



Resources Safety & Health
Queensland



January 2024

El Quarterly Report

High Potential Incidents and Serious Accident Summary

Queensland Explosives Inspectorate

October – December 2023 quarter (FY24Q2)



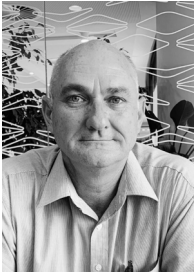
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Unless otherwise stated data is taken to the end of FY24 Q2.



From the Chief



Hermann Fasching,
Chief Inspector of Explosives
Chief Inspector Mineral Mines and Quarries

The Explosives Inspectorate is updating the current notification forms for Blasting and Import of Explosives after the updates to the Fireworks Display Notification form went live in November 2023.

The changes to the forms improve the data captured and will assist the inspectorate in ensuring that blasting and import activities across Queensland meet the legislative requirements and are performed with the safety of workers and the community in mind.

Communications were sent out in November to inform industry of the coming changes which are scheduled to go live early this year. Thank you to the members of industry who provided their feedback on the changes. The inspectorate is finalising the forms based on the feedback provided.



Our vision – ZERO SERIOUS HARM





From the Deputy Chief

Vishwa Bhushan, Acting Deputy Chief Inspector Explosives

We are pleased to share the encouraging news that this Christmas to New Year's period marked a milestone – no reported firework incidents or injuries. We believe our collaboration with media outlets across Queensland, highlighting the dangers of illegal fireworks through Lisa Vanderweyde's story, played a key role in reminding the public of the risks. Lisa was out watching what she thought was a legal fireworks display when she was struck in the leg by firework debris, requiring surgical intervention to remove.

Over the Christmas period, we've seen a significant surge in the reporting of illegal fireworks through our complaint's portal. The community's heightened awareness and proactive responsiveness highlight the impact Lisa's story had on ensuring everyone had a safe New Year's Eve. Together, we are making strides in creating a safer environment through education and advocacy.

