PALMER RENEWABLE ENERGY

This letter is from the developer of a proposed biomass plant in Springfield, MA, which has some of the worst air pollution and highest childhood asthma rates in the state. Community groups are overwhelmingly opposed to this facility, which would be located adjacent to residential neighborhoods. If built, this plant would be one of the biggest, if not the biggest, polluters in Western MA. Permitted emissions from this plant are reproduced in a note at the bottom of this page.
From the website of the group leading the charge to oppose this plant (http://www.springfieldincinerator.info/)

The following groups have joined Stop Toxic Incineration in Springfield to oppose this incinerator: Chicopee City Council, Ludlow Board of Selectmen, Massachusetts Medical Society, Hampden District Medical Society, American Lung Association, Massachusetts Breast Cancer Coalition, Pioneer Valley Asthma Coalition, Toxics Action Center, Arise for Social Justice, Greater Springfield chapter of the Massachusetts Senior Action Council, Western Massachusetts American Friends Service Committee, Connecticut River Watershed Council, Conservation Law Foundation, Massachusetts Environmental Energy Alliance, Massachusetts Sierra Club, The McKnight Neighborhood Youth Council, East Forest Park Civic Association, Physicians for Social Responsibility/Pioneer Valley, Masschusetts Forest Watch, Bay Area Neighborhood Council, Indian Orchard Citizens Council, Maple High/Six Corners NC, East Forest Park Civic Association, East Springfield Neighborhood Council, McKnight Neighborhood Council, West Springfield Town Council.

October 30, 2015

Judith Judson, Commissioner
Department of Energy Resources
100 Cambridge Street
Boston, MA 02114

Dear Commissioner Judson,

We appreciate the opportunity to offer comment on existing Department of Energy Resources regulations as part of the Baker Administration's regulatory review process. We would like to call your attention to problematic regulations limiting biomass energy's inclusion in the Renewable Portfolio Standard (RPS). Specifically, we are requesting that 225 CMR 14.00 be amended to omit all references to energy efficiency requirements for biomass facilities. A red-lined version of the regulations with our suggested changes is attached here for your reference (see 225 CMR 14.05(1)(a)7.f.iii and 225 CMR 14.05(8)(c)).

The incorporation of energy efficiency standards in these regulations raises a number of concerns for us, namely that the standards are nearly impossible for electricity-only biomass facilities to meet, were calculated based on faulty assumptions, and are crushing a once-thriving green energy industry at a time when the Commonwealth should be encouraging the development of alternative energy sources. These energy efficiency standards for biomass are strictly regulatory in nature, not statutory. They do not advance the renewable energy goals of the Department or of the underlying legislation, the Green Communities Act of 2008. Massachusetts has become an outlier in how it approaches biomass, in comparison not only to other states, but also to the federal government and other nations around the world. Massachusetts' treatment of biomass fails to reflect the overwhelming consensus that biomass is a valuable green energy resource. This places the Commonwealth at a competitive disadvantage. Governor Baker's intent in initiating this regulatory review process was to identify and correct provisions, like the one in question, that needlessly harm the Massachusetts economy. We believe our proposed changes align with the Governor's vision.

This was the point of the regulations. Emissions from "electricity-only" facilities were found by a science-based process to be excessive, so the regulations removed RECs for these units.

This is not true. The goals of MA legislation are to reduce GHG emissions. The biomass regulations do that.

This is a false representation. In fact, the "overwhelming concensus," at least by scientists, is that wood-burning power plants are a net source of carbon emissions over decades.

Despite the regulatory climate, we at Palmer Renewable Energy believe in the promise of biomass energy production to positively impact our communities and the environment. We continue to move forward with our proposed biomass-to-power project in Springfield, an $150 million project that will create 200 construction jobs and employ approximately 50 permanent workers. The facility is projected to use 1200 tons per day of fuel of clean non-contaminated non-forest woody material to produce 38 MW of power. We would welcome a reconsideration of energy efficiency standards for biomass inclusion in the RPS as a strong

If they are moving forward anyway, why do they need subsidies?

Burning one ton of green wood emits just over one ton of CO2, and a lot of other pollution, as well. This facility would emit over 400,000 tons of CO2 per year, making it the largest GHG emitter in Western MA.

Table 1
Proposed Annual Potential Emission Rates (Tons Per Year)

Pollutant	Boiler	Lime Storage Silo	Ash Storage Silo	Wood Storage Shed	Fugitive Emissions	Facility Wide
NOx	37.9	-	-	-	-	37.9
CO	81.4	-	-	-	-	81.4
VOC	11.15	-	-	-	-	11.15
SO_2	26.8	-	-	-	-	26.8
PM[1]	33.44	0.008	0.231	0.41	0.46	34.55
PM_{10}[2]	33.44	0.008	0.231	0.17	0.092	33.94
$PM_{2.5}$[3]	33.44	0.002	0.053	0.02	0.023	33.54
HAPs	13.2	-	0.0012	-	-	13.2
NH_3	13.4	-	-	-	-	13.4

Permitted emissions from the Palmer plant, from the facility's air permit. Note tens of tons of particulate matter (PM) and the smog precursors NOx and VOCs - pollutants linked to asthma and other respiratory and cardiovascular ailments.

statement of the Baker administration's commitment to a truly diverse and balanced energy portfolio.

