

## **Fabric Coating and Laminating Company Oxidizer Permitting and Air Emission Compliance Assistance Rhode Island**

ESS Group, Inc. was retained by a fabric coating and laminating company to conduct emission compliance testing of an old catalytic oxidizer that controlled volatile organic compound (VOC) emissions from several coating lines. Compliance was marginal, and odorous emissions from the oxidizer stack were causing neighborhood complaints. As a way to address this and other regulatory issues, ESS assisted the facility in negotiating a consent agreement and special environmental project (SEP) with the Rhode Island Department of Environmental Management (RIDEM), whereby the facility would replace the old catalytic oxidizer with a new regenerative thermal oxidizer (RTO).

ESS prepared a comprehensive permit application for the RTO that demonstrated Best Available Control Technology (BACT) by improving the control efficiency from 95% to 98%, reduced facility emissions of VOC and hazardous air pollutants (HAPs) even further by venting mix room emissions to the RTO, and maintaining 100% capture efficiency through the design of a room permanent total enclosure about the coating lines.

ESS subsequently conducted compliance testing of the RTO and enclosure, demonstrating an overall control efficiency in excess of that required by the permit. The facility was commended by local community for eliminating the odorous emissions. As part of the SEP agreement, the facility was able to credit surplus VOC emission reductions against the purchase of VOC offsets required by an earlier regulatory action.

### **Relevant Services Include:**

- Emission Testing
- Enclosure Design for 100% Capture Efficiency
- Control Equipment Evaluation and Selection
- Regulatory Agency Negotiation