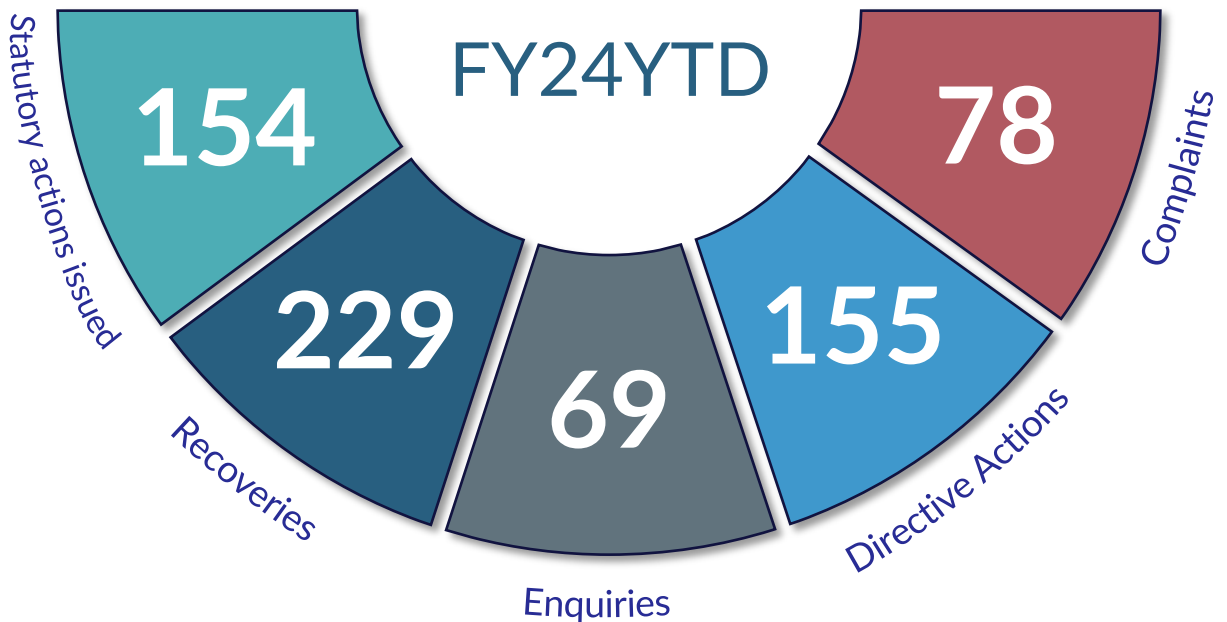
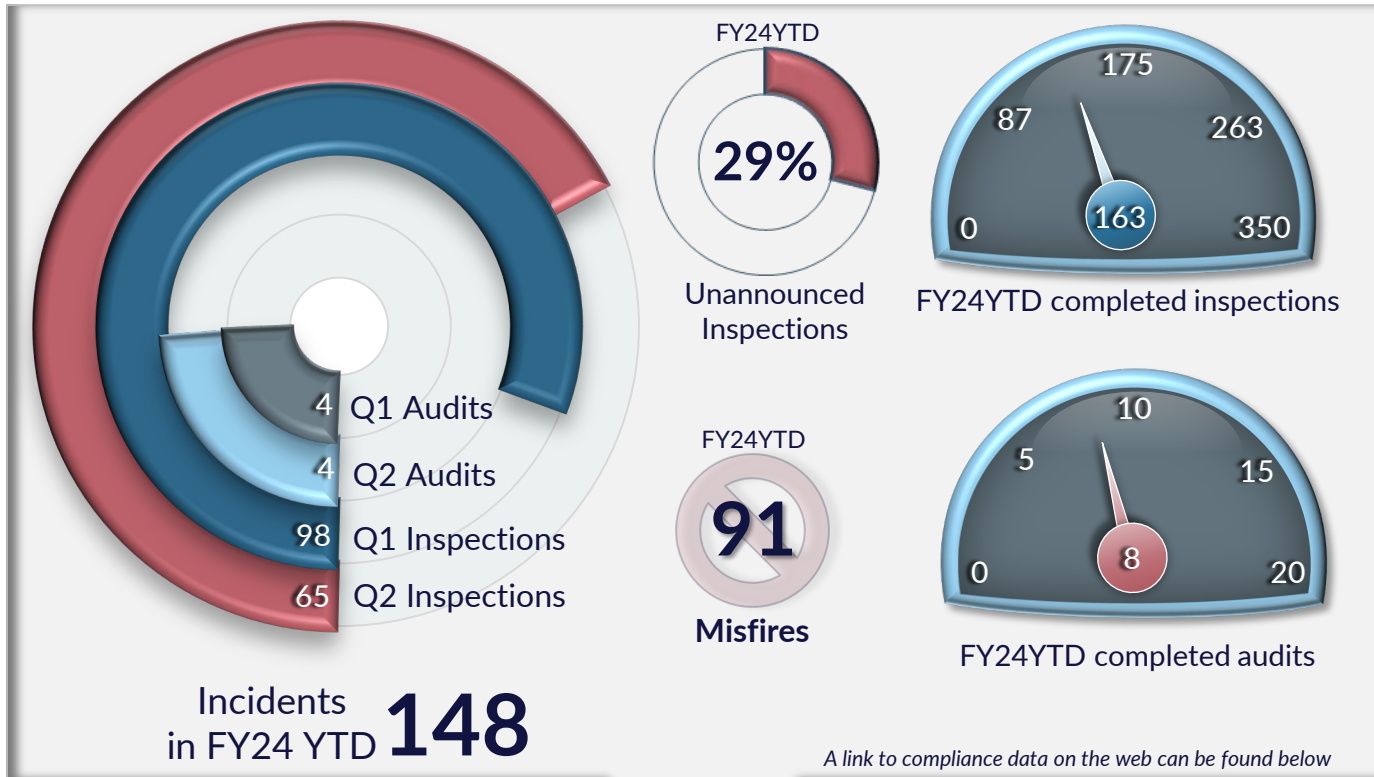
A significant highlight of the quarter was the safety reset meetings and events at numerous mines, quarries, and firework contractors' operations, along with the Quarry & Construction blasting forum. These gatherings brought the industry together for open and objective discussions on safety, emphasising collaborative efforts to enhance our collective approach to creating a safer work environment. The engagement during these safety resets reflects our shared commitment to continuous improvement and fostering a culture of "See, Stop, Report".

