



PIPA

PLASTICS INDUSTRY
PIPE ASSOCIATION
OF AUSTRALIA LIMITED

Preparing plastic pipes and fittings for recycling

A PRACTICAL GUIDE TO IDENTIFICATION, SEPARATION AND SAFE HANDLING



Good recycling starts with preparation

Plastic pipes and fittings are designed to provide safe, reliable service over many decades. Installation offcuts, unused products and suitable material removed from service can provide opportunities to recover plastic for another use.

Many pipe materials including polyvinyl chloride (PVC), polyethylene (PE) and polypropylene (PP) can be recycled. Whether a particular product can be accepted depends on its material, construction, condition, previous use and the capabilities of the receiving facility.

Correct identification, separation and preparation help reduce contamination, support safe handling and improve the suitability of material for recycling.

Check acceptance before you start

Recycling capabilities and acceptance requirements vary between receiving facilities. Not every facility accepts every type of pipe or fitting, and preparation requirements may differ.

Contact the receiving facility before preparing material or arranging collection or delivery. Confirm which products it accepts and how they need to be separated, cleaned and contained.

Six steps to prepare material for recycling

1. Identify

Identify the material the pipe or fitting is made from.

2. Separate

Keep different materials apart and remove other components where required.

3. Clean

Remove significant dirt, debris and other contamination.

4. Check

Consider the previous use and assess potential health and safety risks before handling or cleaning.

5. Contain

Prepare material for safe handling, storage and transport.

6. Recycle

Confirm acceptance and arrange collection or delivery with the receiving facility.

Why preparation matters

Recycling relies on recovering plastic suitable for further processing. Soil, stones, concrete, rubber, metal, incompatible plastics and residual substances can affect recycling equipment, processing and the quality of the recovered material.

Well prepared material helps the receiving facility recover a more consistent plastic feedstock for a suitable next use.

Not sure? Keep it separate and check with the receiving facility.

Step 1: Identify

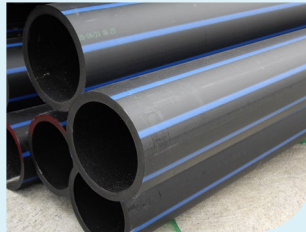
Know what material you have

Identify the material the pipe or fitting is made from before including it in a recycling collection.

Common thermoplastics used in Australian plastic pipe systems include:



PVC - Polyvinyl chloride
Including PVC-U, PVC-M
and PVC-O.



PE - Polyethylene



PP - Polypropylene

Look for the marking

Check the pipe print line, moulded marking on the fitting, product label or original product information for the material designation.

Do not rely on colour or appearance alone. Products that look similar may be made from different materials.

Why identification matters

PVC, PE and PP are different plastics and need to be directed to an appropriate recycling stream. Correct identification helps keep compatible materials together and reduces contamination.

Identifying the plastic is the first step. It does not automatically confirm that the product is suitable for a particular collection. Material grades, formulations and product construction can also affect acceptance.

If you cannot identify it

Keep the material separate and contact the receiving facility. Photographs of the product and any visible markings may help identify it and confirm whether it can be accepted.

Not sure? Keep it separate and check first.



Step 2: Separate

Keep compatible materials together and other materials out

Keep PVC, PE and PP separate unless the receiving facility has confirmed they can be collected together.

Check pipes and fittings for attached components and mixed materials. Remove components as required and keep unsuitable products out of the collection.

Check before handling or cutting

If pipes or fittings may contain sewage, chemicals, oils, fuels or unknown residues, keep them separate. Follow [Step 4](#) Check to assess potential health and safety risks before removing components, cutting or cleaning.

Remove these items before recycling

Follow the receiving facility's requirements for removing the following components



Rubber rings and seals

Remove loose or readily separable rubber rings and seals.



Compression fittings

Unscrew or cut compression fittings off the pipe. Keep the removed fittings separate from the prepared pipe.



Electrofusion fittings

Cut electrofusion fittings off the pipe. These fittings contain embedded metal heating wires.



Irrigation drippers and nozzles

Remove attached drippers, nozzles and other irrigation components. Where these cannot be removed, keep the pipe separate and check acceptance.



Other attached materials

Remove metal brackets, screws, fixings, packaging and other readily separable materials that do not belong in the recycling stream.

Keep removed components out of the pipe collection unless the receiving facility has specifically confirmed it accepts them.

Not accepted in this recycling collection



PEX pipe

Do not include crosslinked polyethylene (PEX) pipe in the standard PE pipe collection as these products include aluminium layers.



Used plumbing traps

Used traps may retain sewage or organic matter and present a biological hazard.



Mixed-material multi duct

Multi duct products may contain different plastics or other materials that cannot readily be separated. Keep these assemblies out of the standard collection.



