Center for Biological Diversity | Chesapeake Climate Action Network
Clean Air Task Force | Dogwood Alliance | Earthjustice
Environmental Working Group | Friends of the Earth
Global Alliance for Incinerator Alternatives | Greenpeace
Partnership for Policy Integrity | Rainforest Action Network | Sierra Club
Southern Environmental Law Center | 350.org

The Honorable Shaun Donovan, Director
Office of Management and Budget
725 17th Street, NW
Washington, DC 20503

June 23, 2015

Dear Mr. Donovan —

The public interest environmental organizations listed above write to register our strong objections to the use of biomass combustion for power generation as a compliance measure in the Clean Power Plan (CPP). In the preamble to the proposed CPP, the Environmental Protection Agency anticipates that states will likely consider biomass as a compliance option, and asserts the importance of defining a clear path for states to do so.[1] This letter outlines several of the concerns our organizations have about the environmental impacts and the legal viability of the approach suggested by EPA in its proposed rule.

First, biomass-based power generation should not be included in the final CPP as a compliance measure because, at least in its proposal, EPA has not identified a rational basis for considering biomass combustion as part of the "best system of emission reduction" (BSER). Power plants burning wood and other forms of biomass emit about 3,000 pounds of CO_2 per megawatt-hour, an emissions rate that is approximately fifty percent higher than that of a coal-fired power plant. Co-firing biomass in a coal plant can increase emissions relative to burning coal alone, and, as EPA has acknowledged, can decrease facility efficiency[2] (thus working in opposition to Building Block 1 of the CPP, which calls for increasing coal plant efficiency).

The Clean Air Act requires EPA to promulgate a standard of performance for limiting the air pollutants emitted from each listed category of stationary sources. This performance standard must "reflect[] the degree of emission limitation achievable

[1] Carbon pollution emission guidelines for existing stationary sources: electric generating units; proposed rule, 79 Fed. Reg. 34,830, 34,924 (June 18, 2014).
[2] U.S. Environmental Protection Agency. Documentation for EPA Base Case v.5.13: Using the Integrated Planning Model. Page 5-9. http://www.epa.gov/airmarkets/documents/ipm/Documentation.pdf

through the application of the best system of emission reduction … the Administrator determines has been adequately demonstrated."[3] Section 111(d) of the Act is source-focused, requiring states to submit plans for implementing standards of performance at particular existing sources.[4] As biomass combustion does not produce contemporaneous reductions in CO_2 emissions, with any reductions in net lifecycle emissions depending on carbon offsetting that occurs offsite and in the future, it cannot be considered part of the BSER envisioned in the Clean Power Plan and required under Section 111 of Act.

EPA and other agencies have often treated CO_2 from bioenergy differently from CO_2 from fossil fuel combustion, even though CO_2 from both sources has the same effect on the climate. This different treatment is based on the theory that burning biomass to generate energy either results in emissions that will be recaptured as trees grow back, or avoids emissions that otherwise would have occurred if the biomass were to decompose. However, even if emissions are reduced by regrowth later in time, or if emissions that would have occurred later in time are avoided, the offsetting reductions are significantly delayed – on the order of years, decades, or more than a century, depending on the material used as fuel. The emission reductions typically attributed to power plants that burn biomass are therefore uncertain, speculative, and dislocated, and cannot be relied upon for the purpose of CPP compliance.

Second, if EPA decides to shift the development of biomass carbon accounting to individual states, with no guidance or standards for evaluating biomass-dependent compliance proposals, this would invite arbitrary results and would have no rational basis. EPA's proposed CPP would not require biomass-burning facilities to ensure that emission reductions are contemporaneous, or even that such reductions will occur within a specified time period. Nor did the proposal describe how states are to assess the connection between facilities that burn biomass and nominally related CO_2 reductions that occur elsewhere (due to either subsequent plant growth or avoided decomposition).

