

## Controlling NO<sub>x</sub> Emissions

*Celanese Acetate, LLC – Narrows, Virginia*

### Client Benefits

The NO<sub>x</sub> emissions reduction mandated by Rule 126 would require Celanese to install control equipment on existing boilers. This capital-intensive project added no value to the manufacturing facility or to its products. Peregrine was able to free up Celanese's personnel from managing this non-core project by funding, owning and delivering the project on a turnkey basis. This transfer of project risk allowed Celanese to focus both its people and its capital on core business objectives.



### The Opportunity

Nine boilers support the Celanese acetate manufacturing facility; two are subject to Rule 126. Celanese needed to install a system that would reduce the NO<sub>x</sub> emissions of these units. They also wanted to preserve their capital for use in core business areas while addressing this regulatory issue.



### The Solution

Peregrine accepted the challenge by partnering with Celanese under a Utility Services and Lease Agreement. The project scope included the installation of low NO<sub>x</sub> burners and an SNCR system (one unit is coal-fired (230,000 #/hr) and one is gas-fired (200,000 #/hr)). The coal-fired boiler was fitted with new low NO<sub>x</sub> burners and an SNCR system while the gas-fired unit received low NO<sub>x</sub> burners with flue gas re-circulation. Both boilers were also fitted with burner management systems, including new flame scanners.



**The installation of these systems along with boiler modifications will allow the units to operate at nameplate capacity while meeting Rule 126 requirements.**