Chlorinated PVC pipe

Do not include chlorinated polyvinyl chloride (PVC-C, also known as CPVC) pipe or fittings in the standard PVC collection.



Other waste

Keep timber, general waste and unrelated materials out of the recycling collection.

Keep potentially contaminated products separate



Used purple pipe

Unused purple pipe offcuts may be accepted where the material meets the receiving facility's requirements.

Used purple pipe may have carried recycled water or other substances that present a contamination risk. Keep it separate and follow [Step 4](#) Check before handling, cutting or cleaning. Confirm acceptance with the receiving facility.



Paint coatings and excess solvent cement

Keep heavily painted or coated material, or material with excessive solvent cement deposits, separate and check acceptance with the receiving facility.

Solvent-cemented PVC joints do not automatically need to be cut apart. Follow the receiving facility's requirements.

Products that look alike

Some PVC, PE and PP products have a similar appearance. Check the print line or moulded marking rather than relying on colour, shape or brand.

Keep identified materials in separate groups. Clearly label products that could be confused and confirm any separate collection requirements with the receiving facility.

Why separation matters

Rubber, metal and incompatible plastics can affect recycling equipment, processing and the quality of the recovered material.

Removing unwanted components and keeping unsuitable products out helps protect the recycling stream and supports recovery of a more consistent plastic feedstock.

Not sure? Keep it separate and check first.

Step 3 Clean

Check inside and outside

Check both the outside and the inside of pipes and fittings. Material that appears clean externally may still contain soil, stones or other debris.

Before cleaning, consider the previous use. If the material may contain hazardous or unknown residues, follow Step 4 Check before proceeding.

Remove dirt and debris

Remove significant contamination including:

- caked-on dirt and mud
- stones, aggregate and material trapped inside the pipe
- tape and packaging where required
- timber and general waste
- loose foreign material remaining after separation.

It does not need to look new

Light dust or surface dirt may be acceptable. The aim is to remove contamination that could affect handling, processing or the quality of the recovered plastic.

Follow the receiving facility's cleaning requirements.

Keep separate and check first

Contact the receiving facility before cleaning or including material with:

- oils, fuels or chemical residues
- unknown substances or residues
- paint, coatings or linings
- significant concrete or embedded material
- contamination that cannot readily be removed.

Where contamination may present a health or safety risk, follow your workplace procedures and the guidance in Step 4 Check.

Why cleaning matters

Material attached to a pipe or trapped inside it can enter the recycling process when the pipe is cut, shredded or granulated.

Removing dirt, debris and other contamination helps the recycler recover a more consistent plastic feedstock and reduces the need for additional sorting or treatment.

**Clean inside and outside. Not sure?
Keep it separate and check first.**





Step 4: Check

Know where it has been and what it carried

Before handling, cutting or cleaning used pipes and fittings, consider their previous application and any contamination that may present a health or safety risk.

Complete this check before starting the other preparation steps.

Take particular care with material that has carried or come into contact with:

- sewage or organic matter
- chemicals or industrial substances
- oils or fuels
- other potentially hazardous substances
- unknown contents or residues

Sewage contamination

Pipes and fittings that have carried or been contaminated by sewage may present a biological hazard.

Keep this material separate. Follow your organisation's workplace health and safety procedures for assessing and managing the risk before handling or cleaning.

Do not include sewage-contaminated material in a recycling collection.

Chemicals oils and unknown residues

Keep pipes and fittings containing chemical, oil, fuel or unknown residues separate. Assess the potential risks before handling, cutting or cleaning.

Provide the receiving facility with information about the previous use and any known contamination so it can determine whether the material can be accepted.

Do not assume that emptying or washing a pipe makes it safe to handle or suitable for recycling.

Follow your organisation's workplace health and safety procedures and use appropriate equipment and handling methods.



If the previous use or contamination is unknown

Keep the material separate. Do not proceed with preparation until the potential risks have been assessed and appropriate controls are in place.

Check the risk before you prepare the material.

Step 5: Contain



Prepare material for safe handling and transport

Once pipes and fittings have been identified, separated, cleaned and checked, prepare them for collection or delivery.

Confirm the receiving facility's requirements for pipe lengths, containers, loading and unloading before preparing the load.

Bundle or contain the material

Depending on its size and quantity:

- bundle longer pipe lengths securely
- place shorter lengths and offcuts in suitable cages, bins or containers
- contain loose fittings so they cannot fall or escape during handling
- cut pipe to the lengths required by the receiving facility, using appropriate equipment and workplace procedures.

Keep different materials separate unless the receiving facility has confirmed they can be collected together.

Keep the load secure

Prepare material so it can be safely loaded, transported and unloaded.