A notable concern in the last quarter was the substantial increase in the number of incidents related to fire and transport of explosives/precursors. Fortunately, no injuries occurred in these incidents, and extinguishers successfully controlled fires in all cases except one. To address this issue, we are actively investigating the root causes and notifying industry of corrective actions, such as Explosives Inspectorate [Safety Alert 114](#). To further delve into these matters and collaboratively find solutions, we plan to discuss these issues in the upcoming meeting of the Transport Industry Liaison Group.

Our vision – ZERO SERIOUS HARM

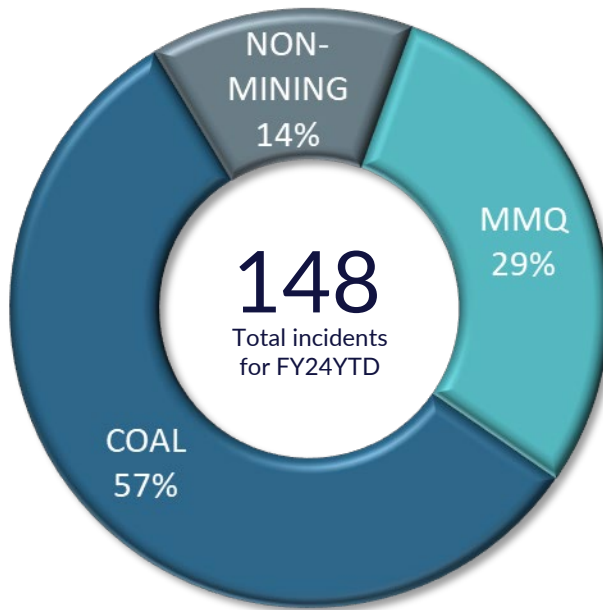


Regulator activity

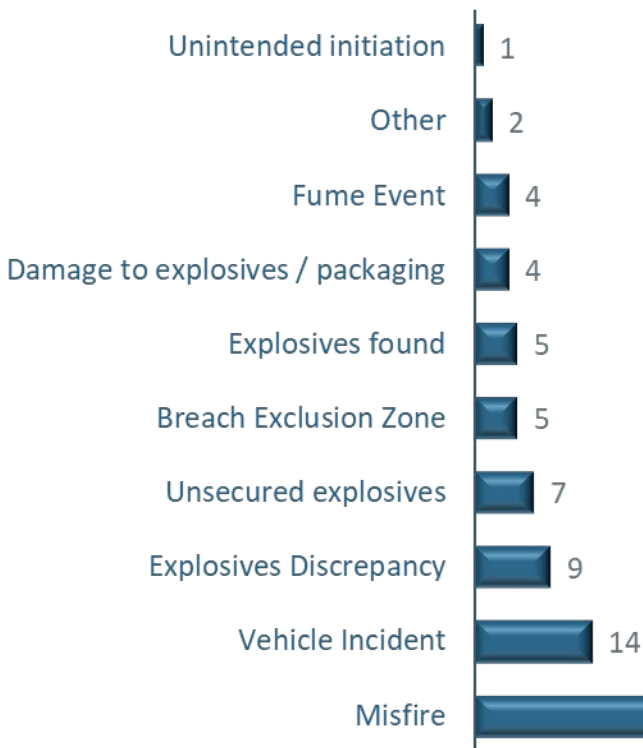
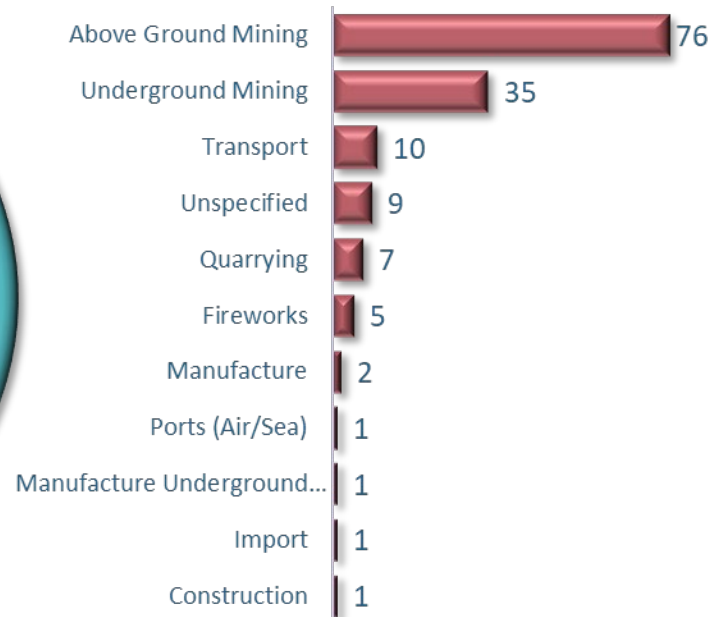


