

Safety and health alert

17/03 Gas service pipe fire

Incident

A plumber using an oxy-acetylene welder on a water pipe melted a parallel 20mm PVC gas service pipe, which caused a fire that burnt the plumber's lower legs and face and also caused property damage.

Factors

1. The gas service pipe was not adequately protected during the welding operation.
2. The clearance between the gas service pipe and the water service was approximately 80mm.
3. The plumber shielded the gas service from the heat of the oxy-acetylene flame using a piece of fibro cement approximately 350mm x 150mm between the two pipes.
4. The oxy-acetylene welder flame spread around the piece of fibro cement and melted the PVC gas pipe.
5. The gas ignited and caused a fire.

Recommendations

1. Prior to the commencement of welding or any other hot work in the vicinity of gas pipes, take precautions to prevent any risk of fire, explosion, injury or other danger that can occur during the performance of the welding by:
 - o Identifying any potential fire hazard (including the presence of flammable or combustible liquids, gases, vapours, dusts, fibres or substances) within the hot work.
 - o Considering potential hazards that may exist adjacent to the work area.
 - o Considering the possibility of changing circumstances during the progress of the hot work.
2. Under all circumstances gas service pipes must be protected to prevent being damaged from work being undertaken on other services, regardless of the separation to other services.

Protection of gas service pipes must include use of appropriate materials of sufficient size to provide shielding and insulation of the gas service pipe, such as a fire blanket.
3. Where the protection of gas service cannot be guaranteed, a mechanical coupling must be used on the water service OR arrangements made with National Power Service Pty Ltd WA (9499 5200) to isolate the gas supply.

Further Information

Further information can be obtained from the WorkSafe internet site www.worksafe.wa.gov.au, or by contacting customer service on 1300 307 877 or email: safety@docep.wa.gov.au.



