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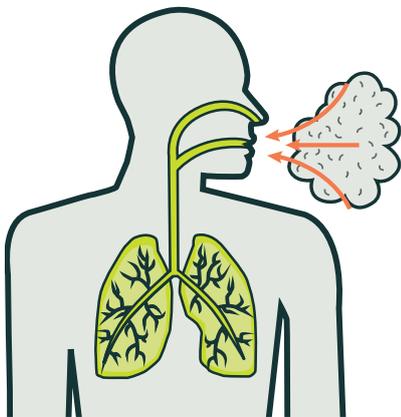
## Maintaining air quality in enclosed cabins – for workers

This quick guide is for mobile plant and fixed plant control room operators and certain truck drivers. It explains some factors to consider when managing risks from poor quality air in enclosed cabins.

### Am I at risk?

As a mobile plant or fixed plant control room operator or truck driver, you spend a lot of time in your cabin. Harmful dust, vapours, gases and debris can enter the cabin and small particles can circulate in the air.

Dust enters your cab through open doors and windows, gaps in seals, and on your clothing and boots. You may or may not be able to see the tiny particles in the air, but when you breathe in they are inhaled. Tiny particles can settle deep in your lungs.



**FIGURE 1:** When you breathe, contaminants are inhaled and tiny particles can settle deep in your lungs

If you drive or operate plant in environments where there are dusts or vapours in the air, there could be a risk to your health.

These kinds of environments can include:

- land remediation sites
- waste disposal areas
- composting facilities
- mines or quarries
- ports or sites where loose materials are loaded or shifted, releasing dust into the air
- areas of agricultural spraying and spreading
- worksites that contain known hazardous contaminants that may become airborne such as silica dust, diesel fumes, organic materials, biological materials, dusts or asbestos fibres.

### How can poor quality air affect me?

The following are examples of health risks from breathing in poor quality air.

- If you are exposed to poor quality air over a long period of time, it can lead to lung illness. Lung conditions include wheezing, asthma, allergic inflammation, bronchitis, pneumonia, emphysema and chronic obstructive pulmonary disease (COPD).
- Exposure to diesel engine exhaust is a known cause of lung cancer.

- Exposure to silica dust is a known cause of lung cancer and silicosis.
- Exposure to carbon monoxide can be fatal, and exposure to nitrogen dioxide can cause lung disease. These gases are from combustion engine exhaust and are mainly found in enclosed spaces (for example, mines or tunnels).
- Materials containing asbestos release hazardous fibres which can cause lung disease or cancer if they are inhaled.
- Bagged or bulk organic material such as garden soil, compost, mulch or potting mix may contain fungi or bacteria. *Legionella* bacteria commonly found in compost causes a type of pneumonia called Legionnaires' disease
- Poor quality air can cause general discomfort, fatigue or distraction. This could reduce your ability to perform work safely and effectively.

## How can I stay safe?

Your business must ensure, so far as is reasonably practicable, the health and safety of workers, and that other persons are not put at risk by its work.

Your business must manage work risks to your health and safety. If you are at risk from poor air quality, control measures should be in place to eliminate or minimise your exposure. As described below, there are things that you can do to help.

Your business must engage with you and your representatives when identifying and assessing risks from poor air quality, and making decisions about the ways to eliminate or minimise those risks.

- 1 If one is installed, use the heater, ventilator, air conditioner (HVAC) system instead of opening the window for cool air.

The HVAC system filters incoming air to remove contaminants and will keep the air in your cabin at a comfortable temperature.

- 2 Keep doors and windows closed as much as possible.

Where possible, use radio communication instead of opening the cab window or door to communicate.

Where available, use electronic load systems instead of opening the cab window to hand over paper docket.

De-couple implements without opening the door or window for visibility or access if you are able.

- 3 Check door and window seals regularly for any splits and let your business know if repairs are needed. Any gaps will let in unfiltered air.

- 4 If you are waiting, park away from any activity where hazardous contaminants might become airborne. Wait inside your cab with the windows and doors closed.

- 5 Do not smoke inside your cab. Use worker facilities to wash your hands and face before eating or drinking.

- 6 Switch your engine off rather than leaving it to idle. This will reduce exhaust fumes being created. If available, park your vehicle at a powered truck stop so idling time is reduced.

- 7 Keep the outside of your cab clean. For example, dried mud in the door jamb can become airborne inside the cab as you open and shut the door. Where you can, use a low pressure hose with a gentle spray to clean the vehicle. Do not use compressed air for cleaning as it creates further dust in the air.

- 8 Clean the inside of your cab regularly to remove dust that has settled on the seats and floor. It can easily vibrate loose and recirculate. Talk to your business about getting removable scooped rubber floor mats that can be lifted out of the cab and washed to remove mud and dust build up. Talk to them about using a HEPA filtered vacuum cleaner to help reduce dust being recirculated during cleaning. Do not use compressed air for cleaning as it creates further dust in the air.

- 9 Keep your boots and personal clothing clean to reduce dust and debris being brought into the cab.

