SOUR WATER STRIPPER APPLICATIONS

THE PROBLEM

A common problem in the Sour Water (SW) Stripper Unit is caused when hydrocarbon is discharged with the sour water from the Knock-out Drum into the Surge Tank which feeds the SW Stripper Column (see simplified process flow diagram). The hydrocarbons will vaporize with the sour gas being sent to the Sulfur Recovery Unit (SRU). The hydrocarbons are then released to atmosphere potentially violating EPA regulations. This causes a potentially expensive environmental issue for the refiner, due to non-compliance with EPA regulations for the effluent from the thermal oxidizer stack.

THE SOLUTION

The Agar ID-201 interface detector is installed in the Knock-out Drum upstream of the Sour Water Stripper to prevent hydrocarbon discharge with the sour water feed to the Stripper Column. This is achieved by controlling the location of the water/hydrocarbon interface inside the Knockout Drum.
Sour Water