

TAMPAPLEX TERMINAL MARINE STRUCTURES

CLIENT - Kinder Morgan LOCATION - Tampa, FL COMPLETED - 2005

DESCRIPTION

Matrix PDM Engineering developed the terminal to handle liquid and dry bulk materials. The job consisted of four combined projects resulting in an increase of imports and exports of liquid ammonia used for fertilizer production. A dock extension allowing for larger ships, as well as the design and development of a control system and computer program, were installed to operate the new air condenser system that controls the 50,000-ton tank pressure.

Upgrades include the refurbishment of existing ammonia dock and upgrades to the loading arm and metering. Matrix installed a 3,500 gpm pump system and a 4,500-foot dual pipeline, installation of a dock wall and ammonia dock as well as valves, piping, transformer, electrical, and controls, in addition to a new ammonia unloading dock, dolphins, walkways, and handrails, approximately 450 feet east of the existing dock. For safety, floodlights

FOR MORE INFORMATION:

were also provided. The pressure tested piping, valves, and arm were installed to meet the U.S. Coast Guard regulations.

PRINCIPAL FEATURES

- New ammonia dock control building measuring 10ftx20ftx15ft
- New water booster pump for de-icing of the unloading arm
- 4.16V power feeder extended from the existing building to new building through a concrete encased underground conduit
- Ammonia sensors mounted on the shore light poles with monitoring station and alarm and auxiliary power supply in the new dock control building
- New electrical apparatus including dock power receptacles, equipment start/stop stations, barge control power interface and junction boxes provided on the dock
- Removal of existing 12-inch unloading line for relocation at the new dock
- Main 12-inch insulated header from existing dock was reused
- Existing unloading arm hydraulic unit relocated to the new dock area and new hydraulic piping installed to reconnect the unloading arm
- Existing evacuation pump relocated to the new dock area



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