NSW Resources Regulator

Annual business activity report

2017 - 2018





ABOUT THIS REPORT

This report presents information about the Resources Regulator's activities for the 12 months ending June 2018. The report focusses on compliance activities under both the *Mining Act 1992* and WHS legislation. The data was extracted from the regulator's database on 15 July 2018.

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (July 2018). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the NSW Department of Planning and Environment or the user's independent advisor.



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About us

The NSW Resources Regulator was created on 1 July 2016 as a standalone regulator responsible for compliance and enforcement functions across NSW's mining sector.

The primary focus of the NSW Resources Regulator is on compliance activities within the NSW mining sector including:

- > compliance with the *Mining Act 1992*, including mine rehabilitation obligations
- > regulating safety and health performance at NSW mines and petroleum sites.

The creation of the NSW Resources Regulator was designed to ensure a consistent and responsive regulatory approach and provide increased transparency and community confidence.

In administering its functions, the regulator undertakes various regulatory activities such as:

- receiving and considering complaints, safety incident 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.

Further information on the regulator is contained in our strategic approach.

The information contained in this report is part of the regulator's ongoing commitment to provide regular reports on its activities in order to:

- > ensure a consistent and responsive regulatory approach
- > to provide increased transparency and confidence in its compliance and enforcement activities
- > promote voluntary compliance by industry.

A safe and responsible mining extractive and petroleum industry

To enable and support industry to understand and fulfil its obligations

Coal mines

Opencut, underground and coal preparation plants

Large mines

METALLIFEROUS AND QUARRIES

Quarries that produce >900,000 tonnes pa and large opencut or underground metalliferous mines

NSW Resources Regulator

SECTOR REPORTING

Small mines

METALLIFEROUS, QUARRIES AND OTHER GEMSTONES

Quarries and other mine types (e.g. sand, clay, lime) that produce <900,000 tonnes pa, opencut or underground metalliferous mines and gemstone mines

Petroleum and Geothermal

Onshore petroleum and geothermal productions and exploration sites

Opal Mines

Opal mines at Lightning Ridge and White Cliffs

Exploration

Exploration sites (excluding petroleum)

Non-mine

Includes many manufacturers (including OEMs), suppliers, designers, importers, licence holders and registration holders

Snapshot of activities

Below is a snapshot of the NSW Resources Regulator's activities for the 2017 - 18 year:

ISSUED

1,385

SAFETY NOTICES **RECEIVED**

1,937

SAFETY INCIDENT NOTIFICATIONS

CONDUCTED

352

ENVIRONMENTAL INSPECTIONS

CONDUCTED

7

TARGETED INTERVENTIONS

CONDUCTED

3,955

SITE AND DESKTOP ASSESSMENTS CONDUCTED

22

MAJOR SAFETY INVESTIGATIONS

CONDUCTED

61

TARGETED ASSESSMENTS

COMMENCED

8

PROSECUTIONS

Mining Act 1992 and Work Health and Safety Act 201 **FINALISED**

9

PROSECUTIONS

Mining Act 1992 and

ACCEPTED

8

ENFORCEABLE UNDERTAKINGS

Mining Act 1992 and Work Health and Safety Act 201

LODGED

798

MINING ACT NON-COMPLIANCES

ISSUED

114

MINING ACT PENALTY NOTICES

CONDUCTED

147

MINING ACT INVESTIGATIONS

CANCELLED

4

MINING ACT TITLES



Regulatory activities

SAFETY TARGETED ASSESSMENT PROGRAMS

Targeted Assessment Programs (TAPs) take a planned and 'targeted' approach to assessing the efficacy of a mining operation when it comes to controlling its most significant risks – or principal hazards. Each TAP is conducted by a team of inspectors from a variety of disciplines, such as mining, electrical and mechanical engineering, liaising closely with the mine's management team and communicating assessment outcomes.

TABLE 1. TARGETED ASSESSMENT PROGRAM 2017-18

TARGETED ASSESSMENT PROGRAM	NUMBER CONDUCTED 2017-2018
Ground or strata failure	1
Air quality - diesel exhaust emissions	11
Air quality – airborne contaminants (dust)	3
Air quality - airborne contaminants	15
Fire or explosion	8
Explosion suppression	10
Fatigue	8
Emergency management	5
Total	61

SAFETY TARGETED INTERVENTION PROGRAMS

Targeted Intervention Programs (TIPs) are a key component of the regulator's compliance and enforcement strategy. The purpose of the TIP is to maximise voluntary compliance to prevent multiplefatality and single fatality events and serious injury. TIPs are conducted in response to identified safety issues.

TABLE 2. TARGETED INTERVENTIONS 2017–18

TARGETED INTERVENTION PROGRAM	MINES
	Appin
Gas Outburst in longwall mining	Metropolitan
	Tahmoor
Gas exceedance	Mandalong
Subsidence	Metropolitan Colliery
Winders, shafts and processing plant – elevated work	Perilya
Rib failure intervention	Springvale
Total	7



Spotlight: Outburst risks in longwall mining

During July and August 2017, the regulator conducted a TIP involving mines in the southern coal fields.

The need for the intervention was first identified when the regulator investigated the two outburst incidents at Metropolitan Colliery in 2016-17. In the second incident, a large volume of carbon dioxide was released which was accompanied by a violent ejection of a substantial amount of coal from the longwall.

The regulator's assessment found that, while mines understood the phenomenon of gas outburst, their controls were based on systems and procedures effective for development drivage and these are not effective for longwall extraction.

The TIP found that:

- > methods of assessing outburst propensity in the presence of longwall structures relied on competency of mine personnel rather than a formal risk based assessment and
- > mines demonstrated that detailed analyses of structures and drainage anomalies were conducted, the process was not always systematically documented in the outburst principal hazard management plan.

Generally, findings highlighted the need for mining operations to document reviews and verification of safety management system critical controls.

Specific findings emphasise skill requirements of critical decision makers, structural geology risk assessment, design of infill drilling and remote-control exclusion zones in the longwall.

Download the TIP consolidated report - Gas outburst risks in longwall mining here.





SAFETY ASSESSMENTS

Safety assessments are undertaken by the regulator as part of the risk-based regulation of health and safety in the mining industry and include both desktop and site activities.

The regulator's <u>Incident Prevention Strategy</u> shifts the focus of its compliance activity from incident investigation (reactive) to preventing incidents through planned, risk-based interventions (preventative).

Reactive safety assessments are related to an incident. Preventative activities comprise all other types of inspections and assessment activities including high risk activity's, exploration approvals, authorisations,

program activities for targeted assessments, planned inspections and targeted interventions.

