



**Testimony of Paul Noe for
American Forest & Paper Association before
Senate Committee on Environment and Public Works
Oversight Hearing on EPA’s “Good Neighbor Plan”
March 29, 2023**

Introduction

Chairman Carper, Ranking Member Capito, and distinguished members of the Committee, my name is Paul Noe, and I serve as Vice President of Public Policy for the American Forest & Paper Association. Thank you for the opportunity to share our concerns about EPA’s Good Neighbor Plan.

AF&PA represents manufacturers of about 87% of the pulp, paper, paper-based packaging, and tissue products made in the U.S.A., and our forest products industry employs about 925,000 people and produces 5% of our nation’s GDP. The U.S. paper and wood products industry is a significant contributor to our country’s base of renewable energy, producing more carbon-neutral bioenergy than any other industrial sector. On average, about two-thirds of the energy used at AF&PA member facilities is generated as carbon-neutral bioenergy, largely from residuals of our manufacturing process,¹ and we are a leader in the use of highly energy-efficient combined heat and power technology.

AF&PA’s sustainability initiative — *Better Practices, Better Planet 2030* — comprises one of the most extensive quantifiable sets of sustainability goals for a U.S. manufacturing industry and is the latest example of our members’ proactive

¹ “In 2020, renewable bioenergy provided, on average, about 64 percent of member facility energy needs.” 2020 AF&PA Sustainability Goals: Achievements Summary, <https://www.afandpa.org/sites/default/files/2022-02/BPBP2020SustainabilityGoalsAchievementsSummary-2-2-22.pdf>, at 4.

commitment to the long-term success of our industry, our communities and our environment. We have long been responsible stewards of our planet's resources.

We are pleased to report that our members achieved most of our 2020 sustainability goals, including reducing greenhouse gas emissions 24.1 percent during 2005-2020 and improving purchased energy efficiency by 13.3 percent. Our 2030 goal to reduce greenhouse gas emissions by 50 percent is consistent with President Biden's 2030 economy-wide goal, and a leading example for the U.S. manufacturing sector. AF&PA recognizes the ongoing challenges of our changing climate, and our industry greenhouse gas (GHG) goals reflect our commitment to reducing emissions.

Paper products support sustainable living. Paper mills support the American workforce. And the paper industry works every day to be a good neighbor in communities large and small.

Sustainable Regulation

Our goal is sustainable regulation that will stand the test of time. Sustainable regulation must satisfy legal requirements and meet environmental and economic needs as well as social expectations. This is consistent with the dual purposes of the Clean Air Act to protect and enhance air quality so as to promote public health and welfare and the productive capacity of our nation.² The paper industry has invested in important improvements to air quality, and has reduced its nitrogen oxides (NOx) emissions, the focus of this rule, by almost 50% since 2000. Unfortunately, we do not think that this Good Neighbor Plan rule, and especially EPA's inclusion of our industry in it, meets the goal for sustainable regulation.

Historically, AF&PA has had a very good working relationship with EPA. We appreciate when the Agency recognizes that, to achieve emissions reductions, EPA does the very important work to write the rules, but the regulated community does the work

² See Clean Air Act, Section 101(b)(1).

to reduce the emissions. We all benefit when EPA crafts achievable rules that are based on the best available evidence and can be successfully implemented. For example, during the Obama Administration, EPA proposed an unachievable Boiler MACT rule, but EPA engaged stakeholders and carefully considered the data. The final rule was stringent and cost our industry alone over a billion dollars, but ultimately, we defended EPA's rule in court, and our industry could comply and go on to compete in our highly competitive global marketplace. Among other things, the Boiler MACT rule resulted in combustion upgrades and fuel switching that reduced NOx emissions.

By contrast, the rulemaking process for the Good Neighbor Plan felt rushed and broke down. While we worked very hard to provide extensive information and analysis on EPA's Good Neighbor Plan³ – and even updated our assessment based on EPA's feedback -- in the end, we were disappointed and feel that EPA did not take the time to reach out to understand our findings and how they were made. It also is evident that comments were not adequately considered, and the rule suffered as a result. After all the work we put into this rule, we were disappointed that EPA did not provide responses to some of our most important points. For example, EPA failed to respond to our analysis showing that, if EPA excluded misclassified units, then the number of non-attainment areas our boilers contribute to is below the threshold of 10 that EPA proposed.

While AF&PA doesn't expect to agree with every action EPA takes, we do strive for open communication and transparency so the Agency has access to the best available information that is vital for sustainable regulations. Unfortunately, in this instance, EPA moved the goalposts by fundamentally changing the criteria for including our industry in the rule.

