

Industrial

Date Completed:

2001

Construction Cost:

\$7.0 Million

Client or Owner's Rep:

Chevron Baytown Plant

Highlights:

- ✓ **Technology Evaluation**
- ✓ **Pilot Testing**
- ✓ **Oily Water/ Storm Water Pump Stations**
- ✓ **Diesel Pumps**
- ✓ **Storm Water Surge Tank with Floating Roof**
- ✓ **API Separators**
- ✓ **Vibratory Screens**
- ✓ **Induced Static Flotation Unit (ISF)**
- ✓ **Reduced Total Installed Cost (TIC)**

Stormwater Upgrade Project

Chevron Phillips | Baytown, Texas

Project Description | The project included upgrade of the existing Oily and Stormwater Systems for Chevron Phillips Chemical Company Baytown Plant.

Services Provided | KGI was a prime consultant to Chevron with detailed engineering performed in-house Contractor. KGI was responsible from conceptual study through design and start-up. KGI performed a comprehensive evaluation of the entire existing storm water, oily water and treatment systems to identify the potential problem areas. The scope of work covered several process units such as Ethylene, Olefins, Polyethylene and Tank Farms. The project also included performing treatability and pilot scale studies for the wastewater from Polyethylene units. The wastewater contained large amount polyethylene pellets, fluff, fines, and oil and grease. Some of the major improvements included:

- Two Linear Motion Vibratory Screens to separate polyethylene pellets.
- API Separator for Polyethylene units
- Dry Weather Pump Station consisting of three 550 gpm self priming centrifugal pumps for Polyethylene units
- Wet Weather Pump Station consisting of two 3,300 gpm vertical turbine pumps and one 11,000 gpm self priming centrifugal diesel pump for Polyethylene units.
- 1.0 million gallon open top tank storm water surge tank for storm/wastewater from Polyethylene units.
- API Separator for Olefin units
- Pump Station for Olefin units consisting of one 330 gpm electric driven centrifugal pump and three 1,750 gpm self priming centrifugal diesel pumps. The pump station also has an oil skimmer pump.
- 2.75 million gallon internal floating roof storm water surge tank for storm/wastewater from Olefin units.
- 2,250 gpm Induced Static Flotation Unit.

