



## Case History

### NATURAL GAS TREATMENT

#### Background

This application concentrated on the replacement of **SULFA-CHECK** (sodium nitrite) in an upflow contact tower with sparger assembly.

A major gas producer South East Texas was using a mixture of 10 drums of **SULFA-CHECK** and 10 drums of fresh water for the removal of H<sub>2</sub>S in their contact tower. The run time equated to two months before change outs were necessary. After each run the tower trays were removed and the system steam cleaned in order to removed the precipitated sulfur and other deposits that had accumulated on the interior wall and sparger. This process included a labor crew and steam-cleaning unit. The clean-out time ran from one to two days depending on the severity of disposition.

#### System Data

Gas Production MMscf/d:	120—200
Inlet H <sub>2</sub> S, ppm:	400
Tower Dimension:	15' X 16'

### ENVIRO-SCRUB®

#### Solution

Because of on-going sulfur deposition and labor intensive change outs, Quaker Environmental was invited to test the triazine process utilizing the same tower. Calculations indicated that a 50% reduction in total product would achieve the same results as the **SULFA-CHECK**. Five drums of **ENVIRO-SCRUB®** and five drums of fresh water were added to the contractor.

#### Results

It was determined after the two-month test period, that **ENVIRO-SCRUB®** achieved the same performance as **SULFA-CHECK** with half as much product. In addition, the vessel was found to be free of solids upon inspection. There was no clean out involved and the reacted product was easily drained and the tower recharged.