³ See EPA-HQ-OAR-2021-0668-0437; AF&PA's June 21, 2022 comments.

EPA Moved the Goalposts

Between the proposed rule and the final rule, EPA moved the goalposts in two ways.

First, ***significance of emissions***: In the proposal, EPA included the pulp and paper sector because **paper boilers as a group** were modeled to “significantly impact” 11 ozone non-attainment areas -- just exceeding EPA’s threshold of 10 -- with more than a 0.01 part per billion (ppb) contribution (relative to the 70 ppb NAAQS), which is 0.014%, or 14 hundred-thousandths, of the ozone NAAQS. AF&PA, using EPA’s air quality modeling tool, provided EPA corrections (to misclassifications of eleven units) to the boiler inventory that showed only 9 areas impacted (only 8 if one excludes boilers not currently operating).⁴ We expressed concern in our comments that EPA was using an inventory that was full of errors and did not fully represent the emissions characteristics of the pulp and paper mill boilers in the covered states. Thus, paper boilers no longer qualified as a Tier 2 non-EGU⁵ source category and should have been dropped from the rule.

But without notice or an opportunity for comment, EPA abandoned the criteria for inclusion in the rule and moved away from the proposal’s air quality significance test.⁶ Instead, in the final rule, EPA **lumped together all non-EGU sources** (other

⁴ <https://www.regulations.gov/document/EPA-HQ-OAR-2021-0668-0249>; material provided to EPA on NOx FIP from NCASI: “Follow-up to Reanalysis of the EPA Air Quality Assessment Tool (AQAT) Screening for the Pulp and Paper Sector” Sept 19, 2022. If EPA had updated their AQAT analysis considering the scope of the final rule excluding Wisconsin and Minnesota, areas with more than a 0.01 ppb contribution from pulp and paper boilers would have dropped to **six areas** using AF&PA/NCASI corrected inventory.

⁵ An EGU is an electric generating unit, i.e., a fossil fuel-fired electric power generation utility. The non-EGU source categories are the nine industrial regulated groups described in footnotes 6 and 7 below, including pipeline transportation of natural gas; metal ore mining; cement and concrete product manufacturing; iron and steel mills and ferroalloy manufacturing; glass and glass product manufacturing; basic chemical manufacturing; petroleum and coal products manufacturing; solid waste combustors and incinerators; and pulp, paper, and paperboard mills.

⁶ See Proposed Good Neighbor Plan Rule, 87 Fed Reg at 20083: “A review of the maximum contribution data indicated that the EPA should focus the assessment of NOX reduction potential and cost primarily on four industries. These industries each (1) have a maximum contribution to any one receptor of greater than 0.10 ppb

industry's boilers, pipeline engines, etc.) to come up with a total average non-EGU impact of 0.19 ppb, which EPA now says is significant (it is 0.27%, or 27 ten-thousandths, of the 70 ppb ozone NAAQS).

Second, ***Cost-Effectiveness***: The proposed rule set out a \$7,500/ton of NO_x threshold in its screening analysis, indicating it would be a reasonable cost for including a source category. EPA erroneously estimated that the cost for including paper boilers would be \$3,800 ton. AF&PA commented that the costs of reductions would be far higher – about 10 times higher (\$37,900) -- and the amount of emission reductions about 25% lower. In the final rule, EPA acknowledges that the average cost-effectiveness is \$33,900/ton during the ozone season – over eight times higher than they originally estimated – and far higher than the \$7,500 threshold in the proposed rule. But instead of excluding paper boilers (and other industries that far exceeded the cost threshold

and (2) contribute greater than or equal to 0.01 ppb to at least 10 receptors. The four industries identified below comprise the “Tier 1” non-EGU industries...

In addition to these industries, the maximum contribution data suggests including five additional industries as a second tier in the assessment. These industries each either have (1) a maximum contribution to any one receptor greater than or equal to 0.10 ppb but contribute greater than or equal to 0.01 ppb to fewer than 10 receptors, or (2) a maximum contribution less than 0.10 ppb but contribute greater than or equal to 0.01 ppb to at least 10 receptors. The five industries identified below comprise the “Tier 2” non-EGU industries. • Basic Chemical Manufacturing • Petroleum and Coal Products Manufacturing • Metal Ore Mining • Lime and Gypsum Product Manufacturing • Pulp, Paper, and Paperboard Mills. “

outlined in EPA’s proposal and background documents),^{7,8} EPA again moved the goalposts in the final rule.

