INDUSTRIAL BOILER MACT COMPLIANCE

Achieve a Cost-Effective Compliance Solution

OVERVIEW
Understanding final rule requirements and your available compliance options is critical to minimizing cost exposure. From planning and permitting to project execution and construction, Black & Veatch can help solve the most complex technology, performance, cost, schedule, permitting, and construction issues.

INDUSTRIES WE SERVE

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ACHIEVE A COST-EFFECTIVE COMPLIANCE SOLUTION

WHY BLACK & VEATCH?
Black & Veatch’s program for Boiler MACT Compliance is designed to get your project moving in the right direction.

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<th>Our Capabilities</th>
<th>Benefits to You</th>
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<td>Comprehensive project planning and execution</td>
<td>Save time and money in project coordination</td>
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<td>In-house expertise on boilers, AQCS, CT’s, gas conversion and gas infrastructure</td>
<td>Enables you to examine all the options and select the most cost effective solution</td>
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<td>Economists actively analyzing and predicting power and gas prices</td>
<td>Forecast key economic factors to help you make decisions</td>
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<td>Fuel experts able to analyze the impacts of all types of fuel (coal, wood, cross ties, pet coke, etc)</td>
<td>Objectively examine the benefits and impacts of switching fuels</td>
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<td>Regional offices across the country</td>
<td>Enhance collaboration and communication</td>
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<td>Independent assessment of technology providers</td>
<td>Assess solutions and select the option best suited to your needs</td>
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**IMPORTANT ISSUES**
- Reliable supply of steam and power
- Economic viability and payback of selected compliance solutions
- Implementation schedule and outage duration
- Longevity of compliance solutions
- Fuel variability and flexibility
- Fuel price volatility/stability
- Cost estimate accuracy
- Permitting implications

**YOUR OPTIONS**
- Retrofit with air quality control equipment
- Fuel switching
- Conversion of existing boilers to gas
- New gas boilers
- New combined heat and power (CHP)
- Purchase steam and power

**OUR SERVICES**
- Market analysis
- Scenario planning
- Conceptual engineering and cost estimating
- Analysis of fuel switching
- Permitting
- Detailed design
- Owner’s Engineering
- Construction Management
- Full Engineering, Procurement and Construction

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**BUILDING A WORLD OF DIFFERENCE**
Black & Veatch is an employee-owned, global leader in building Critical Human Infrastructure™ in Energy, Water, Telecommunications and Government Services. Since 1915, we have helped our clients improve the lives of people in over 100 countries through consulting, engineering, construction, operations and program management. Our revenues in 2012 were US $3.3 billion. Follow us on www.bv.com and in social media.

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**ABOUT THE RULE**
On December 20, 2012, the EPA finalized changes to its air toxic standards for Industrial, Commercial, and Institutional Boilers. Commonly referred to as the “Boiler MACT”, these regulations set standards for emissions of hazardous air pollutants. The final rule changes will require industrial power and steam generation facility owners, including small utility boiler (less than 25 MW) owners, to bring affected units into compliance by early 2016.

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