



## CASE STUDY

### SAFE, EFFICIENT AND CLEAN SCR SYSTEM FOR A PAPER MILL'S NEW PACKAGE BOILER

**"We specialize in solving problems through engineering. Our team collaborates with the customer to ensure minimal impact to existing operations,"**

— CECO Environmental Team.

#### THE SITUATION

A paper mill in New England expanded their facility to increase production which required them to improve and lower overall emissions.

#### THE CHALLENGE

Single digit emissions were required by local regulations. The customer's existing ultra-low-NOx burner (ULNB) systems did not work well especially at part load where the mill desired to operate for optimum production. The customer was concerned about the safety, and overall operation of the ULNB having to have plant personnel regularly monitor the equipment. Finally, the customer desired to reduce costs and reporting requirements associated with the ammonia reagent.

#### THE SOLUTION

Install an SCR system into the existing system, optimize the combustion system, and convert to a safe urea reagent system. CECO and our local representative, BMR Thermal, worked closely with the customer to ensure the retrofit system would meet all the needs of the customer and meet overall emissions for the entire range of production.

#### THE CECO ADVANTAGE

CECO Peerless team of engineers are emissions control and combustion experts specializing in retrofitting existing equipment. We use computational fluid dynamics (CFD) for optimal design and performance.

#### THE OPERATIONAL RESULTS

- Value 1: emissions at a range of production rates
- Value 2: simple urea storage system for reagent supply
- Value 3: reliable and modular catalyst and injection system
- Value 4: Low operating costs with small footprint

#### THE ENVIRONMENTAL BENEFITS

- Ultra-Low Emissions control achieved
- Safer operations for plant personnel
- Minimal parasitic load

#### INDUSTRY

Pulp and Paper

#### LOCATION

New England

#### CECO SOLUTIONS USED

- SCR system design
- Low gas temperature catalysts
- Safe Urea reagent storage/delivery
- Direct Injection

#### CONTACT INFORMATION:

For more information, connect with us.

📞 214.357.6181

🌐 [www.CECOenviro.com](http://www.CECOenviro.com)

✉ [name@CECOenviro.com](mailto:name@CECOenviro.com)