

December 12, 2013

Joseph Goffman, Senior Counsel, Office of Air and Radiation  
USEPA Headquarters  
Ariel Rios Building  
1200 Pennsylvania Avenue, N. W.  
Mail Code: 1101A  
Washington, DC 20460

**Re: Federal permitting for bioenergy facilities**

Dear Mr. Goffman:

We are a group of citizens and representatives of local environmental groups, many of us living near current or proposed bioenergy facilities. We are writing because we are concerned about EPA's regulation of bioenergy, and future accounting for biogenic CO<sub>2</sub> emissions.

That bioenergy facilities should be regulated under the Clean Air Act seems clear. Last July, the U.S. Court of Appeals for the District of Columbia Circuit vacated the EPA's three-year exemption for biogenic CO<sub>2</sub> sources from Clean Air Act permitting, which has been allowing bioenergy facilities to avoid the Prevention of Significant Deterioration program (PSD) and its various protections. The court found, as has the EPA, that the atmosphere cannot distinguish between stack emissions of carbon dioxide from burning biomass versus fossil fuels.

**We ask that the EPA reverse the deferral and require major sources of biogenic CO<sub>2</sub> to undergo PSD permitting as soon as possible. There should be no more delay, as delay is causing harm.**

Biomass power plants cause direct harm because they are significant sources of most conventional pollutants. Per megawatt-hour, bioenergy plants emit as much or more particulate matter, nitrogen oxides, and carbon monoxide as modern coal-, oil-, and gas-fired facilities. This is particularly true when bioenergy facilities are exempted from federal permitting under the Clean Air Act, as plants that avoid PSD often have allowable emissions that are double those of plants that have gone through a Best Available Control Technology (BACT) analysis. Some of us signing this letter are faced with bioenergy facilities being built locally. For the health of communities located near biomass power plants, the pattern of bioenergy facilities avoiding PSD needs to stop. Bioenergy facilities are disproportionately polluting for their size, and impacted communities across the country will welcome EPA requiring a BACT analysis for *all* pollutants at bioenergy facilities that are major sources for CO<sub>2</sub>.

The Clean Air Act does not justify exempting facilities from PSD permitting just because the CO<sub>2</sub> they emit is biogenic in origin. However, it is possible that the unique characteristics of biomass as a fuel could be taken into consideration during a BACT analysis for CO<sub>2</sub>, as EPA is now deliberating.

Regarding biomass as a means of reducing net CO<sub>2</sub> emissions, however, we have serious concerns. First, because biomass emits more CO<sub>2</sub> per megawatt-hour than fossil fuels, it can never be BACT for CO<sub>2</sub> based on its stack emissions alone. Because all forms of biomass emit about the same amount of CO<sub>2</sub> per megawatt-hour (more than 3,000 lb/MWh) a comparison among types of biomass does not allow discrimination of lower-emitting forms. Thus, the concept that burning biomass can "reduce" emissions depends on the assumption that bioenergy emissions are offset over time – either because

waste wood used as fuel would eventually decompose and emit CO<sub>2</sub> anyway, or because when whole trees or other plants are used as fuel, these trees and plants eventually grow back and sequester an equivalent amount of CO<sub>2</sub> as was released by burning. Different biogenic fuels have varying periods over which carbon emissions are “paid back,” but in all cases, there is a lag between the immediate emissions from burning, and hypothetical future offsetting. This lag can last for decades.

We are aware that EPA’s initial framework for accounting for biogenic carbon emissions was found to be deeply flawed by EPA’s own Science Advisory Board (SAB), in that it failed to account for the ongoing carbon sequestration that forests currently provide, and failed to acknowledge the time lag between burning biomass and any eventual offsetting of those emissions. The alternate framework suggested by the SAB is an improvement, but itself raises concerns with regard to the Clean Air Act.

