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# **Compliance priorities**

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (February 2019). However, because of receipt of new information, users are reminded of the need to ensure that information upon which they rely is up to date and to the currency of the information with the appropriate officer of the NSW Department of Planning and Environment.



## **Compliance priorities**

### Purpose

This report sets out our key priorities for the next six months.

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

## Our objectives

We aim to:

VISION

- 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.

A safe and responsible mining extractive and petroleum industry

To enable and support industry to understand and fulfil its obligations

MISSION

Our regulatory activities are guided by our:

- <u>Strategic approach</u>
- Compliance and enforcement approach

## **Compliance priorities**

## WHS reporting obligations

#### Sector: Small mines and explorers

#### Period: 2019

Current, updated and key details reported to the Regulator and relating to a mine site or an exploration licence are an important means by which the Regulator can maintain accurate records. These details are also legislatively required. Up to date intelligence and data keeping helps us to respond quickly and effectively to events as they arise.

WHS reporting obligations begin with the nominated operator. Many smaller or 'newer' operators (including explorers) remain unaware of these obligations. We are committed to ensuring that all operators are informed and sufficiently motivated to be able to provide the relevant details about their mining activities.

A long-term objective is to make sure that appointed mine operators update their details and inform the Regulator as changes occur at their mine. Activities will focus on ensuring that notifications required under the WHS legislation are clearly understood and complied with by duty holders.

The program will include development of resources, communications and information sessions at industry forum and events. This program will run throughout 2019.

# Construction, operation and decommissioning of tailings dams

#### Sector: Coal and metalliferous mining sectors Period: January – May 2019

The program commenced in 2018 with a cross-agency awareness campaign, which involved over 17 targeted site reviews on selected mine sites across NSW focussing on tailings dam management practices.

The construction, operation and decommissioning of tailings dams include key issues that have the potential to affect the sustainable development of the mining industry. There are many cases of tailings dam failures across the world resulting in the escape of tailings materials off site and/or significant landform instability issues. Consequences range from the displacement of downstream communities through to significant injuries and the death of mine workers and the public. Environmental impacts have included the pollution of downstream rivers and land, contamination of groundwater, poisoning of native wildlife through exposure of adverse tailings as well as the generation of dust from exposed tailings material.

Regulatory activities, specifically through the review of mining operations plans and rehabilitation cost estimates developed for mining operations across the state, have identified uncertainties and knowledge gaps in relation to the management of tailings dams. In relation to decommissioning, the processes for the treatment, capping and rehabilitation of tailings dams to ensure that they are rendered safe, stable and non-polluting remain ill-defined across many operations.

To ensure that titleholders and mine operators are aware of their legislative obligations, the next step of the program is to conduct an industry workshop in April involving both the coal and metalliferous

mining sectors. The objective of the workshop will be to clearly set our expectations, identify knowledge gaps as well as share key learnings from the 2018 targeted reviews in order to promote best practice tailings management.

## Falling objects

#### Sector: Metalliferous and large quarry

### Period: January - June 2019

Falling objects have resulted in at least one fatality and one significant injury that could have been fatal at mines in NSW during 2018. There were also several reports of heavy objects falling from structures or being dropped from structures and landing near to where people were working.

The fatality occurred when a tyre fell from a tyre handler and crushed a worker at a coal mine. The significant injury occurred to an experienced supervisor during disassembly of a crane when an unsecured component weighing approximately 40kg was lifted to about 10m in the air on the boom of the crane, where it fell and struck the worker.

Some mines have identified falling or dropped objects as a principal hazard and have management plans in place to control the risk of injury to as low as is reasonably practical. Other mines may not have identified this as a principal hazard but should have other management plans and controls in place to mitigate risk to workers. The use of cranes falls into a similar category and will be assessed by the Regulator in the same way.

Assessments will be undertaken to ensure that effective controls are in place.

### Fires on mobile plant

### Sector: Metalliferous and large quarry

### Period: January - June 2019

Incident data continues to show a high number of fires occurring on mobile plant. An incident occurred in June 2018 where a fire on a truck in an underground metalliferous mine caused all mine workers to go to refuge chambers until they could be safely returned to surface.

A fire or explosion at any workplace can have catastrophic consequences, which may result in serious injuries or the death of workers, as well as creating substantial damage to property and significant business disruption.

A program of site assessments will be undertaken in the metalliferous and large quarry sector to ensure that the risk of fires on mobile plants is being appropriately managed, including a focus on maintenance practices.

