To: Lisa Jackson, US Environmental Protection Agency

We are deeply concerned by EPA's recent decision to exempt CO2 emissions from combustion of biomass from Clean Air Act regulation for the next three years. This decision was formalized in Proposed Rules on March 21, 2011, 76 Fed. Reg. 15249 and is referred to as an exemption from the greenhouse gas "Tailoring Rule." Concurrent with issuance of the Proposed Rule, EPA issued guidance for permitting agencies, as discussed below.

If finalized as proposed, the three-year exemption from Clean Air Act permitting will facilitate ongoing development of a significant number of large biomass combustion facilities to burn forest and other "biomass" for electricity. Yet, this decision, made in response to a petition from the National Alliance of Forest Owners, 76 Fed. Reg. 15249, appears to lack legal or scientific merit, endangers public health, and is fiscally irresponsible.

Indeed, there does not appear to be any viable legal basis for treating CO2 emissions from biomass (or any other "biogenic"sources) differently from other CO2 emissions. EPA's own Clean Air Act Tailoring Rule explicitly states that "all carbon counts" in determining whether a stationary source is "major" and subject to permitting requirements. This makes sense given that CO2 from biomass combustion is indistinguishable from CO2 from other sources and exerts the same influence on global climate and health.

EPA's permitting exemption decision is alarming in light of the known science. A number of studies have established that, per unit of electricity generated, considerably more CO2 is released from biomass combustion than from coal combustion, with any carbon resequestration unlikely to occur for decades. A paper published in Science entitled "Fixing A Critical Climate Accounting Error" pointed out the faulty accounting that has resulted in a mistaken practise of referring to virtually all forms of biomass combustion as "carbon neutral".[1]

This was further elaborated by the Manomet Biomass Sustainability and Carbon Policy Study, a main finding of which was that for utility scale biomass power plants, it takes at least 40 years to regrow forests sufficiently to resequester net carbon emissions to the level that would have been emitted if coal had been burned, and more than 90 years to draw down carbon emissions to the level of natural gas.[2] Other studies have further contributed to the growing literature indicating that biomass combustion results in substantial "carbon debt" which cannot be "repaid" on a time frame meaningful for addressing global warming.[3]

Allowing a large number of facilities to be constructed, without regard to their CO2 emissions, will seriously undermine the intent of the Tailoring Rule to reduce greenhouse gas emissions. There is already a trend toward large coal plants converting to biomass. The guidance issued concurrent with the Proposed Rule provides for permitting that encourages biomass combustion itself, as "best available control technology." The result is that we can expect to see more large coal plants converting to biomass combustion, requiring very large quantities of "biomass" to operate. Furthermore, CO2 emissions resulting from the harvesting and transportation of such large quantities of woody biomass will add substantially to the climate impacts of emissions from the facility's smoke stacks.

Permitting the construction of large biomass combustion operations is not only bad for the environment, it is also fiscally irresponsible. These facilities are eligible for taxpayer and ratepayer subsidies because, despite the science they have been classified as "renewable" energy – in the same category as wind, solar, geothermal, and other non-smokestack technologies. (See, e.g. "Biomass: Comparison of Definitions in Legislation Through the 111th Congress," CRS, January 6, 2011)

Developers are cashing in on cash grants provided under the American Recovery and Reinvestment Act (ARRA)– over 100 million dollars so far have been allocated to biomass

combustion, all undertaken without National Environmental Protection Act (NEPA) review. These facilities are also eligible for a wide variety of other lucrative supports, including Department of Energy loan guarantees, and US Department of Agriculture "Biomass Crop Assistance Program" subsidies. All of these subsidies are underwritten by taxpayers, who envision their funds being used to support clean, "green" renewable energy. Instead, we are subsidizing power generation facilities that pollute communities, and drive up health care costs.

A three year permitting exemption for biomass combustion will have long term negative impacts on America's energy future. Biomass combustion already accounts for about half of US so-called "renewable" generation and competes directly for the same subsidies that also support non-polluting renewables such as wind and solar. Biomass combustion will continue to be favored if it is exempted from permitting, setting our nation on course to a future of polluted air, ill health, degraded lands and increased greenhouse gas emissions.

