

Resources Regulator annual report

2021-22

Incorporating the Mine and Petroleum Site Safety Levy

resourcesregulator.nsw.gov.au





Document control

Published by NSW Resources Regulator

Title: Resources Regulator annual report 2021–22

First published: November 2022

Authorised by: Executive Director, NSW Resources Regulator

CM9 Reference: RDOC22/187286

Amendment schedule

Date	Version	Amendment
November 2022	1	First published

© State of New South Wales through Regional NSW 2022. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute Regional NSW as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (November 2022) and may not be accurate, current or complete. The State of New South Wales (including Regional NSW), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication.

Contents

2021–22 activities overview	1
Key safety activities	1
Key Mining Act activities	4
Our enforcement actions	6
Engaging with industry	7
About us	8
Key initiatives and outcomes	9
Compliance and enforcement	9
Regulatory reform	19
Legislative reform	20
Engagement	21
Working with other government agencies	25
Mine and petroleum site levy	26
Financial reports	27
Mine Safety Levy 2021–22	27
Other expenses 2021–22	32



2021-22 activities overview

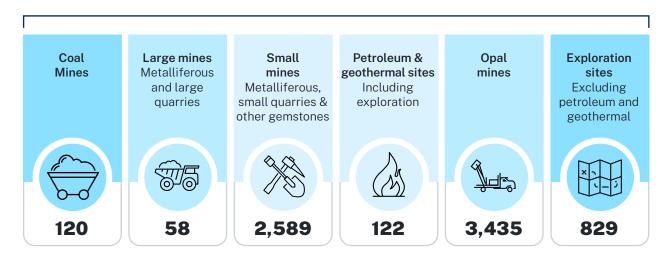
This annual business activities overview shows key compliance and enforcement activities undertaken by the NSW Resources Regulator across NSW's mining and petroleum sectors. It profiles regulatory activities we performed under work, health and safety and Mining Act legislation.

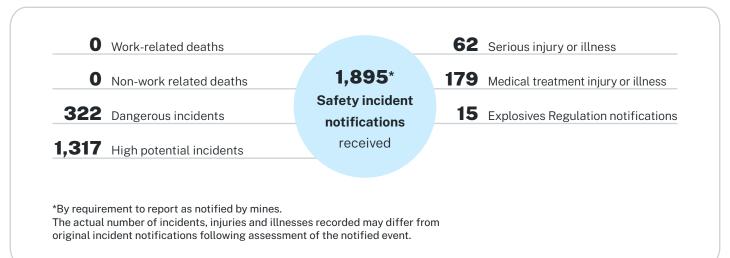
Key safety activities

We are the state's work health and safety regulator for mines and petroleum sites.

7,153 Active mines (as at 30 June 2022)

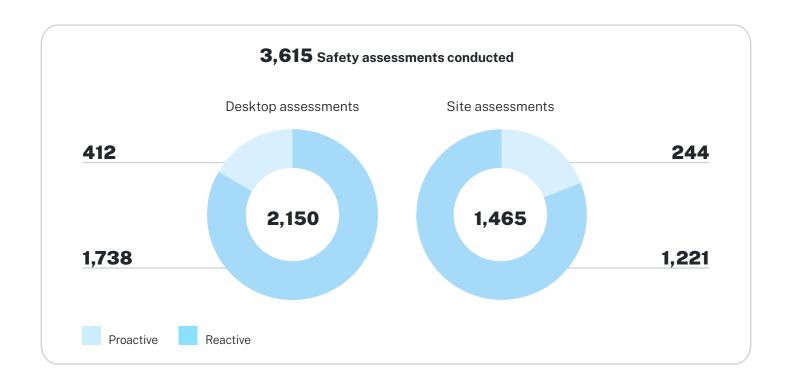
The NSW Resources Regulator regulates safety activities in the following industry sectors.





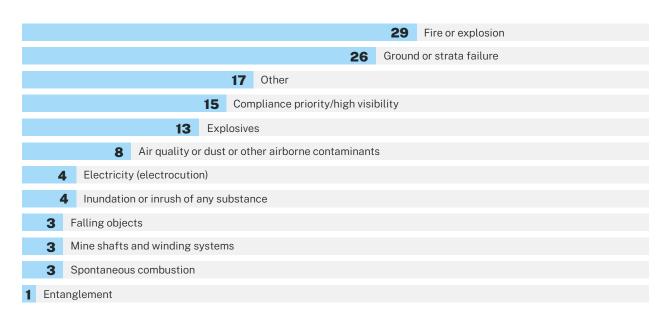
Key safety activities





Key safety activities

126 Targeted assessment program – site assessments



Due to COVID restrictions, some site assessments were undertaken virtually and recorded as desktop assessments. These assessments have been included above.



1

Causal safety investigation completed

Unplanned initiation of explosives at Peak Gold Mine (IIR22-02)

Key Mining Act activities

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

2,330 Current mining titles 3,243 Current small scale titles (as at 30 June 2022) (as at 30 June 2022) Mineral Lightning Ridge White Cliffs Coal small scale small scale titles titles titles titles Source: Titles Administration System Source: Titles Administration System generated 30/06/2022. Petroleum excluded. generated 30/06/2022.





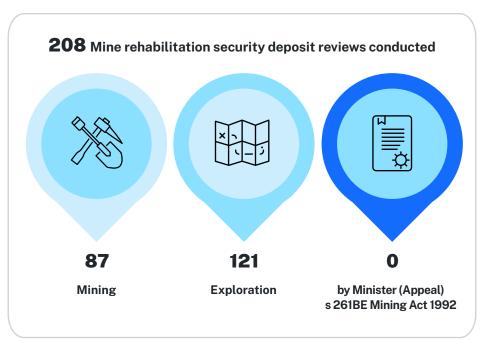
Key Mining Act activities

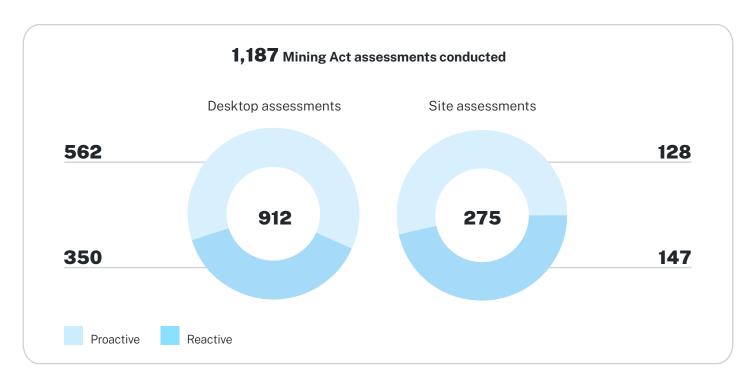
1

Investigation information release published

Alleged illegal mining (IIR21-11)





