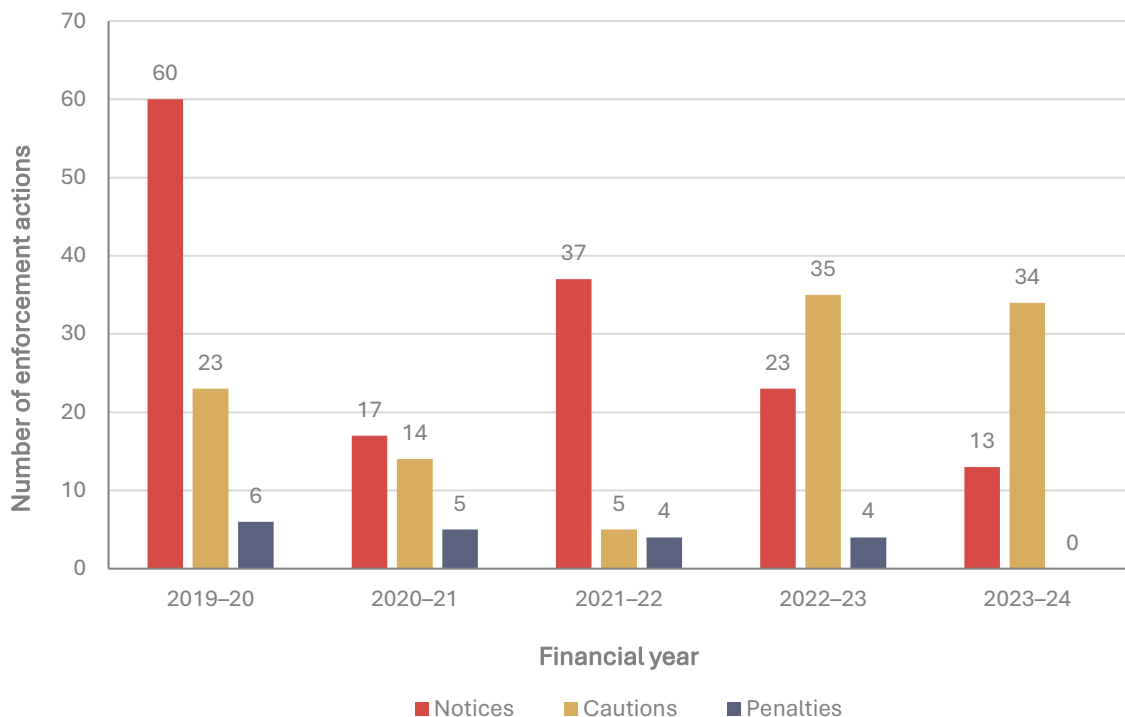
Exhibit 7 lists the number of notices, cautions and penalties issued by the Regulator to large mines in the last five financial years. The Regulator reports on compliance activities under the Mining Act but does not currently report on compliance activities specific to rehabilitation. The Regulator undertook a manual process for the purposes of this audit to isolate compliance data specific to rehabilitation.

The number of notices issued by the Regulator to large mines declined by around 80%, from 60 notices in 2019–20 to 13 notices in 2023–24. The number of cautions issued by the Regulator to large mines also declined by around 80%, from 23 cautions in 2019–20 to five cautions in 2021–22. The Regulator has advised this was due to a decision to suspend some regulatory activities when introducing the reforms and to focus on industry education.

The number of cautions issued increased to 35 notices in 2022–23 and remained at this higher level in 2023–24. The Regulator has advised the number of cautions issued increased due to it taking escalated responses from February 2023 for non-compliances with rehabilitation requirements that came into effect for large mines in July 2022.

The Regulator has not yet established targets for intervention and intervention follow-ups in relation to the issuing of notices and cautions.

**Exhibit 7: Number of rehabilitation related notices, cautions and penalties issued by the Regulator to large mines, from 2019–20 to 2023–24**



Note: Around 80 notices were excluded from the data set provided by the Regulator because they had a mine name that could not be linked to a large mine.

Source: Audit Office analysis based on unaudited Regulator data at December 2024.



