



**American
Forest & Paper
Association**

December 28, 2009

Environmental Protection Agency
EPA Docket Center (EPA/DC)
EPA West (Air Docket)
Mailcode 2822T
Attention Docket ID No. EPA-HQ-OAR-2009-0517
1200 Pennsylvania Avenue, NW.
Washington, DC 20460

Re: Comments on Proposed Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, Docket ID No. EPA-HQ-OAR-2009-0517

Dear Sir or Madam:

I am writing to offer the comments of the American Forest & Paper Association (AF&PA) on a proposed rule, published October 27, 2009 (74 Fed. Reg. 55,292), which would modify the thresholds for greenhouse gases for applicability of the Prevention of Significant Deterioration ("PSD") permitting and Clean Air Act Title V operating permit programs (the "Tailoring Rule").

AF&PA is the national trade association of the forest, pulp, paper, paperboard, and wood products industry. The U.S. forest products industry accounts for approximately 6 percent of the total U.S. manufacturing, placing it roughly on par with the automotive and plastics industries. The forest products industry generates over \$200 billion a year in sales and employs approximately one million people earning \$54 billion in annual payroll. The industry is among the top ten manufacturing sector employers in 48 states. We support policy efforts to increase our nation's energy security, and our member companies are leading the effort to achieve this objective by combining advanced technology and innovative manufacturing practices with responsible stewardship of our nation's natural resources.

AF&PA's members operate facilities that often require a Clean Air Act ("CAA") Prevention of Significant Deterioration ("PSD") permit before they may be constructed or modified. They also operate many other facilities that are not currently major stationary sources subject to PSD permitting but nevertheless burn substantial amounts of fuel as part of their operations. As a result, the issues EPA addresses in the Tailoring Rule proposal, concerning application of PSD permitting and Title V permitting requirements to stationary sources based on their emissions of carbon dioxide ("CO₂") and other greenhouse gases (together, "GHGs"), is of critical importance to AF&PA and its members.

Overview

AF&PA's members strongly believe that the CAA is not the appropriate regulatory mechanism to address the challenges of climate change. In our view, the best way to arrive at the right climate change solution for our nation is to develop a single national program, scientifically based and purposefully designed to deal with the issue of climate change, and addressing as well the interrelated issues of energy policy. It is essential as well that climate change regulatory policy promote the health and welfare of Americans by not causing severe adverse economic impacts domestically and placing U.S. industry at a severe international competitive disadvantage.

We believe this is best accomplished through the careful development of a new national law, separate and distinct from the CAA. The Supreme Court's decision in *Massachusetts v. EPA* was that EPA has authority to consider regulation of GHGs under the CAA. The decision did not require, however, that EPA take any particular regulatory action with respect to GHGs, nor did it establish any deadline for EPA to take action concerning regulation of GHGs under the CAA.¹ As EPA has recognized, because of the near-ubiquitous nature of CO₂ and methane, and the fact that CO₂ in particular is emitted by many types of combustion sources in quantities far greater than the "criteria" pollutants that Congress targeted for prevention of significant deterioration program, applying the same annual emissions thresholds for application of PSD and Title V permitting to GHG emissions that apply to emissions of criteria pollutants and other air pollutants would require PSD and Title V permits for orders of magnitude more sources, creating enormous burdens for businesses and regulatory agencies, far beyond what Congress was contemplating when it enacted those provisions. Moreover, allowing the PSD program to become overwhelmed with GHG-related permitting, causing unacceptable delays and stifling economic development and innovation (including conversion to "green" technologies), is clearly not consistent with congressional intent for the PSD program. See, e.g., Report of the Senate Committee on Public Works on S. 3219, S. Rep. No. 94-717 (1976) at 23 ("The Committee does not intend that the permit process to prevent significant deterioration should become a vehicle for inaction and delay....Nothing could be more detrimental to the intent of this section and the integrity of this Act than to have the process encumbered by bureaucratic delay.").

¹ The issue before the Court was "whether § 202(a)(1) of the Clean Air Act authorizes EPA to regulate greenhouse gas emissions *from new motor vehicles*," 127 S. Ct. at 1459 (emphases added), not whether other CAA provisions authorize regulation of such emissions from other kinds of sources. See also *In re: Deseret Power Electric Cooperative*, 14 E.A.D. ___, PSD Appeal No. 07-03 (Nov. 13, 2008), slip op. at 25 ("The *Massachusetts* case spoke directly to EPA's authority to limit air pollutant emissions from mobile sources under CAA section 202(a)(1).")

While AF&PA supports EPA's efforts to reduce those burdens, the Tailoring Rule does not go nearly far enough. AF&PA believes it would be best for all involved if EPA instead recognized, and amended the PSD and Title V regulations to make clear, that Congress did not intend for those programs, and their "major source" thresholds, to be applied to GHGs, and that doing so would be inconsistent with congressional intent and lead to absurd results.

Barring that, EPA should at least defer applicability of PSD and Title V permitting to all GHG emissions, while Congress is proceeding to consider comprehensive legislation to address climate change and while EPA is gathering more information on GHG emissions and developing other mechanisms to reduce any permitting burden. In addition, such a deferral of applicability would be essential to give state permitting authorities time to make needed changes in their statutes and regulations and to hire and train sufficient staff to handle the huge increase in permitting burden they would face (even under the higher GHG applicability thresholds in the proposed Tailoring Rule). This deferral could be accomplished either by expanding the proposed Tailoring Rule, or (at least until other CAA regulations limiting GHG are adopted) by dropping or deferring the CAA-based portion of the recently proposed rules to increase motor vehicle fuel economy and reduce motor-vehicle GHG emissions.²

Applying the current PSD and Title V regulations, including their size cutoffs, to GHG emissions would be catastrophic for businesses and the economy, and counterproductive for the environment.

In the preamble to the proposed Tailoring Rule, EPA indicates that its anticipated promulgation next spring of GHG tailpipe emission standards for motor vehicles will trigger PSD pre-construction permitting requirements, and potentially costly Best Available Control Technology ("BACT") emission controls, for GHG emissions for tens of thousands of new and modified stationary sources every year that would not otherwise be covered by the PSD program. EPA also asserts that

² EPA asserts that the GHG tailpipe emissions standards for motor vehicles that it recently proposed in conjunction with National Highway Transportation Safety Administration motor vehicle fuel economy standards would, once applicable, constitute regulation under the CAA that would trigger application of the PSD and Title V permitting programs to vastly increased numbers of stationary sources because of their GHG emissions. 74 Fed. Reg. at 55,294. In the preamble to the proposed GHG tailpipe emission standards, however, EPA acknowledges that the only technology currently available to reduce GHG emissions from motor vehicles is increasing their fuel economy, which NHTSA proposed to do in a joint proposal with the EPA tailpipe emission standards. See 74 Fed. Reg. at 49,465 col.3, 49,470 n. 49, 49,539. Promulgation of the proposed fuel economy standards by NHTSA would achieve the motor vehicle GHG emission reductions EPA is seeking, without having GHG tailpipe emission standards promulgated by EPA under the CAA that would trigger application of PSD and Title V and all the unacceptable consequences that follow.

promulgation of the GHG tailpipe standards would result in millions of stationary sources exceeding the emission threshold and having to obtain CAA Title V operating permits for the first time. See 74 Fed. Reg. at 55,294. Moreover, EPA recognizes that this huge expansion of PSD and Title V permitting requirements that would be triggered under current regulations as a result of promulgating the GHG tailpipe standards rule would result in PSD requirements that produce “absurd results,” “run contrary to expressed congressional intent for the PSD and Title V provisions, and, in fact, severely undermine both programs.” *Id.* at 55,303; see also, e.g., *id.* at 55,330.

AF&PA strongly agrees with these conclusions, and indeed we believe EPA’s description in the preamble to the Tailoring Rule of the adverse consequences that would result from application of the PSD rules, as written, to GHG emissions is substantially understated. We also believe, as explained below, that even if the Tailoring Rule is promulgated and states immediately adopt its provisions, application of the revised PSD regulations to GHGs still would have serious adverse consequences, placing a great burden on our economy. Application of PSD and Title V permitting to GHG emissions would produce results that often would be counterproductive to the aims of the PSD program, the CAA, climate/GHG reduction goals (by, e.g., increased “leakage” as projects are shifted to other countries), and national energy policy. We believe EPA has greatly underestimated the number and scope of facilities that would fall into the PSD permitting program—causing a breakdown of the system needed to facilitate improvements and expansions—even with the higher PSD applicability thresholds EPA has proposed for GHGs in the Tailoring Rule.

It is alarming to contemplate the problems that would result, for businesses, permitting authorities, and the nation as a whole, if PSD and Title V permits were required for orders-of-magnitude greater numbers of facilities and projects. Even under the current PSD regulations, which do not apply to GHGs, obtaining a PSD permit takes many months, and often more than a year. This already presents a significant constraint on economic development and innovation. It took many years to issue Title V permits for the sources currently covered, and Title V permit modifications that can be required for changes to the facility also generally take many months to process. It is obvious from this experience that state and EPA permitting authorities would be completely overwhelmed by the expansion of current PSD and Title V permitting programs to encompass all sources whose GHG emissions exceed the 100/250 tpy applicability thresholds in the current regulations.

