

DuPont/INVISTA THF/PTMEG Manufacturing

PROJECT SUMMARY



Location

La Porte, Texas, USA

Total Investment

\$13 Million

Project Type

16-Mile (87,000 LF) Distribution Pipeline
Supplying Feedstock to Major
Petrochemical Facility

Role

Program Management
Project Controls
Project Engineering
Project Procurement

Annual Volume

3000 pph of Transmission 24/7/365
Production Started 10/12/04

Highlights of Project

A "white paper" executed by the business, identified that independent acetylene supply enabled all three of the unique THF global business options and that the best course of action was to recover an otherwise wasted acetylene supply from the nearby CPC Cedar Bayou Plant.

This project was for the design, engineering, procurement, installation, testing and operation of approximately 16 miles, (87,000 linear feet), of 12" pipe and all associated right of way, easement, permit, code requirements and maintenance requirements for a fully functional gas pipeline. Metering of 3,000 pph acetylene supply and pigging facilities for inspection and maintenance were included. Operations and control was contracted with Buckeye Gulf Coast Pipelines Inc. with annunciation and control in their Gulf Coast Operations Center.

This pipeline starts at the valve pen on the eastside of the Chevron Cedar Bayou Plant and terminates at the valve pen on the north side of the DuPont/INVISTA La Porte Plant, in and around Houston, Texas.

The pipeline was generally routed in the existing Exxon/Mobil corridor from the east side of the Chevron Cedar Bayou Plant, across Scott Bay, under the Houston Ship Channel to a depth of 90 feet below lowest mean sea level, and under the San Jacinto Bay to a minimum depth of 6 feet below silt layer, and then exits the corridor onto DuPont property at La Porte, Texas. A combination of excavation, dredging, and directional drilling, was employed during installation. All receiving equipment, flash arrestor, pumps, motors, and ancillary equipment at the DuPont/INVISTA La Porte site was included in the Global Performance scope of work. All equipment on the Chevron end was also included in our scope with the cost included in the price of gas during the first year of operation.

Three major directional drills using GPS and directional bit technology occurred totaling over 14,000 linear feet. This project included the longest directional drill on record at 6,800 linear feet from the La Porte Plant to a point just south of the Houston Ship Channel.

Project Management - Engineering, Procurement, Construction, Start-Up

Global Performance had responsibility for project management, project engineering, estimate development and approval, cost and schedule control, procurement, construction management of Plant scope, change management, contract management of Buckeye Gulf Coast Pipelines Inc. The project team executed this difficult and complex scope of work ahead of schedule and under budget.

Global Performance personnel, working with Buckeye and DuPont/INVISTA designed the process, executed all flow diagrams, reviewed and approved third party P&IDs and Instrument loop sheets, validated all process engineering calculations, specified and procured all materials and engineered equipment for the pipeline and expedited all project engineering activities. We were responsible for bid package preparation and procurement as well as management of all of the construction/equipment installation activities. We worked closely with DuPont/INVISTA engineering, procurement, construction and plant personnel on all of these activities. Our responsibilities ended recently with the final project audit process.