

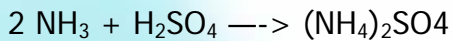
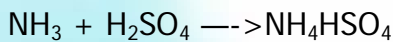
## Closed Loop Ammonia Stripper

A Petro China Catalyst Plant recently upgraded their FCC catalyst plant. The wastewater from the plant had to be treated to remove ammonia prior to recycling. Verantis designed and supplied a "Closed Loop Ammonia Stripper" system for the separation and neutralization of the ammonia.

The system comprised a continuous Stripper, Neutralization Scrubber, Air Stripper Fan, Chemical Dosing system, instrumentation and control panel.

Stage 1:  
Strip off Ammonia from water stream via air stripping

Stage 2:  
Scrub and neutralize ammonia from air stream using H<sub>2</sub>SO<sub>4</sub> to form soluble ammonia salts that are continuously discharged from the scrubber



<b>Application</b>	Catalyst Plant Ammonia Waste Water
<b>Exhaust Volume</b>	120t/h, 90 oC, pH~12
<b>Contaminant</b>	NH <sub>3</sub> - 8,500ppm
<b>Outlet</b>	NH <sub>3</sub> < 40 ppm
<b>Scrubbing Solution</b>	H <sub>2</sub> SO <sub>4</sub>