The Incident numbers for FY24YTD

Incidents by Industry Sector



Incidents by sector

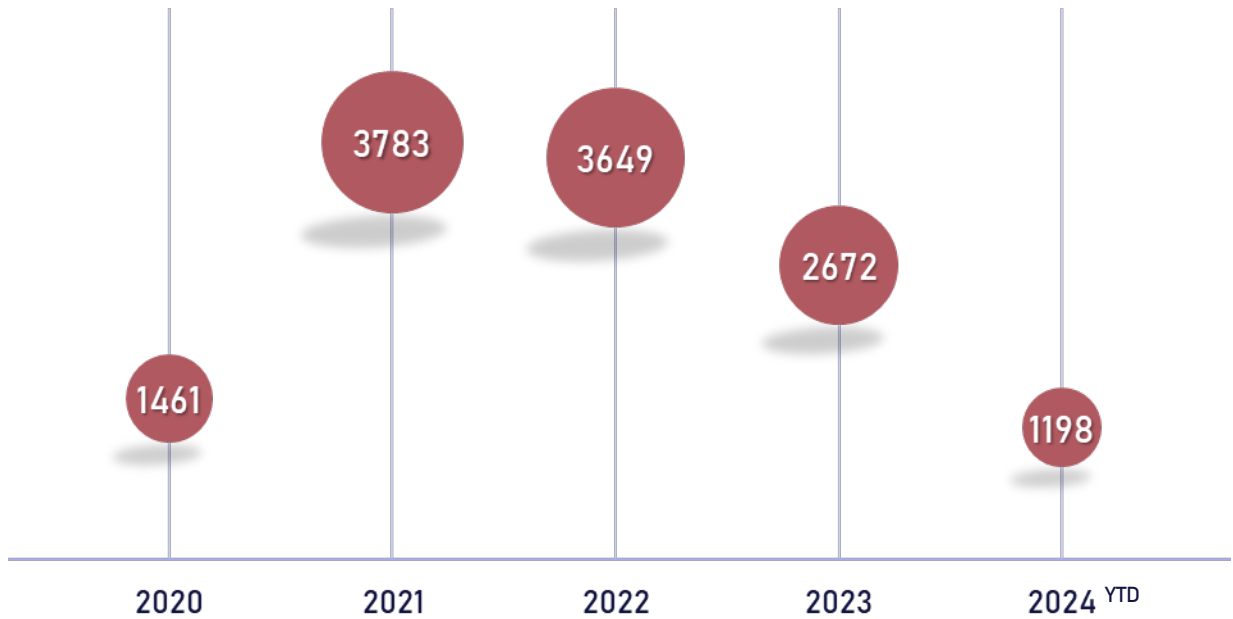


Top 10 incidents by type

What are the key control failures or areas of safety that have impacted these outcomes.