I. Current Standards

225 CMR 14.05(8)(c) requires that biomass plants meet a 40% energy efficiency minimum standard in order to be eligible for the Renewable Portfolio Standard (RPS). While combined heat and power (CHP) systems may achieve this standard, it is virtually impossible for electricity-only generating units. In other words, it effectively disqualifies conventional biomass from receiving any incentives intended to encourage the development of renewable energy sources. Even biomass facilities that comply with the fuel supply sustainability requirements are ineligible for the RPS, which is why we are asking for all energy efficiency standards to be removed. No other renewable energy source in the RPS has been encumbered with anything resembling this energy efficiency requirement.

Actually it's 50%; 40% for "advanced conversion" plants - of which the Palmer plant would not be one.

Tier I credits are lucrative. MA has always had stringent standards to qualify, even before the CO2 standards. Strict standards for high-emissions technologies are appropriate.

II. Rules Based on Faulty Assumptions

The regulations lack a meaningful public health, safety, or environmental rationale for their stringency. The energy efficiency standards were born mainly out of the findings of the Manomet Center for Conservation Science's *Biomass Sustainability and Carbon Policy Study*, which was prepared for DOER in 2010. The Manomet study, however, focused narrowly on modeling carbon emissions with units using forest-harvested wood for fuel. The results of the study are simply not relevant for units that rely on forest harvestry byproducts and waste wood, as do the vast majority of facilities in New England. It is not effective public policy to make rules for an entire industry based on a study that only applies to a narrow slice of producers.

This statement is nonsensical. "Forest harvestry" byproducts" are the same thing as the forest-harvested wood that Manomet studied.

III. Massachusetts is an Outlier

With its reliance on the Manomet study, Massachusetts has been an outlier in its regulatory approach to biomass. While approximately 29 other states have RPSs that qualify biomass as a renewable fuel, none have instituted the overly stringent requirements imposed by DOER's regulations. In addition, the regulations are out of step with federal requirements. The EPA's Clean Power Plan rules, released in August 2015, clearly view biomass as a valuable resource for achieving carbon pollution reduction goals, allowing states to use biomass to meet state-specific reduction requirements. EPA greenhouse gas reduction policy discounts emissions from biomass, with the reasoning that biomass is likely to have minimal or no net atmospheric contributions of biogenic carbon dioxide emissions as long as the biomass is produced sustainably. The European Union has also embraced biomass as a way to diversify Europe's energy supply and create growth while lowering emissions. In fact, in 2012, biomass accounted for two-thirds of all renewable energy consumption in the E.U. Like the EPA, the E.U. considers biomass to be carbon-free.

This is a misleading statement. EPA explicitly did **not** include biomass as part of the "best system of emission reduction" under the CPP. EPA has not approved biomass in any state plans, and the CPP acknowledges that because burning biomass for energy emits so much CO2, biomass-related biogenic CO2 "benefits" must be re "quantifiable, verifiable, non-duplicative, permanent and enforceable." (page 1168 Federal Register version of final Clean Power Plan).

IV. Rules Undermine Intent of Green Communities Act

Under the bioenergy regulations, the requirement for low emissions has been interpreted to mean low "net" emissions. Even the most efficient wood-burning power plants emit about 3,000 lb CO2 per MWh when they are burning green chips.

Rules disqualifying biomass from the RPS are contrary to the intent of the Legislature and to common sense. The Green Communities Act of 2008 was passed to encourage the development of the Commonwealth's nascent renewable and alternative energy resource industries. "Low-emission biomass power conversion technologies" were explicitly named as a renewable electricity-generating source to be included in the RPS Class I and Class II. Energy efficiency standards are not included in the legislation, and it was nowhere contemplated by the Legislature that RPS inclusion would be limited to CHP facilities. The focus on CHP facilities is especially puzzling considering that the Green Communities Act was intended to promote renewable electricity-producing sources – not heating sources. DOER's rulemaking has had the effect of disqualifying an energy source from the RPS that was explicitly included by the Legislature.

This is about 50% more CO2 than a coal plant emits. The requirement for increased efficiency (ie, using both heat and power) means there is less of a gap between net emissions per unit energy from biomass and coal. However, biomass plants, even CHP plants, still have far greater stack emissions of CO2 than coal plants.

IV. Necessity for a Diverse Energy Portfolio

The urgency to develop renewable and alternative energy resources has only grown in recent years. The Commonwealth's increasing reliance on natural gas as nuclear power and coal facilities come offline, coupled with ever-rising electricity costs, is an immense cause for concern. That is why we have been gratified by Governor Baker's call for a "combo platter" approach as the best way to both control staggering electricity costs and to meet greenhouse gas emissions goals. Massachusetts needs a truly diverse renewable energy portfolio, because wind and solar alone cannot meet our needs. Other sources like biomass will be vital to meeting the Commonwealth's goals.

The MA regulations were enacted because the state determined that electric-only biomass power plants would hurt our ability to meet our GHG reduction goals. These bioenergy developers don't appear to give a hoot about reducing emissions; they seem solely interested in collecting millions per year in ratepayer-funded subsidies.

We respectfully request that DOER take this regulatory review period as a chance to reevaluate the need for energy efficiency standards for biomass. While these standards may have been intended to protect our forests and control carbon emissions, in reality they achieve little but to punish a once-thriving renewable energy industry. Biomass can still play an important role in securing the Commonwealth's renewable energy future, if it is not held back by wrongheaded regulation.

We look forward to having an opportunity to meet with you to discuss in greater detail the science, data, and economic analysis behind our proposed changes. Please feel free to reach us at: 617-423-0028.

Thank you.

Sincerely,

David Callahan
President, Palmer Renewable Energy

PALMER RENEWABLE ENERGY

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