Congress clearly did not intend for the PSD program to require tens of thousands of new and modified sources to have to obtain PSD permits every year (and for EPA and state agencies to have to process tens of thousands of such permits). See, e.g., *Alabama Power Co. v. Costle*, 636 F.2d 323, 353 (D.C. Cir. 1980) (“Congress’s intention was to identify facilities which, due to their size, are

financially able to bear the substantial regulatory costs imposed by the PSD provisions and which, as a group, are primarily responsible for emission of the deleterious pollutants that befoul our nation's air.”); see also *id.* at 354 (“a further look at the legislative history reveal[s] that Congress was concerned with large industrial enterprises—major actual emitters of air pollution. The draftsmen were of the view that certain small industrial facilities within these categories might actually and potentially emit less than the threshold amount.”).³

In that regard, we are troubled by EPA’s statement in the preamble to the Tailoring Rule that such minor sources as small boilers in the 15-20 mmBtu/hr. range and internal combustion engines of 2000 horsepower are the types of sources that “should be subject to PSD.” See 74 Fed. Reg. at 55,334 cols. 1-2. Compare that statement to the D.C. Circuit’s conclusion, in rejecting an approach to PSD applicability under which the heating plant of a large high school or a small community college would be subjected to PSD: “We have no reason to believe that Congress intended to define such obviously minor sources as “major” for the purposes of the PSD provision.” *Alabama Power*, 636 F.2d at 354. There simply is no basis for EPA’s assertion that small boilers and other small sources are the type of facilities that Congress intended to be addressed through the PSD program.

To the contrary, Congress recognized that the PSD provisions of the CAA would impose major burdens on affected sources and would require major commitments of resources from permitting agencies as well, and so the scope of facilities requiring PSD permits was carefully limited. See, e.g., *id.* (“Though the costs of compliance with section 165 requirements are substantial, they can reasonably be borne by facilities that actually emit, or would actually emit when operating at full capacity, the large tonnage thresholds specified in section 169(1). The numbers of sources that meet these criteria, as we delineate them, are reasonably in line with EPA’s administrative capability.”) In other words, Congress did not intend for PSD permitting to apply to many, smaller sources, and Congress clearly did not have in mind, when debating the size cutoff that would accomplish that end, emissions of CO₂ that would be several orders of magnitude greater than the air pollutants contemplated at the time. See also, e.g., House Report on H.R. 6161, H.R. Rep. 95-294 (1977), at 144-45, 1977 Legis. Hist. 2465, 2611-12 (“indirect and mobile sources and smaller stationary sources would not be subject to permit provisions”); Senate Report on S. 252, S. Rep. 95-172, at 96-97 (1977), at 1977 Legis. Hist. 1470-1471 (“Such a [permitting] process is reasonable and necessary for very large sources, such as new electrical generating plants or new steel mills. But the procedure would prove costly and potentially unreasonable if imposed on construction of storage facilities for a small gasoline jobber or on the construction of

³ Similarly, as EPA correctly recognized, at 74 Fed. Reg. 55,347, Congress did not envision the excessive fee burdens and state revenues that applying the statutory default Title V permit fee of \$25/ton would generate when applied to much higher emissions of GHGs than pollutants regulated under the CAA in 1990.

a new heating plant at a junior college, each of which may have the potential to emit 100 tons of pollution annually.”).

It is of critical importance to recognize that Congress did not intend the PSD program to produce the kind of severe restrictions on development and refinement of industrial and commercial facilities that would necessarily result from the permitting gridlock that a huge expansion of PSD permitting applicability would produce. For example, during congressional consideration of 1977 amendments to the CAA to incorporate PSD permitting, Senator Randolph, chairman of the Senate Committee on the Environment and Public Works, said: "I assure Members of the Senate that this program—which would be almost totally administered by the States—will not bring a halt to industrial and commercial activity in this country. It will not prohibit the development of needed energy resources. It will not impose Federal land-use planning on communities. It will not result in high costs to individual citizens." Senate Debate on S. 252, June 9, 1977 (reprinted in 1977 Legis. Hist. 910).

If, because of EPA adoption of GHG tailpipe emission standards or some other regulatory action, GHGs were to become “regulated NSR pollutants” by operation of the current PSD regulations, the overwhelming burden of applying for and obtaining permits for a vastly increased number of sources (many of which are so small that they have not required any kind of CAA permit in the past) would make the permitting programs unworkable and vastly more expensive. It also would have a very real detrimental effect on measures to reduce atmospheric GHG loadings. If indeed the nation will need to make the dramatic reductions in GHG emissions that EPA has suggested are needed in the coming years, it will be critically important to assure that modifications to facilities, for purposes such as fuel switching, energy efficiency, and so forth—which will be essential to reducing or mitigating GHG loadings—can proceed in a timely and cost-effective manner, and will not be burdened by lengthy permitting delays and costly application procedures. There will be little or no incentive for businesses to identify, design, and secure funding for projects to reduce GHG emissions if they know that those projects will be delayed for years by permitting gridlock. Similarly, businesses and local governments will be unwilling to embark on projects that could reduce GHG loadings if there is great uncertainty about what will be required in order for them to get the permits needed for the project. In short, in ways that are clear and unavoidable applying the current PSD and Title V applicability thresholds to GHG emissions would produce absurd results, creating permitting gridlock that is contrary to what Congress intended and that would stifle even environmentally beneficial projects.

The Tailoring Rule does not go far enough to mitigate the absurd results and administrative infeasibility of applying PSD and Title V regulations to GHG emissions.

The Tailoring Rule, as proposed, certainly would help mitigate the adverse impacts of triggering PSD and Title V permitting requirements for sources of GHGs. The Tailoring Rule does not go nearly far enough, however. EPA suggests that, with application of the Tailoring Rule, the number of PSD permit applications that regulatory agencies will have to process will still more than double. See 74 Fed. Reg. 55,331 col. 1. While this is certainly better than the 140-fold increase in permits that EPA projects would result if GHGs were subject to PSD permitting at the same 100/250 tpy threshold as other pollutants, see 74 Fed. Reg. 55,349, it nevertheless represents an unreasonable burden that would stifle economic development and innovation. As noted above, the requirement to obtain a PSD permit, with the cost and lengthy delay involved, already prevents many companies from going forward with many important projects. A doubling of the time required to get a PSD permit would present a much greater disincentive.⁴ Similarly, while we certainly agree with EPA that increasing the number of facilities requiring Title V permits by 400-fold (and therefore increasing the number of projects that might require Title V permit modifications to a similar degree) would be entirely unworkable, see *id.*, the doubling of Title V permitted facilities that EPA asserts would occur under the proposed Tailoring Rule, see 74 Fed. Reg. 55,335 col. 1, also would produce unworkable results and would be counterproductive to goals of reducing GHG atmospheric loadings and otherwise controlling air pollution.

Even at that, we believe EPA has greatly underestimated the number of additional new sources and modification projects that would be subject to PSD and Title V permitting at a 25,000 tpy CO₂e threshold for new/major sources and 10,000-25,000 tpy CO₂e threshold for PSD major modifications, as proposed in the Tailoring Rule. As a result, EPA has greatly underestimated the burdens society would face under the Tailoring Rule.

⁴ Note also that in practice the PSD permitting delays would likely more than double. Not only would permitting authorities have to process twice as many applications (and really, much more than twice as many, as explained in the following paragraph), but each of those new permit applications will on average be more time-intensive. This is because permitting authorities will be dealing with GHG permitting issues for the first time and because there are no default BACT emission levels for them to rely on (since there are no New Source Performance Standards under CAA § 111 or SIP emission limitations under CAA § 110) and no established technologies for controlling CO₂ emissions. Permitting authorities will also be burdened with more minor source permits and permit modifications needed to “net out” of PSD, as explained on p. 10, below. Additionally, the demand for environmental consultants, which all but the largest sources must retain to prepare PSD permit applications, would more than double, since the smaller sources that would now be pulled into the PSD program are more likely to need outside assistance, and sources of all sizes would be dealing with a raft of new issues about how the permitting regulations apply to GHGs.

EPA's claim that the number of new facilities and modifications requiring PSD permits would only double as a result of applying PSD requirements to sources of GHGs above the proposed new thresholds is not credible. EPA anticipates that the majority of the impact of GHG permitting under the terms of the Tailoring Rule would be for boilers. 74 Fed. Reg. at 55,334, col. 1. AF&PA agrees that small boilers and other fossil-fuel combustion units are likely to be the sources that push facilities for the first time into the PSD or Title V "major source" category. It also seems that these types of emission units are likely to be the trigger for a "major modification," requiring a PSD permit, for a project that is adding such a unit or increasing its operation, but that would not be subject to PSD but for its GHG emissions. The 25,000 tpy CO₂e threshold for new/major sources and 10,000-25,000 tpy CO₂e threshold for PSD major modifications, as proposed in the Tailoring Rule, would be exceeded by many times as many boilers (or facilities with more than one boiler or fuel combustion unit) than under the PSD thresholds for other pollutants.