We are concerned that if implemented in the context of a BACT analysis, the SAB’s framework of evaluating “net emissions over time” could compromise the Clean Air Act. No other pollutant’s emissions are evaluated on the basis of net future emissions. We also have concerns about enforceability. The bioenergy companies that claim their facilities are carbon neutral over time don’t own or manage the forests where bioenergy offsets are to occur. Who is to say if they will occur?

We are additionally concerned about the timeframe over which net emissions are evaluated. For instance, sometimes net bioenergy CO<sub>2</sub> emissions are evaluated over a twenty or a fifty-year period, with the understanding that emissions first increase relative to fossil fuels, then eventually decrease. However, the latest Intergovernmental Panel on Climate Change report affirms that atmospheric concentrations of greenhouse gases are the highest they have been in 800,000 years, and scientists tell us that we need to reduce the atmospheric concentration of CO<sub>2</sub> *now*, to slow not only climate warming, but also ocean acidification. EPA must take account of these findings when determining an appropriate timeframe for considering net emissions from bioenergy plants.

The bioenergy industry is exploding, with millions of tons of new wood burning and pellet manufacture for overseas bioenergy proposed to come online in the next few years. There is no dispute that the bioenergy industry is currently harvesting whole trees as fuel, and that such harvesting will only increase as more facilities are built. Such harvesting will increase carbon emissions and degrade forests.

It matters little that some of the groups who have signed this letter support small-scale bioenergy for combined heat and power and thermal use, and some do not. All want real, science-based carbon accounting that acknowledges that burning biomass for energy transfers carbon that is stored in terrestrial biomass, especially forests, into the atmosphere, that those emissions are not automatically offset, and that the timeframe for offsetting emissions from many fuels is not compatible with reducing the threat of climate change. Only if such a carbon accounting system is in place can the projects with the least impact on net emissions be identified.

Reducing atmospheric CO<sub>2</sub> emissions requires restoring forests, not burning them. How EPA regulates biogenic CO<sub>2</sub> will affect the future bioenergy industry, not just here in the United States, but worldwide. A truly rigorous accounting scheme must acknowledge that burning wood transfers carbon to the atmosphere and that future offsets are uncertain.

Sincerely,

Group or Individual	Contact	State	Statement
Energy Justice Network	Mike Ewall and Traci Confer, Co-Directors		
Global Alliance for Incinerator Alternatives	Ananda Tan		
Greenpeace	Larry Edwards		
On behalf of citizens of Fairbanks, AK	Joan Franz	AK	As an occupational therapist working with children, I am alarmed by the increased incidence of severe asthma that accompanies prolonged periods of poor air quality from PM 2.5 emissions in my city.
Individual	John Lyle	AK	
Individual	Lou Brown	AK	
On behalf of citizens of Fairbanks, AK	Nancy Rabener	AK	My community lies within a non-attainment area. Rising fuel oil prices have led many households, university campuses and even our local electric cooperative to start burning wood and coal, worsening our existing PM2.5 problem. We need stronger regulations and enforcement to protect our air quality.
Individual	Patrice Lee	AK	
Individual	Richard Seifert	AK	
Individual	Sarka Meyer	AK	
Clean Air Fairbanks	Sylvia Schultz	AK	
Action for Clean Water in Arkansas	David Orr	AR	
Don't Waste Arizona	Stephen Brittle	AZ	Surprize, AZ about the potential health risks of the waste incinerator proposed by Mohave Electric Cooperative, and support opponents of the incinerator.
Sequoia ForestKeeper	Ara Marderosian	CA	
Movement Generation: Justice and Ecology Project	Gopal Dayaneni	CA	
Center for Community, Democracy and Ecology	Reede Stockton	CA	I am concerned about the operation of multiple power plants in the Central Valley Corridor, because this area has severe particulate issues, especially during the summer months.
On behalf of citizens of Gypsum, CO	John and Nicole Schelter	CO	I am concerned about pollution from the biomass powerplant in Gypsum, CO because it is very close (~300 yds) to two large schools, hundreds of homes, and all of the recreation fields; located in a valley known for "inversions"; and on one of the best trout fishing rivers in the country. This plant skipped federal review and 99% of the town residents don't know anything about this plant - it was approved without any residential vote.
Individual	Lovis Axon	CT	
Green America	Frank Locantore, Director, Green America Better Paper Project	DC	
Green Delaware	Allan Muller, Executive Director	DE	
On behalf of citizens of Gainesville, FL	Adele Franson	FL	I expect EPA to put citizens first, and protect us from the harmful impacts of global warming, when regulating biogenic CO2 emissions.
On behalf of citizens of Gainesville, FL	Dian R. Deevey	FL	Gainesville Regional Energy Center (GREC) is a wholly unneeded facility that will inject a million tons of CO2 into the atmosphere each year - this plant will contribute significantly to global warming.

