


NOL-TEC SYSTEMS
Sorb-N-Ject

# Case Study - Fossil Fuel Power Plant

## The Situation

Nol-Tec's customer — a southern region power plant planning agency — has an earned reputation for leading the way in the development of power generating technology and pollution control. Following their own aggressive clean air program for decades, this agency incorporated wet limestone scrubbers early on to substantially reduce sulfur dioxide emissions and selective catalytic reduction systems to lower nitrogen oxide discharges. Then, they tackled a new emissions reduction goal: reduce already lowered sulfur oxides (SOx) emissions of its coal-fired generating facilities even lower — by 2010, drive these pollutants down by 80 to 85 percent of measured 1977 levels and eliminate the annoying bluish-brown stack gas plume caused by excess sulfur trioxide ($SO_3$) emissions.

## The Nol-Tec Solution

Using ***Sorb-N-Ject***® technology, Nol-Tec proved their superior competence of this specific application to meet the requirements for all of the agency's fossil fuel fired facilities. Nol-tec's Sorb-N-Ject system married efficient bulk material handling and conveying with technology to inject hydrated lime from storage silos into the flow of stack gases. When the hydrated lime chemically combined with the sulfur oxides, $SO_3$ emissions were reduced below five parts per million. At this low level, the stack gas bluish-brown plume literally disappeared.

## The Result

After the initial facility installation, Nol-Tec followed up with Sorb-N-Ject installations at three other agency coal-burning plants. Since 2006, the plants have safely and cost effectively reduced measured SOx emissions by 56 % and their emissions goal of 80-85 % of pre-1977 levels is within reach. Nol-Tec's solution provided the agency with economical, cutting-edge SOx abatement technology. The government corporation once again led the way for the power generating industry at large in the effective reduction of these harmful pollutants from stack gases. Additional financial benefits were revealed when actual use rates of hydrated lime sorbent by the Sorb-N-Ject systems were shown to be up to 50% superior to initial estimates. This resulted in significant overall economies for the power plant agency.

Call 651-780-8600 or visit www.nol-tec.com today to begin an analysis of your pollution mitigation needs.

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