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# Quarterly safety report

October to December 2024

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About this report

This quarterly health and safety performance report has been prepared by the NSW Resources Regulator for mine and petroleum site operators in NSW. It contains industry and sector specific information, in addition to information regarding hazards. Wherever possible, trends and patterns have been identified.

The report references sector information about the number of ‘active’ mines. Active mines have the status: open, intermittent, under care and maintenance, open tourist mines, planned and small-scale titles that are current or pending.

The report also contains information on matters of concern to the Regulator including controls and actions that may be implemented to prevent or reduce the likelihood of future safety incidents.

Operators should use the sector specific information, emerging issues and good practice examples presented in this report to assist them in improving safety management systems and undertaking risk assessments at their sites. This report refers to the date the incident was notified rather than the date the incident took place.

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# Executive summary

This report is prepared to assist mine and petroleum site operators meet their obligations under relevant work health and safety legislation, including the *Work Health and Safety (Mines and Petroleum Sites) Act 2013*. It is also a way in which the NSW Resources Regulator monitors progress in implementing our risk-based compliance and enforcement strategy.

As a high-hazard regulator, we focus on compliance with legislative requirements associated with principal and other high-risk hazards, including mechanical and electrical energy and explosives. This report highlights dangerous and high potential incidents, in addition to incidents where a serious injury occurred. 'Roads or other vehicle operating areas' and 'fires or explosion' are principal mining hazard classifications that feature regularly in incident notifications to the Regulator.

As well as providing an overview of incidents across the mining industry, this report looks at the safety performance and regulatory activities of 6 sectors: coal, large (non-coal) mines and quarries, small mines and quarries (including gemstones), opal mines, petroleum and geothermal sites, and exploration sites.

This report also provides information on significant mining events in Australia and globally, and summarises safety incident notifications, compliance activities and outcomes for Quarter 2 (October to December) of financial year (FY) 2025. For selected measures, data is analysed over a 15-month period from October 2023 to December 2024.

In this quarter, there were a total of 551 incident notifications received – a 6% decrease from the previous quarter and a 4% decrease from the same period in FY 2024.

There were 2 fatalities during the quarter, both were non-work related.

Incident notifications decreased for coal mines (6%) and large mines (16%) compared to the previous quarter. Conversely, the small mines sector saw a 33% increase of notified incidents.

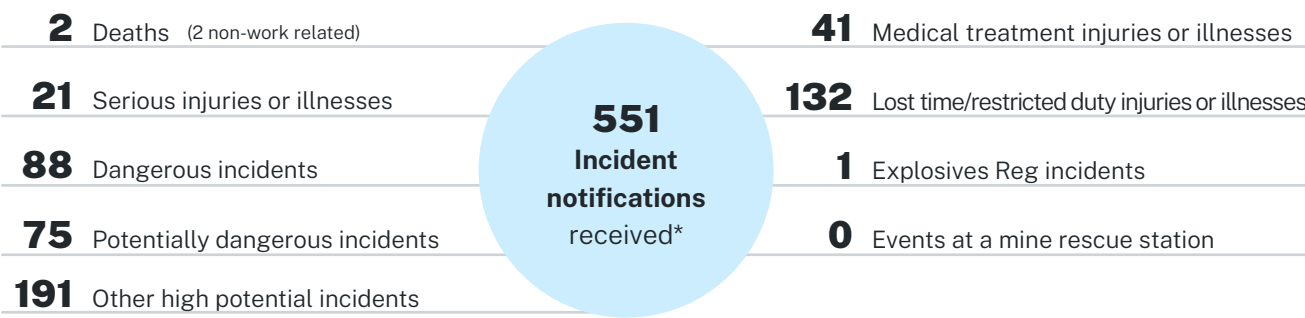
Assessments decreased by 26% overall this quarter from 916 to 677. Decreases were seen in every sector and reporting nature.

Safety notices decreased this quarter from 779 to 494 (37%). This was predominantly led by a decrease in s191 improvement notices issued (from 528 to 344).



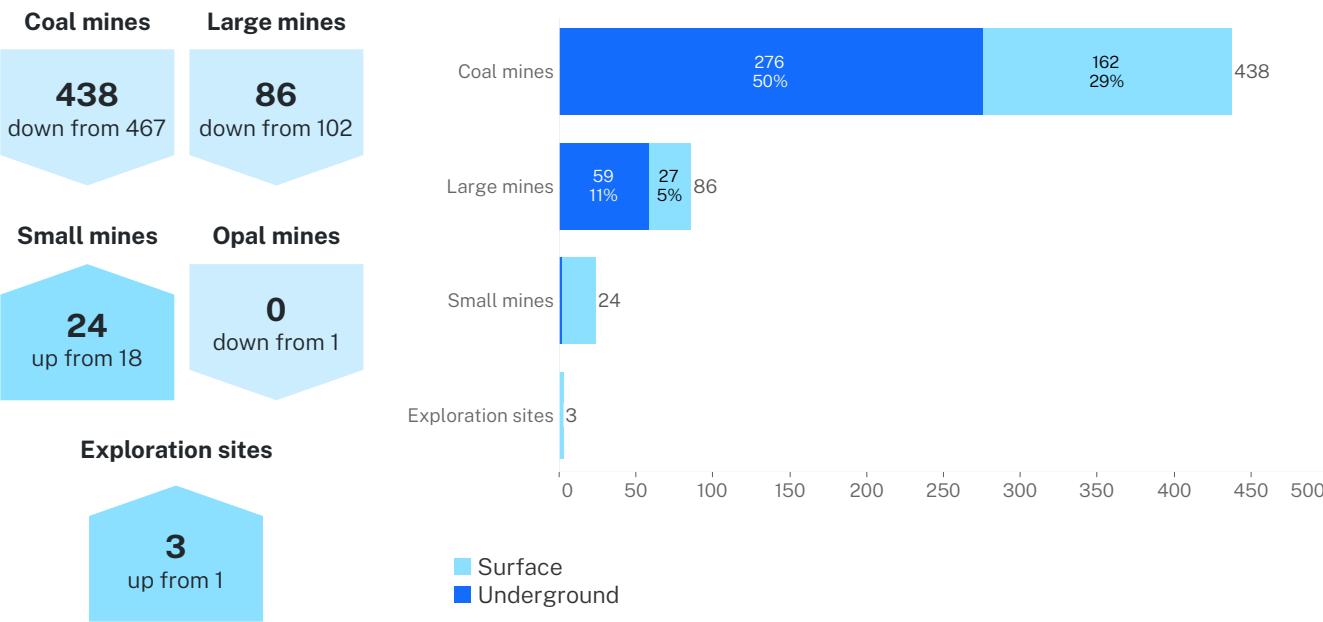


# Quarterly snapshot

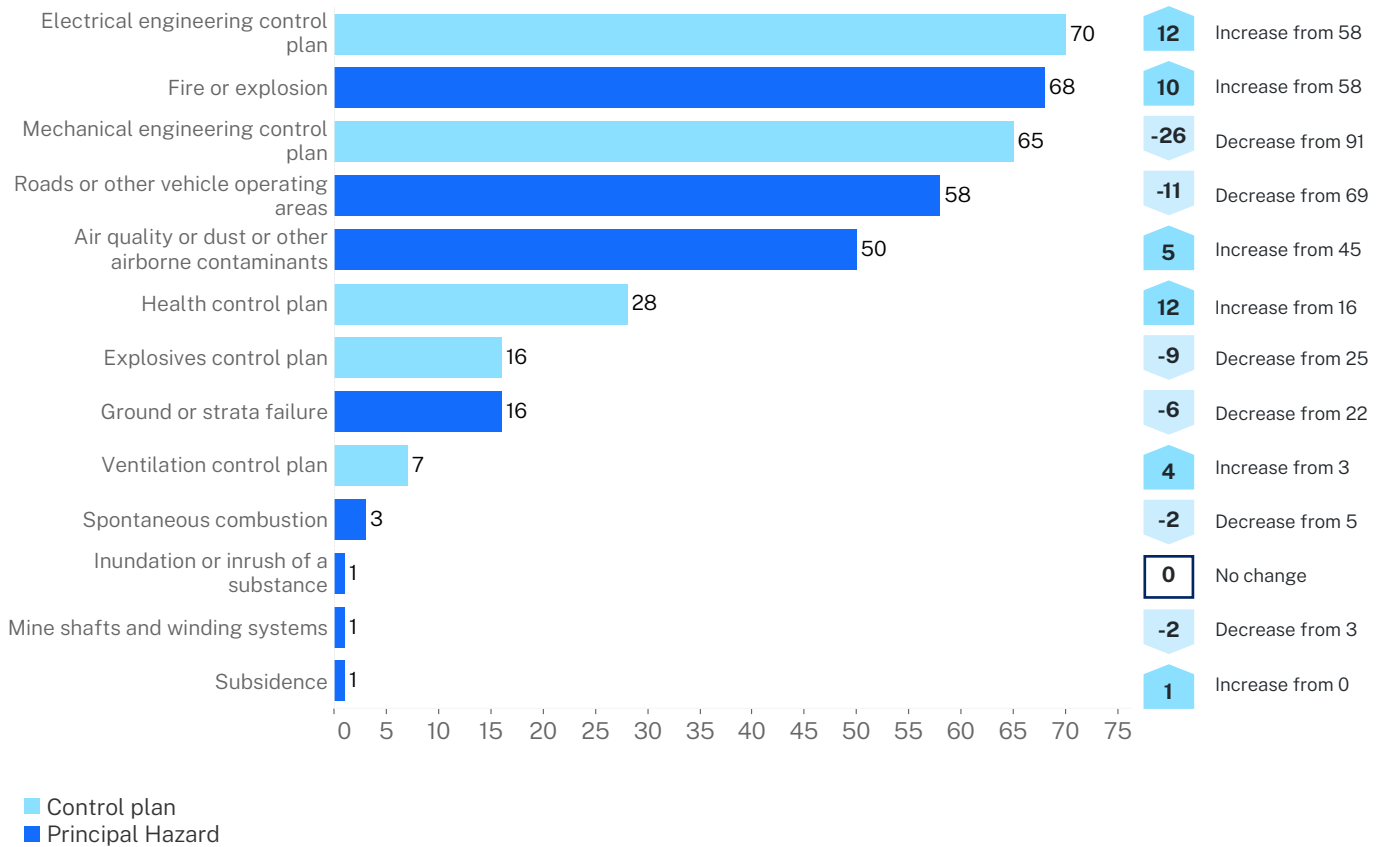


\* By requirement to report as notified by mines. The actual number of incidents, injuries and illnesses recorded may differ from original incident notifications following assessment of the notified event.

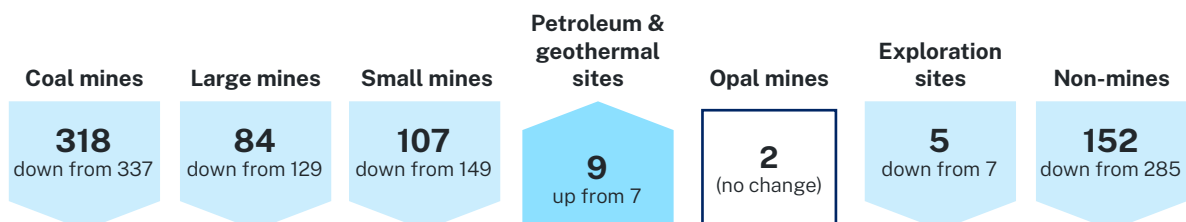
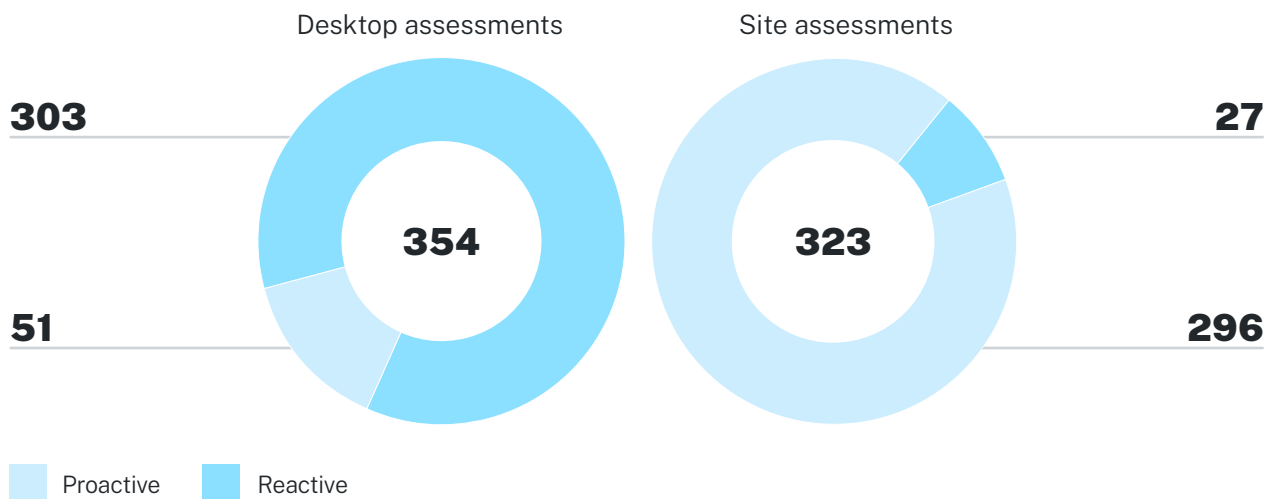
Incident notifications received by sector and operation type



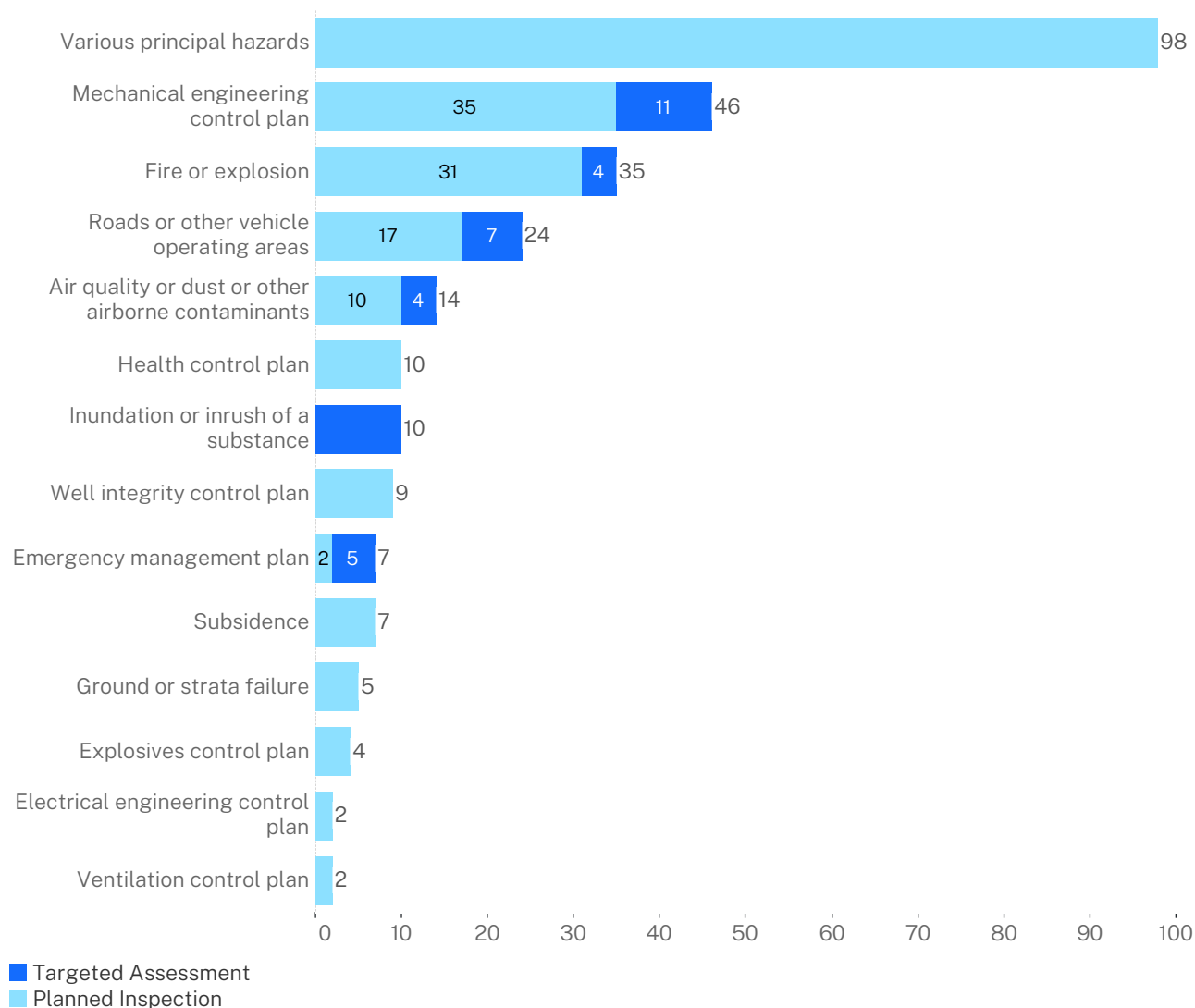
### Incident notifications classified by principal mining hazard or principal control plan



### 677 Assessments commenced



### Programmed site assessments conducted by principal mining hazard and principal control plan



### 494 Notices issued



**5**

WHS s198  
non-disturbance notices



**25**

WHS s195  
prohibition notices



**344**

WHS s191  
improvement notices



**120**

WHS(MPS)A s23  
notices of concern

# National and international significant events

The Regulator is committed to sharing safety information about significant mining-related events and fatalities to increase industry awareness.

The following list includes safety alerts (including fatalities) and bulletins that occurred between 1 October and 31 December 2024.

The incidents selected were based on their relevance to equipment and processes commonly used across the NSW mining industry.

## Fatal injuries

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### Australia

#### Queensland

On 2 October 2024, one worker died, and a second worker was airlifted to hospital for treatment following a maintenance works incident at the Oaky Creek coal mine. Refer to [Glencore media statement](#) dated 3 October 2024.

### International

#### Mexico

On 5 December 2024, a fatal carbon monoxide gas exposure occurred, which claimed the lives of two employees and one contractor at the El Limón Guajes underground mine. Refer to [Torex Gold Resources news report](#) dated 5 December 2024.

#### United States of America

On 5 November 2024, a miner died when the haul truck he was operating travelled over a dump point. The edge of the dump point failed, causing the haul truck to travel backwards, overturn, and land on the roof of the cab. Refer to [MSHA fatality alert](#) dated 5 November 2024.

On 27 November 2024, an electrician died when a Load Haul Dump (LHD) loader struck him. The electrician was outside his mine utility vehicle and was struck by the LHD loader tyre. Refer to [MSHA fatality alert](#) dated 27 November 2024.



# Alerts, bulletins, fact sheets and incident information releases

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## New South Wales

### Safety alerts and bulletins

- **Safety Alert: Haul truck rear strut injures worker**

On 23 September 2024, workers at an open-cut coal mine were replacing a rear suspension strut on a haul truck. The strut was secured by a lower pin and pivoted back onto a worker in the access platform resulting in a serious laceration to his upper leg. Workers were initially supporting the strut with a sling attached to a forklift jib while the lower pin was installed, and then the cylinder was lifted to allow the top pin to be inserted. When the partially inserted top pin fouled on the outer chassis, workers removed the sling and forklift, and brought a work platform behind the strut to allow access to manipulate the outer chassis bush and pin. Workers tried to partially withdraw the pin using a lever hoist to return the outer bush to the correct position, and realign the cylinder by jacking the truck chassis. The upper pin then slid far enough out as to no longer capture the strut cylinder allowing it to pivot and hit the worker. After rendering first aid, the other workers tried to make the area safe, and secured the pin from escaping the inner chassis bush by fitting the retaining plate. Refer to [SA24-04 Haul truck rear strut injures worker](#) dated 17 October 2024.

