

Marley's experience on other major projects provided Transnet with the confidence that Marley is truly able to deliver value to ground-breaking projects

In 2007, major pipeline operator, Transnet, received a construction licence from the National Energy Regulator of South Africa (NERSA) to begin construction on the National Multi-Products Pipeline (NMPP). The multi-billion rand project, which is the largest single capital investment project undertaken by Transnet, will replace the existing Durban to Johannesburg pipeline to transport refined petroleum products and thus secure South Africa's fuel supply.



Owing to the nature of the hazardous materials that would need to be handled by the pipeline (hydrocarbons, chemicals, fuels, etc.), the need arose to implement fire protection to safeguard the facilities

against any potential risk. In January 2012, Marley Pipe Systems was contacted by Transnet to advise on the use of Polyethylene (PE) systems for this particular application.

The challenge that this unique and very complex project posed, however, was that the areas in which the pipeline were to be installed showed signs of severe hydrocarbon contamination, voiding the use of most conventional materials. Even the use of normal "black" PE material would, over time, show signs of swelling under these conditions.

Marley, a leader in the manufacture and supply of PE for the mining and industrial sectors in South Africa, and their fluorination partner, PELCHEM, were already involved in the supply of PE for the transfer of fuels, extending its Petroplas Piping range to include the Fluorinated HDPE system for contaminated soil or ground.

The shear pipe and fittings sizes proved a massive challenge from a production, logistics and handling perspective – a challenge that defines Marley's continuous goal to provide service excellence, quality and delivery that exceeds clients' expectations. Before this project, the largest sizes ever produced and supplied by Marley was 200mm. The sizes that were designed for the NMPP fire system ranged from 160mm up to a massive 560mm – a first for Marley and PELCHEM.

Backed by the skills of the Marley team and network of partners, Marley provided the necessary expertise and was successful in securing the signed Transnet Fluorinated HDPE Project in October 2012.

Marley's experience on other major projects provided Transnet with the confidence that Marley is truly able to deliver value to ground-breaking projects such as the NMPP and that they are ready to take on challenges with above-standard quality products and extensive support to see the project through to its successful end.

Project Details:

- Client: Transnet Capital Projects
- Consultant: Kentz & Hatch Africa
- Main Contractors: Group 5
- Welding Contractor: Clarko
- Pipe Supplier: Marley Pipe Systems
- Fluorination: PELCHEM Pelindaba
- Pipe Sizes: Ø160mm to Ø560mm
- Fittings Supplier: Marley Pipe Systems & Reinert Ritz (Germany)
- Contract Value: Est. R20 million
- Supply Lengths: 6 metres
- Logistics: Marley Pipe Systems & World Net Logistics