

Consolidated report

Mine safety high visibility campaign 2024

24 June 2024 to 5 July 2024



Published by the Department of Primary Industries and Regional Development

Title: Consolidated report – mine safety – high visibility campaign 2024

Subtitle: 24 June 2024 to 5 July 2024

First published: July 2024

Department reference number: RDOC24/56426

More information

Amendment schedule		
Date	Version	Amendment
July 2024	1	First published

© State of New South Wales through the Department of Primary Industries and Regional Development 2024. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute the Department of Primary Industries and Regional Development as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (July 2024) and may not be accurate, current or complete. The State of New South Wales (including the Department of Primary Industries and Regional Development), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication.

Table of Contents

Executive summary	4
Types of mines inspected during the campaign.....	4
Summary of notices issued to mine sites.....	4
Notices issued to coal mine sites.....	5
Key findings for coal mine sites.....	5
Recommendations for coal mine sites.....	6
Notices issued to metalliferous & quarry sites (TIER 1).....	6
Key findings for metalliferous & quarry sites	7
Recommendations for metalliferous & quarry sites	8
Notices issued to small mine sites (TIER 2).....	8
Key findings for small mine sites.....	9
Recommendations for small mine sites.....	9
Further information	10

Executive summary

The Resources Regulator conducted an annual high visibility campaign targeting specific safety issues and safety-related trends occurring and emerging in the NSW mining industry.

The Regulator’s high visibility campaign for 2024 assigned 44 mine safety inspectors to attend 136 mine sites in NSW during two-weeks, between Monday 24 June 2024 and Friday 5 July 2024.

The safety focus of the high visibility campaign at coal mines, metalliferous and extractives mines (surface and underground mines) reviewed the implementation of controls at the mine to prevent reoccurrence of similar types of incidents that had been reported to the Regulator within the previous 12 months.

Inspectors visited small mines sector sites, gave safety presentations to mine management and workers and conducted site inspections.

This report will consolidate inspection findings and provide analysis and recommendations resulting from 194 compliance notices issued to 106 mine sites during the campaign.

Types of mines inspected during the campaign

In total there were 136 mine sites inspected during the high visibility campaign:

- 24 surface metalliferous and extractives mine sites (large mines and quarries tier 1)
- 1 metalliferous processing site
- 14 underground metalliferous mines
- 23 open cut coal mines
- 1 surface coal processing plant
- 17 underground coal mines
- 56 small mine sites (small quarries and sand mines tier 2).

Summary of notices issued to mine sites

In summary, there were 194 compliance notices issued to 106 mine sites in total.

Table 1: Notices issued for all mine sites during the high visibility campaign 2024

NOTICE TYPE	TOTAL ISSUED	NUMBER OF SITES
s.195 prohibition notice	5	4
s.191 improvement notice	114	69
s.23 notice of concern	75	67
Total	194	106

Note: some mine sites were issued multiple notices

Notices issued to coal mine sites

In summary, there were 36 compliance notices issued to 21 coal mine sites during the two-week high visibility campaign in total comprising of:

- 17 x compliance notices issued to 11 surface coal mines
- 1 x compliance notices issued to 1 surface coal processing plant
- 18 x compliance notices issued to 9 underground coal mines

Some sites were issued more than one notice.

Compliance notices issued to coal mines sites by type:

- 13 x section 191 improvement notices
 - 6 at open cut coal mines
 - 7 at underground coal mines
- 23 x section 23 cause for concern notices
 - 11 at open cut coal mines
 - 1 at surface coal processing plant
 - 11 at underground coal mines

The compliance notices issued for coal mine sites were reviewed and Table 2 lists the notices issued by type and number.

Table 2: Notices issued for coal mine sites

NOTICE TYPE	TOTAL ISSUED	NUMBER OF COAL SITES
s.191 improvement notice	13	10
s.23 notice of concern	23	19
Total	36	21 Note: some mine sites were issued multiple notices

Key findings for coal mine sites

A key finding was that the majority of coal mines inspected during the campaign had robust management systems in place to investigate incidents, review control measures and implement identified control improvements. Some of the management systems effectively monitored control improvement actions through to completion.