### **The Regulator does not have effective systems that provide complete and reliable data on enforcement activities and outcomes**

This audit could not verify the accuracy and completeness of the enforcement data provided by the Regulator. Significant manual filtering by the Regulator was needed to obtain key enforcement data related to rehabilitation and compliance for some large mines.

In addition, the Regulator's compliance data does not clearly report on compliance outcomes and follow-up activities. For example, of the 150 rehabilitation related notices it issued from 2019–20 to 2023–24:

- 18 had a follow-up status listed as 'acknowledged'
- four were 'cancelled (revoked)'
- 47 were 'cancelled (varied)'
- one was 'draft'
- 14 were 'failed to comply'
- 62 were 'finalised satisfactory'
- one was 'pending variation'
- three were 'sent'.

The Regulator uses its Assessment, Compliance and Enforcement System (ACES) to record monitoring and compliance data. The Regulator advised it undertook a review of all notices in the ACES database in March 2025 to ensure the system had the correct status for all notices. It advised that those marked 'sent' or 'acknowledged' have had new notices issued, are still current or are still under review; and that around 60% of notices marked 'sent' or 'acknowledged' had been complied with. For notices marked as 'cancelled (varied)', it advised that the notice has been varied, a new notice created, and the original notice cancelled.

The Regulator could improve its understanding of its compliance activities if system entries for issues identified, follow-up activities and outcomes were more effectively categorised. It has commenced a business improvement project to improve the functionality and usability of its ACES database.

### **The Regulator provides internal guidance on information needed for compliance activities and enforcement decisions, and how to obtain it**

The Regulator has developed a range of procedures, processes and guidance to support its compliance and enforcement activities. These include:

- instructions on minimum standards for managing non-compliances in relation to submissions of rehabilitation documents
- instructions to ensure a risk based and consistent approach across the MAI in relation to the late submission of reports, including referrals to the Regulator's moderation panels
- procedures providing inspectors with guidance on the steps and considerations relating to the issuing of direction notices, prohibition notices, suspension notices, and notices for information and records under the Mining Act
- procedures to assist the MAI to undertake risk profiling of mining operations across NSW in a consistent and transparent manner
- procedures providing detail on the processes to be followed when formulating a program plan and undertaking site assessments as part of TAPs, planned inspection programs, compliance audit programs, and logging compliance matters in ACES.

### 5.3. Compliance and enforcement approach

**The Regulator has rehabilitation regulatory programs, but there is limited information on their effectiveness**

The Regulator takes steps to ensure mining companies undertake progressive rehabilitation through:

- assessment finding letters and notices to address poor rehabilitation performance or non-compliance
- TAP reports and rehabilitation information releases
- cautions, penalty infringement notices, prosecutions, suspensions and cancellations to address compliance issues
- mining companies’ self-reporting under the Mining Regulation.

