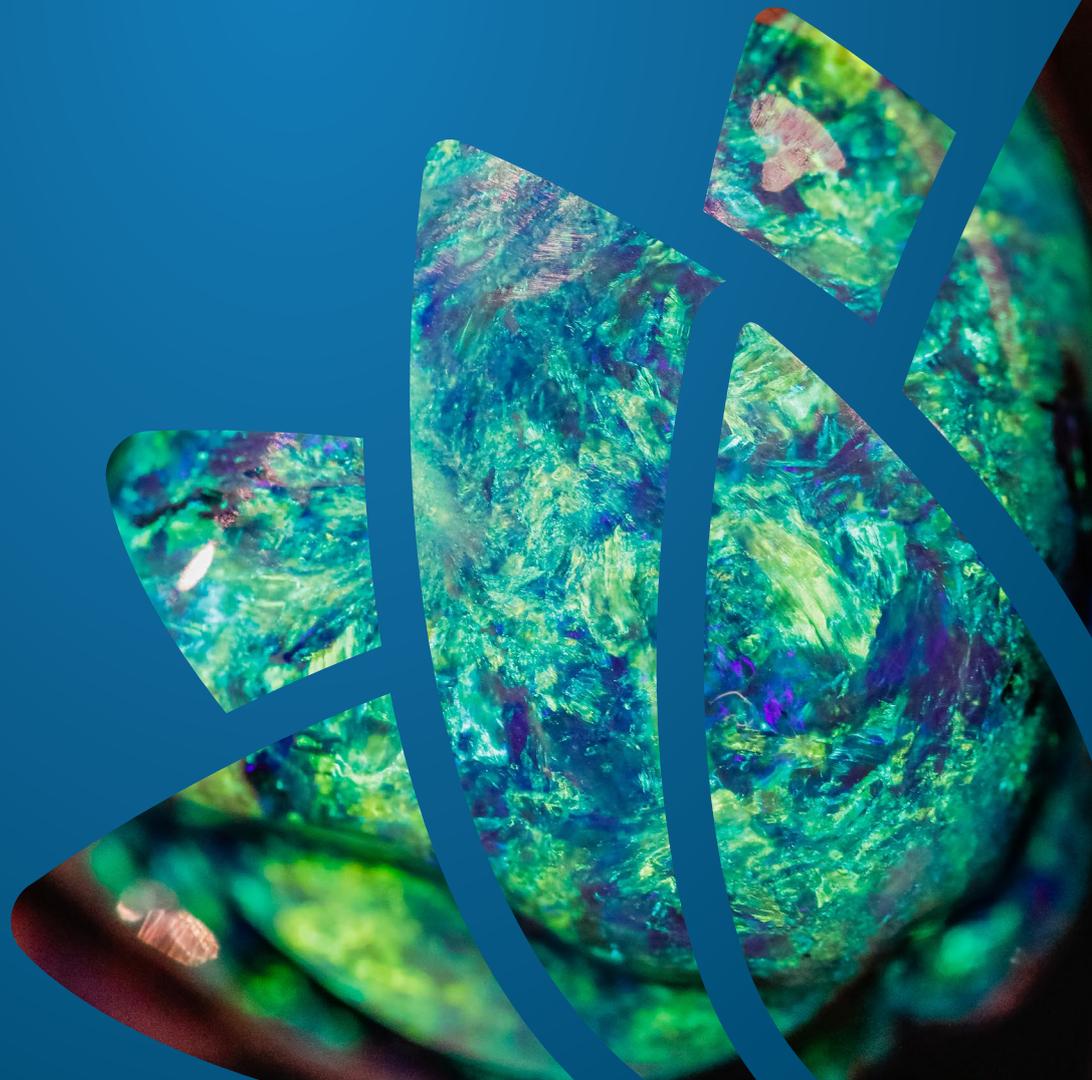




**NSW  
Resources  
Regulator**

# **Opal mining compliance priorities**

JANUARY - DECEMBER 2022



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**4 MINE SAFETY GENERAL** PRESS 4

