

CASE STUDY

Level One State of Cleanliness of a Treatment Settler

Chemical Degassing was performed on a hightemperature froth treatment settler. Residual sludge up to a foot along the walls, seams were completely removed for a Class 1 inspection.

Highlights:

- Nitrogen was provided to maintain positive pressure on a vessel not rated for vacuum.
- FQE Chemistry proved to be very effective in dissolving heavy sludge and removing LELs .
- Equipment left spotless for inspection

The time for another level one inspection had come for our client's high-temperature treatment settler. Here is how FQE was able to facilitate the de-inventory followed up a chemical degassing to remove all sludge.

Step 1: De-Inventorying of Froth Product

De-inventorying of the treatment settler was required before FQE was able to decontaminate the equipment. One issue that was encountered however was the draining of the setter would have created a vacuum which could potentially cause the setter to collapse. To avoid this, FQE was able to provide positive pressure using nitrogen during the draining process.

Step 2: Decontamination of Residual Product

With the setter successfully drained, the vessel was preheated to 90 °C using steam. Our specialty chemistry **FQE Solvent H**, designed to dissolve heavy hydrocarbons quickly, was then injected into a steam stream to clean the inside of the settler vessel. The exiting waste effluent was then easily disposed into the client's hydrocarbon drain system. As a final step, **FQE LEL** and **FQE LEL-V Eco** was used to remove residual LELs.

Following chemical injection for a total period of 13 hours, the steam was shut off and the settler allowed to cool to ambient temperature, before purging with Nitrogen once more and allowing inspection crews to enter without supplied air. The result was a spotless vessel, the cleanest the client had ever seen it during maintenance.



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