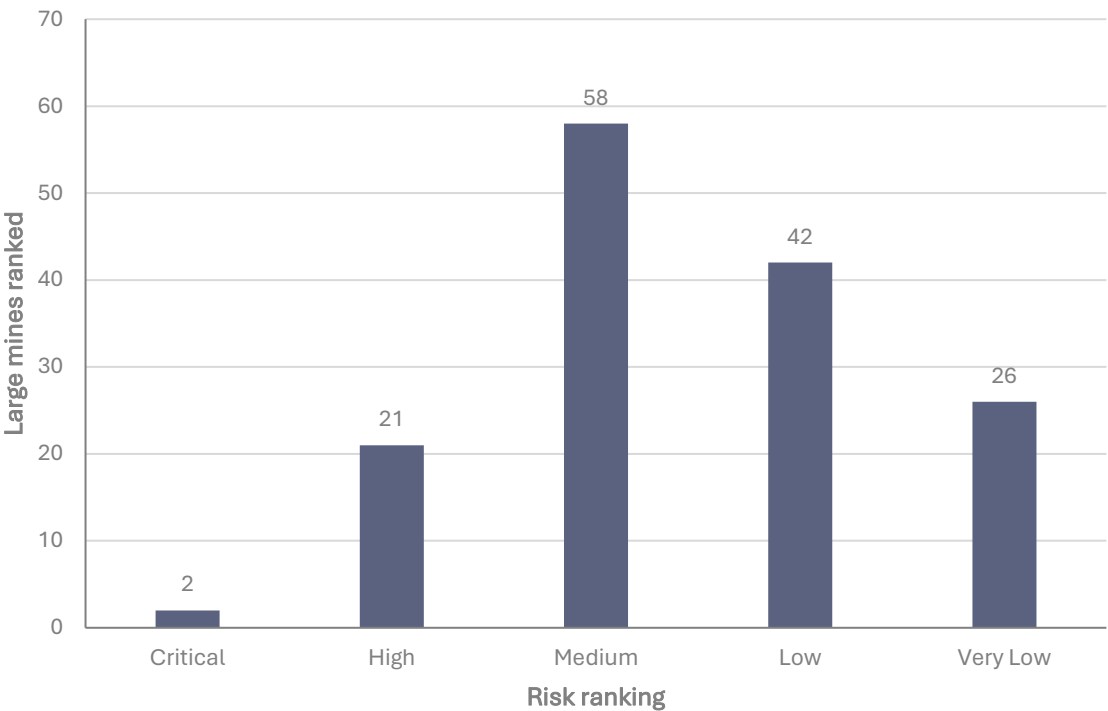
The Regulator also advised it reported quarterly to NSW Treasury on the percentage of site inspections completed for high-risk mines sites as per project plans. Results indicate the Regulator completed all planned inspections in the first quarter of 2024–25 and the last two quarters of 2023–24 but not for prior periods. However, as noted elsewhere in the report, the Regulator does not report on its regulatory effectiveness and there are gaps in its follow-up of enforcement action.

**The Regulator uses a risk-based approach to monitor rehabilitation progress**

The Regulator uses risk criteria and a risk scoring system to determine the mine sites on which it will focus its regulatory efforts in relation to rehabilitation. The risk scoring system includes a score for each mine type, its operational status, level of surface disturbance, compliance history, knowledge of or potential for significant environmental issues, and past rehabilitation performance.

The Regulator’s risk assessment data on around 150 large mines indicates 23 mines have risk scores ranked as high or critical. Exhibit 8 provides an overview of the number of large mines identified by risk ranking.

**Exhibit 8: Risk ranking for large mines**



Source: Audit Office analysis based on unaudited Regulator data at December 2024.

The Regulator has provided overall risk scores for each mine ranking them from 'critical' to 'very low'. Sites ranked 'critical' or 'high' are allocated as priority sites and assigned to a team within the MAI. Where a mining company has multiple mine sites, procedures require that those related sites are also added as priority sites even though they may not have a high-risk level.

The Regulator's Compliance and Enforcement Approach guideline was updated in September 2019, and more recently in February 2025. The guideline notes the Regulator will increase its frequency and scope of inspections, audit or other regulatory engagements if it has risk or operational concerns.

At December 2024, the Regulator's risk data indicates that it has identified 38 large mines that have 'very poor' or 'poor' rehabilitation performance. On average, the Regulator carried out more inspections on these sites. The Regulator issued rehabilitation related notices to around half of these large mines in the last five years.

### **The Regulator monitors rehabilitation progress through its TAPs, but this was paused from 2021 until 2024**

A key element of the Regulator's monitoring and inspection approach is its scheduled TAPs for mines. TAPs focus on the critical controls mining companies should be using to mitigate rehabilitation risks and involve inspections across mine sites to improve rehabilitation outcomes. Each TAP targets a specific critical control or compliance priority across a sample of mines. The Regulator uses surveys, research and best practice guidelines to inform its TAPs.

The Regulator conducted TAPs between 2019 and 2021. The programs identified that rehabilitation management needed to improve in relation to:

- risk assessments – a significant proportion of mines had deficient risk assessments that did not nominate specific controls to manage risks
- waste material characterisation, especially regarding problematic material, such as acid forming materials
- consideration of final landform design to consider long-term settlement
- determination of whether rehabilitation needs could be met with materials on site or whether material would need to be imported
- final landform design and surface water management requirements to ensure the long-term stability of tailings storage facilities post-closure.

The Regulator issued assessment letters and some notices in relation to these TAPs. However, it has not reported on whether the issues it identified have been resolved, and it is unclear whether the notices it issued have been finalised.

