Trinity Consultants

The State of the Boiler MACT Address: Update on Developments & Industry Sector Issues

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- Assisted clients in developing comments on most versions of the Boiler MACT
- Assisted U.S. Sugar with submitting comments on the 2020 proposed rule
- Supported U.S. Sugar's case leading up to *U.S. Sugar vs EPA II*

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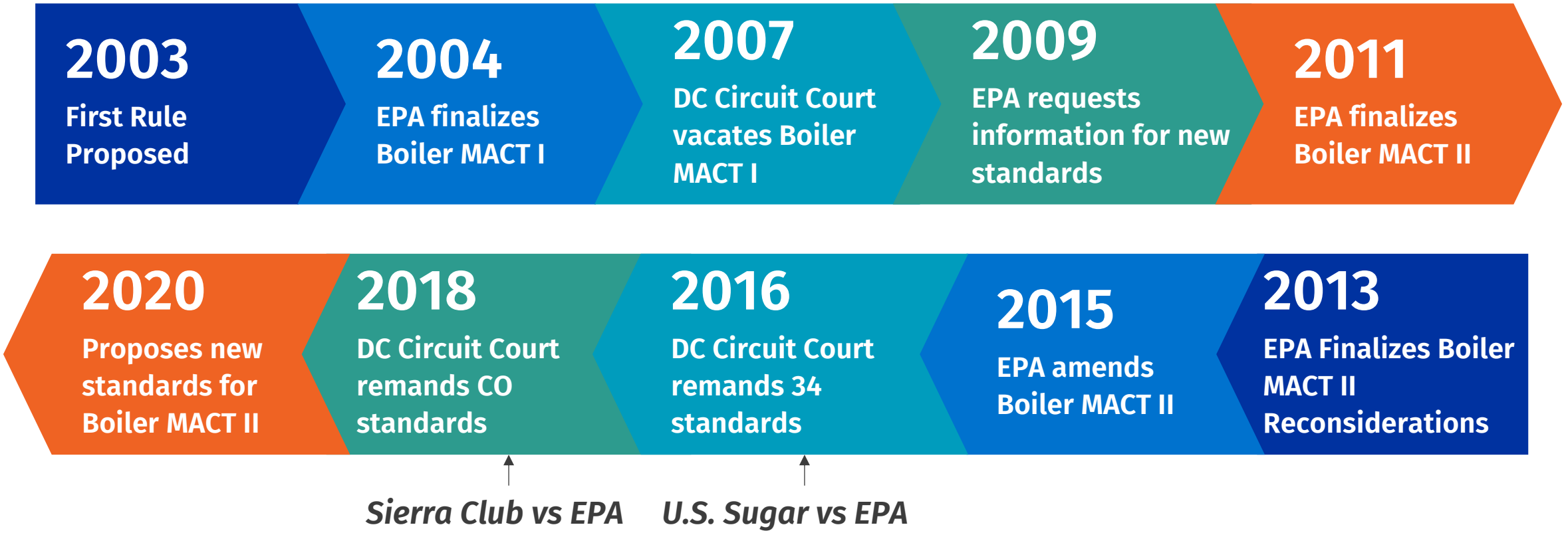
Content

