Sely Cochrane

From:	Friedman, Bernie <bfriedman@beckerlawyers.com></bfriedman@beckerlawyers.com>
Sent:	Tuesday, March 5, 2024 2:22 PM
То:	Beam Furr (bfurr@broward.org); Greg Ross (mayor_ross@coopercityfl.org)
Cc:	Sely Cochrane; Kevin Kelleher (kkelleher@broward.org); michaelruiz@broward.org; Mary
	Lou Tighe; Matthews, Nick; LaPlant, Colleen; Friedman, Bernie; Clay Miller
	(clmiller@broward.org)
Subject:	Waste-to-Energy PROMULAGATION OF NEW REGULATIONS-
Attachments:	SWA MACT 2-19-24.pdf; U. S. Environmental Protection Agency - Solid Waste Authority
	of Palm Beach County[70].pdf; 24-02290-AO-EX Schauer response letter[80][29].pdf;
	SWA UMRA Comments.pdf

Dear Chair Ross and Vice Chair Furr - I wanted to bring to your and the Solid Waste Authority's attention, rulemaking at the Federal level that could seriously impact our County's ability to retrofit and expand existing facilities and possibly make it more costly to build new facilities. The Solid Waste Authority of Palm Beach has been in touch with the Palm Beach Congressional Delegation and has written comments. Knowing that Broward has a lot at stake in this too, I wanted to pass along this information in the hopes that you would possibly take action too to protect all of your options and future interests. Below and attached is some useful information. I am happy to jump on a quick call or get some more information or a presentation for a meeting. Time is of the essence to reach out to the Broward Delegation and a letter related to the new Rules. Thanks. Have a nice day.

US EPA released proposed new Maximum Achievable Control Technology (MACT) standards in January. The comment period is opened until March 25 and the final rule has to be done by court order by Nov 28, 2024. *For existing facilities:*

• The EPA has proposed to reduce emissions for existing facilities up to **85% below** those the EPA approved for **brand new units** just last year.

For new facilities:

• Considering the *exact same technology*, EPA has proposed limits for new facilities over 90% below current BACT levels. This could make a new Broward facility extremely difficult.

I have attached are a few documents from Palm Beach Solid Waste Authority for your review.

- 1. Palm Beach Solid Waste Authority's (SWA) MACT PP
- 2. SWA's request for additional time
- 3. EPA's denial letter
- 4. SWA's comments from last May during the pre-proposal process

In addition, on Wednesday, Feb. 14, the Palm Beach Solid Waste Authority heard a presentation from Executive Director Dan Pellowitz on the U.S. EPA's recently released proposal for MACT. Dan's presentation is available to watch on Youtube <u>at this link</u>. Go to the 20:45 mark to see his remarks and Powerpoint.

Bernie Friedman

Shareholder Chair, Government Law & Lobbying Practice Group



Becker & Poliakoff 1 East Broward Blvd., Suite 1800 Ft. Lauderdale, FL 33301

954.985.4180
954.328.9144
954.985.4716
bfriedman@beckerlawyers.com
www.beckerlawyers.com
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Solid Waste Authority of Palm Beach County

Board Meeting: February 14, 2024



USEPA: Amendments to Maximum Achievable Control Technology (MACT) Standards

Background

- Palm Beach Renewable Energy Facilities 1 & 2 (PBREF 1 & 2) operate in compliance with FDEP permits and air emission limits promulgated by the USEPA.
- PBREF 1 was permitted in the mid-1980s and has been operational since 1989. Refurbishments were made in 2010 to upgrade the air pollution control (APC) system.
- PBREF 2 was permitted in 2011 and has been operational since 2015.
- USEPA is proposing lower air emission limits for all current Waste to Energy (WTE) facilities that combust more than 250 tons/day.
- Impetus for the proposed standards is a lawsuit from environmental organizations.
- A total of 57 existing facilities nationwide will be impacted by the proposed standards.
- The Clean Air Act (CAA) requires USEPA to evaluate air pollution standards every 5 years to review the latest APC technologies. The standards were last revised in 2006.



Timeline

- USEPA published the proposed standards on 1/25/2024.
- 60-day comment period ends 3/25/2024.
- Regulations may go into effect as soon as December 2024.
- Owners have 5 years (until December 2029) to retrofit the facilities to meet the new air emission limits.
- PBREF 1 Operations & Maintenance (O&M) Agreement with Covanta expires in 2029 (can extend 5 years to 2034).
- PBREF 2 O&M Agreement with Covanta expires in 2035 (can extend 20 years to 2055).