- **Safety Bulletin: Recent increase in vehicle interactions**

The Resources Regulator has noticed with some considerable concern, an increasing trend in vehicle interactions over the past 6 months throughout all sectors of the mining industry in NSW. Of the 46 notifications made, 45% were from surface coal mines, 26% from surface metalliferous and quarry operations and 32% from both underground coal and metalliferous mines. A review of these incidents has indicated that the predominant causes have been a lack or inadequate communication between people involved in the incidents, as well as a lack of situational awareness on the part of operators of equipment involved in the incidents. Instances were also noted where procedures were not followed and equipment had malfunctioned. Refer to [SB24-08 Recent increase in vehicle interactions](#) dated 29 October 2024.

- **Safety Bulletin: Safety-critical system failures - steering**

In a one-week period in late October 2024, there were 2 potentially serious incidents in which vehicles lost steering and collided with earth walls. Both incidents were the result of hydraulic failure in the steering circuits of mining-specific mobile plant. These incidents highlight the need to inspect, monitor, and manage safety-critical functions, such as steering, to ensure the safety of workers within or near mobile plant. Refer to [SB24-09 Safety-critical system failures –steering](#) dated 22 November 2024.



## Fact sheets

- **Assessment program – small mines – Tier 3 quarries**

The Resources Regulator has developed a planned assessment program to conduct a review of safety management systems at Tier 3 quarries. The assessment program will be conducted by mine safety inspectors during 2024/25. It will focus on the review key elements that must be included within a safety management system including the systems, procedures, plans and other control measures that will be used to control risks to health and safety at the mine. Refer to [Fact sheet – Assessment program – small mines – Tier 3 quarries](#) dated 4 October 2024.

- **Principal hazard – ground or strata failure (surface)**

The fact sheet provides information related to the assessment program focussing on the MUE –uncontrolled movement of ground related to all types of surface mining operations. The assessment program will focus on mine design, dump design, drill and blast management, water management and worker restrictions in high-risk areas. Refer to [Fact sheet –Principal hazard –ground or strata failure \(surface\)](#) dated 9 October 2024.

- **Rehabilitation of exploration, mining and petroleum operations**

The NSW Government imposes strict conditions on exploration licences, mining leases and production leases to ensure disturbed land is left in a safe and stable condition and that local communities are not unduly affected. Rehabilitation of affected land occurs progressively and in phases during operations and includes a range of activities including demolition, sealing entrances, remediating contaminated land, capping tailings dams, geotechnical stabilisation, groundwater treatment, establishing final landforms, landscaping and revegetation. Refer to [Fact sheet –Rehabilitation of exploration, mining and petroleum operations](#) dated 17 October 2024.

- **Service of notices**

The correct service of notices is an essential element in an application for the appointment of an arbitrator. The failure by any party to serve notices correctly may affect the capacity of the Secretary to appoint an arbitrator under the land access framework (LAF) of the *Mining Act 1992*. Notices are required under the LAF at various points, for example, when the titleholder seeks a LAF with a landholder or seeks their agreement on the appointment of an arbitrator. Section 383 of the Mining Act makes provision for the service of notices under the Mining Act. The requirement to serve notices correctly applies to titleholders, landholders and arbitrators at various stages of the LAF process. An essential first step for titleholders seeking to initiate the LAF is to correctly identify the landholder(s). To do this reference should be made to the definition of landholders in the dictionary of the Mining Act. The next steps are the selection of the most appropriate and effective means of service of the notice and, thirdly, compliance with the timeframes mandated in the LAF. Refer to [Fact sheet – Service of notices](#) dated 21 October 2024.

- **Health control plan – exposure to hazardous chemicals**

The fact sheet provides information related to the assessment program focussing on the MUE –exposure to hazardous chemicals. The Regulator’s assessment program will focus on the following critical controls to prevent worker exposures to hazardous chemicals: elimination, substitution, isolation, tools, dilution, PPE, storage, handling and transportation. Refer to [Fact sheet – Health control plan –exposure to hazardous chemicals](#) dated 30 October 2024.

- **Health control plan – exposure to extreme temperatures**

The fact sheet provides information related to the assessment program focussing on the MUE exposure to extremes of temperature. The Regulator’s assessment program will focus on the following critical controls to prevent worker exposures to extremes of temperature: workplace design, task design, engineered airflow, personnel conduct and emergency response. Refer to [Fact sheet – Health control plan –exposure to extremes of temperature](#) dated 1 November 2024.

- **Control plan – psychosocial harm**

The fact sheet relates to the assessment program focussing on the MUE – exposure to psychosocial harm. The Regulator’s assessment program will focus on the following critical controls: support (pre-harm and post-harm), work design, worker control, plant and workplaces design and procedural justice. Refer to [Fact sheet – Health control plan – psychosocial harm](#) dated 20 November 2024.

- **Principal hazard – Fire and explosion – mobile plant**

The fact sheet relates to the assessment program focussing on the MUE – uncontrolled fire or explosion mobile plant. The Regulator’s assessment program will focus on the following critical controls to prevent an uncontrolled fire or explosion on mobile plant: surface temperature reduction, emergency response, fit-for-purpose design, fit-for-purpose fuel dispensing equipment and fit-for-purpose design of overhead lines. Refer to [Fact sheet – Principal hazard – fire and explosion – mobile plant](#) dated 20 November 2024.

- **Stay heat safe on mine sites**

Extreme heat can cause severe illness, hospital admission and even death. Before, during and after a period of hot weather, it’s important that you keep cool and stay hydrated. In extreme heat, or if you are physically active in hot weather, your body’s natural cooling system can begin to fail. Your body temperature can increase to dangerous levels, leading to severe heat related illness including heat stroke and heat exhaustion. After several heat-related incidents at mine sites last summer, mine operators are reminded of their legislative obligation as outlined within the health control plan of the Work Health & Safety (Mines & Petroleum Sites) Regulation 2022. Refer to [Fact sheet – Stay heat safe on mine sites](#) dated 2 December 2024.

- **Musculoskeletal disorders management**

The work health and safety (WHS) laws contain principles and requirements for musculoskeletal disorder (MSD) prevention. The WHS laws set out the principles and requirements that apply to MSD risk management in the workplace. These laws require a person conducting a business or undertaking (PCBU) to manage risks to health and safety relating to a musculoskeletal disorder associated with a hazardous manual task. Refer to [Fact sheet – Musculoskeletal disorders management](#) dated 6 December 2024.

- **Mine operators managing workers under automatic mutual recognition**

Mine operators may need to consider people wanting to exercise a [NSW WHS statutory function\(s\)](#) or licensed occupation by obtaining automatic mutual recognition (AMR), instead of recognition by being issued with a NSW authorisation. Mine operators may also want their workers to practise interstate temporarily under AMR. This factsheet sets out what is involved and how mine operators may manage AMR so only eligible people to practise do so at a mine in the jurisdiction. AMR is contingent on the person continuing to hold a current authority in the original home state. Refer to [Fact sheet – Mine operators managing workers under automatic mutual recognition](#) dated 9 December 2024.

## Reports

- **Investigation Information Release – IIR24-09 Fatality – worker falls into mine shaft**

A mine worker died after he fell into a decommissioned mine shaft at Austar Coal Mine. The underground mine ceased production in February 2020. When the incident occurred, it was in a decommissioning phase and was being prepared for closure. The incident occurred at the mine's number 2 shaft, which was at Dry Creek Road, Ellalong.

Contractors were preparing to attach steel plates to beams fixed to a shaft cover about 12.30 pm on 17 September 2024. Several sections had been cut out of existing steel plates that were fixed to several beams on the shaft cover. The largest of these cuts was about one to 2 metres long and 0.5 metres wide. A contract worker fell through the area that had been cut and into the shaft. A rescue operation commenced. The worker was found deceased about 400 metres beneath the entrance to the shaft on 18 September 2024. Initial inquiries indicated that fall prevention and/or fall arrest equipment was not used at the time of the incident.

Refer to [IIR24-09 – Fatality – worker falls into mine shaft](#) dated 14 October 2024.

- **Investigation Report – worker seriously injured during lifting activity**

A worker suffered a left leg compound fracture when a 32-kilogram steel lifting plate, attached to an overhead crane, hit him within a workshop at the Tarrawonga Coal Mine at Boggabri, NSW on 13 November 2022. An uncontrolled release of stored energy generated during the operation of the crane caused this incident. The plate was released after it became caught on the edge of the blower housing cut-out during its removal from an axle box of a rigid dump truck. In the moments before the plate's release, the worker's head and body were positioned directly in the line of fire while attempting to manoeuvre the plate through the cut-out. The worker was exposed to a risk of suffering more serious impact injuries, or death, if the plate had hit the worker's head or other vulnerable areas. Furthermore, the worker was also at risk of potentially suffering crush and manual handling injuries, while working in a confined area and adopting awkward positions and postures to manoeuvre the plate, because the crane was in operation.

Refer to [Investigation Report – worker seriously injured during lifting activity](#) dated 8 November 2024.

- **Investigation Information Release – IIR24-10 – worker suffers serious burns whilst refuelling petrol-powered water pump**

A worker suffered serious burn injuries to his legs and hands while refuelling a petrol-powered water pump that ignited at Carrick Hill Quarry near Goulburn in the Southern Tablelands. As part of the quarry's normal operations, a small petrol-powered pump was used to transfer water from a dam within the quarry via an outlet hose to mobile plant comprising a screener, stacker conveyor and impact crusher. The water supply served the dual process of suppressing dust and conditioning the road base material. The pump would generally operate for about 2 hours before needing to be refuelled. Workers were alerted of the need to refuel by the cessation of the water supply to the screening and crushing plant. Refuelling was performed using a plastic jerry can and a funnel to transfer fuel into the fuel tank.

Two workers (a supervisor and quarry worker) began operating the stacker-conveyor, screening and crushing plant to produce 40 mm road-base at 6.30am on 23 October 2024. At 11.00am, the supervisor left the area in a front-end loader to load a truck that had arrived at site. Shortly after, the other worker drove to the water pump to refuel it. During the refuelling process, the pump ignited unexpectedly. The worker called the supervisor via radio and requested assistance. When the supervisor arrived at the injured worker's location, the pump was alight and the worker had suffered serious burns to his legs and hands. Preliminary inquiries indicate the worker was wearing shorts at the time of the incident, which may have contributed to the severity of the burns sustained to his legs.

Refer to [IIR24-10 – Worker suffers serious burns whilst refuelling petrol-powered water pump](#) dated 18 November 2024.

- **Investigation Information Release – IIR24-11 – worker exposed to risk of serious injury while refuelling petrol-powered water pump that ignited**

A worker suffered minor burns but was exposed to the risk of more serious injury when a petrol-powered water pump he was refuelling ignited at Glenella Quarry in Cowra. A small, petrol-powered pump was used to transfer water between dams within the quarry via a 7.6 centimetre lay-flat hose. Ultimately, the water was pumped using another water pump for dust suppression while operating the screening and crushing plant. The pump was retrofitted with a 20-litre marine-grade plastic fuel container that bypassed the pump's original equipment manufacturer (OEM) fitted fuel tank, to provide a longer run time between refuelling. Refuelling was performed using a 20-litre plastic jerry can fitted with a plastic spout to transfer fuel into the fuel container.

A worker drove to a dam in the northwest corner of the quarry to refuel a petrol-powered water pump about 2.45pm on 25 November 2024. The worker turned off the motor and, after taking a short break, began refuelling the pump using petrol in a fuel container. During this process, the nozzle fell out of the fuel container cap causing an uncontrolled release of petrol onto the water pump. The pump ignited, and the worker used a nearby loader to dump a bucket of crusher dust on the pump and surrounding area, extinguishing the fire. The worker suffered minor burns to his right hand.

Refer to [IIR24-11 – worker exposed to risk of serious injury while refuelling petrol-powered water pump that ignited](#) dated 20 December 2024.

- **Investigation Information Release – IIR24-12 – worker suffers serious injuries while working under truck trailer**

A contract worker was tasked by his supervisor to drive a road-registered truck and trailer up the inbound access road to a laydown area. The truck configuration was an Isuzu 3 axle rigid with a dual axle, double-wheeled trailer. The front nearside wheelset of the trailer was locked on and was being dragged along the bitumen road surface as the truck travelled up the inbound haul road. The worker stopped the truck on the haul road and the quarry's manager entered the cabin to try to release the locked trailer brake. The quarry manager drove the truck a short distance but was unable to release the brake. He parked the truck on the side of the roadway and asked the quarry's mechanic to attend the location to release the trailer's brakes.

The mechanic arrived and parked his utility vehicle a short distance behind the trailer. Wheel chocks were placed behind the rear wheels of the trailer. The mechanic used a two-way radio to communicate with the quarry manager who was initially in the driver's seat of the truck. The mechanic accessed the area underneath the trailer to rectify the brake issue. The truck was moved a short distance to determine if the issue had been rectified. The brake remained locked and the truck was parked on the side of the road again. The quarry manager exited the truck cabin and the mechanic continued to work underneath the trailer. The truck's park brake was in the off position. The truck and trailer rolled backwards a short distance (less than 10 metres) while the mechanic was under the trailer. The trailer collided with the utility parked behind it. The force of the impact forced the utility back several metres before the truck, trailer and the utility came to a stop. The mechanic was impacted by part of the trailer's axle assembly. One of his legs was trapped between the trailer's front nearside inner wheel and the torsion bar.

Refer to [IIR24-12 -worker suffers serious injuries while working under truck trailer](#) dated 20 December 2024.

- **Consolidated Report – small mines fixed and mobile plant (mechanical), March 2020 to May 2024**

A crucial part of the Resources Regulator's incident prevention strategy for mines and petroleum sites involves targeted assessments, planned inspection programs and priority programs. This planned inspection program assesses the mechanical engineering control plan (MECP) at small mine sites for fixed and mobile plant. In total this consolidated report consists of 58 assessments from an overall assessment of 83 extractive mine sites. In summary, there were 754 individual assessment findings and of those 428 assessment findings required enforcement action to be taken at the site. The assessment program was conducted between March 2020 and May 2024. In summary, from the 83 assessments there were 356 compliance notices issued to 73 sites in total during the program.

Refer to [Consolidated Report –small mines fixed and mobile plant \(mechanical\), March 2020 to May 2024](#) dated 2 October 2024.

- **Consolidated report – Small mines – electrical engineering control plan review, August 2020 to January 2024**

This planned inspection program assessed the electrical engineering control plan (EECP) at small mine sites. In total this consolidated report consists of 58 assessments reviewed from an overall assessment of 86 small mine sites. In summary, there were 2552 individual assessment findings, and of those, 398 assessment findings required enforcement action to be taken at the site. The assessment program was conducted between August 2020 and January 2024. In summary, from the 58 assessments there were 117 compliance notices issued to 55 sites in total during the program.

Refer to [Consolidated report – Small mines – electrical engineering control plan review, August 2020 to January 2024](#) dated 14 October 2024.

- **Consolidated report – Underground fire or explosion suppression, January to June 2024**

Fire and explosions at underground coal mines have the potential to cause serious and/or fatal injuries to workers if not controlled effectively. This report consolidates assessment findings and provide analysis and recommendations for operators of underground coal mines. An inspection assessment program was developed to assess how well underground coal mines are prepared to manage risks. In total there were 63 assessments conducted at 24 underground coal mines. The majority of underground coal mines were assessed multiple times. There were 4 coal mines assessed on 4 different inspections during the first 6 months of 2024. In summary, there were 441 individual assessment findings and of those 22 assessment findings related to the management of explosion suppression systems that required enforcement action by compliance notice to be taken at the underground coal mine. The assessment program was conducted between January 2024 and June 2024. In summary, there were 25 compliance notices issued in total to 12 underground coal mines.

Refer to [Consolidated report – Underground fire or explosion suppression, January to June 2024](#) dated 16 October 2024.

- **Consolidated report – Roads or other vehicle operating areas – METEX underground – unplanned vehicle interaction, June 2023 to August 2024**

The planned inspection program for roads or other vehicle operating areas (ROVOA) -unplanned vehicle interaction targeted metalliferous underground mines between June 2023 and August 2024. Unplanned vehicle interactions continue to be a significant and increasing type of incident reported in metalliferous underground mines. This planned inspection program was part of an ongoing effort by the Regulator to decrease the number of incidents of unplanned vehicle interaction across all sectors. This report provides information on assessment findings and recommendations for metalliferous underground mine operators. In summary, of the 16 metalliferous underground mines assessed resulted in 34 compliance notices issued to 15 of the 16 underground mines.

Refer to [Consolidated report – Roads or other vehicle operating areas – METEX underground – unplanned vehicle interaction, June 2023 to August 2024](#) dated 15 November 2024.

- **Consolidated report – Explosives control plan – metalliferous stage 2, September 2023 to October 2024**

Unplanned detonation of explosives is a significant type of incident with the potential to cause multiple serious injuries or fatal outcomes. As part of the planned assessment activities, Regulator inspectors attended metalliferous surface and underground sites with a focus on the critical controls including blast planning and implementation and safe blasting processes. This planned inspection program was part of an ongoing effort by the Regulator to reduce the potential for incidents of unplanned detonation of explosives at metalliferous sites. This report provides information on assessment findings and recommendations for metalliferous surface and underground site operators. In summary, of the 25 metalliferous sites assessed (12 surface sites and 13 underground mines) resulted in 49 compliance notices issued to all 25 sites assessed.

Refer to [Consolidated report – Explosives control plan – metalliferous stage 2, September 2023 to October 2024](#) dated 6 December 2024.



# Queensland

- **Ammonium nitrate emulsion tanker explosion**

A B-double combination carrying ammonium nitrate emulsion (ANE) travelling on the Bruce Highway collided with another vehicle near Bororen, left the roadway, caught fire and after burning for some time, exploded. Following the accident an exclusion zone of 2.5km radius was established by emergency services and residents within the zone were evacuated.

Refer to [RSHQ Explosives Inspectorate Alert No.117 V 1 Ammonium nitrate emulsion tanker explosion](#) dated 10 October 2024.

- **Line of fire and exclusion zone failings**

This year the Queensland coal mining industry has suffered four fatalities and a number of serious accidents. Investigations are ongoing but it appears that in many cases, coal mine workers were in the 'line of fire' from unplanned releases of energy sources and within areas where it would reasonably be expected for exclusion zones to apply, also known as 'no-go zones'.

For example, in the most recent fatality at Oaky North coal mine on 2 October 2024, workers were standing in the line of fire. Based on initial investigation reports a sled, laden with conveyor trough frames was being winched up and along the conveyor walkaway. A sudden event has occurred and two coal mine workers standing on the uphill side of the sled have been impacted resulting in one coal mine worker being fatally injured and another coal mine worker sustaining significant injuries.

In an earlier incident in September 2024, a tyre fitter and tyre manipulator operator were completing a vertical mount of a five-piece wheel assembly on a rear dump truck at a surface mine's tyre bay, when the tyre fitter was struck by a falling bead seat band and side ring, suffering significant injuries to his foot, arm and head. Initial investigations show the injured worker was in the line of fire.

RSHQ has also identified an over-reliance on administrative controls (e.g. taking a simple step that appears to highlight an issue but does not remove the issue) in some cases. These provide a lower level of protection and are less reliable controls, instead of looking at safer ways to perform a task. It also appears that hazards and risks to individuals are not being identified.

Refer to [RSHQ Coal Inspectorate Safety and Health Alert No. 452 V 1 Line of fire and exclusion zone failings](#) dated 27 August 2024.

- **Uncontrolled movement of service truck module**

During the commissioning of a new service truck, a worker was emptying the main diesel tank of a service truck to access a faulty level sensor. The service module then unexpectedly tilted backward, nearly causing the hose pod to touch the ground. The worker was uninjured but was exposed to significant risk during the incident. RSHQ investigations revealed the following contributing factors:

**First-time configuration:** A service module was fitted to a rear dump truck (RDT) for the first time.

**Lift cylinders retained:** The lift cylinders from the RDT's original tray setup were kept, allowing the service module to tilt during maintenance.

**Shift in centre of gravity (COG):** Changes in tank fluid levels caused the module's COG to move relative to its pivot axis.

**Lack of retention mechanism:** No catch mechanism or retaining pin was present to secure the module in its lowered position.

**Hydraulic system design:** The hydraulic circuitry allowed the lift cylinders to extend unintentionally, enabling the module to tilt.