## Falls from height

### **Sector: Opal Mines**

### Period: January – June 2019

Falls from height are a major cause of death and serious injury in Australian workplaces. A review of recent incident data from Lightning Ridge has identified an unacceptable number of falls from height incidents.

In one of these incidents, a worker at an opal mine fell 20m 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 worker.

Another worker fell 2.5m into a mine shaft in similar circumstances and broke both ankles. It took more than 10 hours to find him.

The Lightning Ridge area poses its own unique challenges, with many miners working alone without fully appreciating the risks of falls from heights while accessing their mines from ladders.

A compliance program to help eliminate fall from heights incidents at Lightning Ridge will be undertaken including:

- falls from height risk management education program
- consultation with key stakeholders at Lightning Ridge
- exploring the option to implement a safety rebate scheme.

### Supervision at mines

### Sector: All sectors

### Period: January – June 2019

Crucial to the effective maintenance of risk controls and compliance to a mines safety management system are the behaviours and leadership of supervisors. The identification of hazards, the rectification of risk management issues and the willingness and ability to address non-compliant behaviours are fundamental to a supervisor's role.

Recent planned inspections and incident assessments across all sectors have identified an emerging trend around the standard of supervision and its impact on the implementation of key risk controls.

A compliance initiative involving inspectors from all sectors will examine the behaviours and effectiveness of supervisors in dealing with non-compliances to the mines own safety management system. Particular attention will be given to how supervisors manage the implementation of key risk controls, like positive communications.

## **Targeted assessment programs**

The NSW Resources Regulator's safety assessment programs focus on assessing mine operator's control of critical risks and evaluate the effectiveness of control measures in the operator's safety management system. The assessment typically involves sampling specific elements of the safety management system, rather than a holistic, audit-based approach.

For more information visit our website to read the <u>targeted assessment program overview and fact</u> <u>sheets</u>.

## Airborne contaminants

Airborne contaminants are generated during mining activities such as extraction, drilling, crushing, hauling and stockpiling of coal and other rock containing minerals. Workers in coal mines may be exposed to both coal dust and crystalline silica, which, at the respirable fraction, can cause pneumoconiosis (in the case of coal) or silicosis (in the case of crystalline silica). Both conditions are disabling, and often result in fatal lung diseases.

Targeted assessments will continue at coal mines and underground metalliferous mines to ensure that they are employing a range of measures to control the exposure risks of workers.

For more information visit our webpage on airborne contaminants.

### Diesel exhaust emissions

Diesel exhaust emissions contain a range of chemical, gases and diesel particulate matter. The International Agency for Research on Cancer reclassified diesel exhaust emissions as a carcinogen to humans in 2012.

Targeted assessments will be carried out at various underground coal mines focusing on how the mine prevents worker exposure to harmful diesel exhaust emission.

## **Emergency planning**

Operators of mine or petroleum sites have a duty to prepare an emergency plan that addresses all aspects of the emergency response under WHS laws. From 1 February 2017, operators must also comply with the emergency management provisions of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014.

Targeted assessments will continue to be carried out at various mine sites to ensure that workplaces have effective emergency management arrangements in place in the event of an emergency and that they have implemented an emergency plan.

For more information, see our <u>Emergency planning</u> and <u>Mine emergency planning consultation</u> fact sheets.

## Fatigue

Fatigue can be a significant hazard in the mining industry due to the 24-hour nature of mining operations and long working shifts. The management of fatigue at mines will be the subject of targeted assessments that will focus on how worker exposure to fatigue is prevented. Key areas that will be assessed are site processes for identification, assessment and development of risk controls for fatigue and associated risks including preventative and mitigating controls, monitoring for worker exposure and verifying the effectiveness of controls.

Targeted assessments will continue in underground coal mines focusing on how worker exposure to fatigue is prevented. It is intended that this program move to the metalliferous sector later in 2019.

For more information visit our webpage on <u>fatigue</u>.

### Fire and explosion

A fire or explosion at any workplace can have catastrophic consequences, which may result in serious injuries or the death of workers, as well as creating substantial damage to property and significant business disruption. History has shown that mine and petroleum sites are not immune to the realisation of this risk and applicable legislation has identified fire or explosion as a principal hazard, which must be addressed.

Targeted assessments are currently being carried out at underground coal and metalliferous mines to ensure that workplaces are fulfilling their statutory obligations with respect to the identification of fire or explosion hazards and the identification and implementation of risk control measures to prevent or mitigate those risks.

For more information visit our webpage on the prevention of underground fires.