On behalf of citizens of Gainesville, FL	Jane Hendricks	FL	I am a neighbor of the Gainesville, FL biomass plant and fear the release of CO2 and particulates into the air will harm my health and the health of the planet. Our forests will be decimated to fuel this beast - this is not sustainable, renewable or healthy for the environment.
Florida League of Conservation Voters	Joy Towles Ezell	FL	
Individual	Greg Williamson	FL	
Floridians Against Incinerators in Disguise	Joy Towles Ezell	FL	
Florida Environmental Justice Network	Karen Orr	FL	I live near the new 100 megawatt Gainesville Renewable Energy Center, the building of which I have opposed legally and nearly every other way for almost 10 years.
On behalf of citizens of Gainesville, FL	Kevin Kennedy and Sandra Watts Kennedy	FL	After leaving our dioxin-contaminated home (over 1,150 ppt inside) near the Cabot/Koppers Superfund Site, we were devastated when the GREC biomass plant was built a few miles from our apartment. We are now, once again, subjected to dangerous air pollution. EPA must regulate biomass properly.
On behalf of citizens of Gainesville, FL	Li-Xia Yang, MD/PhD	FL	As a neighbor of the new GREC biomass plant, I suffer from the noise, toxic gas, bad odors and air pollution emitted by the plant every day. I hope this noxious plant will be shut down as soon as possible. EPA should take current science on global warming, etc. into account when deciding how to account for biogenic CO2 emissions.
On behalf of citizens of Gainesville, FL	Lynn Coullias	FL	The GREC biomass plant has damaged our quality of life and is endangering our health with constant noise, air pollution, fugitive dust, particulates & wood ash. This power plant is a travesty for all of Alachua County.
Physicians for Social Responsibility, Florida	Lynn Ringenberg, M.D., President	FL	Biomass power plant air pollution causes significant damage to health, especially to children and pregnant women, and must be better regulated to protect public health.
On behalf of citizens of Gainesville, FL	Mario R. Perez	FL	I live in the city of Gainesville where a biomass plant will begin to burn wood to generate electricity. EPA needs to stop the madness of additional CO2 emissions into the atmosphere. The particulate emissions are a health hazard to the citizens of the county.
On behalf of citizens of Gainesville, FL	Jerry Meriwether	FL	The Gainesville Renewable Energy Center is 1.5 miles from my home. There are over 1150 homes in this community with all within 2 miles of the plant. Noise, odor and fugitive dust have invaded our community along with particulate matter, I'm sure. The building of this 100 MW plant, which is not now currently needed since for service, was one of the biggest and most costly mistakes ever made in Florida, and the biggest in Alachua County by
Jefferson Environmental Defense Initiative	Charles Lewis	GA	The tire-wood burner proposed in Wadley avoided Clean Air Act permitting and will add to pollution in an area that already has several pollution sources
On behalf of citizens of Lithonia, GA	Deborah Jackson, Mayor of Lithonia	GA	The City of Lithonia and the surrounding area is severely impacted by the siting of various high polluting facilities such as landfills and a transfer station. The addition of a poorly regulated biomass facility will negatively impact the health conditions in a community that suffers from high rates of asthma and other respiratory ailments. More stringent requirements must be implemented to protect the health of the community and the environment.
Wiregrass Activists for Clean Energy	Michael Noll, President	GA	Wiregrass Activists for Clean Energy is proud to have successfully opposed a proposed biomass power plant in 2011 - our success has protected public health.