Refer to [RSHQ Coal Inspectorate Safety and Health Alert No. 455 V 1 Uncontrolled movement of service truck module](#) dated 10 December 2024.

## Victoria

- **Bearing failure causes underground truck fire**

A haul truck operator at an underground metalliferous mine was hauling material along a drive. The operator saw flames coming from the truck's engine bay area. The truck's Aqueous Film Forming Foam (AFFF) fire suppression system was ineffective in extinguishing the fire. A portable 9kg fire extinguisher was then used to extinguish the fire. The fire happened because a high-speed drive shaft bearing next to the articulation joint overheated. An investigation found that the general-purpose grease recommended by the supplier was not suitable for high-speed bearings. The AFFF system did not provide coverage of the bearing.

Refer to [Worksafe Victoria Safety Alert – Bearing failure causes underground fire](#) dated 15 October 2024.

# Notifiable incidents relating to hazards

The [Work Health and Safety \(Mine and Petroleum Sites\) Regulation 2022](#) (the Regulation) identifies principal mining hazards and principal control plans for special consideration.

Principal mining hazards have a reasonable potential to result in multiple deaths in a single incident or a series of recurring incidents.

Principal control plans cover risks to health and safety from hazards, work processes and plant that may result in incidents that are high potential, frequently occurring or of a certain complexity.

## Summary of incident notifications received

The table below shows the number of incident notifications received for the past 5 quarters as classified against a principal mining hazard or principal control plan.

Overall, there were 551 incident notifications which is the third highest total over the past 5 quarters. Of these, 36% (198) related to principal mining hazards, 46% (256) related to principal control plans, with the remainder (18%) related to other incident types.

**Table 1. Incident notifications received by principal mining hazard and principal control plan – October 2023 to December 2024**

Hazard or Control plan	Hazard/Control plan	FY 2024 Q2	FY 2024 Q3	FY 2024 Q4	FY 2025 Q1	FY 2025 Q2	Grand total
Hazard	Fire or explosion	77	65	59	58	68	327
	Roads or other vehicle operating areas	54	62	61	69	58	304
	Air quality or dust or other airborne contaminants	53	33	37	45	50	218
	Ground or strata failure	29	23	20	22	16	110
	Spontaneous combustion	10	7	5	5	3	30
	Subsidence	2	1	2	1	1	7
	Mine shafts and winding systems	0	0	0	3	1	4
	Inundation or inrush of a substance	0	1	1	0	1	3
	Total	225	192	185	203	198	1003
Control plan	Mechanical engineering control plan	94	88	95	91	65	433
	Electrical engineering control plan	22	19	25	58	70	194
	Health control plan	1	4	9	12	28	54
	Explosives control plan	13	19	24	25	16	97
	Ventilation control plan	23	19	6	3	7	58
	Total	153	149	159	189	186	836
Other	No related principal mining hazard or principal control plan	194	192	173	197	167	923
Grand total		572	533	517	589	551	2762

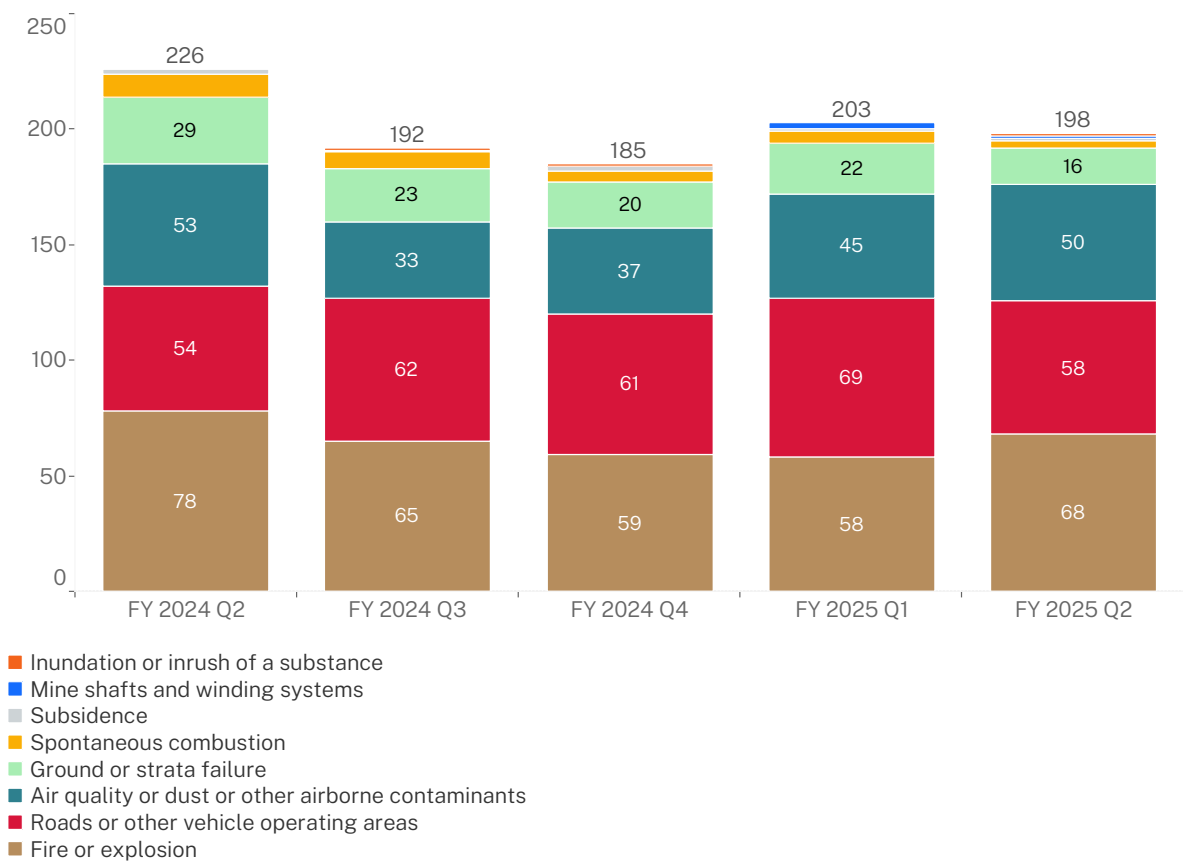
# Principal mining hazards

**Note:** while only one hazard/control plan per incident appears in the report, it is possible for more than one hazard or control plan to be applicable to the incident. Additionally, the number of incidents classified by principal hazard or control plan may change over time due to subsequent reclassification.



The chart below presents a further breakdown of numbers of incident notifications received by quarter related to principal mining hazards as defined in section 4 of the Regulation.

**Figure 1. Incident notifications received by principal mining hazards – October 2023 to December 2024**





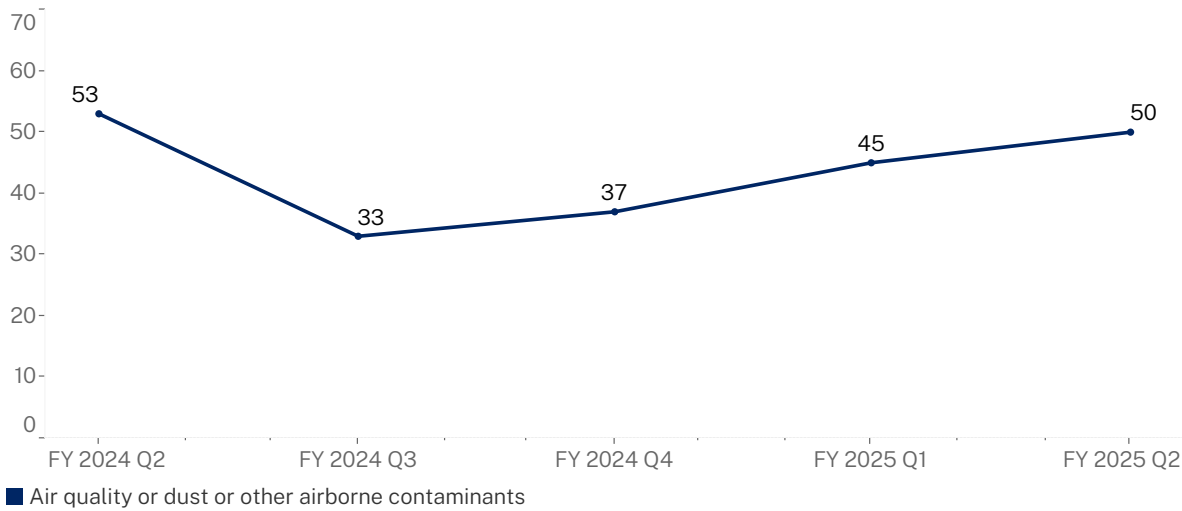
## Air quality, dust or other airborne contaminants

Increase from 45 to 50

Airborne contaminants comprise a large and varied range of substances and forms. Coal and silica particles, along with methane and carbon monoxide, are regularly present in mining as dusts, fumes and vapours. These contaminants have exposure standards and can affect workers rapidly (CO or CO<sub>2</sub>) or over several years (coal/silica dust).

There has been a 51% increase in airborne contaminant related incidents notified from the lowest recorded figure in Q3 FY2024. This quarter's figure is the second-highest recorded in the past 5 quarters.

**Figure 2. Incident notifications received related to the principal mining hazard air quality, dust or other airborne contaminants – October 2023 to December 2024**







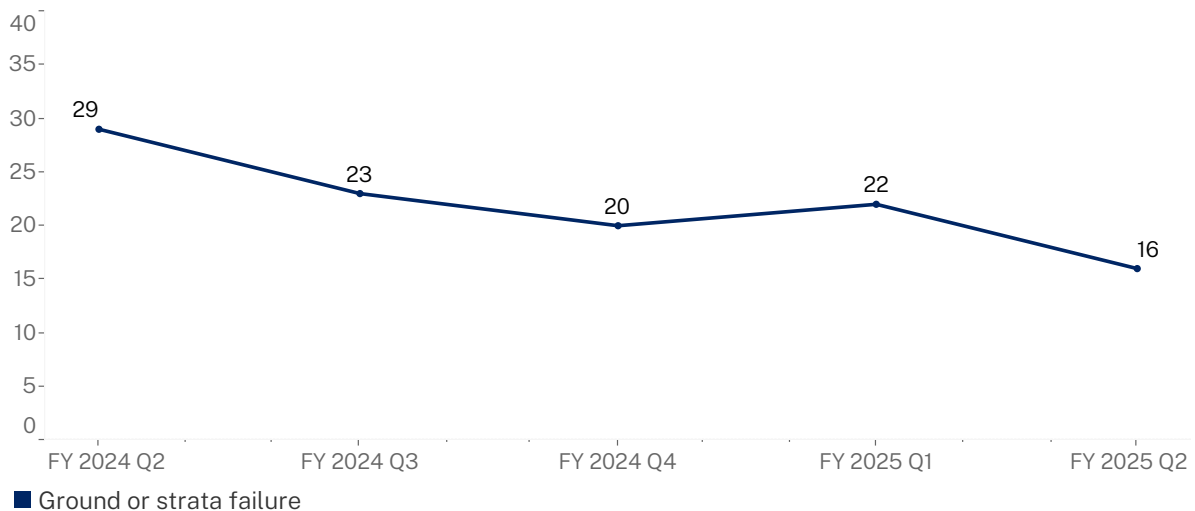
## Ground or strata failure

Decrease from 22 to 16

Ground or strata failure is an ever-present hazard in both surface and underground mining, with a significant risk posed to workers from unplanned movement of ground.

There has been a 45% decrease in ground or strata related incidents notified since Q2 FY2024.

**Figure 3. Incident notifications received related to the principal mining hazard ground or strata failure – October 2023 to December 2024**



### Dangerous incident | IncNot0047788 – Rib fall in mains panel

**Summary:** A large rib fall of about 5 m long x 3.1 m high x 1.2 m deep occurred when cutting in a herringbone mains panel. No one was present on the side of the continuous miner where the fall occurred, although a worker was on the opposite side platform. It did not appear to be a lubricated fault (greasy back). Rib support consisted of 1.2 m bolts at about 2.2-2.4 m above the floor.



Picture 1.  
Rib fall in panel

**Comments to industry:** When mining in an inferred area of geological disturbance strata, trigger action response plans (TARPs) are to be used as a proactive tool. That is, support should increase for both roof, and ribs. Cut-out distances should be adhered to for a higher-level TARP.

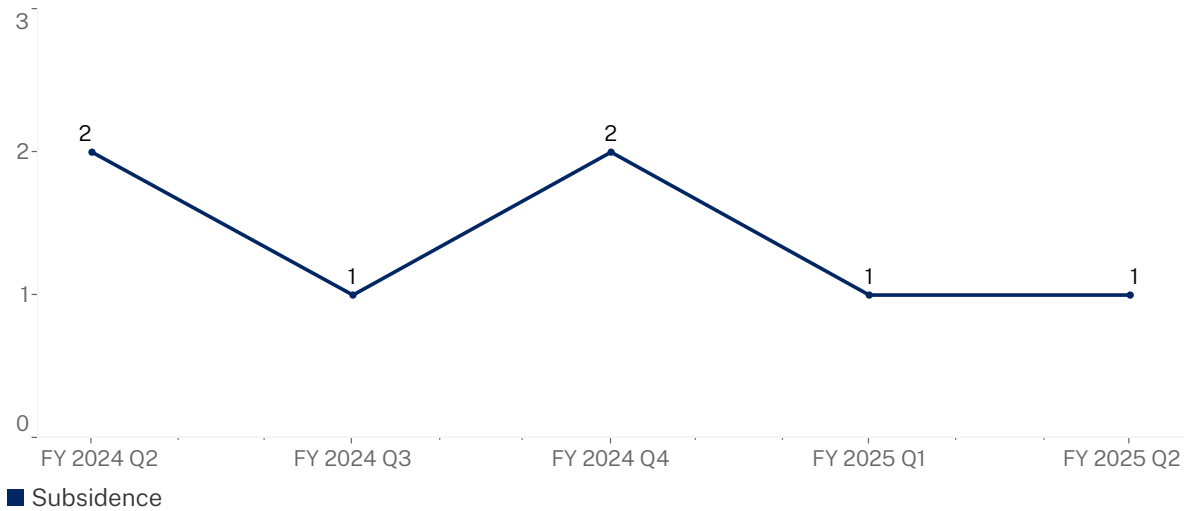


### Subsidence

No change (1)

Surface subsidence hazards may exist where there has been underground mining. The potential to cause significant damage (from deformation or sinkholes) to infrastructure (roads, dwellings etc.) and injure persons nearby, makes this a principal mining hazard in NSW.

**Figure 4. Incident notifications received related to the principal mining hazard subsidence – October 2023 to December 2024**

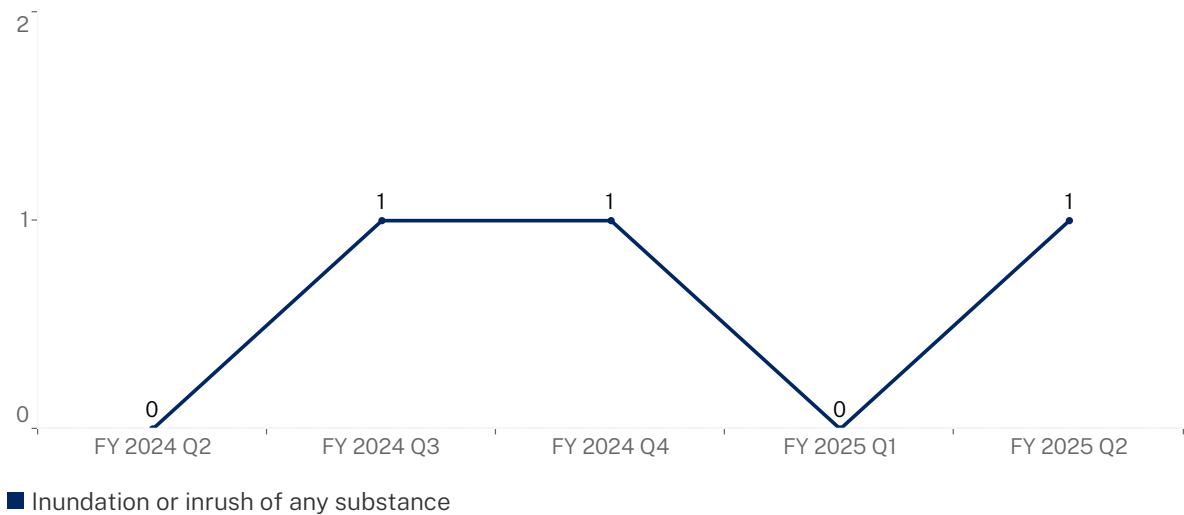


### Inundation or inrush of any substance

Increase from 0 to 1

Inundation and inrush is a low frequency, high consequence hazard, particularly in underground mining. Incidents often involve inrushes of water or inundation by denser materials (sand or rock). The potential to cause multiple fatalities in a single event like at Gretley Colliery in 1996 make this a principal mining hazard in NSW.

**Figure 5. Incident notifications received related to the principal mining hazard inundation or inrush – October 2023 to December 2024**



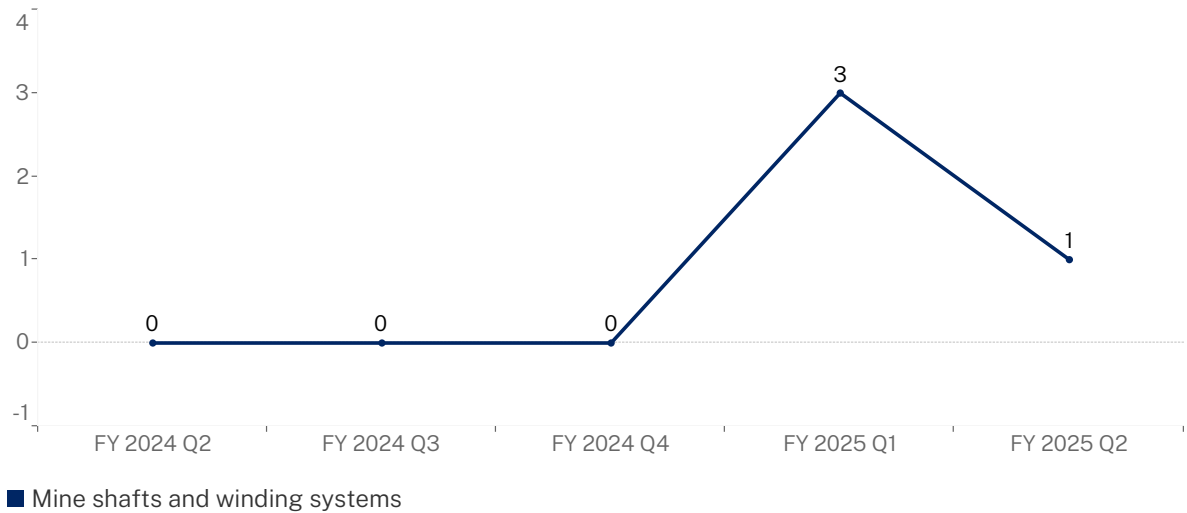


## Mine shafts and winding systems

Decrease from 3 to 1

Mine shaft integrity and the operation of winding systems require specific focus. The safe movement of material and workers up and down mine shafts can be hazardous and has the potential to impact on the safety of multiple workers at a mine.

**Figure 6. Incident notifications received related to the principal mining hazard mine shafts and winding systems – October 2023 to December 2024**



## Gas outbursts

No change (0)

The implementation of appropriate risk controls ensure gas outbursts are not a high frequency hazard event, however their often sudden and violent nature has the potential to cause fatalities to workers. This hazard also includes the liberation of gases that can asphyxiate, lead to explosions or cause a fire. These circumstances make this a principal mining hazard in NSW.

There have been no notified incidents of gas outbursts in the NSW mining sector since November 2022.

