

Petroleum Tank Farm Temporary Wastewater Prevention System for NPDES Discharge

Application: Major owner / operator of petroleum pipeline and terminal facilities

Project: Turn-key temporary wastewater treatment system and licensed operation prior to a 50,000 gallon crude oil storage tank dismantlement

- Goals:**
1. Design and assemble a wastewater treatment system for removal of organics
 2. Maintain consistent effluent for on-site discharge compliance
 3. Complete the project and treatment in 4 weeks and within budget
 4. Licensed operator and system operation in -20 degree F temperatures

All design and equipment assembly activities were completed by ESI and our subcontractors. Based on existing tank water analytical and the previously approved on-site discharge permit, system components were selected and incorporated into the treatment scheme. Temporary enclosure of the treatment system and heat was obtained. Extreme winter conditions increased the challenge of the project. After the first day of treatment, it was discovered that the organic concentrations were much greater than the existing analytical data indicated. Additional treatment components were rushed in and incorporated. After the system restart, daily influent and effluent testing confirmed the design treatment efficiency of the system and consistent effluent compliance. Achievement of both the schedule and budget were achieved under severe conditions and despite inaccurate data.