

## CASE STUDY / POINT LOMA

## REBUILDING AND MODERNIZING GIVES FACELIFT TO POINT LOMA FUELING FACILITY

When the U.S. Navy's largest and busiest refueling facilities for its ships, submarines and aircraft need to be modernized, it's time to dig in and clean up. With strategic precision, Burns & McDonnell designed a solution to replace aging and leaking underground storage tanks at Naval Base Point Loma in San Diego, California.

## HOW DO YOU HANDLE A \$194 MILLION MAKEOVER WHILE MAINTAINING FULL OPERATIONAL CAPABILITY AND SAFETY OF MORE THAN 42 MILLION GALLONS OF STORED FUEL?

Design a solution, develop a remediation plan and efficiently execute it while saving taxpayers \$10 million in the process.

Fleet Logistics Center San Diego, at Naval Base Point Loma is the fuel hub of the Eastern Pacific. Critical to the U.S. Navy's operations, the fuel facility required modernization for safety and environmental compliance while maintaining a daily operating schedule.

To keep fuel flowing during the project, Burns & McDonnell designed a phased construction plan, with the first step being installing a system of temporary fuel piping and valves to the underground tanks. The overall project – completed on time and under budget – was the largest construction project ever within the Defense Logistics Agency.

 Used thermal desorption to process approximately 50,000 tons of contaminated soil that was reused during construction.

- Replaced a combination of 54 underground and aboveground tanks with eight new 125,000 barrel aboveground fuel storage tanks providing a total capacity of 1,000,000 barrels of F76 marine diesel fuel and JP5 aviation fuel. The tanks were complete with leak detection, cathodic protection and protective coatings.
- Reduced soil disruption, tank and soil disposal costs, saving taxpayers about \$10 million.
- Added a new pump house to store the core of the fuel system and a control tower/operations building to monitor operations at the adjacent fueling pier.

With the first-ever LEED Silver certification for a fuel terminal, the renovated fuel depot facility opened in June 2014.



Burns & McDonnell received the highest possible Architect-Engineer Contract Administration Support System, or ACASS, rating, an overall exceptional architect-engineer performance evaluation.

## **PROJECT STATS**

CLIENT U.S. Navy

**LOCATION** San Diego, California

**TOTAL PROJECT COST** \$194 million

**COMPLETION DATE** June 2014

NEW ABOVEGROUND FUEL STORAGE TANKS

\$10M IN SAVINGS TO TAXPAYERS

2 AWARDS WON 2012 FLAT BOTTOM OIL TANK OF THE YEAR STEEL TANK INSTITUTE 2015 MERIT AWARD

ACEC OF CALIFORNIA