Security Clearances

Security Clearances by financial year



Transitional Security Clearances



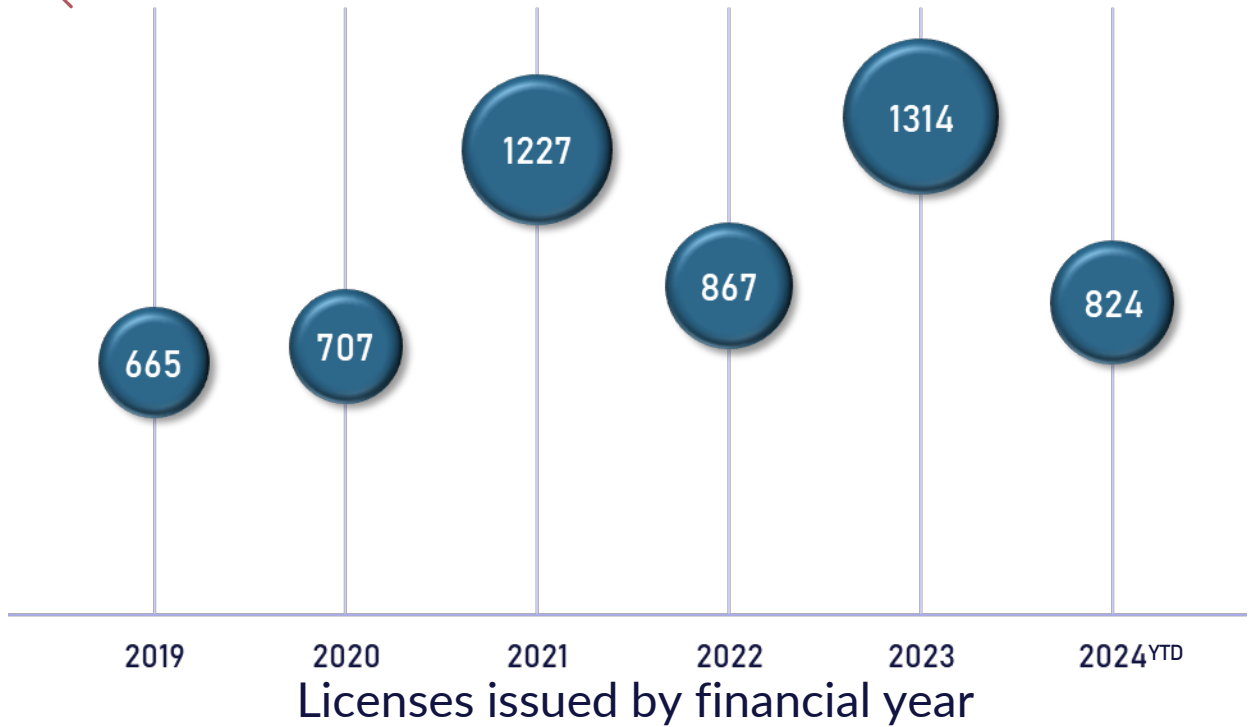
If you held a security sensitive authority (licence) on 1 February 2020, the transitional security clearance arrangements will expire depending on which of the following applies;

If the licence is renewed **(for a period of less than 5 years)** after 1 February 2020, the transitional arrangements expire on the expiry date of the renewed licence (or earlier if the licence is surrendered or cancelled).