**5 MINING ACT COMPLIANCE** PRESS 5

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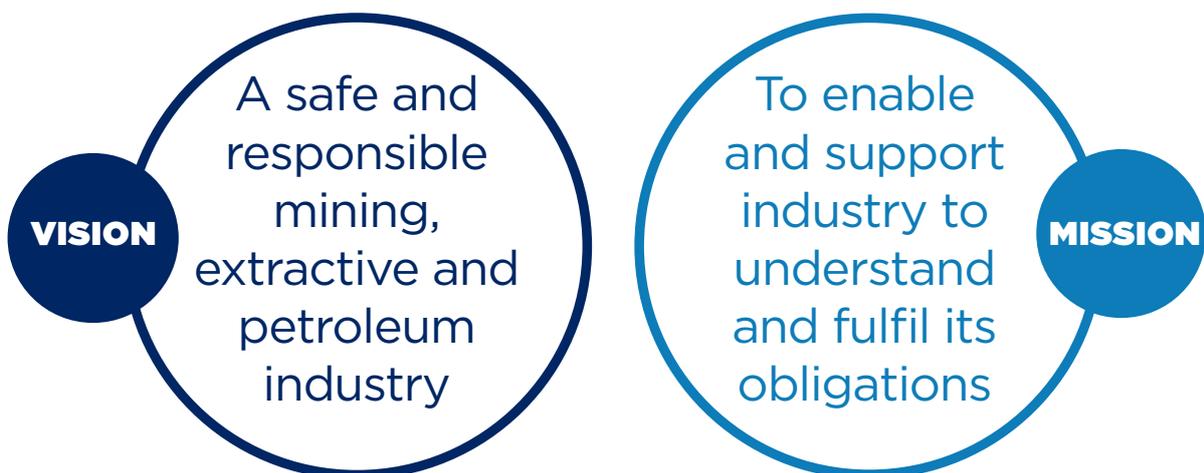
## Purpose

This report sets out our key compliance priorities for opal mining for 2022. By publishing our compliance priorities, we aim to increase transparency, community and industry confidence in our regulatory activities and increase levels of voluntary compliance.

## Our objectives

We aim to:

- ensure a safe, sustainable and innovative mining, extractive and petroleum industry in NSW
- provide information and guidance about safety, environmental and other regulatory obligations to protect and support industry, workers, the community and the state
- promote confidence in how the industry is regulated
- make regulation transparent
- engage with and educate both industry and the community about best practice
- support industry to meet its regulatory obligations.



Our regulatory activities are guided by our:

- [strategic approach](#)
- [compliance and enforcement approach](#)

# Compliance priorities

The following issues have been identified as compliance priorities and will be the focus of targeted assessment programs within the Lightning Ridge and White Cliffs opal mining areas from January to December 2022:

- fall from heights / working in shafts
- persons nominated as mine operator for multiple claims
- puddling tank safety
- person riding hoists
- rehabilitation
- mullock and soil management
- waste materials and site management.

## Fall from heights / working in shafts

### Mine Safety Inspectorate

**Period: January – December 2022**

Falls from height are a major cause of serious injuries and fatalities in workplaces across Australia. In October 2020, a miner at Lightning Ridge was fatally injured after a suspected fall from height within a shaft.

A subsequent review of incident data from Lightning Ridge has identified several incidents during the past three years due to falls from height. In one incident, a worker at an opal mine fell 20 metres from a shaft access ladder and landed in a hoist bucket. He suffered a compound fracture to his left femur and both tibias. It took nearly two hours to find the injured worker. In a similar incident, another miner fell 2.5 metres into a mine shaft and broke both ankles. Similarly, it took more than 10 hours to locate him.

The Lightning Ridge area poses its own unique challenges. Despite recurring serious injuries and fatalities, many miners work alone without fully appreciating the risks of falls when working from height, such as accessing mines with the use of ladders.

A compliance program to prevent falls from height incidents at Lightning Ridge will be undertaken, and supported by:

- a fall from height risk management education program, including resources such as printed material and short videos
- a consultation and engagement strategy with key stakeholders at Lightning Ridge and White Cliffs
- a planned assessment program focusing on working safely in and around mine shafts.