USEPA's Proposed Changes to Air Emission Limits

- Reduced air emissions limits for existing units.
- Elimination of Startup, Shutdown, and Malfunction (SSM) data exclusions.
- Continuous Emissions Monitoring System (CEMS) monitor downtime will result in a violation.



Potential Impacts to SWA

• PBREF 1

- Retrofit with Advanced Selective Non-Catalytic Reduction (ASNCR): \$10-15M
- Upgrade the fabric filters & cages for baghouses: \$18-20M
- Increased carbon injection and lime usage: \$1M/yr.
- Install redundant Continuous Emission Monitoring System (CEMS): \$350k

• PBREF 2

- Upgrade the fabric filters & cages for baghouses: \$25-30M
- Increased carbon injection and lime usage: \$1.5M/yr.
- Install redundant Continuous Emission Monitoring System (CEMS): \$500k



Landfill Capacity Impacts

• Assumptions:

- PBREF 1 will operate until 2034 at current capacity (795,000 tons/yr.) Board approves a 5-year extension to the Covanta O&M Agreement from 2029 to 2034
- PBREF 2 will operate until 2055 at current capacity (1,000,000 tons/yr.) Board approves a 20-year extension to the Covanta O&M Agreement from 2035 to 2055
- PBREF 3 will be online in 2034 at a capacity of 1,000,000 tons/yr. Board approves the project, permits received on time, bond issuance, construction on time, etc.

Landfill Depletion:

- 2054 when all the above assumptions are valid
- 2044 if PBREF 1 is retired in 2029



Proposed Air Emission Standards

Pollutant	PBREF 1 Air Emission Standard/Limit	PBREF 2 Air Emission Standard/Limit	NEW Proposed MACT Limits for Existing Facilities	NEW Proposed MACT Limits for NEW Facilities
NOx	250 ppmvd [142.2]	50 ppmvd (32.6)	110 ppmvd	50 ppmvd
NOx (lb/hr)		37.4		
NOx (12 month rolling avg)		45 ppmvd		
CO (4hr block)	400 ppmvd	100 ppmvd (21.3)		
CO (24hr avg)	200 ppmvd (74.9)		110 ppmvd RDF/S 100 ppmvd MB/WW	100 ppmvd RDF/S 16 ppmvd MB/WW
CO(lb/hr)		45.5		
CO (30 day rolling avg)		80 ppmvd		
SO ₂	29 ppmvd (2233) or 75% reduction	24 ppmvd (17.4)	20 ppmvd	14 ppmvd
SO ₂ (lb/hr)	SO ₂ (lb/hr) -		- 25	
HCI	25 ppmvd [83] or 95% reduction	20 ppmvd (3.09)	13 ppmvd	7.8 ppmvd
HCl(lb/hr)	the state of the s	11.9		
PM/PM ₁₀ /PM _{2.5}	25 mg/dscm [2:4]	12 mg/dscm (215)	7.4 mg/dscm	4.9 mg/dscm
PM/PM ₁₀ /PM _{2.5} (lb/hr)		4.7		

Values highlighted in green are 5-year averages as reported to USEPA All concentration values are corrected to 7% O_2 , except ammonia slip which is 15% O_2 ; $\mu g/dscm = micrograms$ per dry standard cubic meter mg/dscm = milligrams per dry standard cubic meter ng/dscm = nanograms per dry standard cubic meter

ppmvd = part per million dry volume



Proposed Air Emission Standards (continued)

	PBREF 1	PBREF 2	NEW Proposed MACT	NEW Proposed	
Pollutant	Air Emission Standard/Limit	Air Emission Standard/Limit	Limits for Existing Facilities	MACT Limits for NEW Facilities	
Lead (Pb)	400 μg/dscm <mark>(7.58)</mark>	125 µg/dscm (2.79)	56 μg/dscm	13 μg/dscm	
Lead (Pb)(lb/hr)		0.049		and the second second	
Нg	50 μg/dscm <mark>(0.565)</mark> or 85% reduction	25 μg/dscm (0.66)	12 μg/dscm	6.1 μg/dscm	
Cadmium (Cd)	35 μg/dscm (0.337)	10 µg/dscm <mark>(0.31)</mark>	1.5 μg/dscm	1.1 μg/dscm	
Dioxin/Furan	30 ng/dscm (0.749)	4.20 ng/dscm (0.557)	7.20 ng/dscm	1.8 ng/dscm	
Opacity (6 min avg)	10% 🔘	10% 🔘	No Change	No Change	
Ammonia Slip	15 ppmvd	10 ppmvd (3.58)	No Change	No Change	
Values highlighted in green are 5-year averages as All concentration values are corrected to 7% O_2 , e µg/dscm = micrograms per dry standard cubic me mg/dscm = milligrams per dry standard cubic me ng/dscm = nanograms per dry standard cubic me	xcept ammonia slip which is 15% eter ter	6 0 ₂ :			

