



**NSW
Resources
Regulator**

Exploration and Mining Rehabilitation Report

1 JANUARY 2020 - 30 JUNE 2020



RESOURCES
REGULATOR
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MENU**



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INCIDENT**

🕒 24/7

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or to enquire about an
incident you have already
notified, **PRESS 1**



2

**AUTHORISATIONS, PLANT REGISTRATION,
LICENCES & EXEMPTIONS** PRESS 2

3

**COMPETENCE, PRACTISING CERTIFICATES
& MUTUAL RECOGNITION** PRESS 3

4

MINE SAFETY GENERAL PRESS 4

5

MINING ACT COMPLIANCE PRESS 5

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Date	Version	Amendment
Sept 2020	1	First published

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NSW mine rehabilitation overview

1 January 2020 to 30 June 2020

We conduct compliance and enforcement activities under the **Mining Act**, with a focus on **mine rehabilitation**.

Current titles

2,011 current mining titles (as at 30/6/2020)



566
COAL



1,445
MINERALS

3,358 current small scale titles (as at 30/6/2020)



3,204
LIGHTNING RIDGE



154
WHITE CLIFFS

Source: Regional NSW, Mining, Exploration and Geoscience, Mining Industry Infographics Snapshot - June 2020 update. Petroleum titles excluded.

Source: Opal Claims System (OCS) generated 30/6/2020

Our compliance priorities activity

From 1 January to 30 June 2020, our compliance priorities were:



Tailings management

49

Site assessments conducted



Progressive rehabilitation

9

Notices issued



Subsidence management

63

Desktop assessments conducted

1

Notice issued

Engaging with industry



1,115

newsletter subscribers



10

industry publications

NSW mine rehabilitation overview

1 January 2020 to 30 June 2020

Mining Act activity

61 
Mining Act compliance concern
 allegations received

130 
Mining Act compliance concern
 potential breaches alleged

158 
Mining Act compliance concern
 breaches sustained

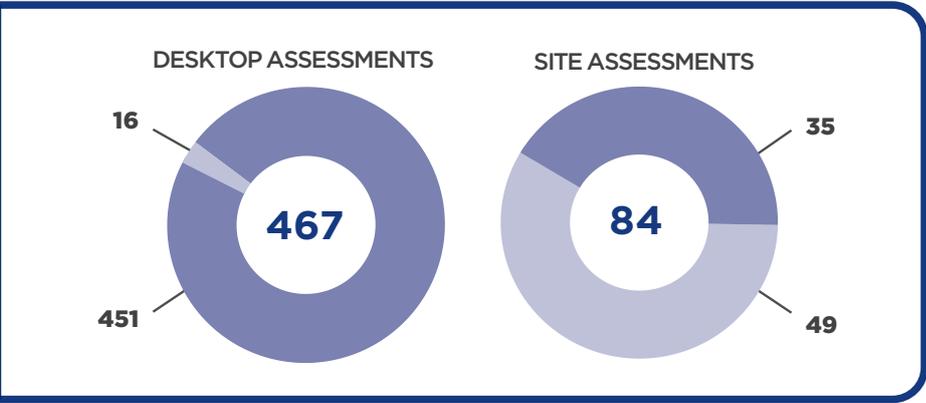

1,775
Mining Act requests for service
 actioned

169 **Mine rehabilitation security deposit reviews** conducted

 In excess of **\$3.1 billion*** is held in security bonds for rehabilitation of exploration and mining impacts

551
Mining Act assessments
 conducted

-  Proactive
-  Reactive

Our enforcement actions

Issued **30** 
Notices of directions
 (Section 240)

Issued **104** 
official cautions

Issued **13** 
penalty notices

Issued **2** 
cancellations of titles

*Only current titles as at end of June 2020. Sourced from the Titles Administration System as of 30 June 2020.
 Note: Site assessment activity was reduced from 13 March to 30 June 2020 in accordance with our business continuity plan for the COVID-19 pandemic.

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Important Updates

The following highlights occurred during the reporting period.