Site assessments include activities related to targeted and planned assessments, targeted interventions and incident investigations. Desk-top only assessments include reviews of mine 'control measures' following an incident and reviews of high risk activity notifications, exemptions and authorisations.

The graphs below provide a breakdown of assessment activities by type, by nature and by industry sector.

FIGURE 1. SAFETY ASSESSMENTS ACTIVITIES FIGURE 2. SAFETY ASSESSMENT ACTIVITIES CONDUCTED BY TYPE 2017 - 18 **CONDUCTED BY NATURE 2017-18** Reactive 1,214 (31%) Site Desktop Preventative Assessments Assessments 2.741 (69%) 1,531 (39%) 2,424 (61%) Desktop Assessments ■ Preventative ■ Site Assessments Reactive

FIGURE 3. SAFETY ASSESSMENT ACTIVITIES CONDUCTED BY SECTOR 2017-18

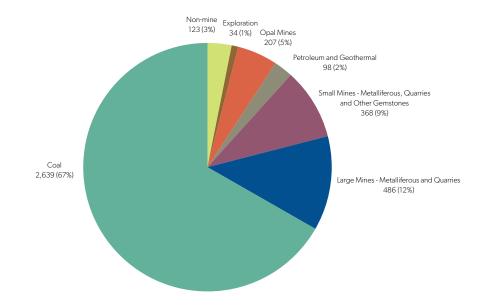


FIGURE 4. SAFETY ASSESSMENT ACTIVITIES CONDUCTED BY MONTH AND TYPE 2017-18

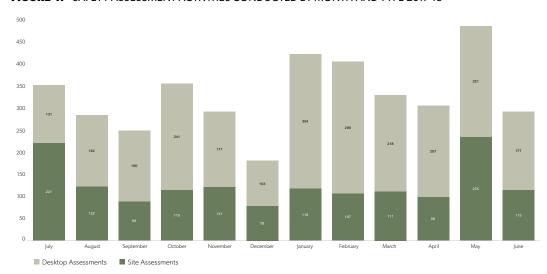


FIGURE 5. SAFETY ASSESSMENT ACTIVITIES CONDUCTED BY MONTH AND NATURE 2017-18

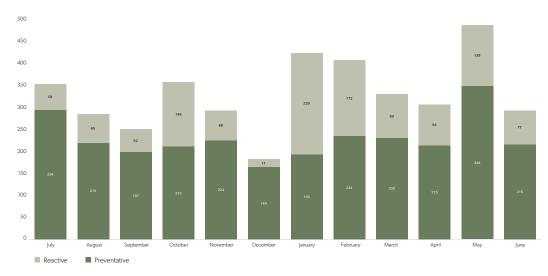
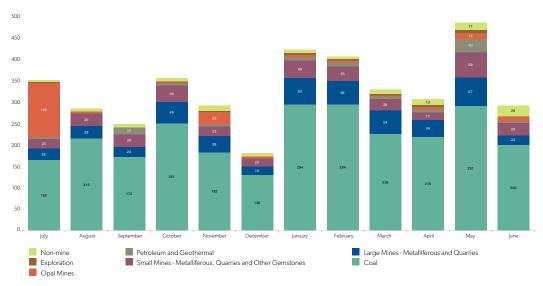


FIGURE 6. SAFETY ASSESSMENT ACTIVITIES CONDUCTED BY MONTH AND SECTOR 2017-18





Spotlight: High visibility compliance operation

In late May 2018, the regulator undertook a high visibility compliance operation across all mining and petroleum sectors. Over the week, 80 inspectors and regulatory officers visited 109 mine and petroleum sites.

The operation focussed on four main areas of current concern:

- > roads and vehicles operating areas at large surface mines and underground metalliferous mines
- > ground and strata failure in all underground mines
- > safe operation of mobile plant at quarrying operations and
- > rehabilitation and dam monitoring.

Compliance issues, mostly related to plant and equipment, were identified on a small number of sites. In total, 28 prohibition notices were issued across 12 sites. In addition, 35 improvement notices and 33 notices of concern were issued for breaches under the work, health and safety requirements. A further eight issues were identified for further investigation under the *Mining Act* 1992.

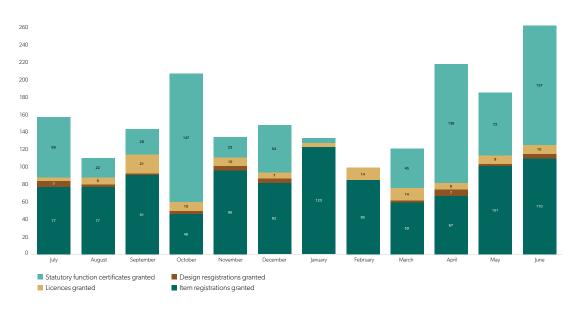
Download the State-wide compliance operation report (May - June 2018) here.

SAFETY CERTIFICATION AND LICENSING ACTIVITIES

The regulator plays a role in licensing equipment used at NSW mines and administering competency certification for workers within the sector. These functions ensure that fit-for-purpose plant and equipment is used in

mining workplaces and that persons fulfilling statutory roles at these sites meet the mandated level of competence under the Work Health and Safety (Mining and Petroleum Site) Act 2013.

FIGURE 7. SAFETY CERTIFICATION AND LICENSING ACTIVITIES BY MONTH 2017-18



SAFETY HIGH RISK ACTIVITY NOTIFICATIONS AND EXEMPTIONS

High Risk Activity Notifications (HRAs) are notifications to the regulator made under clause 33 of the Work Health Safety (Mines and Petroleum Sites) Regulation 2014. These notifications cover mining or extraction activities that are known to present a significant health and safety risk.

35 30 25 20 4 22 4 22 4 2 4 2 2 4 2 4 2 2 4 2

FIGURE 8. HIGH RISK ACTIVITY NOTIFICATIONS RECEIVED BY MONTH AND TYPE 2017-18

 $Mine\ operators\ can\ apply\ for\ exemptions\ from\ provisions\ of\ the\ regulations\ under\ clause\ 684\ of\ the\ Work\ Health\ and\ Safety\ Regulation\ 2011.$

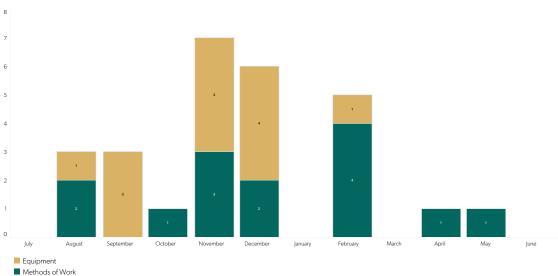


FIGURE 9. EXEMPTIONS GRANTED BY MONTH AND TYPE 2017-18



Spotlight: Causal investigation – catastrophic diesel engine failure in an underground coal mine

On 4 July 2017, there was a catastrophic failure of a Caterpillar 3126 DITA engine in a front end loader operating in the main intake airway at Wongawilli Colliery. The failure created an ignition source which had the potential to cause an explosion of methane.

