

MHF FOAM SUPPRESSION SYSTEM UPGRADE

Key Capabilities:

- Civil works
- Piping systems - supply and install
- Commissioning



Overview

Our Client supplies approximately a quarter of all Australia's petroleum products. Their Melbourne distribution terminal receives stores and distributes fuel products via existing pipelines and downstream retail outlets.

At this Major Hazard Facility (MHF), the tank fire protection system is being upgraded by replacing the existing foam proportioning units with new state of the art direct-motor driven pump proportioning systems all operated remotely via the Process DCS. The Vecta Group were engaged to engineer, manage and deliver this project.

Scope

The scope of work included the following:

- Completion of the design
- Civil works for the tanks, pumps, piping and penetrations;
- Supply and installation of the pumps, pipework, tanks and structural steelwork;
- Commissioning assistance;
- Demolition of redundant system

Challenges

- Due to the criticality of the foam suppression system in a MHF, the scheduling of works including tie-ins were meticulously planned and executed to ensure mitigation of outage durations;
- The broad range of the scope specifically:
 - >1000m of pipe (SS, CS & HDPE) of 25 - 300nb size range
 - >100 valves (actuated and manual)
 - >100,000m² (500x200m)work area required focussed preparation, execution & logistical organisation;
- Traditional supply chain management required unique solutions due to the availability and lead times of key materials and equipment;
- Final tie-in pipework and closing lengths, with criticality exaggerated by the fire system requirements, were site measured and installed without issue;
- In an operating plant for the duration of the works, safe systems of work were agreed prior to commencement and implemented throughout the duration of the project.

Solutions

Aligned focus with our client enabled best for project outcomes to the project, particularly critical activities such as tie-ins. Close preparation with Client Operations ensured that key activities were undertaken and delivered without surprises. Project improvements and efficiencies were acted upon in real time with an aligned focussed between all of the key stakeholders included specialist service providers.

Outcomes

The completed foam unit suppression systems were delivered to the client within safety, schedule and budget parameters.

Want to Know More?

For more information please contact our office on +61 (03) 9326 9384, email info@vectagroup.com.au, or visit our website vectagroup.com.au