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

GOVERNMENT OF WESTERN AUSTRALIA

WorkSafe Western Australia

How to manage airborne contaminant risks in construction: Case study

Managing risks on a commercial construction site

Alex is a manager on a commercial construction site and she and her workers could be exposed to dusts, gases, fumes and vapours. During the health and safety induction, Alex and her team were trained on how to reduce exposure to these risks. Consultation with staff and training is an ongoing process and Alex talks to the rest of the team about workplace health and safety regularly to meet her duties as the person conducting a business or undertaking (PCBU).

Assess the risk

In the commercial construction industry, it is hard to eliminate all the risks, and Alex uses a combination of control measures to manage the risks. Alex instructs the team to use certain materials that are less hazardous, and certain work practices that create less dusts, gases, fumes, and vapours.

Control the risk

To manage dust exposure during each construction phase, the team use wet cutting and local and on-tool exhaust ventilation systems. During clean up, industrial M-class vacuum cleaners are used whenever dusts are created. This is to ensure more dusts are not generated during clean-up.

When they use paints, varnishes and glues that could release hazardous fumes and vapours, Alex ensures that she orders alternative products that have a lower toxicity. When higher risk product use cannot be avoided, suitable controls are implemented, including scheduling work around different trades and shift rotation policies to reduce the time workers are exposed to hazards. This helps to minimise exposure.

When working with paints, varnishes, and glues workers are encouraged to do this work outside as much as they can. If work cannot be moved outside, inside areas are modified with extraction fans or by opening doors and windows to ensure adequate ventilation.

Workers also wear personal protective equipment (PPE) including masks that are suitable for the substance or product and have been correctly fitted. They are trained on how to fit check, use and maintain their PPE.

By thoroughly managing the risks of exposure to dusts, gases, fumes and vapours on the construction site, Alex is ensuring her workers' are protected from harm at work.