

March 10, 2011

www.klgates.com

The Authors:**Cliff L. Rothenstein**cliff.rothenstein@klgates.com
+1.202.778.9381**David A. Franchina**dave.franchina@klgates.com
+1.704.331.7543**Michael W. Evans**michael.evans@klgates.com
+1.202.661.3807**Cindy L. O'Malley**cindy.omalley@klgates.com
+1.202.661.6228

K&L Gates includes lawyers practicing out of 37 offices located in North America, Europe, Asia and the Middle East, and represents numerous GLOBAL 500, FORTUNE 100, and FTSE 100 corporations, in addition to growth and middle market companies, entrepreneurs, capital market participants and public sector entities. For more information, visit www.klgates.com.

The Big MACT Attack

On February 21, 2011, in response to a court order, EPA issued four related rules to control hazardous air pollutants from new and existing industrial, commercial, and institutional boilers and process heaters and from commercial and industrial solid waste incinerators. The four rules are: the Boiler MACT, Area Source Boiler rule, Commercial and Industrial Solid Waste Incinerators (CISWI), and the Solid Waste rule.

Regulation	Summary
Boiler MACT	Regulates emissions from boilers and process heaters by requiring maximum achievable control technology (MACT) at major sources. Major sources are those that can emit ten tons per year of any hazardous air pollutant (HAP) or 25 tons per year of any combination of HAP.
Area Source Boiler rule	Regulates emissions from non-major sources by requiring controls that are equivalent to either MACT or generally available control technology (GACT).
Commercial and Industrial Waste Incinerators	Regulates commercial and industrial units that burn solid waste including incinerators, energy recovery units, waste burning kilns, and small incinerators in very remote locations.
Solid Waste rule	Clarifies which non-hazardous secondary materials are solid waste and therefore regulated as a CISWI.

Following a federal court vacatur of industry specific standards and a September 2009 court order, EPA proposed four related regulations in 2010, including the Boiler MACT rule. Of the four rules, the proposed Boiler MACT rule drew the most sharp and widespread criticism over its requirements, which many believed were unachievable and could not be implemented without considerable cost to industry. K&L Gates wrote about these proposed rules in a client alert which examined the rules, the interplay between the rules and other regulatory frameworks (such as the Resource Conservation and Recovery Act), and the interplay between the rules and an evolving marketplace for alternate fuel supplies:

<http://www.klgates.com/newsstand/detail.aspx?publication=6526>

In response to over 4,800 comments that EPA received on the proposed rule, as well as criticism from many members of Congress, EPA sought a 15 month delay in promulgating the rule to give the agency more time to consider these comments. The court, however, denied EPA's request and instead ordered EPA to issue the Boiler MACT rule and the three other rules within 30 days.

On February 21, 2011, EPA met the court order and issued the four rules, but with some significant changes that the agency claims will cut pollution control costs by 50% from the proposed rule. In fact, due to the number of changes from the initial proposed rule, EPA noted in its final rule announcement that it would reconsider three rules (Boiler MACT, Area Source Boilers and CISWI) under Section 301(d)(7)(b) of the Clean Air Act.

That section allows EPA to seek additional public review and comment and permits the Administrator to stay the rule for up to three months. EPA has not yet announced an intention to stay the rule but will release additional details on the reconsideration process in the near term. This process effectively opens the rule to possible changes by EPA.

Boiler MACT

Together, the four new rules cover more than 200,000 boilers and 88 solid waste incinerators. Although the vast majority of the boilers, about 187,000, are small toxic emitters and likely subject to the Area Source Boiler rule, the Boiler MACT has captured the most attention.

The Boiler MACT requires new and existing major source industrial, commercial and industrial boilers and process heaters to reduce emissions of hazardous air pollutants. Major sources are defined as those with the potential to emit ten tons of any single hazardous air pollutant per year or twenty-five tons per year of any combination of hazardous air pollutants per year. The Boiler MACT does not, however, regulate boilers or process heaters already subject to a different National Emission Standard for Hazardous Air Pollutants, residential-type boilers/hot water heaters, commercial and industrial solid waste incinerators, or an electric utility steam generating unit that produces more than 25 MW of electricity for sale.

