



CIBO Annual Meeting: Boiler MACT, PM NAAQS, GHG Reporting and GNP

Tuesday, September 12, 2023

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BETTER PLANET 2030 SUSTAINABLE PRODUCTS FOR A SUSTAINABLE FUTURE



Topics

- I. Boiler MACT Litigation and Reconsideration
- II. PM NAAQS
- III. GHG Reporting
- IV. Good Neighbor Plan



Boiler MACT Remand Litigation – Offense and Defense

Remand finalized October 6, 2022 – petitioned December 2nd and intervened January 3rd

• CIBO and AF&PA/AWC in coalition

<u>Effective date for who is a new source – move to August 2020 from August 2010;</u> June 26 court filing by US Sugar with AF&PA and CIBO, declarations provided

- Unfair and unlawful to retroactively apply limits to boilers already built vacate
- HCl limit for new solid fuel boilers unlawful if used <u>best</u> performer and variability, then higher limit
- EPA and ENGO interveners will file opposition briefs September 11 and October 2, respectively

Seeking reasonable interpretation of <u>operating load limit</u> – difficult for some multi-fuel boilers

- allow both stack testing and fuel analysis (3x the cost) issue is footnote in final rule
- litigation held in abeyance in June while OAPQS considers new guidance per AF&PA/CIBO's January suggestions





Max Fuel Pollutant Input vs Operating Load

- Some solid fuel boilers cannot burn solid fuel at max operating load, gas or oil is needed to reach max load – examples: wood/oil/gas, coal/gas, coal/wood boilers
- The requirements for multifuel boilers complying using stack testing require that the fuel mixture with the highest HCl and Hg input on a lb/MMBtu input basis (NOT lb/hr) be burned during the stack test and then monitored on a monthly basis.
- Highest fuel pollutant input loading (PIL) is wood only for wood/oil/gas, coal only for coal/gas.
- Highest load is the combination of fuels during PM / CO testing.
- The new language in the footnote will inappropriately restrict boiler operation and could restrict production if a backup boiler is not available or in some cases cause increase in fossil fuels and thus GHGs.



Operating Load Solutions: No Regulatory Change Needed

Allow for load operating parameter limit to be set using PM/CO testing, not Hg/HCl testing where load conflicts with need to run at highest lb/MMBtu input.

Allow a mill to do a 4th run at max/high load to set operating load but demonstrate compliance with HCl and Hg and set PIL using just the first three runs.

Allow a mill to subtract out heat input load from non-contributing fuel (oil or gas) when developing limits for HCl or mercury in other fuels (biomass, TDF, etc). Allowed for one mill through Alternative Monitoring Plan approval.





Boiler MACT Remand Litigation – Offense and Defense

ENGOs June 26 petitioner's brief	Rebuttal							
• EPA failed to use newest data available to EPA since 2013 to update all emission limits - MACT on MACT on MACT	 Remand under section 112(d) use older data; should not rat Limited precedent for future I 							
 Contrary to "plain language" of section 112(d)(2)&(3) Significant HAP emissions emitted 	 about remand; not revisiting I settled Arbitrary and capricious to red data" – EPA not compelled Overstate number of units and factual errors, lower emission 							

Schedule:

- EPA/DOJ response by Sept 11 and then intervener's brief (AF&PA, CIBO) October 2nd
- Oral argument early 2024 assign 3-judge panel from DC Circuit with decision mid- 2024? ۲



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edo limits using "new

nd HAP emissions – ns and fewer units



PM NAAQS – Overview

EPA proposing (1/27/23) to lower in range of 9-10ug/m³ (even 8 ug/m³)

• Huge economic impact with more non-attainment and in attainment areas

NAAQS Regulatory Review & Rulemaking Coalition (NR3) comments – 3/28/23

Advocacy by NR3:

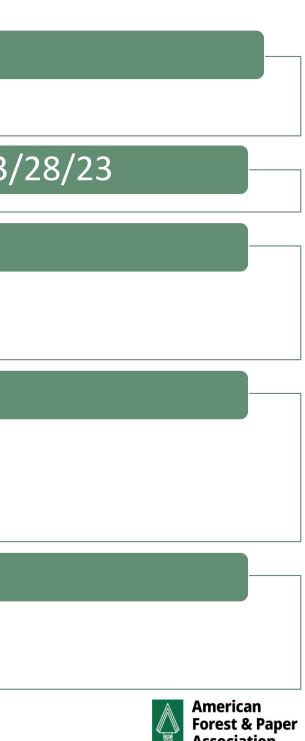
- Maintain the standard (12ug/m³) not compelled; or limit lowering
- And defer effective date at least two years to allow permitting transition

Outreach to EPA

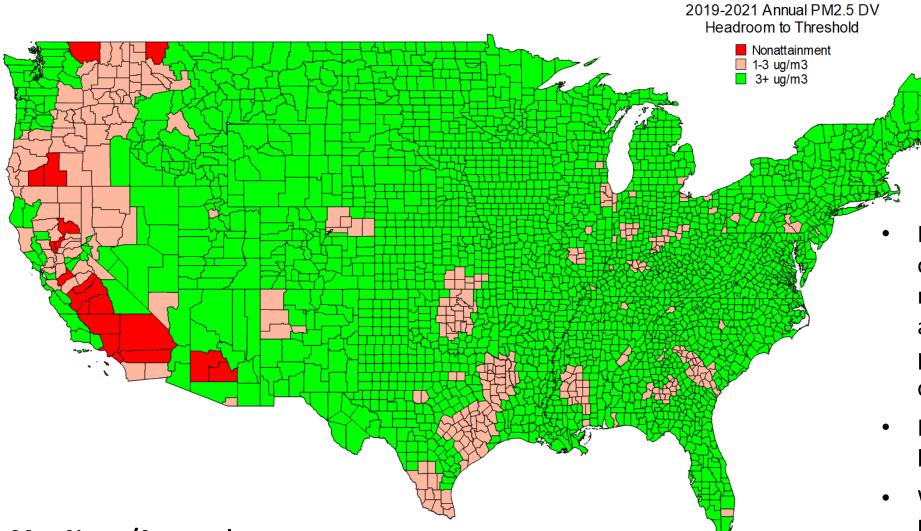
- Enhance awareness of permitting gridlock
- Chamber sign on letter
- NAM analysis on impacts huge!

Hill Outreach

- Meetings with House Republicans expanding to Senate and Ds
- Expanding to Senate and Democrats



Current PM_{2 5} NAAQS (12 μ g/m³) leaves room for economic growth



Map Notes/Approach:

8

- Used maximum PM_{2.5} Design Values (DVs) for each monitored county
- Calculated non-monitored counties values using geospatial statistical interpolation ("kriging") "fills-in" estimates for locations between the monitors. •
- Five (5) closest monitored values used to estimate non-monitored county values using inverse-distance weighted averaging method.

- attainment with NAAQS.
- available controls and typically simulated a project's future annual PM_{2.5} ambient contribution to be 1-3 ug/m^3 .
- Many areas of the country (green) have background levels of 6 to 9 ug/m^3 .
- With a standard of 12 ug/m³, areas with "headroom" to accommodate the typical contribution from the project (e.g., 3 ug/m^3).
- **Currently:** Most projects can be built.

Projects in non-attainment areas (red) will require LAER, offsets/alternatives NSR analysis, and SIPs with RACT.