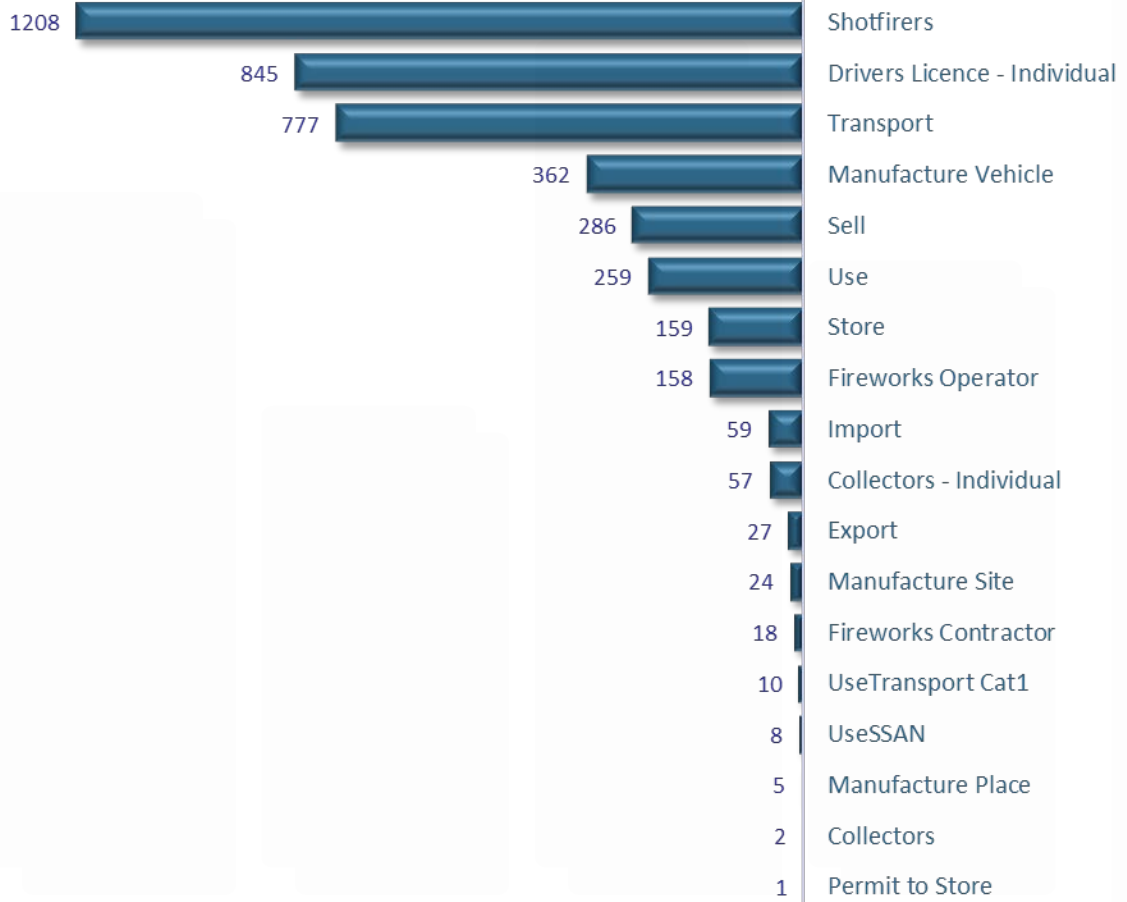
If the licence is renewed **(for a period of 5 years)** after 1 February 2020, the transitional arrangements will expire on 1 February 2025 (or earlier if the licence is surrendered or cancelled).

If the licence is **not renewed** after 1 February 2020, the transitional arrangements will expire when the licence expires.

Current Licenses



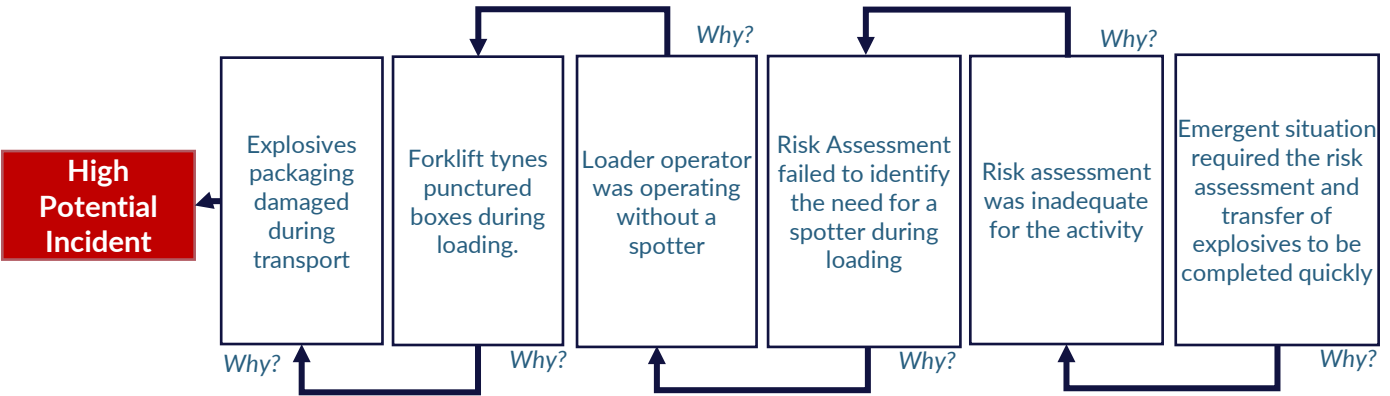
Licenses by class



Incident Focus

Damage to explosives during transportation

A localised bushfire threat prompted the decision to transfer explosives from surface magazines underground. During their return transfer, it was identified that damage to explosive packaging had been caused by forklift tynes on an IT Loader.