For new and existing major sources, the Boiler MACT establishes numeric emissions limits for five pollutants. The fuel-based pollutants include mercury, hydrogen chloride (as a surrogate for acid gases), and particulate matter (as a surrogate for non-mercury metals). The combustion-based pollutants include carbon monoxide (as a surrogate for non-dioxin organic air toxics) and dioxins/furans.

The final rule identifies 15 different subcategories of boilers and process heaters based on the design of the units, and it specifies requirements for each subcategory.

Subcategories of Boilers and Process Heaters

- Pulverized coal/solid fossil fuel units
- Stokers designed to burn coal/solid fossil fuel
- Fluidized bed units designed to burn coal/solid fossil fuel
- Stokers designed to burn biomass/bio-based solid
- Fluidized bed units designed to burn biomass/bio-based solid
- Suspension burners/Dutch ovens designed to burn biomass/biofuel solid
- Fuel cells designed to burn biomass/bio-based solid
- Hybrid suspension/grate burners designed to burn biomass/bio-based solid
- Units designed to burn solid fuel
- Units designed to burn liquid fuel
- Units designed to burn liquid fuel in non-continental States or territories
- Units designed to burn natural gas, refinery gas or other gas 1 fuels
- Units designed to burn gas 2 (other) gases
- Metal process furnaces
- Limited-use boilers and process heaters

For some subcategories the rule establishes work practice standards requiring tune-ups instead of emission limits. Specifically, for natural gas and refinery gas fired units, units with low heat input capacity, and limited use boilers, the rule requires operators to perform tune-ups. Natural gas and refinery gas fired units require tune-ups annually, while low heat input capacity units and limited use boilers require a tune-up every two years.

The rule also requires the largest major source boilers to continuously monitor their particulate emissions as a surrogate for metals such as lead and chromium, and units larger than 10MMBtu/hr must monitor oxygen as a measure of good combustion. All existing major sources must also conduct a one-time energy assessment to identify cost-effective energy conservation measures.

Some of these requirements are different from the proposed rule in significant ways that recognize the differences among boiler and fuel types. Among

the more noteworthy changes are the new subcategories that the final rule added. For example, a new subcategory was created for solid fuels for particulate matter, mercury and hydrogen chloride, rather than having separate categories for biomass and coal as the proposal did. This has the effect of reducing certain pollutant limits, potentially making it easier and less costly to comply with the rule. The final rule also adds new subcategories for combination suspension/grate burners, limited-use units and non-continental liquid units, thereby recognizing the differences in boiler types.

The other important change in the final rule is allowing work practice standards in lieu of numeric emission limits for certain types of units. Specifically, the final rule replaced emissions limits with work practice standards for periods of start up and shut down, for low heat capacity units, as well as for biomass boiler units, natural gas and refinery gas-fired units, and for units burning other gas if they can demonstrate contaminant levels similar to natural gas. These important changes provide facilities with less costly compliance options than the proposed rule.

The Other Rules

EPA also issued final rules for Area Source Boilers, Commercial and Industrial Solid Waste Incinerators (CISWI) and for defining solid waste. Perhaps the most significant of these rules is the Solid Waste rule, which is important in determining if the unit is subject to the boiler rules or the more-stringent CISWI rule.

The CISWI rule has been the subject of some litigation. Following EPA's 2005 CISWI Definitions rule, which exempted combustion units designed for energy recovery from CISWI, a court vacated the rule, finding that solid waste must be regulated under CISWI. This triggered the newly issued EPA rule, which identifies which materials are not solid wastes and can be managed under the boiler standards.