Summary of compliance notice key findings for surface coal mine sites include:

- Inadequate risk controls on vertical access ladders to prevent fall from height on plant and infrastructure
- Missing, inadequate and poorly maintained guard rails on mobile plant and fixed walkways on plant and mine infrastructure to prevent fall from height.

- Inadequate implementation and management of identified risk controls in the electrical engineering control plan
- Inadequate communication of changes to the traffic management plan right of way modifications and haul road delineation standards to oncoming workers
- Inadequate mobile plant tyre management and inspection standards including contractor operated mobile plant.

Summary of compliance notice key findings for underground coal mine sites include:

- Inadequate electrical engineering management of open enclosure glands, cable identification and isolation locking on an underground electrical transformer.
- Inadequate electrical engineering management of conveyor lanyard installation standards
- Inadequate mechanical engineering management of inspection and maintenance of multi-bolter brake systems
- Inadequate mining engineering management of authority to mine approvals and supervisor sign off communications to work groups.

Recommendations for coal mine sites

Based on the findings outlined in this report, and with respect to the numbers and types of compliance notices issued during the two-week high visibility campaign, the following recommendations should be reviewed by mine operators of coal mine sites:

- Mine operators should review the adequacy and maintenance of guard rails on mobile plant and fixed walkways on plant and infrastructure to prevent fall from height.
- Mine operators should review electrical engineering plan identified controls are implemented and maintained.
- Mine operators should review traffic management plans for traffic system modification information is provided to oncoming mine workers
- Mine operators should review mobile plant tyre management and inspections standards for all mobile plant operating at the site
- Underground coal mine operators should review implementation of mechanical engineering plan controls for underground multi-bolter brake systems.
- Underground coal mine operator should review mining engineering management of authority to mine approvals and ensure supervisor sign off communications to work groups.

Notices issued to metalliferous and quarry sites (tier 1)

In summary, there were 62 compliance notices issued to 33 metalliferous mines and quarries sites (TIER 1) during the two-week high visibility campaign in total comprising of:

- 45 x compliance notices issued to 24 surface metalliferous & quarry sites
- 1 x compliance notices issued to 1 metalliferous processing site
- 16 x compliance notices issued to 8 underground metalliferous mines

Some sites were issued with more than one notice.

Compliance notices issued to metalliferous mines sites by type:

- 1 x section 195 prohibition notice
 - 1 surface quarry (tier 1)
- 30 x section 191 improvement notices
 - 25 at surface metalliferous mines and quarry sites (tier 1)
 - 5 at underground metalliferous mines and quarry sites (tier 1)
- 31 x section 23 cause for concern notices
 - 19 at surface metalliferous mines and quarry sites (tier 1)
 - 1 at surface metalliferous processing site
 - 11 at underground metalliferous (tier 1) mines

The compliance notices issued for metalliferous and quarry sites (tier 1) were reviewed and Table 3 lists the notices issued by type and number.

Table 3: Notices issued for metalliferous & quarry sites (tier 1)

NOTICE TYPE	TOTAL ISSUED	NUMBER OF METEX SITES
s.195 prohibition notice	1	1
s.191 improvement notice	30	17
s.23 notice of concern	31	30
Total	62	33

Note: some mine sites were issued multiple notices

Key findings for metalliferous and quarry sites

Summary of compliance notice key findings for metalliferous and quarry sites include:

- s195 prohibition notice related to a quarry site that had excess airborne dust generated from a crushing and screening plant.
- Inadequate hazardous chemical and fuel storage standards of compliance with:
 - Australian Standard AS:1940:2004 - The Storage and Handling of Flammable and Combustible Liquids
 - Australian Standard AS:4452:1997 - The Storage and Handling of Toxic Substances
 - Safe Work Aust: Code of Practice: June 2023 - Managing risks of hazardous chemicals in the workplace
 - Dangerous Goods (Road and Rail Transport) Act 2008 No 95
 - Dangerous Goods (Road and Rail Transport) Regulation 2022
- Missing, inadequate and poorly maintained guard rails on mobile plant and fixed walkways on material screening plant to prevent fall from height.
- Inadequate controls to reduce pedestrian interactions with mobile plant.

