

Permeability Reduction in Secondary Containment Structures

Philadelphia, Pennsylvania

June, 2009



Project Description: Terratech reduces costs of regulatory compliance by working in conjunction with major oil refineries in an effort to decrease the hydraulic conductivity of secondary containment structures. The secondary containment structures consist of earth berm dikes constructed around tank perimeters. These structures must be sufficiently impermeable to contain a potential spill for a minimum 72 hour period during which clean-up activities can take place. All secondary containment structures must meet regulatory hydraulic conductivity standards ($k \leq 1 \times 10^{-6}$ cm/sec) in order to prevent product release into the environment.

Project Objectives: Terratech products were chosen as the only viable alternative capable of effectively and inexpensively decreasing permeability of the existing containment areas. Other dike retro-fit methods were too costly and logistically difficult to implement due to interference from above ground pipework and existing structures. Because the polymer solution could be applied topically and from a portable mixing tank, Terratech polymer technology was the only solution which met the regulatory criteria, was easy to install, and required no downtime or removal of structures.

Equipment Used: Mixing Tank with Fire Hose for manual application.

Application Specifications: Engineered for site specific soil permeability and to comply with regulation.

Maintenance Requirements: Annual topical re-application of the polymer solution.



Corporate Headquarters

3945 E. Vernon Street
Long Beach, CA 90815
01 562 494 9500 phone
01 562 494 9565 fax

Global Distribution

Canada	Saudi Arabia
Mexico	Spain
Nigeria	