If EPA sets the threshold for PSD applicability at a potential to emit of 25,000 tpy for CO₂, while the threshold is 250 tpy for most sources for all other pollutants that means CO₂ emissions can be up to 100 times greater than any other pollutant before CO₂ becomes the trigger for PSD applicability to a source.⁵ For a gas-fired boiler, the GHG reporting rule GHG emission factor is 117 lb CO₂e/mmBtu. 40 C.F.R. Part 98 Subpart C Table C-1. NO_x would be the criteria pollutant emitted at the highest rate from a gas-fired boiler, say at 0.1 lb/mmBtu. See EPA's compilation of emission factors, AP-42, p. 1.4-6, Table 1.4-2. The ratio of these two factors is 1170, or 11.7 times greater than 100. Thus, the proposed 25,000 tpy CO₂ threshold would be tripped long before NO_x tripped the 250 tpy threshold.⁶ If the boiler's "potential to emit" was based on operating at maximum capacity over a full year, the NO_x threshold would be tripped at 570 mmBtu/hr. heat input, while the CO₂ threshold would be tripped at only 49 mmBtu/hr. For a wood-fired boiler, the GHG emission factor in the GHG reporting rule is 211 lb CO₂e/mmBtu, 40 C.F.R. Part 98 Subpart C Table C-1, while carbon monoxide (CO) would be the criteria pollutant emitted at the greatest rate, say 0.4 lb/mmBtu. The ratio of these two factors is 530, or 5.3 times

⁵ For certain designated categories of sources, the major source threshold is 100 tpy. But many of the sources that are too small to be covered by the PSD regulations for current regulated NSR pollutants would not fall into one of those designated categories. And for boilers in particular, the 100 tpy potential to emit cut-off only applies to boilers with a heat input of more than 250 mmBtu/hr—far larger than the size that would exceed a 25,000 tpy CO₂e threshold. See CAA §169(1) and the following discussion.

⁶ Similarly, emission factors compiled recently by the Department of Energy's Argonne National Laboratory indicate that emissions from small boilers of NO_x, the conventional pollutant emitted at the highest rate in that analysis, were around 50 g of NO_x/mmBtu heat input, but those same boilers emitted about 60,000 g of CO₂/mmBtu, or 1200 times more CO₂ than the next-highest-emitted pollutant. See http://www.transportation.anl.gov/modeling_simulation/GREET/pdfs/esd_av2.pdf.

greater than the ratio of the proposed threshold for CO₂e to the threshold for other pollutants. Thus, a 143 mmBtu/hr wood-fired boiler would trip the 250 tpy CO threshold, while a wood-fired boiler as small as 27 mmBtu/hr boiler would be a major source under the proposed CO₂ threshold of 25,000 tpy.⁷

A similar comparison for lime kilns at pulp mills leads to similar conclusions: The lime kiln CO₂ emissions are the sum of the CO₂ from fossil fuel burning plus the CO₂ released when calcium carbonate is converted to CaO. The GHG reporting rule emission factor for natural gas burned in a lime kiln is 124 lb CO₂e/mmBtu, and 169 lb CO₂e/mmBtu for #6 oil. See 40 C.F.R. Part 98 Subpart AA Table AA-2. In addition, 0.79 ton of CO₂ is liberated for every ton of CaO produced. If the kiln is fairly energy efficient, it would require about 6 mmBtu heat input to produce a ton of lime. Assuming the kiln operates 365 days/yr., a production rate of 59 tpd CaO would give 25,000 tpy of CO₂ based on natural gas firing, or 53 tpd based on #6 oil firing. At the lower end of the range of thresholds EPA is considering for a “significant” increase requiring PSD permitting as a modification, 10,000 tpy, producing less than 24/21 tpd of lime would exceed the threshold. If NO_x is the currently-regulated pollutant with the highest emission rate (using an average of 1.7 lb NO_x/ton CaO for gas-fired kilns or 1.2 for #6 oil), a 129 tpd increase in CaO production at a gas-fired kiln or a 183 tpd increase in CaO production at an oil-fired kiln would have the potential to emit 40 tpy of NO_x, the threshold for a “significant” increase in NO_x under EPA regulations. In other words, a modification of a lime kiln that allows it to process less than 24-60 tpd more lime would require a PSD permit because of CO₂ emissions under the proposed thresholds in the Tailoring Rule, while a modification under current regulations would have to increase lime production by 2 to 9 times as much before a PSD permit would be required.

These comparisons do not even take into account the fact that, in many cases, the applicant may be subject to or propose emission limits—for pollutants other than GHGs—that reduce the “potential to emit” those pollutants to much less than the uncontrolled emission factors would indicate. (For example, under Subpart Db New Source Performance Standards, a low heat release rate boiler would have to have a permit limit no higher than 45 g of NO_x/mmBtu.) In the forest products industry alone, a PSD major source threshold of 25,000 tpy CO₂e would result in many times more wood products facilities (sawmills, particleboard mills, and the like) requiring PSD permits than under current regulations.

Although EPA has proposed a major stationary source threshold for CO₂e that is 100 times higher than for other pollutants, the facts described above show that the small boilers most likely to be affected emit on the order of 500-1200 times more CO₂ than other pollutants. (Even EPA acknowledges that “at a combustion source... GHGs may be from several hundred times to over one thousand times the emissions of

⁷ As noted on pp. 4-5 above, Congress never intended that a facility as small as one with just one boiler in the 27-49 mmBtu/hr. range should be subject to PSD.

other combustion pollutants.” 74 Fed. Reg. 55,347 col.1. This suggests that the Tailoring Rule could easily result in businesses needing to obtain, and regulatory agencies needing to process, 10 times as many PSD permits than they do now. (A number of states in which AF&PA members have operations also have been saying they believe that the Tailoring Rule would result in several times more new and modified sources being required to obtain permits than currently.) This is a recipe for permitting overload and gridlock almost as devastating as that which EPA has attributed to applying PSD and Title V permitting without the Tailoring Rule. It would be arbitrary and capricious, and indeed irresponsible, for EPA to proceed on the assumption that the Tailoring Rule would result in a manageable number of additional sources subject to permitting requirements, when the facts show that many times more sources and modifications would be subject to PSD because of their CO₂ emissions than because of other pollutants.

Note also that this analysis omits, as did EPA's, the increased demands on state and local permitting authorities resulting from the need for many more, and more complex, “minor source” new source review and operating permits because of applying PSD requirements to GHGs. EPA regulations allow, indeed encourage, sources to accept limitations on their operations or their emissions to ensure that they will not exceed major stationary source or major modification cutoffs. Also, in many cases sources may avoid the delay and cost of PSD permitting by reducing emissions at other emission units at the plant, so as to keep net emissions increases from a project to less than applicable thresholds. These restrictions generally have to be incorporated into state air permits. Even if EPA promulgates PSD regulations for GHGs that are based on some measure of actual emissions rather than “potential to emit,” sources still may need to get new permit limitations for GHGs (or for operating rates to constrain GHG emissions) in order to be below major source/major modification thresholds. This tremendous expansion in the need for new or modified minor source permits would fall on the same state and local permitting authorities already overwhelmed by the increase in PSD and Title V permits required for GHG sources. EPA must take this into consideration in setting any applicability threshold and in evaluating the economic and social impacts of the set of GHG regulations EPA is considering.

EPA should exclude GHGs from the PSD and Title V regulations.

While steps like the reaffirmation of the PSD Interpretive Memo (proposed Oct. 7, 2009, 74 Fed. Reg. 51,535) and the proposed Tailoring Rule may help mitigate the adverse and unintended consequences of applying PSD permitting requirements to GHGs, rather than focusing on these “band-aids,” EPA should conclude that forcing GHG emissions and concerns into the PSD framework at this time would be administratively infeasible and would lead to absurd results, while promoting litigation and prolonging uncertainty that inhibits investments needed to

accelerate and consolidate our country's economic recovery. Accordingly, EPA should exclude GHGs from the PSD and Title V permitting programs.⁸

As an initial point, nothing in the Supreme Court's *Massachusetts v. EPA* decision requires EPA to interpret the CAA as applying PSD and Title V permitting to GHG emissions. The Supreme Court in *Massachusetts* did not, as Petitioners imply, hold that EPA must regulate CO₂ and other greenhouse gas emissions under all or any of the various CAA sections that authorize EPA regulatory action. Rather, the Supreme Court's decision addresses only whether EPA has the authority—if specific statutory criteria are met—to regulate CO₂ and other greenhouse gas emissions from new motor vehicles under section 202(a)(1) of the Act, 42 U.S.C. § 7521(a)(1). See 127 S. Ct. at 1462 (“we hold that EPA has the statutory authority to regulate the emission of such gases from new motor vehicles.”); *id.* at 1459.⁹

Also, the proposed Tailoring Rule rests on the implicit assumption that EPA regulations that impose PSD permitting requirements on a source that is “major” for any pollutant that is “subject to regulation under the Act,” 40 C.F.R. § 52.21(b)(50)(iv), are an accurate reflection of what the CAA authorizes and requires. This is not at all clear, however. AF&PA notes that there is a question, raised by some commenters on the PSD Interpretive Memo, about whether PSD permitting requirements may be imposed at all on a source that is “major” (or a modification of a major source that has a significant net emissions increase) solely for pollutants for which EPA has not set a National Ambient Air Quality Standard (“NAAQS”) under CAA Section 108. The statutory language that introduces the requirement for states to have PSD programs says that each SIP “shall contain emission limitations and such other measures as may be necessary... to prevent significant deterioration of air quality in each region... designated pursuant to section 107 as attainment or unclassifiable.” CAA § 161. Section 165(a) of the CAA prohibits construction of a major emitting facility “in any area to which this part applies” (referring to Title I Part C, Prevention of Significant Deterioration of Air Quality). These passages indicate that the question of whether a facility is a “major

⁸ EPA also needs to recognize that it likely faces vigorous legal challenges to one or more of its proposed regulations and administrative policies attempting to mitigate the burdens that PSD permitting for GHGs would impose on sources, permitting authorities, and the public. EPA's intricately-woven net of intended mitigation measures and their timing therefore is vulnerable to disruption, with the result that the huge expansion of PSD permitting EPA is trying to avoid being triggered anyway. EPA should simply exempt GHGs from application of PSD entirely, if it is to have the best chance of avoiding these undesirable and unintended permitting consequences of starting to subject GHGs to limitations under the CAA.