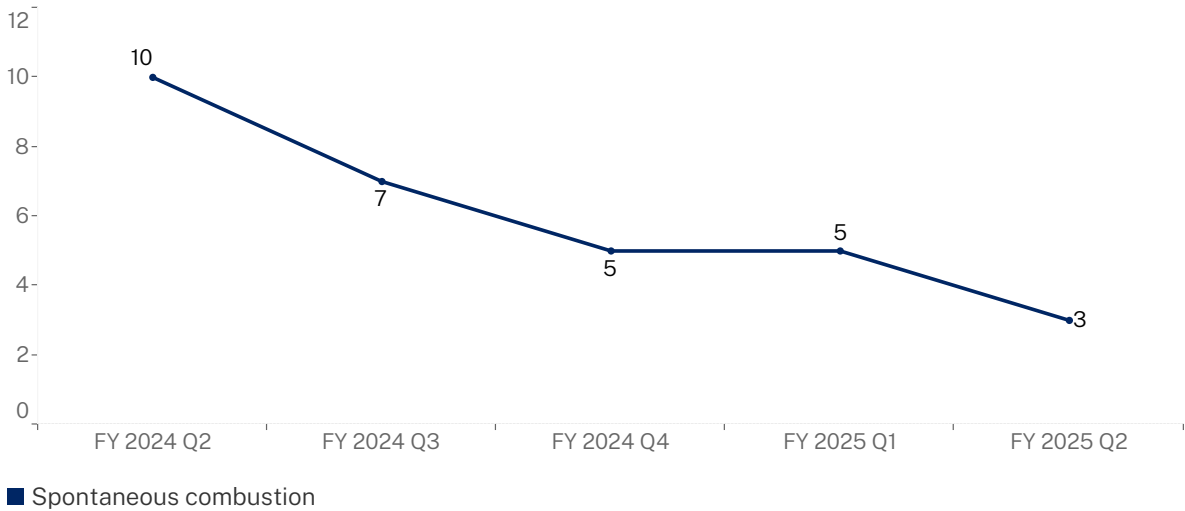


## Spontaneous combustion

Decrease from 5 to 3

While spontaneous combustion (of coal) is a hazard exclusive to the coal sector, in the underground parts of the mine the consequences have the potential to cause multiple fatalities. The chart below includes spontaneous combustion incidents underground and on the surface of coal mines.

Figure 7. Incident notifications received related to the principal mining hazard spontaneous combustion – October 2023 to December 2024





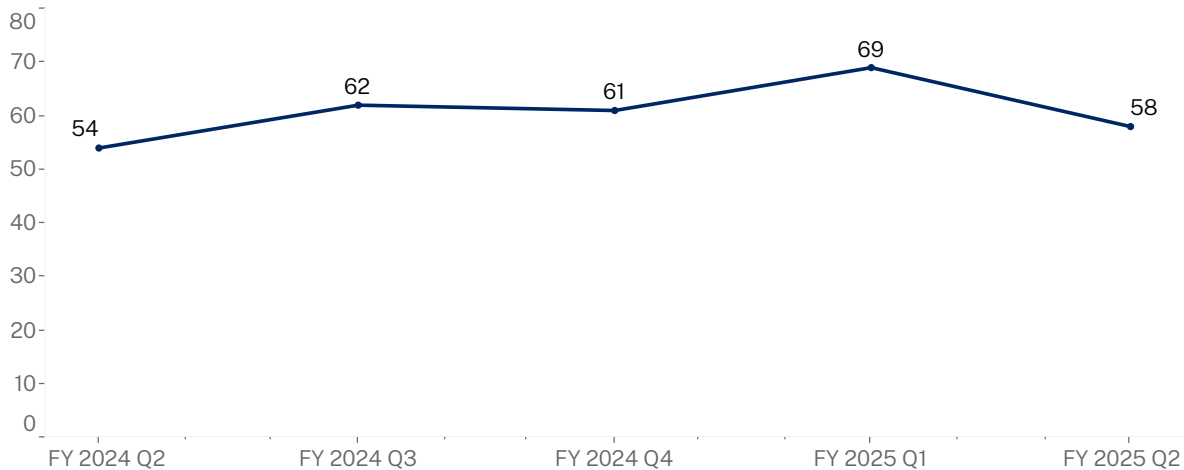


## Roads or other vehicle operating areas

Decrease from 69 to 58

Vehicle movements in and around mine sites require specific design considerations and controls to ensure that collisions and other vehicular accidents do not occur, and place workers lives at risk. The high volume of vehicular interactions on mine sites and the size of the mobile plant utilised classifies this as a principal mining hazard in NSW.

**Figure 8. Incident notifications received related to principal mining hazard roads or other vehicle operating areas – October 2023 to December 2024**



### Dangerous incident | IncNot0047769 – Haul truck and light vehicle collision

**Summary:** A supervisor pulled up near a stationary haul truck to pick up the operator. The operator, unaware of the nearby light vehicle, moved the truck forward several metres to realign it, contacting the light vehicle with the ladder, which was in the lowered position. The supervisor assumed the truck was parked up when he stopped in front of it.



Picture 2.  
Truck ladder and damaged light vehicle



**Comments to industry:** Parking near a haul truck without establishing positive communications can have fatal consequences and should not occur under any circumstances. It is never safe to assume you know what another plant operator is going to do. Assumptions are not controls.

**Dangerous incident | IncNot0047782 – Truck reversed into dozer**

**Summary:** A dozer was cleaning up around a dig face when a haul truck reversed into place. The truck contacted the dozer on the drivers offside. The truck driver breached the mine’s procedure by positioning the rear of the truck towards the loading unit prior to the bucket being presented.



Picture 3.  
Dozer and truck interaction showing tyre  
scuff marks

**Comments to industry:** Workers have a duty to take reasonable care for themselves and others while in the workplace. This includes staying alert, being aware of their surroundings, and maintaining control of the plant and machinery they operate. Workers are also reminded that as part of their duty, they must comply with reasonable instructions and procedures of the workplace. Following procedures for loading trucks is considered reasonable.

**Dangerous incident | IncNot0047789 – Truck rolled its dump body**

**Summary:** An articulated truck rolled its dump body while negotiating a bend. The cabin remained upright, and no one was injured.



Picture 4.  
Rolled articulated dump body with  
spilled material

**Comments to industry:** Articulated truck rollovers continue to be a cause for concern on mine sites. The stability of articulated vehicles is a known risk that needs to be managed. When operating articulated equipment workers must drive at appropriate speeds, particularly when negotiating corners and turning the machine around.

### Dangerous incident | IncNot0047797 – Haul truck exceeded retard window

**Summary:** A loaded haul truck exceeded its retard window while descending an 8% ramp. The truck reached a speed of 60 kph before the operator made an emergency application of the service brake. The truck stopped within an estimated distance of 300 m. A working wheel dozer was positioned about 30-40 m from where the haul truck stopped.

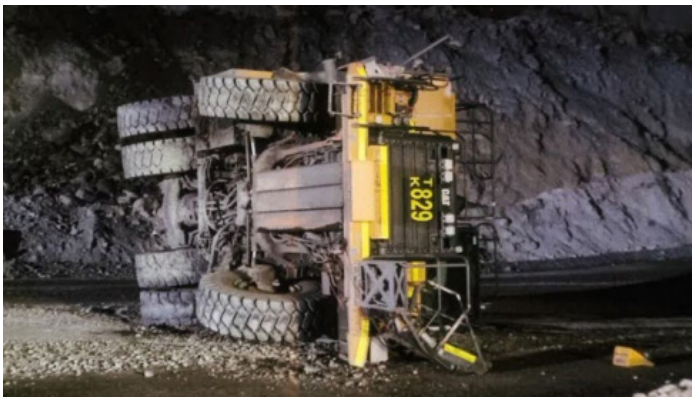


Picture 5.  
Laden haul truck stopping position

**Comments to industry:** When operating machinery, a worker's primary focus must remain on the operation and control of the vehicle. Excessive speeds can easily result in a fatality. All vehicle operators are required to adhere to the mine's road rules. Mine operators should review the triggers for competency assessment and the minimum level of competence required before workers are authorised for solo operations.

### Dangerous incident | IncNot0047820 – Service cart overturned

**Summary:** A service cart overturned when completing a U-turn. The cart transitioned from a wet to a dry line and overturned onto its left side. There were no injuries to the operator. Speed has been established as a major contributing factor.



Picture 6.  
Overturned service cart

**Comments to industry:** Service cart operators need to take extra care when turning their vehicles as the movement of fluid in tanks mounted on mobile plant can significantly influence the centre of gravity and overall stability of the vehicle. Extra caution is needed when changing from a wet to a dry line and vice versa. U-turns should be executed at a low speed.

### Dangerous incident | IncNot0047934 – Water cart lost steering

**Summary:** A water cart lost steering as it was negotiating a bend in the haul road. The water cart collided with a windrow while attempting an emergency stop. The failure was caused by low hydraulic oil level due to an undetected leak. The design did not include a low hydraulic oil reservoir level warning to alert the operator.



Picture 7.  
Water cart stopped on windrow

**Comments to industry:** This incident highlights the importance of stringent monitoring and quality control of maintenance and repair activities. After doing maintenance and repairing mobile plant, the plant should be inspected, tested and verified as fit-for-purpose before being returned to service.

### Dangerous incident | IncNot0047938 – Light vehicle rolled backwards hitting wall

**Summary:** A technician who was operating a light vehicle was rushing to arm barriers for a tele-remote system and failed to park the vehicle correctly before exiting it. The vehicle immediately rolled backwards about 13 metres before hitting a wall. The technician had applied the handbrake but left the vehicle running, not in gear and not parked into the wall. During the incident, the technician ran to the vehicle and tried to re-enter the cabin, but it was moving too fast.



Picture 8.  
Damage to rear of light vehicle

**Comments to industry:** When implementing controls for safe parking, mine operators should follow the hierarchy of controls. Engineering controls should be considered before resorting to lower-level controls. Regardless of the engineering controls fitted, workers should always park fundamentally stable. Under no circumstances should a worker ever attempt to re-enter a moving vehicle.

### Dangerous incident | IncNot0047947 – Dump truck and dozer collision whilst reversing

**Summary:** A laden dump truck and a dozer collided while both were reversing on a dump. The offside rear corner of the dump truck dovetail collided with the left-hand, rear corner of the dozer. Both operators were uninjured in the incident.



Picture 9.  
Vehicles parked after collision

**Comments to industry:** Mine operators should continually assess the suitability of their collision avoidance controls before they lead to an incident. Operators should prioritise segregation between dozers and haul trucks on dumps over lower order controls such as positive communications and work procedures.

### Dangerous incident | IncNot0047992 – Two load haul dump trucks collided underground

**Summary:** Two load-haul-dump machines (LHDs) collided underground. The first LHD, heading outbye, stopped at 56 cut-through to allow another vehicle to shunt past. The second LHD, in third gear and carrying a concrete kibble, failed to notice the parked LHD and collided into its rear. The scene was not preserved immediately. The operator of the first LHD, which was hit, experienced minor discomfort and was treated on site.



Picture 10.  
LHD collision damage

**Comments to industry:** Mine workers must drive according to conditions (e.g. slow down) when carrying large loads that obstruct visibility with underground mining equipment. When operators are shunting, it is critical to ensure that mobile plant is safely positioned off the roadway when vehicles are passing.



## Dangerous incident | IncNot0047993 – Microsleep causes intersection collision

**Summary:** A worker was driving in an underground mine vehicle when he had a micro sleep. He woke up just before there was a collision, but when he went to brake, his foot missed the brake pedal. The vehicle collided with the corner of an intersection he was approaching. It was the worker's second night shift in 3 months.



Picture 11.  
Collision damage at intersection

**Comments to industry:** Workers should ensure that they turn up fit to work long hours and for several days and or nights in a row. Other reasonable controls are:

- roster patterns that allow for adequate sleep and life activities (eating, washing and family)
- shift durations that consider workers' commuting times to allow for adequate sleep and life activities
- allowing a 48-hour break after a block of night shifts and an adequate break between blocks of shifts for recovery
- allowing an adequate break between shifts to enable 7–8 hours' sleep
- increasing supervision during periods of low alertness (e.g. 3am to 5am)
- providing training and information on the risks of shift work and ensure supervisors and management can recognise problems
- ensuring breaks are taken within shifts to mitigate fatigue.

Further information can be found at our [Health control plan resources guide](#).

### High potential incident | IncNot0048016 – Dump truck spun 90 degrees descending wet ramp

**Summary:** An empty rear dump truck slid 90 degrees clockwise while descending a ramp following wet weather. Rainfall on the previous night had resulted in a wet haul road surface. The wet weather trigger action response plan (TARP) was implemented limiting speed to a maximum of 30kph. After hauling laden onto the dump, the operator commenced the return run. On descent of a short section on the access road, the truck lost traction. It slid at low speed for about 50 metres before rotating clockwise and stopping in the middle of the road. The truck crossed the centre line of the road at this point.



Picture 12.  
Dump truck spun on wet road

**Comments to industry:** Mine operators must undertake appropriate examinations of haul roads following wet weather periods. Where appropriate you must stop production until a dry line can be graded in or there is appropriate traction available to trucks even at low speeds.

### Dangerous incident | IncNot0048041 – Tip edge slumped whilst truck was discharging

**Summary:** A rear dump truck reversed up to a tip head and began discharging its load when the tip edge slumped, causing the rear of the truck to sink with the slumped material. The dump slumped at a slow rate. The operator exited the vehicle and was uninjured.



Picture 13.  
Slumped material and truck

**Comments to industry:** When designing a dump, ground stability should be a primary consideration. Material consistency, wet conditions and dipping ground stability should be factored into the design. Inspections should verify dump integrity. Areas that do not meet the standard should be demarcated, communicated to operators, and remediated to meet the standard.



### Dangerous incident | IncNot0048090 – LHD wheels left the ground

**Summary:** A laden load haul dump (LHD) machine's rear wheels left the ground while the machine was being operated. The operator was removed from the cab of the machine with the assistance of an elevated work platform. A slight slope leading to the bins, that had built up over time, may have contributed to the vehicle tipping forward.



Picture 14.  
Stricken LHD with rear wheels off the ground

**Comments to industry:** Mine supervisors should undertake frequent physical inspections of mine roadways to ensure there are no impediments to the safe operation of vehicles and that roadways remain as designed. Equipment operators must remain situationally aware and understand the effects of heavy loads on the tipping point of an articulated vehicle.

### Dangerous incident | IncNot0048108 – Dozer and dump truck collision

**Summary:** A dozer and dump truck collided despite the dozer operator identifying the presence of the truck just before impact and attempting to track forward to avoid a collision. The dozer was side cutting a narrow dump when the dump truck entered the dump without establishing positive communication.



Picture 15.  
Scene of location and vehicles involved

**Comments to industry:** The Resources Regulator has noticed with some considerable concern, an increasing trend in vehicle interactions over the past 6 months throughout all sectors of the mining industry in NSW. Mine operators must take note of the recommendations in safety bulletin: [SB24-08 Recent increase in vehicle interactions](#). There have been 46 vehicle interaction notifications reported to the Regulator in the past 6 months. A review of these incidents indicated that the predominant causes have been a lack of, or inadequate, communication between people involved in the incidents, as well as a lack of situational awareness on the part of operators.

**Dangerous incident | IncNot0048160 – Haul truck lost control on muddy section of road**

**Summary:** A loaded haul truck drove into mud in the centre of a road and lost control before making contact with a centre bund and crossing the centreline of a road. The truck, being driven by a trainee operator, was travelling down a ramp of about 6% at 46 kmh when the incident occurred.



Picture 16.  
Drone view of truck after incident

**Comments to industry:** Mine operators must undertake appropriate examinations of haul roads after wet weather. Where appropriate, production must stop until a dry line can be graded in or there is appropriate traction available to trucks. Workers must operate vehicles at a speed that is appropriate to the conditions. Engineering controls that minimise the risk of loss of control should be considered, including the use of speed-limiting devices.

### High potential incident | IncNot0048167 – Light vehicle rolled away

**Summary:** A worker alighted from a light vehicle in an underground area and went to the upside of the vehicle, leaving it unattended. The light vehicle rolled away about 20 metres before colliding with the wall of the opposite drive. The operator then drove the vehicle back up the drive.



Picture 17.  
Light vehicle at wall

**Comments to industry:** Vehicles must at all times be safely parked as to eliminate the risk of roll away or unplanned movements. Following any incident where a vehicle rolls away, under no circumstances should the vehicle be driven until the issue has been diagnosed and remedied. If the vehicle needs to be moved for repairs, adequate controls are to be implemented to move the vehicle to a safe place.

### Dangerous incident | IncNot0048197 – Haul truck wheel raised after slump

**Summary:** During the process of tipping a load, the position 5 and 6 wheels of a haul truck slumped, causing the position 1 wheel to raise about 1.5 metres off the ground.



Picture 18.  
Slumped truck with raised wheel

**Comments to industry:** Dumping operations should conform to design and operational parameters that ensure stability and safe tipping operations. Mine operators must ensure a system is in place to monitor the compliance to these parameters at all times. Operators involved in dumping operations must be competent to do so, and have the knowledge and ability to raise timely compliance concerns when dump construction and/or operations are non-compliant.



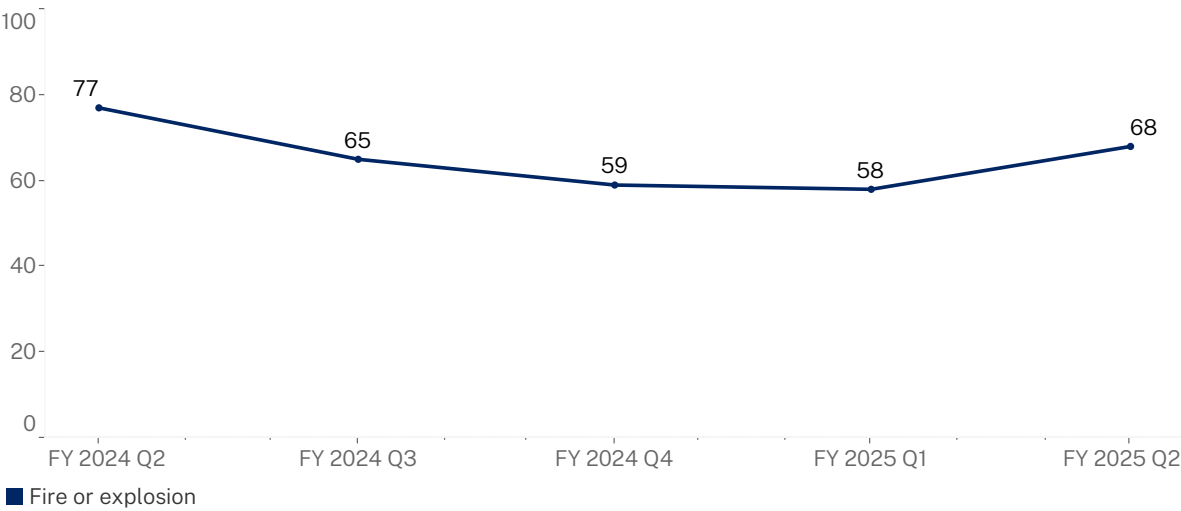
## Fire or explosion

Increase from 58 to 68

This principal mining hazard includes risk associated with all sources of flammable, combustible and explosive substances and materials in the working environment. A common source of these incidents are fires on mobile plant. This principal mining hazard is distinct from the hazards covered in the explosives control plan.

This quarter, fire or explosion notified incidents increased from 58 to 68 and recorded the second-highest figure over the past 5 quarters.

Figure 9. Incident notifications received related to principal mining hazard fire or explosion – October 2023 to December 2024



### Serious injury | IncNot0047878 – Serious burns as petrol-powered pump ignited

**Summary:** A worker suffered serious burns when the fuel being used to refill a petrol-powered pump ignited.



Picture 19.  
Charred pump after ignition incident



**Comments to industry:** Hot engine exhausts are a well-known ignition source. As a minimum petrol-powered pumps shall be turned off and allowed to cool down prior to any refuelling activities. Mine operators should have documented safe work procedures for refuelling petrol engines and workers trained in those procedures. Consideration should be given to using diesel engines in place of petrol engines.