- Do not overfill cages, bins or containers.
- Keep material within the container without protruding pieces.
- Secure loose pipe and fittings to prevent movement or loss.
- Keep general waste and unrelated materials out of the load.

Follow applicable workplace procedures, transport requirements and load restraint requirements.

Plan for unloading

Confirm how the material will be unloaded and whether suitable equipment is available at the receiving facility.

Well-organised, appropriately contained material is easier to inspect, handle and receive.

Bundle securely. Keep material contained. Confirm delivery requirements.

Step 6: Recycle

Confirm acceptance before collection or delivery

Once material has been prepared, confirm that it meets the receiving facility's requirements and arrange collection or delivery.

A product accepted at one facility may not be accepted at another. Always contact the receiving facility directly before sending material.

Find a participating organisation

Visit the PIPA website for information about participating organisations and recycling opportunities for plastic pipes and fittings.

pipa.com.au/recycling

Provide details about your material

When making an enquiry, include:

Material pvc, pe, pp or unidentified.

Product type pipes, fittings or assemblies.

Previous use installation offcuts, unused products or material removed from service, including what it carried.

Condition cleanliness, contamination, coatings or attached components.

Quantity and dimensions

approximate weight or volume, pipe diameters and lengths.

Location where the material is stored.

Preparation whether it is bundled, caged or otherwise contained.

Photographs of the material and its markings can help the receiving facility assess suitability.

Confirm the arrangements

Before collection or delivery, agree on:

- any further preparation required
- acceptable pipe lengths and containment
- collection or delivery arrangements
- loading and unloading requirements
- any applicable charges

Keep material awaiting acceptance separate from the confirmed load.

Ready to recycle?

Use this checklist to confirm the material is ready for the receiving facility.

1. Identify

The pipe and fitting materials have been identified

2. Separate

Different plastics have been separated as required, unwanted components removed and excluded products kept out of the collection.

3. Clean

Pipes and fittings have been checked inside and outside, and significant dirt, debris and other contamination removed.

4. Check

Previous use, potential contamination and handling risks have been assessed before preparation, and workplace health and safety procedures followed.

5. Contain

Material is appropriately bundled or contained and can be safely loaded, transported and unloaded.

6. Recycle

The receiving facility has confirmed acceptance, preparation requirements and collection or delivery arrangements.

Not sure? Keep it separate and check first.

Acceptance requirements vary between receiving facilities.

Confirm that your material meets the requirements before sending it.

Find participating organisations and recycling information:

pipa.com.au/recycling



Common questions

Can plastic pipes and fittings be recycled?

Many thermoplastic pipe materials, including PVC, PE and PP, can be recycled. Acceptance depends on the product, its condition, previous use and the receiving facility's capabilities.

Confirm acceptance before arranging collection or delivery.

Can fittings be included with pipe?

Only where the receiving facility has confirmed acceptance. Fittings may contain rubber, metal or different plastics and some need to be removed from the pipe or collected separately.

Does the material need to be completely clean?

It does not need to look new. Light surface dust or dirt may be acceptable, but significant dirt, stones, debris and other contamination should be removed from inside and outside.

Follow the receiving facility's requirements.

Can pipe removed from service be recycled?

Potentially. Its previous use and condition need to be considered.

Do not include sewage-contaminated material in the recycling collection. Material containing chemicals, oils, fuels or unknown residues must be

kept separate and assessed before handling or preparation.

Follow **Step 4** Check and confirm the receiving facility's requirements.

Can different plastics go in the same collection?

Only if the receiving facility has confirmed this. Otherwise, keep PVC, PE and PP separate.

Do solvent cement joints need to be cut apart?

Not necessarily. Some receiving facilities accept solvent-cemented PVC pipe and fittings. Check before cutting joints apart.

What if I cannot identify the material?

Keep it separate. Check the pipe print line, fitting marking, label or original product information.

If it remains unidentified, send photographs of the product and any markings to the receiving facility for advice.

Where can I find a recycling option?

Visit pipa.com.au/recycling for information about participating organisations.

Contact the organisation directly to confirm current acceptance and preparation requirements before sending material.

What happens next?

From recovered pipe to a useful resource

Once accepted for recycling, plastic pipes and fittings undergo processing to prepare the material for another use.

The process varies depending on the material, its condition and the receiving facility. A typical mechanical recycling pathway includes the following stages.

Not every facility undertakes every stage, and the order may vary. Some material may be transferred to another processor for further treatment or manufacture.

Your preparation makes a difference

Correct identification, separation, cleaning and containment help reduce contamination and make material easier to handle and process.

These steps support the recovery of a more consistent plastic feedstock suitable for another use.

Good recycling starts before the material reaches the recycler.





Contact Us

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[**pipa.com.au**](http://pipa.com.au)