



A Highland Tank 20,000 gallon storage tank is installed at an airport.

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The location of this airport project and the fact that it is surrounded by water on three sides required careful planning and management for all airport operations.

The EPA requires facilities that engage in regulated industrial activities to obtain NPDES permits before discharging to storm water. The Airport's de-icing and fueling facilities are specifically identified as industrial activities subject to the NPDES regulations.

The design engineers specified a Highland Tank Wastewater Treatment System for the drainage upgrades on this project.

Highland Tank's Wastewater Treatment System consisted of two separate areas of treatment:

1) The first drainage area was to treat wastewater collected from a Vacuum Truck at the large jet fuel bulk storage containment area, and various collection sumps from around the Airport.

The treatment is a dump process of wastewater to a prefabricated existing sump. The sump offers a collection point and pretreatment upstream before flowing to the 1-HTC-G-2000 US Gallon EZ Access custom oil/water separator.

This custom oil/water separator was designed with an oversized inlet grit chamber and additional baffles to offer more pretreatment for the removal of heavy oil and solids before flowing into the oil/water separation chamber.

The flow from the outlet of the oil/water separator chamber is directed to a Highland Tank 20,000 gallon underground double-wall water storage tank for further treatment.

2) The second wastewater treatment area is taking surface water runoff from fueling and Airport operations.

The wastewater is collecting in a Highland Tank CB-55 collection catch basin system. The CB-55 collects the wastewater and offers some pretreatment with the removal of solids and oil, before flowing downstream to a high-performance HTC-J-10,000 US Gallons EZ Access oil water separator.

The engineer selected a Highland Tank Model HTC-J-10,000 oil/water separator, designed for the treatment of contaminated storm water runoff from 0-1,000 gallons per minute, discharging with a qualified/certified effluent quality of 10 ppm of free oil and grease. This unit is equipped with an effluent clear-well and duplex effluent pumps discharging automatically.

Beginning in 1972 with the Clean Water Act (CWA), Congress passed a series of laws prohibiting the discharge of pollutant into the waters of the United States from a point source unless discharge is authorized by a NPDES permit.

The CWA has been interpreted to cover all surface waters, including any waterway within the U.S. In most cases, NPDES discharge regulations state that “any facility that discharges a harmful quantity of oil, or any petroleum product, and the oil enters a body of water in the United States, by whatever means, is liable for significant penalties for cleanup costs and ecological damage.”

A harmful quantity of oil, by government definition, is an oil discharge that can “cause a film or sheen upon, or a discoloration of, the surface of the water”.

It may also include a discharge that can cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines — more specifically, an oil waste having average oil content greater than 15ppm.



Please visit our [website](#) to learn more about Highland Tank's Wastewater Treatment Systems.

Call 814-893-5701 today or visit us at www.highlandtank.com for more information on wastewater treatment systems.

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