Department of Regional NSW

We are now part of the new Department of Regional NSW.

The NSW Government announced establishment of the new department in April to form a central agency dedicated to regional issues.

Read the full announcement on the [Resources Regulator website](#).

Fossicking: A guide to fossicking

Following consultation with industry and government agencies, the revised fossicking guideline, [Fossicking: A guide to fossicking in NSW](#), has now been published on our website.

The purpose of the publication is to provide a detailed and accessible guide to relevant legislation so that fossickers understand their rights and responsibilities. In particular, it provides clarity on restrictions relating to permissible fossicking equipment.



Exploration

We are responsible for the regulation of exploration activities undertaken pursuant to an exploration title. This includes:

- issuing exploration activity approvals
- determining the amount of the security deposit that the title holder is required to provide
- ensuring compliance with title conditions and exploration codes of practice
- conducting probity and compliance checks on applicants for grant/renewal/transfer of exploration title applications
- conducting site inspections and investigations.

A suite of guidance material, including a self-audit checklist for explorers, has been developed to assist explorers with understanding their regulatory responsibilities under both the Mining Act 1992 and Mining Regulation 2016.

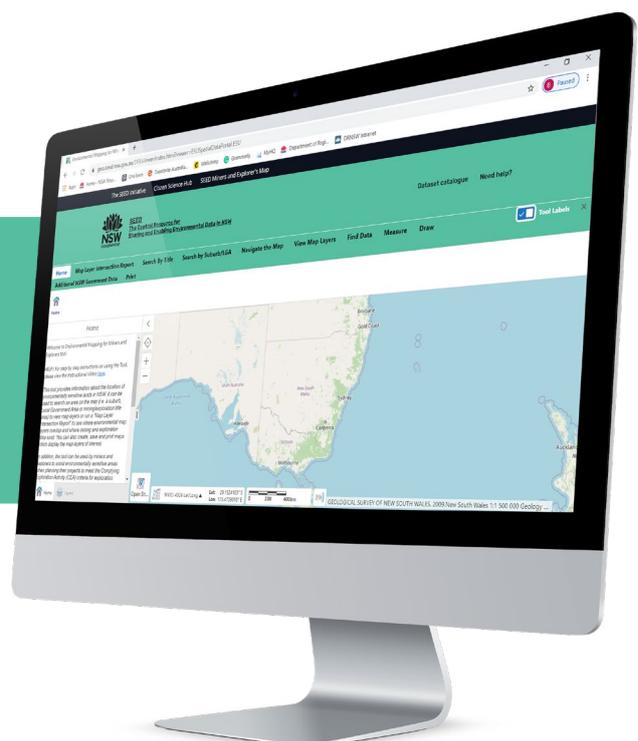
Download the [self-audit checklist for explorers](#) and other [guidance material for exploration](#).

SEED portal

Miners and explorers are encouraged to use the SEED portal, a mapping tool that provides information about the location of environmentally sensitive lands in NSW. This tool can be used by miners and explorers to avoid environmentally sensitive areas when planning their projects to meet the Complying Exploration Activity (CEA) criteria for exploration (refer to www.resourcesandenergy.nsw.gov.au).

Access the Central Resource for Sharing and Enabling Data in NSW - [SEED portal](#).

SEED
The Central Resource for
Sharing and Enabling
Environmental Data in NSW



Audits

We undertake compliance audits of mining operations and exploration activities to assess whether title holders are meeting their compliance requirements under the Mining Act 1992.

Three compliance audits were undertaken, with one non-compliance, five observations of concern and two suggestions for improvement being identified in one audit.

Subsidence management - Metropolitan Colliery, Metropolitan Collieries Pty Ltd

An audit of subsidence management activities associated with the Metropolitan Colliery was undertaken on 26 February 2020.

From the evidence reviewed during the audit, and observations made on site during the audit site inspections, it was concluded that Metropolitan Collieries Pty Ltd has achieved a high level of compliance with the requirements of the SMP approval and environmental management plans associated with the management of subsidence impacts at the Metropolitan Colliery.

