

July 2010

The Honorable Lisa Jackson
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington D.C. 20460

Re: Support for Regulating Biomass Emissions Under the
“Prevention of Significant Deterioration And Title V
Greenhouse Gas Tailoring Rule”

Dear Ms. Jackson:

We are writing on behalf of community-based grassroots organizations concerned about the public health, forest ecosystems, and climate change to support EPA’s decision to include “biomass emissions” in the Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule (Tailoring Rule).

EPA’s regulation of biomass emissions under the Tailoring Rule is consistent with the Clean Air Act and the U.S. Supreme Court case of *Massachusetts v. EPA*, 549 U.S. 497 (2007) and with current science.¹ Conversely, as established through a FOIA request to EPA in 2009 and other data, there is no scientific, legal, societal, or economic basis upon which to continue to treat biomass carbon dioxide and greenhouse gas emissions as if they are invisible.

We write to ensure that the Tailoring Rule covers biomass emissions because currently operating and proposed biomass electric power plants are being qualified as “renewable energy generating sources” under state Renewable Portfolio Standards and

¹ See, e.g., Manomet Center for Conservation Sciences Report, <http://www.manomet.org/node/322>; Environmental Working Group, Clearcut Disaster; <http://www.ewg.org/clearcut-disaster>.

under several federal energy laws and the IRS tax code. As so-called “renewable energy,” biomass plants are eligible for lucrative subsidies and for stimulus money under the American Recovery and Reinvestment Act of 2009 (ARRA).² Typical biomass plants include Greenfield, Massachusetts (47 MW), Scottsburg, IN (47 MW) and large existing coal plants such as the Burger plant in Ohio that are planning to switch fuels, replacing a portion or all current coal with biomass burning. Biomass electric power plants emit 50% more carbon dioxide per unit of energy than coal, and a 50 MW plant emits about 500,000 tons per year of carbon dioxide. These figures do not even include emissions associated with forest impacts, harvest and transportation and fertilizer demands.³ With about 200 such plants proposed across the U.S., propelled by ARRA stimulus money, the scale of the issue becomes apparent.

For the reasons stated below, biomass emissions should not be exempt from the Tailoring Rule.

I. The Clean Air Act does not authorize EPA to treat “biomass

² While we are narrowly focused on these commercial power plants, we are also concerned about greenhouse gas emissions from solid waste landfills, waste-to-energy projects, fermentation processes, combustion of renewable fuels, ethanol manufacturing, ethanol production and other alternative energy production that uses biomass feedstocks, as described on p. 417 of the Rule.

³ A) Emissions from soils resulting from harvest disturbance are significant: Nave et al, 2010. Harvest Impacts on Soil Carbon Storage in Temperate Forests. *Forest Ecology and Management*. 259: 857-866.

B) Emissions from transportation of large amounts of bulky biomass material from harvest sites to generating facilities are likely to be massive. (EWG report pg 10: estimates 2 billion gallons of diesel burned, releasing 23 million tons of CO₂)

C) . Emissions from increased demand for nitrogen fertilizer will be significant: Between 1991 and 2008, U.S. imports of nitrogen fertilizer have tripled. Our ability to grow biomass (and food) relies on these energy-intensive fertilizer imports.

emissions” differently from other smokestack emissions.

Arguments to exempt biomass emissions from the Tailoring Rule are based on an erroneous premise that biomass combustion power plants are somehow entitled to special treatment under the Clean Air Act because they emit “biogenic” rather than “fossil” carbon. This distinction is largely arbitrary however as evidenced by attempts in some European countries to classify peat moss burning as a “slow renewable” granted special status (peat is considered a precursor to coal formation and peat bogs take thousands of years to form). The greenhouse gas emissions from biomass power plants have the same impact on the global warming as do the emissions from other sources – whether they are power plants, cement kilns, or automobiles. The economic and societal costs arising from the public health and environmental impacts of climate change are likewise the same as the impacts from burning fossil fuels.

Exempting biomass emissions would open a Pandora’s Box for every industry to argue that because the “lifecycle” of its fuel stock it should be granted special treatment and differing greenhouse gas emission standards. Coal power producers could argue that their “lifecycle” greenhouse gas emissions differ from that of natural gas and therefore its smokestack emissions should be treated differently. This would lead to absurd results and impose an undue burden on the agency.