#### **Dangerous incident | IncNot0047959 – Conveyor system incident**

**Summary:** A deputy discovered a collapsed return roller on a panel conveyor belt at an underground coal mine. The deputy stopped the belt, applied a fire extinguisher and isolated the area with a fire watch in place. A preliminary investigation was initiated, and the incident was reported to the Regulator. Immediate corrective actions included replacing damaged structure legs and rollers and conducting a full review of the conveyor risk assessments and fire management plan. Three days later, smoke and embers were detected on the conveyor directly outbye the earlier incident. This was caused by the belt making contact with a restrained grease line. The conveyor had wandered beyond its intended path, with wander switches failing to trip. All belts were shut down, and a full inspection was ordered. The incident prompted a detailed audit of conveyor systems, investigation of wander switch functionality, and a review of installation procedures.



Picture 20.  
Smoke damage on conveyor structure

**Comments to industry:** Risks and effective risk controls associated with conveyor systems are well known. Mine operators must ensure appropriate risk controls are implemented and maintained. Inspection systems should be designed to identify defects, with a strategy to address identified defects, i.e. with the use of a defect register/ database. Wander switches should be commissioned to ensure this control measure will be effective during the operation of conveyors.

#### **High potential incident | IncNot0047989 – Methane exceedance**

**Summary:** Between 2.45pm and 6.10pm a real time sensor located between 1 and 2 cut through of the tailgate of longwall 207B detected greater than 2% methane with a peak reading of 2.18% at 4.12pm. The mining operation reported multiple methane exceedances recently in the past. These usually correlated with a fall of barometer or change in mining parameters.

**Comments to industry:** Mines that have methane in-situ within their target coal seam should have appropriate ventilation control measures in place which address foreseeable hazards posed by falling barometers and variable production rates. Where inter-seam goaf connectivity is identified as a hazard relating to the ongoing management of residual methane gas, ventilation modelling must be conducted to identify and address reasonably foreseeable falls in barometric pressures, incorporating the planned production rates.



## Dangerous incident | IncNot0048151 – Sparking on return roller

**Summary:** A work crew was travelling inbye at a shift change when they noticed sparking from a return roller. The work crew stopped the belt, and the roller produced a visible flame for a short time before being extinguished.



Picture 21.  
Defective roller involved in fire incident

**Comments to industry:** Mine operators must have systems to identify and change-out defective conveyor rollers. Workers conducting conveyor inspections must be aware of the increased risk of roller failure at high tension areas of conveyors. Mine operators must also diligently inspect for fire risks such as accumulation of material, failing or collapsed idlers and contact between conveyor belts and fixed structures.





# Principal control plans

The [Work Health and Safety \(Mines and Petroleum Sites\) Regulation 2022](#) specifies principal control plans for managing certain risks associated with hazards at mine and petroleum sites.

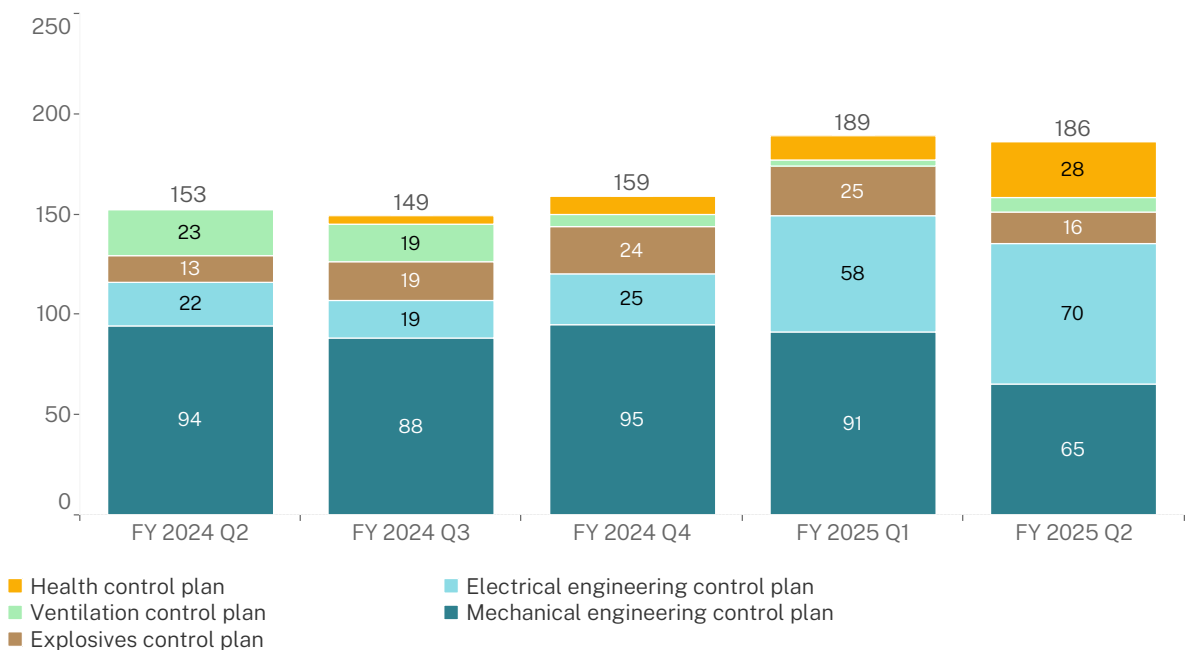
There are 5 principal control plans specified in the Regulation.

The previous classification ‘Electrical and/or mechanical engineering control plan’ has been discontinued with the data mapped to ‘Mechanical engineering control plan’. Any change in the number of mechanical engineering control plan incident notifications across each of the quarters is due to the mapping described above.

The figure below presents a further breakdown of numbers of incident notifications received related to principal control plans as defined in section 19 and Schedule 2 of the Regulation.

Note: no incidents were notified in relation to health control plans or well integrity control plans.

Figure 10. Incident notifications received by principal control plans – October 2023 to December 2024



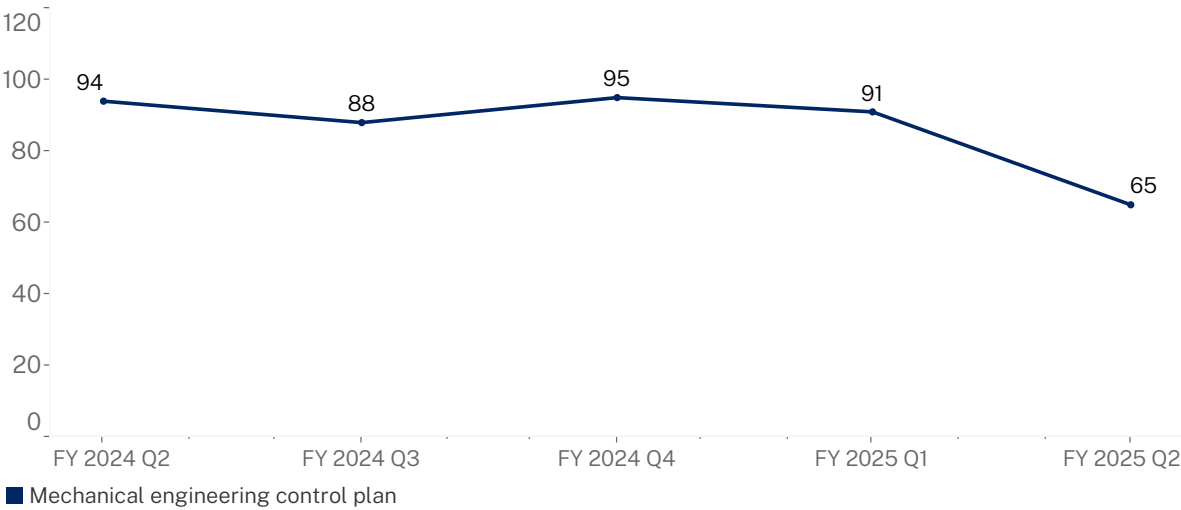


## Mechanical engineering control plans

Decrease from 91 to 65

The mechanical engineering control plan covers ‘lifecycle’ risks associated with mechanical hazards (vehicles, plant and mechanical systems and structures) that workers may be exposed to. This includes risks associated with pressurised fluids.

**Figure 11. Incident notifications received related to mechanical engineering control plans – October 2023 to December 2024**



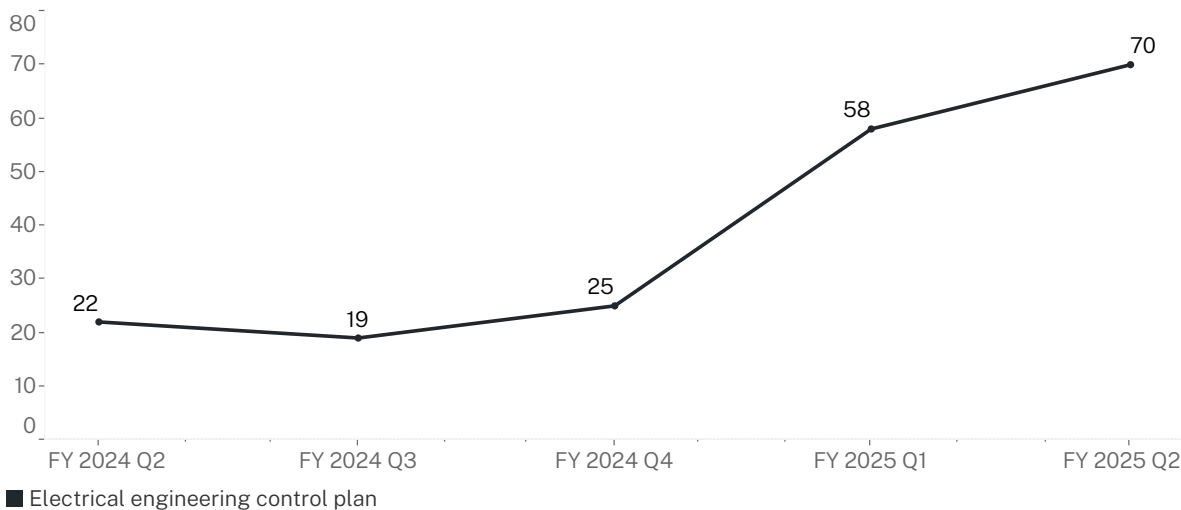
## Electrical engineering control plans

Increase from 58 to 70

The electrical engineering control plan covers ‘lifecycle’ risks associated with electrical hazards (supply, vehicles, plant or infrastructure) that workers may be exposed to.

Notified incidents related to electrical engineering control plans increased by 21% this quarter, continuing an upward trend observed since Q3 FY24.

**Figure 12. Incident notifications received related to electrical engineering control plans – October 2023 to December 2024**



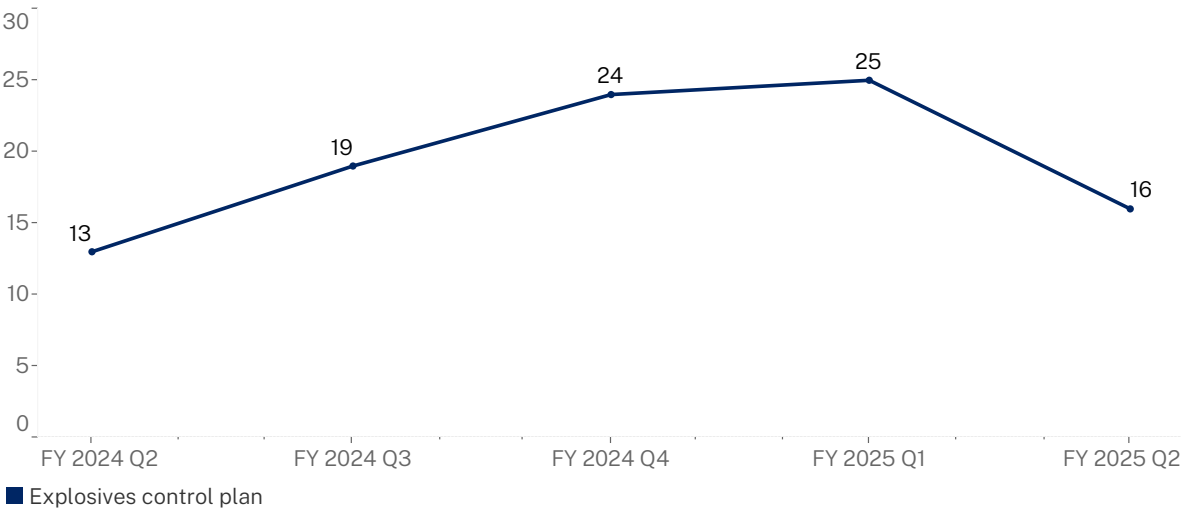


### Explosives control plans

Decrease from 25 to 16

The explosives control plan covers risks associated with the use and management of explosives hazards workers may be exposed to. This includes incidents involving ‘flyrock’ and misfire events.

**Figure 13. Incident notifications received related to explosives control plans – October 2023 to December 2024**



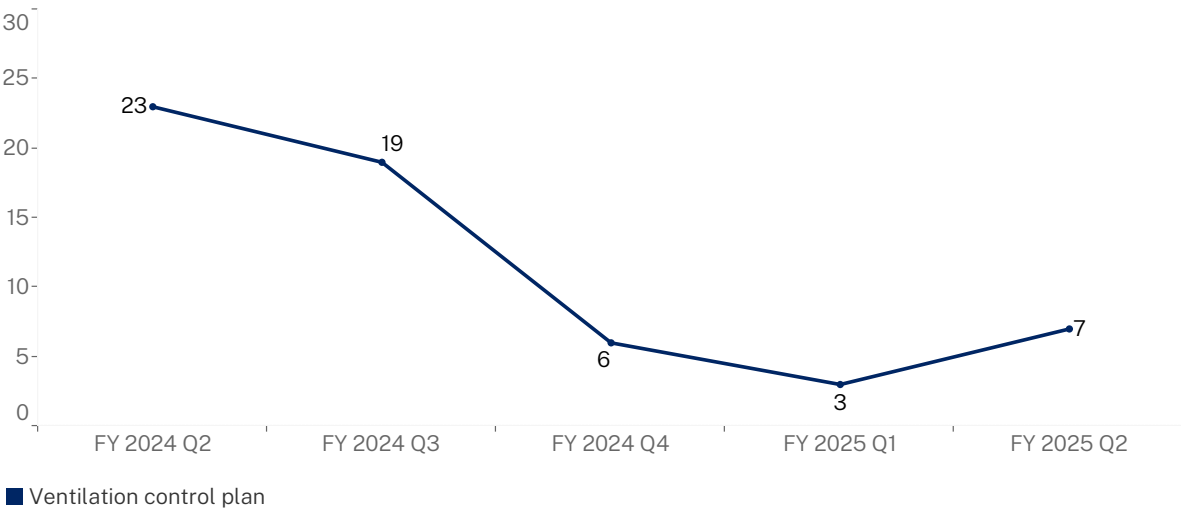
### Ventilation control plans

Increase from 3 to 7

A ventilation control plan covers risks associated with ventilation in underground mines. This includes incidents involving failed atmospheric conditions and where trigger action response plans may have been activated.

This quarter, notified incidents about ventilation control plans more than doubled from 3 in the previous quarter. However, this figure (7) is over two-thirds less than the high of 23 in Q2 FY24.

**Figure 14. Incident notification received related to ventilation control plans – October 2023 to December 2024**







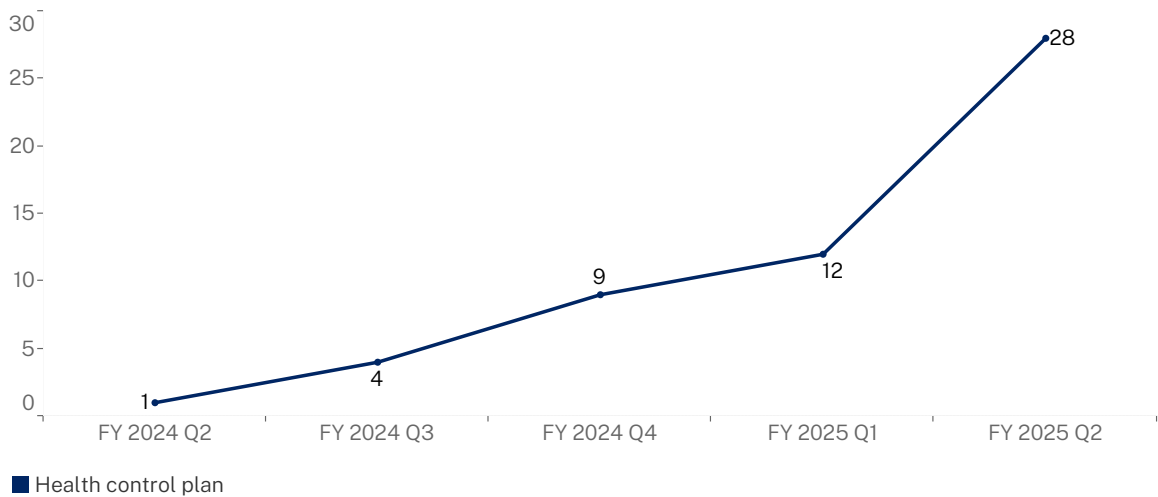
## Health control plans

Increase from 12 to 28

A health control plan (HCP) sets out how the operator will manage the risks to health associated with their mining or petroleum operations. The HCP forms part of the safety management system (SMS). An HCP identifies the hazards which present a risk to health of workers and measures to control them.

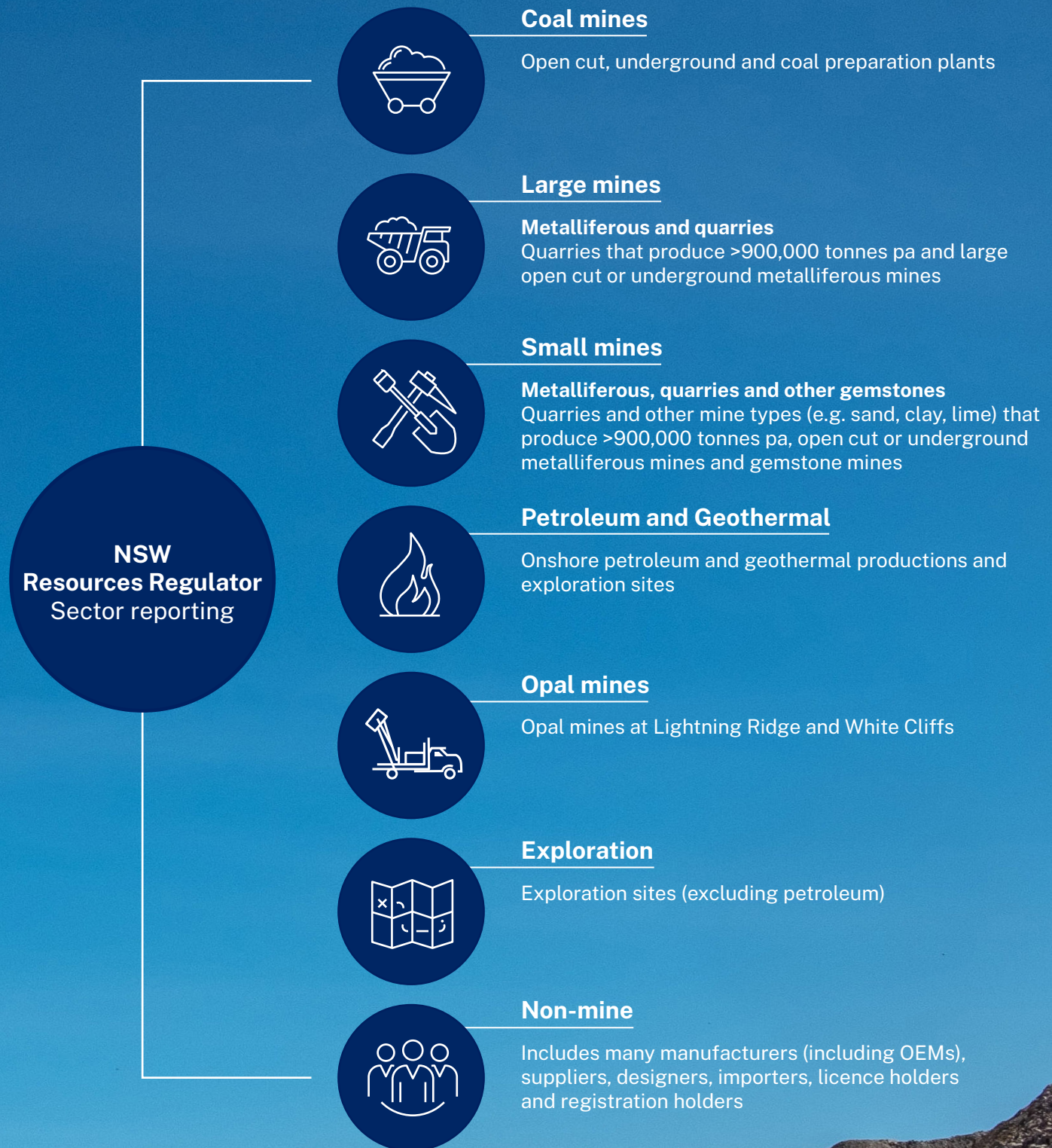
This quarter saw an increase of more than 133% in notified incidents regarding health control plans compared to the previous quarter.

