

Fire safety in waste facilities

If you operate or own a waste facility you should implement the Fire and Rescue NSW fire safety guideline for waste facilities.

What is the fire safety guideline?

The fire safety guideline outlines standard approaches for fire risk management, fire safety systems, storage, stockpiles and planning at waste facilities. It can be found on the Fire and Rescue NSW website, www.fire.nsw.gov.au.

Why is there a fire safety guideline for waste facilities?

Fires at waste facilities may pose special problems of firefighting, such as:

- large amounts of combustible waste
- poor storage and separation, creating fire risks and reducing firefighting access
- inadequate hydrants, fire water management, fire suppression systems and smoke hazard management.

The guideline helps waste facilities reduce and manage the risk of fires starting and spreading, to protect employees, emergency services, the community, businesses and the environment. It will also be considered by consent authorities in determining development applications and can be used by regulatory authorities in licensing.

Types of waste facilities the fire safety guideline applies to

The guideline applies to any premises (existing or proposed) used for the storage, treatment, processing, sorting or resource recovery of combustible waste material. This includes unlicensed sites and those with an environment protection licence from the EPA.

What is combustible waste?

Combustible waste material is any solid waste material that can readily ignite and burn under normal conditions. This includes:

- wood and wood-based products
- paper and cardboard
- plastic and textiles
- rubber, including shredded or crumbed tyres
- waste-derived fuels
- metal with combustible contaminants
- any other waste material that may pose a notable fire risk.

Sites the guideline does not apply to

The fire safety guideline does not apply to sites with less than 50 m³ of combustible waste or areas of a waste facility used for:

- composting and green waste
- anaerobic digestion
- liquid waste treatment
- special and hazardous waste treatment
- waste tyre treatment
- sites that are landfills only.

However, other fire safety requirements may still apply to waste facilities not covered by the guideline.

How waste fires impact the environment and human health

Waste fires are often large and continue for a long time. As a result, they generate large amounts of smoke, odour, air particulates and fire water run-off, which impact communities and ecosystems.

Is the guideline compulsory?

Waste facilities may be required to comply with some or all of the guideline through planning requirements, development consents, environment protection licences, orders, or notices issued to the facility.



Flammable gas sign at a waste management facility.
Photo: Evolving Images/EPA

How will the guideline be used by consent authorities?

If a development application proposes a standard approach such as the ‘acceptable solution’ within the guideline, whether for a new facility or modification of an existing facility, then the development application is assessed by the relevant consent authority.

If a development application proposes a performance-based approach and an ‘alternative solution’, the relevant consent authority will refer the application to Fire and Rescue NSW for assessment. Proponents should provide details of any alternative solution to address the fire risks and requirements outlined within the guideline.

Facility	‘Acceptable solution’	‘Alternative solution’
New facility	Assessed by the consent authority	Assessed by FRNSW
Modification of an existing facility	Assessed by the consent authority	Assessed by FRNSW
Existing facility with an issued Order or notice	Relevant consent or regulatory authority will identify specific conditions on the Order or notice	

What is an ‘alternative solution’?

An ‘alternative solution’ is a performance-based approach using principles of fire engineering to achieve the performance requirements of the National Construction Code. A waste facility is considered a special hazard that may require additional fire safety provisions. The alternative solution is assessed by Fire and Rescue NSW but still determined by the consent authority.

What if my waste facility can’t achieve the separation distances specified for waste storage and stockpiles?

In this case, look at the solutions in the guideline that reduce the risk of having reduced separation distances, such as masonry walls, bunkers or fire sprinklers. See sections 8.2 and 8.4 of the guideline for details. As with any alternative solution, if the waste facility proposes reduced separation distances it will have to be assessed by Fire and Rescue NSW.

How will the government use the fire safety guideline?

The guideline is used by **consent authorities** – councils and the NSW Department of Planning, Industry and Environment – and **regulatory authorities** – EPA, SafeWork NSW and councils.

Consent authorities can apply the guideline in full or in part when determining a development consent or issuing fire safety notices or development control orders.

Councils can apply the guideline to any business or undertaking under its jurisdiction using a variety of regulatory tools.

The **EPA** regulates licensed waste facilities under the *Protection of the Environment Operations Act 1997*. If the EPA considers that a licensed waste facility presents a non-trivial risk of harm to human health or the environment, it may consider requiring compliance with elements of the fire safety guideline. This would be done by talking to licensees and adding conditions on a site’s environment protection licence, via the normal licence variation process.

Where can I get more information?

Fire and Rescue NSW
firesafety@fire.nsw.gov.au
02 9742 7434

Guideline available from www.fire.nsw.gov.au

NSW EPA
info@epa.nsw.gov.au
131 555 or 02 9995 5555 from outside NSW

NSW Environment Protection Authority
Email: info@epa.nsw.gov.au
Website: www.epa.nsw.gov.au
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