

KINDER MORGAN PETROLEUM NINE TANK EXPANSION



PROJECT: Nine Tank (1.3 Million Barrels) Petroleum Expansion for Major Liquid Terminal Facility

CLIENT: Kinder Morgan - Perth Amboy Terminal

LOCATION: Perth Amboy, NJ

SERVICES: Conceptual Design and Budget Development
Preliminary Engineering and Detailed Design

DESCRIPTION

River Consulting provided complete multidiscipline design services for a nine tank petroleum product expansion at the Kinder Morgan liquid terminal that consists of 80 acres with approximately 100 tanks and more than two million barrels of total storage capacity.

The new tanks were designed to hold up to 1.3 million barrels of product and stand 60 feet tall. They have a barge loading and transfer capability of 7,500 to 10,000 bph. Additionally, the expansion features a product manifold to transfer liquids from any tank to barge, from tank to tank or from tank to an existing pipeline.

River Consulting was responsible for all aboveground installation services for the new tanks, which included all tank locations, orientation, tank mixing, product receiving and transfer piping, pipe racks, bridges and platforms, foam piping system installation, instrumentation, electrical and controls.

Design for debottlenecking was also provided for the nine new and 15 existing petroleum product tanks. These were diverted to the new main manifold area, which consisted of approximately 100 manual valves, where direction of flow was then lined out by operations. Operations now has the capability of receiving and transferring product via tank, pipeline, vessel and barge to/from any respective petroleum product tank.

PRINCIPAL FEATURES

- Multidiscipline engineering design including mechanical, piping, electrical and controls
- Construction support
- Project scheduling
- Piping design
- Debottlenecking for 24 petroleum product tanks
- Structural steel pipe rack design
- Foundation design and review
- New product manifold with 100 manual valves
- Pump Hydraulics
- Specification and evaluation
- General arrangements