Figure 15. Incident notification received related to health control plans – October 2023 to December 2024





# Sector profiles





# Coal sector

## Incident notifications

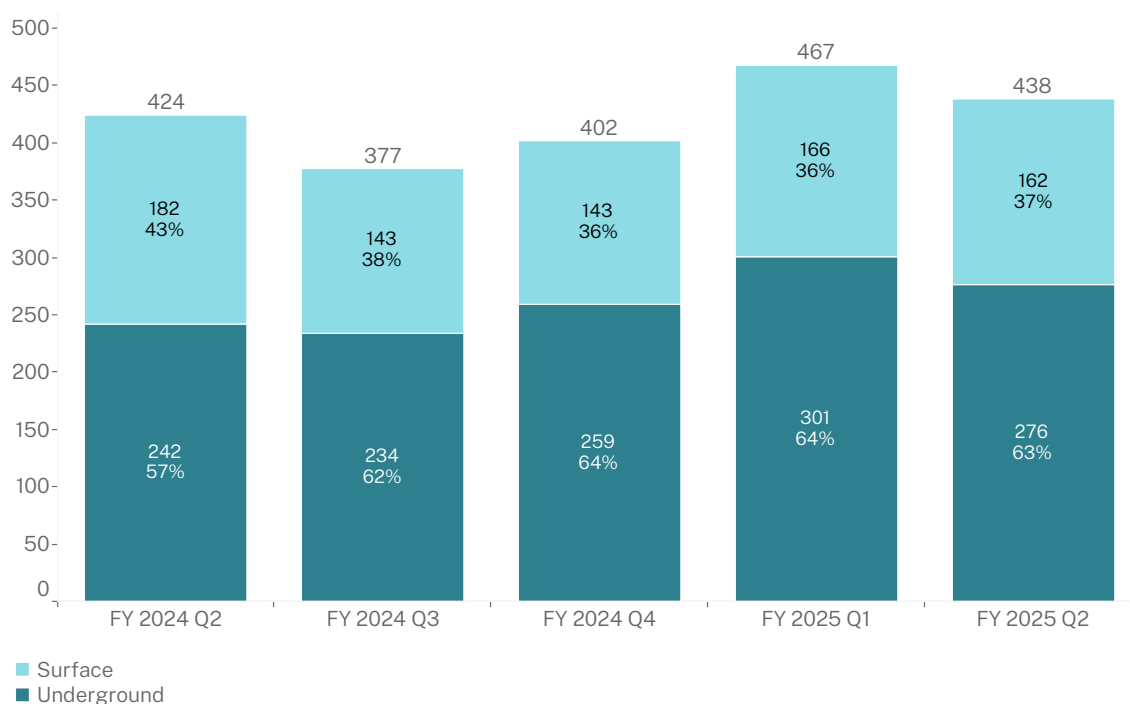
Under work health and safety legislation, mine operators must notify the Regulator about the occurrence of certain types of safety incidents. Incident notification data (by active mine) provides insights into sector-specific reporting trends.

**Table 2. Coal sector incident notification rates – October 2023 to December 2024**

Measure	FY 2024 Q2	FY 2024 Q3	FY 2024 Q4	FY 2025 Q1	FY 2025 Q2
Incidents	424	377	402	467	438
Active mines	103	103	102	99	98
Incident rate per active mine	4.12	3.66	3.94	4.72	4.47
Mines that notified incidents	52	50	48	54	51
% of mines notifying an incident	50%	49%	47%	55%	52%
Incident rate per notifying mine	8.15	7.54	8.38	8.65	8.59

The following graph shows the proportion of safety incident notifications received from surface and underground coal operations. This quarter there were decreases in both surface and underground sectors resulting in an overall drop of 6%. However, the quarter still recorded the second-highest number of incidents over the 5-quarter period.

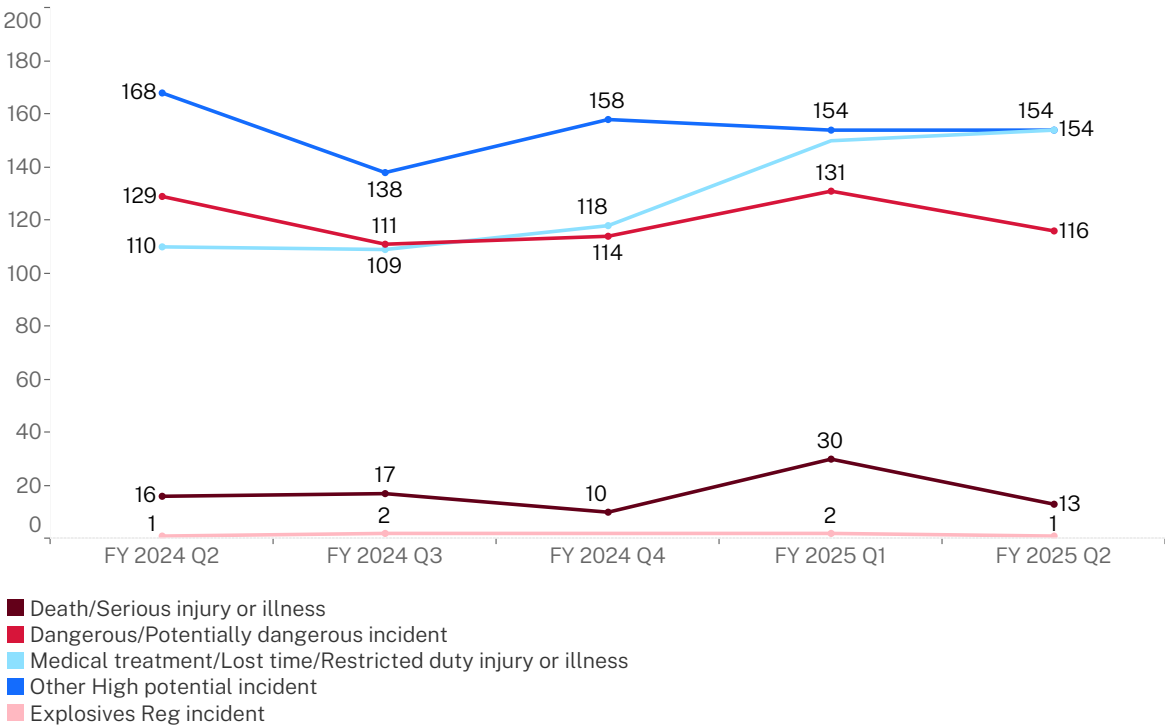
**Figure 16. Coal sector incident notifications received by operation type – October 2023 to December 2024**





The graph below presents a breakdown of safety incidents notified to the Regulator by the coal sector by the requirement to report under safety legislation. Compared to the previous quarter, death/serious injury or illness incidents in the coal sector decreased by 57% (from 30 to 13) recording the second-lowest figure of the past 5 quarters. Dangerous/potentially dangerous incidents also dropped this quarter from 131 to 116. A slight increase was seen for medical treatment/lost time/restricted duty injuries or illnesses (150 to 154) compared to the previous quarter, this was also the highest figure recorded in the past 5 quarters. Notifications of other high potential incidents remained unchanged at 154. [Explosives Regulation](#) incidents remain low.

Figure 17. Coal sector incident notifications received by requirement to report – October 2023 to December 2024

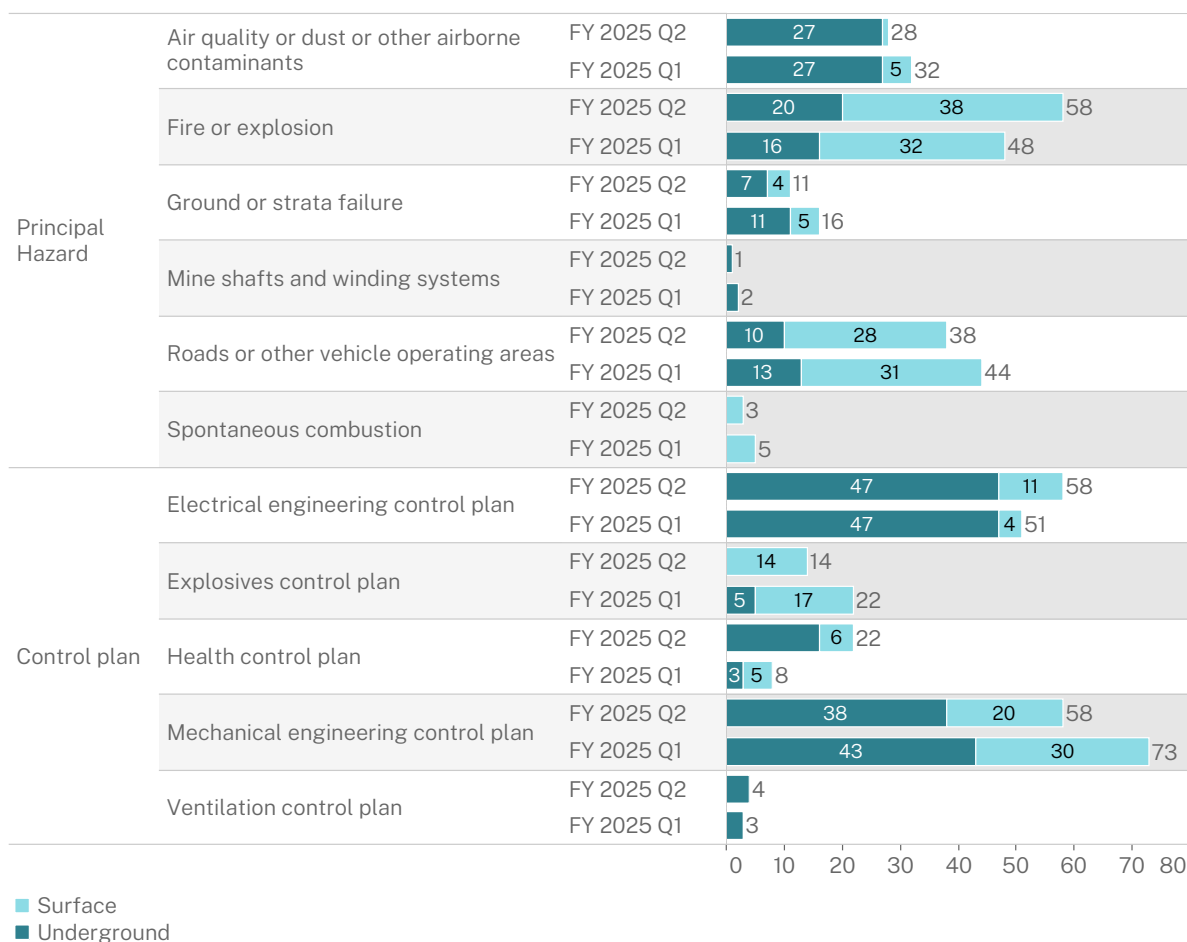


## Incident notifications received by principal mining hazard or principal control plan

The figure below shows the number of incident notifications received from the coal sector during the past 2 quarters, as classified against related principal mining hazards and principal control plans. The findings highlight hazards where mine operators need to ensure their risk management controls remain fully effective.

In this quarter, notable increases were observed in notified incidents relating to fire or explosion (37 to 49) and roads or other vehicle operating areas (30 to 40). Notable decreases were seen in explosives control plan (22 to 14) and mechanical engineering control plan (47 to 38).

**Figure 18. Coal mine incident notifications received by principal mining hazard or principal control plan, and by operation type – July to December 2024**



# Large mines sector

## Incident notifications received

Under work health and safety legislation, mine operators must notify the Regulator about the occurrence of certain types of safety incidents. Incident notification data (by active mine) provides insights into sector specific reporting trends.

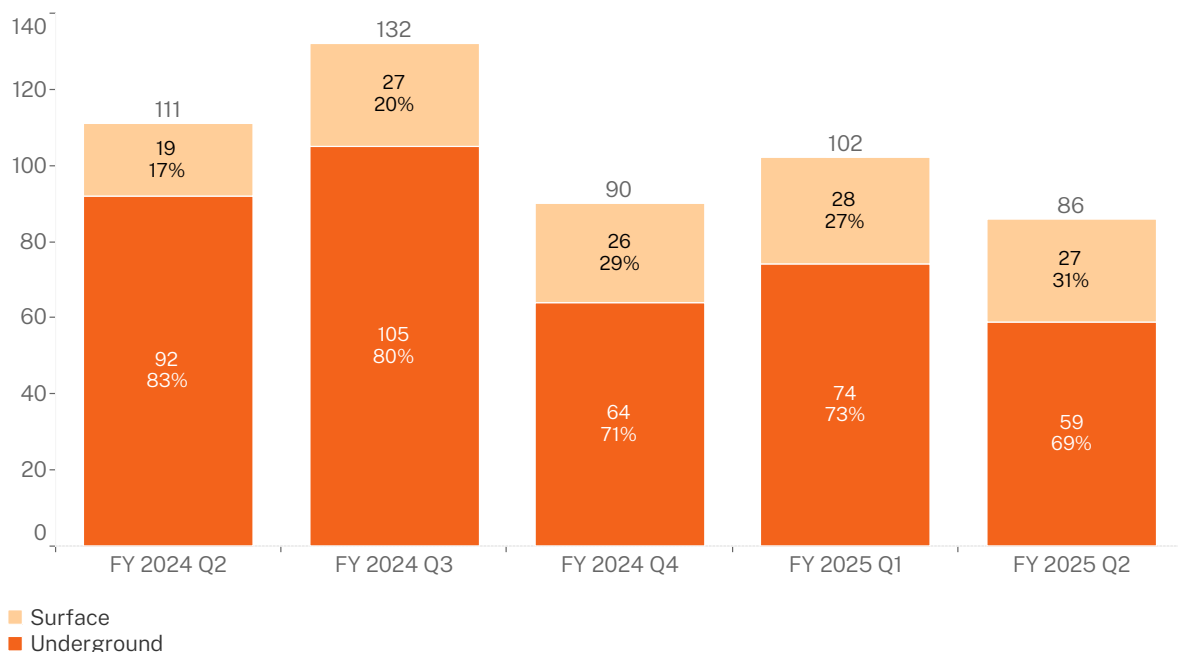
**Table 3. Large mines and quarries incident notifications received rates – October 2023 to December 2024**

Measure	FY 2024 Q2	FY 2024 Q3	FY 2024 Q4	FY 2025 Q1	FY 2025 Q2
Incidents	111	132	90	102	86
Active mines	69	70	67	67	64
Incident rate per active mine	1.61	1.89	1.34	1.52	1.34
Mines that notified incidents	27	28	28	30	34
% of mines notifying an incident	39%	40%	42%	45%	53%
Incident rate per notifying mine	4.11	4.71	3.21	3.40	2.53

\* Active mines exclude exclusive enviro mines from Q1 FY 2023 onwards

The following graph shows the proportion of safety incident notifications received from large mines and quarries by operation type. Against the previous quarter, notified incidents decreased overall by 16% to record the lowest figure seen over the past 5 quarters.

**Figure 19. Large mines and quarries incident notifications received by operation type – October 2023 to December 2024**

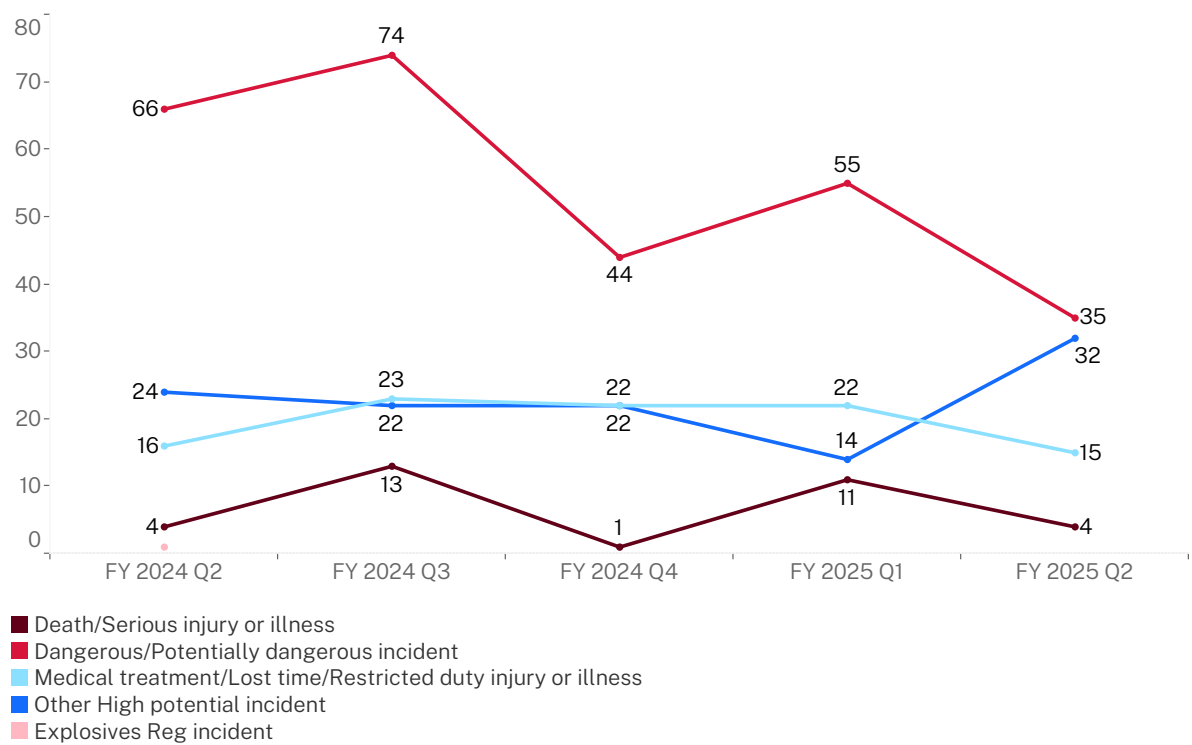




The following graph presents a breakdown of safety incidents notified to the Regulator by the large mines and quarries sector based on the requirement to report under safety legislation.

This quarter a 36% decrease in dangerous/potentially dangerous incidents was observed, recording the lowest figure seen over the past 5 quarters. A notable decrease was seen for death/serious injury or illness which dropped from 11 to 4 incidents compared to the previous quarter. Other high potential incidents was the only category to record any increase, rising from 14 last quarter to 32 this quarter.

