# 1.0 Introduction

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Around 150,000 workplaces throughout New Zealand use hazardous substances. The risks they cause are often taken for granted. For example, common hazardous substances like commercial cleaning products, paints, adhesives, acids, bases and solvents can cause serious harm if not used safely.

Not understanding the harm that can occur when working with hazardous substances is a serious problem with serious consequences. Between 600 and 900 New Zealanders are estimated to die from work-related illness every year, many from exposure to hazardous substances.

### 1.1 About this guide

This guide helps you manage the hazardous substances you use, handle, manufacture and store at work more safely. It also helps you to meet your obligations under the Health and Safety at Work Act (HSWA) and the Health and Safety at Work (Hazardous Substances) Regulations (the Regulations). It is a reference document about what you need to do and how to do it.

Use this guide alongside WorkSafe's other guidance and the Hazardous Substances Calculator available at: www.hazardoussubstances.govt.nz

When you enter the details of your inventory into the Calculator, it works out the key controls you need to safely manage your hazardous substances. When you see this calculator icon in this guide, it means that the control is included in the Calculator. See page 15 of this guide for more information about using the Calculator.

While this guide gives you information about the key controls for hazardous substances, the only way to know which controls you have to follow is to know what hazardous substances you have and in what quantities by creating an inventory.

You can use the Calculator to create an inventory, or WorkSafe has also published a quick guide on how to prepare an inventory of your hazardous substances, which includes a template of a hazardous substance inventory. Another tool, the *Workbook*, takes you through the process of creating an inventory, and is available at: <a href="www.hazardoussubstances.govt.nz">www.hazardoussubstances.govt.nz</a>

Once you have created an inventory, the Calculator will tell you the key controls that apply, or you can use the Environmental Protection Authority (EPA) database, *Approved Hazardous Substances with Controls*, to see a full list of the controls for your substances.

This guide is for PCBUs (persons conducting a business or undertaking), especially small business PCBUs. When you read 'you' or 'business', it generally means the PCBU. See Section 1.8 of this guide for more information on the PCBU and their duties.

This guide focuses on the health and safety principles and key controls that increase workplace health and safety. It helps you improve your compliance with these controls but does not contain information about every control, or detailed information about transporting or disposing of substances, or about explosives.

This section describes some of the key concepts you will see in the guide. There is a glossary at the back explaining some of the terms that are used.

#### 1.2 Hazardous substances

Hazardous substances are substances that are explosive, flammable, oxidising, toxic, corrosive or toxic to the environment (ecotoxic).

A hazardous substance may be a single chemical or a mixture of both hazardous and non-hazardous chemicals. Most products used in the workplace are a mixture of chemicals.

In this guide the words product and substance may be used interchangeably.



#### 1.3 How hazardous substances are classified

Hazardous substances are classified based on the hazards they pose to people and the environment due to their hazardous properties. This helps determine how to manage the risks they cause. Each new hazardous substance imported into New Zealand or manufactured in New Zealand must be approved by the EPA and classified.

Most hazardous substances have more than one hazardous property and as a result, more than one classification. Based on this classification, *controls* are placed on a substance to manage the risks it can cause.

For more information on classifications, see pages 8-9 of this guide.

### 1.4 Controls for managing hazardous substances

You need to follow the rules that apply for a substance's classification or classifications to manage the risks it poses. These rules are known as controls.

The controls vary depending on the risk of the hazardous substance, its hazardous properties, how much of it there is and how it is used.

Some controls, such as preparing an inventory or labelling always apply no matter what hazardous substances you use and store. Other controls, such as signage or certified handlers, apply only if you have specific hazardous substances over certain limits (thresholds). In other words, the controls you need to follow depend on the type and amount of hazardous substances you have.

For more information on controls, see pages 10-13 of this guide.

## 1.5 Managing risk

Consider whether you need hazardous substances in your workplace. If you can, eliminate hazardous substances from your workplace. Then, consider whether you can substitute any that remain for less hazardous ones.

But sometimes a hazardous substance is necessary for your work and cannot be eliminated or substituted. If a hazardous substance has to be in a workplace, the Regulations set specific controls to reduce the risk of working with it.

After you put in place these specific controls, you then need to identify any remaining hazards that could create reasonably foreseeable risks, and 'so far as is reasonably practicable' eliminate them to protect workers and other people in the workplace. See below for more about what 'so far as is reasonably practicable' means.

If it is not reasonably practicable to eliminate the remaining risks or substitute the hazards that causes them, the PCBU must minimise them, so far as is reasonably practicable, by putting in place the most effective control measures for them.

These are listed below, from most to least effective:

- Isolating the hazards to prevent people from being exposed to the risks or applying engineering control measures - physical control measures that might include mechanical devices or processes.
- Applying administrative controls, if any risk remains after isolating the hazard or applying engineering control measures. These are safe methods of work, processes or procedures designed to minimise risk. They do not include engineering controls, or wearing or using personal protective equipment (PPE).
- If a risk still remains after all of the above, you must minimise it by ensuring the provision and use of suitable PPE when other control measures alone can't adequately manage the risk.

The risk management process is explained in more detail between pages 16 and 19 of this guide.

### 1.6 'So far as is reasonably practicable'

When managing risk, you need to eliminate or minimise risks 'so far as is reasonably practicable'. This means something can reasonably be done after weighing up and considering:

- how likely it is that a hazard or risk will cause harm
- how severe that harm could be
- what a person knows, or reasonably should know, about the risk and how to eliminate or minimise it
- the measures in place to eliminate or minimise the risk (control measures)
- how available and suitable the control measures are.

#### 1.7 Health and safety duties in the workplace

Everyone at a workplace has a role to play in workplace health and safety. The duty holders under HSWA are:

- The PCBU see below for more about the PCBU.
- The officers of the PCBU, who must ensure that the PCBU meets its health and safety duties. An officer could be a company director or anyone whose position allows them to exercise significant influence over the management of the business or undertaking.
- Workers have a duty to take reasonable care to keep themselves and others healthy and safe when doing their work. Workers include employees, contractors, subcontractors, apprentices and volunteer workers.
- Other people in the workplace, such as visitors or customers, have a duty to take reasonable care for their own health and safety, and not to harm others.

For more information on each duty holder and their duties, visit WorkSafe's website.

#### 1.8 More about the PCBU

HSWA gives duties to the person conducting a business or undertaking. A PCBU may be an individual person or an organisation, but is usually an organisation. A PCBU could be a business that is a limited liability company, a sole trader, self-employed person or a limited partnership, among others.

A PCBU isn't a volunteer association or a home occupier who employs someone to do work around the home, or an officer in a business or undertaking.

A PCBU has a primary duty of care to ensure that, so far as is reasonably practicable, the health and safety of workers, and that other persons, such as visitors or customers, are not put at risk by its work.

PCBUs also have other duties including providing information, training, instruction or supervision and ensuring worker engagement and participation.

For more information about the PCBU and its duties, see WorkSafe's website.