**In environments where there are or could be hazardous contaminants in the air, additional control measures may be needed.**

- 10 If there is a cabin pressure monitor installed, check that your cabin pressure is kept at the recommended level. If levels drop, this is usually because there are gaps or holes in the cabin or window and door seals. Some monitors sound an alarm if the level drops below a set target.

If air recirculation filtering systems are installed, use them to filter the air that is already inside the cabin.

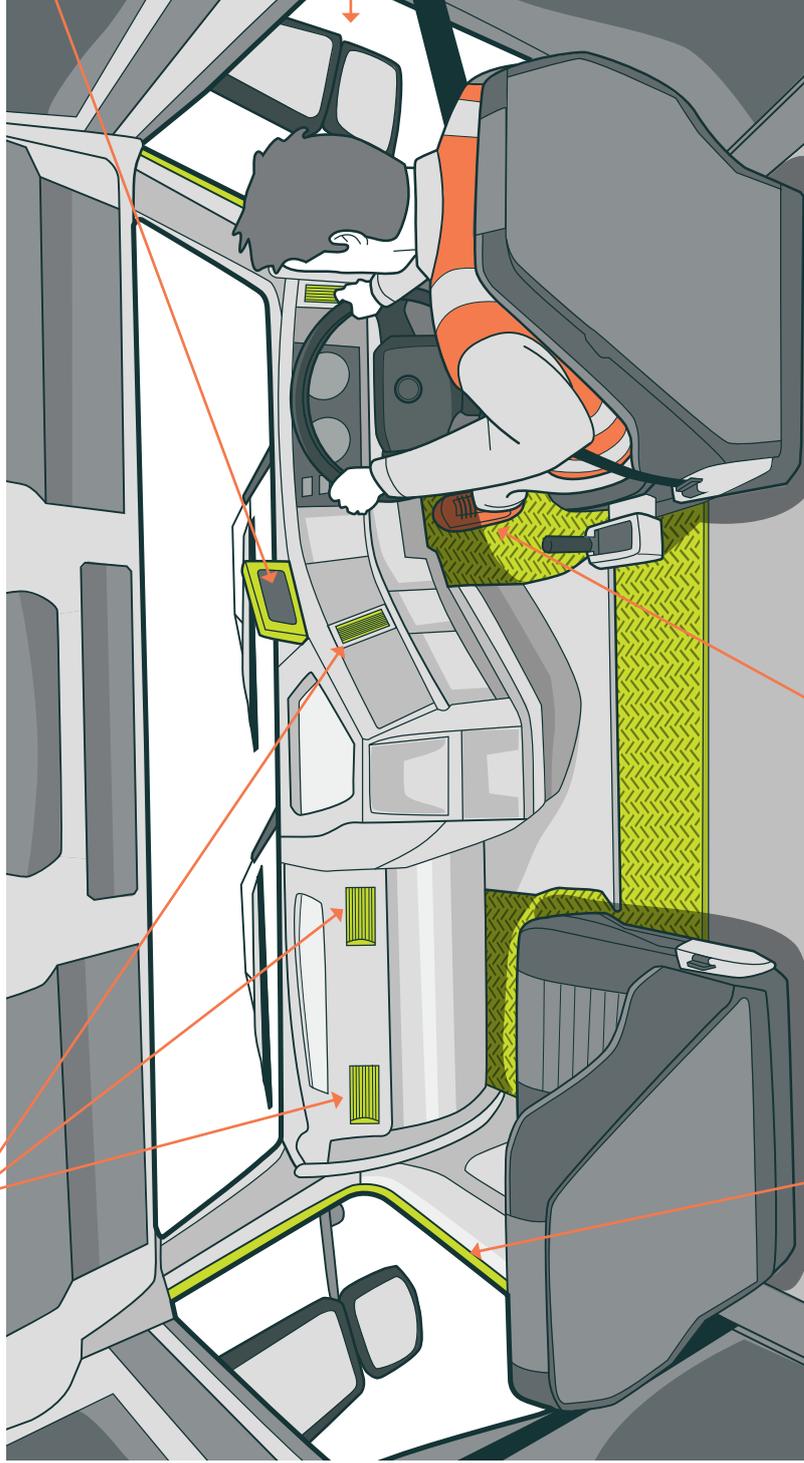
Work at contaminated sites being remediated will likely have further control measures in place for the decontamination of vehicles and plant.

Talk to your business to make sure that you are aware of what is required.

## How can I stay safe?

Talk with your business about which of these control measures are appropriate for your situation.

If installed, filter air coming in by using the HVAC system



For environments where there are, or could be hazardous contaminants in the air, where installed:

- use an air recirculation filtering system as well as HVAC
- use a cabin pressure monitor

Keep doors and windows closed

- Do not smoke inside your cab. Wash your hands and face before eating
- If you can, park away from work areas, and wait inside your cab. Switch off your engine rather than leaving it to idle
- Clean the inside of your cab regularly
- Keep the outside of your cab clean

Keep your boots and personal clothing clean and dust free

Check door and window seals for splits or gaps