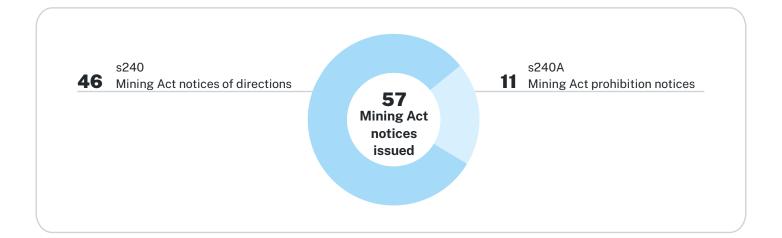


Key Mining Act activities

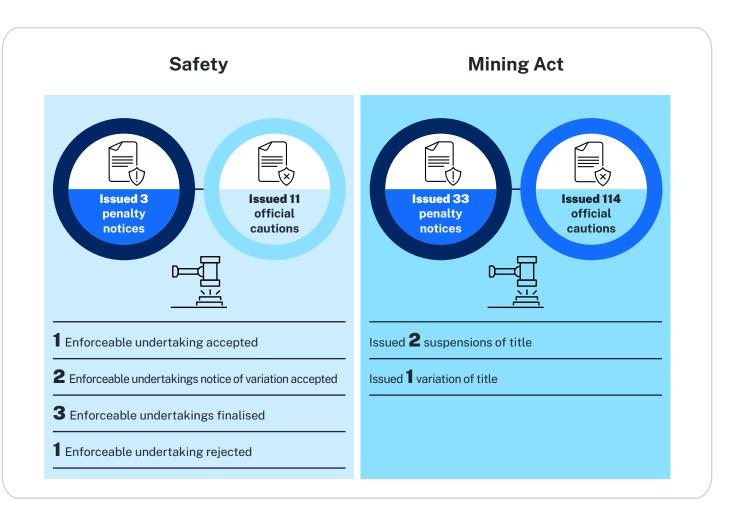
1

Rehabilitation information release published

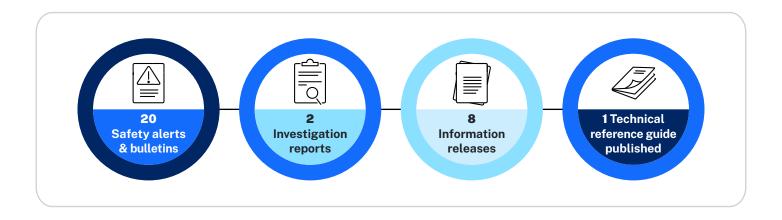
Geomorphic landform establishment at Mount Pleasant Operations coal mine (RIR21-03)

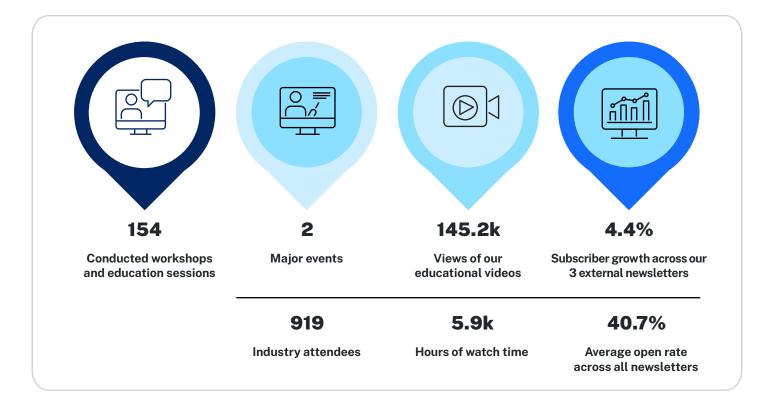


Our enforcement actions



Engaging with industry





For further information regarding these activities please refer to <u>business activities reports</u> on our website.



About us

The NSW Resources Regulator is responsible for regulating work health and safety at NSW mine and petroleum sites and monitoring and enforcing compliance under the *Mining Act 1992*.

Our activities are designed to ensure a consistent and responsive regulatory approach and provide increased transparency and community confidence.

In administering these functions, we undertake various regulatory activities such as:

- · receiving and considering complaints, notifications and requests from interested parties
- · conducting inspections, audits and investigations
- · assessing licensing and registration applications
- · issuing prohibition and other statutory notices
- taking enforcement action such as issuing penalty infringement notices or commencing prosecution proceedings
- · taking other administrative actions such as suspension or cancellation of authorities.

Our Vision

A safe and responsible mining, extractive and petroleum industry.

Our Mission

To enable and support industry to understand and fulfil its obligations.



Key initiatives and outcomes

Compliance and enforcement

The NSW Resources Regulator adopts 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 demonstrates best practice by actively adopting measures and practices over and above legislative requirements.

Our regulatory activities are guided by our compliance and enforcement approach.

Compliance priorities

By publishing our <u>compliance priorities</u>, we aim to provide increased transparency, maintain community and industry confidence in our regulatory activities and increase levels of voluntary compliance.

During the 2021–22 financial year (the reporting period) several priorities were identified within our compliance program:

Compliance priorities

Priority	Sector	Period
Respirable dust – revision to exposure standards	Coal, metalliferous and small mines	July – December 2021
Management of blast exclusion zones	Small mines	July – December 2021
Collision avoidance and proximity detection technology	Coal	July-December 2021
Positive communications	Metalliferous and large quarries	July – December 2021
Management of hazardous chemicals	Coal	July-December 2021
Contractor management	Coal	July – December 2021
Entanglement around conveyors	Metals and petroleum	July 2021 – June 2022
	Small mines	January – June 2022
Rehabilitation reforms	All mining leases	July 2021 – June 2022
Progressive rehabilitation	Mining leases	July-December 2021
Legacy Mines Program	Legacy mines	July-December 2021
Onboarding training for new workers	Coal, metalliferous and small mines	January – June 2022
Ignition of methane	Coal	January – June 2022
Review of quarries sector to ensure compliance with Mining Act authorisations	Quarries in NSW	January – June 2022

In April 2022, we published standalone <u>compliance priorities</u> for opal mining and prospecting. A key component of our compliance priorities is to deliver a diverse range of reforms and improvement measures to strengthen the regulation of opal mining. This focus reflects a significant regulatory program of compliance for the Lightning Ridge opal mining area.

Compliance priorities - opal mining and prospecting

Priority	Sector	Period
Fall from heights / working in shafts	Opal mining	January – December 2022
Persons nominated as mine operator for multiple claims	Opal mining	January – December 2022
Puddling tank safety	Opal mining	July-December 2022
Person riding hoists	Opal mining	April – December 2022
Rehabilitation	Opal mining	January – December 2022
Mullock and soil management	Opal mining	January – December 2022
Waste materials and site management	Opal mining	January – December 2022

COVID-19 response

The NSW Resources Regulator continues to monitor and implement a response plan to manage the risk of COVID-19 transmission. This plan is consistent with the advice from NSW Health and the broader NSW Government approach and considers the specific considerations which reflect our operational model.

We maintained high levels of inspection activity while operating under strict COVID protocols and have now returned to pre-COVID operations.

Please refer to our COVID-19 webpage for updates and guidance material.

Focus on risk controls for work health and safety

Our proactive assessment program includes a clear focus on risk controls. This assessment program fundamentally underpins much of the inspection and assessment work we conduct on mine sites.

Our assessment tools are based upon bowtie analysis workshops. The workshops identify principal mining hazards, including the identification of critical controls using a process aligned with the guidance provided within the ICMM critical control management documents.

Our assessment program includes 2 assessment levels:

- a desktop assessment to examine how risk controls are identified and defined within the documented safety management system (control definition assessment)
- a site assessment to observe how risk controls are implemented and maintained where workers are exposed (control implementation assessment).

