Coated pipes can contain hazardous materials. When working with coated pipes, proper precautions and procedures must be followed at all times - from the identification stage right through to the handling, storage, transport and disposal of pipes.

It’s important to correctly identify the type of pipe you’re working with before determining the correct steps to take. Working on pipes with hazardous materials must only be undertaken by personnel with the right training and skills, using the right equipment and personal protective equipment (PPE).

**What should I do when working with coated pipe?**

Prior to commencing work on a pipe, you must always first identify whether the coating contains any hazardous material such as asbestos, polycyclic aromatic hydrocarbons (PAHs) and/or polychlorinated biphenyls (PCBs).

All coal tar or bituminous wrapped pipe may contain asbestos, PAH's and/or PCBs. Pipes with a coal tar or bituminous wrapping generally be characterised by a black wrapping surrounding a steel pipe. However, the appearance of the wrapping and how it’s been applied to the pipe may vary. In some circumstances, it may appear grey or white if it’s been exposed to the sun for an extended period of time. Often, you can see fibre strands from either the asbestos in the material or from synthetic mineral fibres.

Below are several examples of pipe wrapped in coal tar or bituminous wrapping:

The decision tree below provides you with an overview of what you should do when working with coated pipes:

![Decision tree](image)

**Decision tree for working with coated pipes**

1. If you’re working with coated pipe and you’re unsure of the type of coating material, obtain advice from the Field Services’ Inspections and Refurbishments Services (IRS) team. Do not send a sample unless instructed.

2. If the pipe coating is suspected to be asbestos coal tar enamel or similar bituminous material, obtain a sample and test for the presence of asbestos, polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs). IRS can assist with identification if needed.

3. If the sample contains asbestos, PAHs or PCBs, contact the Safety and Wellbeing Business Unit or the Environment team for further advice regarding handling and disposal.

**Note:** Coated pipes containing asbestos, PAHs or PCBs **must not** be disposed of without first contacting Field Services’ IRS team, Safety and Wellbeing or the Environment team.

**Contact details:**

For technical queries on how to identify coated pipes containing hazardous materials, contact Field Services’ IRS team at inspection.services@watercorporation.com.au

For queries relating to PPE requirements, handling, waste disposal and training, contact Richard Smith, Specialist – OSH, Safety and Wellbeing on 9420 3449 or asbestos@watercorporation.com.au

For queries relating to waste transport, disposal process, remediation and contaminated site reporting requirements, contact Environment at environment@watercorporation.com.au. Alternatively, contact Cale Alexander, Team Leader - Environment & Contaminated Sites, Environment on 9420 2284 or James Evans, Advisor – Environment & Contaminated Sites on 9420 2311.

**Who is allowed to work with coated pipes containing hazardous material?**

If you do not have the appropriate skills, knowledge or equipment to safely work on the pipe, stop the job. Inform your supervisor who will then provide you with further guidance and organise for the job to be undertaken safely.

If you have all the necessary skills, knowledge and equipment to work on the pipe, carry out your safe job planning and undertake the task using the correct procedure, equipment and PPE.

Water Corporation currently offers ‘Working Safely with Asbestos’ and a general awareness training which also covers wrapped pipes. Additional information and resources, including animations, can be found on the Asbestos Management Framework Waterfront page.
Who is allowed to cut, weld, heat or grind a pipe containing hazardous material and how can they undertake the task safely?

Only personnel with the appropriate skills, knowledge, equipment and PPE are allowed to do so. If you don’t have any of this, you must stop the job and contact your supervisor for further direction.

Before commencing any work on the pipe, you must remove all of the coal tar or bituminous material; refer to section 5.2 of the Working with Asbestos Containing Materials Work Instruction. To do this you must only use manual hand tools - never use power tools. At all times, you must wear the appropriate PPE at and use the appropriate materials as listed below.

<table>
<thead>
<tr>
<th>Manual hand tools</th>
<th>DO NOT use power tools</th>
<th>A source of water</th>
<th>Disposable cleaning rags</th>
<th>Disposal Sheets</th>
<th>Duct Tape</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>✓</strong></td>
<td><strong>✗</strong></td>
<td><strong>✓</strong></td>
<td><strong>✓</strong></td>
<td><strong>✓</strong></td>
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</tr>
</tbody>
</table>

- **Manual hand tools**: Must be used to remove coal tar or bituminous materials. This may include hammer and chisel, wire brushes or a sharp implement.
- **DO NOT use power tools**: Power tools must never be used to remove coal tar or bituminous materials.
- **A source of water**: To wet down potential asbestos fibres released whilst removing the wrapping and once complete.
- **Disposable cleaning rags**: To clean non-disposable PPE and tools after the job is complete. This includes glasses, respirators, gumboots, chisels, hammers etc.
- **Disposal Sheets (0.2mm (200 µm (micron)) or bags**: To contain all asbestos waste. All waste must be double wrapped or double bagged.
- **Duct Tape**: To seal asbestos bags/wrapping.