No non-compliances were identified for the subsidence management activities subject to audit.

Read the full [compliance audit report](#).

Subsidence management - Dendrobium Colliery, Illawarra Coal Pty Ltd

An audit of subsidence management activities associated with the Dendrobium Colliery was undertaken on 28 November 2019.

From the evidence reviewed during the audit and observations made during the audit site inspections, it was concluded that Dendrobium Coal Pty Ltd has achieved a high level of compliance with the requirements of the SMP approval and environmental management plans associated with the management of subsidence impacts at the Dendrobium Colliery.

No non-compliances were identified for the subsidence management activities subject to audit.

Read the full [compliance audit report](#).



Compliance audit program - Woodlawn Mine, Tarago Operations Pty Ltd

An audit of the mining operations associated with the Woodlawn Mine was undertaken on 7 November 2019.

From the evidence reviewed during the audit and observations made on site during the audit site inspections, it was concluded that Tarago Operations Pty Ltd has achieved a moderate level of compliance with the requirements of the mining lease and MOP in relation to mining operations undertaken at the Woodlawn Mine.

One non-compliance, five observations of concern and two suggestions for improvement were noted by the auditor as summarised in Table 2, Table 3 and Table 4 of the audit report. Regulatory actions may be undertaken in relation to the non-compliances and observations of concern identified during the audit

Read the full [compliance audit report](#).



Rehabilitation

We are responsible for regulating rehabilitation under the *Mining Act 1992* and the conditions of the relevant mining lease.

Rehabilitation is the treatment or management of land or water that has been disturbed by exploration or mining to ensure a safe and stable environment. Rehabilitation must achieve a final outcome as required by the development consent of a mine, which may include but is not limited to the re-establishment of native ecosystems, agriculture and a variety of rural, urban and industrial land uses.

A range of regulatory tools are utilised to ensure rehabilitation is undertaken progressively in a timely manner and in accordance with approved commitments. On completion of mining, companies must demonstrate they have met their rehabilitation commitments before a security deposit can be fully released by the Government.

The Regulator can direct a former holder of an exploration licence or mining lease to complete rehabilitation works even after a mining title has been relinquished.

Regulating Mine Rehabilitation video

We released a video highlighting our approach to mine rehabilitation in NSW.

As part of our responsibilities, we ensure that rehabilitation is undertaken progressively, and mines are fully rehabilitated once mining is completed.

We have a strong regulatory approach which ensures that mines in NSW are fully rehabilitated to achieve sustainable land use now and into the future.



Rehabilitation Information Releases

During the reporting period Rehabilitation Information Releases (RIRs) were published to highlight instances where the Regulator has determined that rehabilitation outcomes have been successfully achieved. The RIRs were also developed to communicate initiatives and learnings across NSW mines sites.

Rehabilitation Information Releases are published on our [website](#).

There were five Rehabilitation Information Releases published between January - June 2020. A summary of these are included below.

Fieldsend Clay Mine returns to native bushland

CSR Building Products Limited has successfully completed rehabilitation works at the former Fieldsend Clay Mine, Maitland satisfactorily meeting approved rehabilitation objectives and completion criteria.

Clay, shale and sandstone materials were extracted continuously from the site since 1882 for brick making. Since the completion of mining in 2008, the site was remediated, reshaped and seeded. This has included planting more than 250,000 mixed native tube stock around the waterbody to create a wildlife habitat and stabilise the banks, creating a safe and stable landform for passive recreational activities.

Read the full rehabilitation information release [RIR20-04](#).

FIGURE 1. REHABILITATION AT FIELDSEND CLAY MINE



Westside open-cut returns to bushland

Thirty-eight hectares of the north pit area, known as 'Domain 2' at the former Westside Mine at Wakefield has been successfully rehabilitated, resulting in a bushland outcome with some retained access tracks and small dams. Westside mine ceased operations in 2012.

Surrounded by native vegetation, characterised by a relatively large expanse of remnant forest that forms a corridor with the Heaton and Awaba State Forests, the former open-cut mine site has been undergoing progressive rehabilitation since operations commenced in 1992.