EPA accounted for this shift by stating in the final rule preamble that the “available reductions and cost-levels for the non-EGUs stringency is commensurate with the control strategy for EGUs” (page 87), and **as a class** “emissions from certain non-EGU sources in the upwind states significantly contribute to downwind air quality problems for the 2015 ozone NAAQS, and that cost-effective emissions reductions from these sources are required to eliminate significant contribution under the interstate transport provision” (page 88) – while assuming that each industry could cost-effectively install the controls and meet the limits. Later in the preamble to the final rule, EPA says that the \$7,500 cost-effectiveness threshold is “intended to be a representative figure for evaluating technologies to allow for a relative comparison between different levels of control stringency. The value was used to identify potentially cost-effective controls for further evaluation.” (p. 276). Note that nowhere in the kind of vague, conclusory

⁷ Proposed Rule, 87 Fed. Reg. at 20043: “To identify appropriate control strategies for non-EGU sources to achieve NOX emissions reductions that would result in meaningful air quality improvements in downwind areas, the EPA developed an analytical framework to evaluate the air quality impacts of potential emissions reductions from non-EGU sources located in the linked upwind states. The EPA incorporated air quality modeling information, annual emissions, and information about potential controls to determine which industries, if subject to further control requirements, would have the greatest impact in providing air quality improvements at the downwind receptors. This evaluation was subject to a marginal cost threshold of up to \$7,500 per ton, which the EPA determined based on information available to the Agency about existing control device efficiency and cost information. Additional information on the analytical framework is described in Section VI.B.2 of this proposed rule and is presented in the memorandum titled Screening Assessment of Potential Emissions Reductions, Air Quality Impacts, and Costs from Non-EGU Emissions Units for 2026 (“Non-EGU Screening Assessment memorandum”), which is available in the docket for this proposed rulemaking.”

⁸ Proposed Rule, 87 Fed. Reg. at 20083. “Figure 1 on page 4 of the Non-EGU Screening Assessment memorandum... indicates there is a “knee in the curve” at approximately \$7,500 per ton (all non-EGU cost estimates in the assessment and presented in the rest of this section are in 2016 dollars). The EPA used this marginal cost threshold to further assess potential control strategies, estimated emissions reductions, air quality improvements, and costs from the potentially impactful industries. Note that controls and related emissions reductions are available at several estimated cost levels up to the \$7,500 per ton threshold. (These costs do not include monitoring, recordkeeping, reporting, or testing costs.)

Next, using the marginal cost threshold of \$7,500 per ton, to estimate emissions reductions and costs the EPA processed the CoST run using the maximum emissions reduction algorithm,¹⁶⁷ with known controls.¹⁶⁸ The EPA identified controls for non-EGU emissions units in the Tier 1 and Tier 2 industries that cost up to \$7,500 per ton. The EPA then calculated air quality impacts associated with the estimated reductions for the 27 linked states in 2023....”

language quoted above are there criteria for an industry to determine whether it should be in or out of the final rule.

The proposed rule was clear that it was focusing on non-EGU sources with marginal cost thresholds of up to \$7,500 per ton after identifying the sectors that met the ppb impact criteria. EPA stated that “reductions from any industry identified by this process are more likely to be achievable and to lead to air quality improvements.”⁹ Yet, when better information was presented to the Agency in the comment period showing that our industry did not meet EPA’s thresholds, EPA bypassed these facts and instead made much more general and vague statements about all non-EGU emissions that appear to dismiss the consideration of individual Tier 2 or Tier 1 non-EGU sectors. In fact, in the final rule, EPA no longer uses those Tier 1 and Tier 2 classifications, with only five references in the final rule, even though EPA’s decision logic was closely tied to these classifications in the proposed rule -- which included 70 references to these Tiers. This is yet another indication that EPA fundamentally changed its rationale without notice or an opportunity for comment. This is not a fair process, and it has produced an erroneous and unsustainable rule.

EPA holds out the vague promise of a case-by-case alternative emission limit if a facility can prove “technical impossibility” or “extreme economic hardship.” So, in effect, EPA has taken a Congressionally-delegated authority to consider costs (and promote the productive capacity of our nation), and has converted it into an “impossibility” standard. Based on the information in EPA’s record, EPA should have excluded the whole category of paper boilers. Instead, we are left with a provision that seems unclear, burdensome, and dubious.

⁹ Proposed Rule, 87 Fed. Reg. at 20083.

EPA Made Unrealistic Control Technology Assumptions.