Our assessment tools are not a definitive list of the critical controls that exist at a mine or quarry, but a series of targeted questions designed to assist inspectors in identifying deficiencies with a site's safety management system or management of principal hazards. The results of these assessments are recorded, analysed and used to develop constructive advice and feedback to industry.

During the reporting period we conducted 126 targeted safety site assessment programs that focused on the following hazard areas:

- air quality/dust/other airborne contaminants (surface and underground coal)
- compliance priority/high visibility (surface and underground metalliferous, and surface extractives)
- electricity (electrocution) (underground coal)
- entanglement (underground coal)
- explosives (surface coal and extractives, underground metalliferous)
- falling objects (surface coal and underground metalliferous)
- fire or explosion (underground coal, surface extractives and underground metalliferous)
- ground or strata failure (<u>surface</u> and underground coal, surface and underground metalliferous)
- inundation or inrush of any substance (underground coal)
- mine shafts and winding systems (underground coal, underground metalliferous)
- spontaneous combustion (underground coal).

Targeted assessments help achieve sustainable rehabilitation

The targeted assessment program (TAP) proactively assesses how effectively a mine is controlling risks and managing compliance with the preventative and mitigating controls that are critical in planning for and implementing mine site rehabilitation. Each TAP focuses on the implementation of a specific critical control or compliance priority. During the reporting period, the Regulator has focused on the following rehabilitation TAPs:

- decommissioning
- materials and soils management
- landform establishment
- revegetation
- · surface and groundwater management
- tailings facilities storage management.

Further information on rehabilitation TAPs is available on our website.

Compliance audits

Our <u>compliance audit program</u> assesses specific requirements of the *Mining Act 1992* and examines the operational performance of mining operations to achieve sustainable and safe operations.

The audit program is developed using a risk review process to identify the audit focus. A risk assessment methodology (broadly based on AS/NZS ISO 31000:2009 Risk management – Principles and guidelines) is used to develop a broad risk profile for each sector to assist in the development of an audit program.

During the reporting period our audit program has focused on exploration drilling and compliance with exploration activity approvals and general dip sampling cross sections of the mining sector.

We completed 18 compliance audits during the reporting period.

Compliance audits

Audit	Date
Alkane Resources Ltd-exploration	August 2021
Hillgrove Mines Pty Ltd-exploration	August 2021
Centennial Mandalong Pty Ltd-mining operations	September 2021
Werris Creek Pty Ltd - mining operations	September 2021
Evolution Mining (Cowal) Pty Ltd - exploration	September 2021
Lasseter Gold Pty Ltd-exploration	January 2022
Goldreef Resources Pty Ltd -exploration	February 2022
Thomson Resources Ltd -exploration	February 2022
Oxley Exploration Pty Ltd and Isokind Pty Ltd -exploration	February 2022
Peak Gold Mines Pty Ltd-exploration	February 2022

Due to COVID-19 restrictions, 9 of the audits were undertaken as desktop assessments rather than field site inspections.

Major investigations

Major investigations are often initiated for complex, serious and high-risk matters, including workplace fatalities and serious injuries. This includes facilitating and coordinating escalated enforcement actions, such as prosecutions and enforceable undertakings, and administrative sanctions such as a cancellation or suspension of authorities.

Investigation information releases concerning incidents, published at an early point in time, and detailed investigation reports concerning incidents, published at a later point in time, are useful resources for industry to provide information that may assist with risk assessments including the cause and circumstance of the incident, findings, best practice examples and action taken. As part of the lessons learned from some of the incidents, we have developed detailed animations to share and better engage with industry stakeholders.

During the reporting period, we published 7 investigation information releases, 2 full investigation reports and 2 learning from investigations animations.

Investigation information releases, reports and animations

Reference	Title
Investigation report	Fatality at Snapper Mineral Sands Mine
Video animation	Learning from investigations: Fatal collision between dozer and light vehicle
<u>IIR21-10</u>	Collision between an excavator and a dozer
<u>IIR21-11</u>	Worker suffers serious injuries after falling into conveyor chute
<u>IIR21-12</u>	Clarence Colliery roof fall
<u>IIR21-13</u>	Rear dump truck narrowly avoids collision with light vehicle
<u>IIR21-14</u>	Worker suffers serious burns in underground loader fire
Investigation report	Report into the death of Brian Bryant, Grawin opal fields
Video animation	Learning from investigations: Fatality at Grawin opal fields
IIR22-01	Two mine workers injured during pipe installation work
IIR22-02	Unplanned initiation of explosives at Peak Gold Mine

Causal investigations

A causal investigation is an investigation into a safety incident notified to us under work health and safety laws, not to obtain evidence for a prosecution but rather to identify the causal factors of safety incidents, the effectiveness of the controls being used and what factors may have contributed to the failure of the controls.

Under our <u>causal investigation policy</u> we may refer an incident for a causal investigation when the safety incident:

· did not involve the death or serious injury of any person

or

· did not involve any reckless conduct by persons that resulted in the safety incident

or

did not involve the provision of false or misleading information to the Regulator about the safety incident.

The purpose of this approach is to ensure transparency and that vital information is disseminated to industry as soon as possible regarding significant or high potential safety events.

One causal investigation report was published during the reporting period:

• Causal investigation: Unplanned initiation of explosives at Peak Gold Mine.

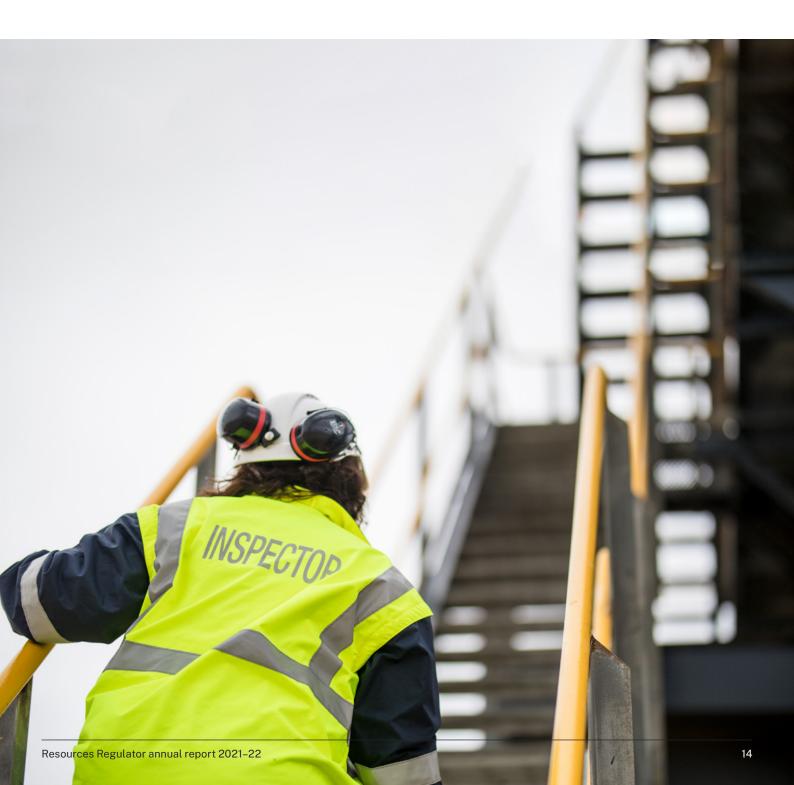
Enforcement measures

The enforcement options embodied in our <u>compliance and enforcement approach</u> allow for a balanced approach which, rather than simply being a punishment, stops improper conduct, promotes behavioural change and is remedial and focused on future compliance. This means that we may, and often, simultaneously apply multiple enforcement tools to achieve the desired compliance outcome.

