

## Lowering Utility Cost with Continuous Emissions Monitoring Systems (CEMS)

*Celanese Acetate, LLC – Narrows, Virginia*

### Client Benefits

The NOx 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. To start the compliance process, Celanese needed to install a system that would monitor the NOx 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 rose to the challenge by partnering with Celanese under a Utility Services and Lease Agreement. Project scope included installation of two CEMS on the stacks of the two boilers (one unit is coal-fired (230,000 #/hr) and one is gas-fired (200,000 #/hr)). The project also involved the installation of fuel flow measurement equipment – gravimetric coal feeders, fuel oil mass flow meters and natural gas flow meters. An ultrasonic flue gas flow meter and a NOx concentration meter are also installed on each stack.



**The emissions data collected by CEMS will provide design criteria for upgrading of the two boilers to effectively lower their NOx emissions to meet Rule 126 compliance.**

***Bringing Business Sense to Every Project***