⁹ Indeed, even with respect to greenhouse gas emissions from motor vehicles, the Supreme Court did not hold that EPA was required, under section 202(a)(1) of the Act, to regulate such emissions or even to decide whether to regulate them. See *id.* at 1463 (“We need not and do not reach the question whether on remand EPA must make an endangerment finding, or whether policy concerns can inform EPA's actions in the event that it makes such a finding.”).

emitting facility” subject to PSD requirements is tied to the attainment (or unclassifiable) status of the area in which the facility is located. Since there are no NAAQS, and therefore no attainment or unclassifiable designations, for GHGs, EPA could conclude that PSD requirements do not apply to a facility that is “major” only as to its emissions of GHGs.

The question of whether the CAA PSD provisions apply to a source that is not “major” for any pollutant for which a NAAQS has been set, and therefore for which the area is classified as “attainment” or “unclassified,” is a legal question, but it overlaps with the practical implications of applying PSD requirements to GHGs. Since there are no NAAQS and no PSD increments for GHGs (and indeed those criteria would make no sense for GHGs, where the concern is global atmospheric loadings rather than local or regional ground-level pollutant concentrations) the purpose of the PSD provisions of the CAA—to prevent significant deterioration of air quality in an attainment area and to assure that a project will not result in an exceedance of the NAAQS—would not be furthered by applying PSD permit review to sources that are major only for GHGs.¹⁰ Unlike the emissions for which the PSD program was designed, reducing GHGs emissions in Alaska contributes just as much to reducing atmospheric loadings as reducing GHG emissions in Alabama. Moreover, there is no reason to think that requiring the Best Available Control Technology to reduce GHG emissions from new and modified major sources is anywhere near a cost-effective means to achieve a given GHG atmospheric loading reduction goal...and to achieve the ambitious GHG reduction targets EPA has suggested are needed, it would be imperative for the nation’s resources to be focused on the most cost-effective ways to reduce GHGs.

Applying Title V permitting requirements to GHGs makes even less sense. The Title V permit is not intended to impose new compliance obligations, see, e.g., CAA sections 502(b)(5)(A) and 504(a). There are almost no existing federally applicable GHG compliance obligations to be consolidated into a Title V permit, and no emission limitations for which monitoring requirements could be specified in a Title V permit. Title V permits therefore are not needed for sources or the public to understand the sources’ compliance obligations related to GHG emissions.

Thus, it would be entirely appropriate for EPA to conclude that Congress did not intend the PSD and Title V permitting programs to apply to a situation like emissions of GHGs and their potential contribution to global climate change. AF&PA believes EPA could do so as a straight matter of statutory interpretation, but EPA also could make the same kinds of arguments it makes in the preamble in support of the proposed Tailoring Rule, that trying to fit the very different considerations raised

¹⁰ Cf. Conf. Report on CAA Amendments of 1977, H.R. Rep. 95-564 (Aug. 3, 1977), at 148 (PSD portion of the statute “requires State implementation plans to be amended to include requirements that will prevent the significant deterioration of air quality *where such air quality is presently cleaner than existing ambient air quality standards.*” (Emphasis added.)

by GHGs into the CAA PSD and Title V programs would lead to absurd results that would frustrate the intent of Congress and render those programs virtually impossible to administer.

For the reasons discussed below, even with adoption of the Tailoring Rule as proposed, application of PSD and Title V permitting requirements based on GHG emissions would still impose a huge burden on businesses, regulators, and the entire economy. (It would also create an untenable situation in which many states felt obliged to require PSD permits even for smaller sources until their laws and regulations were amended.) And in any event there is no reason to believe this problem would diminish over the five-year term for which EPA proposes to delay application of PSD and Title V to smaller sources of GHGs. EPA should recognize these inevitable truths and face the fact that the PSD and Title V programs were not enacted with global atmospheric loadings and the much larger universe of GHG sources in mind. EPA should acknowledge that it is irrational to try to force GHG emissions, where the concern is achieving a broad reduction in total GHG loadings to the global atmosphere, into Clean Air Act programs designed to prevent unacceptable deterioration of relatively high-quality air in the vicinity of a new or modified source (in the case of PSD) and to collect and clarify the applicable limitations and conditions for a source's air emissions (in the case of Title V). EPA should therefore conclude that the PSD and Title V regulations must be amended to exclude GHGs from determinations of whether applicability thresholds have been exceeded and from any control requirements. Otherwise there will inevitably be confusion, delay, and interference with legitimate growth and pollution control and prevention projects.

At the least, EPA should defer application of PSD and Title V programs to GHGs altogether.

EPA should not, and indeed must not, implement the PSD and Title V programs in a way that would have such an unacceptable burden and unworkable implementation as the huge expansion of those programs described above would have. If EPA has the authority, as it has argued, to depart from statutory and regulatory thresholds in order to avoid "absurd results" and "administrative infeasibility" when applied to GHGs, then for the same reasons EPA can defer application of PSD and Title V to GHGs altogether.

As AF&PA sees it, it is almost impossible, under the circumstances, for EPA to come up with a version of the Tailoring Rule that would apply PSD and Title V to some sources without creating widespread confusion and delay, at best, in the permitting programs. Rather than rush ahead and impose the PSD and Title V permitting obligations on sources of GHGs, EPA should defer those obligations while Congress is considering comprehensive climate change legislation, and while EPA is learning more about stationary source GHG emissions (through the recently

promulgated mandatory GHG emission reporting regulations) and developing and evaluating ways to mitigate the tremendous administrative and financial burdens if PSD or Title V permitting has to be imposed on some sources based on their GHG emissions. There is ample authority for EPA to do so.

First, EPA has substantial discretion in implementing the PSD program, and EPA has taken steps in the past to delay implementation of aspects of the PSD program in order to avoid administrative impracticability. The 1980 PSD regulations contained a number of transition provisions, for example, that delayed applicability to certain classes of sources. Also, EPA has for a decade effectively deferred application of PSD provisions based on PM_{2.5} emissions, despite adoption of National Ambient Air Quality Standards for PM_{2.5} in 1997, relying on PM₁₀ instead because of problems measuring and modeling PM_{2.5} emissions. See 73 Fed. Reg. 28,321, 28,324 (May 16, 2008). As evidenced by the Tailoring Rule preamble, the administrative and technical problems posed by requiring PSD permits and BACT for GHGs dwarfs the problems posed by PM_{2.5}. EPA has particular flexibility in defining which modifications will require PSD permits. The CAA does not set any threshold for which modifications must be covered by a PSD permit, and the legislative history of the CAA does not suggest Congress “had details of regulatory implementation in mind when it imposed PSD requirements on modified sources.” *Env'tl. Defense v. Duke Energy Corp.*, 127 S. Ct. 1423, 1433-34 (2007).

Secondly, the arguments EPA offers in the preamble to the proposed Tailoring Rule for why it can depart from a literal application of CAA PSD and Title V requirements to all sources that emit more than 100/250 tpy of GHGs could be applied as well to deferring application of PSD and Title V to GHGs altogether. As noted above, requiring Title V permits even for only the larger sources of GHGs would not produce any environmental benefit (because there are no GHG emission limitations to consolidate into a Title V permit, and GHG monitoring and reporting is already required under the recently promulgated GHG mandatory emission reporting rule). And imposing PSD permitting requirements, even only for larger GHG sources, would have precious little environmental benefit: there are no ambient standards or PSD increments to apply, and there are no demonstrated CO₂ emission control technologies per se to apply through the BACT requirement (and even if there were, there likely are much less costly ways to achieve the same reductions in CO₂ emissions). Moreover, greatly expanding the number of sources requiring PSD or Title V permits will jam the permitting process and delay or preempt countless projects, especially when permit writers have virtually no guidance or precedent to help them with GHG permitting. These circumstances all constitute the kind of absurd results and administrative infeasibility that EPA claims justify departing from the strict language of the statute through the Tailoring Rule.