## **Planned inspection program**

Our planned inspection program is a considered approach to assessing how effectively a mine or petroleum site is controlling risks associated with the operation's principal hazard management plans and principal control plans. Planned inspections are based on industry and sector risk profiles, may be announced or unannounced and may occur on back shifts. Planned inspections will be carried out on the following:

### **Small mines**

- inspections of underground opal workings roof support, ground control and surface equipment
- hazards air quality or dust or other airborne contaminants, electricity (electrocution), fire and explosion

### **Underground metal mines**

- confines spaces
- working at height
- inundation or inrush of any substance
- roads or other vehicle operating areas

### **Surface metal mines**

- confines spaces
- working at height
- inundation or inrush of any substance
- roads or other vehicle operating areas

### **Processing plants**

- air quality, dust or other airborne contaminants
- electricity (electrocution)
- fire or explosion
- confined space
- working at heights
- gas outburst (pressure vessels)
- inundation or inrush of any substance

### **Underground coal mines**

- air quality, dust or other airborne contaminants
- fire
- explosion
- electricity (electrocution)
- inundation or inrush of any substance
- roads or other vehicle operating areas

### **Surface coal mines**

- air quality, dust or other airborne contaminants
- roads or other vehicle operating areas
- fire or explosion
- electricity (electrocution)
- ground or strata failure

### **Petroleum sites**

- verification of compliance with decommissioning plans and well-workover plans (HRAs)
- health and safety risks at legacy well sites.

## **Compliance audits**

Our audit program is a planned approach to assessing compliance against selected requirements of the Mining Act or WHS legislation. In addition, compliance audits assess the operational performance of mining operations and the ability of operators to implement management systems and controls to provide for sustainable and safe management of the 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 facilitate the development of the audit program. The audit program will focus on:

- rehabilitation progress on mine sites
- exploration drilling and compliance with exploration activity approvals
- general dip sampling cross sections of each sector.

## **Investigation priorities**

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

## Work health and safety obligations<sup>1</sup>

- work-related fatalities and serious injuries or where there is a risk of such outcomes
- non-compliance with inspectors' notices or directions
- offences against inspectors
- offences against health and safety representatives and matters relating to entry permit holders
- discrimination against workers on the basis of their work health and safety activities
- failure to notify incidents

### Mining Act obligations

- failure to pay rehabilitation security deposits
- failure to rehabilitate land
- false and misleading information
- non-compliance with inspectors' notices or directions
- offences against inspectors
- non-compliance with title conditions

<sup>&</sup>lt;sup>1</sup> As identified in the Safe Work Australia – National Compliance and Enforcement Policy

## **Workshops and seminars**

A key role of the NSW Resources Regulator is to ensure all operators and title holders are aware of their obligations and how to meet them. Training workshops and information sessions are used as a valuable way to engage with industry and help to maximise their compliance.

Visit our <u>events calendar</u> for specific dates and locations of workshops and seminars as they may be subject to change.

## Mine Safety Awareness course

### February, March, April and June

This course covers general safety in mining. 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.

## Mine Safety and Health Representative training

### February

Accredited by the Regulator under section 45 of the Work Health and Safety (Mines and Petroleum Sites) Act 2013, this course is a key deliverable for enabling coal mine safety and health representatives to fulfil the functions for which they are elected at their mine site. It focuses on the role, functions and powers of the safety and health representative at coal mines.

## Mine Operators' workshop

### February, March, May and June

This course 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.

## Southern Region Electrical Engineers' meeting

### **February and May**

This is a meeting of electrical engineers from coal, metalliferous and extractive mines with inspectors of electrical engineering to review emerging issues and trends in the application of electrical engineering in coal, metalliferous and extractive mines. Includes review of recent incidents, site experiences in managing safety and discussions on improving electrical safety.

## Hunter Region Electrical Engineers' meeting

### **February and May**

The meeting of electrical engineers from coal and extractive mines and the NSW Resources Regulator's electrical engineering inspectors of electrical engineering will review emerging issues and trends in the application of electrical engineering in coal and extractive mines. The meet also includes a review of recent incidents, site experiences in managing safety and discussions on improving electrical safety.

## Tailings Management workshop

### April

The one-day workshop with industry and other regulators will discuss the best practice methodologies of Tailings Storage Facilities (TSF) management. The day will involve presentations by a TSF research expert, discussions of identified risks and knowledge gaps associated with TSF management to help inform the development of specific strategies to address these issues.