While prosecutions are the final tool in our enforcement approach, they are usually reserved for matters particularly grave in nature (such as fatalities) or matters of negligence and disregard that require a strong regulatory response. However, the most common enforcement measures employed to encourage and guide industry to better practice include increased intensity of regulatory engagement, warning letters, directions or notices.

Enforcement actions undertaken during reporting period

Enforcement measure	Work Health and Safety	Mining Act
Compliance concern breaches sustained	11	167
Notices issued	1,549	57
Official cautions issued	2	114
Penalty notices issued	3	33



Prosecutions

The most serious breaches under the legislation we regulate require appropriately elevated regulatory responses.

During the reporting period, we launched proceedings against 2 individuals for failing to meet duties under the *Mining Act 1992*, and finalised 8 proceedings against mine operators and individuals for failures to meet duties under the *Mining Act 1992* and work health and safety laws.

Prosecutions commenced and ongoing

Defendant	Details	Legislation	Status
Boral Resources Pty Ltd	At a South Coast quarry, during the periods 22–23 August 2018 and 16–20 August 2019, there were 28 recorded exceedances of the exposure standard for silica. Over this same period there were 8 instances of failing to notify the Regulator of certain incidents.	Work Health and Safety Regulation 2017 Work Health and Safety (Mines and Petroleum Sites) Regulation 2014	Commenced 18 May 2020
Crawford, Peter	Between about 2018 and 3 August 2021, Peter Crawford prospected for opals, a prescribed mineral in White Cliffs without a current mineral claim.	Mining Act 1992	Commenced 23 March 2022
Endeavour Coal Pty Ltd	On 8 June 2019, a contract worker suffered serious injuries when their right foot fell into moving conveyor.	Work Health and Safety Act 2011	Commenced 22 April 2021
Grimes, Garry	Between about 26 May 2019 and about 4 August 2021, Garry Grimes prospected for opals, a prescribed mineral in White Cliffs without a current mineral claim.	Mining Act 1992	Commenced 23 February 2022
Moolarben Coal Operations Pty Ltd	On 17 May 2019, 6 workers were exposed to potential for injury or death from flyrock from an open cut blast.	Work Health and Safety Act 2011	Commenced 10 May 2019
Tritton Resources Pty Ltd	On 23 June 2018, 19 workers became trapped in an underground copper mine when a haul truck caught fire on the decline. All workers retreated to refuge chambers until the fire was extinguished, about 6 hours later.	Work Health and Safety Act 2011	Commenced 18 June 2020
Young Mining Company Pty Ltd	On 17 April 2019, there were failures to comply with the directions of one prohibition and 3 improvement notices.	Work Health and Safety Act 2011	Commenced 18 March 2020
Young Mining Company Pty Ltd	Between 25 July – 5 August 2019, there were failures to comply with a condition of an authorisation and a statutory notice.	Mining Act 1992	Commenced 18 December 2019

Prosecutions finalised

Defendant	Details	Legislation	Commencement date	Fines
Burgess Earthmoving Pty Ltd	On 10 April 2018, 12 people were at risk of being struck by flyrock during an overburden blast conducted at Albury Quarry. Those at risk included members of the public, workers and a shotfirer who were at the firing location at the time of blasting.	Work Health and Safety Act 2011	31 August 2020	Guilty plea – Convicted and fined \$180,000 and ordered to pay the Regulator's costs
Hamilton, David (worker)	On 10 April 2018, 12 people were at risk of being struck by flyrock during an overburden blast conducted at Albury Quarry. Those at risk included members of the public, workers and a shotfirer who were at the firing location at the time of blasting.	Work Health and Safety Act 2011 Work Health and Safety (Mines and Petroleum Sites) Act 2013	31 August 2020	Guilty plea – Convicted and fined \$22,500 and ordered to pay the Regulator's costs
Hamilton Blasting Services Pty Ltd	On 10 April 2018, 12 people were at risk of being struck by flyrock during an overburden blast conducted at Albury Quarry. Those at risk included members of the public, workers and a shotfirer who were at the firing location at the time of blasting.	Work Health and Safety Act 2011 Work Health and Safety (Mines and Petroleum Sites) Act 2013	31 August 2020	Guilty plea – Convicted and fined \$324,000 and ordered to pay the Regulator's costs
Narrabri Coal Operations Pty Ltd	In 2019, the authorisation holder constructed unauthorised tracks, failed to rehabilitate drill sites and drilled bore holes contrary to exploration activity approval conditions.	Mining Act 1992	10 August 2020	Guilty plea – Convicted and fined \$240,000 and ordered to pay the Regulator's costs
Narrabri Coal Pty Ltd	In 2019, the authorisation holder constructed unauthorised tracks, failed to rehabilitate drill sites and drilled bore holes contrary to exploration activity approval conditions.	Mining Act 1992	13 August 2021	Guilty plea – Convicted and fined \$132,500 and ordered to pay the Regulator's costs
Peak Gold Pty Ltd	On 3 April 2017, a worker operating a mobile rock drill at an underground gold mine died after losing consciousness while being transported to the surface.	Work Health and Safety Act 2011	2 April 2019	Guilty plea – Convicted and fined \$480,000 and ordered to pay the Regulator's costs
Walburn, Jedadiah Blake	Between about 11 November and 16 November 2020, Jedadiah Walburn mined sapphires, a prescribed mineral, without authorisation.	Mining Act 1992	16 November 2020	Guilty plea – Convicted and fined \$60,000 and ordered to pay the Regulator's costs
Walburn, Robert John	Between about 11 November and 16 November 2020, Robert Walburn mined sapphires, a prescribed mineral, without authorisation.	Mining Act 1992	16 November 2020	Guilty plea – Convicted and fined \$60,000 and ordered to pay the Regulator's costs
Total fines				\$1,499,000

Enforceable undertakings

Enforceable undertakings are legally binding agreements proposed by a company or person which are accepted by the Regulator, following an alleged contravention of the Act, as an alternative to prosecution. We publish accepted enforceable undertakings on our website.

An enforceable undertaking is a commitment by a company or person to implement initiatives designed to deliver tangible benefits for the industry and broader community. The initiatives are intended to resolve both the behaviour of concern that has led to the alleged contravention and rectify the consequences of the conduct.

During the reporting period, one enforceable undertaking and 2 variations were accepted (to a total value of \$253,626). One enforceable undertaking was rejected and 3 were finalised (to a total value of \$2,073,911).

Enforceable undertakings

Enforceable undertaking	Legislation	Status	Amount (\$)
Clarence Coal Pty Ltd	Work Health and Safety Act 2011	Variation accepted	No change to undertaking value
Clarence Coal Pty Ltd	Work Health and Safety Act 2011	Finalised 30 May 2022	524,942
Mt Arthur Coal Pty Ltd	Work Health and Safety Act 2011	Finalised 9 July 2021	1,090,750
Otraco International Pty Ltd	Work Health and Safety Act 2011	Finalised 27 July 2021	458,219
Endeavour Coal Pty Ltd	Work Health and Safety Act 2011	Rejected	N/A
Winder Controls Australia Pty Ltd	Work Health and Safety Act 2011	Accepted	253,626 (ex GST)
Winder Controls Australia Pty Ltd	Work Health and Safety Act 2011	Variation accepted	No change to undertaking value
Total			2,073,911

Suspension, variation and cancellation of mining authorisations

Suspension and cancellation of an authority is sought where serious contraventions have occurred or where the authority holder is unwilling or unable to return to compliance. Variation of a mining authorisation is sought as an alternative to suspension or cancellation with a view to addressing identified risks.

