

Outside Counsel

Expert Analysis

EPA's New Boiler Rules Finalized for City Buildings

Fuel oil plays a vital role in New York City's energy economy and is a major source of heat and hot water in city buildings. According to the New York City Department of Environmental Protection, there are more than 56,000 heating oil boilers operating in the city, not including those used to heat one- and two-family homes. Collectively, this equipment uses well over two million gallons of fuel oil on average each day with most demand concentrated in the winter months. It is not surprising, therefore, that recent developments at the New York City and New York State level governing both the use of fuel oil and the operation of heating equipment have been closely followed by building owners, tenants, and city residents alike. Once these rules and regulations take effect, they will greatly alter New York's energy landscape.

During the same period as this recent city and statewide activity, the U.S. Environmental Protection Agency (EPA) has pursued a series of rulemakings designed to control hazardous air pollutants (HAPs) and other emissions tied to global warming. These rulemakings include regulatory action governing heating equipment. Although the rules have been debated at the national level, the scope of the federal rules could have led to an even greater impact on fuel oil users in New York than the recent state and local laws.

As originally proposed, EPA's new rules would have gone well beyond New York's laws, with major repercussions for energy consumers. However, after consideration of input collected during the public comment period, EPA's refined analysis narrowed the rulemaking's impact on New York's energy economy, consistent with its mission to protect human health and the environment. As a result,

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EPA's final rules are not likely to require more significant changes to the type of energy or heating equipment commonly used in New York City.

Local Laws

With the introduction of PlaNYC 2030 in 2007, New York City embarked upon an ambitious effort to strengthen environmental

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regulations and conserve energy by improving the efficiency of the city's fuel-burning equipment and building stock. Thereafter, in December 2009, the New York City Council passed a suite of local laws known collectively as the Greener Greater Buildings Plan. One of these laws (Local Law 84) requires property owners and co-op and condo associations to benchmark energy and water use by collecting, reporting, and maintaining building-specific data in accordance with standard protocols. A second law (Local Law 85) requires buildings to come into full compliance with the New York State Energy Conservation Construction Code at the time of any renovation or alteration project. Prior to passage of Local Law 85, full compliance was required only for those

projects affecting more than 50 percent of the building system.

A third law (Local Law 87), requires large city buildings to undergo a comprehensive energy audit every 10 years and to identify all reasonable measures and capital improvements that would result in energy use or cost reductions, the associated savings, cost of implementation, and payback period. Local Law 87 also requires buildings to perform retro-commissioning to tune up the buildings' existing systems and ensure efficient operation. These new laws reinforced pre-existing rules and regulations which require performance testing and optimization when new heating equipment is installed and every three years thereafter. Heating systems in larger buildings also must pass an annual mechanical inspection.

On the heels of the Greener Greater Buildings Plan, in 2010 both New York State and New York City passed laws altering the product standards of fuel oil that may be used in heating equipment. Under New York state law, by July 2012 the sulfur content by weight of No. 2 fuel oil, the most commonly used type of heating oil, will decline by greater than 99 percent to 15 parts per million (ppm). Under New York City law, by October 2012, the sulfur content of No. 4 fuel oil, a grade of fuel commonly used to heat larger buildings, will decline by 50 percent to 1,500 ppm. In addition, by that same date, all fuel oil used in New York City must contain at least 2 percent biodiesel.

Finally, the New York City Department of Environmental Protection recently completed a rulemaking, phasing out the use of No. 6 fuel oil (but not No. 4 fuel oil) in city buildings by 2015. No. 6 fuel oil is a high viscosity fuel popular for larger heating systems due to its low cost and high energy content. The broad scope and rapid pace of these laws has left suppliers, consumers, and regulators scrambling to comply. Collectively, they implicate a wide variety of important local interests which include public health, energy supply and delivery capacity, energy security, jobs, and affordable housing.

These local interests do not exist in a vacuum. Since New York is a major hub for oil delivery and distribution in the United States, the recent developments discussed above will also affect the energy economies of neighboring states and price disclosure sources such as the New York Mercantile Exchange. In addition, these interests will be subject to recent developments in federal law.

Sources of Pollutants

Section 112 of the Clean Air Act (CAA) requires EPA to establish national emissions standards for specified hazardous air pollutants (HAPs) and to regulate defined categories of stationary sources of those pollutants. Source categories include commercial, industrial, and institutional oil combustion equipment. EPA must further distinguish between major sources and area sources based upon the potential amount of HAPs that may be emitted by the source. A major source has the potential to emit 10 tons per year (tpy) or more of any single HAP or 25 tpy or more of any combination of HAPs.