The Regulator advised that it paused its TAPs in 2021–22 to focus on the implementation of the reforms, including industry education. This temporary suspension limited its monitoring of mine rehabilitation progress and the collection of baseline information in the initial years of the reforms. It also limited its ability to communicate common issues to the mining industry while reforms were being implemented and collect key information that would demonstrate the success or otherwise of the reforms.

The Regulator recommenced its TAPs in 2024 and published the results in March and April 2025. These three programs covered revegetation, ground and surface water management, and tailing storage facilities management at a sample of mines. The reports included a range of findings and recommendations in relation to these key areas of rehabilitation management. The Regulator issued assessment finding letters to mines in each of the programs and issued improvement notices to some mines.

The Regulator has also developed a forward schedule of TAPs over the next three years.

## **Section 2 –**

### Appendices

---

# Appendix 1 – Response from entity

## Response from the Department of Primary Industries and Regional Development

---

Department of Primary Industries  
and Regional Development



20 June 2025

Mr Bola Oyetunji,  
Auditor General  
Audit Office of New South Wales  
mail@audit.nsw.gov.au

---

### Performance Audit – Mining rehabilitation

Dear Mr Oyetunji

Thank you for your recent letter attaching the Audit Office's final report on its performance audit of the Department of Primary Industries and Regional Development's regulation of mining rehabilitation. I appreciate the opportunity to provide a response.

The Department of Primary Industries and Regional Development accepts all the Audit Office recommendations. We value the objective assessment of our approach to regulating rehabilitation in the mining sector and recognise it will enhance regulatory outcomes.

We are pleased that you have found that the regulatory framework for mining rehabilitation has been strengthened by reforms in recent years. The Resources Regulator worked closely with stakeholders in the implementation of these reforms to support strong compliance with regulatory obligations.

The Department is committed to continuous improvement. The implementation of the recommendations of this report, including improved monitoring and evaluation of rehabilitation outcomes, will assist in enhanced regulation of mine rehabilitation in NSW.

Yours sincerely

A handwritten signature in black ink, appearing to read "Steve Orr".

**Steve Orr**

Secretary

NSW Department of Primary Industries and Regional Development

---

66 Harrington Street  
The Rocks NSW 2000

[dpird.nsw.gov.au](http://dpird.nsw.gov.au)

1



## Response to the Recommendations

Recommendation	Department of Primary Industries and Regional Development (DPIRD) Response
<p><b>Recommendation 1</b></p> <p>DPIRD by June 2026 should develop and implement a monitoring and evaluation plan to measure the outcomes of the regulatory program for mine rehabilitation.</p>	<p>Accept</p> <p>A monitoring and evaluation plan will be developed to assess rehabilitation outcomes, and regulatory activity using the additional data collected post reforms.</p>
<p><b>Recommendation 2</b></p> <p>DPIRD by June 2026 should address the gaps in its data framework identified in this report to ensure that:</p> <ul style="list-style-type: none"> <li>it provides timely access to accurate data about rehabilitation progress, security deposits and enforcement outcomes</li> <li>data is used to inform regulatory strategy, planning and activities.</li> </ul>	<p>Accept</p> <p>The Department will develop a data strategy for rehabilitation. Reporting and regulatory activity will improve over time with multiple years of data.</p> <p>Upcoming system enhancements include automation of reporting currently scheduled for 2025/26 and upgrades to Mine Rehabilitation Portal currently scheduled for completion by December 2026. The Resources Regulator will continue to report by authorisation as required under the Mining Act, with improved functionality for reporting at the 'large mine' level.</p>
<p><b>Recommendation 3</b></p> <p>DPIRD by June 2026 should develop and report publicly on key performance indicators and targets that:</p> <ul style="list-style-type: none"> <li>are consistent, measurable, and demonstrate performance and outcomes against the requirements for rehabilitation set out in the Mining Act 1992 and Mining Regulations 2016</li> <li>describe compliance performance and trends in the emergence and resolution of non-compliance with regulatory reporting, rehabilitation and security obligations</li> <li>inform strategic planning and continuous improvement in activities related to mine rehabilitation.</li> </ul>	<p>Accept</p> <p>The Department will develop key performance indicators and targets to better demonstrate rehabilitation outcomes and will continue to publicly report at regular intervals.</p>
<p><b>Recommendation 4</b></p> <p>DPIRD by June 2026 should enhance its governance and regulation for mine rehabilitation by:</p> <ul style="list-style-type: none"> <li>ensuring the Regulator's strategies and risk documents are evidence-based, including by taking into account new and emerging strategic risks</li> <li>implementing controls to address all risks resulting from a conflict of duties, including ensuring the NSW Resources Regulator uses best practice regulation to meet its rehabilitation objectives under the Mining Act.</li> </ul>	<p>Accept</p> <p>The Department will review its governance framework to ensure there are appropriate controls to manage identified risks.</p> <p>Having regulatory functions located within the Department alongside other functions implementing the objects of the Mining Act 1992 ensures informed policy development and regulatory decisions. This structure is common for many regulatory functions in NSW and across Australia.</p>