Understanding the Boiler MACT

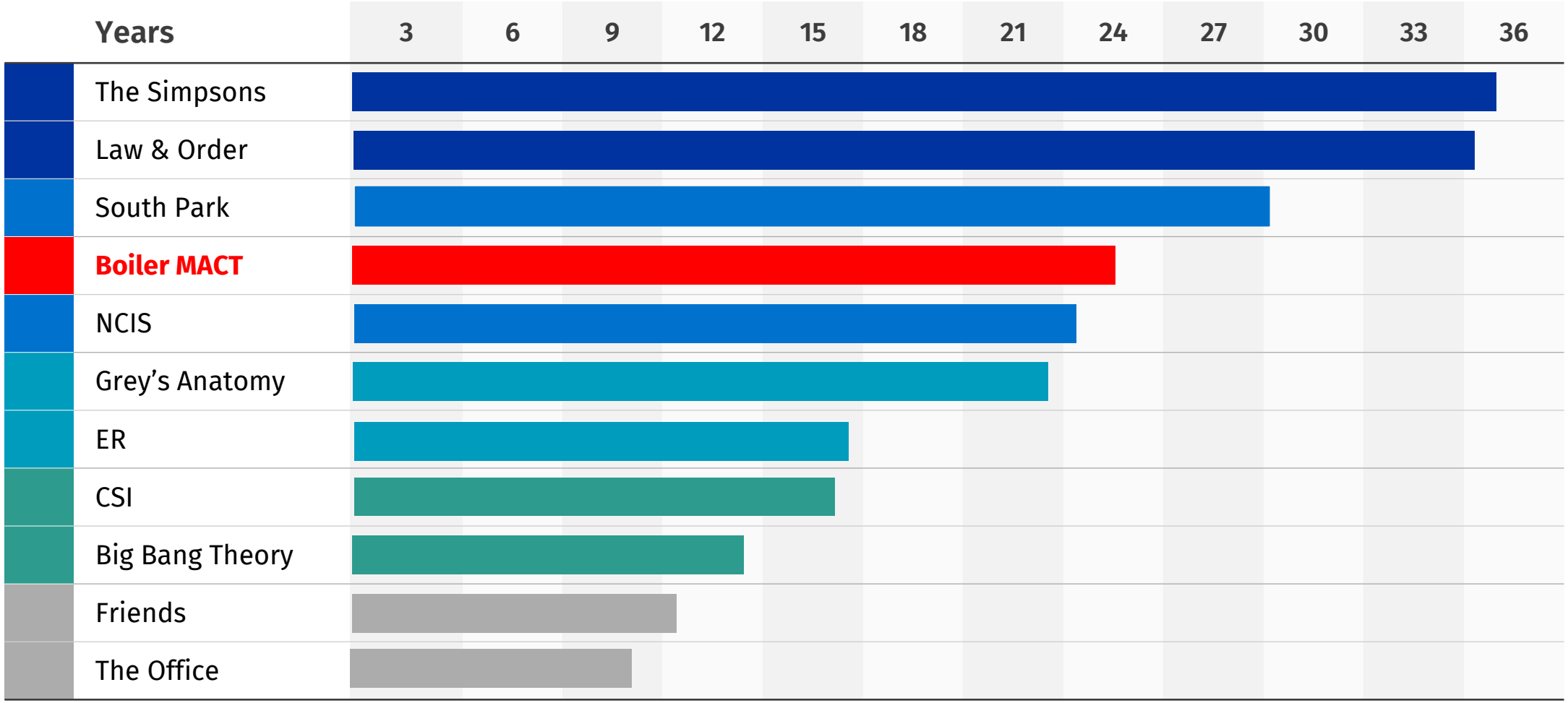
What is the Boiler MACT?

Purpose	Standards to limit emissions of heavy metals, hazardous organic chemicals, and acid gases from industrial boilers, commercial and institutional boilers, and process heaters
Organization	Boilers are grouped into 19 subcategories based on design and fuel source.
M.A.C.T.	“Maximum Achievable Control Technology” The emission control that is achieved in practice by the best-controlled similar source

Boiler MACT History



D.C. Court Approves New Season of Boiler MACT



The 2022 Final Boiler MACT

EPA's 2022 final rule addressed the 34 emission standards for solid fuel boilers remanded by *U.S. Sugar v EPA* and the CO emission standards remanded by *Sierra Club v EPA*.

01

"New Sources" included everything constructed after the proposed rule in 2010.

Because the court did not vacate the standards in *U.S. Sugar v EPA,* EPA claimed the standards were first proposed in 2010, and all boilers constructed after 2010 are subject to the revised new standards.

