

Ed.D

Dr. Susan Theberge Northampton
CAN and SCJC

The Massachusetts Department of Energy Resources (DOER) is proposing to substantially roll back hard-won 2012 environmental and health protections governing woody biomass in the state's Renewable Portfolio Standard (RPS).

dirty These changes will significantly increase clean energy subsidies for polluting biomass power plants and garbage incinerators

only While on the verge of climate disaster and with a very brief window of time before positive feedback loops kick in - magnifying the danger of this situation - these changes will ^{ACTUALLY} increase greenhouse gas emissions in Massachusetts. — |

Among many concerns I will focus on one of them:

Public health impacts of burning biomass

Biomass electricity generation facilities are major air polluters, and in many cases will significantly worsen air quality in the communities and regions where they are constructed.

Just like coal plants, biomass plants belch soot, smog, and other pollutants that threaten public health and the environment.

→ Emissions from biomass power plants contribute to acute and chronic health problems including asthma, heart disease, diabetes, and cancer.

→ **DOER's** proposal will enable the 35 megawatt Palmer Renewable Energy biomass plant to be constructed in East Springfield

~~with take~~ This Corporation will take
— collect an estimated \$10 million to \$12
million per year from electricity
ratepayers. ~~that means us~~ (That means
us)

I am horrified by this blatant climate
and environmental injustice. ~~This~~
~~biomass plant will adding more~~
~~pollution to an already overburdened~~
~~environmental justice community.~~

Springfield was named "Asthma
Capital" of the US in 2018 by the
Asthma and Allergy Foundation of
America based on asthma prevalence,
emergency room visits, and asthma-
related deaths.

→ ~~Burning biomass emits large amounts of
pollutants, just like burning other solid
fuels such as coal.~~

→ ~~Burning organic material emits
particulate matter (PM), nitrogen oxides~~

(NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), lead, mercury, and other hazardous air pollutants (HAPs).

Hazardous air pollutants are a group of 187 toxics that according to EPA “are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects”.

(EPA has recently released the newest National Air Toxics Assessment, which characterizes emissions and ambient air concentrations of toxics around the country.)

The HAPs emitted in the greatest quantities by burning biomass include the organic HAPs styrene, acrolein, and formaldehyde, and the acid gases hydrofluoric acid and hydrochloric acid,.

Biomass burners commonly emit ten tons or more of the acid gases and from one to five tons of organics each year. Even "clean wood" – that is, forestry-derived wood, as opposed to construction and demolition debris – emits these chemicals when burned.

→ Burning clean wood also emits non-negligible amounts of heavy metals.

→ Burning "urban wood" – a friendly term for construction and demolition debris (CDD) – significantly increases emissions of arsenic, chromium, copper, lead, and mercury, as well as dioxins/furans and pentachlorophenol (PCPs). See letter from the MA Department of Environmental Health expressing concerns about

about → emissions of metals and other air toxics in the environmental justice community of Springfield, MA, where childhood asthma rates and incidence of high

We are talking

blood lead levels are already twice the State average).

~~In addition~~

Climate impacts

DOER has *eliminated* all the Massachusetts-specific forest harvesting criteria that were designed to protect forests, maintain soil fertility, and protect from overharvesting, and replaced them with vague and unenforceable forest industry language about "sustainable harvesting."

it incentivizes logging and burning trees for energy, which will increase CO2 emissions and decrease carbon sequestration.

Consider

~~I will close w/ this~~

The importance of protecting forests as one of our last, best hopes for averting climate disaster through carbon sequestration.

This is both a **environmental**
call for about climate justice

In climate justice
trajectory and we, the
public will oppose
Ours at every fiber
of our being

in history
and

We + Please <sup>CALL on you
to stand with
us ~~from~~ at this
critical moment
in history</sup>

Withdraw these harmful
changes to the biomass
standards