Read the full rehabilitation information release [RIR20-03](#).

Catherine Hill Bay Coal Preparation Plant rehabilitation achieves residential land use

We have recently completed assessments of the progressive rehabilitation works undertaken at a portion of the former Catherine Hill Bay Mine and determined that the rehabilitation obligations have been fulfilled to the requisite standard in accordance with the approved closure plan and development consent.

The domain (5a) associated with the former mining operations, and where rehabilitation has now been completed, comprises around 6 hectares of a former coal stockpile area, resulting in a safe, stable and non-polluting landform to support the approved residential subdivision and land use.

Read the full rehabilitation information release [RIR20-02](#).

FIGURE 2. MINE CLOSURE DOMAINS (AREAS) ASSOCIATED WITH THE FORMER CATHERINE HILL BAY COAL PREPARATION PLANT



Completion of rehabilitation at Kempsey Clay Mine

In October 2019, Fishers Property Group Pty Ltd lodged an application with us to obtain formal sign-off on completed rehabilitation works at the former Kempsey Clay Mine site. Our assessment determined the rehabilitation was undertaken in accordance with the obligations set out in the mining operations plan and as a result the security deposit was returned to the title holder.

The approved rehabilitation objectives included the establishment of a safe and stable landform to provide a suitable location for an industrial subdivision.

Read the full rehabilitation information release [RIR20-01](#).

FIGURE 3. REHABILITATION PROGRESSION - FINAL VOID FROM 2015 TO 2019



Rehabilitation of the East Pit at Ulan Coal Mine

A detailed assessment, including consultation with Ulan Coal Mine and site inspections, determined that rehabilitation works on part of the Ulan Coal Mine near Mudgee has been successfully completed. The domain where rehabilitation has been completed comprises 50.4 hectares within the former open cut mining area known as East Pit Area 2 (EPA2). Rehabilitation has been undertaken progressively at EPA2 since the early 1980s.

The approved rehabilitation objectives include establishing a safe, stable, self-sustaining and non-polluting landform that is free-draining and a final land use that consists of grassland, shrubs and native trees.

Read the full rehabilitation information release [RIR20-05](#).

Rehabilitation security deposits

All exploration and mining title holders are required to lodge a security deposit that covers the full rehabilitation costs. As at March 2020, the NSW Government held about \$3.1 billion in security bonds for rehabilitation of exploration and mining impacts.

We regularly assess the surface disturbance (or proposed disturbance) of a mine or exploration site to calculate the security deposit, this is known as the assessed deposit. Before partial or full security bonds are returned, evidence must be provided to demonstrate rehabilitation objectives have been met and final approved landform have been implemented.

A list of recently reviewed assessed deposits determined by the Regulator can be viewed in the [assessed deposits table](#).

FIGURE 4. NSW MINE REHABILITATION



Compliance and enforcement

The Resources Regulator has a risk-based and outcomes-focused approach to compliance and enforcement. While the laws we administer set minimum standards that industry must meet, we seek to encourage a positive compliance culture where industry demonstrate best practice by actively adopting measures and practices over and above legislative requirements.

Compliance priorities

Our targeted assessments between January and June 2020 were undertaken in line with our compliance priorities at identified sites, following a risk profiling review. The assessments included announced and unannounced inspections and captured identified high-risk sites.

The following compliance priorities were set for the period January – June 2020.

Tailings management

Sector: Coal and metalliferous

Targeted assessments were undertaken at mines that use tailings processing and storage (both coal and metalliferous mines) to ensure mine operators are effectively identifying and managing risks associated with tailings management and fulfilling their statutory compliance obligations under relevant legislation. A particular focus of the assessments was how risks were being managed throughout the design, construction, operation and decommissioning of tailings dams to ensure sustainable rehabilitation outcomes. View the range of [tailings management resources](#) on our website.



