

## Safe Work Instruction - Tapping and Repairs to High Pressure UPVC Mains (Pressure Greater Than 85 Metres)

**DO NOT use this plant\* or complete this task unless you have been inducted in its safe use and operation by an Authorised Experienced Operator**

This SWI may not cover all possible hazards and risks and should be referred to as a control measure in the risk assessment process.  
Additional training may be required for high risk plant. Site and task may change required PPE.

### PERSONAL PROTECTIVE EQUIPMENT



Eye protection must be worn



Long and loose hair must be contained or covered.



Hand protection must be worn



Foot protection must be worn

### POTENTIAL HAZARDS AND RISKS

- Manual Task Injury**  
Manual task injury from incorrect manual handling techniques
- Struck by Moving Object**  
Injury to worker due to being struck by moving traffic
- Slip, Trips, Falls**  
Slip, trip, fall due to uneven or slippery work surfaces  
Slip, trip, fall due to steep working surfaces
- Other**  
Injury due to plant malfunction or misuse

### PRE-OPERATIONAL SAFETY CHECKS

- ✓ Complete site-specific risk assessment
- ✓ Complete the appropriate pre-operational plant checklist
- ✓ Ensure you are familiar with plant operations and controls
- ✓ If a Traffic Control Plan is required, both standard and modified TCP's used must be documented as per .....
- ✓ Ensure that guards are fitted, secured and functional in accordance with manufacturers guidelines
- ✓ There shall be at least two Shoalwater workers on site for the tapping or repair work process to take place
- ✓ If the worker is unsure of the pressure, then a pressure test must be carried out at the nearest house tap to determine the pressure of the main
- ✓ Before starting excavation, the pressure in the main must be reduced to 85 Meters Head or less. This achieved by affixing a standpipe to the nearest hydrant to the proposed tapping or leak.
- ✓ The standpipe must be fully opened.
- ✓ The stop valves that control the flow in the section of the main are to be throttled to reduce the potential flow in the section of the main

### OPERATING PROCEDURES

- ✓ Keep clear of moving plant parts
- ✓ Operate plant to the conditions of the work area
- ✓ Excavation must be kept to a minimum –
  - For a main repair only expose enough UPVC pipe to identify the approximate location of the leak

- For a main tapping only expose enough UPVC main to assured of its location
- ✓ Before fully exposing the PVC pipe –
  - For a main repair the water main must be isolated and depressurised. This is achieved by completing shutting off the valves to isolate the section of main and leaving the standpipe fully open to drain the water out of the isolated section of the main
  - For a main tapping, the water pressure needs only to be maintained below 85 Meters Head
- ✓ Complete the appropriate excavations around the water main
- ✓ Carry out main repair works as required or main tapping by using a hole saw supplied by Rapit tap (or equivalent) to the required tapping diameter
- ✓ The uncovered section of the main must be backfilled before it is recharged
- ✓ The standpipe is to be left open until the main is fully charged and water is clear
- ✓ Examples of areas within Shoalhaven City Council that **MAY** have UPVC water mains with pressure greater than 85 Meters are –
  - Hyams Beach
  - Berrara
  - Erowal Bay
  - Swanhaven
  - Wrights Beach
  - Cudmirrah
  - Old Erowal Bay
  - Tomerong
  - Sanctuary Point
  - Wandandian
  - St Georges Basin
  - Bewong
  - Basin View

**NOTE:** Many of these areas now have a Pressure Reducing Valve in place to reduce static pressure  
**This procedure is to coincide with all other procedures that are relevant when carrying out this type of work**

### ENDING OPERATIONS

- ✓ Allow plant to cool before performing any maintenance, refuelling or cleaning
- ✓ Ensure plant is in good working order and stored in the appropriate location

### DO NOT

- ✗ Do not use if plant is faulty. Attach an Out of Service tag and report fault to your supervisor
- ✗ Do not wear loose jewellery
- ✗ Do not use mobile phone while operating plant

\*Plant in this SWI refers to any machinery, equipment, appliance, container, implement and tool.