Lower emitting stationary sources are regulated as area sources. The CAA compels EPA to take special steps to regulate area sources representing 90 percent of the emissions of each member of a special group of 30 HAPs that pose the greatest potential health threat to urban areas. Within this group of 30 urban HAPs there is a further subset of seven HAPs which require even more stringent regulation.

On June 4, 2010, EPA proposed area source rules for numerous categories of HAPs, including regulations for commercial, industrial, and institutional oil-fired boilers. These types of boilers are commonly found in apartment houses, multifamily homes, and office buildings as well as schools, hospitals, churches, and municipal buildings. When implemented, the proposed rules would have required these boilers to meet strict emissions limits for particulate matter (as a surrogate for listed non-mercury metallic HAPs) and carbon monoxide (as a surrogate for listed organic compounds). The specific rules and emissions limits depended upon which of two size categories the boilers fell into and whether or not the equipment was existing or new.

When EPA published the proposed area source rule, it also took parallel action on two other closely watched rulemakings—one for major sources of the same urban HAPs and one for solid waste incinerators. The rulemakings have attracted great attention from environmentalists, public health groups, industry associations, and lawmakers alike. EPA received more than 4,800 comments during

the public comment period. According to many commenters, EPA's proposed emissions limits for area source, oil-fired boilers were based on improper and inadequate information, and could neither be met by currently available equipment nor effectively measured for compliance. In addition to public comments, more than 40 senators and 115 congressmen representing both sides of the political aisle signed letters asking the agency to respond to these concerns.

EPA's new boiler rules, together with other recent rulemakings, have become just one part of a renewed national debate on the reach of government and the balancing of interests between public health, jobs, the environment, and the future sources, uses and affordability of energy.

Final Rule

Following its regulatory review, EPA concluded that the numerical emissions standards for typical oil boilers were unrealistic and otherwise unnecessarily stringent. As a result, EPA published a final rule on March 21, 2011, that was significantly different than the rule proposed the summer before. EPA moved from requiring numerical emissions limits for the kinds of oil-fired boilers commonly used in New York city buildings to requiring a prudent management practice standard.

Important to EPA's modified approach was its decision to regulate this equipment using generally available control technology (GACT)—a regulatory standard more permissive of management practices—rather than the stricter maximum achievable control technology (MACT). As discussed in EPA's final rule, 76 Fed. Reg. 15554 (March 21, 2011), MACT is not required here because this type of heating oil equipment does not contribute to 90 percent of the emissions of the urban HAPs of concern.

Accordingly, by March 21, 2014, EPA will require these types of boilers to implement a biennial tune-up program as specified in the Code of Federal Regulations at 40 CFR Part 63, Section 63.11223. New equipment (equipment put into service following publication of the proposed rule in 2010) will need to implement a biennial tune-up program beginning on May 20, 2011, or upon startup of the facility, whichever is later. With minor differences in the tune-up cycle and performance steps, New York City already requires such a program

under the Greener Greater Buildings Plan and pre-existing law.

If EPA had stuck with the proposed numerical emissions limits as opposed to a management practice standard, the resulting federal regulations could well have rendered New York's new local laws functionally irrelevant for many smaller heating systems. These systems simply would have been unable to comply under any circumstances. However, even under EPA's modified approach, larger heating systems (such as those found at universities, major hospitals, and other institutional settings), and systems using some fuels other than oil, will need to comply with stringent numerical standards in addition to undertaking an energy assessment designed to identify cost-effective energy conservation measures.

Although EPA published its final boiler rules this past March, some uncertainty persists. The rulemakings are taking place pursuant to litigation in federal District Court for the District of Columbia. In order to comply with a court-ordered deadline, EPA published the rules earlier than it wished and immediately noticed its intention to entertain reconsideration of portions of the rulemaking. However, most of the issues being reconsidered relate to large industrial heating systems and EPA has stayed the effective date of the standards for these major sources during the reconsideration process.

Conclusion

EPA's new federal standards for the types of oil-fired boilers most commonly used in New York City buildings should not prove overly burdensome. Perhaps because these efforts persist during an extended period of high unemployment and a weak economy, they have triggered intense discussion concerning the scope of EPA's regulatory authority.

EPA's new boiler rules, together with other recent rulemakings, have become just one part of a renewed national debate on the reach of government and the balancing of interests between public health, jobs, the environment, and the future sources, uses and affordability of energy. A similar debate is taking place in New York. At least for heating oil equipment, following extensive deliberation, EPA adopted a management practice approach to regulate emissions that is compatible with recent New York state and New York city laws.