Progressive rehabilitation

Sector: Mining leases

Targeted assessments are being carried out at mine sites to ensure progressive rehabilitation is undertaken and that potential risks, which may limit the success of rehabilitation, are effectively managed. Specifically, assessments focus on the effectiveness of management practices relating to:

- soil resources (e.g. topsoil and subsoils)
- soil seedbanks
- the selective handling of other materials (e.g. overburden/spoils) in order to achieve sustainable rehabilitation outcomes.

This assessment program has been extended until December 2020 given the COVID-19 situation.

Subsidence management

Sector: Mining leases

The audit program that began in 2019 was continued, focusing on key issues arising from subsidence impacts associated with underground mining operations in the Illawarra and Southern Coalfields. The scope of the audit program includes assessment of compliance against:

- the subsidence management plan (SMP) or extraction plan
- commitments made in the SMP or extraction plan, and any associated management plans
- subsidence monitoring requirements, including a comparison between predicted impacts and actual impacts, as shown by subsidence management results
- remediation action plans for subsidence affected areas.

Our [audit reports](#) are available on our website.

Additional information regarding compliance and enforcement activities, priorities, outcomes are published in our [monthly business activity reports](#).



Mining Act statutory decisions

Compliance and enforcement actions resulted in the cancellation of two mining leases. In both cases, the titles were unable to be cancelled by the titleholders due to legislative complexities preventing the cancellation of the lease involving deceased persons.

NAME(S) OF PARTIES	DECISION	REASON	DATE OF DECISION
Mining Lease 1127 (Act 1973) - 'Martins Creek Gold Mine'. Multiple lease holders.	Cancelled ML 1127 (Act 1973) Lease is 41 km ENE of Scone and was granted for the purpose of mining gold. Section 125(1)(b) and (c) decision to cancel ML 1127.	Contravention of the <i>Mining Act 1992</i> . Contraventions of conditions of authority ML 1127. Contravention of s. 292C of the <i>Mining Act 1992</i> - failure to pay rent and levy fees. Contravention of Condition 3 - fail to submit Annual Environmental Management Report (AEMR), year 2017. Contravention of Condition 6 - fail to submit Annual Exploration Report (AER), years 2017-18.	5 June 2020
Mining Lease 1259 (Act 1973) - 'Fanny's Reward'. Multiple lease holders.	Cancelled ML 1259 (Act 1973) Lease is 16 km NNW of Coffs Harbour and granted for the purpose of shaft sinking and tunnelling for gold. Section 125(1)(c) decision to cancel ML 1259	Contraventions of condition of authority ML 1259. Condition 2 - Mining Operations Plan (MOP) & Condition 4 - Working Requirement.	24 February 2020

Prosecutions

Young Mining Prosecution launched

Prosecution proceedings were commenced against Young Mining Company Pty Ltd for two alleged contraventions of the Mining Act. Read the [media release](#).

Significant national and international events

We are committed to sharing rehabilitation and environmental information about significant mining-related events and activities to increase industry awareness. This inexhaustive list includes events and activities that occurred between January to June 2020.

National

Queensland

The Mineral and Energy Resources and Other Legislation Amendment Act 2020 was passed by the Queensland Parliament on May 2020. This paves the way for legislation that will:

- strengthen the safety culture in the resources sector
- improve financial assurance and supports the whole-of-government mine rehabilitation reforms
- improve the administration and efficiency of the regulatory framework applying to resource projects.

For further information refer to the [Queensland Government website](#).

Victoria

The Victorian Government has launched a [Latrobe Valley Regional Rehabilitation Strategy](#) and created a new Mine Land rehabilitation Authority to oversee the implementation of the strategy. The strategy provides a blueprint to progress mine rehabilitation planning and activities to achieve safe, stable and sustainable rehabilitation solutions.

For more information refer to the [Victoria State Government website](#).

International

China

Mine Tailings Dam Leak in North-eastern China

A tailings dam leak at a molybdenum mine in China's north eastern province of Heilongjiang threatened to contaminate the water supply. The incident occurred late March and no casualties were reported.

Read the full article on the [Reuters website](#).

