

Client Reference

Oil and Gas | Commercial Depots Failure Mode and Effects Analysis

By defining and documenting failure modes across 32 asset types, the client achieved a structured maintenance approach and expects to reduce future unplanned costs by R4.4 million.

100%

Asset types
have FMEA
information

Reducing

R4,4 mil in
unplanned
expenditure

Your key challenges

- Key assets at the Supply Chain and Commercial Depots lacked adequately defined and documented Failure Modes and Effects (FME) to enable optimal maintenance tactic selection and effective implementation.
- Additionally, several assets were identified as “bad actors” through a rigorous process of data analysis and performance evaluation, showing a high failure rate and associated costs of approximately **R4.4 million** across **169 failures** within **nine months**.

Our approach

- The Pragma team identified the asset types and quantities requiring defined Failure Modes and Effects (FME).
- Using a Reliability Centred Maintenance (RCM) methodology, Pragma conducted comprehensive and detailed Failure Modes and Effects Analyses (FMEA) for these assets and recommended appropriate mitigation actions.
- Pragma engineers reviewed existing FMEAs to identify gaps and improvement opportunities and subsequently developed or updated FMEA sheets for all identified assets.

Your value add

- Documented scientific basis for maintenance tactics applied to key operational assets.
- Reduced failure risk associated with key asset types with unknown failure modes and effects.
- Well-defined and documented asset failure modes and effects for critical operational assets.
- Expected future unplanned expenditure reduction of R4.4 million.



Client background

The client is a leading African energy group specialising in the marketing, supply and distribution of petroleum products, lubricants, functional fluids and chemicals.

They also provide retail convenience services through an extensive retail network.

The client operates 24 fuel depots across South Africa and 15 across Sub-Saharan Africa.

