Industrial Boiler MACT Rule Update
Learn more about the ramifications of recent court decisions and EPA policy updates.

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EPA began their efforts to regulate hazardous air pollutant (HAP) emissions from industrial, commercial, and institutional boilers with the Industrial Combustion Coordinated Rulemaking (ICCR) in the mid-1990s. They proposed a Boiler MACT rule in 2003 (40 CFR 63, Subpart DDDDD) and finalized it in 2004. Legal challenges then forced them to reconsider it, and the rule was vacated in 2007, just before the compliance date. EPA went back to work with an information collection request and other associated rulemaking efforts. They sought to sort out the difference between boilers firing fuels and incinerators firing solid waste, establish emission standards to cover all HAPs, and remove the exemption for startup, shutdown, and malfunction periods.

EPA issued three rounds of proposed and final Boiler MACT rules between 2010 and 2015, culminating with the second final Boiler MACT reconsideration rule in 2015. This rule contained numeric emission standards for 18 subcategories of boilers for mercury (Hg), hydrogen chloride (HCl), particulate matter (as a surrogate for HAP metals), and carbon monoxide (CO) (as a surrogate for organic HAPs). Sources were required to comply with these final requirements by January 31, 2016 (or 2017 if a 1-year extension was granted). The 2013 final rule and the 2015 final reconsideration rule were also subject to legal challenges, and the outcomes of both lawsuits were recently decided (July 2016 and March 2018).

Bottom line: over 20 years after starting the process, EPA still has some work to do to finish the Boiler MACT rule.

The July 2016 court decision settled two contentious issues: it upheld EPA’s subcategorization approach and EPA’s statistical calculation methodology for establishing numeric emission limits. However, the decision required EPA to address two other Boiler MACT items. First, the court held that the Agency
must re-evaluate the emission standards that had been established for several subcategories because these standards were developed without properly considering emissions data from boilers firing multiple fuels. EPA has identified 14 existing source standards and 10 new source standards that are affected by this aspect of the court’s decision. EPA is expected to promulgate more stringent emission limits for these standards, which include the solid and liquid fuel Hg and HCl limits for existing boilers. Second, the court required EPA to adequately explain how CO acts as a reasonable surrogate for non-dioxin/furan organic HAPs. EPA must determine if the best performing boilers are using control technologies other than good combustion to reduce organic HAP emissions beyond what they achieve by reducing CO alone. The court indicated that they believed EPA would likely be able to adequately explain its decision to use CO as a surrogate.

The March 2018 decision is important because the court upheld EPA’s determination that requiring boiler operators to follow work practices (rather than meeting emission limits) is an appropriate means to regulate emissions associated with startup and shutdown. However, in this decision, the court also ruled that EPA must better explain why they did not set any CO limits below a threshold of 130 ppm. The court found that EPA did not adequately justify its conclusion that no further HAP emissions reductions would occur if the CO emission limit were reduced further. However, the court did acknowledge that when using a surrogate, the emission limit should be set at the level of the surrogate that results in the lowest HAP levels achievable, not the lowest surrogate levels achievable. Therefore, the 130 ppm CO limits were remanded but not vacated, and EPA now has an opportunity to provide a better justification for not setting a lower CO emission standard.

To potentially further complicate an already confusing situation, EPA is also obligated to complete their 8-year risk and technology review (RTR) for the Boiler MACT rule soon. The Agency has not begun that review and is currently under court-ordered deadlines to complete 33 other RTR rulemakings between December 2018 and June 2020. The RTR process requires EPA to determine two things: if the health risks posed by emissions from each source category following implementation of their MACT standards are acceptable, and if there have been any developments in emission control technology since the rule was promulgated that would warrant a change in the standards.

EPA has also been making technical corrections and reviewing use of surrogates as part of recent RTR rulemakings. EPA has acknowledged that the RTR process does not automatically require them to recalculate MACT limits (e.g., based on the current population of affected sources and their performance).

What does all of this activity mean for facilities regulated by the Boiler MACT rule? At the moment, it means business as usual. The limits and other requirements in the Boiler MACT rule remain in place. EPA will need to conduct a rulemaking to address the issues remanded by the court. It seems likely that they will proceed with that rulemaking quickly in order to propose and finalize it under the current administration. However, if a rulemaking to address the remanded issues is delayed due to other priorities and deadlines, it is also possible that EPA could choose to address the issues remanded by the court as part of the Boiler MACT RTR rulemaking.

One final relevant item to note is EPA's recent withdrawal of its 1995 “once-in, always-in” policy. Per a January 25, 2018 EPA memorandum, facilities that have reduced HAP emissions below major source levels can now engage with their permitting authorities to revise their permit requirements, remove MACT rules applicable to major sources, and be reclassified as area sources. EPA is expected to publish a proposed rule soon in order to codify the current interpretation that a source that becomes an area source through an enforceable limitation on its HAP potential to emit will no longer be subject to a major source MACT standard.