The regulator initiated a causal investigation as incidents of this type and magnitude are rare. Within a short time-frame, the regulator was able to establish the cause of the engine failure. Findings were disseminated to industry. The investigation team included representatives from WesTrac, Delta SBD, Wongawilli and the regulator.

The investigation found that the likely cause of the catastrophic failure was lack of oil quality or quantity (marginal lubrication) at No. 6 big end bearing.

Key learnings for mine operators or workers in control of explosion-protected diesel engine systems include ensuring that:

- > maintenance, inspection and testing is carried out in accordance with the vehicle and engine manufacturers' recommendation and
- > thorough inspection and testing is undertaken before plant is commissioned.

Download the <u>Wongawilli Colliery causal</u> <u>investigation report</u> here.



Spotlight: Causal investigation – unintended movement of underground conveyor puts workers at risk

On 29 August 2017, while undertaking a conveyor belt extension, a flexible conveyor train at the Ulan West underground coal mine moved unexpectedly. This movement was due to an unrelated incident which caused power loss to the conveyor head, winch and dynamic move up (DMU). Seven workers suffered minor injuries.

Preliminary investigation indicated that a causal investigation was appropriate. This enabled quick and full understanding of the causes of the incident to be communicated to industry. The investigation team included representatives from Ulan West Operations, Glencore Coal Assets Australia, Joy Global, the CFMEU and the regulator.

Investigation findings highlighted the importance of the design and design review process. Mechanical design enabled the DMU advancing cylinders to develop sufficient force to break the boot end frame from the DMU if not controlled. Under-estimation of the consequences of the over-tension was a causal factor in the incident.

It was also identified that high level manufacturer's passwords needed for changing safety critical parameters of the conveyor had been inappropriately shared with workers at the mine.

Finally, the investigation found that changes to safe work procedures had not been communicated to workers.

Download the <u>Ulan West Operations causal</u> <u>investigation report</u> here.

MINING ACT 1992 NON-COMPLIANCE EVENTS COMMENCED

The regulator is responsible for investigating non-compliance with the *Mining Act 1992* as well as carrying out compliance and enforcement actions under the Act.

TABLE 3. NON-COMPLIANCE EVENTS LODGED 2017-18

ALLEGED NON-COMPLIANCE BY TYPE	NUMBER
Failure to comply with conditions of authority	245
Failure to comply with direction(s) - Mining Act 1992	16
Failure to make payment – rent and levy	284
Failure to make payment – royalty and security	5
Failure to submit report - mining and environmental	49
Failure to submit report - exploration / geological	142
Fit and Proper Person	6
Illegal mining / fossicking / prospecting	28
Provision of false and misleading information	23
Total	798







Spotlight: Cancellation of mining licences

During 2017-18 financial year, the regulator took strong and decisive action when title holders have been found operating outside their legislative obligations under the *Mining Act 1992*.

In August 2017, three mining leases held by Far Western Stone Quarries were cancelled due to failure to pay environmental security deposits, rents and levies and failure to supply annual environmental reports. In January 2018, a mining lease in the Northern Rivers area was cancelled after an investigation identified 16 non-compliances. The breaches ranged from failure to provide mining operations plans to failure to rehabilitate the site.

Environmental rehabilitation security deposits and requirements for progressive rehabilitation during

the life of a mine are a critical part of the regulatory framework which ensures a viable and sustainable mining industry in NSW.

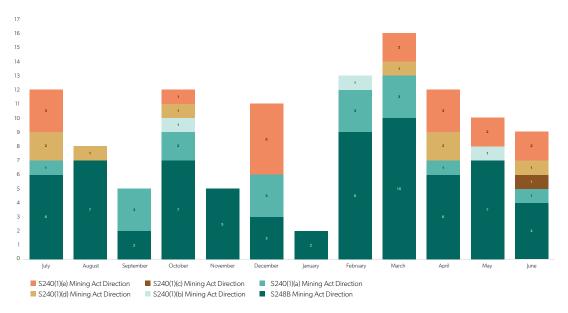
Cancellation of licences is the final enforcement action available to the regulator. In all cases, before this action is taken, the regulator attempts to secure compliance with legislative obligations by other means such as cautions, directions and other penalties.

Despite any licence cancellations, titleholders remain subject to ongoing site rehabilitation responsibilities. If rehabilitation obligations remain unfulfilled, the regulator may take further action including commencement of legal proceedings.

MINING ACT DIRECTIONS ISSUED

Under the *Mining Act 1992*, the regulator may issue a range of directions to authorisation holders or others who may breach any provision of the Act. The graph below shows the directions issued under the Act by the regulator.

FIGURE 10. DIRECTIONS ISSUED UNDER THE MINING ACT 1992 2017-18



Note:

- s.240A Prohibition notice
- s.240AA Direction to suspend operations
- 240(1)(a) Direction to give effect to condition
- s.240(1)(b) Direction to address adverse impact
- s. 240(1)(c) Direction to address risk of there being such an impact
- s.240(1)(d) Direction to conserve or protect the environment
- s.240(1)(e) Direction to rehabilitate
- s.248B Provide information and records.

MINING ACT AUDITS UNDERTAKEN

As part of its standard audit program under the *Mining Act 1992*, the regulator carried out Mining and Exploration audits. Mining audits assessed authorisation holders' compliance with both the *Mining Act 1992* and mining lease conditions. Exploration audits assessed operator's compliance with the requirements listed in exploration licences and other approved activities.

In 2017-18, the regulator's targeted audit program included Water Catchment Special Areas and Tailings

Management audits. The joint Water Catchment audits were undertaken with Water NSW and the NSW Environment Protection Agency. The audits assessed management of hazardous substances within mining areas located in the catchment. Any opportunities for rehabilitation of redundant infrastructure were also identified. The Tailings Management audits assessed operational management of Tailings Dams.

