



## Asbestos on Underground Transformers

In recent months there have been several underground transformers excavated and removed from site for either scrap or refurbishment in the SPD workshop.

It has since been discovered that a number of these units have a combination of brown and grey asbestos wrapped pipework connecting the main tank of the transformer to the cooler bank which rests above ground.

The asbestos covered pipework also extends fully inside the cooler banks and does not seem specific to a single transformer size, as it has been found on transformers of different rating.

### Actions Taken & Investigation

Following the discovery of the asbestos contaminated units, it has been identified that predominately two different design concepts of underground transformer are present on the network.

One design concept has exposed pipework connecting the main tank to the cooler bank, which typically will have an asbestos wrap, and so far, units manufactured by Hackbridge & Hewittic have this design.

The alternative concept is that shown on the bottom right picture, with all the cooling pipework enclosed and connected directly into the tank. These units are typically asbestos free.



*Example unit with exposed pipework*



*Example unit with enclosed pipework*

## Recommendations and action points

- Confirm underground transformer design concept type, where possible, at work planning stage prior to excavation to determine whether asbestos is likely to be present.
- The asbestos register, drawings or database shall be accessed to assist in determining the nature of the asbestos for removal.
- In all cases, excavate with caution and if anything suspicious is found, **stop work immediately** and avoid unnecessary disturbance of the suspected asbestos.
- Where it has been identified that asbestos must be removed, a licensed asbestos removal contractor, from the SPEN framework, shall be instructed to complete the necessary work in line with the requirements of [SMS-11-013](#) Asbestos Management.