There were 2 suspensions (following alleged contraventions of the Mining Act 1992) during this period.

Notice	Issued to	Date
Decision to suspend	Shree Minerals Ltd	28 June 2022
Decision to suspend	Macquarie Marble and Lime Pty Ltd	28 June 2022

Rehabilitation security deposit reviews

All exploration and mining title holders are required to lodge a security deposit that covers the full rehabilitation costs. As of July 2022, the NSW Government held about \$3.55 billion in security bonds for rehabilitation of exploration and mining impacts.

We regularly access 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 has been implemented.

During the reporting period, we reviewed 283 assessed deposits. Of these, 170 were exploration deposits, 107 were mining deposits and a further 6 were for petroleum operations or determined by the Minister.

A full list can be viewed in the assessed deposits table.



Regulatory reform

New Standard Mining Lease Conditions

New standard conditions now apply for all mining leases and are set out in <u>Schedule 8A of the Mining Regulation 2016</u>. For large mines with an Environment Protection Licence (EPL) the regulations came into effect on 2 July 2022. For mines without an EPL (small mines) the regulations will come into effect on 2 July 2023. The reforms will bring greater consistency and ensure all large mines across NSW are subject to one standard set of conditions.

The conditions support best practice mine site rehabilitation by ensuring progressive rehabilitation occurs in a manner that achieves sustainable final land uses following the completion of mining.

Lease holders will be required to demonstrate that the rehabilitation of land and water disturbed by mining is safe and stable and can support the future final land use(s) approved through the development consent. Lease holders will be required to:

- · prevent or minimise harm to the environment
- rehabilitate land and water as soon as reasonably practicable after disturbance occurs
- achieve the approved final land use for the mining area as set out in the:
 - rehabilitation objectives statement
 - rehabilitation completion criteria statement
 - final landform and rehabilitation spatial plan (large mines only)
- undertake a rehabilitation risk assessment and implement measures to eliminate, minimise or mitigate risks to achieving the final land use
- prepare and implement a rehabilitation management plan (large mines only)
- prepare an annual rehabilitation report which describes the progress of rehabilitation over the annual reporting period
- prepare a forward program which includes the schedule of mining and rehabilitation activities for the next 3 years demonstrating how rehabilitation will occur as soon as reasonably practicable after disturbance.

Mines are being provided with assistance to ensure provision of the necessary records as required by the reforms.



Legislative reform

Statutory review of WHS laws for mining

In line with the key recommendations of the 2020 Kym Bills statutory review, amendments were made to the Work Health and Safety (Mines and Petroleum Sites) Act 2013, and consultation on a remake of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 was undertaken during the reporting period.

The Work Health and Safety (Mines and Petroleum Sites) Amendment Act 2022 passed through Parliament in May 2022 and will commence on 1 August 2022. The Act amendments are mainly administrative. They streamline, clarify, and modernise some processes and provisions. They also enhance probity controls for statutory roles. For example, enabling electronic document service, and providing for an independent Mining and Petroleum Competency Board (MPCB) Chair. Most significant of the amendments was a change to offence penalties. These are now expressed as a 'unit' rather than a dollar value. This allows for the indexation of penalties to ensure they retain their real value over time.

In line with NSW subordinate legislation laws, the Work Health and Safety (Mines and Petroleum) Sites Regulation 2014 underwent a staged repeal and remake process. The proposed remake includes 28 of Mr Bills' 40 review recommendations. Establishing a safer and more modern work health and safety system was the key driver of these reforms. The reforms will also align with industry leading practice and the key features of the NSW mining industry.

We assessed the costs and benefits of each amendment proposal via a Regulatory Impact Statement (RIS). The RIS forecast an overall net benefit to industry and the Regulator of approximately \$500,000. We consulted on the proposed remade Regulation and RIS in June 2022. The remade Regulation will consider feedback received during the consultation period. The 2014 Regulation is set to lapse on 1 September 2022. It will be replaced with the remade Work Health and Safety (Mines and Petroleum Sites) Regulation 2022.



Engagement

We are committed to ensuring that the mining industry knows and understands its obligations. During the reporting period we continued with our engagement strategy to inform our stakeholders about our programs, legislative changes and newly developed resources and guidance.

We actively strive to improve our communications channels, approach and messaging.

Guidance for industry

New standard rehabilitation conditions on mining leases

New standard rehabilitation and reporting conditions on mining leases were introduced on 2 July 2021. A range of guidance material was published to assist mining lease holder comply with the new requirements.

Technical Reference Guide: Main fans, booster fans and auxiliary fans in underground coal mines

Following a review of the previous version in 2020, the <u>Technical Reference Guide: Main fans, booster fans and auxiliary fans in underground coal mines</u> was published in November 2021. This technical reference guide supersedes Mining Design Guideline 3.

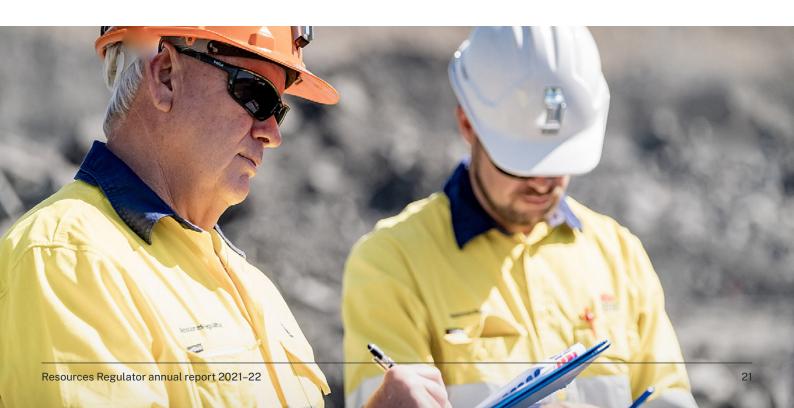
Practising certificates

Guidance and forms about <u>practising certificates</u> and <u>quarry manager practising certificates</u> have been updated regularly on our website.

Reports

We publish a range of reports on business activities and industry performance to ensure transparency of our regulatory activities and assist industry to maintain and improve compliance. These include:

- · Annual activity reports report on the activities of the Resources Regulator each financial year
- Business activity reports provide information on key regulatory activities carried out and are produced each quarter
- Quarterly safety reports provide information relating to hazard management and are prepared to assist mine and petroleum site operators meet obligations under WHS laws
- <u>Bi-annual exploration and mining rehabilitation reports</u> provide information about our regulatory activities under the Mining Act
- · Annual safety performance measures report provide information and analysis on industry safety data.



Improved communication

Established engagement

Transparency and engagement remain a high priority for the Regulator. To ensure open and ongoing dialogue with industry we have continued regular and bi-monthly forums with several key representative bodies, including:

- NSW Minerals Council
- · Cement Concrete and Aggregates Australia
- Construction Forestry Maritime Mining Energy Union
- Australian Workers Union
- Association of Mining and Exploration Companies
- Coal Services
- Lock the Gate
- Mine Managers Association Australia.

