Sour Water Stripper



Stream No.	1	2	3
Name			
Overall			
Mass flow lb/hr	69503.7	343.2	69160.5
Temp F	140.0	148.1	218.7
Pres psia	56.9	14.4	16.8
Vapor mass fraction	0.0000	1.000	0.0000
Component mole fractions			
Hydrogen Sulfide	0.00	0.29	0.00
Ammonia	0.00	0.46	0.00
Water	1.00	0.25	1.00

DESCRIPTION:

In this example, the Tower Plus (TPLS) model has been used to simulate stripping wastewater from Hydrogen Sulfide and Ammonia down to the level of 5 ppm. This is another application of the TPLS model, which is normally used to simulate atmospheric and vacuum distillation of crude oil.

The tower is equipped with a reboiler, and a pumparound is used to generate internal reflux.

A special thermodynamic model, SOUR, has been used to calculate equilibria in the system.

The picture below is the Process Flow Diagram including a Stream Databoxes. CHEMCAD 5 allows placing Stream and Equipment Databoxes on a PFD, and you are free to select properties and the units of measure that would appear there.