EPA points states and other stakeholders to the Agency's ongoing effort to develop a scientific carbon accounting framework to track the lifecycle CO_2 emissions associated with biomass-based energy production. According to EPA, states that want to incorporate biomass combustion into their CPP implementation plans should refer to the draft *Framework for Assessing Biogenic CO_2 Emissions from Stationary Sources*. The draft Framework, however, is currently under review by an EPA Science Advisory Board (SAB) panel that roundly criticized the Agency's previous draft;[5] it states

[3] 42 U.S.C. § 7411(b)(1)(B), (a)(1).
[4] *Id*. § 7411(d)(1)(A).
[5] SAB review of EPA's Accounting Framework for Biogenic CO_2 Emissions From Stationary Sources. EPA-SAB-12-011 (Washington, D,C., Sept. 28, 2012), *available at* http://yosemite.epa.gov/sab/SABPRODUCT.NSF/57B7A4F1987D7F7385257A87007977F6/$File/EP

explicitly that EPA has not yet determined how to apply the Framework to any particular policy context, such as the CPP;[6] and it does not deliberate on the legal limitations and obligations that are particular to Section 111 of the Act or how the details of that provision apply to biomass combustion. Given the lack of guidance provided by EPA, there is a significant risk that some states will develop implementation plans that incorporate a diversity of biomass combustion measures that are arbitrary or otherwise legally baseless.[7]

Third, the concept of "sustainability" that EPA has said it will use to distinguish CPP-compliant biomass is not a proxy for carbon accounting. In a memorandum issued in late 2014, EPA signaled that it might bypass the scientific effort being conducted by the SAB by making two determinations: first, that the "use of waste-derived feedstocks and certain forest-derived industrial byproducts are likely to have minimal or no net atmospheric contributions of biogenic CO_2 emissions, or even reduce such impacts, when compared with an alternate fate of disposal;" and second, "that states' reliance specifically on sustainably-derived agricultural- and forest-derived feedstocks may also be an approvable element of their [CPP] compliance plans."[8] Sustainability standards in the forestry context, however, generally do not consider carbon dynamics at all, and thus cannot serve as an accurate proxy for carbon accounting.

The organizations represented on this letter have a range of perspectives about bioenergy. However, we all agree that the molecules of CO_2 emitted by biomass-burning facilities warm the atmosphere and acidify the oceans just as effectively as CO_2 from fossil fuels. Even if bioenergy emissions are eventually offset, the process of reaching net emissions parity with coal- and natural gas-fired power plants takes decades to more than a century, depending on the feedstocks used and the combustion efficiency of the facility. As such, biomass combustion is contrary to both the policy goals and legal requirements that underpin the Clean Power Plan, and cannot qualify as BSER.

A-SAB-12-011-unsigned.pdf. EPA recently extended the SAB's current review of the Framework through at least early September. *See* Notification of Three Teleconferences of the Science Advisory Board Biogenic Carbon Emissions Panel, 80 Fed. Reg. 32,113 (June 5, 2015).

[6] United States Environmental Protection Agency, Office of Air and Radiation. Framework for Assessing Biogenic CO_2 Emissions from Stationary Sources (Nov. 2014).

[7] The forestry industry, emboldened by the possibility that EPA will discount the CO_2 emitted by biomass-burning power plants, anticipates a "new North American wood pellet market" under the CPP. *See* http://www.informationforecastnet.com/events/pellets-coal-plant-conversions/?utm_source=Pellets-J1-0526-1&utm_medium=Banner&utm_campaign=2015Events. A new market would exacerbate the rapidly growing demand for US-harvested trees from power companies in Europe, where bioenergy is wrongly assumed to be "carbon neutral." *See* Joby Warrick, How Europe's climate policies led to more U.S. trees being cut down, Washington Post, June 2, 2015, *available at* http://t.co/anLq0JuA6c.

[8] Memorandum from Janet McCabe, Acting Assistance Administrator, Office of Air and Radiation, EPA, to Air Division Directors, Regions 1 – 10, "Addressing Biogenic Carbon Dioxide Emissions from Stationary Sources," Nov. 19, 2015.

For the reasons described above, we believe that the inclusion of biomass combustion as a compliance option would deeply compromise the final CPP, and we respectfully urge the Office of Management and Budget to recommend its exclusion.

Respectfully submitted,

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