Mine Safety News

<u>Mine Safety News</u> is an online newsletter regularly published by the NSW Resources Regulator designed to inform, educate and promote the enhancement of the health and safety culture of NSW mining.

Weekly incident summary

The Regulator publishes a reportable incidents summary each week. The <u>weekly incident summary</u> shows the total number of reportable incidents in a 7-day period and summarises incidents of note, including those from other mining jurisdictions, nationally and internationally.

Safety alerts and bulletins

<u>Safety alerts</u> are an important communication tool between the Regulator and the NSW mining industry, suppliers, unions and industry organisations. Safety alerts are issued following the occurrence of an event such as a fatal accident, dangerous occurrence or any incident which is of significance to the industry, with the aim of preventing a similar occurrence.

<u>Safety bulletins</u> contain information relating to specific mine safety issues.



Targeted safety messaging

Following the 'Vehicle Incidents – Heading in the wrong direction' targeted campaign in April 2021 which highlighted awareness of vehicle interaction, the seriousness and potential consequences of vehicle interaction incidents had not significantly improved – with the majority of such incidents having either resulted in serious injuries or had the potential to kill workers.

The Regulator conducted a further targeted awareness campaign over 10 days in late May/early June 2022 focussing on vehicle interaction at surface coal operations and a selection of metalliferous/extractives operations. This campaign primarily focussed on the responsibilities of front-line leaders and their duties to establish and maintain the required standards. Workers were also consulted to measure the level of understanding and awareness of the nominated vehicle interaction controls at each site. This included assessing the site traffic management standards, road conditions, road design, effective use of positive communication, and willingness to report compliance issues.

Throughout the campaign inspectors addressed 78 crews across 22 surface coal mines highlighting the importance of managing vehicle interaction risks. This also included detailed discussions with 214 front-line leaders and 563 individual workers.

Similarly, inspectors addressed 37 crews across a combination of 14 surface and underground metalliferous/extractives mines. These same detailed discussions were held with 96 front-line leaders and 321 individual workers.

Rehabilitation resources

The Regulator produced a range of new rehabilitation resources including <u>rehabilitation information releases</u> and mine rehabilitation newsletters.

YouTube Channel

Effective stakeholder engagement is crucial to improving the safety culture in the mining industry in NSW. To increase engagement around investigation reports and important topics, which at times are lengthy and technical in nature, we have developed high quality animations, which can be found on our Resources Regulator <u>YouTube</u> channel.

Our efforts to diversify our methods used to inform industry have returned promising outcomes and we will continue to develop innovative delivery solutions.

Industry and community feedback

Feedback from the mining industry and community is important in guiding and developing our regulatory approach to deliver improved outcomes to the NSW community. Public consultations give the mining industry and community an opportunity to provide feedback to the Regulator on a range of issues.

Work Health and Safety (Mines and Petroleum Sites) Regulation

On 15 June 2021, we sought comments on the exposure draft of the proposed Work Health and Safety (Mines and Petroleum Sites) Regulation 2022. The <u>public consultation draft</u> and <u>regulatory impact statement</u> were made available for comment, and submissions closed on 8 July 2022.

Industry events

Small Mines and Quarries Health and Safety Roadshow

Roadshows were held across NSW to deliver key health and safety messages directly to the small mines and quarrying sector. They provide an opportunity to communicate contemporary and pertinent issues and help maintain the Regulator's visibility in the sector. The Small Mines and Quarries Health and Safety Roadshow engaged with 14 regional areas and 385 industry participants to provide information about health, safety and current issues affecting this industry sector. Topics included effective supervision, quarry manager practising certificates, on-site management of vehicles and plant, dust management and several other topics relevant to the sector.

Workshops for practising certificate holders of maintenance of competence

Face-to-face workshops were held for practising certificate holders of maintenance of competence in regional locations. An additional webinar was also held. The sessions included updates on maintenance of competence requirements and a self-auditing checklist for logbooks. These workshops were attended by 174 people across 5 locations plus the webinar.

Standardised Subsidence Information Management System workshops

The industry workshops focused on the query facilities of the online standardised subsidence information management system. By focusing on the quantifiable likelihood, as well as its associated magnitude of subsidence, the methodology promotes an improved risk-based approach to subsidence management and recovery of coal resources, as well as risk-based regulation in relation to subsidence.

Safety Awareness Course - Lightning Ridge

The safety awareness course for Lightning Ridge covers the knowledge and skills required to be a mine operator at an opal mine, including safety policy, hazard identification, maintenance, risk management, people management, emergency response plans and contractors. In the reporting period, the Regulator held ten courses, including 9 in-person and one online with 366 participants overall.

Engineering events

One of our key roles is to ensure all operators and title holders are aware of their obligations and how to meet them. Workshops and information sessions allow us to engage with industry and help maximise compliance. As a result of the COVID situation, the Regulator organised for key events to continue online. These events allow participants to discuss emerging issues and trends, recent incidents, site experiences in managing safety and discussions on improving engineering safety. These events are an essential part of meeting CPD requirements for holders of practicing certificates and occurred throughout NSW.

Metalliferous Emergency Response Team working group

Members of the Metalliferous Emergency Response team collaborate on emergency planning and response capability matters. The working group, made up of emergency response managers from the major metalliferous mines in NSW, emergency services and other stakeholder groups, discuss emergency planning topics and share key learning information from incidents across NSW.

NSW Mine Rehabilitation Forum

The mine rehabilitation forum was an opportunity for the more than 300 attendees from Regulator, industry and the wider community to share experiences, lessons learnt and promote leading practice in mine rehabilitation. The day covered the implementation of the new compliance and reporting reforms for mine rehabilitation and new regulations under the Mining Act 1992. Participants also heard from industry representatives who are leading the way in progressive rehabilitation practices and discussed the Regulator's Targeted Assessment Programs (TAPs) over the last 2 years which have focussed on tailings management, soil and material management, as well as landform establishment.

Compliance Management in exploration webinar

More than 140 people attended this half-day online education and awareness session for explorers which focused on compliance obligations under the *Mining Act 1992*. The session covered an overview of the Regulator's audit program, work health and safety considerations for explorers, regulatory investigation in the exploration space, native title and the Regulator Portal. Participants also heard from industry representatives about collaboration between explorers and implementing the community consultation exploration code of practice.

Committees, boards and working groups

As secretariat, we oversee the coordination and administration of 2 collaborative advisory bodies:

- NSW Mine Safety Advisory Council (MSAC)—is a tripartite forum established to provide the Minster with advice on strategic health and safety issues in the mining and extractives industry
- Mining and Petroleum Competence Board (MPCB) advises the Minister and oversees the development of
 competence standards and the assessment of people who have a role at a mine that may affect health
 and safety.

