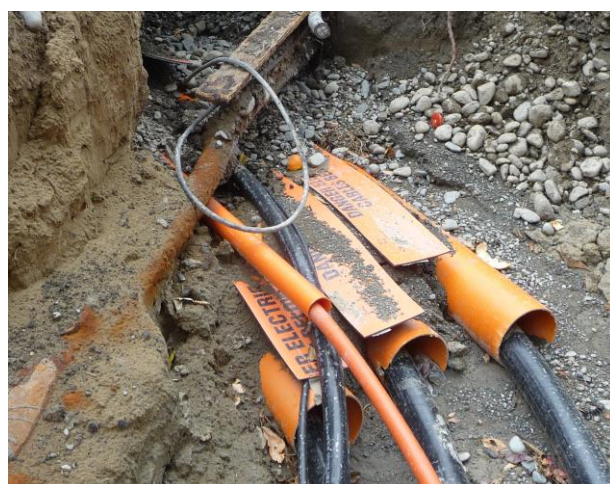


Risk from heating uPVC materials

Heavy duty uPVC conduit is commonly used to protect underground services. When encountering previously laid duct it is often necessary to carefully remove part of the pipe for positive identification of the service within.



Recently a MainPower employee was cutting such an observation aperture whilst working within a tight work space. He used a flame gun to soften the uPVC duct so that a small part could be peeled away using a craft knife. Whilst heating the duct the employee was subjected to noxious fumes, at which point he paused the process.

When uPVC is subjected to heat it gives off a white caustic gas (hydrogen chloride). Hydrogen chloride will combine with water (e.g. sweat or saliva) to form corrosive hydrochloric acid.

At temperatures above 250°C uPVC will emit carbon monoxide, a highly toxic gas which is a colorless, odourless and tasteless.

Higher temperatures may liberate toxic phosgene gas which can cause the lungs to fill with liquid (pulmonary edema) resulting in asphyxiation.

All work practices involving heating uPVC materials must cease immediately

If you have any questions about the information in this bulletin please contact the HSEQ Department