Moreover, EPA says, in VII.B. of the preamble to the proposed Tailoring Rule, that developing and implementing various potential techniques to “streamline” and

reduce the burden of PSD and Title V permitting, some of which are discussed below, would take 3-4 years. AF&PA questions why it should take 3-4 years for EPA to adopt the new guidance and policies, or make the modifications to the regulations, that EPA is considering, especially given the critical importance of this issue. But certainly the time needed for EPA to consider and adopt mechanisms for reducing the cost and delay associated with expansion of the PSD and Title V permitting programs to encompass GHG emissions is another strong rationale supporting deferral of PSD and Title V application to GHG emissions altogether.

Finally, EPA has given inadequate consideration to the efforts that would be required on the part of state and local permitting authorities just to be able to process the onslaught of PSD and Title V permits required because of sources' GHG emissions. As explained above, even if the Tailoring Rule were adopted as proposed, and even if it withstands judicial review, permitting agencies will still be faced with at least a doubling and more likely many times more permit applications that will have to be processed and evaluated. Permitting agencies will need time to hire and train the additional personnel needed for that additional workload (not to mention the increased budget to do so). Moreover, even once EPA adopted the Tailoring Rule, for the majority of states, which have approved PSD programs, the old 100/250 tpy thresholds may continue to apply to GHGs as a matter of state law until the state has changed its permitting regulations and maybe even its statutes. State and local permitting authorities have already made this point to EPA in comments on proposed GHG emission standards for motor vehicles. See, e.g., comment letter dated Nov. 25, 2009 sent by Metro 4, Inc. and Southeastern States Air Resource Managers, Inc. on behalf of fourteen local and state air pollution control agencies. If EPA does not give states adequate time to make this transition, the unacceptable scenario EPA is attempting to avoid through the Tailoring Rule will occur despite EPA efforts.

Deferring application of PSD to GHGs for this reason would be entirely consistent with Congress's intent, expressed in the CAA Amendments of 1977, that new pollutants become subject to PSD only over a period of years, not immediately as EPA says would occur for GHGs absent the Tailoring Rule. In the 1977 Amendments, EPA was given two years "to propose regulations for increments or other means for preventing significant deterioration" for four criteria pollutants (pollutants subject to NAAQS) for which the legislation did not supply increments. Those regulations then would not go into effect for another year. Then at that point, "revision of State Implementation Plans would begin." Additionally, PSD "[r]egulations for new ambient air quality standards are to be followed within two years by measures to prevent significant deterioration." H.R. Rep. 95-564 at 151.

If EPA fails to defer application of the PSD and Title V programs to GHGs, it should at the very least increase the proposed applicability thresholds.

If EPA does not defer application of PSD and Title V to GHGs altogether, as the preceding comments advocate, EPA at the least should substantially increase the applicability thresholds.¹¹ Based on the analysis presented above, which suggests that the proposed 25,000 tpy threshold could cause 10 times as many new and modified sources to have to obtain PSD permits, it would make sense to set a PSD threshold for GHGs of at least 100,000 tpy. This would still pull in many fossil-fuel combustion sources that would not be considered major for any other pollutant. We do not necessarily agree that assessing what portion of aggregate national stationary source GHG emissions would be “covered” at various threshold levels is an appropriate way to consider whether a threshold will avoid the unintended and unworkable consequences of an overbroad applicability provision. But since EPA has considered that factor, we note that the information EPA provided in the preamble to the proposed Tailoring Rule shows that a relatively small reduction in the percentage of national stationary source emissions covered would produce a substantial reduction in the number of additional sources that would have to obtain PSD and Title V permits.

For example, according to Table VIII-1 at 74 Fed. Reg. 55,332, increasing the major modification threshold from 25,000 to 50,000 would reduce the number of permits that would have to be issued per year by almost half, and it would cut it by almost three-quarters compared to the lower modification threshold of 10,000 tpy that EPA is considering. Yet increasing the modification threshold from 25,000 tpy to 50,000 reduces the percentage coverage of nationwide stationary source GHG emissions by only three percentage points, and increasing it from 10,000 to 50,000 reduces the percentage coverage by only 5 percentage points. See Table VIII-2 at 74 Fed. Reg. 55,333. Those same tables indicate that increasing the threshold from 25,000 to 100,000 reduces the number of major modifications that would have to obtain permits each year by almost two-thirds, but it only reduces the percentage coverage of nationwide stationary source GHG emissions by four percentage points. (We believe the analysis would be similar—although the relief provided by higher thresholds would be much more dramatic—if a more reasonable, higher estimate of the number of sources affected at the proposed Tailoring Rule applicability thresholds, as discussed above, was used in the analysis.)¹²

¹¹ Of course, even if PSD and Title V applicability to GHGs is deferred for a number of years, higher applicability thresholds would still be needed after the deferral, if Congress had not addressed the issue by then, since even with all the time in the world federal, state, and local permitting authorities could not feasibly develop the capability to promptly process permits for the millions of sources whose potential to emit GHGs exceeds 100/250 tpy.

¹² On a related note, AF&PA was concerned by EPA statements in the preamble to the proposed Tailoring Rule that discuss “strategies for obtaining GHG reductions from sources under the proposed GHG permit thresholds,” i.e. “through means other than PSD and Title V

Increasing the number of new facilities and modifications of existing facilities that will have to obtain PSD permits by a factor of 2, 4, 10 or more would wreak havoc with the permitting programs, resulting in unreasonable delays, excessive costs for both industry and permitting authorities, and ultimately a reduction in environmental protection by decreasing the attention that could be paid to each permit, and by greatly delaying or effectively precluding many projects that would have net environmental benefits (including a net improvement in GHG loadings). While we believe the right thing for EPA to do is to exempt or defer application of the PSD and Title V programs to GHGs altogether, if EPA refuses to do that EPA should at a minimum increase the applicability thresholds to 100,000 tpy CO_{2e} for major source status and between 50,000 and 100,000 tpy, and certainly no lower than 50,000 tpy, for modifications.¹³

If EPA is going to subject GHG emissions to PSD permitting, it should make needed clarifications to the PSD program at the same time.

If, despite the points we have made above, EPA promulgates something like the Tailoring Rule as proposed, EPA should at the same time clarify existing regulations or adopt changes to those regulations to address issues that will become even more important once the PSD rules are applied to many more sources due to their GHGs emissions. EPA has been involved in a years-long project to improve and clarify the workings of the PSD regulations, and it is not good policy for EPA to

during the first phase” of the Tailoring Rule. See 74 Fed. Reg. at 55,325. The Title V program is, by congressional directive, not to be a program for imposing new reductions in or “mitigating” emissions of pollutants. See, e.g., CAA §§ 502(f) and 504(a). Thus, exempting sources of GHGs below a certain size cutoff from Title V permitting in no way creates a rationale for EPA to impose other regulatory requirements that would reduce GHG emissions from such sources. Similarly, the PSD program is designed to avoid “backsliding” where emissions from large new or modified sources would interfere with continued attainment of air quality standards in clean-air areas. Congress did not intend the PSD provisions of the CAA to be used for purposes of reducing emissions (overall or in attainment areas) from existing sources, nor is reducing emissions even from new and modified sources a broad goal of the PSD program, other than ensuring that the best available control technology is used. To the extent EPA is suggesting that there is some legal or policy reason to develop ways to reduce GHG emissions from sources falling below the applicability thresholds in the Tailoring Rule, simply because they will not be subject to PSD and Title V permitting, there is no legal or logical reason for that assertion.

¹³ Setting both the major source threshold and the modification threshold at 100,000 for GHGs would be consistent with the way the current PSD regulations address carbon monoxide (CO). Under 40 C.F.R. § 52.21(b)(23)(i), the significance level for modifications is 100 tpy for CO, the same threshold used to determine whether listed source categories have potential emissions of CO or other regulated pollutants that make the source “major” and subject to PSD

implement a huge expansion of the number of sources covered by the PSD regulations before EPA has completed work on improving those regulations.

In particular, if EPA persists in applying PSD to GHG emissions, it would be especially important for EPA to clarify application of the exclusion from PSD, under existing regulations, for changes at a facility that merely result in the increased utilization of a unit or increased fuel burning or burning of an alternative fuel, provided the unit was capable of accommodating that change. See 40 C.F.R. § 52.21(b)(2)(iii)(e) - (f). Since EPA has identified combustion sources like boilers as the primary units that will be affected by or will trigger PSD permitting for GHGs, see 74 Fed. Reg. at 55,334, there will be an increased number of questions about whether increases in fuel consumption or fuel-switching at those units are exempted from being a PSD major modification.

In that regard, we encourage EPA to reinforce the interpretation it applied to those exemptions from the definition of modification soon after they were promulgated: that, so long as a unit itself (not including peripheral equipment) is capable of burning a fuel, or is capable of burning greater quantities of a fuel, the increased emissions associated with fuel switching or increased utilization are not counted in determining a “net emissions increase,” regardless of whether other changes at a facility made the fuel switching or increased rate of operation necessary or more desirable. Since, as noted above, burning just 27 mmBtu/hr. of wood could cause an increase in CO₂ emissions of 25,000 tpy, a change in utilization of only about 5% in a 600 mmBtu/hr. boiler could be a major modification for CO₂ (and less than 2% if EPA sets the modification threshold at 10,000 tpy). Clarification of the exemptions for fuel switching and increased fuel use is needed, or else countless activities at a facility would have to be evaluated as potentially triggering PSD for CO₂.

