



FUELS INDUSTRY
Association of South Africa

LEARNING FROM INCIDENT (LFI)

TotalEnergies SCBA refinery related incidents

2024



INCIDENT DESCRIPTION

- **Fatality** - A contract painter died while preparing to brush a steel structure on an outdoor platform. He was wearing a sandblasting hood and was asphyxiated by nitrogen.
- **HIPO 1** - A contractor was wearing a breathing apparatus which was mistakenly connected to nitrogen. He felt unwell and the hood was removed. The victim thought it was fatigue. While kneeling the hood was put back a second time and the victim fell unconscious.
- **HIPO 2** - A contract painter mistakenly connected his blasting helmet to the nitrogen network. He was asphyxiated by the nitrogen, but fortunately returned to his normal state with no further consequences.
- **HIPO 3** - A contract painter was required to use a breathing hood to apply paint to a tank and connected to an unmarked line near the gasometer tank; he immediately fell to his knees, semi-conscious.



INCIDENT ROOT CAUSE

- The air connection point and the N2 network connection point were close, but not sufficiently identified or differentiated.
- Because of its size, the air appliance connector could be inserted into the N2 network connection.
- No supervision during these operations.



INCIDENT LEARNINGS

- The following requirements are designed to prevent incorrect connections to a nitrogen network.
 - Identify utility networks through different and uniform connections at site level by consistent colour coding of pipes in the immediate vicinity of the connection point.
 - Identify the N2 network in a legible manner by means of “Nitrogen Hazard” signage and a hazard pictogram in the immediate vicinity of the connection point.
 - Prohibit “claw” quick couplings on N2 networks. Use different connection couplings.
 - Prohibit the use of modified hoses with a different connection at each end.
 - Before an employee or contractor connects to a utility network, validate the correct connection by a company supervisor.

