

Ashley West
Interim Chief Executive Officer
WorkSafe Victoria
1 Malop Street
Geelong VIC 3220

24 October 2025

Dear Mr West,

REGULATORY IMPACT STATEMENT FOR THE ADOPTION OF THE WORKPLACE EXPOSURE LIMITS FOR AIRBORNE CONTAMINANTS

I would like to thank your staff at WorkSafe Victoria for working with the team at Better Regulation Victoria on the preparation of the Regulatory Impact Statement (RIS) for the Dangerous Goods (Storage and Handling) Amendment (Workplace Exposure Limits) Regulations and Occupational Health and Safety Amendment (Workplace Exposure Limits) Regulations (the proposed Regulations).

The Commissioner for Better Regulation provides independent advice on the adequacy of the analysis provided in all RISs in Victoria. A RIS is deemed to be adequate when it contains analysis that is logical, draws on relevant evidence, is transparent about any assumptions made, and is proportionate to the proposal's expected effects. The RIS also needs to be clearly written so that it can be a suitable basis for public consultation.

I am pleased to advise that the final version of the RIS received on 23 October 2025 meets the adequacy requirements set out in the *Subordinate Legislation Act 1994*.

Background and problems

Work processes can release airborne contaminants including dusts, gases, fumes, vapours or mists, which can lead to adverse health effects. The Workplace Exposure Standards for airborne contaminants (the WES list) sets limits on the levels that workers may be exposed to for approximately 700 hazardous substances. Businesses are required to ensure that these limits are not exceeded in the workplace.

The WES list is developed and published by Safe Work Australia (SWA) in its role as the national policy body responsible for developing workplace health and safety (WHS) laws across Australia. Every state and territory has adopted the WES list, meaning exposure standards are consistent across all Australian jurisdictions. In Victoria, the Occupational Health and Safety Regulations 2017 and Dangerous Goods (Storage and Handling) Regulations 2022 (collectively referred to as the current Regulations) require employees and duty holders to ensure that the WES for any hazardous substance is not exceeded in workplaces or premises, as appropriate.

As Victoria's WHS regulator, WorkSafe Victoria enforces compliance with WES list and provides guidance to employers on how to comply with the exposure standards. In the RIS, WorkSafe explains that the current WES list was last comprehensively updated in 2003, meaning some current exposure standards no longer reflect contemporary health evidence. A 2019 review of the current Workplace Exposure Standards undertaken by SWA (which has led to the development of this RIS) found that:

- some exposure standards are outdated and considered to provide insufficient protection to workers, such as the current exposure standard for wood dust
- some substances that currently have exposure standards are now considered to be unsafe at any level, such as ethylene oxide, which is used in chemical manufacturing
- several hazardous substances commonly used in workplaces do not currently have an exposure standard. For example, diesel particulate matter (DPM) generated by diesel engines is not currently on the WES list, despite studies finding that DPM is associated with an increased risk of lung cancer
- some hazardous substances have exposure standards which are more stringent than current health evidence suggests is necessary to prevent ill health. For example, acetaldehyde, used in perfume manufacturing, has a lower exposure standard than other jurisdictions, without evidence of additional health benefits
- some exposure standards are obsolete and relate to substances no longer permitted for use in Australian workplaces.

Following this review, SWA independently examined over 700 hazardous substances against current scientific evidence, recommending changes to the exposure standards for 278 substances on the WES list. SWA also recommended a change in terminology from 'Workplace Exposure Standards' to 'Workplace Exposure Limits' to better reflect the mandatory nature of these limits. In 2024, all state and territory WHS Ministers agreed to adopting the new Workplace Exposure Limits (the WEL list) from 1 December 2026.

In the RIS, WorkSafe discusses the adverse health impacts to Victorian workers associated with some of the current WES values. WorkSafe notes that in its 2019 review, SWA found that exposure to airborne contaminants at or below WES values may result in hearing loss,

headaches, nausea, respiratory disease, reproductive issues, cardiovascular diseases and cancer. Drawing on SWA's analysis, WorkSafe estimates that the annual health burden of occupational disease from hazardous substance exposure in Victoria is approximately \$283 million,¹ and that 530,000 Victorians are directly affected by exposure to hazardous substances in the workplace. WorkSafe also discusses the financial impact of exposure-related worker compensation claims, which are estimated to cost businesses approximately \$3.1 million each year.

WorkSafe also qualitatively assesses indirect impacts associated with under-protective WES values, including lost productivity due to illness, emotional and financial impacts on individuals and families, and pressure on the healthcare system. Additionally, it notes that retaining the WES list would impose unnecessary compliance costs on businesses where current WES values are overly stringent, without providing any additional health benefits.

Options and impact analysis

WorkSafe assesses two options in the RIS to address the problems outlined above:

- **Option 1:** retain the current Workplace Exposure Standards (WES) in Victoria
- **Option 2:** adopt the proposed Workplace Exposure Limits (WEL) list in Victoria.