Similarly, EPA needs to clarify how debottlenecking projects will be treated and how projects must be aggregated for PSD applicability purposes. EPA should clearly indicate in the regulations as well how “contemporaneous” increases and decreases of GHGs will be addressed with respect to changes in GHG emissions that took place before they became regulated under the PSD rules. (Logic suggests that increases and decreases in GHG emissions prior to that date be disregarded when assessing a project that will increase GHGs after they become subject to regulation, especially since for most sources very little information about GHG emissions prior to that date will be available.)

AF&PA also believes that, in light of the lack of current limitations on GHG emissions, and the practical inability for a source to secure such limitations once the permitting authorities are overwhelmed by the doubling or tripling or more of their permitting load under the Tailoring Rule, EPA needs to make every effort to modify or clarify its regulations and policy concerning the determination of a source’s

“potential to emit” GHGs. EPA has asserted in the past that it has substantial discretion in determining such details of the PSD program, and the courts have agreed. There is a clear need to base applicability for GHG emissions on a measure more reflective of reality than the source’s theoretical ability to emit CO₂ at the maximum fuel-burning rate every hour of the year. Additionally, while we think it is clear from existing regulations, EPA also should reinforce explicitly that the GHG emissions to be assessed are those from the source itself, and not those from activities like transportation or off-site electricity generation that have some connection with the source.

Also, although EPA is in the process of reconsidering whether and how fugitive emissions of conventional pollutants should be counted in determining whether a facility exceeds major source or major modification thresholds, for GHGs EPA should make it clear that fugitive emissions do not need to be included. Very little information is available that would allow even a reasonable estimate of fugitive GHG emissions. Reflecting that fact, EPA’s recently promulgated mandatory GHG emission monitoring and reporting regulations generally do not require inclusion of fugitive emissions in recordkeeping and reporting. EPA should avoid adding any unnecessary complexity to PSD and Title V applicability determinations for GHGs, and attempting to account for fugitive GHG emissions definitely would complicate such determinations.

In the preamble to the Tailoring Rule, EPA briefly describes separate efforts it has underway to consider how BACT requirements might apply in the context of GHG emissions, and whether EPA may be able to issue guidance that would reduce somewhat the burden of BACT analyses for GHGs. AF&PA supports those efforts as a general matter, and we have been participating in stakeholder workgroup discussions about BACT issues raised by applying PSD to GHGs. We look forward to participating in what we hope and presume will be a transparent process, with public input, as EPA develops BACT guidance specifically intended for GHGs. While AF&PA believes that issues of BACT for GHG are for the most part beyond the scope of the proposed Tailoring Rule and these comments on that proposal, we already have some concerns about some of the comments EPA has made in the preamble to the proposed Tailoring Rule and in other settings.

For example, statements about “presumptive BACT” in the preamble seem inconsistent with the fact that BACT is by statute supposed to be a case-by-case analysis, rather than the imposition of national emission standards. See CAA §§ 165(a)(4) and 169(3). AF&PA also is concerned that EPA seems to be suggesting that it could be appropriate, under the rubric of determining BACT, to tell a source what type of combustion unit it must build, or what type of fuel it may use, or how it must engineer its manufacturing operations to reduce demand for the thermal energy or electricity that the combustion unit will generate. Such expansion of the statutory requirement to assure that the best available control technology is used for a

particular project, into an inquiry by the permitting authority into whether a plant can be designed or operated more efficiently, or whether it might be environmentally preferable for the plant to be proposing a different kind of project, would be inconsistent with EPA's statutory authority, long-standing EPA interpretations and policy, and judicial and Environmental Appeals Board decisions.

In the ways described above, among others, the preamble to the Tailoring Rule reads like a description of a wide-ranging and on-going policy discussion—a work-in-progress rather than a proposal for a huge new regulatory program set to go into effect next year. This further supports AF&PA's recommendation, as set out above, that EPA should defer entirely application of the PSD and Title V programs to GHG emissions at this time.

PSD and Title V should only apply once emissions of a GHG are actually limited by federal regulations.

While it may not be EPA's intent, the proposed Tailoring Rule appears to be written so that GHG emissions above the thresholds would trigger PSD and Title V applicability as soon as the Tailoring Rule goes into effect. See, e.g., proposed 40 C.F.R. 52.21(b)(1)(i)(d)). That would be inconsistent with EPA's claim of statutory authority to apply these permitting programs to GHGs. In particular, EPA has asserted, in the preamble to the proposed Tailoring Rule and also in EPA's proposal to reaffirm the "Johnson Memo" interpreting when PSD and Title V apply to GHGs, 74 Fed. Reg. 51,535, that stationary source permitting requirements only apply to GHGs once there is a limitation on emissions of the GHG imposed under federal law. Thus, until GHGs are subject to emission limitations under Title II of the CAA (for motor vehicles) or some other CAA authority, EPA cannot apply PSD and Title V permit requirements based on a source's GHG emissions. See, e.g., 74 Fed. Reg. at 51,547.

The Tailoring Rule needs to be very clear that GHGs are not counted for purposes of determining whether a new source or modification will exceed PSD applicability thresholds, and whether a source needs a Title V permit, until the GHG is actually subject to an emission limitation issued under the CAA.¹⁴ If GHG tailpipe

¹⁴ Note that EPA states in the preamble to the proposed Tailoring Rule that PSD permitting requirements for GHGs would be triggered "when a rule controlling those pollutants is promulgated (and even before that rule takes effect)." 74 Fed. Reg. at 55,300 col 2. EPA has proposed to change that interpretation in its reconsideration of the Johnson Memo, see 74 Fed. Reg. at 51,546. We agree it should be changed (as we urged in our comments on the reconsideration of the Johnson Memo). Indeed, we see no basis for that interpretation, since it is inconsistent with EPA's analysis (with which we agree) that a pollutant is not subject to regulation under the CAA until its emission is actually limited—and that does not occur when a rule is promulgated, nor even on the rule's effective date if compliance is not required until some later date.

emissions standards are the first such limitation, then PSD and Title V would begin to apply to the pollutant(s) regulated by such standards at the time motor vehicle manufacturers are required to certify compliance with them. For similar reasons, EPA lacks authority to impose PSD and Title V requirements on emissions of a pollutant that is considered a greenhouse gas but is not yet subject to any promulgated emission limitation under the CAA. The Tailoring Rule appears to be written so as to apply PSD and Title V to all six GHGs listed even if they do not all become subject to emission limitations at the same time (for example, because they are not all emitted by motor vehicles or included in motor vehicle tailpipe emission standards). That would conflict as well with EPA's legal rationale for subjecting GHGs to PSD and Title V.

EPA can and should disapprove state permitting programs to the extent they expand PSD or Title V applicability beyond the coverage of the final Tailoring Rule.

The proposed Tailoring Rule has a huge loophole that could totally frustrate the purposes for which EPA says it is proposing to adopt the Tailoring Rule. EPA proposes to modify its approval of existing state PSD programs so that the states will not be *required* to apply PSD to sources that would be "major" only because they have GHG emissions greater than 100/250 tpy but less than 25,000 tpy. Under the approach to State Implementation Plan approval/disapproval EPA proposed in the Tailoring Rule, however, states would be free to include in their state PSD programs such smaller GHG sources. In fact, it appears that states would have to affirmatively amend their regulations to exempt such smaller sources, unless their regulations incorporate EPA's PSD regulations by reference (and the state's rules on incorporation by reference allow updating to include the latest version of those EPA regulations).

The result of this approach seems almost certain to be mass confusion and, at least in the first months and years, requirements to apply for and obtain a PSD permit in many states for sources whose GHG emissions are over 100/250 tpy. That will produce exactly the kind of overload of permitting authorities and permitting gridlock that the Tailoring Rule is supposed to avoid. It also would create an unacceptable patchwork of states having differing PSD applicability thresholds, making compliance a particular challenge for industry. EPA could claim that the same principles of administrative necessity and avoiding absurd results on which EPA based the proposed Tailoring Rule support EPA mandating through the Tailoring Rule that state programs do not require PSD and Title V permits for smaller sources of GHGs.

As EPA explained in the preamble to the proposed Tailoring Rule, various CAA provisions governing EPA review and approval of State Implementation Plans have the effect that "EPA may approve the SIP PSD provisions only if EPA is

satisfied that the state will have adequate personnel and funding to administer the PSD program, including conducting the appropriate analyses for new and existing sources, issuing the permits, conducting enforcement, and taking other necessary administrative action.” 74 Fed. Reg. at 55,341 col. 1. EPA currently has enough information to conclude that states would not have adequate resources to implement their state PSD programs if the threshold for GHGs is 100/250 tpy, or anything near that level. EPA therefore can and should disapprove state SIPs to the extent they require PSD permits for sources/modifications below the thresholds established in the Tailoring Rule. Failure to disapprove such SIPs will create great confusion for potentially regulated sources and will generate the kind of permitting gridlock (and “absurd results”) that EPA is seeking to avoid.¹⁵

EPA should exempt CO₂ emissions of biomass origin from PSD applicability thresholds.