FIGURE 11. AUDITS CONDUCTED UNDER THE MINING ACT 1992 2017-18



Notifications

SAFETY INCIDENT NOTIFICATIONS RECEIVED

Under the Work Health and Safety (Mines and Petroleum Sites) Act 2013, mine operators are required to notify the regulator about the occurrence of certain types of safety incidents. These notifications include incidents which result in fatalities and serious injuries, dangerous and high potential incidents with or without an injury and high potential incidents resulting in more than seven days lost time or restricted duties.

When a notification is received, the regulator triages each one based on the nature of the incident and level of harm resulting from the incident. This triage classification is used to prioritise the regulator's response to each notification.

Critical and severe incidents are those which require an urgent response in that they pose (or may have posed) a serious risk to the health or safety of workers or other persons protected under the WHS framework. After initially classifying notified incidents, each is further assessed and investigation levels are assigned.

Graphs below show incident notifications by classification and sector. The table below lists significant safety incidents of note that occurred in 2017-18.

TABLE 4. INCIDENT RESPONSE CLASSIFICATION

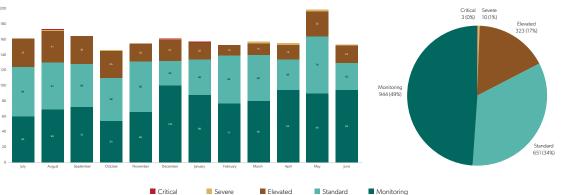
CLASSIFICATION	DESCRIPTION
Critical	An incident that results in a death or where a person may die from their injuries.
Severe	An incident that results in a serious injury or illness.
Elevated	A dangerous incident that exposes a person to serious risk to health and safety.
Standard	A non-notifiable medical treatment injury or high potential incident that would have been dangerous if a person were in the vicinity at the time.
Monitoring	A high potential incident that does not pose an imminent risk to health and safety and no injury occurs and there are no aggravating factors.

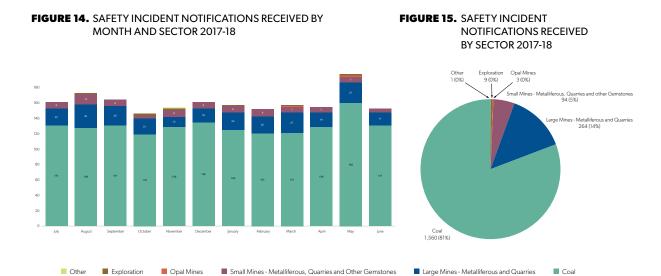
FIGURE 12. SAFETY INCIDENT NOTIFICATIONS RECEIVED BY MONTH AND CLASSIFICATION 2017-18

FIGURE 13. SAFETY INCIDENT

NOTIFICATIONS RECEIVED

BY CLASSIFICATION 2017-18





These are safety incident notifications that were either originally triaged as critical and severe or were incidents that were further investigated by the regulator.

TABLE 5. SIGNIFICANT SAFETY INCIDENT NOTIFICATIONS 2017-18

DATE	LOCATION	INCIDENT DETAILS
23 Jun 2018	Tritton Copper Mine	A haul truck caught fire in the decline of an underground mine blocking egress. All 28 workers were directed to refuge chambers and remained there for up to 10 hours. Once the fire was extinguished, all workers were evacuated from the mine. No injuries were reported. See the <u>Safety Alert</u> for more details.
28 May 2018	Appin Underground Coal Mine	A reported coal burst event occurred at approximately 12:30pm and workers near the burst were peppered with coal and covered in dust but there were no injuries reported. A ban was issued and the operator was prohibited from mining in the roadway at the development panel where the event occurred.
11 May 2018	MC57615 Mehi 3 Lightning Ridge	One person fell approximately 14 metres down a shaft of an opal mine contacting the hoist bucket. The person was rescued by the SES and was hospitalised with broken legs.
21 Apr 2018	Maules Creek Griffith	A haul truck and service truck collided at an intersection at the mine. A truck operator was injured and transported to hospital. See the Investigation information release for more details.

DATE	LOCATION	INCIDENT DETAILS
2 Apr 2018	Werris Creek No. 2 Coal Mine	An articulated water cart rolled onto its side crushing the cabin and trapping the driver in a confined space. The driver suffered bruising and lacerations. See the <u>Investigation information release</u> for more details.
16 Mar 2018	Austar Coal mine	Austar had a series of coal burst since August 2016. In one incident in August 2016, two workers were knocked over and five workers were put at risk. In February 2018, about 50 tonnes were ejected injuring one worker and putting other face workers at risk. Some of the workers were hit by debris. Over 75 instances of coal burst and bumps were noted since January 2018. Multiple s195 prohibition notices were issued by the regulator. More details are available on our website.
9 Mar 2018	Cadia East Project	A section of the North Tailing Dam slumped and as a result tailings were released into the South Tailings Dam. It is understood that the release was contained by the South Tailings Dam. Inspectors from the Resources Regulator were onsite monitoring the situation and working closely with other agencies, including NSW State Emergency Service, NSW Police and the Dam Safety Committee.
23 Jan 2018	Chain Valley Colliery	A frictional ignition of methane occurred at an underground coal mine in which a continuous miner intersected a projected structure during production in a development panel. The fire was eventually extinguished using a fire extinguisher. No workers were injured. See the Investigation information release for more details.
17 Jan 18	Glendell Open Cut	A fatality occurred at the mine when a worker was driving an articulated dump truck as part of rehabilitation activities at the mine. After being loaded with topsoil, the dump truck was seen to veer off the haul road and come to a stop about 250 metres away. The driver was found unresponsive and died despite resuscitation efforts of co-workers and ambulance officers. See the Investigation information release for more details.
29 Aug 2017	Ulan West Operations	An unintended movement of conveyer boot end unit injured seven workers. One worker lost consciousness and was transported to hospital. Another worker reported abdominal pain. The mine notified the emergency services and preserved the scene. See the Investigation information release and the Causal investigation report for more details.

DATE	LOCATION	INCIDENT DETAILS
10 Aug 2017	Mt Arthur Coal Pty Ltd	A contract worker sustained serious burns to face and body while refuelling a diesel powered tyre handler at the mine's heavy vehicle refuelling bay. It was identified that the fuel splash filler nozzle was not suitable. The worker was hospitalised and the fuel bay sustained significant damage. See the Investigation Information Release for more details.
4 July 2017	Wongawilli Colliery	A catastrophic failure of a diesel engine system occurred, resulting in hot internal reciprocating components being ejected through the engine block and exposing them to the mine atmosphere, creating a potential ignition source. No person was injured as a result of the incident and the regulator conducted a <u>Causal investigation</u> .