Figure 20. Large mines and quarries incident notifications received by requirement to report – October 2023 to December 2024

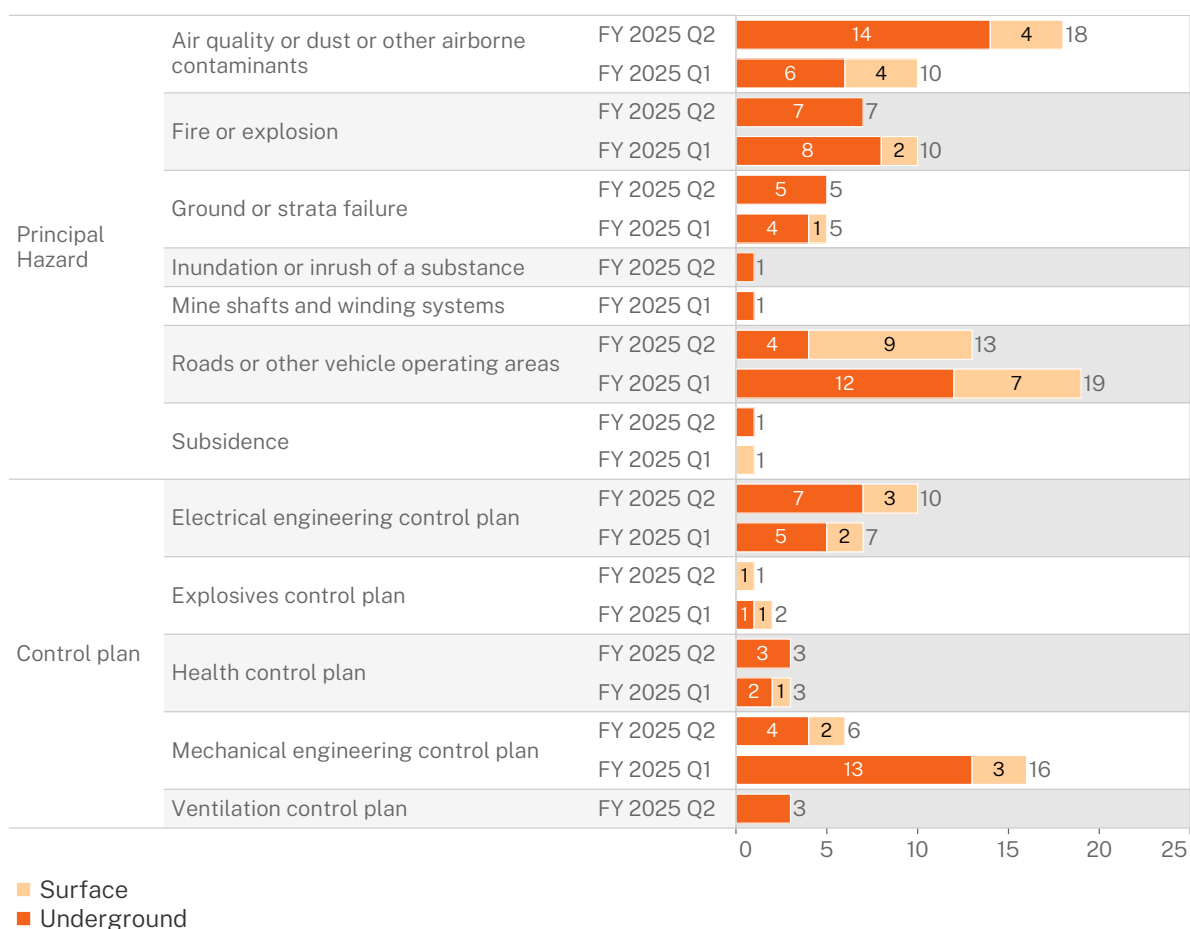


## Incident notifications received by principal mining hazard or principal control plan

The figure below shows the number of incident notifications received from the large mines and quarries sector during the past 2 quarters as classified against related principal mining hazards and principal control plans. The findings highlight hazards where mine operators need to ensure their risk management controls remain fully effective.

In this quarter, a notable decrease was seen in notified incidents relating to mechanical engineering control plan (16 to 6), and an increase in air quality or dust or other airborne contaminants which increased by 80% (10 to 18).

**Figure 21. Large mines and quarries incident notifications received by principal mining hazard or principal control plan, and operation type – July 2024 to December 2024**



# Small mines sector

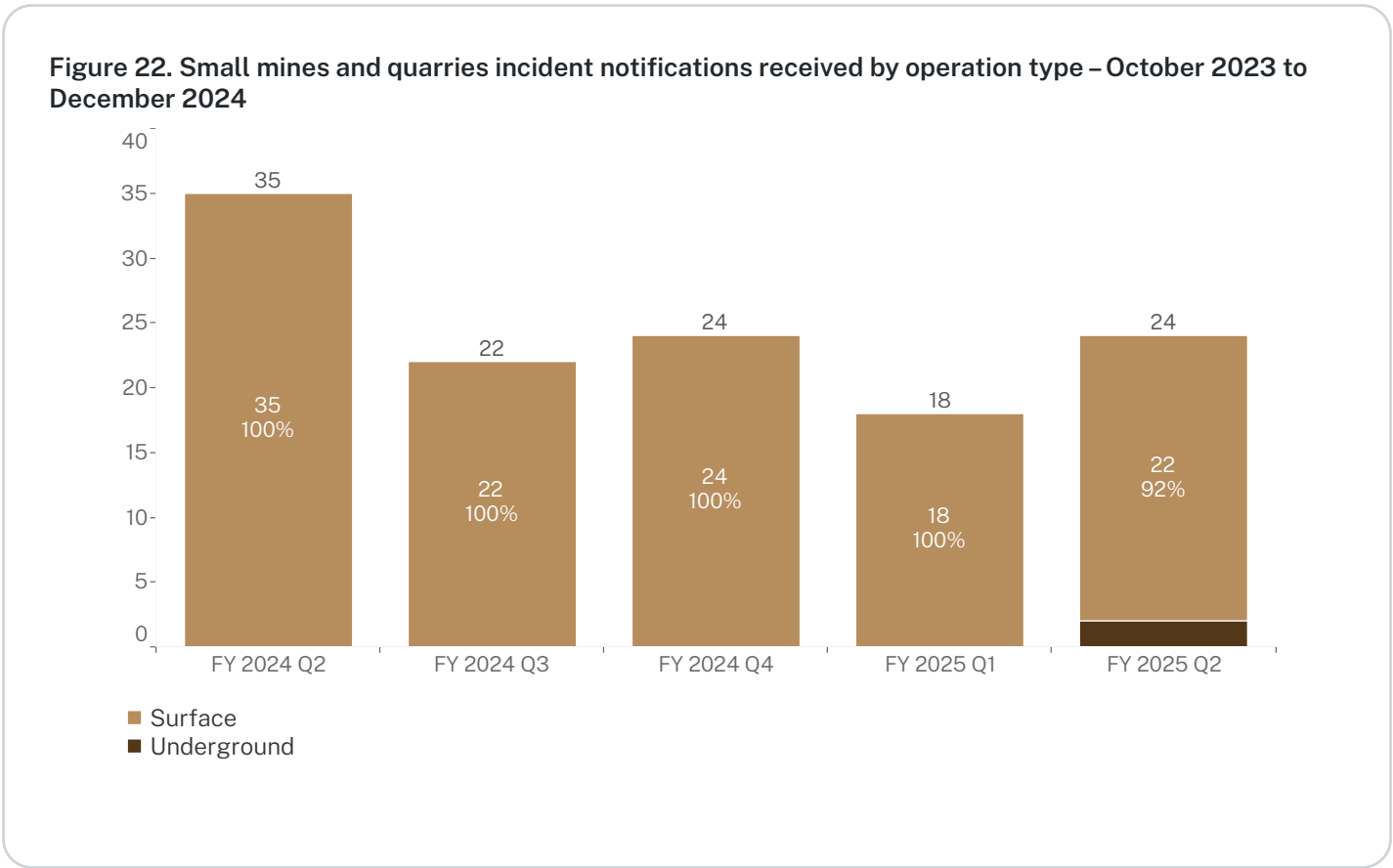
## Incident notifications received

Under work health and safety legislation, mine operators must notify the Regulator about the occurrence of certain types of safety incidents. Incident notification data (by active mine) provides insights into sector specific reporting trends.

Table 4. Small mines and quarries incident notifications received rates – October 2023 to December 2024

Measure	FY 2024 Q2	FY 2024 Q3	FY 2024 Q4	FY 2025 Q1	FY 2025 Q2
Incidents	35	22	24	18	24
Active mines	2,399	2,314	2,310	2,288	2,208
Incident rate per active mine	0.01	0.01	0.01	0.01	0.01
Mines that notified incidents	31	21	20	17	21
% of mines notifying an incident	1.29%	0.91%	0.87%	0.74%	0.95%
Incident rate per notifying mine	1.13	1.05	1.20	1.06	1.14

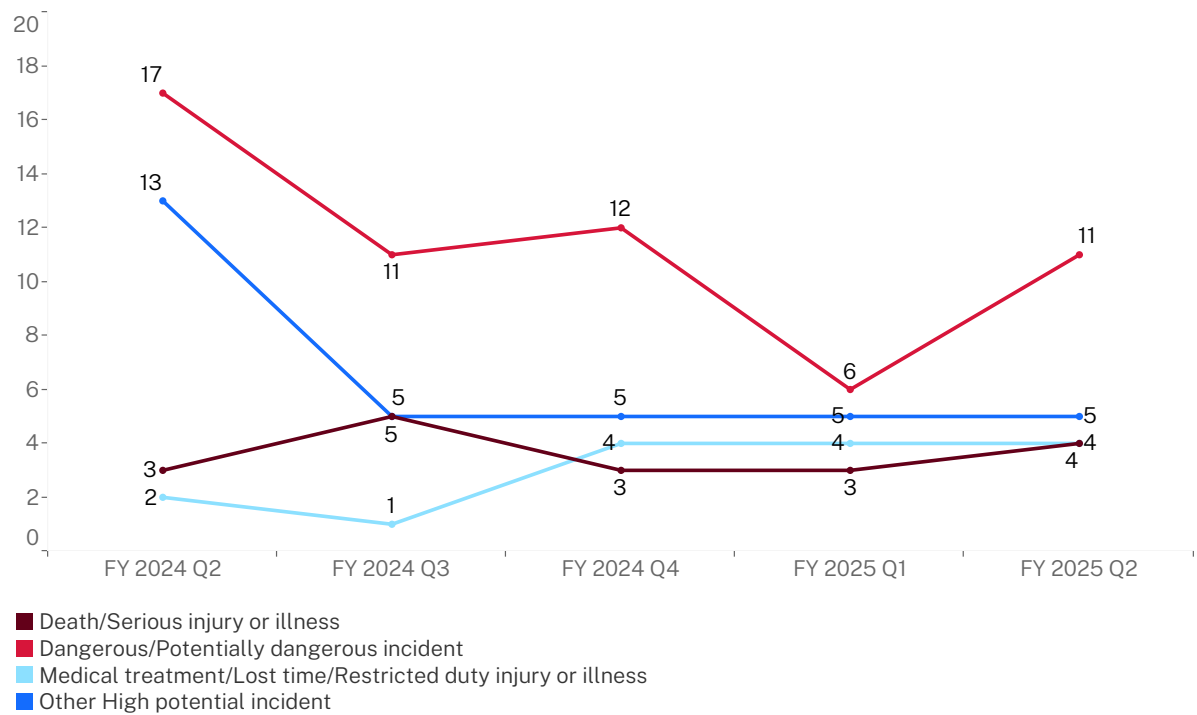
The graph below shows the proportion of safety incident notifications received from small mines and quarries by operation type. In this quarter, notified incidents increased overall by 33%.





The graph below presents a breakdown of safety incidents notified to the Regulator by the small mines and quarries sector by the requirement to report under safety legislation. This quarter saw an increase of 83% in dangerous/potentially dangerous incidents from 6 to 11. Reporting figures for the other categories remained constant compared to the previous quarter, except for death/serious injury or illness which increased from 3 to 4.

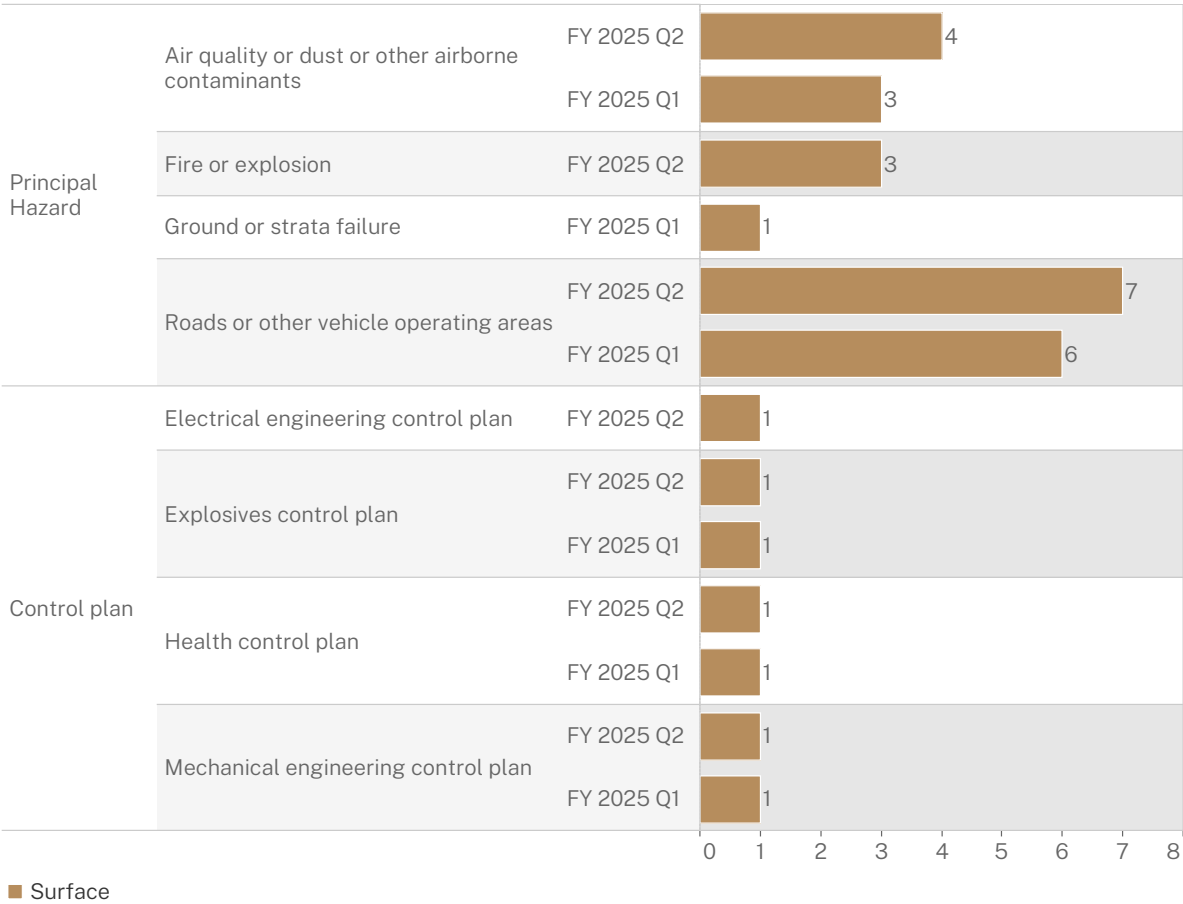
**Figure 23. Small mines and quarries incident notifications received by requirement to report – October 2023 to December 2024**



# Incident notifications received by principal mining hazard or principal control plan

The figure below shows the number of incident notifications received from the small mines and quarries sector during the past 2 quarters as classified against related principal mining hazards and principal control plans. The findings highlight hazards where small mine and quarry operators need to ensure their risk management controls remain fully effective.

**Figure 24. Small mines and quarries incident notifications received by principal mining hazard or principal control plan, and operation type – July 2024 to December 2024**



## Other mines sector profiles

### Incident notifications received

Under work health and safety legislation, mine operators must notify the Regulator about the occurrence of certain types of safety incidents.

This section relates to petroleum and geothermal sites, opal mines and exploration sites. The tables below show the number and types of incident notification received by requirement to report under safety legislation and by principal mining hazard.

**Table 5. Petroleum and geothermal sites, opal mines and exploration sites incident notifications received – October 2023 to December 2024**

Sector	Measure	FY 2024 Q2	FY 2024 Q3	FY 2024 Q4	FY 2025 Q1	FY 2025 Q2
Petroleum and geothermal sites*	Incidents	0	0	0	0	0
Opal mines	Incidents	1	0	0	1	0
Exploration sites**	Incidents	1	2	1	1	3

\* includes exploration

\*\* excludes petroleum and geothermal

**Table 6. Opal mines and exploration sites incident notifications received by requirement to report – October 2023 to December 2024**

Sector	Requirement to report measure	FY 2024 Q2	FY 2024 Q3	FY 2024 Q4	FY 2025 Q1	FY 2025 Q2
Opal mines	Death/Serious injury or illness	1	0	0	1	0
	Total	1	0	0	1	0
Exploration sites	Death/Serious injury or illness	0	1	0	0	2
	Dangerous/Potentially dangerous incident	1	0	0	1	1
	Medical treatment/Lost time/Restricted duty injury or illness	0	1	1	0	0
	Total	1	2	1	1	3

**Table 7. Opal mines and exploration sites incident notifications received by principal mining hazard and other hazards – October 2023 to December 2024**

Sector	Principal hazard or control plan	FY 2024 Q2	FY 2024 Q3	FY 2024 Q4	FY 2025 Q1	FY 2025 Q2
Opal mines	No related principal mining hazard or principal control plan	1	0	0	1	0
	Total	1	0	0	1	0
Exploration sites	Electrical engineering control plan	0	0	0	0	1
	Health control plan	0	1	0	0	2
	Mechanical engineering control plan	0	0	0	1	0
	No related principal mining hazard or principal control plan	1	1	1	0	0
	Total	1	2	1	1	3





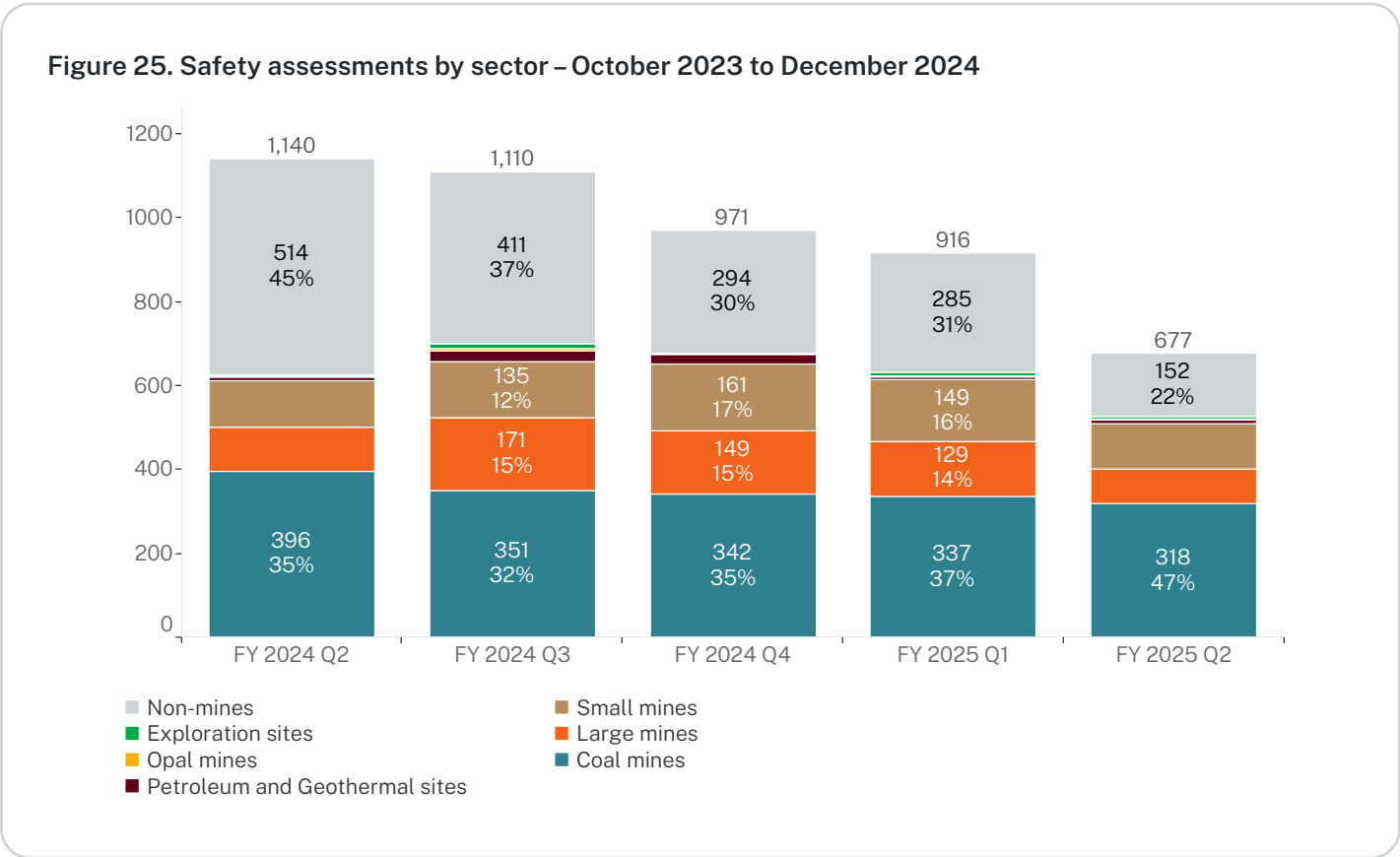
# Compliance and enforcement

The Regulator uses a range of tools to promote and secure compliance in mines and petroleum sites in relation to work health and safety legislation. These include desktop assessments, site inspections, investigations and enforcement actions, such as issuing notices and commencing prosecutions.

