

Statement of regulatory intent: Implementation of workplace exposure standard for aluminium (welding fumes)

Valid for the period: 17 November 2025 to 16 November 2026

1 Purpose

This Statement of Regulatory Intent outlines the regulatory approach that the WorkSafe Group (WorkSafe) of the Department of Local Government, Industry Regulation and Safety will adopt for the immediate implementation of the reduced workplace exposure standard (WES) for aluminium (welding fumes) under the Work Health and Safety (General) Regulations 2022 and the Work Health and Safety (Mines) Regulations 2022 (WHS Regulations).

These laws are effective in Western Australia from 17 November 2025.

2 Requirement not to exceed the workplace exposure standard - regulation 49

As prescribed by regulation 49 of the WHS Regulations, a person conducting a business or undertaking (PCBU) must ensure that no person at the workplace is exposed to a substance or mixture in an airborne concentration that exceeds the WES for that substance or mixture.

The WES for aluminium welding fumes has been reduced to 1 mg/m³ from 5 mg/m³ effective immediately.

PCBUs must take all reasonably practicable steps to eliminate or minimise the risk of exposure to aluminium welding fumes. This includes the implementation of appropriate higher order controls, such as substitution, isolation and engineering controls.

Where controls have already been implemented to comply with the reduced WES for welding fumes (not otherwise classified), which was lowered to 1 mg/m³ in early 2024, WorkSafe expects those controls will also be effective for aluminium welding fumes. In such cases, WorkSafe will enforce regulation 49 in accordance with its Compliance and enforcement policy.

For specialist aluminium fabrication workshops, or other work where aluminium welding is the primary activity, WorkSafe will adopt a 12-month transition period. During this time, WorkSafe will take an educational approach to breaches of the WES where airborne concentrations exceed 1 mg/m³ but are below the previous standard of 5 mg/m³.

Specialist aluminium fabricators are expected to use this transition period to:

- review existing controls;
- · conduct exposure assessments; and
- implement practicable higher order controls to reduce worker exposure.

Respiratory protective equipment, including powered air purifying respirators, should not be relied upon as the sole control and should be considered only after implementing higher order controls.

3 Requirement for air monitoring – regulation 50

Under regulation 50 of the WHS Regulations, a PCBU must ensure that air monitoring is carried out to determine airborne contaminant levels where there is uncertainty about whether the WES is being exceeded.

For specialist aluminium fabrication workshops or processes, WorkSafe will apply a 12-month transition period and take an educational approach to suspected breaches of regulation 50.

During this period, these PCBUs are expected to:

- undertake airborne contaminant exposure monitoring to establish whether the WES is being exceeded;
- · engage a competent person (such as an occupational hygienist) to conduct assessments; or
- reliably reference comparable data from similar workplaces with equivalent tasks and controls.

Where aluminium welding fumes are not the primary contaminant of concern, such as in general welding shops, WorkSafe will enforce regulation 50 in line with its <u>Compliance and enforcement policy</u>. Where aluminium welding is conducted, aluminium welding fume must be included in any air monitoring program conducted for welding fumes (not otherwise classified).

4 Review and compliance pathways

WorkSafe will apply a two-stream approach:

1. General fabrication workshops (not specialising in aluminium welding):

No transition period applies.

These workplaces are already required to comply with the 1 mg/m³ WES for welding fume (not otherwise classified) and are therefore expected to be compliant with the WES for aluminium (welding fumes).

2. Specialist aluminium fabrication workshops or processes (predominantly aluminium welding):

A 12-month transition period applies for regulations 49 and 50.

This period allows for appropriate risk assessment, implementation of higher order controls and alignment with the new WES. This approach aims to avoid over reliance on personal protective equipment, such as powered air purifying respirators, without first considering more effective, higher order control measures.