

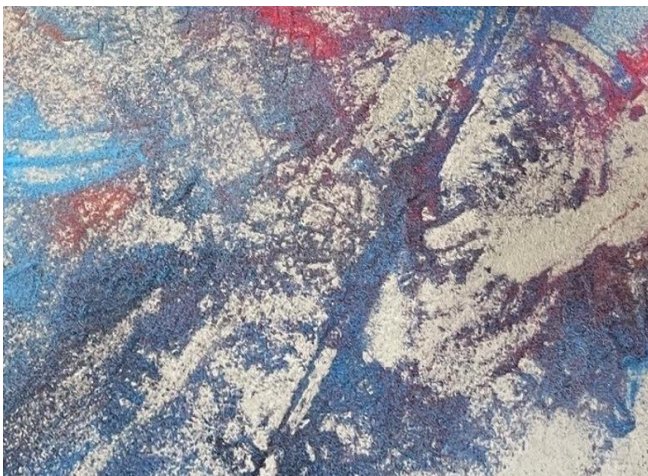
Managing plastic feedstock

Publication 1701.1

Fact Sheet

What is plastic feedstock?

Plastic feedstock is the raw material such as flakes, powder, recycled chips and resin pellets used to make plastic products. These products include rainwater tanks, pipes, medical supplies, textiles, electronics, food containers and drink bottles.



Plastic feedstock powder.



Plastic resin pellets.

During product manufacturing, installation and maintenance, plastic feedstock can be released into the environment as residue or material offcuts called swarf.



Plastic feedstock swarf.

epa.vic.gov.au

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What is the issue?

Plastic feedstock can:

- be blown into the air
- enter freshwater and marine habitats as microplastics
- attract chemical pollutants to its surfaces
- be eaten by animals and harm their health
- enter the food chain and harm human health.

Spills and mishandling can cause the release of plastic feedstock into surrounding environments. For example, land, stormwater systems, waterways and the ocean.

What are industry's obligations?

If you don't take [reasonably practicable](#) steps to control your plastic feedstock, you may be breaching your duty to manage industrial waste or creating an environmental hazard.

Discarded, rejected, abandoned, unwanted or surplus matter (such as plastic feedstock) is defined as waste under the *Environment Protection Act 2017*. This waste must be managed appropriately.

Plastic feedstock that is not managed may result in uncontrolled release into the environment. This is in breach of the [general environmental duty](#).



Tear in a one tonne bulk bag resulting in release of uncontrolled plastic resin pellets into the environment.

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Tear in a storage bag resulting in release of uncontrolled plastic resin pellets into the environment.

Businesses that produce, manufacture, transport, store, handle, use, install and maintain plastic products and those that collect, recycle or dispose of plastic products and feedstock are required to assess and manage the risk of these materials escaping. Failure to do so may attract a penalty.

Managing plastic feedstock

Aligned with circular economy principles, managing plastic feedstock involves the stages of raw materials, design, production and remanufacturing, distribution, consumption, use and reuse, collection and recycling.



The above steps follow the risk management process detailed in the *Assessing and controlling risk: A guide for business* (EPA publication 1695).

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Step 1: Identify hazards

Uncontrolled release of plastic feedstock into the environment.

Step 2: Assess risks

Assess the risk of uncontrolled release of plastic feedstock into the environment during:

- production, manufacturing, packaging, material transfer, transport, storage, handling, usage, installing, maintaining, collection, recycling and disposal.

Step 3: Implement controls

The following controls are examples of options to help manage the uncontrolled release of plastic feedstock into the environment:

- limit the release of plastic feedstock into the environment by implementing:
 - catch trays, bunding and wide mouth hoppers for preventing and containing spills
 - portable vacuums and cleaning equipment located in easily accessible areas
 - drain mesh guards, baffles, booms and skimmers for rainfall events
 - shoe brush stations
 - barrier curtains to prevent loss from inside areas.
- conduct regular site inspections and/or formal audits to monitor plastic feedstock release (or potential release)
- ensure outdoor bin lids are closed
- implement good house-keeping procedures
- provide training to your staff, and inductions to contractors on appropriate handling of plastic feedstock onsite (including spill capture)
include plastic feedstock management in standard operating procedures such as environment management plans and health, safety and environment plans
- consider relevant industry information for further guidance on controls such as [Operation Clean Sweep Australia](#).

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Wide mouth hopper contains release of uncontrolled plastic feedstock into the environment.



Drain mesh guard contains release of uncontrolled plastic feedstock into the environment during rainfall events.

Step 4: Check controls

Monitor controls you put in place. This ensures they are working effectively and as planned. See the following examples for monitoring the uncontrolled release of plastic feedstock into the environment:

- conduct a site walkaround to check controls are in good working order and working as intended
- review site boundaries and exit routes where plastic feedstock may be escaping. For example, slopes, concourses and unprotected drains
- regularly maintain and service equipment and machinery
- check staff awareness
- check supply chain for points where it could be released
- speak to suppliers and customers about arrangements for receiving plastic feedstock deliveries.

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Management benefits

Managing plastic feedstock can help you:

- save costs
- reduce your impacts on human health and the environment
- contribute to the principles of environment protection as per the *Environment Protection Act 2017*
- improve your circular economy outcomes
- improve your workplace safety
- meet community expectations
- avoid fines and prosecution.

Further information

[General environmental duty for businesses](#)

[Manage your environmental risk](#)

[Engaging consultants fact sheet](#)

[Operation Clean Sweep Australia](#)

Contact EPA on 1300 372 842 (1300 EPA VIC) or visit our website epa.vic.gov.au

EPA Victoria gratefully thanks Tangaroa Blue Foundation, Association of Rotational Moulders Australasia, Chemistry Australia and Plastics Industry Pipe Association of Australia Limited for their contribution and supplying images.