If EPA's CO2 permitting exemption is allowed to stand, facilitating development of the many new facilities and conversions, there will be a large increase in the concomitant emissions of particulates and other toxic air pollutants from biomass combustion. Those pollutants will escalate cumulatively as the number of facilities granted operating permits increases.

We know already that health impacts from biomass combustion emissions are alarming: In a June 24 2009 letter to Congress concerning energy legislation, The American Lung Association stated: "The Lung Association urges that the legislation not promote the combustion of biomass. Burning biomass could lead to significant increases in emissions of nitrogen oxides, particulate matter and sulfur dioxide and have severe impacts on the health of children, older adults and people with lung diseases." The Massachusetts Medical Society testified to the state legislature that biomass burning presents an "unacceptable health risk". The American Lung Association of Massachusetts takes the same position, and opposes all federal subsidies for biomass burning.[4]

Biomass combustion results in very large quantities of particulate emissions. EPA itself points out: "Particle pollution especially fine particles—contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems." In fact it has been determined that there is no safe level of exposure to small particulates (PM 2.5). The American Heart Association states: "Short-term exposure to particulate matter (PM) air pollution contributes to acute cardiovascular morbidity and mortality and exposure to elevated PM levels over the long term can reduce life expectancy by a few years." Particulate pollution has even been linked recently to diabetes. [5]

Biomass combustion also emits nitrogen oxide, sulfur dioxide, volatile organic compounds, carbon monoxide as well as extremely toxic (and inadequately regulated) dioxins, furans and other pollutants, depending upon the type of biomass burned. These contaminants contribute to asthma, heart and lung disease, cancer and other disease, especially in the communities where they are located.

Of special concern is the trend to construct large biomass plants in low income communities of color, where they contribute further to the health burden already suffered as a result of disproportionate exposure to toxins. The NAACP chapters in Valdosta Georgia, Tallahassee and Alachua County, Florida have already expressed concern over biomass combustion developments.[6]

In light of the above, we respectfully request:

That EPA adopt a moratorium or "stay" on further permitting of biomass combustion facilities for the duration of the 3 year study period, rather than continuing to permit these facilities in the interim. EPA has chosen to study the matter of biogenic emissions further, and should therefore await the outcome of its own studies prior to facilitating further development of biomass combustion industry.

Signed:

American Environmental Health Studies Project (New York)
Biomass Accountability Project
Biofuelwatch
Blue Ridge Environmental Defense League
Buckeye Forest Council
Citizens Opposed to Bioburners (Gainesville, Florida)
Concerned Citizens of Perryville
Ecology Party of Florida
Energy Justice Network
Environmental Alliance of North Florida
Florida Environmental Justice Network
Florida League of Conservation Voters
Floridians Against Incinerators in Disguise
Friends of the Fenholloway River
Georgia NAACP
Greenwich Citizens Committee (NY)
Help Our Polluted Environment (Taylor County, Florida)
Help Save the Apalachicola River Group
Incinerator-Free Brown County (Wisconsin)
Keep Our Island Clean (Hawaii)
ManaSota88 (Florida)
Neighbors Against the Burner (Minnesota)
Port Townsend Airwatchers (Washington)
Preserve Pepeekeo Health and Environment (Hawaii)
Save The Pine Bush (NY)
Selkirk, Coeymans, Ravena Against Pollution
Valdosta-Lowndes NAACP
Waukesha County Environmental Action League
Wild Virginia
Wild West Institute
World Temperate Rainforest Network

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[1] Searchinger et al 2009: Fixing A Critical Climate Accounting Error, Science vol 326

[2] Manomet Biomass Sustainability and Carbon Policy Report, 2010

[3] Bioenergy: A Carbon Accounting Time Bomb. Birdlife Intl, Transport and Environment and EU Environmental Bureau

[4] see statements from medical associations compiled here:

http://www.nobiomassburning.org/BAP/Public_Health.html

[5] Children's Hospital Boston: http://healthfreedoms.org/2010/11/07/national-study-finds-strong-link-between-diabetes-and-air-pollution/

[6] See: http://www.nobiomassburning.org/BAP/Civil_Rights.html