

Total Petrochemicals USA, Port Arthur, TX Soil Stabilization

Problem: A wastewater treatment facility was to be built on site at Total Petrochemicals USA in Port Arthur, Texas. The engineering design by ReCon Engineering, Inc. called for two concrete foundations measuring approximately 12' X 23' to support the wastewater facility. A previous soil study of the area indicated a soft gray clay with a high moisture content at a depth of 6 to 8 feet. The engineer was concerned about future foundation movement as a result of the poor soils and wanted to stabilize the soils prior to construction of the concrete foundations. In addition, there were to be 14 pipe stands constructed in the same area that were to be supported by 4' X 4' concrete pads.

Factors for Consideration: Each of three issues played a part in the decision making process for soil stabilization. First, there had to be minimal interruption to the 24-hour petrochemical facility. Simply put, it should be business as usual. Secondly, work should be completed in a timely manner. Finally, there was existing underground piping and conduit in the area that needed to be avoided during the drilling process.

Method/Process Applied: The patented Uretex Process eliminates common subsurface soil issues. Utilizing the most advanced technologies, injection, and the most dense polymers available, the patented process drives out water, fills underground soil fissures and voids, and expands to densify the ground. The hydro insensitive Uretex 486 polymer material has excellent chemical tolerance, increasing its suitability in harsh, chemically-rich environments.

Result: The soil stabilization process was completed over a two day period with minimal disruption to the petrochemical facility. The ReCon engineer was present during the process and pointed out specific areas of concern that needed to be addressed. The soil was stabilized at several different depths from a total of 44 injection locations. The man-made material is extremely light in weight and does not contribute to further soil settling, while always increasing soil load-bearing capacity.

Benefit: Uretex ICR's products and services provide the industry's best, most cost effective, fastest, and safest solution to soil stabilization. A pioneer in applying the latest technologies to solving complex soil stabilization problems, Uretex ICR leads the industry in delivering the "no disruption" cure for infrastructure repair problems, deep soil densification, strengthening piers and pilings, and sealing underground leaks.

**Inexpensive, Fast, Quiet, Effective,
Soil Stabilization and Concrete Lifting. CONTROL.**