EPA made unrealistic control technology assumptions. EPA claims in its Fact Sheet that the rule uses “**proven, cost-effective control technologies**,” but to the best of my knowledge, that’s not so for our industry. In the final rule, EPA makes sweeping statements that many boilers can install Selective Catalyst Reduction (SCR) because SCR has been identified as Reasonably Available Control Technology (RACT) by several states. But EPA failed to consider AF&PA’s comments that SCR has never been required for paper mill boilers because it is not cost-effective to operate, and getting SCR to work would require reheating the flue gas to 450 degrees Fahrenheit to make the catalyst function. SCR has been examined in state RACT and regional haze reviews but has not been identified as cost-effective for NO_x reduction at paper mill boilers. And at some mills, there is inadequate space to install an SCR reactor prior to the air heater or economizer. We acknowledge that SCR has been used in other sectors, but not in the paper sector.

EPA Disregarded Climate Disbenefits Associated with Expected Controls

Unfortunately, assuming the use of SCR on our boilers by setting emission limits so low (below current New Source Performance Standards for industrial boilers) would result in higher greenhouse gas emissions. We called this environmental disbenefit to EPA’s attention, but EPA dismissed it, even though it is 166,000 metric tons of CO₂e annually, which is equivalent to the emissions of over 35,500 gasoline-powered cars. As part of AF&PA’s voluntary sustainability program, *Better Practices, Better Planet 2030*, we adopted a goal to cut our greenhouse gas emissions by 50% by 2030, which aligns with the Biden Administration’s climate goals. In this case, EPA’s rule will increase our carbon footprint, undermining that goal.

Alternative Approaches Evidently Were Not Carefully Considered

Notably – after imposing compliance costs of about \$14 billion according to EPA, as best we can tell, the final rule will not result in a single non-attainment area coming into attainment. That is how small the upwind state net emission reductions are compared to the emission reductions in the downwind nonattainment areas that are needed to bring those areas into attainment.

As was explained to EPA in the comments by the Midwest Ozone Group (MOG), local sources are more important contributors to ozone non-attainment than sources much further away. For example, an opportunity for important emissions reductions in New York City and the downwind Connecticut non-attainment areas are timely controls on “peaking units” (simple cycle combustion turbines) that operate on high electricity demand days and have relatively high NOx emission rates. EPA and state assessments show that non-attainment at two Connecticut monitors is being caused by these peaking units (Westport and Stratford), and planned controls will help the non-attainment situation. New York and EPA, however, have elected to delay the imposition of those controls for years beyond the 2023 attainment date -- until 2025.¹⁰

MOG recommended that EPA’s modeling and emission inventories should include on-the-books control programs and related permitted emission limits on ozone precursors that significantly impact air quality design values in 2023 and beyond -- rather than imposing controls through the Good Neighbor Plan in the short term. This shifts the emission reduction burden from downwind states to upwind states. MOG also argues this violates the Clean Air Act, which requires that the Good Neighbor requirements applicable to upwind states be implemented in a manner that is consistent with the

¹⁰ See EPA, “Approval and Promulgation of Implementation Plans; New York, Ozone and Particulate Matter Control Strategies” 87 Fed. Reg. 4530 (Jan. 28, 2022); and EPA, “Approval and Promulgation of Implementation Plans, New York, Ozone and Particulate Matter Controls Strategy, 87 Fed. Reg. at 33,438 (June 2, 2022).

implementation of the nonattainment requirements applicable to downwind states.¹¹ These two Connecticut monitors are two of the remaining six monitors that EPA says pulp and paper boilers “significantly contribute” towards. EPA, by its own admission, elected not to address this requirement with respect to any of the nonattainment monitors upon which the rule is based.

Another example is mobile sources’ NOx emissions in the New York City metro area, which have a significant impact on ozone formation (15% of the emissions, while non-EGU point sources are about 6%). In fact, EPA has required tougher NOx requirements on heavy duty truck engines, and the move to electric vehicles will reduce NOx emissions over time in the areas where reductions are most needed. Achieving greater reductions from mobile sources evidently is a much more effective emission reduction strategy.

It seems reasonable to consider that addressing the NOx sources that are close to or right in overburdened communities would provide much greater health benefits -- rather than those that are many hundreds of miles away, or well over a thousand miles away. In the case of the Connecticut monitors, our understanding is that area sources represent about a third of the relative contribution.¹² Even emissions from outside the U.S are bigger sources (greater than a quarter in the NYC area) that add to background ozone levels that unfairly shift control burdens onto U.S. industries.