II. Massachusetts’ decision that the greenhouse gas emissions from biomass undermine greenhouse gas reduction targets emphasizes the need to regulate biomass emissions under the Tailoring Rule.

On June 7, 2010, Massachusetts announced plans to amend the Renewable Portfolio Standard to align with greenhouse gas emissions targets and the research conducted by the Manomet

Center for Conservation Science.⁴ Secretary Bowles states, “[i]n light of the Manomet study, we have a deeper understanding that the greenhouse gas impacts of biomass energy are far more complicated than the conventional view that electricity from power plants using biomass harvested from New England natural forests is carbon neutral. The findings of the Manomet study have changed the policy landscape for biomass production derived from wood fuels. Our policy should reflect this current science....” EPA should similarly move in the direction of aligning the Tailoring Rules with current science and public policy.

III. The alleged “renewability” of biomass burned for power does not provide the basis for treating its smokestack emissions different from other power plants that emit greenhouse gases.

There is an inherent policy flaw in equating “renewability” with “clean energy” when it comes to biomass combustion power plants. Incinerating biomass is not clean energy.⁵ The fact that some types of “biomass” fuel can be reproduced⁶ and hence may loosely be considered “renewable” does not justify exempting the industry’s smokestack emissions from the Clean Air Act, particularly when the facts are such that this “renewable energy” source actually contributes to climate change in the short run, and will undermine efforts to reduce greenhouse gas emissions.

IV. Biomass cannot provide “energy security”

While biomass is promoted on grounds that it is a necessary to achieve energy independence these claims do not trump the U.S. Supreme Court ruling in *Massachusetts v. EPA*, directing the agency to regulate greenhouse gas emissions. Indeed, the threat to

⁴ Attachment 1, Letter 7/7/10 from Secretary Ian Bowles to Commissioner Guidice.

⁵ www.nobiomassburning.org

⁶ That is, trees can grow back, and we can produce more waste and that can be considered “renewable biomass” in some sense.

national security from climate change impacts is well recognized, and forms the basis for several of the recent climate change bills. It is also untrue that biomass represents energy independence, since growing trees and grasses for biomass relies on nitrogen-based fertilizers, produced with vast amounts of natural gas, a fossil fuel.

IV. Biomass greenhouse gas emissions have the same public health impacts as emissions from other sources regulated under the Tailoring Rule.

The Massachusetts Medical Society and many other health organizations oppose the use of biomass combustion for electricity on the grounds, inter alia, that “[b]iomass combustion plants emit carbon dioxide, which contributes to climate change and global warming. Climate change has global environmental and human health effects.”⁷ Biomass emissions also contribute to ozone formation, which also has health impacts. These health impacts have economic costs which must be taken into account in evaluating whether biomass emissions should be exempt from the Tailoring Rule. Any decision to exempt biomass from the Tailoring Rule would be arbitrary given human health impacts and associated health care costs that will be borne by all Americans.

V. Exempting biomass emissions would further promote the erroneous policy of treating the emissions as invisible and undermine greenhouse gas emissions targets set by existing state and proposed federal climate legislation.

Climate science clearly states that we must reduce greenhouse gas emissions dramatically and immediately. Because of the large amounts of CO₂ released per unit of energy produced

⁷[http://www.massmed.org/AM/Template.cfm?](http://www.massmed.org/AM/Template.cfm?Section=MMS_Testimony&CONTENTID=33653&TEMPLATE=/CM/ContentDisplay.cfm)

[Section=MMS_Testimony&CONTENTID=33653&TEMPLATE=/CM/ContentDisplay.cfm](http://www.massmed.org/AM/Template.cfm?Section=MMS_Testimony&CONTENTID=33653&TEMPLATE=/CM/ContentDisplay.cfm); See also, e.g., Letter of North Carolina Academy of Family Practice. <http://www.ncafp.com/files/Final%20Letter%20of%20Concern%20Regarding%20Biomass%20Burning.pdf> “Academy Communicates Concern Regarding Biomass Burning Plants to NC Dept. of Environment”

when burning biomass, switching from coal to biomass, rather than reducing emissions, will actually result in more CO₂ emissions than would occur if we continued to rely solely on coal (neither is a good option). Over time, re-sequestration by new tree growth will occur, but is limited by plant growth rates. In the case of trees – and wood is by far the major source of biomass - the shortest rotations are on the order of 15-20 years, meaning emissions would continue to escalate, above and beyond what they would under a fossil fuel scenario for many years before **any** re-sequestration would occur.

