

SAFETY Alert



PREPARED BY: Corporate QHSE Dept.

N° 04/2023 Date: April 2023

OBJECT: UNDERGROUND INTERFERENCES

Excavation is a hazardous activity and all needed precaution measures must be put in place prior to start an excavating. Interferences with underground facilities is one of the major risk of this activity. Contact with live underground facilities could have catastrophic consequences for the crew and for third parties.



DESCRIPTION

During the excavation for a 6" line, an excavator contacted an underground gas live pipeline causing a leakage of gas. The area have been immediately evacuated and Emergency Response Plan activated. Project Emergency Team reached the location and take over the emergency crisis management.

POTENTIAL CONSEQUENCES

- Fire and Explosion in case of a spark - HiPo consequence which might lead to a fatal accident.
- Shut down of a live plant or unit in case of process pipeline damage.

INCIDENTS CAUSES

- Failure to Follow the Procedure: mechanical excavation was carried out within mechanical excavation exclusion zone (where hand excavation is mandatory).
- Inadequate Supervision: permanent construction and HSE supervision not assigned for the task.
- Inadequate guards or barriers: the third-party pipe has not been protected (wood-lagging) while mechanical excavation is ongoing.

CORRECTIVE AND PREVENTIVE ACTIONS

Measures adopted to prevent recurrence of similar incidents:

- Inform and get approval from the third-party pipeline owner before starting any excavation activity.
- Implement a Crossing checklist for each existing pipeline crossing activity.
- Ensure proper Construction and HSE Supervision to stand by while performing excavation at third-party pipeline crossings.
- No mechanical excavation allowed within the "crossing safety area" (2 meters from the existing pipeline).
- Utilize a toothless bucket / mini excavator for the excavation activity where there is a third-party crossing.
- Fully expose the pipeline crossing to identify the direction and provide a larger view. (Along the width of the trench, 0.5mt to the 3 dimensions)
- If the soil is hard, use a mini-hand jackhammer or use water to soak the soil the previous day (wetting of the ground).
- Always protect the facility when exposed: implement wood-lagging to protect the pipe.



*SICIM Golden Rule #10 INTERFERING SERVICES
"I will assume all services are "live" until proved otherwise"*



RECEPTION BY THE PROJECT

WHICH ACTIONS IDENTIFIED TO BE IMPLEMENTED IN THE PROJECT:

Project Manager:

Signature:

HSE Project Manager:

Signature: