

POSITION PAPER

HAZARDOUS CHEMICALS AT MINES AND PETROLEUM SITES IN NSW

September 2020

Regulator's position

All hazardous chemical incidents are avoidable and preventable. Hazardous chemical incidents are inherently dangerous and can impact the safety of workers and the community with potentially catastrophic consequences.

Provisions under NSW work health and safety laws provide mine operators directions on the use, handling, storage and notification requirements of hazardous chemicals. There are specific requirements to notify the regulator when certain quantities of hazardous chemicals are exceeded.

The Resources Regulator will actively engage with mine operators on hazardous chemical risk management onsite and support industry to meet their obligations under the work health and safety laws.

We will take a zero-tolerance approach where mine operators have not taken appropriate steps to manage hazardous chemical risks onsite.

Compliance focus

We have reviewed our approach to the regulation of hazardous chemicals at mine and petroleum sites. In response, we will be strengthening our regulatory and compliance approach towards hazardous chemicals.

We have increased our focus on compliance and enforcement activities relating to hazardous chemicals at mine and petroleum sites and in early 2021 will commence a compliance priority program.

Moving forward, our compliance approach for hazardous chemicals will be consistent with that applied to the management of the prescribed principal hazards. In considering the definition of a principal hazard in accordance with cl5(a)(x) of the WHS (Mines and Petroleum Sites) Regulation 2014, it is our position that mine operators should consider hazardous chemicals as a principal hazard where large quantities of hazardous chemicals are stored or used at their mine, particularly where the quantities exceed the manifest quantities specified in schedule 11 of the Work Health and Safety Regulation 2017 (WHS Regulation).

We will adopt the same compliance approach to hazardous chemicals as to the prescribed principal mining hazards, including a bow-tie risk assessment to inform our assessment of critical controls.

We are committed to working with industry to ensure health and safety obligations are being met, to reduce the number of hazardous chemical incidents and prevent potentially catastrophic events.

Risk profiling

We have made improvements to our compliance database to include hazardous chemicals and explosives data notified under schedule 11 of the WHS Regulation. This information will assist with the risk profiling of mine and petroleum sites.

A range of mines use significant quantities of both explosives and hazardous chemicals. As a comparison, many of these sites exceed the threshold applied to major hazard facilities in non-mining workplaces. While mines and petroleum sites are exempt from the major hazard facility provisions in Chapter 9 of the WHS Regulation, it is considered appropriate that thresholds specified for major hazard facilities are applied when risk profiling mine sites to ensure consistency.

Mines and petroleum sites that use, handle or store manifest quantities of hazardous chemicals at volumes consistent with major hazard facilities will be treated as high-risk sites. This includes sites exceeding 10% of thresholds identified in schedule 15 of the WHS Regulation, relating to major hazard facilities.

Schedule 11 notifications

The quantities at which notification, placards and manifests of hazardous chemicals are required are outlined in schedule 11 of the WHS Regulation. Mines and petroleum sites are required to notify the regulator of excess manifest quantities of schedule 11 chemicals. These notifications are currently received by us via the SafeWork NSW [on-line portal](#).

Work is underway to enable sites to submit schedule 11 notifications via our Regulator Portal. Operators will be notified when this functionality is available.

Industry engagement

As part of this increased focus, we will be providing ongoing and targeted advice and guidance to industry on the management of risks associated with hazardous chemicals.

Industry actions

Mine operators must ensure they comply with the NSW work health and safety laws and their duties in relation to hazardous chemicals onsite.

It is our position that mine and petroleum sites that use, handle or store manifest quantities of hazardous chemicals at volumes consistent with major hazard facilities should be treating hazardous chemicals as a principal hazard (clause 5(a)(x) of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014).

Further information on duties relating to hazardous chemicals, including specific [Codes of Practice](#), are available from the [SafeWork NSW website](#).

Background

Hazardous chemicals are used extensively throughout the NSW mining industry, in forms ranging from fuels and oils for plant operations, cyanides and caustics for ore processing plants, radioactive elements in testing and explosive precursors. Some of these chemicals are highly toxic, are physically dangerous causing fire and damage, and can pose security risks if not managed appropriately.

Non-compliance with legislation

Each year we conduct targeted mine assessments and inspections across NSW to ensure compliance with work health and safety laws. Historically, the storage, handling and use of hazardous chemicals has been regulated as part of this broader compliance approach.

During these inspections, several non-compliance issues were identified in relation to the storage to handing of large quantities of hazardous chemicals or sites possessing multiple dangerous goods.

These findings, along with emergency management considerations, prompted our review of the regulation of hazardous chemicals at mine and petroleum sites.

Review of the regulation of hazardous chemicals at mine and petroleum sites

Our review of the regulation of hazardous chemicals was informed by a gap analysis comparing legislative requirements and our compliance and enforcement approach to those in place for major hazard facilities.

The review identified a range of regulatory and compliance gaps in the management of risks to health and safety and made recommendations including:

- improvements to our compliance database to include schedule 11 notification data
- an increased focus on the regulation of hazardous chemicals, targeting high-risk sites
- incorporating the storage, use and handling of hazardous chemicals and explosives as part of risk profiling of mine and petroleum sites
- an industry awareness campaign.

We have commenced a hazardous chemicals program to operationalise the recommendations, including an increased focus on hazardous chemicals within our compliance program.

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