Contributing Factors

- The bushfire threat prompted the decision to remove the explosives from danger (elimination vs engineering controls).
- A spotter was not available to guide operator into position to manoeuvre the IT Loader forklift tynes into place.
- The explosive incident was not immediately reported to the shift supervisor

Key takeaways

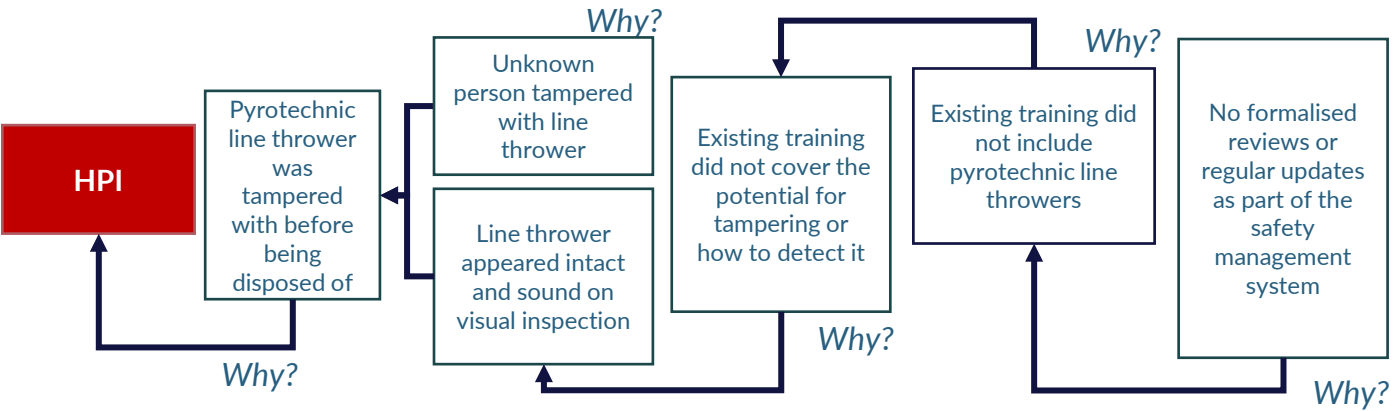
- Adequate training of employees in incident procedures is a critical step in all safety and health management systems.
- Explosive incidents are to be reported immediately under s56 of the Explosives Act 1999.
- Employers must be reasonably satisfied the employee has the qualifications; experience & expertise prescribed by a regulation for carrying out the activity



Incident Focus

Unplanned initiation of pyrotechnic distress signal

During recovery of a surrendered line thrower, as the line thrower was being picked up for packaging it has functioned and fired without external input.



Contributing Factors

- Safety equipment had been tampered with, reducing the effectiveness of the controls in place to prevent unplanned detonation
- Line throwers are initiated by pyrotechnic charges and were not included in training packages for marine flare recoveries.

Key takeaways

- Any persons involved in the recovery chain should review training and process for marine safety devices, including line throwers.
- Documentation Update: Ensure that documented work procedures include comprehensive guidelines for line throwers, covering inspection, identification of tampering, and proper handling.
- Document actions to be taken if devices are found to be in tampered or in altered states.
- If unsure seek advice from your supervisor or the explosive inspectorate 1300 739 868