// NOTIFICATIONS



Spotlight: Landmark proceedings deliver first Category 1 offence in NSW

In February 2018, Cudal Lime Products Pty Ltd (CLP) was convicted and fined \$900,000 for reckless contravention of obligations under the Work Health and Safety Act 2011 resulting in the death of a local resident.

The landmark proceedings, brought by the NSW Resources Regulator, were the first to prosecute a Category 1 offence in NSW under the Work Health and Safety Act 2011.

The defendant, CLP, operated the Cudal Lime Quarry, an open-cut limestone quarry located in the Central West region of NSW.

On 27 August 2014, an occupant of a nearby cottage, was fatally electrocuted when they came into contact with a metallic flexible shower hose while standing in the shower recess. Investigations revealed that the metallic fixtures of the cottage (including the pipework and taps) had become dangerously electrified due to a fault in the low

voltage system of the mine which transferred to the cottage via the shared cable supply.

The incident was caused by non-compliant electrical work combined with the absence of critical electrical safety devices and damaged electrical plant and equipment. The mine had a history of electrical issues and, despite the mine safety plan requiring electrical work to be undertaken by a qualified electrician or electrical engineer, it was found that work on the mine's main switchboard had been undertaken by an unqualified employee of the mine.

In handing down the decision, the judge said:

"The direction of an unqualified person to install the switchboard to save costs was an act devoid of social utility, so that the foresight of the possibility of the risk of serious injury or death arising was sufficient to constitute recklessness."

RESOURCES REGULATOR TELEPHONE MENU

00 814

OTHER ENQUIRIES

For all other enquiries, PRESS 2

(8.30AM - 4.30PM MON - FRI

AUTHORISATIONS

For all enquiries relating to authorisations, including plant registration, licences and exemptions, PRESS 2

COMPETENCE

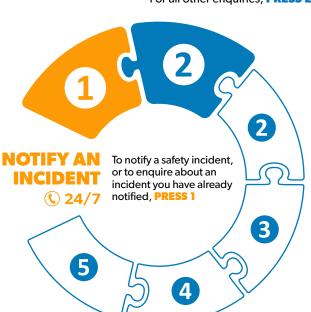
For all enquiries relating to competencies, including certificates of competence, practising certificates, mutual recognition and blasting explosives users licences, PRESS 3

MINE SAFETY GENERAL

For all other enquiries relating to work health and safety in mining, including guidance, high risk activity notifications, other notifications and seminars and events, PRESS 4

COMPLIANCE OPERATIONS

For all enquiries relating to the Mining Act or Petroleum (Onshore) Act, including reporting a potential non-compliance, conditions of authorisation, exploration activity approvals, reporting obligations and any other environmental, rehabilitation or compliance matter, PRESS 5





Spotlight: Gas exceedance incidents

Controlling methane gas levels to as low as reasonably practicable is one of the key controls to prevent explosions in underground coal mines. During the 2017-18 financial year there were 67 gas exceedance events comprising 126 individual exceedance occurrences. Just over 80 percent of these occurred in the first two quarters of the financial year.

In total, four section 195 notices under the *Work Health and Safety Act 2011* were issued to four mines during September and October 2017. The notices prohibited re-entry of persons to underground areas except to undertake required works and inspections to make the areas safe.

Circumstances leading to the prohibition notices included:

- > workers not being withdrawn according to the Trigger Action Response Plan following unreported damage to a gas drainage range
- > poor scheduling of concurrent work on main/booster fans and gas drainage compromising critical controls
- > failure to respond to an escalating situation where an accumulation of water blocked ventilation and
- > failure to manage gas push due to a goaf fall.

In two of these incidents, the behaviour and decisions of supervisors were identified as contributing factors.



// NOTIFICATIONS



Spotlight: Amendments to the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014

Amendments to the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 commenced on 13 April 2018. The amendments address recent work health and safety issues, to ensure the policy intent of the legislation is achieved and to remove regulatory burden

Key changes include:

. removing obligations by mining operators to monitor the health of mine workers under the Work Health and Safety (Mines and Petroleum Sites) Regulation 2013. The worker health monitoring requirements outlined in the Work Health and Safety Act 2011 continue to apply and the regulator directs persons conducting a business or undertaking to comply with these provisions

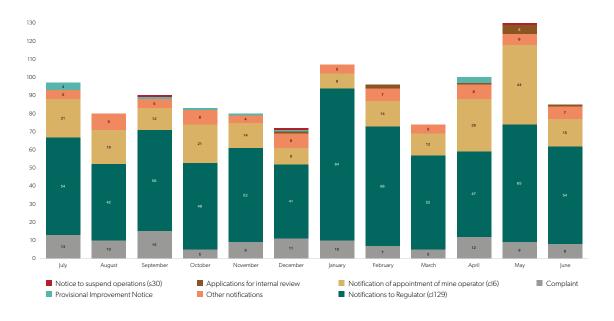
- 2. additional events to be notified under highpotential or notifiable incidents
- additional offences for which a penalty notice may be issued
- 4. requiring operator's to notify the regulator of any changes to contact details and
- 5. requiring persons exercising statutory engineering functions to update qualifications.

Further information on the Work Health and Safety
(Mines and Petroleum Sites) Amendment Regulation
2018 is available on the Resources Regulator

SAFETY NOTIFICATIONS TO THE REGULATOR

Other notifications made to the regulator under the Work Health and Safety (Mines and Petroleum Sites) legislation are shown below.

FIGURE 16. REPORTABLE EVENTS, MINE OPERATOR, INDUSTRY SAFETY AND HEALTH REPRESENTATIVE ACTIONS AND OTHER NOTIFICATIONS RECEIVED BY MONTH 2017-18



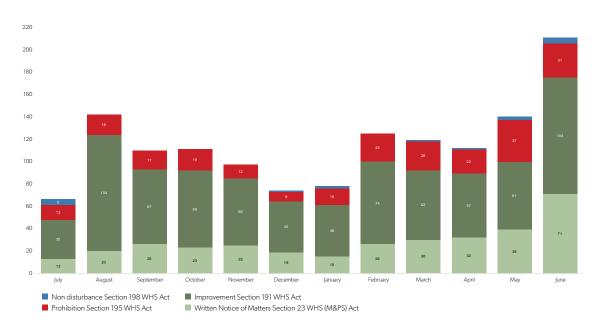
Enforcement

SAFETY NOTICES ISSUED

The regulator has the power to issue a range of notices to mine operators under the WHS legislation. The regulator issued a total of 1,385 notices in the 2017-18 financial year.



