



FUELS INDUSTRY
Association of South Africa

SASOLBURG

Exposure to Cyanide

2024



INCIDENT DESCRIPTION

Area: Cyanide plant on Midland site

Product involved: 19 – 25% Hydrogen Cyanide gas

Whilst the employee was stripping gas cooler F (EA1301F) top section, the employee went to the ground floor to strip the bottom part of the gas cooler. He then went to strip the online gas cooler G (EA1301G) instead of gas cooler F (EA1301F) and was exposed to gas.

This resulted in a Lost workday case (Level 2) as well as Fire Explosives Releases – Significant (Level 2)

Immediate action taken

- Emergency protocol was initiated.
- Online equipment was switched off and boxed up (EA1301G).



INCIDENT DESCRIPTION

At the time of the incident, the gas cooler G (EA1301G) operating pressure was 16 kPa(g).

- DCS trends indicate that EA1301G started to lose operating pressure at 9:53 and was switched off at 10:01
- Permit was issued for EA1301F, fitter stripped EA1301G.
- Permit to work and PTRA was issued for the task.
- Correct equipment was identified, tagged and made safe

Leak source: It was found that 5 of 8 bolts were removed, resulting in the release of HCN.





INITIAL LEARNINGS

Preliminary causes:

- Incorrect equipment was identified by the employee.
- Always double check to ensure correct equipment is worked on.



CHALLENGES

- Ambulance took too long to get to the patient.
- The Ambulance stretcher failed to operate as it should
- The plant administer breathing air through a BA set instead of oxygen
- The Sasol Dr on standby to approximately 30 minutes to get to the medical station
- It took too long to administer Cyanide Antidote.
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Thank You

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