Before construction is permitted, new projects must use EPA models to show

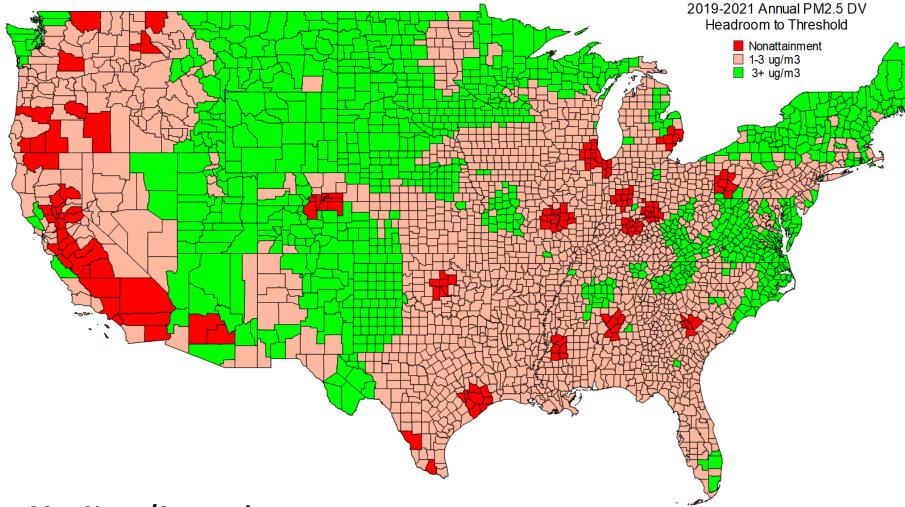
EPA's modeling guidelines represent continuous operation of all new and modified sources at the maximum allowable emission rate after best

background of 9 ug/m³ or less will have enough



Immediate Impact of $PM_{2.5}$ NAAQS at 10.0 μ g/m³

New or expanded manufacturing projects may become too costly or unachievable in red/pink colored



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- Five (5) closest monitored values used to estimate non-monitored county values using inverse-distance weighted averaging method.

- to be 1-3 ug/m3.
- background levels of 6 to 9 ug/m^3 .

Before construction is permitted, new projects must use EPA models to show attainment with the NAAOS.

EPA's modeling guidelines require assuming continuous operation of all new and modified sources at the **maximum** allowable emission rate using best available controls and typically simulate a project's future annual average PM_{2.5} ambient concentration

Many PM_{2.5} "attainment" areas have

With a standard of 10 ug/m^3 , areas with background as low as 7 ug/m^3 will not have enough "headroom" to accommodate the ambient concentration conservatively

simulated for the project (e.g., 3 ug/m^3).

Impact: A violation of the NAAQS is predicted which effectively stops the project.

Why 2 years is imperative for PM Implementation

Align effective date of final rule with State Implementation Plan process (at least 2 years)

- Gives EPA time to develop comprehensive implementation plan (modeling improvements, policy) updates, and inclusion of more sources) working with states and other stakeholders
- Allows time for projects in pipeline to be built including IRA funded projects
- "Headroom" challenges complex require critical new thinking and policies to solve
- Legally required otherwise, action is "arbitrary and capricious"
- It is fair to industry to have time to adjust to new modeling goal

SIP process for non-attainment areas continues unaffected

Use IRA money to place ambient monitors in rural areas to better characterize background

Use time to make improvements to modeling tools – monitor bias, variability, ambient air

EPA should maintain key aspects of 2020 Project Emissions Accounting Rule







Expanded GHG Reporting

Proposed May 22, 2023 – significantly augments GHGRP beyond scope 1 (direct) emissions

60-day comment period no extension granted

Subpart B of proposal:

- Detailed Metered Energy Monitoring Plan
- Descriptions, data & photos of energy operations for every meter
- Details on each meter model number
- Energy procurement information such as billing
- Data validation methods





Expanded GHG Reporting – Changes Sought

Comments filed July 21 – with ACC, Lime, IECA

EPA lacks legal authority to promulgate and enforce Subpart B - REMOVE/DROP

- relies on limited authority from 2007 Appropriations line item
- Beyond scope of section 114 authority one off uses, not energy feedstocks, offsite energy consumption
- Other agencies collect DOE/EIA; EPA work with them if there is an issue

Inadequate analysis:

- Failed to go through Paperwork Reduction Act burdens
- RIA inadequate
- CBI protection concerns projections of energy use