A recently released report by Environmental Working Group analyzed data and projections from the Department of Energy’s Energy Information Administration (EIA) summarized that “... biomass-fueled electricity generation would produce billions of tons of uncounted emissions over the next 15 years while wiping out millions of acres of woodlands and eroding for decades the ability of existing forests to sequester atmospheric carbon.”⁸ This conclusion severely undermines any effort to claim that biomass combustion power plant greenhouse gas are entitled to an exemption from the Tailoring Rule: indeed, according to the study the plants will emit billions of tons of emissions that simply cannot be “exempted” from the Tailoring Rule.

VII. Exempting biomass emissions from the Tailoring Rule will provide an additional unwarranted subsidy in the form of avoided costs of compliance.

Already, biomass combustion for electricity is eligible for a plethora of unwarranted ratepayer and taxpayer subsidies in the form of tax credits, renewable energy credits, and ARRA cash grants. Exempting these plants from the Tailoring Rule will provide a further unjustifiable financial benefit in the form of avoided costs of compliance.

⁸ Booth, M. and Wiles, R. 2010. Clearcut Disaster: Carbon Loophole Threatens U.S. Forests, (Environmental Working Group).

VI. Exempting biomass emissions from the Tailoring Rule will further incentivize the destruction of our nation's forests.

Proponents of biomass power plants claim that facilities will burn primarily “wastes and residues” even though it is clear that adequate supplies – on the order of 13 thousand tons per megawatt of electricity production per year, are simply not available. Instead these facilities burn “whole tree chips” and what is vaguely referred to as “non merchantable” timber. (see: [http://www.ewg.org/agmag/2010/06/did-they-really-say-that-see-for-yourself/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed:+AgMag+\(Environmental+Working+Group+AgMag\)](http://www.ewg.org/agmag/2010/06/did-they-really-say-that-see-for-yourself/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed:+AgMag+(Environmental+Working+Group+AgMag)))

To meet these enormous new demands for wood chips and pellets, a slew of legislative and other initiatives have been introduced to open up both public and private forested lands for removal of “excess biomass” (exemplified by Senator Wyden’s “Oregon Eastside Forests Restoration, Old Growth Protection and Jobs Act, (S 2895)).

Given the enormous quantities of biomass needed to supply facilities, we are facing massive escalation of deforestation so long as biomass is subsidized as “renewable and carbon neutral.” As an example, consider that the state of Ohio is currently facing proposals to generate between 1600 and 2100 megawatts of electricity, largely biomass cofiring with coal. This will require burning on the order of 27 million green tons of wood per year in a state where the current annual harvest is around 2 million tons. It is inconceivable that this enormous increase in harvesting, ongoing for the lifespan of these facilities, could be in any way “sustainable.” Exempting biomass plants from the Tailoring Rule would provide further incentives for these plants and promote the destruction of our nation's forests.

VII. Citizens across the country are fighting determinedly to oppose biomass facilities because of the public health risk and

the threat to forests.

With remaining forests at stake and global warming rapidly advancing, we simply cannot afford to err. Citizens in communities across the country are fighting determinedly to protect their health and the integrity of their forests from the threats presented from biomass incineration. On July 7, 2010, the date that Massachusetts indicated that it is changing its Renewable Portfolio Standard on biomass, citizens in Crawford County Indiana celebrated a long sought victory to keep Liberty Green Renewables from constructing a biomass incinerator in their town. Two weeks earlier, Traverse City Light and Power announced it would abandon plans for biomass incineration in light of citizen opposition. And a few weeks earlier: citizens in Gretna, Florida successfully prevented construction of a biomass burning facility in their town.

Please stand united with citizens across the country, and with the scientific community which demanded proper accounting of biomass emissions in a letter to Congress (dated May 24, 2010). Fulfill your mandate to protect ecosystems and public health by ensuring that power plants using biomass combustion (including co-firing with coal) are covered by the Tailoring Rule, and the full panoply of regulatory mechanisms under the Clean Air Act. There is no justification for allowing biomass combustion to “escape” Clean Air Act regulation. Indeed, such a decision would be arbitrary and capricious and directly contrary to current science and public policy. Thank you for your consideration of these comments.

Sincerely,