The proposed changes between the current WES list (Option 1) and the proposed WEL list (Option 2) include:

- new WELs for 31 hazardous substances that are currently not on the WES list
- reduced WELs (i.e. more stringent limits) for 177 hazardous substances
- increased WELs (i.e. less stringent limits) for 40 hazardous substances
- addition of a prohibited substance and a non-threshold genotoxic carcinogen (NTGC)² classification for 30 hazardous substances:
 - prohibited substances would be removed from the WEL list as they are prohibited for import, manufacture and use in Australia
 - for substances classified as NTGCs, employers would be required to ensure exposure is as low as is reasonably practicable.
- no change to the current WES value for over 400 substances.

WorkSafe explains that this RIS does not analyse the impact of new exposure limits for nine hazardous substances which are currently subject to a separate SWA review process and have not been agreed upon by WHS Ministers at the time of writing.³

¹ This estimate considers the health impacts (in terms of premature death and disability) arising from hazardous substance exposure. These impacts are valued in dollar terms through the value of a statistical life, value of a statistical life year, and disability weights.

² NTGCs are substances that have the potential to cause cancer at any exposure level.

³ The nine hazardous substances under review are benzene, chlorine, copper, formaldehyde, hydrogen cyanide, hydrogen sulphide, nitrogen dioxide, respirable crystalline silica (RCS), and titanium dioxide.

In the RIS, WorkSafe compares the impacts of Option 2 against Option 1, which serves as a base case for comparison. The RIS uses a cost-benefit analysis (CBA) to quantify the impacts associated with moving to the WEL list. The CBA uses a methodology that draws on previous impact analyses undertaken by SWA on the Workplace Exposure Limits.

WorkSafe estimates that the **costs to industry of Option 2 will be approximately \$6.3 billion** over 10 years, with the changes estimated to impact over 130,000 Victorian employers. Costs incurred by businesses include control measure costs (such as engineering controls and personal protective equipment) and management practice costs (such as air monitoring and occupational hygienist costs). WorkSafe's modelling estimates that costs differ by business size and the type of exposure limit change businesses will be subject to (e.g. lower limits or new limits for substances that previous had no exposure standard). The CBA modelling does not estimate how costs would differ across industries or for specific substance limits. However, in the RIS, WorkSafe acknowledges that some industries may be particularly affected by new or reduced limits, such as the agricultural, construction, and automotive industries. It also notes that compliance with the WEL list may be more challenging for smaller and medium-sized businesses, which may adversely affect business viability.

In the RIS, WorkSafe quantifies two health-related benefits associated with Option 2: avoided disease burden and avoided worker's compensation payments. The **quantified health benefits are estimated to be \$2.9 billion** over 10 ten years, which reflects fewer premature deaths and chronic illnesses among 530,000 affected workers. In modelling these benefits, WorkSafe makes certain assumptions, including that:

- the proposed Workplace Exposure Limits will prevent all occupational disease caused by hazardous substance exposure in Victoria. This assumption is based on the new WEL values being set by an expert panel to reflect safe exposure levels
- the health benefits of moving to the WEL list will be immediately realised in full, starting from the first year of implementation of the new limits.

Using the CBA, which only accounts for quantifiable costs and benefits, WorkSafe estimates that **Option 2 imposes a net cost of \$3.5 billion over 10 years**. To highlight potential uncertainty in the estimated impacts, WorkSafe undertakes sensitivity analysis, which finds that total estimated costs range from \$3.6 billion to \$9.9 billion over 10 years, while total benefits range from \$0.7 billion to \$4.3 billion. Under all scenarios, the costs of Option 2 are estimated to exceed the quantified benefits.

WorkSafe explains that it was not able to quantify some additional benefits associated with Option 2 in the CBA. This includes benefits related to national regulatory alignment, alleviated pressure on the healthcare system, workplace productivity, and improved public confidence.

In the RIS, WorkSafe outlines that Option 2 (adopting the proposed WEL list) is its preferred option. Notwithstanding the results of the cost-benefit analysis, WorkSafe explains that **Option 2 reflects the collective agreement of WHS Ministers nationally and is consistent with the Victorian Government's objective to reduce harm in the workplace and protect the health and wellbeing of Victorian workers.**

Implementation and evaluation

WorkSafe explains that the proposed Regulations will take effect from 1 December 2026 (consistent with other Australian jurisdictions), and that it will be responsible for implementing the Workplace Exposure Limits and evaluating their effectiveness.

WorkSafe's implementation plan outlines stakeholder engagement activities it will undertake to support the transition to the WEL list, which includes targeted support for small businesses. WorkSafe explains that it will also coordinate implementation activities with SWA to ensure consistent messaging and to avoid duplication.

WorkSafe commits to both a mid-term and sunseting evaluation of the proposed Regulations. It proposes conducting the mid-term evaluation for the WEL list in 2032 alongside the mid-term evaluation for the next set of Occupational Health and Safety Regulations, which it expects to make in 2027. Future evaluation of the WEL list will assess Victorian employers' compliance with the exposure limits, as well as the impact of the new and revised limits on exposure levels, health outcomes, and compliance costs.

WorkSafe also commits to gathering baseline data to use for evaluation purposes and identifies potential indicators to support evaluation, including compliance measures, exposure monitoring data, compliance and enforcement data, and stakeholder feedback.

Should your team wish to discuss any issues raised in this letter, please do not hesitate to contact Better Regulation Victoria on (03) 7005 9772.

Yours sincerely,



Katrina McKenzie

Commissioner for Better Regulation