Finally, we were pleased to see that several states also have expressed concerns about the impact of this rule on industry and our workers,¹³ including Executive Director

¹¹ See MOG comments, pp. 58-61, <https://www.regulations.gov/comment/EPA-HQ-OAR-2021-0668-0323>

¹² MOG also states that EPA should adjust its photochemical modeling along coastlines (e.g., Long Island Sound) where temperature gradients along the land/water interface significantly overpredict ozone formation in the summer. See Midwest Ozone Group comments at <https://www.regulations.gov/comment/EPA-HQ-OAR-2021-0668-0323>

¹³ See for example comments by Arkansas Department of Energy and Environment (<https://www.regulations.gov/comment/EPA-HQ-OAR-2021-0668-0398>), Oklahoma Office of the Secretary of Energy and Environment (<https://www.regulations.gov/comment/EPA-HQ-OAR-2021-0668-0397>) and Louisiana Department of Environmental Quality (<https://www.regulations.gov/comment/EPA-HQ-OAR-2021-0668-0397>)

Well's State of Mississippi, which recognizes that "needless restriction on industrial sources will inevitably shift production outside the United States to countries with much less restrictive emission controls than currently in place in the United States resulting in greater international pollution and transport, cause costs of essential goods and services to rise, and cause the loss of American jobs."¹⁴

Thus, AF&PA believes paper boilers should be excluded from the rule.

Conclusion

The Good Neighbor Plan is not a sustainable regulation. Unfortunately, the Good Neighbor Plan is only the tip of the iceberg, which is the enormous cumulative regulatory challenge now facing the U.S. manufacturing sector. I have worked on regulatory policy for well over 30 years, and I have never seen a regulatory agenda that is so massive and so fraught with unintended outcomes as the current agenda. Many rulemakings blatantly disregard costs and other tradeoffs and otherwise stray beyond the bounds of the law.

Here are just a few of the problematic mega-rules that are imminent:

- EPA's proposal to lower the PM NAAQS¹⁵ is a discretionary reconsideration and should be deferred to the statutory five-year review cycle, given regulatory and economic uncertainty – just as the Obama Administration did in 2011 when it deferred the ozone NAAQS reconsideration to the traditional five-year review cycle. In particular, to avoid air permit gridlock that would prevent investments in manufacturing modernization projects, **EPA should develop an implementation plan** before finalizing the rule -- so our nation can achieve its "Made in America" goals and provide American workers with high-paying jobs while advancing environmental protection.

¹⁴ EPA-HQ-OAR-2021-0668-0300; MS DEQ, June 20, 2022, pp. 2-3.

¹⁵ National Ambient Air Quality Standard for fine particulate matter.

- EPA’s proposal to list PFOA/PFOS as hazardous substances claims Congress “prohibited” EPA from considering cost – contrary to the statutory standard that allows EPA to consider all factors “as may be appropriate.”¹⁶ We appreciate the importance of this issue, but respectfully, this is a rule where **EPA should carefully consider potential unintended outcomes.**
- EPA’s final Human Health Water Quality Criteria for Washington State to our knowledge **cannot be attained by any regulated entity** in the state, whether industrial or municipal.
- The greenhouse gas rule for federal contractors by the Federal Acquisition Regulatory Council, if finalized as proposed, would trigger the major questions doctrine and be declared unlawful on many grounds, including that it would **violate the U.S. Constitution.** Among other things, the rule would violate the Private Nondelegation Doctrine and raise serious due process problems because it would out-source U.S. regulatory authority to international non-governmental organizations.

I am deeply concerned that an undisciplined regulatory deluge threatens high-paying union jobs in rural America just when our country is trying to encourage on-shoring of essential manufacturing industries, including our forest products industry. We must change this trajectory. It threatens U.S. manufacturing, including the U.S. forest products industry. Ultimately, this is a threat to the American worker – men and women with high-paying, high-skilled manufacturing jobs, both rural and urban, in red and blue states. There are proud, hardworking people who only ask for the right to compete.

Our shared goal should be sustainable regulation – regulation that addresses environmental, health and economic needs. This requires bipartisan work. We must keep and create sustainable manufacturing jobs in America – they are critical now and for our country’s future success. There is no better place for a robust manufacturing

¹⁶ See CERCLA, Section 102(a).

sector than the United States, which has highly productive workers, creative entrepreneurs and innovators, abundant resources, a strong free-market democracy, and regulatory agencies capable of leading the world on sustainable regulation.

Thank you for the opportunity to be heard.