What PPE must I wear when removing coal tar or bituminous wrapping?

It’s mandatory for anyone working on or observing the removal of coal tar or bituminous wrap to wear disposable overalls, a P2 respirator, disposable gloves, safety glasses, disposable over-boots or gumboots.

Additional PPE and equipment in the form of power tools and a powered air purifying respirator is required if you’re cutting, grinding or welding the steel pipe. However this work can be carried out only once the coating has been removed from the steel pipe.

<table>
<thead>
<tr>
<th>Disposable Overalls</th>
<th>P2 respirator</th>
<th>Disposable Gloves</th>
<th>Safety eye wear</th>
<th>Disposable Over boots or Gumboots</th>
<th>Power Tools</th>
<th>Powered air purifying respirator (PAPR)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>✓</strong></td>
<td><strong>✓</strong></td>
<td><strong>✓</strong></td>
<td><strong>✓</strong></td>
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<td><strong>✗</strong></td>
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</tr>
</tbody>
</table>

- **Disposable Overalls**: P2 respirator
  - **Note**: A non-disposable rubber mask can be used with disposable filters (rubber mask must be thoroughly washed afterwards)
- **Disposable Gloves**: Safety eye wear
  - **Note**: Eye wear must be thoroughly washed after use
- **Disposable Over boots or Gumboots**: Disposable Over boots or Gumboots
  - **Note**: Gumboots must be thoroughly washed afterwards
- **Power Tools**: Power Tools
- **Powered air purifying respirator (PAPR)**: Used to prevent the inhalation of fumes from remaining PAH material or heavy metal contaminants from the steel itself.

These additional PPE and equipment are required if you’re cutting, grinding or welding oxy steel only after coating and wrapping has been removed.

These must be used by anyone working on or observing the removal of coal tar or bituminous wrap.
What should I do with the wrapping material once it’s been removed?

Any wrapping material that has been removed must be stored correctly. You must do the following:

1. Collect all debris and double bag it in an asbestos removal bag or wrap it in thick plastic sheeting, preferably 0.2mm (200 μm (micron)) thick.
2. Place the bags into a 205 litre drum and put an asbestos warning sticker on the drum. Email Safety and Wellbeing if you need new labels.
3. Securely store the drum (preferably under cover) at a Water Corporation site, on a bund and in a location away from personnel or site activities until it can be transferred to a suitable hazardous waste storage and disposal facility. Contact Safety and Wellbeing or the Environment team for disposal options currently available for this material.
4. Once safely secured on the site, any material containing asbestos must be added to the asbestos register for that site.

Additional information is available in the Asbestos Waste Disposal Work Instruction.

What should I do with sections of pipe with coating containing hazardous material?

Coated pipes containing asbestos, PAHs or PCBs must not be disposed of without first contacting either the Safety and Wellbeing team or Environment team.

Any steel coated pipes containing hazardous material must be double wrapped in 200 μm (micron) thick plastic prior to being stored and/or transported. Once sealed, they should be labelled as Asbestos waste. It should be noted that these pipes must be transported as a special (asbestos) waste.

A long term strategy and facility is currently being developed for the ongoing management of this material. In the meantime, contact either the Safety and Wellbeing team or Environment team for waste disposal options.

Note: Any waste stored at a Water Corporation site must be subject to a regular inspection to ensure containment and ensure that signage and barriers remain adequate.

Where can I get more information?

For technical queries on how to identify coated pipes containing hazardous materials, contact the Field Services’ IRS team at inspection.services@watercorporation.com.au

For queries relating to PPE requirements, handling, waste disposal and training, contact Richard Smith, Specialist – OSH, Safety and Wellbeing on 9420 3449 or asbestos@watercorporation.com.au.

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Additional information can also be found below:

- HSEAA-P-131 working with asbestos procedure.
- Working with Asbestos Containing Materials Work Instruction (aquadoc #15474341)
- Asbestos Waste Disposal Work Instruction (aquadoc #16396473)
- Asbestos Decontamination of Work Area, Tools, Equipment, Soil and Personnel Work Instruction (aquadoc #16396820)
- Asbestos Management Framework Waterfront page