



# Guidelines for managing public health risks associated with commercial garden soils

This Guideline provides advice to assist the packaged and bulk garden soils industry to meet their obligations under the general public health duty specified in Part 3 of the *Public Health Act 2016*.

The general public health duty requires that “*a person must take all reasonable and practicable steps to prevent or minimise any harm to public health that might foreseeably result from anything done or omitted to be done by the person*”.

This Guideline sets out the generally accepted practices related to the provision of commercial garden soils in Western Australia (WA) in order to minimise the risk of Legionnaires’ disease to consumers who purchase packaged or bulk garden soils.

When a business owner or operator fails to comply with this Guideline, this may be grounds for local government authorised officers to issue an improvement notice or enforcement order in accordance with the *Public Health Act 2016*.

## Risks to public health

Potting mixes, mulches, composts and commercial gardening soils are biologically active materials that contain algae, protozoa and other bacteria which provide essential nutrients to improve the condition of soils and support plant growth. However, garden soils are commonly associated with the growth of *Legionella* species, *Legionella longbeachae*

and other pathogenic microorganisms that can be harmful to health if safe handling precautions are not taken.

## Legionnaires’ disease

Commercial garden soils have been associated with a number of cases of Legionnaires’ disease in WA. Legionnaires’ disease is a serious and sometimes fatal form of pneumonia caused by exposure to *Legionella longbeachae*. For further information about Legionnaires’ disease, visit the [Healthy WA](http://healthywa.wa.gov.au) website.

## Generally accepted practices for industry

At present, there are no known strategies to eliminate *Legionella longbeachae* and other pathogenic organisms from commercial garden soils. Appropriate health warnings and hazardous information labels on commercial garden soil products is considered to be an effective method in managing the risks to public health.

## Relevant Australian Standards

The following Australian Standards are provided for manufacturers’ and suppliers of commercial garden soils to ensure soil products are safe for commercial use, consistently meet minimum quality standards and are not contaminated by chemical, physical, plant and animal pathogens.

- *AS4454:2012- Composts, soil conditioners and mulches*
- *AS4419:2018- Soils for landscaping and garden use*
- *AS3743:2003- Potting mixes*

**Manufacturers' and suppliers should demonstrate due diligence by providing appropriate and accurate risk information to purchasers.**

## Health warnings and hazardous information labels on packaged garden soil

Packaged garden soil should have a health warning (see appendix 1) printed on or affixed to the exterior surface on the front of the package.

Health warnings should be permanently and legibly marked in contrasting colour to other non-warning information and should be outlined by a bold border.

The health warning should be written in letters that are:

- 16 point Arial bold or similar font on ≥15 L packages
- 12 point Arial bold or similar font on ≤15 L packages
- 10 point Arial bold or similar font on an information sheet/invoice for bulk soil deliveries (AS4419:2018).

A hazardous information label (see appendix 2) should also be printed on or affixed to the exterior surface of the back of the package.

Hazardous information labels should:

- be titled 'HAZARDOUS' in a font size that is no less than twice the size of the general text
- have text in contrasting colour to non-warning printing.

Where a manufacturer makes a statement that the product complies with AS4419, the

manufacturer should ensure this statement is capable of being verified (AS4419:2018).

## Health warning notice at a place where unpackaged garden soil is sold

A health warning notice / sign (see appendix 1) should be made clearly visible to any person entering or exiting the place from which garden soil is sold.

## Health warnings and hazardous information labels for unpackaged garden soils

A health warning (see appendix 1) should be printed in a prominent position on an information sheet or invoice and should be given to the purchaser of unpackaged garden soil before or upon receipt of the garden soil. In addition this, health warnings may also be made available online.

A person who sells unpackaged garden soil should ensure hazardous information (see appendix 2) is printed on an information sheet or invoice after the health warning and should be given to the purchaser before or upon the receipt of the garden soil.

## Other agency requirements

Refer to the Code of Practice [Prevention and control of Legionnaires' disease](#) issued by Worksafe WA for information on the safe handling of garden soils to reduce exposure to workers.

## This Guideline was prepared by:

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This document is only available electronically and can be downloaded from the WA Department of Health's website [www.health.wa.gov.au](http://www.health.wa.gov.au) . Hardcopies are not available.

## **Appendix 1 - Health warning label (AS4419:2018)**

### **HEALTH WARNING**

**THIS PRODUCT CONTAINS MICRO-ORGANISMS**

**ENSURE PRODUCT IS MOIST WHEN HANDLING**

**WEAR A PARTICULATE MASK IF DUSTS OR MISTS ARE  
GENERATED**

**THIS PRODUCT MAY CONTAIN SHARP MATERIALS**

**WEAR APPROPRIATE GLOVES AND FOOTWEAR AS A  
PRECAUTION**

**WASH HANDS IMMEDIATELY AFTER HANDLING SOIL**

**READ HAZARDOUS INFORMATION LABEL**

**REFER TO MANUFACTURERS' MATERIAL SAFETY DATA  
SHEET**

## Appendix 2 – Hazard information label (AS4419:2018)

# HAZARDOUS

COMPOSTS, POTTING MIXES

AND OTHER ORGANIC GARDENING MATERIALS

This product is made by blending organic materials including plant mulch, soil, sand, wood dust and manure and contains living micro-organisms including bacteria, fungi and protozoa. This product may also contain mineral and fertilizer additives. Dusts and mists from this product are hazardous according to the criteria of Worksafe Australia.

**RISK** Inhalation of dust and/or liquid mists (bio aerosols) may irritate, inflame or sensitise the nose, throat and lungs, resulting in respiratory illnesses ranging from hay fever to pneumonia (Legionnaires' disease) and may aggravate pre-existing conditions such as asthma and bronchitis. Direct contact with this material or its dust and/or liquid mists may cause skin irritation (dermatitis), skin or eye infection or irritation. People who are immunocompromised or have pre-existing illness should take precautions to avoid direct contact with this material.

**SAFETY** Avoid contact with eyes and skin.

Avoid inhaling dusts and/or liquid mists (bio aerosols).

Ensure suitable protective clothing and gloves are worn (AS2161.2)

If dusts and/or liquid mists are likely to be generated, wear dust-resistant eye protection (AS1336 and AS1337) and a particulate respirator (AS1715 and AS1716).

Wash hands immediately after handling. Wash clothing regularly.

Clean spills by wet sweeping or vacuuming.

Store product in a cool location.

**FIRST AID** Flush eyes with water for 10 minutes.

Wash skin with soap and water.

Seek medical attention for persistent skin, eye or respiratory symptoms.

**DISPOSAL** Ensure safety precautions are followed and dispose of product as trade waste in accordance with local authority guidelines.

**MANUFACTURER** XXXXX

Refer to the material safety data sheet for further information. Material safety data sheets are available from XXXXXXXX

**This document can be made available in alternative formats on request for a person with disability.**

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