We also actively participate in several other committees and working groups including:

- Standing Dust Committee formed under Coal Services with the purpose of offering expert advice to industry (and government) to ensure reduced exposure to airborne contaminants and improvements to occupational hygiene.
- Australian Standards our electrical and mechanical engineering inspectors sit on several standards committees
 and working groups. These committees are tasked with reviewing, updating and ratifying current standards and
 developing new standards. This work sees our inspectors travel across Australia to collaborate and contribute
 their technical expertise, up to a dozen times a year. Examples of the electrical and mechanical standards
 committees we have representation on include:
 - EL 43 High Voltage systems
 - EL043 Electrical technical committee for mining and quarrying
 - ME063-Earthmoving equipment
 - ME018-Mining equipment.
- Mines Rescue working group-formed under Coal Services to deal with the specific issue of training mine employees to respond to emergencies using compressed air breathing apparatus (CABA).
- Central West Mine and Extractive Environment Team (MEET) to bring together on-site environmental personnel from mines and guarries in the Central West region.
- Hunter Coal and Environment Group (HCEG) a forum for environmental professionals to exchange developments in mine rehabilitation and environmental management in the coal mining industry of the Hunter Region.
- Upper Hunter Mining Dialogue (UHMD) an initiative of several Hunter Region mines in coordination with the NSW Minerals Council. It was formed to create opportunities to respond to community concerns regarding mining impacts including mine rehabilitation, water impacts and air quality.

Working with other government agencies

Collaborating to better regulate gas activities in NSW

On 1 July 2015 the Environmental Protection Agency (EPA) became the lead regulator for compliance and enforcement of conditions of gas activity instruments in NSW. In July 2016 a memorandum of understanding was established between the EPA, Department of Planning and Environment, Department of Primary Industries Water and the then Division of Resources and Energy (now Mining Exploration and Geoscience (MEG)). Each agency has a role to play in regulating the gas industry, with MEG responsible for administering petroleum titles under the *Petroleum (Onshore) Act 1991* and compliance with Work Health and Safety legislation.

The memorandum of understanding is currently under review to clarify each agency's role and assist them to undertake their responsibilities when regulating gas activities.

Collaborating to rehabilitate legacy mine sites in NSW

The Legacy Mines Program assists landholders by delivering and managing works to reduce risks from legacy mine sites. The Legacy Mines Team regularly partner with Soil Conservation Services (SCS) to remediate abandoned mines across the State. A great example of this collaboration occurred at the Ottery Arsenic Mine near Emmaville where SCS undertook works on behalf of the Legacy Mines Team to excavate and stabilise major bodies of highly contaminated waste rock dumps and tailings, taking the area out of drainage lines and encapsulating the material in a 23,000m³ stable, engineered cell.

Mine and petroleum site levy

The Mine and Petroleum Site Safety (Cost Recovery) Act 2005 establishes the Mine Safety Fund. The contributions to the fund by mining industry employers are commonly referred to as the mine safety levy.

The Mine Safety Fund is a levy charged by the NSW Government to pay for health and safety regulation of the state's mining workplaces. The levy applies to employers in the mining industry who have obligations under mine safety legislation for the health and safety of workers. The levy is collected by the worker's compensation insurers of mining industry employers and transferred to the Regulator.

Under the legislation, the fund may only be used to meet specified expenses incurred by the Regulator in carrying out:

- regulatory activities connected with mine safety legislation, the Explosives Act 2003 and Radiation Control Act 1990
- expenses incurred in the administration or execution of the mine safety legislation
- · administrative expenses related to the fund.

In accordance with the recommendations of the <u>2017 Independent Review of the Mine and Petroleum Site</u>
<u>Safety Levy</u>, we engaged an external party to conduct an audit of the 2018–19 mine safety levy expenditure. The final audit report acknowledged our efforts to improve the control environment and implement the 2017 review recommendations, whilst managing various challenges. All recommendations within our realm of responsibility have been considered, actioned and implemented.



Financial reports

Mine Safety Levy 2021–22

Payments made from the Mine and Petroleum Site Safety Fund for the 2021–22 financial year

Note	Description	Amount (\$ thousands)
Total	payments	41,151
Empl	oyee related	25,530
1	Salaries and wages – direct	21,134
	Salaries and wages – on costs	4,396
Opera	ating expenses	12,294
2	Advertising and promotion	37
3	Boards and committees	102
4	Consultants and professional services	2,139
5	Entertainment and events	95
6	Legal	5,782
7	Printing, postage, stationery and consumables	76
8	Rent, repairs and maintenance	10
9	Research and technology	725
10	Training	211
11	Travel	470
12	Motor vehicles	228
13	Other costs – audit fees	-
14	Other costs - clothing - uniforms	52
15	Other costs - equipment - maintenance and consumables	173
16	Other costs - equipment - minor purchase	29
17	Other costs – professional memberships and subscriptions	63
18	Other costs - medical exam costs	7
19	Other costs – ISHR contribution	97
20	Other costs-MSTC transfer payment	2,000

Note	Description	Amount (\$ thousands)
Intern	al department service charges	3,327
21	Accommodation costs	1,106
22	Legal branch services	411
23	Other corporate costs	1,810
Capit	al	-
Opera	ting revenue	36,189
	Levy contributions for 2021/22	34,006
24	Legal costs recovered and fines	916
25	Moieties	430
26	Costs recovered under enforceable undertakings	53
27	Other revenue	783
28	Interest	1

Summary of movements in the Mine and Petroleum Site Safety Fund for the 2021–22 financial year

Description	Amount (\$)
Opening balance @ 1 July 2020	13,480
Plus: Mine Safety Levy 2020–21	29,395
Plus: miscellaneous other revenue 2020–21	2,989
Less: expenditure for 2020–21	40,740
Opening balance @ 1 July 2021	5,124
Plus: Mine Safety Levy 2021–22	34,006
Plus: miscellaneous other revenue 2021–22	2,183
Less: expenditure for 2021–22	41,151
Opening balance @ 1 July 2022	162
Plus: Mine Safety Levy 2022–23	34,486
Plus: budgeted miscellaneous other revenue 2022–23	1,700
Less: budgeted expenditure for 2022–23	33,551
Forecasted opening balance @ 1 July 2023	2,797

Comments on financial report

Note	Category	Description
Emplo	oyee related	
1	Salaries and wages – direct	Includes ongoing, temporary and contingent staff costs.
Opera	ting expenses	
2	Advertising and promotion	Includes mine safety video production including animations and other mine safety promotion material.
3	Boards and committees	Payments to board and committee members – Mine Safety Advisory Council, Mining and Petroleum Competence Board and Mine Safety Assessment and Review Committee.
4	Consultants and professional services	 Includes professional and consultancy fees for: Specialist consultants to assist investigations into serious or fatal injuries MSTC decommissioning including project management Administrative costs associated with the collection of the levy Audit of Practicing Certificates Integrity Screening Program Analysis of MSAC Safety Survey Records archiving and digitisation Legislative Reform Project including the Regulatory Impact Statement for the remake of the Work Health & Safety (Mines and Petroleum Sites) Regulation Review of NSW Health Surveillance Scheme Program Management Services
5	Entertainment and events	Costs for internal and external mine safety events hosted by Resources Regulator
		 Safety seminars* Mechanical Engineering Safety Seminar Electrical Engineering Safety Seminar Mining Engineering Manager Safety Seminar Quarterly Forums Metalliferous mechanical engineers' forum Open cut coal mechanical engineers' forum Underground coal mechanical engineers' forum Southern and western region coal electrical engineers' forum Hunter region coal electrical engineers' forum Western region metalliferous electrical engineers' forum Open cut mining engineering managers' forum Underground mining engineering manager's forum Other Safety and health representatives seminar Small mines roadshows Metalliferous industry safety and health engagement forum NSW proximity detection forum Open cut drill and blast forum Underground drill and blast forum Opal mine safety workshop