## Persons nominated as mine operator for multiple claims

**Mine Safety Inspectorate**

**Period: January - December 2022**

Individuals are currently able to be nominated as the operator of up to four mineral claims at Lightning Ridge. This limit can be increased if the individual can provide evidence that they can safely operate more than four claims. While there is currently no maximum number of claims an individual can nominate to be the operator, we believe that this presents potential safety risks.

Some nominated operators do not live in Lightning Ridge or the surrounding areas. There have been cases where nominated operators do not attend the sites on a regular basis, thereby failing to meet statutory obligations. Many of the claims that operators are nominated for are also spread across multiple Opal Prospecting Areas (OPAs), rather than a single location.

A review of operator records and claim data will be undertaken to consider whether current arrangements are appropriate.

## Puddling tank safety

**Mine Safety Inspectorate**

**Period: July - December 2022**

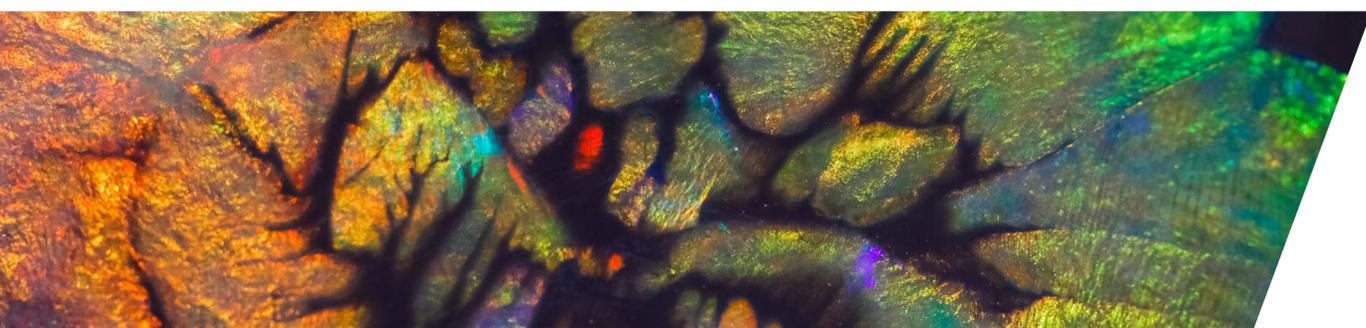
Wet puddling operations at Lightning Ridge typically serve between 10 to 20 individual and distinct mining operations, despite being operated as a single title with one title holder and nominated operator. The activities on these sites are usually conducted by other miners with no supervision from the operator.

A typical puddling site is made up of an agitator that has been removed from a cement truck, often with a heavily modified drive. These sites contain multiple hazards, including those associated with falls from height, entanglement, pedestrian-vehicle interactions and electric shock.

We will conduct a program of targeted assessments that specifically targets puddling operations including:

- guarding of machines and equipment
- safety barriers and fall arrest controls
- traffic controls on site.

Operators will be advised of the upcoming inspection program and information on minimum standards for operating puddling sites.



## Person riding hoists

**Mine Safety Inspectorate**

**Period: April – December 2022**

Person riding hoists (winding systems) are an important item of plant in small gemstone mines. They are considered high risk plant, and if they fail, they have the potential for a fatality.

The safe design, manufacture, maintenance and operation of the person riding hoist plays a critical role in eliminating hazards and risks when a person riding hoist is introduced to a mine.

Inspectors will be inspecting person riding hoists to check that they have been designed, manufactured, installed and maintained safely.

The program will be focusing on both the registration of plant and the safe use and maintenance of the winding system.

## Rehabilitation

**Mining Act Inspectorate**

**Period: January – December 2022**

Rehabilitation is a critical element of NSW mining operations and is principally regulated under the conditions of the relevant mineral claim or opal prospecting licence granted under the *Mining Act 1992*.

Rehabilitation ensures that areas disturbed by prospecting and mining operations are returned to a condition capable of achieving a subsequent land use. Claim holders are required to undertake rehabilitation in accordance with the conditions of the mineral claim or opal prospecting licence and provide evidence that rehabilitation has occurred. This includes:

- a written statement outlining the rehabilitation activities undertaken for all prospecting or mining disturbances
- photographs of all rehabilitation sites.

A program of planned inspections will be undertaken to assess how effectively title holders are complying with their conditions of title for rehabilitating opal mine sites.