FIGURE 17. S23, S191, S195 AND S198 NOTICES ISSUED BY MONTH 2017-18





Spotlight: Mineral claims cancelled for failure to comply with safety and other licence requirements

On 29 June 2018, the regulator cancelled two minerals claims in Lightning Ridge. Issues leading to the cancellation were identified during the July 2017 Lighting Ridge compliance operation. Multiple environmental and safety non-compliances were identified under both the Work Health and Safety (Mines and Petroleum Sites) Regulation 2013 and the *Mining Act 1992*.

The safety assessment conducted on the claims identified several safety concerns. In August 2017, five section 191 improvement notices were issued in respect of insecure shafts, bore holes and

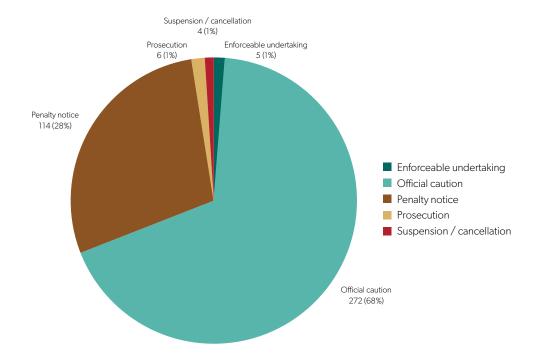
other safety concerns. Follow up inspections in November 2017 and June 2018 confirmed that the claim holder had not adequately secured shafts to prevent persons falling. In March 2018, the title holder was issued a \$750 penalty infringement under the *Mining Act 1992* and ordered to rehabilitate the claims.

Due to the claim holder further failing to rectify the issues or meet the requirements of the statutory directions, further action was taken to cancel the mineral claims. Compliance follow-up is continuing.

KEY ENFORCEMENT ACTIONS UNDER THE MINING ACT 1992

Several enforcement options are available to the regulator under the *Mining Act 1992*. These range from the issue of a caution to cancellation of an authorisation and criminal prosecution. The following chart gives a breakdown of the enforcement actions undertaken by the regulator in 2017-18.

FIGURE 18. ENFORCEMENT ACTIONS BY TYPE 2017-18



PROSECUTIONS

A total of eight prosecutions were commenced in 2017-18. This includes six prosecutions under the *Mining Act 1992* and two prosecutions under the *Work Health and Safety Act 2011*. In addition, there was one appeal.

A total of nine prosecutions were finalised in 2017-18. In addition, decisions were handed down on two appeals from a single defendant.

Summaries of <u>finalised prosecutions</u> are available on our website.

TABLE 6. PROSECUTIONS AND APPEALS COMMENCED IN 2017-18

COMMENCEMENT DATE	LEGISLATION	DEFENDANT	ALLEGATION / BACKGROUND
24 Aug 2017	Work Health and Safety Act 2011	Newcrest Mining Limited	On 6 Sep 2015, a worker was fatally crushed by a water cannon mobile plant when ore material from the draw point collapsed into the drive at Ridgeway Gold Mine.
			Contravention of s 32 of the WHS Act by failure of duty under s 19 of the Act.
5 Sep 2017	Work Health and Safety Act 2011	Macmahon Mining Services Pty Ltd	Attorney General appeal to Court of Criminal Appeal of NSW against sentence imposed on defendant in District Court of NSW decision.
8 Nov 2017	Mining Act 1992	Wollongong Coal Limited Wongawilli Coal Pty Ltd	Wollongong Coal (1 count) and Wongawilli Coal (2 counts) for failure to pay authorisation rents and levies Contravention of s.292C of the <i>Mining Act</i> 1992
26 Oct 2017	Mining Act 1992	Mudgee Stone Co Pty Ltd Director	Unauthorised mining and hindering inspector's investigation. Contraventions of s.5 and s.378A of the <i>Mining Act</i> 1992
30 Jan 2018	Work Health and Safety Act 2011	Sibelco Australia Limited	On 1 Feb 2016, a worker fell 2.7 metres to the ground from a truck on a low-loader suffering traumatic head injuries at the Salt Ash Sand Plant. Contravention of s 32 of the WHS Act by failure of
8 Mar 2018	Mining Act	Wollongona	duty under s 19 of the Act. Wollongong Coal (3 count) and Wongawilli Coal
o iviar ZUT8	Mining Act 1992	Wollongong Coal Limited Wongawilli Coal Pty Ltd	(3 count) for failure to pay authorisation rents and levies. Contravention of s.292C of the <i>Mining Act</i> 1992

COMMENCEMENT DATE	LEGISLATION	DEFENDANT	ALLEGATION / BACKGROUND
28 Mar 2018	Mining Act 1992	G Young	Defendant found on mineral claim held by another person in possession of tools for prospecting or mining at Lightning Ridge in April 2017. Contravention of s.175A of the <i>Mining Act 1992</i>
28 Mar 2018	Mining Act 1992	A Djuheric	Defendant found on mineral claim held by another person at Lightning Ridge in April 2017. Contravention of s.175A of the <i>Mining Act 1992</i>
30 May 2018	Mining Act 1992	B Kortu	Defendant failed to comply with a Direction Contravention of s.240C of the <i>Mining Act 1992</i>

TABLE 7. PROSECUTIONS AND APPEALS FINALISED IN 2017-18

DATE	ENTITY	ALLEGATION / BACKGROUND	OUTCOME
23 Oct 2017	Coal & Allied (NSW) Pty Limited (formerly Rio Tinto Coal (NSW) Pty Limited)	The prosecution related to a 2014 incident when a worker suffered serious injuries when ejected from the access ladder of a grader when cleaning the window at the Mount Thorley Warkworth mine.	The proceedings under the WHS Act were discontinued as the regulator accepted an enforceable undertaking given by the company.
8 Nov 2017	Wollongong Coal Limited Wongawilli Coal Pty Ltd	Prosecution - Wollongong Coal (1 count) and Wongawilli Coal (2 counts) for failure to pay authorisation rents and levies under s.292C of the <i>Mining Act</i> 1992	Wollongong Coal were convicted and fined \$2,200 and Wongawilli Coal were convicted and fined \$4,400 for each count in the NSW Local Court. The entities appealed the convictions to the NSW District Court due to be heard on 12 June 2018. The appeals were withdrawn by the entities prior to the hearing date.
19 Dec 2017	Hunter Quarries Pty Ltd Director	Appeal related to a WHS conviction of the company and one director in relation to the death of a worker at the Karuah Quarry in 2005	Appeal in the Court of Criminal Appeal of NSW by the company and one director dismissed on all grounds.