Note	Category	Description	
6	Legal	Legal advice obtained from Crown Solicitors Office and external providers in relation to major incident investigations and prosecutions. Matters Include:	
		 Fatality at Hunter Quarries, Fatality at Lightning Ridge, Fatality at Rixs Creek, Fatality at Peak Gold Mine, Fatality at Regional Hardrock Quarry West Wyalong. 	
		 Serious incident at Moolarben Coal Mine, Serious incident at Tritton Copper Mine, Crystalline silica exposure at Peppertree Quarry, WHS contraventions at Thuddungra Mine, Serious injury at Thuddungra Mine, Serious incident at Albury Quarry, Serious injury at Appin North Mine, Serious injury at Appin East Mine. 	
		Legal costs include provision for the estimated cost settlement of the Hunter Quarries matter.	
7	Printing, postage, stationery and consumables	Includes courier and freight, printing, photocopying, stationery/ office consumables, postage and office equipment	
8	Rent, repairs and maintenance	Minor office repairs and maintenance and storage shed rent.	
9	Research and technology	Includes mobile and data charges and software licensing fees, including the Resources Regulator's database ACES. Includes the purchase of computer hardware and accessories. Also includes website development, digitisation of mine survey plans, the opal mining mobile app development and ACES enhancements.	
10	Training	Training for regulatory staff. Topics include emergency management, first aid, self-escape, dam safety, safe working at heights, blast management, tailings management. Also training in capabilities such as leadership development, change and fatigue management, lead investigator, accessibility, communications including ministerial and policy writing, industry familiarisation and learning from disasters.	
11	Travel	Includes domestic travel undertaken by mine safety personnel. Nil overseas travel in 2021/22.	
12	Motor vehicles	Operational costs (fuel, maintenance and lease) of fleet vehicles.	
13	Audit fees	There weren't any external audits conducted during 2021/22.	
14	Clothing –uniforms	Provision of uniform and PPE for mine safety staff.	
15	Equipment maintenance and consumables	Maintenance and associated consumables of MSTC equipment and safety inspector equipment.	
16	Equipment minor purchase	Purchase of low value assets and equipment.	
17	Professional memberships and subscriptions	Membership fees for external organisations including Joint Accreditation Australia and New Zealand (JAS-ANZ) and Australian Standards.	
18	Medical exam costs	Medical examination costs for mine safety staff.	
19	ISHR contribution	Yearly contribution to trade union for industry safety and health representatives appointed by the Minister under part 5 of the Work Health and Safety (Mine and Petroleum Sites) Act 2013.	
20	Other Costs - MSTC transfer payment	Contribution to Coal Services Pty Ltd as part of the transition of testing services from the Mine Safety Technology Centre. Transferred April 2022.	
21	Accommodation costs	Costs associated with providing office accommodation to mine safety personnel in Maitland, Thornton, Sydney, Wollongong, Lithgow, Orange, Cobar, Broken Hill, Lightning Ridge and Armidale.	
22	Legal branch services	Legal services provided by departmental in-house legal team.	

Note	Category	Description	
Intern	Internal department service charges		
23	Other corporate costs	Costs associated with providing corporate services such as finance, payroll, human resource, records and asset management for mine safety personnel in Maitland, Thornton, Sydney, Wollongong, Lithgow, Orange, Cobar, Broken Hill, Lightning Ridge and Armidale.	
Operating Revenue			
24	Legal costs recovered	Cost settlements and fines in relation to prosecutions Albury Quarry, Rixs Creek, Peak Gold and Moolarben.	
25	Moieties	Moieties received in relation to prosecutions of Cudal, Peak Gold and Albury Quarry.	
26	Costs recovered under WHS undertakings	Recovery of legal, investigation and compliance monitoring costs in relation to a serious incident at the Appin East Mine.	
27	Other revenue	Fees collected in relation to the services provided by the Mine Safety Technology Centre, certificates of competence, opal safety courses, workshops and conferences.	
28	Interest	Interest earnt on Levy bank balance.	
* Previous deposits paid for the cancelled 2021 Safety Seminar events were attributed to other seminars and forums.			

Other expenses 2021–22

Non mine safety levy related

Note	Description	Amount (\$ thousands)
Total	Fotal payments 11,170	
Empl	loyee related	6,837
1	Salaries and wages – direct	5,701
	Salaries and wages – on costs	1,136
Oper	rating expenses	4,339
2	Advertising and promotion	2
3	Consultants and professional services	33
	Consultants and professional services – legacy mines	3,894
4	Entertainment and events	6
5	Legal	144
6	Printing, postage, stationery and consumables	20
7	Rent, repairs and maintenance	-
8	Research and technology	47
9	Training	15
10	Travel	109
11	Motor vehicles	46
12	Other costs - clothing - uniforms	11
13	Other costs – professional memberships and subscriptions	11
14	Other costs - medical exam costs	1
15	Other costs - equipment - minor purchase	10
Capi	tal	-
Oper	rating revenue	417
16	Legal costs recovered	357
17	Fines	60
Total	l Resources Regulator impact on Administration Levy 2021/22	10,759

Comments

Note	Category	Description	
Emplo	oyee related		
1	Salaries and wages-direct	Includes ongoing, temporary and contingent staff costs.	
Opera	nting expenses		
2	Advertising and promotion	Promotion of mine rehabilitation and signage.	
3	Consultants and professional services	Includes professional fees for: • Searches and checks including Corporate Scorecard, ASIC, SAI Global • Berrima Ground Water Remodelling • PINS processing • Integrity Screening Program • Records digitisation project	
4	Entertainment and events	Costs for internal and external events.	
5	Legal	Legal advice obtained from Crown Solicitors Office and external providers in relation to investigations and prosecutions (Mining Act). Matters include Narrabri Coal Operations, Young Mining Company, Robert and Jedadiah Walburn, Macquarie Marble and Lime, Grimes, Crawford.	
6	Printing, postage, stationery and consumables	Includes courier and freight, printing, photocopying, stationery/office consumables, postage and office equipment	
7	Rent, repairs and maintenance	Minor office repairs and maintenance	
8	Research and technology	Includes mobile and data charges and software licensing fees. Includes the purchase of computer hardware and accessories. Also includes website development.	
9	Training	Training for regulatory staff. Topics include Certificate IV in Government Investigations, first aid, 4WD driving. Also training in capabilities such as leadership development and industry familiarisation.	
10	Travel	Domestic travel undertaken for inspections and audits.	
11	Motor vehicles	Operational costs (fuel, maintenance and lease) of fleet vehicles.	
12	Clothing –uniforms	Provision of uniform and PPE.	
13	Professional memberships and subscriptions	Membership fees for standards access and other subscriptions.	
14	Medical exam costs	Medical examination costs for staff.	
15	Equipment minor purchase	Purchase of low value assets and equipment.	
Total	operating revenue		
16	Legal costs recovered	Cost settlements and moieties in relation to prosecutions of Narrabri Coal Operations and Robert and Jedadiah Walburn.	
17	Fines	Penalty Infringement Notices issued for breaches under the Mining Act 1992.	

NSW Resources Regulator W: <u>resourcesregulator.nsw.gov.au</u>