Many other GHG actions in the Administration

Eliminate Subpart C adjustments – confusing categorization of industrial operations





EPA Good Neighbor Plan for Paper Mill Boilers: Ripe for Reconsideration

Final rule signed March 15, FR publication June 6

- States failure to set adequate SIPs to protect downwind areas
- EGUs and non-EGUs for first time

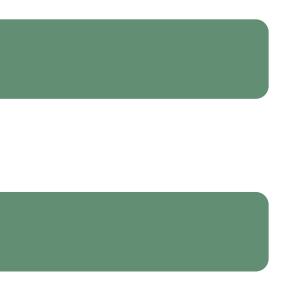
Concerns:

- Paper sector boilers are not significant contributor to air quality
- Controls not cost-effective >\$7,500/ton NOx
- SCR not proven technology (rejected in BACT/RACT) and will increase GHGs
- EPA changed its criteria for including non-EGUs in rule: cost effectiveness and significance thresholds

Asked EPA to stay rule – formal filing July 17

• Reconsider inclusion of all paper boilers or whether limits are appropriate; NSPS?

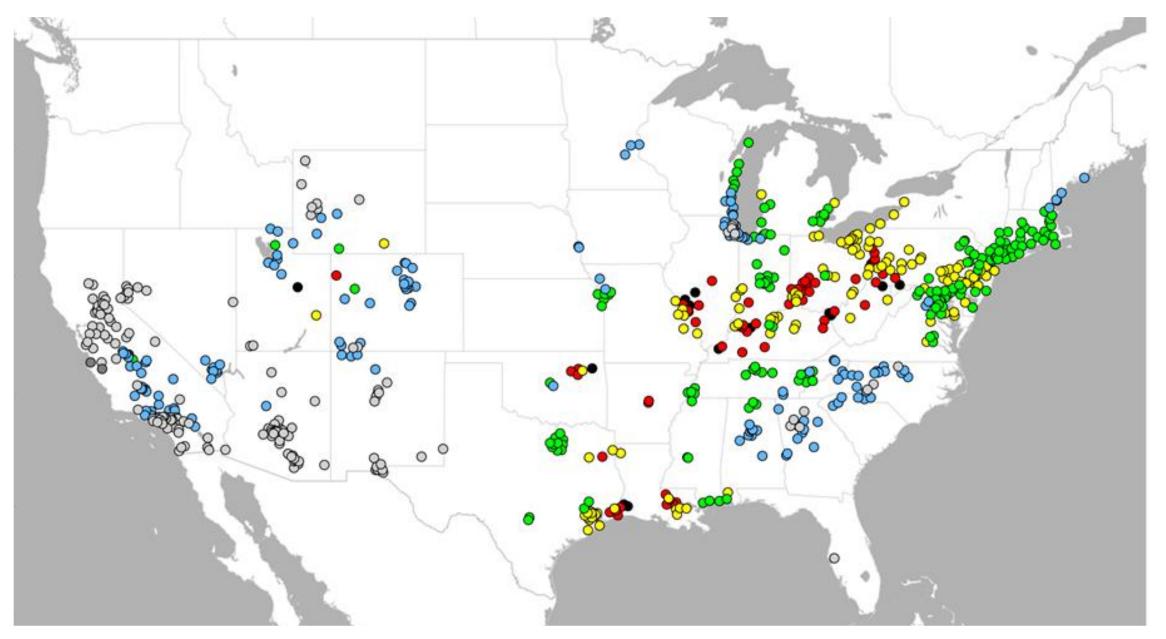








EPA's Expected Ozone Design Value Reductions Resulting from FIP Policy Controlled NOx Emission Reductions in 2026



Not all displayed monitors require additional reduction for attainment 14 In eastern US, only two key monitors, both in TX, model attainment with 2026 control. Remaining monitors remain in nonattainment or maintenance.

