



FIRE PROTECTION CONSULTANTS



INDUSTRY: Oil and Gas
SERVICE: Consultancy & Engineering
LOCATION: Halul Island, State of Qatar
PERIOD: December 2001 – November 2003
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Halul Island is part of the State of Qatar located around 100 kilometers North East, of the city of Doha. The island occupies an area of around 1.5 km². It has all the facilities of a major international oil terminal. The island is home to 11 crude oil storage tanks, with a total capacity of 5 million barrels, crude oil pumping facilities, power generation and water desalination plants. Halul Island accommodates about 800 personnel including contractors on a daily basis.

PROJECT GOAL AND SCOPE

- Front End Engineering Design (FEED) for tank shell cooling systems based on QRA results.
- Testing of the existing fire water systems followed by a recommendations report for upgrading of the network.
- Design of sea water fire pump room and hydraulic calculations for sizing the fire water main.
- Determining the size and capacity of the new fire pump set.

BUSINESS NEEDS

- Compliance with QRA findings and industry practice
- Provide tank shell cooling for tanks currently not fitted with ones.
- Upgrade / expand fire water main and fire pump room to meet the demands of the new tank shell cooling systems.

BUSINESS BENEFITS

- Enhanced fire water supply capability throughout the island.
- Reduced risk of adjacent tank(s) fire as a result of heat radiation due to full surface tank fire.