



FUELS INDUSTRY
Association of South Africa

SHARING LEARNINGS FROM INSURANCE SURVEY

2024



Onshore Risk Engineering Survey

23 Jul – 02 Aug 2024

Scope of the Insurance Risk Engineering Survey

- Plant preservation and safe operation of the live units.
- Review of Previous Risk Improvement Recommendations Status.
- Review loss prevention related management practices

Positive Progress Feedback

- **Preservation Scope**
 - Refinery Fuel gas and flare systems now out-of-service and nitrogen purged to hydrocarbon free status
- **Mechanical**
 - Intelligent pigging report reflect no further leak points on the Condensate pipeline from FA Platform despite slight growth on existing 8 defect areas
- **Management Systems**
 - 3X Risk improvement recommendations were closed out
 - Only one new RIR 24.01 (Electrical Supply Reliability Improvements) was raised during the survey
 - Good work on PM-13 closeout and QAQC
 - Improved housekeeping on site
 - Site audit findings being driven to conclusion to reduce risk.
- **Emergency Control**
 - Re-focus on firewater repairs project with great effect – zero active leaks
 - Mock emergency with wet fire drill successfully performed at Voorbaai which simultaneously gave an opportunity to perform flow test of firewater pumps

Areas of Improvement

- **Mechanical**
 - Remove old tank from Voorbaai that presents a significant personal safety hazard as it has already partially collapsed and buckled
 - Fireproofing & concrete observed on the floor of Unit 19. Put up signs to warn of hazard of falling objects and consider civils encapsulation
 - Apart from the weld seam defects, analyze the removed firewater pipe to determine if failures are linked to the internal corrosion
- **Management Systems**
 - Improper application of MOC procedure: MOC closed out but the Unit 19 battery limit jump-over piping spool piece left suspended on one bolt
 - Improve control of work practice: Work completed but scaffolding still in place
 - Records of Critical Task Observations still not being performed and recorded in all areas
- **Emergency Control**
 - Replace foam concentrate pump at Voorbaai (has been out since 2021)
 - Firewater main valves, 2 handles missing
 - Update Emergency Fire Pre-Plans reflecting firewater impairment including Voorbaai tank fires



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Thank You

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