EPA has ample authority to exclude CO₂ emissions generated by combustion of biomass from the determination of whether a facility is a major stationary source or is undergoing a major modification for PSD purposes. In fact, EPA has repeatedly asserted that it has similar types of flexibility to interpret the PSD provisions of the Clean Air Act PSD, including in the proposed Tailoring Rule.

For example, EPA has asserted authority in the proposal to define which chemicals are included in the “air pollutant” called “greenhouse gases” that will be subject to PSD. See, e.g., proposed 40 C.F.R. § 52.21(b)(59) and 74 Fed. Reg. 55,292, 55,329. Defining the pollutant that will be subject to PSD permitting (if the emissions threshold is exceeded) as the aggregate of six chemicals whose emissions are thought to contribute to global warming, and not any other chemicals whose emissions might also contribute to global warming—which EPA asserts it has discretion to do under the CAA—is conceptually comparable to defining the “air pollutant” to which the PSD thresholds will be applied as “non-biogenic CO₂” and not including biogenic CO₂.

There is precedent as well in previous EPA regulations implementing the PSD program. For example, EPA has by regulation excluded certain compounds, which are in fact “volatile” and “organic,” from the definition of “volatile organic compounds” (VOCs) for purposes of applying the PSD regulations, including applicability thresholds. See 40 C.F.R. §§ 52.21(b)(2)(ii) and 52.21(b)(30) (incorporating by

¹⁵ Although CAA § 116 preserves states’ authority to adopt their own requirements respecting control or abatement of air pollution in most circumstances, AF&PA submits that this preservation of state rights does not allow a state to promulgate and apply regulations that thwart effective implementation of the CAA. Moreover, because a state’s overly inclusive GHG applicability thresholds could result in the state’s ability to review and evaluate carefully PSD and Title V permit applications being overwhelmed, leading to less-protective permits, a state’s continued maintenance of 100/250 tpy thresholds when applied to GHGs could justifiably be viewed as state regulations that are less stringent than those required by the CAA.

reference 40 C.F.R. § 51.100(s)). Under section 51.100(s), chemicals that would otherwise be considered volatile organic compounds are not defined as VOCs, and their emissions will not be counted toward the VOC applicability thresholds for PSD, if those compounds exhibit negligible photochemical reactivity, i.e., their emission will not contribute significantly to the formation of ground-level ozone. In other words, EPA has defined a class of compounds as a pollutant subject to PSD, but then has excluded some portions of that class of compounds based on the negligible environmental impact those constituents have. Similarly, faced with the fact that ambient air quality standards (and therefore attainment areas) are defined for ozone, whereas it is the emission of ozone precursors, especially volatile organic compounds that can cause nonattainment of the ozone NAAQS, EPA applied the major-source thresholds to VOC emissions rather than to ozone emissions. See 40 C.F.R. § 52.21(b)(2)(ii).

In both of these cases, EPA logically has determined PSD applicability on a functional basis, counting towards the applicability of PSD those emissions that can contribute to the degradation of ambient air quality and noncompliance with ambient air quality standards that the PSD program was designed to avoid.¹⁶ It would be entirely consistent with that precedent for EPA to define “greenhouse gases” in the Tailoring Rule to exclude emissions of CO₂ that come from combustion of biomass, since that combustion is carbon-neutral, does not increase atmospheric levels of CO₂, and does not cause or contribute to global warming.

EPA believes that the doctrine of administrative law, that an agency can depart from a literal interpretation of statutory language if to do otherwise would lead to absurd results and frustrate the purposes of the statute, authorizes the provisions of the Tailoring Rule EPA has proposed. That doctrine would apply at least as forcefully to the treatment of CO₂ emissions from combustion of biomass as carbon-neutral. In this case, if EPA counts emissions of biogenic CO₂ towards the threshold for determining whether a facility is a major stationary source or whether the net increase in emissions from the facility constitutes a major modification, EPA would be identifying for further analysis and enhanced emission control requirements sources whose emissions, and whose increases in emissions, do not contribute to global warming. Not only would this be an unnecessary and unfair regulation, it would have unintended consequences that would have a negative effect on atmospheric CO₂ concentrations.

Defining the “pollutant” subject to PSD as excluding biogenic CO₂ would:
(1) avoid imposing PSD requirements on emissions that do not cause or contribute to the air quality impact (increased CO₂ concentration in the global atmosphere) that application of PSD permitting is supposed to be addressing, and (2) encourage the

¹⁶ Likewise, EPA has distinguished in the PSD regulations between total particulate matter and the subset PM₁₀, for purposes of the significant emissions increase threshold for determining whether a modification has triggered PSD. See 40 C.F.R. § 52.21(b)(23)(i).

substitution of renewable fuels for fossil fuels—which EPA already is seeking to accomplish through other measures, such as provisions in the proposed GHG tailpipe standards that give manufacturers extra credit for alternative fuel vehicles. In fact, it would be arbitrary and capricious for EPA to impose PSD analysis requirements and BACT on a source's CO₂ emissions if those emissions do not have the potential to degrade air quality (i.e., increase atmospheric CO₂ concentrations).

Biomass CO₂ neutrality is an inherent property of biomass based on the natural carbon cycle. The CO₂ removed from the atmosphere during photosynthesis is converted into organic carbon and stored in biomass such as trees and crops. When harvested and combusted, the carbon in the biomass is released into the atmosphere as CO₂, thus completing the carbon cycle.¹⁷

The neutrality of biomass CO₂ has been repeatedly recognized for many years by an abundance of studies and is widely accepted by agencies, institutions, regulations, and legislation. This is true not only of the IPCC Guidance and the UNFCCC reporting protocols, but of innumerable other agencies and institutions as well.

The globally accepted accounting practice for sovereigns of the UN Framework Convention on Climate Change Treaty, of which the United States is a signatory, is developed in the IPCC Guidelines of 1996 and 2006 and the Guidance of 2003 for Land Use/Land Use Change and Forestry (LULUCF). Unequivocally, in the 2006 IPCC Guidelines, Volume 1, Section 1.2, IPCC states that “CO₂ from the combustion or decay of short-lived biogenic material removed from where it is grown, is reported as zero in the Energy, Industrial Processes Product Use (IPPU) and Waste Sectors.”

Similarly, other countries and regional entities follow the same best practices. For example, in its directive on carbon trading, the European Union Emissions Trading Scheme (EU ETS), the EU Commission 2004 regulation in section 4.2.2.1.6 Emission factors, states “[b]iomass is considered as CO₂-neutral. An emission factor of 0 [t CO₂/TJ or t or m³] shall be applied to biomass.”

EPA recently confirmed its position that the combustion of biomass should be considered as CO₂-neutral, regardless of the source of the biomass, in its proposed rule to implement the Energy Independence and Security Act of 2007 through a new Renewable Fuel Standard, RFS2 (74 Fed. Reg. 24904 (May 26, 2009)). In the

¹⁷ From a technical or scientific perspective, biomass CO₂ neutrality is independent of any consideration of material sustainability of the sources of biomass – the CO₂ released back to the atmosphere is the same CO₂ that was just recently removed or “sequestered” from it. The carbon in biomass will return to the atmosphere regardless of whether it is burned for energy or allowed to biodegrade. When we burn biomass for energy we are simply inserting a step in the cycle that allows us to recover usable energy that can displace fossil fuels.

detailed explanation of the modeling framework for these complex life cycle studies, EPA identifies a sequence of highly complex models that are used in conducting a complete, global, and consequential type of life cycle assessment mandated by Congress for the determination of whether various fuels achieve the required GHG reductions. In this case, the study is not to verify the neutral characteristic of the CO₂ emissions from the biomass combustion stage, but rather if the totality of the emissions in the life cycle of the fuel result in the required reductions. This was confirmed when, in determining the treatment of CO₂ emitted from combustion of biomass-based fuels during the processing of feedstock into transportation biofuels, EPA made clear, in VI.B.5.d Processing, that “The emissions from combustion of biomass fuel source are not assumed to increase net atmospheric CO₂ levels. The CO₂ emitted from biomass-based fuels combustion does not increase the atmospheric CO₂ concentrations, assuming the biogenic carbon emitted is offset by the uptake of CO₂ resulting from the growth of new biomass. Therefore, the CO₂ emissions from biomass combustion as a process fuel source are not included in the lifecycle GHG inventory of the ethanol (and other biofuels) plant.” 74 Fed. Reg. at 25,039.

Further, because CO₂ emitted from combustion of biomass is widely considered carbon-neutral, it is either not reported (or reported separately for information purposes only) in many protocols such as U.S. Department of Energy’s 1605(b), World Resources Institute/World Business Council for Sustainable Development, International Standards Organization 14064, IPCC, Environment Canada, U.S. EPA Climate Leaders, Midwest Greenhouse Gas Reduction Accord Advisory Board recommendations, and the final EPA Mandatory GHG Reporting Rule. Also, in its Mandatory Reporting of GHGs Rule, EPA makes clear the exclusion of biomass CO₂ emissions quantities from the calculation of thresholds for determining regulated facilities.