02

The HCl emission standard for multiple subcategories decreased by 65 – 99%.

For solid fuels, the top-ranked source had multiple tests for which "variability" could be seen in EPA's 2010 analysis. In 2022, EPA manually changed the top-ranked source not based on lowest test, but on a claim of lower variance. But, EPA did not realize their statistical variance was flawed – it only considered a single non-detect test, and they did not have at least 3 degrees of freedom to calculate a legitimate UPL.

Understanding the Dispute

Case Background: *U.S. Sugar vs EPA II*

In 2019, U.S. Sugar completed construction of Boiler 9, a state-of-the-art bagasse boiler designed to meet the final Boiler MACT standards at the time.

- Under the 2022 rule, Boiler 9 is “new”, even though it was constructed and operating before the rule was proposed in 2020.
- The HCl standard for “new” sources was 100x lower than the 2011/2013/2015 standards.
- Boiler 9 was designed to the previous “new” standard, and U.S. Sugar would require tens of millions of dollars in retrofits to Boiler 9.

Industry Perspective

Arguments from U.S. Sugar and Industry Groups

01

A facility built before a standard is proposed cannot be "new".

- EPA erred in interpreting when a standard is "first proposed."
- An emission standard is first proposed whenever the standard is first proposed. The EPA cannot propose a standard, spend a decade revising it, and then claim that it was first proposed a decade earlier.

02

The EPA misapplied a statistical analysis to determine the new, remanded standards.

- EPA set the HCl standard based on PB-44 because it had the lowest variance from a single stack test. However, all data points were based on a single non-detect threshold, and not three actual measurements.
- EPA used a statistical analysis that relies on a dataset's variability and sufficient degrees of freedom to have a valid calculus. Because the values were non-detect, the method is not statistically valid.

Environmental Petitioners

Sierra Club, et al.

- When EPA calculated the 34 new MACT standards proposed in 2020, EPA decided not to use additional data it had collected after 2013.
  - EPA believed this approach would treat new sources across boiler subcategories equally.
- Environmental petitioners argued that excluding post-2013 data made some of the 34 new standards less strict.

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D.C. Circuit Court's Ruling

September 3, 2024

01

Intervenors

"…EPA drew its data from the same 2013-era dataset it had used for other, still-valid emission standards promulgated for industrial boilers back in 2013. …Because that decision did not violate the Clean Air Act, we deny the petition brought by four environmental organizations. "

02

New Source Definition

"The structure of the Clean Air Act makes clear that boilers constructed before each individual standard was first proposed are "existing," and boilers constructed after each individual standard was first proposed are "new."

