



STATE OF WASHINGTON

September 10, 2010

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

Dear Administrator Jackson:

We are writing in response to your agency's call for information on July 15, 2010 (EPA-HQ-OAR-2010-0560) to offer a recommended approach for addressing biogenic greenhouse gas emissions under the Clean Air Act. We appreciate the opportunity to provide comments and recommendations from the perspective of Washington State.

Washington, like many western states, has made a commitment to expanding clean, renewable sources of energy, while also taking strong steps to reduce emissions of greenhouse gases and otherwise address the challenges of climate change. Biomass-to-energy projects help reduce our nation's energy costs and dependence, while maintaining and creating much-needed jobs, especially in the rural areas of the state.

Washington is home to some of the nation's richest forest resources, conferring many benefits from local to international scale, and supporting our economically vital forest industry. Washington has made a commitment to bioenergy as a component of our renewable energy future, based on sustainable supplies of biomass from our forests lands, consisting primarily of residuals of forest operations, that have little if any other commercial value. Washington has also invested, with both public and private funds, in the development and commercial expansion of bioenergy derived from agricultural crops, grown in concert with the production of food.

Washington is committed to a strong air quality program and to sustainable management of our natural resources, and we tasked our air quality, energy, forestry and agricultural resource agencies to work together in responding to your call.

For biogenic emissions under the tailoring rule, the approach we recommend relies on an objective finding regarding biological stock status at the state scale, rather than sole reliance on permitting and emission controls for individual sources in a state. Stable or increasing overall stocks of carbon-sequestering forests and agriculture lands would essentially constitute "best available control technology" for a state's permitted greenhouse gas emission sources. Further source-based controls would only be warranted in the case of declining stocks for a state.



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The enclosure provides additional details of our recommended approach. We would be happy to provide a more extended written explanation of our suggested approach and its rationale. Please let us know if that would be helpful.

Thank you for your time and consideration.

Sincerely,



Christine O. Gregoire
Governor



Peter Goldmark
Commissioner of Public Lands

Enclosure

**State of Washington
Recommendations**

**EPA Call for Information on Greenhouse Gas Emissions
Associated with Bioenergy and Other Biogenic Sources
EPA-HQ-OAR-2010-0560**

September 10, 2010

The State of Washington recommends the following approach to addressing biogenic greenhouse gas emissions, in response to EPA's call for information on July 15, 2010 (EPA-HQ-OAR-2010-0560). The call specifically solicited carbon accounting methods, fossil-based embodied energy comparisons, and other analytical details. We are responding with a framework and rationale within the context of the Clean Air Act authorities, the endangerment finding, and the tailoring rule approach.

Two things are fundamental to biogenic emissions that differ from other sources. The first is that levels of biogenic greenhouse gasses (GHG) are not "new" to the atmosphere in the way that fossil emissions are. Instead, biogenic emissions are part of the global carbon cycle, which forms the baseline condition to which other emissions sources contribute added GHG concentrations. Biogenic carbon may arrive in the atmosphere in the form of GHG through a variety of pathways including plant decomposition, wildfire, combustion in a biomass energy facility or combustion of biogenic liquid fuels. The specific pathway is not important to the overall global background levels of GHG resulting from the natural carbon cycle.

The second is that the baseline level of biogenic emissions over time depends on the overall size of the biological systems, and most importantly, the systems' carbon sequestration capacity. In our view, the primary variable of concern to EPA for most biogenic emission sources relevant to Clean Air Act regulation of GHGs under the Prevention of Significant Discharge program and Title V should be whether these biological systems are net sinks, net sources, or neutral in relation to carbon emissions.

Therefore, we recommend that the authority and responsibility for regulating biogenic GHG emission sources be triggered by an objective finding as to whether a system's biological stocks are increasing, decreasing, or stable over a given time interval. If systems are stable or increasing, any emissions associated with these systems are not new GHGs and are continually subject to re-sequestration. Conversely, for systems whose stocks are decreasing, emissions associated with those systems represent emission levels that will not be readily re-sequestered and their sources should be regulated while that stock condition persists.

This logic requires that a clear distinction is drawn between the scale and legal mechanisms for objective findings on system stock changes, and those for source regulation. Until and unless a

system's threshold of decreasing stocks is crossed, source-specific application of Best Available Control Technology (BACT) is inappropriate. Essentially, we suggest that the first, best, and most relevant BACT is biological systems' stocks that are in an increasing or stable condition. Only in the case that this control should fail would supplemental source-based technologies and controls be applicable.

Furthermore, we suggest that the appropriate scale of objective stock status findings is at the state level. This scale acknowledges the variation among and within major biological systems such as forests and agricultural lands, differing rates of stock fluxes and overall sequestration capacity, and available methods of measurement.

Finally, we acknowledge that a great breadth of legal authority and policy, including incentives, in the realm of biobased energy and natural resource management may lead to more complex analytical questions of projects' carbon neutrality. However, the purpose and intended outcome of the tailoring rule is to reduce atmospheric GHG concentrations and their incumbent radiative forcing effect on our planet's climate. Externalities and intricacies of renewable energy and natural resource management policy are simply not in our view applicable as considerations within the authority to regulate GHGs under the Clean Air Act.

Based on this conceptual foundation, we propose the following approach under the Clean Air Act, PSD and Title V:

1. Each new source of biogenic emissions that is over the threshold established by the tailoring rule must apply for and receive a PSD or Title V permit for GHGs, subject to #5 below.
2. EPA promulgates an amendment to the Mandatory GHG Reporting Rule (40 C.F.R. Part 98) to incorporate International Panel on Climate Change guidelines for national greenhouse gas inventories, pertinent to land-use, land-use change and forestry.
 - a. These protocols, and these protocols alone, are employed in the same manner EPA has used in voluntary land-use and forestry reporting for the annual GHG inventory.
 - b. The underlying data, consisting primarily of the US Forest Service Forest Inventory and Analysis system and the US Geologic Survey Land-Use/Land Cover dataset, are scaled-down at the state level to make an annual determination of biological systems' stock status as increasing, stable or decreasing.
 - c. EPA may also wish to utilize forecasting tools provided by the Forest Inventory and Analysis system and the Renewable Resources Planning Act assessment, in an exclusively non-regulatory context, so that the annual accounting of GHG emissions could provide early warning that preemptive actions may be needed to avoid a projected negative stock status finding.
3. On the basis of state findings, BACT represents either the maintenance of stable or increasing stock status, or in the case of decreasing stock status, additional controls.
4. Existing sources associated with a biological system status that is stable or increasing, would not require GHG permitting until and unless a major modification was undertaken.

5. No new source should be required to receive a PSD or Title V permit solely on the basis of GHG emissions, so long as stable or increasing stock status is maintained.
6. New sources whose biological system status is found to be decreasing may have the option of either installing direct stack control measures, or purchasing sufficient carbon offsets from qualifying sources.
7. Some provision must be made for instances wherein state-level findings of decreasing stock status could be mitigated or reversed in the long-term as a consequence of a project. For example, forest ecosystems in British Columbia have been classified as a net emitter of GHGs owing to catastrophic tree mortality from bark beetles. Without human intervention that may result in some near-term emissions, the length of time before the ecosystem returns to an increasing stock status would be extended. In such cases, project-specific accounting would be appropriate.