## Mechanical Engineering Managers' meeting

### April

This meeting is held with mechanical engineers at underground coal mines who hold the statutory position of 'mechanical engineering manager'. The meeting is organised and run by the Regulator to discuss topical issues, give updates on guidelines and standards, discuss published safety alerts, bulletins, investigation releases and discuss relevant notifiable incidents for the previous six months. The meeting is also an essential part of the CPD requirements for statutory engineers.

## Mechanical Engineers' meeting

### April

This meeting is held with mechanical engineers from open cut coal mines and coal processing facilities, who hold the statutory position of 'mechanical engineer'. The meeting will discuss topical issues, give updates on guidelines and standards, discuss published safety alerts, bulletins, investigation releases and discuss relevant notifiable incidents for the previous six months. The meeting is an essential part of the CPD requirements for statutory engineers.

## Metalliferous Industry Safety Advisory Committee (now re-badged as Metalliferous Industry Safety and Health Engagement Forum)

### **May and November**

The Metalliferous Industry Safety Advisory Committee (MISAC) was established by the regulator to share information and provide advice on safety issues within the metalliferous mining sector. Its name has been a mis-nomer as it does not have any mandate to provide advice, and in consultation with the Chief Inspector and others, it has been re-badged as the Metalliferous Industry Safety and Health Engagement Forum (MISHEF). This forum is attended by representatives from industry and the regulator and meets biannually.

## Metex Mine Emergency Response Team Working Group

### May

Held in Dubbo, the Metalliferous Emergency Response Team members meet twice a year to collaborate on emergency planning and response capability matters. The working group is made up of emergency response managers from the major metalliferous mines in NSW. The meetings provide an engagement platform for speakers from emergency services and other stakeholder groups, discussion on emergency planning topics and the sharing of key learning information from incidents across NSW.

## Western Region Electrical Engineers' meeting

#### May

This is a meeting of electrical engineers from metalliferous and extractive mines with inspectors of electrical engineering to review emerging issues and trends in the application of electrical engineering in metalliferous and extractive mines. It includes a review of recent incidents, site experiences in managing safety and discussions on improving electrical safety.

## Electrical Safety and Health Representatives (SHR) meeting

#### June

This is a meeting with electrical SHR representatives. The scope of the meeting includes reviewing latest legislation updates, training for the SHRs in mine safety issues, and discussing current and emerging issues in the use of electricity in mines.

# Standardised Subsidence Information Management System workshop

### June

This workshop is an introduction to the finalised Standardised Subsidence Information Management System (SSIMS), developed by the NSW Resources Regulator's Subsidence Engineering team under ACARP Project C20038. The workshop will cover new learnings in the area of subsidence engineering and risk management, as well the functionality of the completed system including additional capabilities for the industry in terms of managing risk to ensure compliance.

## **Reporting compliance activities and outcomes**

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

- ensure a consistent and responsive regulatory approach and
- 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 <u>Compliance activities and reports web page</u>. Further information can also be found in our <u>Public comment policy</u>.



## Compliance activities calendar January - June 2019

COMPLIANCE PRIORITIES	SECTOR	JAN	FEB	MAR	APR	MAY	JUN
Tailing dams	Coal and metalliferous						
Supervision at mines	All						
Falling objects	Metalliferous and large quarry						
Compliance Program – WHS reporting	Small mines and explorers						
Small mines – Falls from height	Opal mines						
Fires on mobile plant	Metalliferous and large quarry						

TARGETED ASSESSMENTS	SECTOR	JAN	FEB	MAR	APR	MAY	JUN
Emergency planning	Underground coal						
Emergency planning	Metalliferous						
Diesel exhaust emissions	Underground coal						
Fatigue	Surface coal						
Explosion Suppression	Underground coal						
Airborne contaminants	Surface coal						
Fire and explosion	Underground coal						
Fire and explosion	Underground metalliferous						

WORKSHOPS AND SEMINARS	SECTOR	JAN	FEB	MAR	APR	MAY	JUN
Tailings Management Workshop	Coal and metalliferous						
Mine safety awareness course	Opal mines						
Mine Operators workshop	Opal mines						
Metalliferous Industry Safety and Health Engagement forum	Metalliferous mines						
Southern Region Electrical Engineers meeting	All						
Hunter Region Electrical Engineers meeting	All						
Western Region Electrical Engineers meeting	All						
Electrical SHR meeting	Coal mines						
Mechanical Engineering Managers meeting	Underground coal						
Mechanical engineers meeting	Open cut coal						
Metex Mine Emergency Response Team working group	Metalliferous						
Standardised Subsidence IMS workshop	All						
Mine Safety and Health Rep Training	Coal						