Preserve Pepekeo Health and Environment	Tim Greene, President	HI	Preserve Pepekeo Health and Environment represents over 100 individuals, many of whom live within 2 miles of a planned biomass plant, HuHonua Bioenergy LLC. We oppose the plant because it poses great risk to public health - it will emit dioxins and furans, pollutants that are toxic to humans.
Individual	Alec Kalla	IN	
Individual	James and Susan Donnelly	IN	
Citizens' Alliance for Responsible Energy	Mercedes Brugh	IN	Citizens' Alliance for Responsible Energy is working against a proposed municipal solid waste incinerator. We urge EPA to strengthen regulation of CO2 for biomass incineration, and use a true carbon accounting system.
Healthy Dubois County, Inc	Norma Kreilein, MD, FAAP	IN	Healthy Dubois County is working to protect public health by stopping the development of a miscanthus-burning facility near a residential neighborhood.
Individual	Ellen Moyer, Ph.D., P.E.	MA	
Concerned Citizens of Franklin County	Janet Sinclair	MA	The Pioneer Renewable Energy biomass plant would have added to air pollution in the Greenfield area.
Stop Toxic Incineration in Springfield	Lee Ann and Stuart Warner	MA	The three biomass plants proposed in western Massachusetts would have been some of the largest polluters in the region.
Individual	Lynne Pledger	MA	
Project for Energy Accountability	Meg Sheehan	MA	
Arise for Social Justice	Michaelann Bewsee	MA	A biomass plant proposed in the Springfield, MA area would add significantly to air pollution in an already polluted area.
On behalf of citizens of Greenfield, MA	Patrick Devlin	MA	As a resident of Greenfield, MA, I am proud to be from the first town to become a Massachusetts Green Community and have defeated a proposed biomass power plant by public referendum. Biomass power does not belong in our "green" future.
Toxics Action Center	Sylvia Broude	MA	TAC opposes large bioenergy plants that have been proposed for North Springfield, VT, Springfield, MA, Russell, MA, and Greenfield, MA. These facilities are significant sources of air pollution.
On behalf of Bennington Berkshires Citizens Coalition, MA & VT	Tela Zasloff	MA	Our group, the Bennington Berkshires Citizens Coalition, helped defeat a large biomass wood burning incinerator in Pownal, VT that would have endangered public health and the environment.
Wicomico Environmental Trust	Karen Lucas, Executive Director	MD	
Community Research	Greg Smith and Suchitra Balachandran, Co-Directors	MD	
Chesapeake Climate Action Network	Mike Tidwell,	MD/VA/DC	
Individual	Mark Muhich	MI	
On behalf of citizens in MN dealing with woodsmoke	Mike and Margot Reps	MN	We oppose biomass power because we live nextdoor to an outdoor wood boiler that heavily pollutes our property - we know first hand how polluting wood burning can be.
Individual	Katheren Koehn	MN	
On behalf of citizens in MO opposing large-scale bioenergy	Charles Phillips	MO	Corn ethanol plants all over Missouri and robbing communities of millions of gallons of water per year - growing a food product to produce biomass fuel (ethanol) is idiotic.
Missouri Coalition for the Environment	Heather B. Navarro, Executive Director	MO	