03	Reduction (ppb)		
•	>= 2.0		
٠	>= 1.0 to 2.0		
•	>= 0.50 to 1.0		
•	>= 0.25 to 0.50		
•	>= 0.10 to 0.25		
0	< 0.10		

AQAT REANALYSIS FOR PULP AND PAPER SECTOR

Analysis Given EPA; Updated for Final Rule: Not impactful!

State	Oxone Non-Attainment Receptor Location	Original Non-EGU EPA Screening Document (ppb)	NCASI Removed Misclassifications from Inventory (9/22) (ppb)	Adjustments + Remove MN and WI (ppb)	Remove 2 CT monitors below 70 in 2026 (ppb)	Expected OS NOx reductions from 31 boilers (AF&PA 2023) (ppb)
IL	Chicago/Alsip	0.0352	0.0323	<mark>0.0060</mark>		<mark>0.0011</mark>
IL	Chicago/Northbrook	0.0425	0.0396	<mark>0.0052</mark>		<mark>0.0007</mark>
ТХ	Galveston	0.0430	0.0408	0.0366	0.0309	0.0159
ТХ	Houston/Aldine	0.0147	0.0142	0.0134	0.0124	<mark>0.0062</mark>
СТ	<mark>Greenwich</mark>	0.0279	0.0149	0.0214	Meet 70	<mark>0.0005</mark>
СТ	New Haven	0.0349	0.0214	0.0247	Meet 70	<mark>0.0010</mark>
СТ	<mark>Stratford</mark>	0.0328	0.0195	0.0239	<mark>0.0239</mark>	<mark>0.0012</mark>
СТ	Westport	0.0256	0.0156	0.0186	0.0186	<mark>0.0009</mark>
PA	Philly-Bristol	0.0135	0.0107	<mark>0.0076</mark>		<mark>0.0008</mark>
WI	<mark>Kenosha</mark>	0.0102	<mark>0.0077</mark>	<mark>0.0065</mark>		<mark>0.0014</mark>
WI	<mark>Sheboygan</mark>	0.0133	<mark>0.0097</mark>	<mark>0.0083</mark>	<mark>0.0083</mark>	<mark>0.0013</mark>
	Receptor Count >0.01	11	<mark>9</mark>	<mark>6</mark>	<mark>3-4</mark>	1
	<mark>Green</mark> = <0.01 ppb	Slightly above >10 threshold	Below threshold	Far below threshold	Stratford meets in ~ 2027	Only one area is above 0.01 ppb

EPA Good Neighbor Plan for Paper Mill Boilers: Litigation - Complex

Eleven states won their challenges of EPA's SIP disapprovals

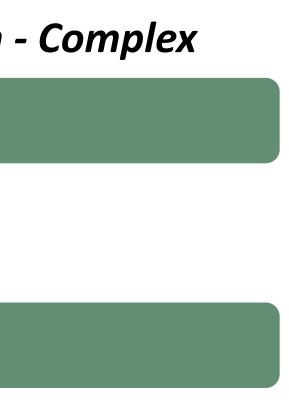
- LA, TX, AR, MS, UT, MO, NV, MN, KY, OK, WY
- Provisions not in affect Toll compliance date as well?
- EPA interim final rules acknowledge rule not in effect: June 30 and July 31

Activity Over the Summer

- AF&PA petition for review (MOG, NMA, PCA, various electric groups) 7/21
- Joint stay request with AF&PA, MOG, etc. August 2; prevail on merits
- EPA/DOJ, some states and ENGOs argue against need for stay not prevail on merits; 8/18
- Statement of issues on GNP 8/21

Stay decision from D.C. Circuit by end of September?

Briefing on merits case by end of year? Defer if stayed?







Wrap Up

Seeking sustainable regulations

Cumulative regulatory challenges – beyond air, NAM's Manufacturers for Sensible Regulation

2024 will see many final actions and likely further litigation

Questions??





Stay Connected



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American Forest & Paper Association

BETTER PRACTICES 2030 SUSTAINABLE PRODUCTS FOR A SUSTAINABLE FUTURE



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