- Inadequate storage and control of explosives in magazines.
- Inadequate electrical lead maintenance and testing standards.

Recommendations for metalliferous and quarry sites

Based on the findings outlined in this report and with respect to the numbers and types of compliance notices issued during the two-week high visibility campaign, the following recommendations should be reviewed by mine operators of metalliferous mine and quarry sites:

- Mine operators should review sources of airborne dust generating plant and equipment and place controls to prevent airborne dust exposures to workers
- Mine operators should review hazardous chemical and fuel storage facilities to maintain compliance with legislative requirements, Australian Standards and best practice guidance information.
- Mine operators should review the adequacy and maintenance of guard rails on mobile plant and fixed walkways on material screening plant to prevent fall from height.
- Mine operators should review pedestrian interactions with mobile plant and place effective controls to prevent vehicle to pedestrian incidents.
- Mine operators should review storage and control of explosives in magazines to maintain compliance with legislative requirements, Australian Standards and best practice guidance information.
- Mine operators should review the management of electrical equipment in particular electrical lead maintenance and testing standards meet with Australian Standards and best practice guidance information.

Notices issued to small mine sites (tier 2)

In summary, there were 96 compliance notices issued to 52 small mine sites (tier 2) during the two-week high visibility campaign in total comprising of:

- 4 x section 195 prohibition notices at 3 small mines
- 71 x section 191 improvement notices at 42 small mines
- 21 x section 23 cause for concern notices at 18 small mines

The compliance notices issued for small mine sites were reviewed and Table 4 lists the notices issued by type and number.

Table 4: Notices issued for small mine sites

NOTICE TYPE	TOTAL ISSUED	NUMBER OF SITES
s.195 prohibition notice	4	3
s.191 improvement notice	71	42
s.23 notice of concern	21	18
Total	96	52

Note: some mine sites were issued multiple notices

Key findings for small mine sites

Summary of compliance notice key findings for small mine sites include:

- Four s195 prohibition notices were issued to three small mine sites. The prohibition notices all identified missing, inadequate and poorly maintained guard rails on mobile plant (loaders and excavators) and fixed walkways on material screening plant to prevent fall from height.
- Many pre-start checklists for the crushing and screening circuits covered the entire plant with one pre-start and did not have a specific pre-start for sections of the plant.
- Some pre-start checklists covered the maintenance critical items that needed to be checked however did not consider the safety critical items (guards, warning devices, emergency stopping system) that need to be checked.
- Many workers were not formally trained in how to complete a pre-start on the crushing and screening circuits and did not know what action to be taken if a safety critical item was not operational.
- Many small mine sites had conveyor belts that needed to be tracked with the guards off.

Recommendations for small mine sites

Based on the findings outlined in this report and with respect to the numbers and types of compliance notices issued during the two-week high visibility campaign, the following recommendations should be reviewed by mine operators of small mine sites:

- Mine operators should review the adequacy and maintenance of guard rails on mobile plant (loaders) and fixed walkways on material screening plant to prevent fall from height.
- Mine operators should review the pre-start of their crushing and screening circuits to ensure that they are fit for purpose and cover all the safety critical items that need to be checked before operation of the plant.
- Mine operators must train workers in how to complete the pre-start of their crushing and screening circuits and ensure workers are aware of which safety critical items mean that the plant cannot be operated till the issue is rectified.
- Mine operators should review the tracking of belts on their sites considering the hierarchy of control and implement engineering controls to ensure worker are not exposed to the risk of entanglement.

Further information

For more information on safety assessment programs, the findings outlined in this report, or other mine safety information, please contact the Resources Regulator:

CONTACT TYPE	CONTACT DETAILS
Email	cau@regional.nsw.gov.au
Incident reporting	To report an incident or injury call 1300 814 609 or log in to the Regulator Portal
Website	www.resourcesregulator.nsw.gov.au
Address	Resources Regulator 516 High Street Maitland NSW 2320