	Matthew Koehler, Executive Director	MT	
WildWest Institute			
Dogwood Alliance	Danna Smith	NC	
On behalf of opponents of bioenergy in NC	William J. Blackley, MD	NC	Biomass burning is harmful to public health - we stopped a biomass burning plant construction for health reasons.
Global Justice Ecology Project	Anne Petermann	NY	
Citizens' Environmental Coalition	Barbara Warren, Executive Director	NY	Citizens' Environmental Coalition is concerned about the preferential status being given to biomass and waste incineration in New York. We believe this preference is misguided because these technologies are polluting and harmful to public health and the environment.
New York Public Interest Research Group	Laura Haight	NY	
Buckeye Forest Council	Heather Cantino, Board Vice Chair	OH	
Pennsylvania Clean Air Council	Joe Minot, Executive Director	PA	
Individual	Peter Becker	RI	
On behalf of citizens of Allendale, SC	Becky Lafitte	SC	The biomass plant being built in Allendale escaped federal permitting and will be a large source of air pollution.
Cornucopia Network/NJ/TN Chapter	Donald B. Clark	TN	
Stafford Citizens for Open Government	Bill Johnson, Deputy Director	VA	We are currently trying to stop our local government, Stafford County, VA, from building a waste incineration plant that would purportedly generate electricity.
Heartwood	Ernie Reed	VA	
On behalf of neighbors of incinerators in VA	Mary Jane Reyes	VA	I live near a massive municipal solid waste-to-energy facility and, since I am allergic to wood smoke, have studied the toxic effects of wood smoke extensively. Burning more wood is bad for human health, the health of our forests, and the health of our planet, as increased CO2 emissions drive climate change.
Wild Virginia	Misty Boos, Managing Director	VA	
Clinch Coalition	Paul Mocerri, President	VA	
Biofuelwatch	Rachel Smolker	VT	
North Springfield Action Group	Robert F. Kischko, P.E.	VT	Our group opposes the 37MW NSSEP project, which at 26.1% efficient is a waste of our wood resources. We are legal interveners in the Vermont PSB Section 248 process.
Individual	Darlene Schanfeld	WA	
Climate Crisis Committee of the Olympia Fellowship of Reconciliation	Gar Lipow	WA	
Stop Biomass Washington State	Diana Somerville	WA	
Individual	Dr. Jeffrey Morris	WA	
On behalf of citizens facing expansion of Port Townsend paper mill, WA	Elaine Bailey	WA	Along with over 9,000 people in our town, we live a few miles away from Port Townsend Paper Corporations 25MW proposed biomass cogeneration project.
Olympia Movement for Justice and Peace	Gar Lipow	WA	

On behalf of citizens facing woodsmoke pollution	Gary Schultz	WA	Biomass facilities and outdoor wood-fired heaters are nowhere near as clean as advertised. Exposure to these wood boilers led me to be a witness for the Alaska DEC against the manufacturer of these boilers when they were taken to court. Heating homes and schools with biomass exposes us to unnecessary, dangerous air pollution.
PT Airwatchers	Gretchen Brewer	WA	Paper, 500,000 tons per year have been ignored by regulators under "biogenic" CO2 exemption schemes. PTPC plans to "more than double" their biomass incineration in the near future will drastically increase CO2 emissions.
On behalf of citizens opposed to bioenergy in Seattle, WA	John Willenbacher	WA	Seattle Steam has convinced lawmakers in Washington State that burning wood (biomass) in downtown Seattle is greenhouse gas neutral - this has nothing to do with reality, only politics.
World Temperate Rainforest Network	Pat Rasmussen, Coordinator	WA	The World Temperate Rainforest Network opposed proposed biomass plants in Port Angeles and Port Townsend that would use wood from the Temperate Rainforest on the Olympic Peninsula. This rainforest is a valuable carbon sink; logging it would both decrease the sink and create more CO2 in the atmosphere, a lose-lose situation.
Midwest Environmental Advocates	Kimberlee Wright, Executive Director	WI	
Save Our Air Resource	Robert Hughes	WI	Our group opposed the We Energies biomass plant, which is adding pollution in the region.
Ohio Valley Environmental Coalition	Janet Keating, Executive Director	WV	