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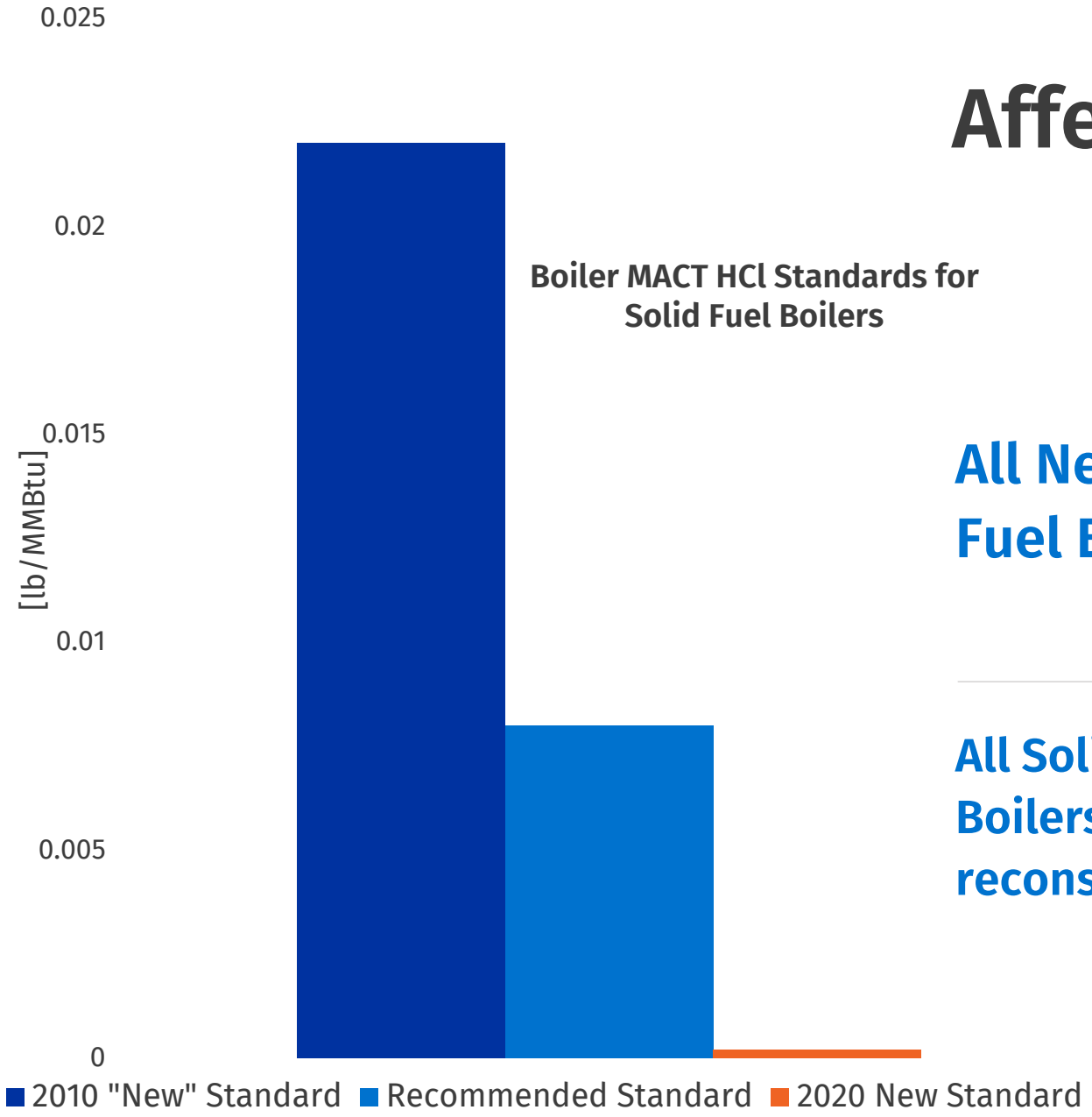
> **The Industry Petitioners also ask us to rule that EPA arbitrarily set the HCl limit for new sources. Once their boilers are properly classified, however, they will no longer be subjected to the new-source HCl limit. *Therefore, we decline to reach that issue.***

U.S. Sugar v EPA II, No. 22-1271 (D.C. Cir. 2024)

Affected Industries



All New Solid Fuel Boilers

- Sugar Industry
- Pulp and Paper
- Lumber Mills
- Biomass Combustion

All Solid Fuel Boilers that are reconstructed

These requirements apply to existing sources but are designed to become applicable as existing boilers age.

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Future of the Boiler MACT

What's Next?

01

Court Order

The EPA will have to rewrite the rule to align with the definition of a new source ordered by the Court.

At this time, the Court has not issued a formal directive.

02

Remanded Emission Standards

The Court declined to rule on EPA's approach for calculating the HCl standard for solid fuel boilers.

EPA was not ordered to update the standards in the proposed rule.

03

Other Issues

The "Franken-MACT" approach still fails to reflect real-world operating conditions. Boiler MACT continues to affect boiler subcategories disproportionately and will likely result in underutilizing clean-burning, renewable fuels.

Questions?