



Chemical Treatment of Industrial Wastewater Made Simpler and More Economical

Problem

The increasing cost of disposing of oily wastewater, coupled with the tightening of regulations governing the manner of its disposal, have forced many generators in a variety of industries to find their own solutions for treating their effluent.

Treaters and generators must now confront the challenges caused by variations in emulsion type, the cost of residual sludge disposal, and the complexity and high cost of mechanical systems.

Case I

A Southern California manufacturer of household appliances generated wastewater containing approximately 2500 ppm of oil. Disposal cost was quoted at 30 cents per gallon.

Case II

A Southern California waste treatment facility received oily wastewater from industrial, oilfield, and marine sources. The plant needed a versatile product to treat the wide variations in the unsegregated streams.

Solution

ECA* 10, a versatile water clarifier and sulfide remover, was selected to remove the oil and solids from the wastewater.

Results

Case I

ECA 10 at 1000 ppm is now mixed, using pump-circulation into 500 gallon batches and allowed to settle overnight. This results in the formation of a compact top oil and clear sewerable water. Treatment cost is 1.5 cents per gallon.

Case II

ECA 10 is now transfer-injected, followed by caustic addition to pH 9, and the treated water is settled overnight. The compact oily floc is recovered (5% of the original volume) and the clarified water is sewerable. Treatment cost is less than 2 cents per gallon.

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