QSHE-ALERT 2021-06

Place: The Netherlands

Date: 29/06/2021

Victims & Damage:

- No physical injuries.
- Cable damage and power outage for the surrounding companies.

Nature:

Hitting the medium-voltage cable (MS-10KV) with a long-reach excavator bucket.

Activities:

Excavation waterway crossing (sheet piling) around MS cable.

Description of the incident:

When excavating a sheet piling which crosses a small waterway, the excavation was carried out in accordance with the excavation permit, the prevailing rules of preliminary excavation and manual excavation around the pipe. To remove the soil from the sheet piling , the crane operator placed his excavator bucket below the support beam, and against the sheet piling. In doing so, the medium-voltage cable was out of his field of vision. Due to a miscommunication between the operator and the groundworker, the MV cable was hit, which resulted in an electric arc.

The described steps in the work plan and the work procedure "protection of underground cables and pipes" were followed.

Risks:

- Fire / explosion generated by an electric arc.
- Electrocution / electrification due to voltage release/electric arc.
- Consequential damage due to loss of electrical power
- Image damage.

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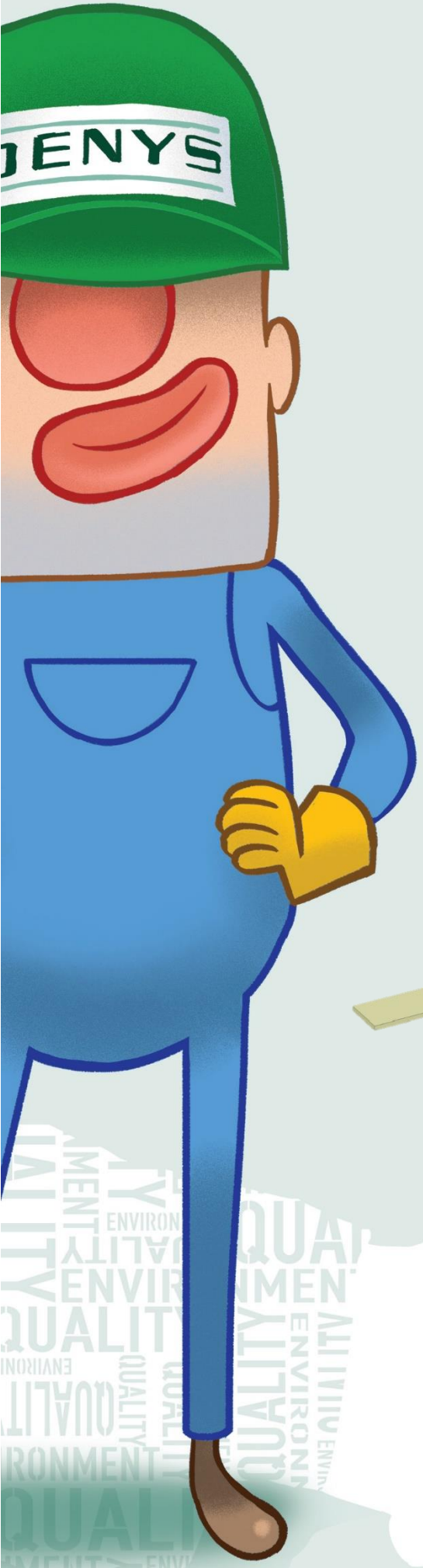
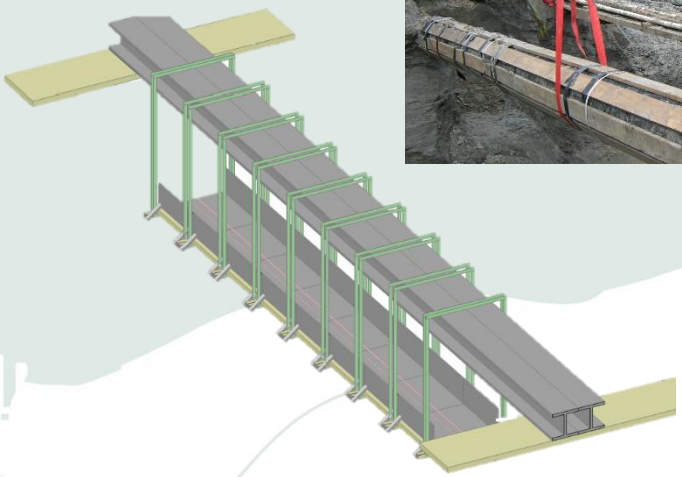


Causes:

- No clear communication between excavator operator and ground worker.
- Excavator operator has no view of the location where the cable enters the ground.
- No clear plan/instructions on how to effectively hang and protect the cable in this configuration were included in the Method Statement.

Measures / advice:

- The additional measures and information about the pipelines (type, etc.) in and near the excavation (earth-moving activity) must always be requested.
- All cables and pipelines that cross a trench must always be properly supported, at least according to the requirements of the cable owner.
  If the latter does not impose anything, the Denys standard is a minimum.
- Always draw up a work plan and provide the necessary materials to carry out this plan.
- Integrate this incident discussion and related measures in the training RCP (Responsible for Cables and Pipelines).



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