Even further, the most recent climate change legislative actions, the House-passed American Clean Energy and Security Act of 2009 (EISA, Waxman-Markey) and the Senate Clean Energy Jobs and Power Act, list “fossil fuel based carbon dioxide” (emphasis added) as one of the emissions from GHG that could make up the required 25,000 tons of CO₂ eq threshold to be considered a covered entity. The substance of this definition is reinforced in the section related to industrial stationary sources’ compliance obligation – where there is an exemption for “renewable biomass.”

Note that when a tree is harvested, the removal of carbon from the forest sink is counted in national accounting systems concerning land use changes. If the carbon were counted again in terms of the emissions when the tree or its residues are combusted at a forest products mill, this would be a double-counting of the CO₂ emissions. Since the standard convention around the world is to count the transaction when the harvesting occurs, that is the proper place, rather than at the

smokestack. It is also proper to track the transaction at the point of harvest because that is where increases in carbon sequestration on the land are accounted for, to see if sequestration equals or exceeds the amount removed by harvesting. In the United States, the forest products industry is a net sink for carbon, growing more biomass than we harvest, so the carbon cycle is in balance here, independent of any combustion of harvested biomass.

It would be arbitrary and capricious for EPA, having recognized in other contexts that emissions from biomass combustion do not increase global CO₂ concentrations, nevertheless to insist that such emissions be counted in determining whether a new source or modification involves a “major” increase in CO₂ emissions. It would be akin to basing PSD applicability in a carbon monoxide attainment area on the source’s aggregate emissions of all oxides of carbon, even though only carbon monoxide emissions have the effect on NAAQS attainment and on human health that PSD is designed to prevent.

Note also that EPA failure to recognize the carbon-neutrality of biomass combustion could lead to decidedly counterproductive results. If coal firing and wood firing are compared, it could appear that burning coal is preferable from a GHG emission perspective (since coal has a higher heat value than wood and therefore less coal will have to be burned to generate a desired amount of steam), even though the CO₂ emissions from wood burning are simply returning carbon to the atmosphere that was removed from the atmosphere by the biomass, while coal burning adds carbon to the atmosphere which has been sequestered underground for eons. Also, if EPA does not exempt biogenic CO₂ emissions from PSD, then facilities, like many forest products mills, that already rely mostly or entirely on biomass for their fuel will be faced with uncertain and unproductive BACT analyses (since their use of biomass already minimizes contribution to atmospheric CO₂ loadings) whenever they have a project that is “major” for any pollutant. Based on available data, AF&PA estimates that an additional 136 wood product mills (roughly half of all wood product mills) would be considered major sources for PSD if biogenic CO₂ emissions are included in threshold determinations. Only 2 percent of wood product mills (5 mills) would be major sources if biogenic CO₂ emissions are excluded using a 25,000 ton threshold.

In fact, it appears that EPA already has proposed that CO₂ emissions from biomass combustion not be counted towards applicability thresholds for the PSD or Title V programs. In the proposed 40 C.F.R. § 52.21(b)(60), EPA specifies how sources are to calculate CO₂e emissions: “The applicable GWPs and guidance on how to calculate a source’s GHG emissions in tpy CO₂e can be found in EPA’s “Inventory of U.S. Greenhouse Gas Emissions and Sinks,…” The referenced inventory states, at pp. 91-92 (emphasis added):

The combustion of biomass and biomass-based fuels also emits greenhouse gases. Carbon dioxide emissions from these activities, however, are not included in national emissions totals because biomass fuels are of biogenic origin. It is assumed that the C released during the consumption of biomass is recycled as U.S. forests and crops regenerate, causing no net addition of CO₂ to the atmosphere. The net impacts of land-use and forestry activities on the C cycle are accounted for separately within the Land Use, Land-Use Change, and Forestry chapter. Emissions of other greenhouse gases from the combustion of biomass and biomass-based fuels are included in national totals under stationary and mobile combustion.

Similarly, the Inventory states at p. 149 (emphasis added):

3.10. Wood Biomass and Ethanol Consumption (IPCC Source Category 1A)
The combustion of biomass fuels such as wood, charcoal, and wood waste and biomass-based fuels such as ethanol from corn and woody crops generates CO₂. However, in the long run the CO₂ emitted from biomass consumption does not increase atmospheric CO₂ concentrations, assuming that the biogenic C emitted is offset by the uptake of CO₂ that results from the growth of new biomass. As a result, CO₂ emissions from biomass combustion have been estimated separately from fossil fuel-based emissions and are not included in the U.S. totals. Net C fluxes from changes in biogenic C reservoirs in wooded or crop lands are accounted for in the Land Use, Land-Use Change, and Forestry chapter. . . “

While the effect of these provisions is that the Tailoring Rule as proposed would not count biogenic CO₂ emissions towards PSD and Title V applicability thresholds, EPA should make that clearer in the final Tailoring Rule.¹⁸

Federal law and policy require EPA to conduct a comprehensive analysis of the regulatory impact of expanding PSD and Title V permitting to major sources of GHGs.

The preamble to the Tailoring Rule discusses the economic impact of the Tailoring Rule solely from the perspective of the reduced regulatory burden associated with the higher applicability thresholds proposed in the Tailoring Rule, without ever assessing the economic burdens associated with applying the PSD and Title V programs to GHGs at the thresholds in the current regulations. Similarly, in

¹⁸ Also, AF&PA encourages EPA to include the GWP factors that are to be used in determining whether PSD and Title V applicability thresholds have been exceeded in the Tailoring Rule regulations themselves, rather than referring to another document, and moreover a document that may change over time.

the preamble to the proposed GHG tailpipe emission standards, the promulgation of which EPA says will trigger application of PSD and Title V permitting, EPA only addresses the economic impact of the tailpipe emission standards on motor vehicle manufacturers and those who use or supply fuel to motor vehicles, while ignoring the huge impact on businesses, permitting authorities, and the public that would arise from the vast increase in sources and projects that would become subject to PSD and Title V permitting requirements, under the current permitting regulations, as a result of promulgation of those tailpipe standards.

It does not appear that EPA has ever conducted a comprehensive analysis of the impacts resulting from the significant expansion of the PSD and Title V programs which the Tailoring Rule would allow, nor of the even much greater burden that would be imposed if PSD and Title V applicability for GHGs is determined using existing thresholds. AF&PA suggests, as it also suggested in its comments on the proposed GHG tailpipe standards, that multiple statutes and executive orders require such an analysis before EPA triggers PSD and Title V permitting for GHGs through its adoption of the tailpipe standards. To the extent that EPA ignores our comments above and issues a Tailoring Rule that makes GHGs subject to PSD and Title V permitting requirements prior to and/or independent of promulgation of GHG tailpipe emission standards, that kind of thorough review of the economic and social impact would be required before EPA could issue the Tailoring Rule itself.

Likewise, although EPA asserts that the Paperwork Reduction Act's requirement for creation and OMB review and approval of an Information Collection Request (ICR) does not apply because of prior approval of an ICR for the PSD program, this ignores the fact that there would be a huge increase in the paperwork burden as a result of applying PSD and Title V permitting requirements to sources that are "major" only because of their GHG emissions. Certainly if the Tailoring Rule is worded to take effect independently of promulgation of GHG tailpipe standards or other GHG emission limitations, then there is no question that a new ICR would be required. But even if the Tailoring Rule were legitimately seen only as reducing the burden imposed as a result of current PSD and Title V applicability regulations and the promulgation of emission limitations for GHGs, there is still a tremendous paperwork burden that would remain after the Tailoring Rule went into effect, and it is EPA's consideration (or lack thereof) of ways to further reduce that huge burden that should be evaluated in the context of the Paperwork Reduction Act.

* * * * *

In summary, while AF&PA agrees with EPA that applying PSD and Title V permitting requirements to emissions of GHGs, using current applicability thresholds, would present a huge burden on regulated facilities, permitting authorities, and the public, we believe EPA has understated that burden and, in addition, has overstated

the relief that would be provided by its proposed Tailoring Rule. Applying the PSD program at all to the very different circumstances presented by global climate change would not reflect congressional intent and would result in an un-manageable situation that likely would adversely affect global GHG loadings. EPA should simply exempt GHG emissions from the PSD and Title V program and leave it to Congress to consider a more workable and efficient approach to climate change mitigation. Barring that, EPA should defer application of PSD and Title V to GHGs for a number of years so that EPA and states can develop programs and procedures to address GHG emissions sources and so that EPA can gather better data on the universe of potentially regulated sources under the recently promulgated mandatory GHG emissions reporting rule.

If EPA fails to heed AF&PA's urging that EPA should defer application of PSD to GHGs altogether, it is crucial that EPA increase the applicability thresholds for GHGs substantially above what was proposed in the Tailoring Rule, while also making other adjustments in PSD and Title V permitting requirements and procedures to facilitate the increased number of new sources and modifications that will be required to obtain a permit. EPA also should make clear that the portion of a source's CO₂ emissions that are derived from biomass is not counted in PSD applicability and BACT determinations, recognizing that those emissions do not represent a net contribution to global atmospheric CO₂ concentrations.

If you have any questions about these comments, please contact Tim Hunt, AF&PA's Senior Director, Air Quality Programs, at (202) 463-2588 or at tim_hunt@afandpa.org.

Sincerely,

A handwritten signature in blue ink, appearing to read "Paul Noe".

Paul Noe
Vice President for Public Policy