# SSOE Group Air Quality Regulations Summary

### FEDERAL GREENHOUSE GAS (GHG) TAILORING RULE

| What is it?   | Why does it exist?  | Who does it affect?   | What's required?   | How does SSOE help?   | How does SSOE add value?   |
|---|---|---|--|---|--|
| In May 2010, the EPA<br>issued a final ruling to<br>increase the major source<br>thresholds for GHGs from<br>100/250 TPY to 25,000<br>TPY, effectively "tailoring"<br>the PSD and Title V permit<br>programs to target only<br>"major" GHG sources and<br>major modifications. GHGs<br>include CO2, N2O, CH4,<br>HFCs, PFCs, and SF6. | To phase in permitting<br>requirements and reduce<br>the number of applications<br>submitted at one time. | All facilities applying for,<br>renewing, or revising<br>an air quality permit; or<br>facilities that increase<br>their GHG emissions by<br>75,000 TPY. | <ul> <li>Phase 1: Permits Issued<br/>1/2/11 - 6/30/11</li> <li>PSD permit: new<br/>construction projects<br/>or modifications that<br/>increase GHG to more<br/>than 75,000 TPY are<br/>required to conduct a<br/>Best Available Control<br/>Technology (BACT)<br/>analysis.</li> <li>Title V permits: only<br/>when applying for<br/>a new, renewing, or<br/>revising a permit.</li> <li>Phase 2: Permits Issued<br/>7/1/11 - 6/30/13</li> <li>PSD permit: new<br/>construction projects that<br/>emit GHG emissions of<br/>at least 100,000 TPY,<br/>and modifications to<br/>existing facilities that<br/>increase GHG emissions<br/>by at least 75,000 TPY.</li> <li>Title V permit: facilities<br/>that emit at least<br/>100,000 TPY.</li> </ul> | Help clients understand the<br>permit requirements and<br>how they apply to them.<br>Complete/coordinate<br>permit applications and<br>help revise processes and/<br>or building plans to meet<br>guidelines. | SSOE applies its broad<br>knowledge of industrial<br>processes and facilities<br>and full range of services<br>to identify emissions issues<br>before permits are submit-<br>ted for review. |

making clients successful by saving them time, trouble, and money



# SSOE Group Air Quality Regulations Summary

### MANDATORY REPORTING OF GHGs RULE

| What is it?  | Why does it exist?  | Who does it affect?  | What's required?   | How does SSOE help?   | How does SSOE add value?  |
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| In October 2009, the EPA<br>issued the "Mandatory<br>Reporting of GHGs Rule"<br>that requires industrial<br>facilities to report their<br>GHG data and other<br>relevant information. The<br>Rule is referred to as 40<br>CFR 98 (or Part 98 Rule).<br>The gases reported include<br>CO2, N2O,and CH4, | To gain accurate and<br>timely GHG data that will<br>inform future decisions. | <ul> <li>Facilities that emit</li> <li>25,000 TPY of GHGs,<br/>and any of the following<br/>facility types:</li> <li>Adipic acid<br/>production</li> <li>Aluminum production</li> <li>Ammonia production</li> <li>Certain electricity<br/>generation</li> <li>Certain manure<br/>management systems</li> <li>Certain municipal<br/>solid waste landfills</li> <li>HCFC-22 production</li> <li>Certain HFC-23<br/>destruction processes</li> <li>Lime manufacturing</li> <li>Nitric acid<br/>production</li> <li>Petrochemical<br/>production</li> <li>Phosphoric acid<br/>production</li> <li>Silicon carbide<br/>production</li> <li>Silicon carbide<br/>production</li> <li>Titanium dioxide<br/>production</li> </ul> | Facilities that exceed<br>thresholds are required to<br>submit annual reports to the<br>EPA. | Help clients understand<br>and interpret industry-<br>specific requirements.<br>Identify processes and<br>sources that emit GHGs.<br>Help create and implement<br>an effective GHG<br>monitoring plan.<br>Identify areas and<br>strategies to decrease<br>GHG emissions and<br>increase efficiency. | Alleviate the cost and time<br>of internal resources.<br>Experienced specialists<br>know what data needs<br>to be collected and<br>calculations performed, as<br>well as how to organize<br>the reports to meet the<br>EPA's criteria.<br>Full range of services<br>to help implement<br>components of GHG<br>monitoring plan (i.e.<br>integrate meters and<br>controls systems). |



# SSOE Group Air Quality Regulations Summary

#### **BOILER MACT RULE - MAJOR SOURCES**

| What is it?   | Why does it exist?  | Who does it affect?  | What's required?   | How does SSOE help?   | How does SSOE add value?  |
|---|---|--|--|---|---|
| In February 2011,<br>the EPA issued new<br>regulations regarding the<br>emissions of hazardous<br>air pollutants (HAPs) from<br>industrial, commercial, and<br>institutional boilers. | To regulate the emissions<br>of HAPs, such as HCl,<br>particulate matter, CO,<br>mercury, and dioxins/<br>furans from major sources<br>of HAPs. | Facilities with boilers that<br>emit at least 10 TPY of<br>any single HAP and/or<br>at least emit 25 TPY of<br>all HAPs. The rule covers<br>new, reconstructed, and<br>existing boilers. | All units with heat inputs<br>less than 10 MMBTU/H are<br>required to have biennial<br>tune-ups.<br>Natural gas fired units<br>with heat input equal to or<br>greater than 10 MMBTU/H<br>are required to have annual<br>tune-ups.<br>All facilities are required<br>to have a one-time energy<br>assessment.<br>All facilities are required<br>to be in compliance within<br>three years of publication of<br>the rules (February 2014).<br>New emissions limits for<br>coal, biogas, and other fuel<br>burning equipment. | Help clients understand<br>and interpret specific<br>requirements.<br>Perform required energy<br>assessments/boiler studies.<br>Identify areas and<br>strategies to increase<br>efficiency.<br>Help create a plan to<br>update equipment/<br>processes, and provide<br>engineering and design<br>support. | Experience with various<br>industrial boilers and<br>comprehensive services<br>qualifies SSOE to identify<br>cause and effect of<br>emissions throughout both<br>facilities and processes<br>and provide integrated<br>solutions. |

