

COMPLIANCE PRIORITIES OUTCOMES

Hazardous chemicals - metalliferous mines and Tier-1 quarries

Issue

In September 2020, the NSW Resources Regulator published a position paper titled *Hazardous Chemicals at Mines and Petroleum sites in NSW*. The paper outlines expectations for mine operators who use, handle, or store hazardous chemicals to ensure they comply with NSW work health and safety laws. This includes the requirement to notify the Regulator when certain quantities of hazardous chemicals are exceeded. We also advised that in early 2021, a compliance priority program would commence focussing on the management of hazardous chemicals at mines and petroleum sites. In March 2021, we released a [fact sheet](#) detailing the notifiable requirements of Schedule 11 of the NSW Work Health and Safety Regulation 2017 and provided information about the availability of the [Regulator portal](#) to assist with these notifications.

What we did

Assessments were undertaken at 34 mines between April and July 2021. The following criteria was assessed at each site:

- The identification of all chemicals used on site and specifically, assessment of quantities against the Schedule 11 placard and manifest quantities.
- Where a notification to the Regulator of above manifest quantities had only recently been made, an assessment was conducted to determine if the mine had identified the requirement and developed a principal hazard management plan. Manifest quantities are detailed in schedule 11 of the Work, Health and Safety Regulation 2017. Schedule 12 of the Work, Health and Safety Regulation 2017 details manifest requirements.
- The assessment of health and safety risks from the use, handling, generation and storage of hazardous chemicals on site.
- Sufficient information, training and instruction provided to all personnel who use or handle hazardous chemicals.
- The correct use and placement of outer warning placards and signage, emergency plans developed and lodged with Fire and Rescue NSW, where required.

- The provision and maintenance of adequate fire protection and fire-fighting equipment.
- The identification of any radiation sources.

What we found

The assessments found that:

- The vast majority of mine operators had adequately identified and assessed the health and safety risks along with the Schedule 11 manifest and placard quantities associated with the chemicals used on site. Where manifest quantities had been identified, the manifest was maintained in accordance with Schedule 12 and proper notification with all required information to the Regulator had occurred on all but four instances. However, there were a very small number of mine operators that had not adequately assessed the health and safety risks of the chemicals used on site and had not managed appropriately the legislative requirements around Schedules 11 and 12.
- Adequate information, training and instruction had been provided to workers except for a small percentage of mines where training packages had either not been developed or not yet delivered to affected workers. Lack of a clear understanding of what information was available in safety data sheets was also a factor.
- All mine operators had prepared an emergency plan, which is a legislative requirement. However a small number had not consulted or lodged a copy of the plan with Fire and Rescue NSW where a manifest quantity of hazardous chemicals had been identified. As a result, the plan was also missing from a prominent position at the entrance of the mine, along with outdated or missing signage and placarding.
- Signage in relation to adequate labels alerting workers to the chemical's properties was mainly in place, although there were some anomalies. These included missing, outdated, incorrect, weathered or illegible labelling. There were also instances in relation to bulk diesel fuel tanks where safe fill volumes or flammability signage was not displayed.
- Fire protection and firefighting capabilities were appropriate for the established fuel loads.
- Radiation sources identified on site were well documented and mainly consisted of industrial lab equipment and installed density gauges in the processing circuit.

Outcome

The assessments resulted in the issuing of:

- one section 195 prohibition notice
- thirteen section 191 improvement notices
- twenty-one section 23 notices of concern.

Next steps

We will continue to assess and monitor the management of hazardous chemicals across NSW metalliferous mines and Tier-1 quarries through planned inspections and targeted interventions. This aims to ensure compliance to work health and safety laws, as well as verify that effective control measures are implemented to minimise the risk, as low as reasonably practicable.

Results of these inspections will be monitored to gauge industry performance and identify high-risk practices which require further assessment or intervention. Mine operators are also encouraged to review the outcomes of this report and determine potential areas of improvement that may be applicable to their own operations.

Recommendations

Mine operators should:

- Ensure there is a complete and up-to-date register of all chemicals available on their site along with an adequate assessment of the risks to health and safety of workers who use them. A review should be undertaken against the schedule 11 manifest quantities and where exceeded, reported via the Regulator portal. In reporting to the Regulator, schedule 12 must be followed to ensure the required information is provided.
- Review all training and information dissemination activities and ensure that all workers receive proper and up-to-date training around the health and safety risks of the chemicals used on site. This should include ensuring safety data sheets are current and workers are trained in reading and interpreting the relevant information they require to safely use those chemicals.
- Ensure emergency plans are up-to-date and have been lodged, with appropriate consultation from Fire and Rescue NSW, where manifest quantities exceed schedule 11 thresholds. Consultation should include not only the types and quantities of chemicals on site but the

available resources to Fire and Rescue NSW and the agreed location on site of all this information in the event of a deployment.

Published guidance

NSW Resources Regulator:

- Position Paper: [Hazardous Chemicals at Mines and Petroleum sites in NSW](#)
- Fact Sheet: [Schedule 11 Hazardous chemical notifications for mine and petroleum sites](#)

Additional resources:

- SafeWork NSW: [Hazardous chemicals web page](#)
- NSW Fire & Rescue: [Technical information - Hazardous chemicals manifest](#)

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