Department of **Local Government, Industry Regulation and Safety**

GOVERNMENT OF WESTERN AUSTRALIA

WorkSafe Western Australia

How to identify airborne contaminant hazards in construction: Checklist

This checklist will help persons conducting a business or undertaking (PCBU) in the construction industry to identify airborne contaminants that can cause harm to their workers.

Prior to construction commencing, and during the different stages of a construction build or demolition, you should observe your work environment to assess the potential hazards as these may change during the different phases of construction. This includes checking the construction site, administration areas and lunchrooms for any hazards.

Regularly looking at your workplace and how your workers conduct their work will help you to identify airborne contaminants, such as dusts, gases, fumes, mists or vapours.

Identification is the first step in managing work health and safety (WHS) risks. If you identify a hazard by using the checklist below, you should do a workplace risk assessment.

Look at your workplace

Description	Yes	No
Do your workers use machinery or equipment such as power tools that generate dusts or fumes? *In the construction industry a lot of the tools and equipment used can create dusts or fumes when workers cut, shape, grind or weld material.*	☐	☐
Are your workers using materials that release dusts or vapours when machined, applied, handled or spread? *Some materials like stone, wood and concrete release fine dust particles or vapours into the air that are not always visible.*	☐	☐
Do you use hazardous chemicals? *Inhaling vapours from solvents, adhesives, paints, stains and varnishes can damage your lungs.*	☐	☐
Do you undertake any activities that may disturb asbestos? *Disturbing asbestos can release fine dust particles that can become airborne and if inhaled, they may lead to harm including lung diseases.*	☐	☐
Is work done inside or in an enclosed space? *Working inside or in an enclosed space may mean there is less ventilation and airborne contaminants are more likely to be breathed in.*	☐	☐

Description	Yes	No
Can you see anything in the air, such as dust plumes or vapours when workers are cutting concrete or wood or when welding? *If you can see substances in the air, such as dusts, they have the potential to be breathed in if unprotected.*	☐	☐
Can you smell anything when walking around your workplace? For example, when resins or paint are being used. *Not all hazards can be seen or smelled. Hazards like vapours and fumes can be invisible. If you can smell it though, you're also breathing it in.*	☐	☐
Can you see coatings of dusts or residues on surfaces? For example, on machinery, equipment, windows or work surfaces. *Looking at how clean machinery or surfaces are can help indicate the presence of airborne contaminants in the air – even if you can't see it in the air.*	☐	☐
Is the filter warning light on any of your workers' tools?	☐	☐
Are your workers covered in dusts while working? *Exposure to dusts can cause irritation, allergies and even lung diseases. If workers are covered in dusts it could indicate that your work practices are not controlled, and their risk of exposure is higher. If so, it's important your workers stop work, identify the hazards and re-assess the task applying appropriate control measures.*	☐	☐
Do certain work tasks like drilling concrete or working with chemicals make your workers cough? *If workers cough during specific tasks, it may mean that they are breathing in hazardous substances. If so, it's important you stop work, identify the hazards and re-assess the task applying appropriate control measures.*	☐	☐



Talk and consult with your workers

Description	Yes	No
When you consult with your workers, are they telling you that they see, smell or feel the effects of airborne contaminants? Do they know the risks of breathing them in? *Your workers may be able to tell you if their work produces airborne contaminants. You must then manage work processes to eliminate or reduce the risk of exposure.*	☐	☐
Do you consult with your workers and listen to their concerns about their work processes to help you change how they conduct work to eliminate or minimise their exposure? *As a PCBU you have a duty of care to ensure workers are not exposed to health and safety risks. Listening to your workers can provide valuable information about hazards and risks in the workplace which you can then manage appropriately.*	☐	☐
Have you completed a risk assessment in consultation with workers and health and safety representatives (HSRs) to help identify the risks and controls required to reduce workplace exposure. *Consultation with workers and HSRs is required at each step of the risk management process. By drawing on their knowledge and experience, you can identify hazards and choose effective control measures.*	☐	☐

Check labels and safety data sheets

Description	Yes	No
Have you checked any relevant safety data sheets, labels and product information and understood the health and safety information in it? *A safety data sheet provides detailed information on a hazardous chemical. It is important to read and understand this information before working with a hazardous chemical so that it can be safely stored, handled or used in the workplace.*	☐	☐
Are there workplace exposure limits for materials that you use? *Exposure to substances or mixtures in the workplace can occur through inhalation, absorption through the skin, or ingestion. These are known as workplace exposure limits. PCBUs must aim to limit exposure to as low as reasonably practicable, even if they meet the workplace exposure limits.* *Specialist equipment or training by an occupational hygienist may be needed to determine the difference between safe levels of airborne contaminants and levels that are harmful to workers.*	☐	☐

For more information, read our *How to identify airborne contaminant risk in construction: Information sheet*.