## Mullock and soil management

**Mining Act Inspectorate**

**Period: January – December 2022**

Topsoil is a valuable resource in the rehabilitation process. It is important to remove the topsoil prior to commencing mining operations and stockpile it to the side for later re-spread across the completed operation. The use of topsoil allows vegetation to re-establish quickly and so reduces the potential for erosion.

Mullock must be stockpiled separately to topsoil. Mullock must not be spread across the final landform as this has the potential to inhibit vegetation from re-establishing and so may delay the return of the security held by the Department.

A program of planned inspections will be undertaken to assess how effectively title holders are managing mullock stockpiles and soils on their opal mine sites to ensure compliance with the conditions of the mineral claim or opal prospecting licence.

## Waste materials and site management

**Mining Act Inspectorate**

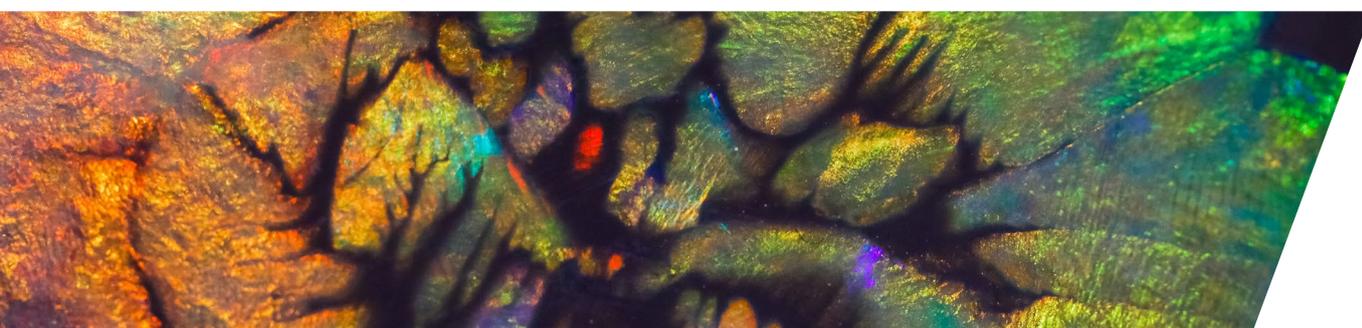
**Period: January – December 2022**

The claim holder must ensure that all wastes (including drilling by-products contaminated by chemicals, contaminated residues, chemicals, oils or fuels) are collected, segregated and securely deposited in properly constructed containers and disposed of at a regulated waste management or recycling facility.

The *Protection of the Environment Operations Act 1997* regulates the disposal of waste. It is illegal to deposit waste, as defined by the Waste Classification Guidelines (EPA, 2014), on land, unless it is an appropriately licensed waste facility, or the material is subject to an exemption issued in relation to the Protection of the Environment Operations (Waste) Regulation 2014.

Claim holders must ensure that the mineral claim or opal prospecting licence is maintained in a proper state of cleanliness at all times. All rubbish, including derelict vehicles and equipment and material that is not used in relation to the approved operations, must be removed. Furthermore, at the completion of prospecting and mining operations, all material, infrastructure, and equipment, must be removed and the land rehabilitated.

A program of planned inspections will be undertaken to assess how effectively title holders are managing waste collection, handling and disposal to ensure compliance with the conditions of the mineral claim or opal prospecting licence.



# Proactive assessment programs

## Mine safety assessment programs

Our planned inspection programs are a structured approach to assessing how effectively a mine operator is complying with their obligations.

They may be announced or unannounced. From January to December 2022, planned inspections within the Lightning Ridge Mineral Claims District will be undertaken in line with our compliance priorities to include the following:

- electrical safety
- surface plant and equipment – including puddling tank installations
- ground or strata failure of underground opal workings
- working safely in and around shafts.

## Mining Act Inspectorate

Our planned inspection programs are a structured approach to assessing how effectively a title holder is complying with their conditions of title.

They may be announced or unannounced.

From January to December 2022, planned inspections within the Lightning Ridge Mineral Claims District will be undertaken in line with our compliance priorities to include the following:

- rehabilitation
- mullock and soil management
- waste materials and site management.