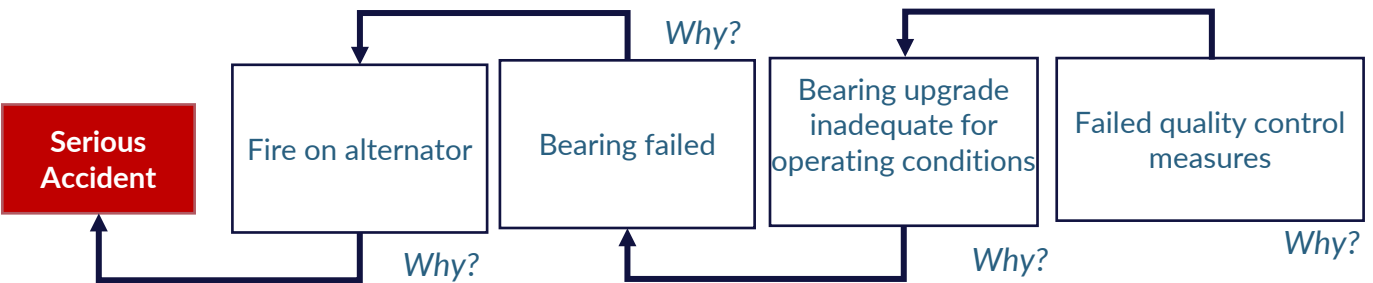




Incident Focus

Faulty alternator catches fire on SSAN transport

An AB-triple combination fully loaded with security sensitive ammonium nitrate (SSAN) emulsion, parked at the mine security gate, had a failed alternator bearing resulting in an alternator fire.



Contributing Factors

- The investigation identified that a failed bearing in the OEM-fitted alternator caused the fire.
- This incident highlights the potential for the alternators to prematurely fail, leading to an unexpected fire.
- Further enquiry by RSHQ identified 5 other cases of similar bearing failure in alternators with less than 12 months service.

Key takeaways

- Regularly check for recall notices by the manufacturer and replace as required.
- A regular inspection regime is recommended, including removing the belt and checking the alternator for movement or noise.
- Drivers to be informed of any defects and provided clear instructions regarding their responses or actions.





Incidents in the spotlight

Increasing instances of the loss of control of explosives

From 2021 to 2023 we have seen a three-fold increase in the number of security incidents where sites have lost control of explosives. In comparison to last year, it represents a six-fold increase.

The increase may be due to sites reporting incident where they have not in the past. However, the significant increase should be a cause for concern for the mining industry.

These incidents have varied between:

- Stocktakes identifying missing stock.
- SSAN and other explosives being transported unintentionally.
- Explosives being left in insecure environments, not returned to the magazine.

Single or small quantities of items being found as missing on a stocktake indicates that there could be either a loss of physical control of items or inadequate completion of stock records. Whilst the majority of instances were resolved, the incidents point to ineffective or ignored procedures and systems. In all cases this is an unacceptable situation and is to be addressed by authority holders.

As to the uncontrolled transportation of explosives, there were a number of different incidents. Several involved the movement of SSAN from sites, in one case it being dumped at a public landfill site. On two occasions close to 10T of SSAN was involved. There have also been incidents where additional items were transported, without appropriate documentation.

Leaving explosives insecure, outside a magazine or carry box, has been another common problem. Whether they have been left on the bench or in a vehicle, they are no longer under the control of appropriate staff. What is also of concern is the fact that the discrepancies are not picked up by stock reconciliations when other explosives are returned to the magazine.

Any loss of control of explosives is a direct safety risk to the community and indicative of systems not under control or staff not exhibiting the right culture around explosives. Whatever the case may be, this is an area of concern for the Inspectorate and these types of incidents will be reviewed in detail by our staff.

If you or your organisation have any questions regarding the security of explosives, stock control or your responsibilities, please address them to explosives@rshq.qld.gov.au and an inspector will respond as soon as possible.



Key engagement & activities

UPCOMING EVENTS



Transport Industry Liaison Group Meeting - Rockhampton

PUBLICATIONS THIS QUARTER



[Safety Alert 113 Fireworks injury sparks changes to exclusion zone](#)



Contact

Licensing

GPO Box 1321

Brisbane QLD 4001

Phone: (07) 3199 8023

Email: explicensing@rshq.qld.gov.au



General Enquiries

GPO Box 1321

Brisbane QLD 4001

Phone: (07) 3199 8023

Email: explosives@rshq.qld.gov.au

Emergencies

For emergencies where someone is seriously injured and in need of urgent medical help, life or property is under threat, or if you have witnessed a serious accident or crime **first contact 000**.



You can then report explosives accidents or emergencies to the **Explosives Hotline 1300 739 868** (24/7).

<https://www.business.qld.gov.au/industries/mining-energy-water/explosives-fireworks>