---

## Appendix 2 – About the audit

### Audit objective

This audit assessed the effectiveness of the Department of Primary Industries and Regional Development (DPIRD) in monitoring compliance with and enforcing mine rehabilitation requirements under the Mining Act and associated regulations.

### Audit criteria

We addressed the audit objective by examining the following criteria.

1. The Department has established a framework that enables it to effectively regulate mine rehabilitation requirements at NSW mines
  - the Department has clearly articulated and communicated an evidence-based regulatory strategy and program for mine rehabilitation
  - the Department has the required structure and resources, including workforce skills and capacity, to implement regulatory objectives and priorities
  - the Department evaluates its mine rehabilitation regulatory activities and uses evaluation outcomes to inform continuous improvement.
2. The Department effectively monitors rehabilitation progress at NSW mines
  - the Department clearly communicates its expected rehabilitation outcomes, and its rehabilitation obligations are consistent with standard conditions
  - the Department obtains, reviews and validates mining companies' forward program plans and progress reports, and reviews security deposits
  - the Department regularly measures and reports on the progress of mines towards required final rehabilitation outcomes.
3. The Department effectively ensures compliance with rehabilitation requirements at NSW mines
  - the Department ensures it has the necessary information to inform its compliance and enforcement decisions
  - the Department provides guidance, where appropriate, to assist mining companies in meeting mine rehabilitation requirements
  - the Department effectively responds to potential instances of non-compliance with mine rehabilitation requirements
  - the Department regularly and transparently reports performance of its mine rehabilitation compliance activities.

### Audit scope and focus

The audit examined:

- the monitoring and regulation of rehabilitation requirements focusing on coal mines and large mines
- assurance over the adequacy of rehabilitation security deposits.

This audit covered the regulation of rehabilitation requirements in mining leases over the last five years (2019–2024).<sup>1</sup> It focused on regulatory activities during the operation, closure and relinquishment of a mine.

## Audit exclusions

The audit did not examine:

- rehabilitation at opal mines and petroleum sites
- the activities of other regulators at mine sites that do not relate to mine rehabilitation
- compliance activities in relation to conditions of development consent that do not relate to rehabilitation
- requirements under the Mining Act and associated regulations that do not relate to mine rehabilitation.

However, we may have commented on these issues where they affect our findings or to provide context.

## Audit approach

Our procedures included the following.

- Examining and analysing documents and data including:
  - strategy papers, annual reports, compliance programs and frameworks
  - inspection and desktop assessment records
  - records of enforcement action
  - records of monitoring activity, including inspections
  - advice and support provided to mine operators and stakeholders
  - reviews or audits relating to mine rehabilitation
  - mining lease and development consent conditions relating to mine rehabilitation, focusing on coal mines and large mines
  - IT systems to monitor, store and report on mine rehabilitation data.
- Interviewing and site visits with:
  - relevant staff of DPIRD responsible for strategy, monitoring and regulating rehabilitation
  - key external stakeholders to understand the impacts, challenges and opportunities associated with mine rehabilitation.

The audit approach was complemented by quality assurance processes within the Audit Office to ensure compliance with professional standards.

