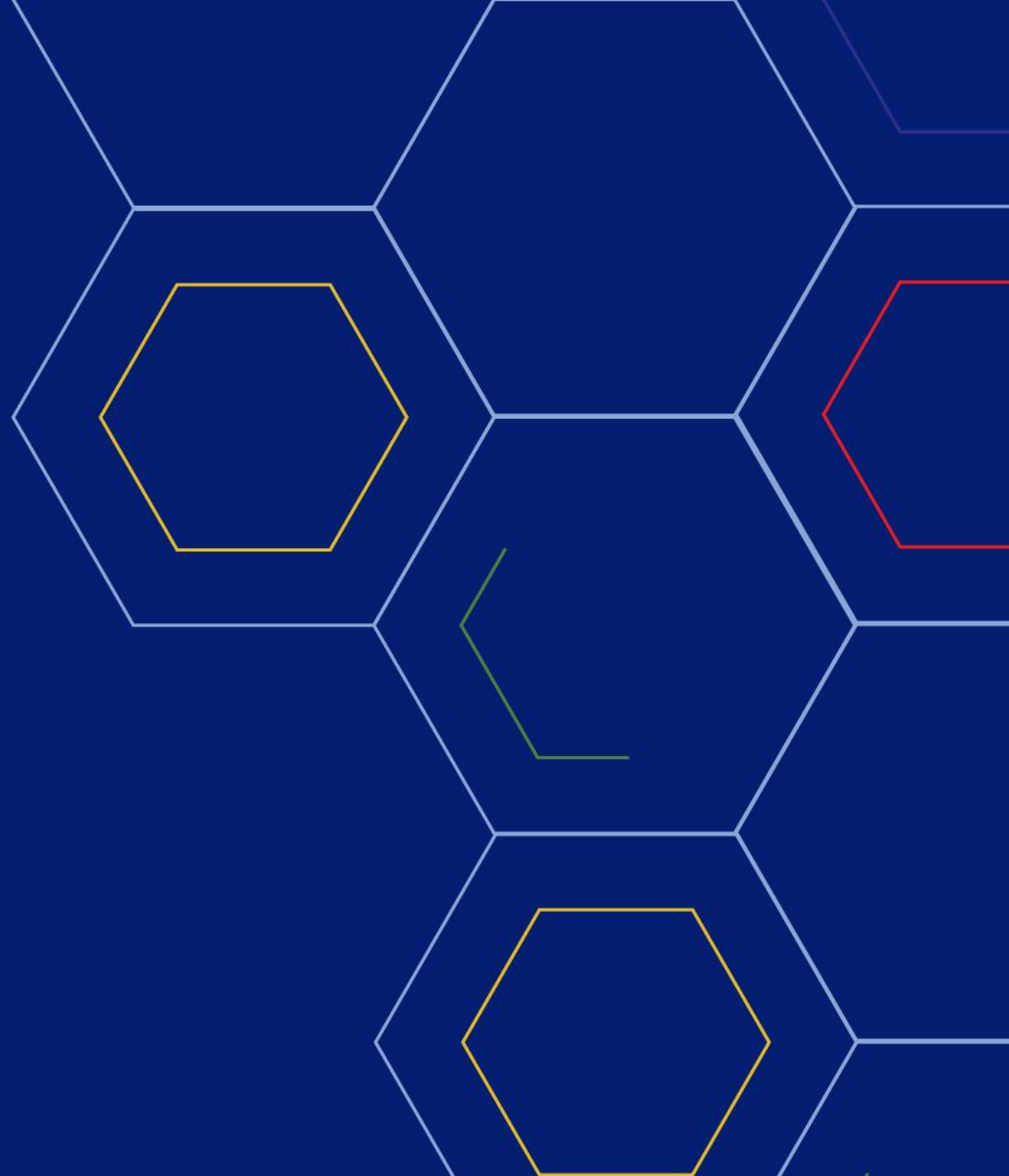




**FUELS INDUSTRY**  
Association of South Africa

# LEARNING FROM INCIDENT (LFI)

2024





# INCIDENT DESCRIPTION

<b>Date</b>	4 <sup>th</sup> January
<b>Time</b>	09h12
<b>Location</b>	Downstream flange on FE11471 on 2" slop-wax line from J11014 to F29046.
<b>Description</b>	A fire occurred due to a leak in pipeline N111043-CFD, which transports slop wax from the vacuum column E11005 in CDU. This incident led to a shutdown of the plant. The failure originated in the vicinity of the flange-to-pipe weld located downstream of the orifice FE1147.
<b>KUE   Scenario</b>	Major loss of containment of hazardous material and associated chemical energy
<b>Consequences</b>	Damage to instrumentation, electrical cables, piping, and main cable rack carrying electrical cables for motor control on equipment on multiple plants. Damage to scaffolding in the vicinity of the leak.



# INCIDENT ROOT CAUSE

## ROOT CAUSES

**RC1 – The 5Cr-0.5Mo material was considered suitable for the application with an inspection strategy in place. The failure occurred at a point which is not an applicable inspection point in accordance with the relevant standard.**



# INCIDENT LEARNINGS

## SHE INCIDENT LEARNING

1. The downstream orifice flange in low chrome alloyed systems and corrosion service can also experience extreme wall thinning due to multiple corrosion mechanisms. Engineering departments need to evaluate risk in similar applications.
2. An organization must ensure that resources are available to keep abreast of industry best practices to derive the benefit from industry experiences instead of repeating them.
3. Scaffolding clutters operational areas and pose safety risk.
4. Cables to multiple plants running on shared cable racks through a common high fire risk area, without adequate fire protection, increases the risk of impact on multiple plants due to a single event.
5. The emergency number is the primary contact number to communicate emergencies. This should be reinforced.



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**Thank You**

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