In general, materials are identified under the rule as solid wastes unless:

- The material is used as a fuel and remains within the control of the generator;
 - The material has not been discarded in the first instance and meets the legitimacy criteria when used as a fuel,;
 - The material is used as an ingredient in a manufacturing process;
 - The material has been sufficiently processed to produce a fuel or ingredient that meets the legitimacy criteria; or
 - Through a case-by-case petition process, it has been determined that the material handled outside the control of the generator but has not been discarded and is indistinguishable in all relevant aspects from a fuel product.
- In EPA's proposed rule, many materials, including some wood residuals and clean biofuel/biogas, would have been defined as waste and not fuel and therefore would be subject to the more stringent CISWI regulations. In the final rule, however, EPA backed off certain restrictions that will be especially important to facilities that burn biomass. Examples of some of the most significant differences between the proposed and final rule are that the final rule:
- Expands the list of traditional fuels (coal, oil and natural gas) to include alternative fuels such as coal refuse, on-spec used oil, and clean cellulosic biomass and making it clear that traditional fuels are not wastes unless they are discarded;
 - Defines resinated wood residuals as a non-waste fuel if it meets the legitimacy criteria;
 - Defines abandoned coal refuse that is processed to lower contaminants and increased energy value as non-waste fuel;
 - Defines scrap tires that are removed from vehicles and managed under established tire collection programs and tire-derived fuel from the processing of scrap tires removed from tire piles (shredded with the steel belts and wire have been removed) as a non-waste fuel;
 - Defines clean biofuel/biogas processed from solid waste as a non-waste fuel; and

- Defines cement kiln dust, coal ash, and foundry sand that are used as ingredients in manufacturing processes (e.g., in cement kilns) as a secondary material.

Implications

These four rules cast a wide net affecting over 200,000 boilers across the nation. These rules are complicated and the impact and cost will depend on the type of boiler, process heater and fuels that are used. In many instances the final rule will give facilities more realistic requirements than the proposed rule. This is particularly important in the Boiler MACT rule where the agency is allowing less costly work practice standards in lieu of numeric limits for certain major source facilities and is creating subcategories that are more appropriate for the type of unit.

Perhaps the best news of all is that because of the number of changes that EPA made the agency has announced that it will reconsider the Boiler MACT,

Area Source Boiler and CISWI rules. This is significant because it will give industry an important opportunity to provide further comments to EPA and seek additional changes to the rule. EPA expects to release details on the reconsideration process in the near term to give interested parties an opportunity to participate.

These actions on the Boiler MACT and its companion rules along with EPA's recent decision to defer GHG permitting requirements for biomass sources for 3 years continues to show that EPA is looking to tilt the table toward "green" energy sources as it puts together new or enhanced permitting and regulatory regimes.

Anchorage Austin Beijing Berlin Boston Brussels Charlotte Chicago Dallas Dubai Fort Worth Frankfurt Harrisburg Hong Kong London Los Angeles Miami Moscow Newark New York Orange County Palo Alto Paris Pittsburgh Portland Raleigh Research Triangle Park San Diego San Francisco Seattle Shanghai Singapore Spokane/Coeur d'Alene Taipei Tokyo Warsaw Washington, D.C.

K&L Gates includes lawyers practicing out of 37 offices located in North America, Europe, Asia and the Middle East, and represents numerous GLOBAL 500, FORTUNE 100, and FTSE 100 corporations, in addition to growth and middle market companies, entrepreneurs, capital market participants and public sector entities. For more information, visit www.klgates.com.

K&L Gates comprises multiple affiliated entities: a limited liability partnership with the full name K&L Gates LLP qualified in Delaware and maintaining offices throughout the United States, in Berlin and Frankfurt, Germany, in Beijing (K&L Gates LLP Beijing Representative Office), in Brussels, in Dubai, U.A.E., in Shanghai (K&L Gates LLP Shanghai Representative Office), in Tokyo, and in Singapore; a limited liability partnership (also named K&L Gates LLP) incorporated in England and maintaining offices in London and Paris; a Taiwan general partnership (K&L Gates) maintaining an office in Taipei; a Hong Kong general partnership (K&L Gates, Solicitors) maintaining an office in Hong Kong; a Polish limited partnership (K&L Gates Jamka sp.k.) maintaining an office in Warsaw; and a Delaware limited liability company (K&L Gates Holdings, LLC) maintaining an office in Moscow. K&L Gates maintains appropriate registrations in the jurisdictions in which its offices are located. A list of the partners or members in each entity is available for inspection at any K&L Gates office.

This publication is for informational purposes and does not contain or convey legal advice. The information herein should not be used or relied upon in regard to any particular facts or circumstances without first consulting a lawyer.

©2011 K&L Gates LLP. All Rights Reserved.