Mechanical Excavations in Exclusion zones

Incident Description
A team assigned to carry out a dig hit an intermediate pressure gas main at approximately 400mm under the surface damaging the cathodic protection.

During the installation of a Distribution Network Operator Ducting, a 550mm deep channel needed to be excavated. To enable these works trial holes were dug using a RED permit. The services were identified and appropriately and clearly marked on the ground by the team.

Excavation of the DNO ducting channel commenced under a GREEN permit, and during this work the digging team hit an intermediate pressure gas main at approximately 400mm under the surface damaging the cathodic protection.

The gas main was identified on the ground and on the service drawing. A Safe System of Work (SSOW) was produced, which consisted of a Permit to Work (PtW). However there was an error on the front sheet of the permit and marked ‘gas as not present’.

There was a deviation from the breaking ground procedure and that the hold points built into the procedure as prevention had been overlooked.

Actions
- All permits were reviewed following the incident.
- Permits cancelled and renewed following a redraft of the Safe System of Work (SSOW) identifying the Gas main as a high risk.
- The SSOW was suspended and a new SSOW / Task Briefing Sheet (TBS) produced specifically for working within the exclusion zone of the gas main.
- A full investigation review was carried out at Director Level.
- A site wide stand down was undertaken to reinforce H&S behaviours and expectations.

Learning
- Ensure a robust Safe System of Work is in operation and adhered to at all times
- Ensure that a Cable Avoidance Tool and Signal Generator are used in conjunction prior and during excavation.
- Adhere to all permit requirements, this includes any hold-points attached to the permit conditions

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