

	<div style="text-align: center;">  LESSON LEARNED  </div>	Doc. No.: GP426 F39 Rev. 00
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Environmental – Uncontrolled spillage of hydraulic oil			
Number	2023-11	Date	22/05/2023
<p>Summary: In the night of 20 - 21 May, the biogas upgrading plant in P130000128 Dünaföldvár experienced an emergency shutdown. The cause of this failure was the bursting of a hydraulic oil hose on a compressor unit. The pressure dropped in the hydraulic system then led to the planned shutdown of the plant. About 15 litres of hydraulic oil were released in the container during the incident. Environmental impact was only minor, as the oil that escaped from the container (approx. 1-2 litres) was collected on the concrete foundation slab. The leakage came out from the weld seam of the oil foldable hose. The defective component was replaced by the supplier. There was no danger to people, as no one was in the container where the spillage occurred.</p> <p>Despite the fact that nobody got injured, taking into consideration that the system was operating at a pressure of 10bars with oil at the temperature of 90 Celsius degrees and that someone could have been affected by the oil leakage, reporting possible permanent disability, the incident was classified as HiPo.</p> <p>Outcome: Contained oil spillage</p> <p>Incident Classification: ENV – Level 1 - HiPo</p>			



Figure 1 (left side)
Burst hydraulic oil
hose after the
event. The installed
hose was too long.
(See Figure 3).



Figure 2 Same situation after repair, hose
with correct length was mounted

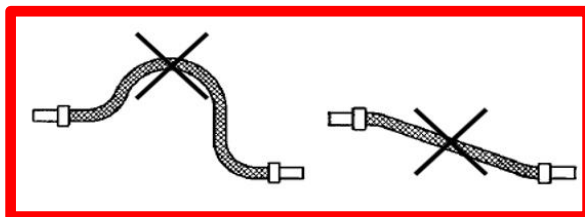


Figure 3 incorrect mounting of flexible metal hoses

Root Causes and Contributory Factors	Lesson Learned
<ul style="list-style-type: none"> The incorrect installation of the hose (oil hose too long) The vibration of the compressor may have contributed to the event 	<ul style="list-style-type: none"> Check the correct installation of flexible metal hoses for hydraulic oil before operating the unit. If you have any doubts about the correct installation of the metal hoses, inform your supervisor before operating the unit. Never start a device on which the metal hoses show visible damages such as cracks or deformations! Always use the prescribed personal protective equipment. Information on this can be found in the specific RAMS for the activities.



Every Lesson Learned is an opportunity to avoid recurrences.
What have you done to avoid a similar incident on your project?