DATE	ENTITY	ALLEGATION / BACKGROUND	OUTCOME
2 Feb 2018	Resources Pacific Pty Limited	Prosecution - The charges brought related to the death of a subcontract haulage truck driver in 2009 when material from the coal reject bin crushed the truck cabin at the Ravensworth Mine.	The company entered a not guilty plea to contravention of sections 8(2) and 10(2) of the Occupational Health and Safety Act 2000. The company was found not guilty and the charges dismissed in the Supreme Court of NSW.
26 Feb 2018	Cudal Lime Products Pty Ltd	Prosecution - The conviction relates to a 2014 fatal electric shock of a woman whilst in the shower of a home near the Cudal Limestone Quarry caused by non-compliant electrical work and other electrical issues at the mine.	The company entered a plea of guilty to a contravention of section 31 of the WHS Act failed a duty under 19(2) of the WHS Act by engaging in conduct that exposed an individual to a risk of death or serious injury and was reckless as to the risk and was fined \$900,000.
26 Feb 2018	Individual worker	Prosecution - The conviction relates to a 2014 fatal electric shock of a woman whilst in the shower of a home near the Cudal Limestone Quarry caused by non-compliant electrical work and other electrical issues at the mine.	The individual entered a plea of guilty to a contravention of section 32 of the WHS Act by failure to comply with section 28 of the WHS Act and was fined \$48,000.
28 Feb 2018	Perilya Broken Hill Limited	The prosecution related to a 2012 incident where a worker fell 15 metres down the shaft while connecting counterweights suffering the amputation of the leg at the Perilya Broken Hill Southern Operations.	The company entered a not guilty plea to contravention of section 32 of the WHS Act by failure to comply with section 19 of the WHS Act. The company was convicted and fined \$500,000. The company has filed a notice of intention to appeal the conviction, sentence and cost in the Court of Criminal Appeal of NSW.
28 Feb 2018	Perilya Limited	The prosecution related to a 2012 incident where a worker fell 15 metres down the shaft while connecting counterweights suffering the amputation of the leg.	The company entered a not guilty plea to contravention of section 32 of the WHS Act by failure to comply with section 19 of the WHS Act. The company was found not guilty and the charges dismissed.

DATE	ENTITY	ALLEGATION / BACKGROUND	OUTCOME
8 Mar 2018	Wollongong Coal Limited Wongawilli Coal Pty Ltd	Prosecution - Failed to pay authorisation rents and levies on time for Sep, Oct and Nov 2017.	Matters withdrawn by Prosecution following acceptance of an enforceable undertaking.
9 Apr 2018	Ulan Coal Mines Limited Ulan West Operations Pty Ltd	The prosecution related to a 2015 incident when a worker suffered serious injuries when struck by a pipe end plug when pressure testing at the Ulan West Operations.	The proceedings under the WHS Act were discontinued as the regulator accepted an enforceable undertaking given jointly by the companies.
10 May 2018	Hunter Quarries Pty Ltd and Director	Appeal - appellants filed application for special leave to appeal decision of Criminal Court of Appeal of NSW in High Court of Australia.	Application dismissed in High Court of Australia.





Spotlight: Compliance priorities

This financial year the regulator published its compliance priorities for July to December 2017 and January to June 2018. In general terms, priority projects are identified areas of concern.

Projects completed in the first two quarters include:

- > gas outburst risks in longwall mining a targeted intervention program on gas outbursts was initiated in mid-2017 after two longwall outburst events in late-2016 and again in early-2017
- coal handling and preparation plants an inspection program of 46 coal handling facilities in mid-2017, focusing on structural integrity
- > Lightning Ridge opal mining compliance
 operation the fourth proactive compliance
 operation conducted by the NSW Resources
 Regulator since 2014, with 19 specialist
 inspectors participating in the operation
- > fires on mobile plant a review of incident data showed a consistently high number of fires occurring on mobile plant each month
- methods of working and control of bench heights - identified following several incidents at

- mines where rocks fell from blasted quarry faces and stockpiles onto loaders and excavators, resulting in damage to equipment and injury to machine operators
- plant used in hazardous zones a workshop conducted for industry to promote awareness and improve compliance with issued certificates of conformity for electrical plant manufactured and supplied for use at underground coal mines.

Other priorities during 2017 - 2018 included:

- > illegal fossicking
- > incident reporting
- > hazardous chemicals
- > safety management systems at small-scale mines and quarries construction, operation and decommissioning of tailings dams and hoists used in opal mining
- > respirable dust hazards.

Further information on <u>compliance priorities</u> is available on the Resources Regulator website.





ENFORCEABLE UNDERTAKINGS

An enforceable undertaking is a written, legally binding agreement proposed by a company or individual following an alleged contravention of an Act. It provides a commitment by a company or individual to implement initiatives designed to deliver tangible benefits for the industry and broader community. These initiatives should seek to resolve both the behaviour of concern that has led to the alleged contravention and seek to rectify the consequences of the conduct.

Enforceable undertakings accepted in 2017-18 are listed in Table 7 below.

TABLE 8. ENFORCEABLE UNDERTAKINGS ACCEPTED 2017-18

DATE OF ACCEPTANCE	NAME(S) OF PARTIES	LEGISLATION
20 Oct 2017	Coal and Allied (NSW) Pty Limited	Work Health and Safety Act 2011
6 Feb 2018	NSW Department of Finance, Services and Innovation (Heritage Stoneworks)	Work Health and Safety Act 2011
6 Mar 2018	Boral Limited	Mining Act 1992
6 Apr 2018	Ulan Coal Mines Limited and Ulan West Operations Pty Ltd	Work Health and Safety Act 2011
18 Apr 2018	Boral Bricks Pty Ltd	Mining Act 1992
7 Jun 2018	Wollongong Coal Limited Wongawilli Coal Pty Ltd	Mining Act 1992
18 Jun 2018	Tahmoor Coal Pty Ltd	Mining Act 1992
22 Jun 2018	Ridgelands Coal Resources Pty Ltd	Mining Act 1992

Further details of accepted undertakings can be found on our website.



Mines and petroleum sites are required to develop and implement a health control plan under the Work Health and Safety (Mines and Petroleum sites) Regulation 2014. In 2017, the regulator developed and delivered a range of resources for industry to assist mines to meet their legislative obligations. These included:

- > tools and resources which promote a health risk management process to developing a health control
- > on-line videos discussing health risk assessment, personal exposure monitoring of dust and health monitoring
- > interactive workshops which introduced the health control plan tools and provided an opportunity to apply them and
- > a health control plan evaluation workshop was developed for mines and quarries that had already developed and implemented their health control plan.

