



CASE HISTORY

80% reduction in outage time for complete elimination of H₂S and reduction in ammonia in an SRU Sour Water Tank when utilizing chemical decontamination



Results Achieved

Complete elimination of hydrogen sulfide and reduction of ammonia to acceptable levels

Over 80% reduction in outage time

No personnel exposure to hazardous materials

No additional disposal expense

Chemicals Utilized

FQE® H₂S Scavenger

FQE® Ammonia Odor

A large petroleum refinery in New Jersey used our hydrogen sulfide abatement product, FQE® H₂S Scavenger, and ammonia control product FQE Ammonia Odor to decontaminate a sour water tank in their sulfur recovery unit (SRU) containing 1,438 m³ (380,000 gallons) of sour water.

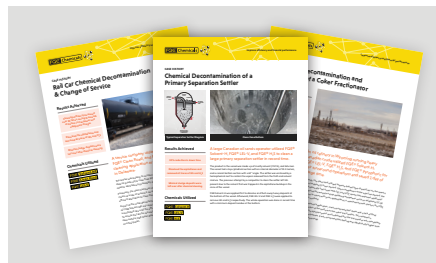
The initial H₂S readings from the sour water vessel exceeded 80,000 ppm (8.0%). A 20% FQE H₂S Scavenger mixture in water was prepared and pumped into the tank. The tank contents were circulated for 48 hours to ensure good contact was made between the vessel water and the FQE H₂S Scavenger. The tank contents were sampled every two hours with the H₂S being reported at 0 ppm after 32 hours. Prior to the hydrogen sulfide treatment, the vessel was treated with FQE Ammonia Odor for ammonia control. The required amount of FQE Ammonia Odor was pumped into the tank and the vessel contents were circulated for 12 hours until the ammonia level was below the acceptable 10 ppm.

The chemical circulation was performed at an ambient temperature and was applied from bottom to top through a 3D nozzle mounted through the vessel's top manway access. The spray nozzle was used to eliminate the high H₂S and ammonia concentrations present in the vessel's head space. Upon completion, the treated water was processed through the wastewater treatment plant without delays.

Typically, this process is conducted by the slow addition of a strong oxidizing liquid over a 7-10 day period of time, resulting in extra time and additional disposal considerations being required.



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Case Histories

Access a wide range of case histories to learn about the variety of applications our chemicals are utilized for.

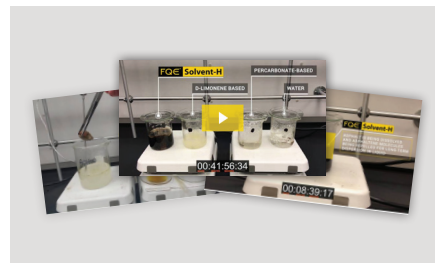
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White Papers

Our white papers provide deep insights into industry problems and how our innovative chemical products solve them.

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Video Library

View videos from our lab where we have tested a range of client samples to show how effective our chemicals are.

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