# Reforms and improvement measures

A project is underway to deliver a diverse range of reforms and improvement measures to strengthen the regulation of the opal mining industry.

## Guidance material

A range of guidance material will be prepared including:

- safety guidance for first response personnel, designed to assist personnel:
  - understand reporting requirements for incidents at opal sites
  - have an awareness and understanding of how to manage specific hazards
  - manage the site to preserve essential evidence to conduct an effective investigation
- guidance for industry on the functions, role and responsibilities of the NSW Resources Regulator and the Division of Mining Exploration and Geoscience
- guidance on open cut opal mining
- fall from heights self-assessment checklist and awareness campaign
- guidance on conducting opal prospecting and mining activities to facilitate sustainable rehabilitation outcomes
- updates to the Resources Regulator's website to consolidate all opal mining related information to one dedicated section.

## Training

Development of online interactive modules for components of the opal miner's safety training course and the environmental awareness course.

Policy and legislative amendments will also be considered to expand the requirement to complete the safety course to all workers at opal mines.

## Regulatory policy framework

The review will consider certain policy aspects of the regulatory framework for opal mining including:

- preserved fields
- potential for re-introduction of opal mining board function
- the regulation of ancillary mining activities
- approvals for restricted operations (trenching).

## Investigation priorities

In addition to the priorities identified within this document, the following circumstances or allegations are always priority areas for investigations.

### Work health and safety obligations

- work-related fatalities and serious injuries, or where there are risks of such outcomes
- non-compliance with inspector-issued notices or directions
- offences against inspectors
- discrimination against workers based on their work health and safety activities
- failure to notify incidents.

### Mining Act obligations

- mining/prospecting without authorisation
- failure to rehabilitate the land
- providing false and misleading information
- non-compliance with statutory notices or directions
- offences against inspectors
- non-compliance with mineral claim conditions
- failure to pay rehabilitation security deposits.

We promote voluntary compliance and good practice while applying escalating enforcement action that targets those who demonstrate more serious, repeated or sustained contraventions or other misconduct inconsistent with community expectations and public interest.

All allegations of conduct that fail to meet regulatory obligations reported to, or identified by us, will be assessed to determine what action is taken, including whether we investigate an alleged offence.

Further information can be found in our [Compliance and Enforcement Approach](#).



## Workshops and seminars

One of our key functions is to ensure mine operators and title holders are aware of their obligations and how to meet them. Training workshops and information sessions allow us to engage with the industry and help maximise compliance. Many of our regular events will now be delivered virtually where possible, however face to face forums will remain available. Visit our events calendar on our website for specific dates and locations to our workshops and seminars. These may be subject to change.

### Opal Mining Safety Workshop – Lightning Ridge

The safety awareness course has been combined with the mine operators' workshop. It 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. Individuals wanting to apply for a mineral claim in the Lightning Ridge Mineral Claims District are required to complete this course as part of their application.

We intend to make several modules available online. These modules will be self-paced and interactive.

### Environmental training – Lightning Ridge

Prior to obtaining a mineral claim in Opal Prospecting Area 4 or on the property 'Wyoming', the Environmental Awareness Course must be completed, in addition to the Opal Mining Safety Workshop.

The course gives an overview on how to minimise damage to the environment while conducting exploration and mining activities, and covers many issues including:

- impacts on flora and fauna
- prevention of soil erosion
- subsidence impacts
- mullock management
- Aboriginal or historic sites
- puddling operations.

For your convenience, this course is free and available on demand on our [website](#).

## Reporting and compliance activities outcomes

We have a strong policy of transparency and are committed to communicating publicly about our regulatory activities. Regular reports on our activities are published to:

- ensure a consistent and responsive regulatory approach
- provide increased transparency and confidence in our compliance and enforcement activities.

Reports on compliance activities and programs, targeted assessment programs and compliance auditing can be found on our compliance activities and reports web page. Further information can also be found in our [public comment policy](#).

## Workshops and events calendar

### JANUARY TO DECEMBER 2022

WORKSHOPS AND SEMINARS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Safety training - Lightning Ridge												
Safety training - White Cliffs												
Environment training - Lightning Ridge (available on demand)												