The workshops were held across NSW at the end of 2017 and beginning of 2018. In total, 215 people attended the workshops.

The resources for industry are available on our website.

Publications and engagement

The regulator publishes safety alerts and bulletins and significant incident information releases and investigation reports to inform the NSW mining industry stakeholders about work health and safety issues. The aim of publishing investigation findings is to prevent similar occurrences and provide operators with information to help them meet their obligations.

TABLE 9. INCIDENTS, SAFETY ALERTS AND INVESTIGATION REPORTS

DATE	PUBLICATION TYPE	REFERENCE	LINK
29 May 2018	Safety Bulletin	SB18-10	People warned of fall risk in opal mine fields
14 May 2018	Investigation Information Release	IIR18-04	Dangerous incident at Chain Valley Colliery
11 May 2018	Safety Alert	SA18-07	CMI 425 Amp flameproof restrained receptacle recall
7 May 2018	Investigation Information Release	IIR18-03	Serious injury at Maules Creek mine
1 May 2018	Safety Bulletin	SB1809	Overwatering of roads leads to vehicle incidents
23 Apr 2018	Safety Bulletin	SB18-08	Missing and damaged protective devices on longwalls
16 Apr 2018	Investigation Information Release	IIR18-02	Serious injury at Werris Creek mine
16 Apr 2018	Safety Bulletin	SB18-07	Safe systems of work for mobile plant
12 Apr 2018	Safety Alert	SA18-06	Self rescuer maintenance
11 Apr 2018	Safety Bulletin	SB18-06	Lack of positive communications
9 Apr 2018	Safety Alert	SA18-05	Offsider's nose and cheek broken in incident
5 Apr 2018	Safety Bulletin	SB18-05	Shattered windscreens on mobile plant
5 Apr 2018	Safety Bulletin	SB18-04	Fires on surface drill rigs
23 Mar 2018	Safety Alert	SA18-04	Workers withdrawn after methane frictional ignition
21 Mar 2018	Safety Bulletin	SB18-03	Diesel exhaust filters in underground coal mines

DATE	PUBLICATION TYPE	REFERENCE	LINK
2 Feb 2018	Investigation Information Release	IIR18-01	Fatality at Glendell mine
1 Feb 2018	Safety Alert	SA18-03	Two workers suffer serious fluid injection injuries in separate incidents
29 Jan 2018	Safety Alert	SA18-02	<u>Loader loses brakes and crashes at bottom</u> <u>of wall</u>
17 Jan 2018	Safety Alert	SA18-01	Potentially dangerous mechanical components on opal mine materials handling hoists
17 Jan 2018	Safety Bulletin	SB18-02	Mines and preparing for fire
2 Jan 2018	Safety Bulletin	SB18-01	Wireless operated hazard reduction devices for welding machines
18 Dec 2017	Causal investigation	n/a	Causal investigation: Underground conveyor equipment incident puts workers at risk
27 Nov 2017	Causal investigation	n/a	Causal investigation: Catastrophic engine failure in an underground coal mine
27 Nov 2017	Investigation report	n/a	Investigation report into the serious injury of a mine worker at Sibelco Sand plant on 1 Feb 2016
24 Nov 2017	Safety Bulletin	SB17-07	Air quantities for underground diesel engines in coal mines
9 Nov 2017	Investigation report	n/a	Report into the serious injury of an operator at Mannering Colliery, Doyalson, NSW on 22 January 2016
16 Oct 2017	Safety Bulletin	SB17-06	Safety helmets - effective working life
11 Oct 2017	Investigation information release	IIR17-13	Final investigation report into fatality
20 Sep 2017	Investigation information release	IIR17-12	Causal investigation: unintended movement of conveyor tail end unit
13 Sep 2017	Safety Alert	SA17-10	Response times of gas detectors
8 Sept 2017	Safety Bulletin	SB17-05	Reuse of removable filters on explosion protected diesel engines
25 Aug 2017	Investigation information release	IIR17-11	Causal investigation into catastrophic engine failure - preliminary report

DATE	PUBLICATION TYPE	REFERENCE	LINK
23 Aug 2017	Investigation information release	IIR17-10	Mt Arthur serious injury fire
11 Aug 2017	Investigation information release	IIR17-09	<u>Catastrophic engine failure</u>
31 Jul 2017	Investigation information release	IIR17-08	Flyrock incident at open cut coal mine
26 Jul 2017	Safety Alert	SA17-09	Longwall faces: safe access and emergency exits
20 Jul 2017	Safety Alert	SA17-08	Lack of Pillar Support

EDUCATION, ENGAGEMENT ACTIVITIES AND INDUSTRY INVOLVEMENT

As part of the regulator's role in promoting improved compliance within the NSW mining industry it undertakes engagement activities. This includes presentations to industry groups, input into industry committees and coordination or participation in emergency response exercises.

Figure 19 shows the numbers of the various types of industry education and engagement activities the regulator provided in the 2017-18 year.

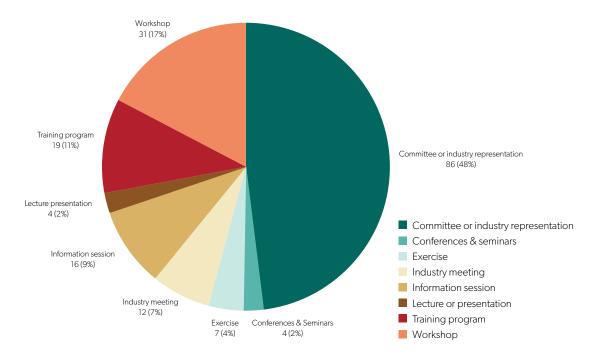


FIGURE 19. INDUSTRY EDUCATION AND ENGAGEMENT 2017-18

In addition to these activities, the regulator published the following new and updated policies:

- > Strategic approach 2017-2020
- > Compliance and enforcement approach 2017
- > Fit and proper person policy



Spotlight: Fit and proper person policy

The regulator published a policy to provide guidance on determining a fit and proper person to be authorised to conduct mining and exploration activities in NSW.

The fit and proper person test is an important part of the best practice regulatory framework for mineral and petroleum exploration. The test is specified in section 380A of the *Mining Act 1992* and section 24A of the *Petroleum (Onshore) Act 1991*. The test applies to exploration licences and assessment leases under the *Mining Act 1992* and exploration licences and production leases under the *Petroleum (Onshore) Act 1991*.

Download the <u>Fit and proper person policy</u> here.