Detailed information regarding compliance activities, priorities, outcomes and reports are published on our [website](#) and in our [business activity reports](#).

## Safety assessments by sector

This quarter saw a 26% decrease in the number of safety assessments commenced by the Regulator. The largest proportion of assessments (47%) were conducted in coal mines, followed by 22% in non-mines and 16% in small mines.

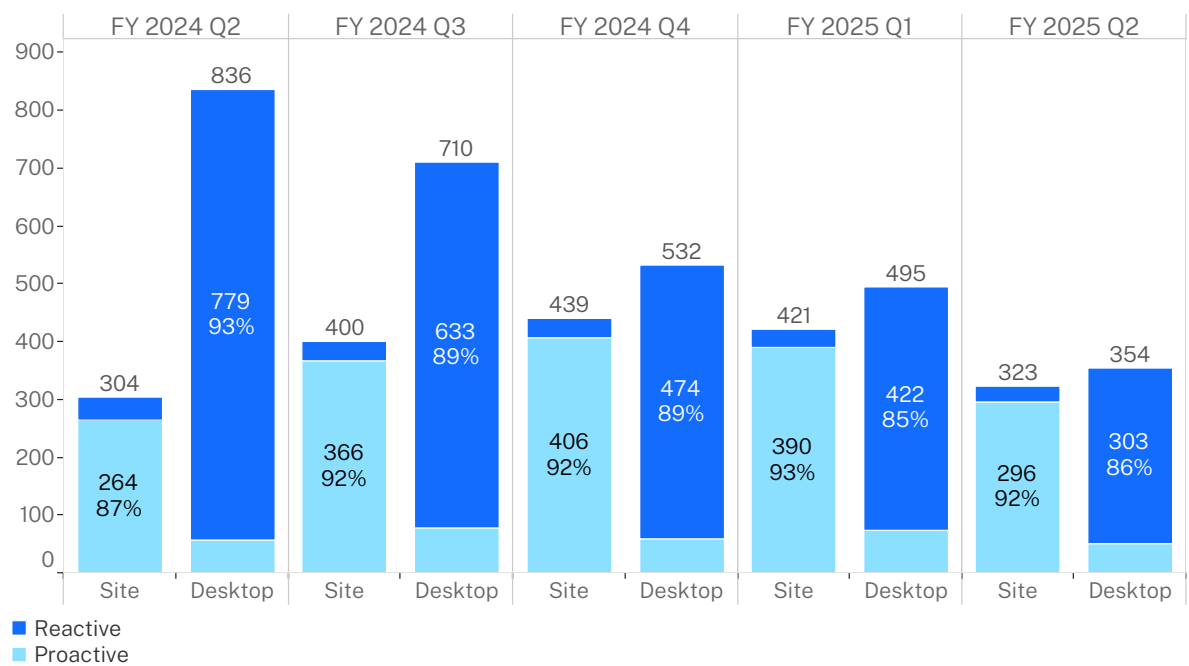


# Safety assessments by category and nature

Site-based (visiting mine sites) and desktop activities are both important regulatory tools. While the focus of our on-site compliance activity is on preventing incidents through planned risk-based proactive assessments, our desktop activities are mainly reactive.

Site-based proactive assessments focus on establishing whether critical controls have been effectively implemented. Meanwhile desktop assessment activities include reviews of control measures following an incident, review of personal dust monitoring reports submitted by coal mine operators, assessment of high-risk activity notifications, applications for exemptions from work health and safety laws, subsidence management plans and preparation for site work.

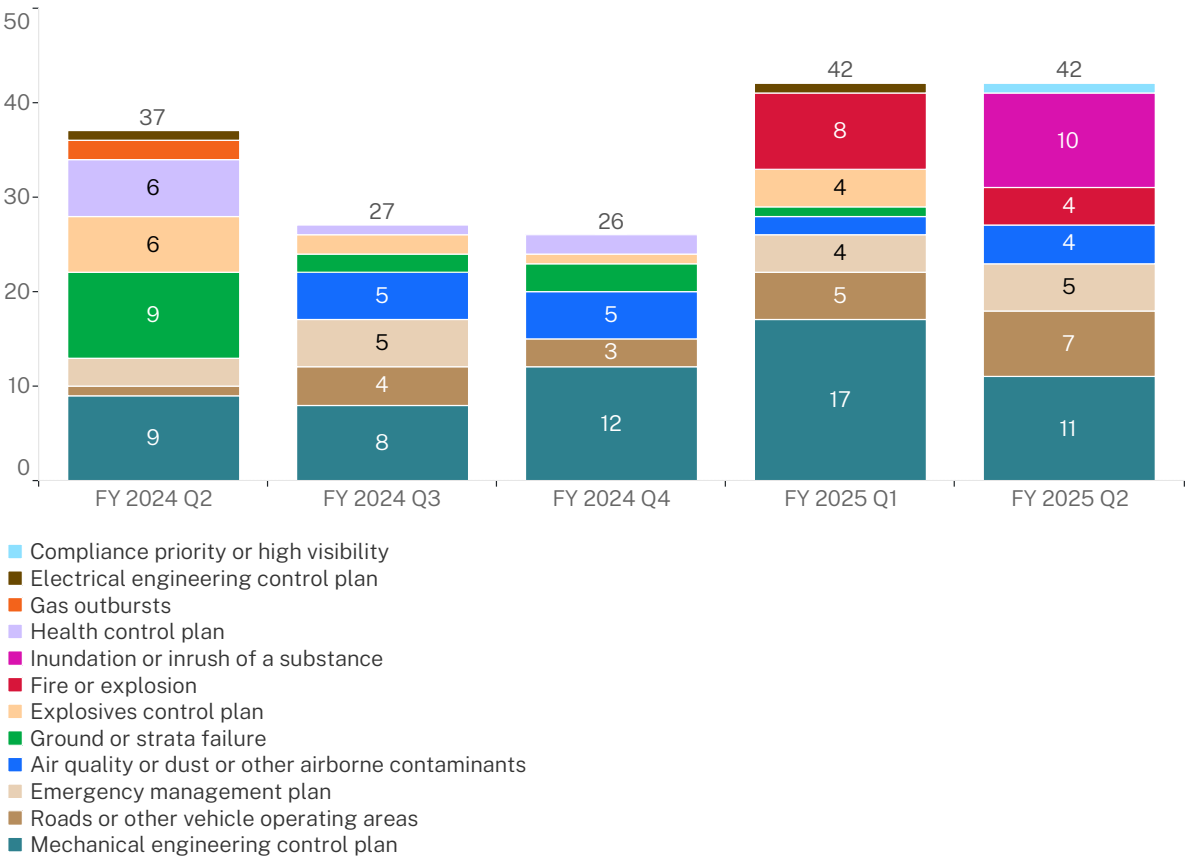
Figure 26. Safety assessments by category and nature – October 2023 to December 2024



# Programmed site assessments

Our targeted assessment program establishes a risk-based and proactive approach for assessing the extent to which critical controls for managing principal mining hazards, principal control plans and other programs have been identified, implemented and are being monitored.

**Figure 27. Targeted assessments by principal mining hazards, principal control plans and other programs – October 2023 to December 2024**

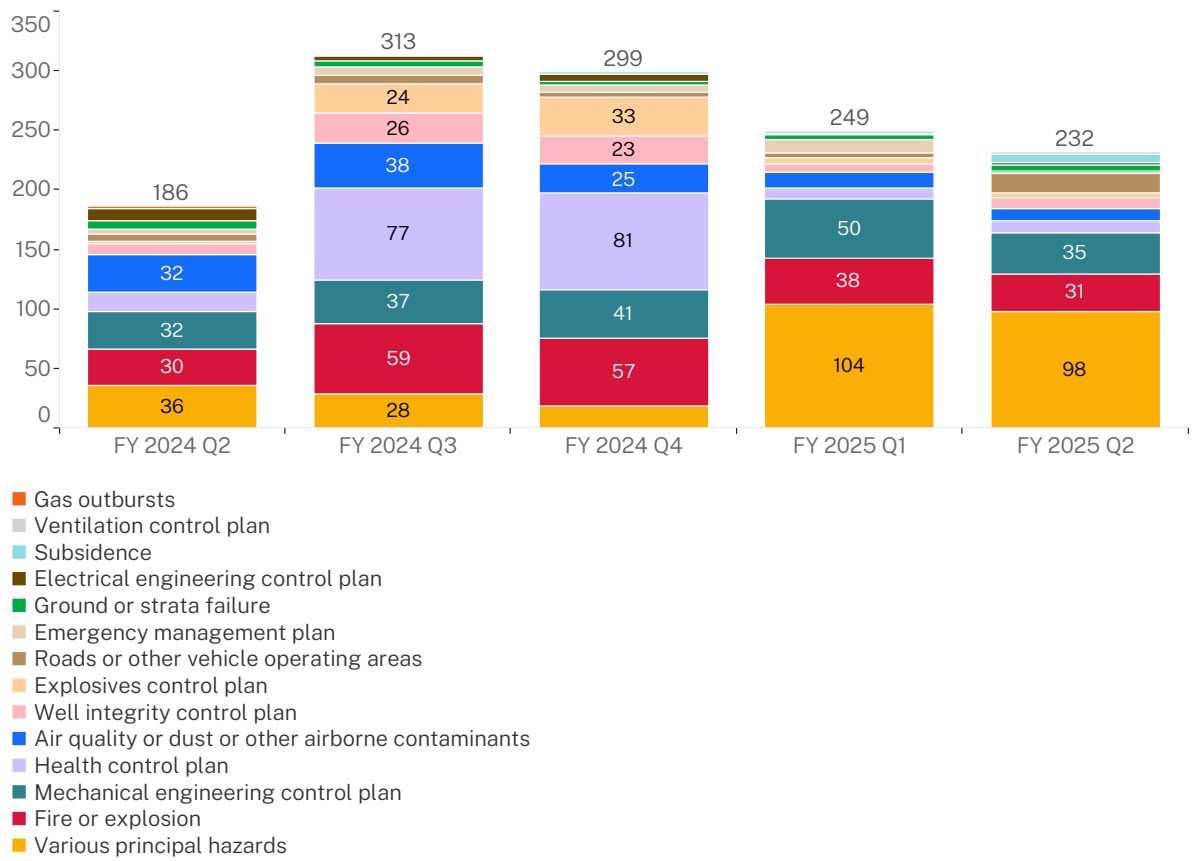


# Planned inspections

Planned inspections assist in identifying compliance weaknesses which could lead to an incident or injury. These assessments focus on the physical implementation of critical controls in the operating areas of a mine.

Planned site inspections were commenced on the principal mining hazards and control plans shown in the graph below.

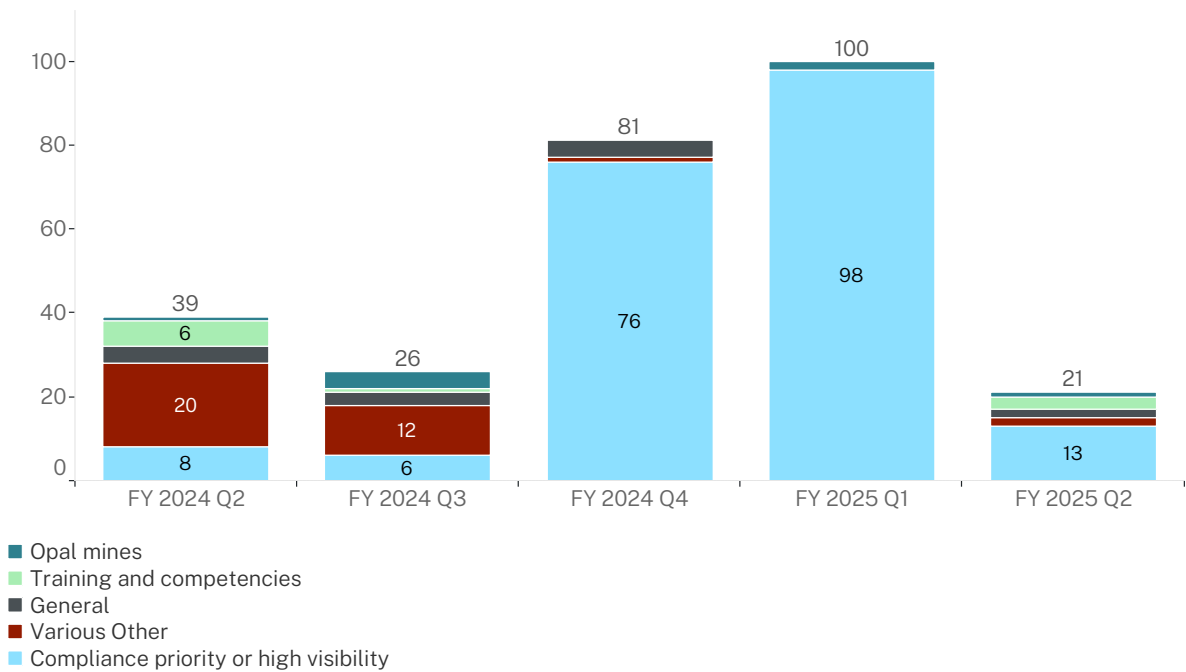
**Figure 28. Planned inspections by principal mining hazard and principal control plan – October 2023 to December 2024**





The graph below shows planned site inspections commenced for ‘other’ hazards. ‘Other’ hazards are those hazards that are not related to principal mining hazards or principal control plans.

Figure 29. Planned inspections by ‘other’ programs – October 2023 to December 2024



# Safety notices issued

We issue risk-based safety notices including prohibition and improvement notices, notices of concern (written notice of matters) and non-disturbance notices.

The graph below shows the number and type of safety notices issued during each of the 5 quarters from October 2023. During this quarter, the number of safety notices issued decreased by 37%. This change was predominantly led by s191 improvement notices which dropped from 528 to 344.

Figure 30. Safety notices issued by notice type – October 2023 to December 2024

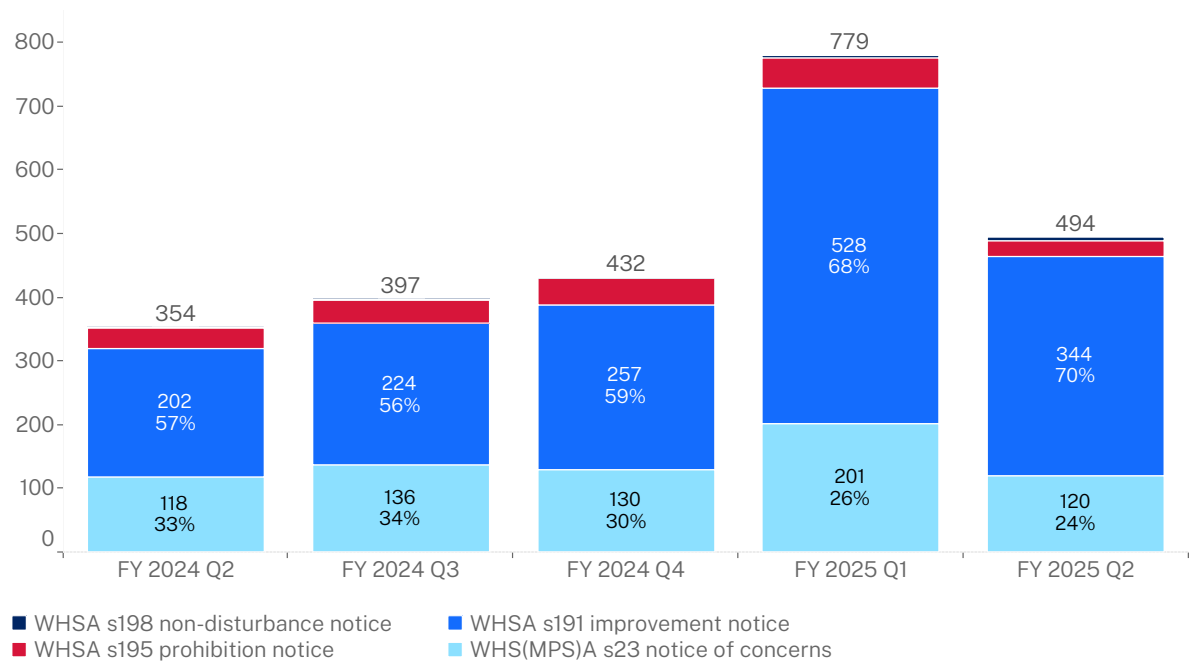
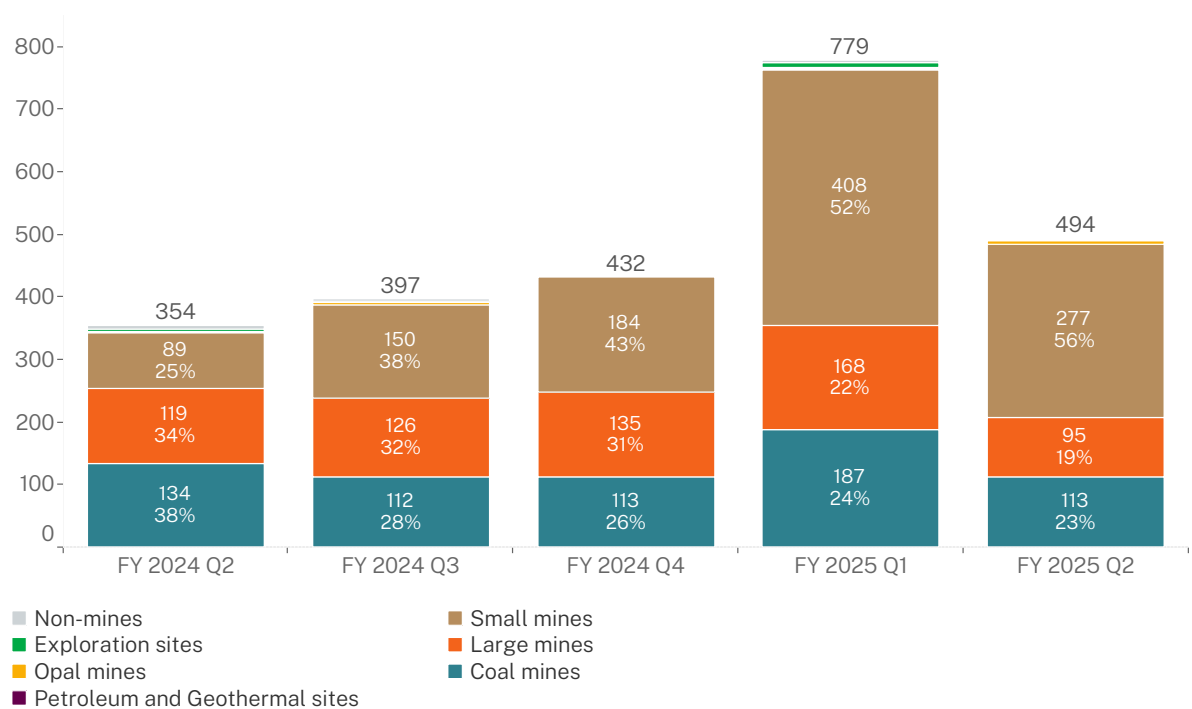


Figure 31. Safety notices issued by sector – October 2023 to December 2024



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