
Tobruk Oil Refinery & Majid Oil Field, Libya



Client: Arabian Gulf Oil Company

Principle Contractor: Sikelis International Limited

The Arabian Gulf Oil Company (AGOCO) is one of the largest oil companies in Libya controlling eight oil fields, two refineries and an oil terminal representing approximately 40% of the total Libyan crude oil production.

Tobruk Oil Refinery which has been on stream since 1985 is sited on the mediteranian coast to the East of Libya. The refinery has a capacity of 20,000 barrels per day of refined oil. Majid Oil Field is sited to the south of Benghazi in the South East of Libya. The oil field extracts saharian crude oil for transfer to Tobruk.

Incendia Consulting carried out the design and engineering to NFPA standards for the crude and refined oil tank fire fighting enhancement project. The project involved the upgrade and enhancement of the existing semi-fixed foam protection systems

and waterspray cooling systems to cone roof and floating roof tanks.

The project at the Tobruk refinery incorporated the top pourer foam system enhancement for 19 floating roof refined oil tanks with a diameter of 32.0m. The existing semi-fixed protection was enhanced to incorporate three foam stations each containing two AFFF foam concentrate bladder tanks and balanced pressure foam proportioners.

The project at the Majid oil field incorporated waterspray cooling systems and base injection foam protection to four crude oil storage tanks each with a diameter of 24.0m. The new foam protection incorporated a single foam station containing two AFFF foam concentrate bladder tanks and in line high back pressure foam generators.

Incendia Consulting was responsible for the full design and engineering of the systems, foam concentrate stations, fire main routes and confirmation of the equipment and piping selection through hydraulic analysis.