## Audit methodology

Our performance audit methodology is designed to satisfy Australian Auditing Standard ASAE 3500 Performance Engagements and other professional standards. The standards require the audit team to comply with relevant ethical requirements and plan and perform the audit to obtain reasonable assurance and draw a conclusion on the audit objective. Our processes have also been designed to comply with requirements specified in the *Government Sector Audit Act 1983* and the *Local Government Act 1993*.

---

<sup>1</sup> This timeframe would enable the audit to provide a more meaningful description of performance and cover pre- and post-mine rehabilitation reforms implemented from 2021.

## **Acknowledgements**

We gratefully acknowledge the cooperation and assistance provided by staff at the NSW Department of Primary Industries and Regional Development.

In particular, we thank the liaison officers at the NSW Resources Regulator, and the staff who participated in audit interviews and provided materials relevant to the audit.

## **Audit cost**

The estimated cost of the audit is approximately \$580,000.

---

## Appendix 3 – Performance auditing

### What are performance audits?

Performance audits assess whether the activities of state or local government entities are being carried out effectively, economically, efficiently and in compliance with relevant laws.

The activities examined by a performance audit may include a government program, all or part of an audited entity, or more than one entity. A performance audit can also consider particular issues that affect the whole public sector and/or the whole local government sector. They cannot question the merits of government policy objectives.

The Auditor-General's mandate to undertake audits is set out in the *Government Sector Audit Act 1983* for state government entities, and in the *Local Government Act 1993* for local government entities. This mandate includes audit of non-government sector entities where these entities have received money or other resources (whether directly or indirectly) from, or on behalf of, a government entity for a particular purpose (follow-the-dollar).

### Why do we conduct performance audits?

Performance audits provide independent assurance to the NSW Parliament and the public.

Through their recommendations, performance audits seek to improve the value for money the community receives from government services.

Performance audits are selected at the discretion of the Auditor-General who seeks input from parliamentarians, state and local government entities, other interested stakeholders and Audit Office research.

### How are performance audits selected?

When selecting and scoping topics, we aim to choose topics that reflect the interests of Parliament in holding the government to account. Performance audits are selected at the discretion of the Auditor-General based on our own research, suggestions from the public, and in consultation with parliamentarians, agency heads and key government stakeholders. Our three-year performance audit program is published on the website and is reviewed annually to ensure it continues to address significant issues of interest to Parliament, aligns with government priorities and reflects contemporary thinking on public sector management. Our program is sufficiently flexible to allow us to respond readily to any emerging issues.

### What happens during the phases of a performance audit?

Performance audits have three key phases: planning, fieldwork and report writing.

During the planning phase, the audit team develops an understanding of the audit topic and responsible entities and defines the objective and scope of the audit.

The planning phase also identifies the audit criteria. These are standards of performance against which the audited entity, program or activities are assessed. Criteria may be based on relevant legislation, internal policies and procedures, industry standards, best practice, government targets, benchmarks or published guidelines.

During the fieldwork phase, audit teams will require access to books, records or any documentation deemed necessary in the conduct of the audit, including confidential information that is either Cabinet information within the meaning of the *Government Information (Public Access) Act 2009* or information that could be subject to a claim of privilege by the State or a public official in a court of law. Confidential information will not be disclosed, unless authorised by the Auditor-General.

At the completion of fieldwork, the audit team meets with management representatives to discuss all significant matters arising from the audit. Following this, a draft performance audit report is prepared.

The audit team then meets with management representatives to check that facts presented in the draft report are accurate and to seek input into developing practical recommendations on areas of improvement.

A final report is then provided to the accountable authority of the audited entity(ies), which will be invited to formally respond to the report. If the audit includes a follow-the-dollar component, the final report will also be provided to the governing body of the relevant entity. The report presented to the NSW Parliament includes any response from the accountable authority of the audited entity. The relevant Minister and the Treasurer are also provided with a copy of the final report for state government entities. For local government entities, the Secretary of the Department of Planning and Environment, the Minister for Local Government and other responsible Ministers will also be provided with a copy of the report. In performance audits that involve multiple entities, there may be responses from more than one audited entity or from a nominated coordinating entity.

