How to manage the risks from airborne contaminants that can cause harm to construction workers

The construction industry uses products and materials that can release airborne contaminants such as, dusts, gases, fumes, mists, and vapours into the air. These can cause harm to workers.

During the stages of a construction build or demolition, as the person conducting a business or undertaking (PCBU), you should observe your workplace to identify and assess the potential hazards.

Once you have done this, it is important to control the risks and take actions to eliminate or minimise them as much as you reasonably can.

Use this checklist to help control the risks of harm to construction workers.

Elimination

	Yes	No
The most effective control measure is to eliminate the hazard and associated risk.		
Can you remove materials that generate dusts, gases, fumes, mists and vapours from your workplace? *It is not always possible to avoid generating airborne contaminants. If this is the case, you must work through the hierarchy of control measures below.*	☐	☐

Substitution

	Yes	No
Substitution controls rely on replacing the hazard with something that is safer for your workers.		
Can you replace materials or work tasks and processes with an option that is less hazardous? *For example, can you:* • *use an element connection system instead of relying on welding?* • *replace chemicals like glues, varnishes, solvents, and paints with those with a lower toxicity?* • *replace asbestos containing materials with non-asbestos materials?*	☐	☐

Isolation

	Yes	No
Isolation controls rely on physically separating the hazard or source of harm from workers by distance or using barriers.		
Can you place barriers between a hazard and your workers? *For example, can you use earthmoving equipment that has an enclosed cabin and keep the doors and windows closed when doing dusty work?*	☐	☐
Can you create distance between a work process and workers? *For example, can you use power tools and machinery in a restricted area, away from other workers?*	☐	☐
Do you provide worker amenities which are separate from the main work area? *For example, can you provide a room in a separate building or area for workers to eat and change?*	☐	☐

For more information, read 'How to manage the risks from airborne contaminants that can cause harm to construction workers – information sheet' at swa.gov.au/airborne-contaminants.

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Checklist

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Engineering

	Yes	No
Engineering controls rely on introducing a physical control measure such as a mechanical device or process to reduce exposure to harm.		
Can you use physical devices to reduce how airborne contaminants are created and/or capture them or move them away from a worker? *For example, can you install local exhaust ventilation and/or water suppression systems on machinery for tasks that generate dust?*	☐	☐
Do you clean up dusts after they are created with an industrial vacuum cleaner with appropriate filtration?	☐	☐

Administrative

	Yes	No
Administrative controls rely on your workers' understanding and following workplace policies. They should only be used in combination with substitution, isolation and engineering controls.		
Do you have policies to support safe work practices and worker behaviour at your workplace, including training on WHS?	☐	☐
Could you introduce a shift rotation policy, so workers don't spend too long in an exposure area?	☐	☐
Could you provide a laundering service for contaminated work clothes?	☐	☐
Are there designated change areas for changing out of personal protective equipment (PPE)?	☐	☐
Does your workplace have policies for storing, cleaning and maintaining equipment?	☐	☐
Can you install signs to alert your workers to a hazard?	☐	☐
Do you keep your workplace clean?	☐	☐

Personal protective equipment (PPE)

	Yes	No
PPE should be considered last after other control measures. It should not be relied on as the sole control measure for a risk. It is important your workers are trained in how to fit and properly wear PPE.		
Do your workers need PPE to complement the control measures at your workplace?	☐	☐
Do you know what PPE your workers need to support your control measures?	☐	☐
Have you checked the PPE that you are providing is appropriate and fits the worker who will be wearing it?	☐	☐
Have you ensured workers' respiratory protective equipment (RPE) is fit tested by a competent person if applicable?	☐	☐
Are you providing ongoing training, information, and instructions on how to use, clean and maintain PPE and RPE and are cartridges and filters changed regularly?	☐	☐

Contact your WHS regulator

	Yes	No
Have you looked for guidance on your WHS regulator's website? *Your WHS regulator is responsible for regulating and enforcing WHS laws in their jurisdiction. Contact them if you have any questions specific to your workplace.*	☐	☐