

Hydraulic cutting of asbestos cement (AC) and pitch fibre water and sewer pipes

This guidance is for companies working in the water industry and gives advice on how to cut large diameter asbestos cement (AC) pipes.

AC water pipes should be cut by hand where possible. However, cutting larger diameter AC pipes by hand is not always practicable and could potentially introduce other health risks.

Trials by Wessex Water have identified three hydraulic tools that keep fibre levels below the control limit when operated to manufacturer's instructions and therefore can be used in some circumstances. Currently (July 2015) the tools identified are ICS PowerGrit Utility Chainsaw, Steve Vick International Keel Cutter and MACAW pipe cracker. Other hydraulic tools may also be suitable, but should not be used unless tested in controlled conditions to show that fibre release is below the short-term exposure limit (STEL).

This task is a maintenance task and therefore is non-licensed work.

WARNING: Cut off saws must NOT be used even with water suppression.

Before work starts you will need to have carried out a risk assessment and have a written plan of work.

Training required

- Provision and use of PPE.
- Safe work with asbestos including decontamination procedures.
- Safe procedures for cutting asbestos pipes.
- Work in excavations.
- Safe operation and maintenance of the power tool.
- Hazardous waste handling and disposal.

Personal Protective Equipment (PPE)

- Disposable overalls fitted with a hood.
- Boots without laces (Laced boots are hard to decontaminate).
- Respirator (APF of 20) face fit tested to the wearer.
- Rubber gloves (Gloves with cotton backs or cuffs must not be used).

Equipment

- Ladder access to excavation.
- 500 and 1000 gauge polythene sheeting and/or clear plastic asbestos waste bags.
- Duct tape.
- Water bowser or mains supply.
- Power grit saw; or

- Keel Cutter; or
- Pipe cracker.
- Asbestos warning stickers.

Preliminary checks

- Provide safe access to the excavation.
- Minimise the number of people present.
- Excavate to expose pipe and provide adequate clearance to operate power tool.
- Before starting work ensure there is a sufficient supply of water to provide a constant flow to the power tool. Use mains water or pumped water from a bowser. This type of bowser can be topped up without stopping the operation.
- Under no circumstances will the power tools be used dry.
- PPE and RPE as specified above must be worn.

Procedure

- Check power tool is in good working order.
- Set up the power tool following the manufacturer's instructions.
- Ensure a good supply of water is reaching the cutting point.
- Carry out the cuts ensuring there is no release of dust. If dust is generated stop work immediately and investigate cause.

Clean up and decontamination

- On completion of the repair double bag the asbestos pipe, or wrap in the polythene sheeting, seal and clean outside of bag/wrapping before moving it out of the excavation.
- Thoroughly wash the power tool clean within the excavation before moving it out of the excavation.
- Thoroughly wash boots to remove all traces of asbestos before leaving excavation.
- If wearing waterproof clothing wash any areas contaminated with dirt before leaving the excavation.
- If ladder has been used for access then wash allowing the washings to fall into the excavation.
- Back fill excavation.
- Finally remove disposable PPE and double bag as asbestos waste removing RPE last.
- Wash hands and face.
- Remove asbestos to dedicated asbestos waste skip and dispose of as hazardous waste.

NOTE: Proper decontamination is important to ensure that no asbestos fibres are spread from the excavation or taken into a vehicle on boots or tools.

Useful Links:

[HSG47 Avoiding danger from underground services](#)
[HSG53 RPE at work – A practical guide](#)
[Information, instruction and training](#)
Excavations: <http://www.hse.gov.uk/pubns/cis64.pdf>