## **Who checks to see if recommendations have been implemented?**

After the report is presented to the NSW Parliament, it is usual for the entity's Audit and Risk Committee / Audit Risk and Improvement Committee to monitor progress with the implementation of recommendations.

In addition, it is the practice of NSW Parliament's Public Accounts Committee to conduct reviews or hold inquiries into matters raised in performance audit reports. The reviews and inquiries are usually held 12 months after the report received by the NSW Parliament. These reports are available on the NSW Parliament website.

## **Who audits the auditors?**

Our performance audits are subject to internal and external quality reviews against relevant Australian standards.

The Public Accounts Committee appoints an independent reviewer to report on compliance with auditing practices and standards every four years. The reviewer's report is presented to the NSW Parliament and available on its website.

Periodic peer reviews by other Audit Offices test our activities against relevant standards and better practice.

Each audit is subject to internal review prior to its release.

## **Who pays for performance audits?**

No fee is charged to entities for performance audits. Our performance audit services are funded by the NSW Parliament.

## **Further information and copies of reports**

For further information, including copies of performance audit reports and a list of audits currently in-progress, please see our website [www.audit.nsw.gov.au](http://www.audit.nsw.gov.au) or contact us on 9275 7100.



# Appendix 4 – Report snapshot

## Report snapshot



### Regulating mine rehabilitation

#### About this report

In NSW, mining companies are legally required to rehabilitate disturbed land and water to a safe and stable condition. Mining companies must also provide a security deposit to cover the cost of rehabilitation in case they default on their obligations.

The Department of Primary Industries and Regional Development (the Department) is responsible for overseeing and enforcing these requirements. These functions are delivered by a unit in the Department, known as the NSW Resources Regulator.

This audit assessed the effectiveness of the Department in monitoring compliance with and enforcing mine rehabilitation requirements. This audit focused on the rehabilitation of large mines.

While the Regulator collects data on the amount of land under rehabilitation, it does not collect data on the amount of disturbed land available to mining companies for rehabilitation. Without this data, the Regulator is unable to determine whether a mining company has rehabilitated disturbed land as soon as reasonably practicable after the disturbance occurs.

The total value of rehabilitation security deposits held by the Department was around \$4 billion in 2023–24. If there is a shortfall in deposits held for one mine, that shortfall cannot be covered by another mining company's security deposit. A Rehabilitation Cost Estimate tool is used to calculate required security deposits for each mine. The Regulator updates this tool around every four years, but there is no allowance between reviews to account for inflation or changes to industry rates.

#### Findings

The Department is not effectively monitoring and reporting on compliance with mining rehabilitation requirements. However, regulatory reforms introduced in July 2021 provide a more robust regulatory framework for mine rehabilitation. These changes, if implemented effectively, should provide the Regulator with a consolidated view of rehabilitation progress for large mines.

Current gaps in the Department's data framework mean that it does not have a comprehensive and reliable view of rehabilitation progress and enforcement outcomes. This limits the Regulator's ability to effectively regulate mine rehabilitation. Further, there is no current plan to evaluate the effectiveness of its regulatory program.

#### Recommendations

The audit makes four recommendations, including to:

1. implement an evaluation plan to measure regulatory outcomes
2. address gaps in the data framework
3. develop and report publicly on key performance indicators and targets
4. enhance governance and regulation for mine rehabilitation, including by ensuring planning documents consider emerging risks.

### Fast facts

~150

large mines required to provide rehabilitation progress data

~95%

of these mines submitted rehabilitation progress reports for 2023

~35%

of disturbed land is being rehabilitated at December 2023

Tabled in NSW Parliament 25 June 2025

## OUR VISION

Our insights inform and challenge government to improve outcomes for citizens.

## OUR PURPOSE

To help Parliament hold government accountable for its use of public resources.

## OUR VALUES

Pride in purpose

Curious and open-minded

Valuing people

Contagious integrity

Courage (even when it's uncomfortable)



**Audit Office of New South Wales**

Level 19, Darling Park Tower 2  
201 Sussex Street  
Sydney NSW 2000 Australia

t +61 2 9275 7100

mail@audit.nsw.gov.au

Office hours: 8.30 am–5.00 pm

---

*audit.nsw.gov.au*