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ppmvd = part per million dry volume

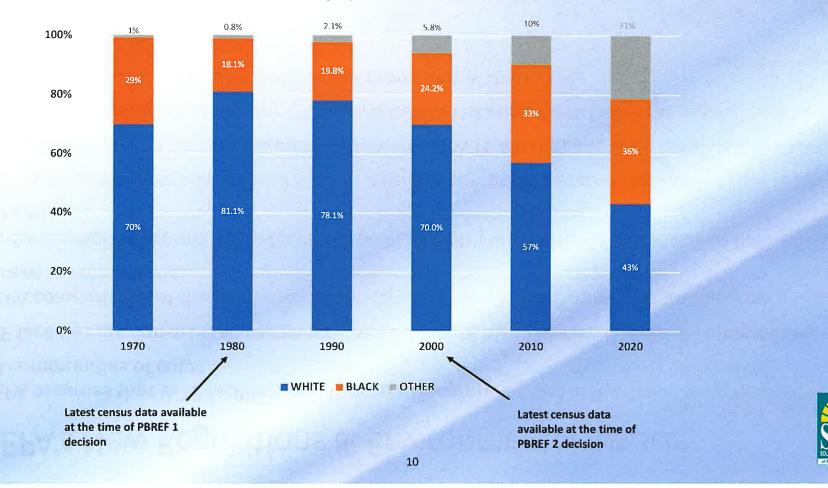
USEPA's New Regulations & Environmental Justice

- USEPA assumes that WTE facilities are disproportionately located in low-income communities and communities of color.
- WTE facilities are constructed to service the solid waste disposal needs of local communities.
- USEPA comparisons of the local demographics to those within 50 miles and the national average are misleading.
- The demographics around these facilities many of which were sited in the 1980s or before have changed.
- WTE facilities are generally located near or within urban areas because landfilling is not feasible.
- USEPA ignores the known environmental benefits of WTE in comparison to landfills.
- There is no scientific evidence demonstrating health risks associated with these WTE facilities.

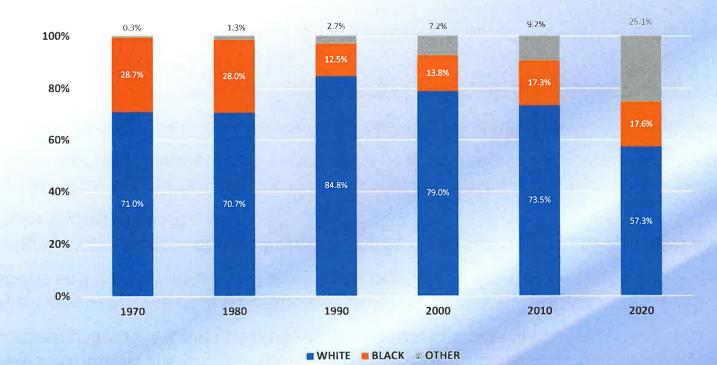
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• There are more than 500 WTE facilities in Europe and 900 in China.





SWA : Race Demographics Within a 3-Mile Radius



Palm Beach County: Race Demographics



Concerns with USEPA's New Regulations

- USEPA did not follow the process required by the CAA for amendments to the air emission limits, specifically USEPA did not perform a Residual Risk Analysis.
- USEPA assumes that the new air emission limits can be met by making minor modifications to operations and limited capital investments to upgrade and retrofit existing APC equipment.
- USEPA ignores the impact of modifications to one component of the APC system on other components downstream.
- New regulations will require existing facilities that are reaching the end of serviceable life to make large capital investments to comply with new air emission limits or shut down.
- Proposed technologies and operational modifications have not been fully evaluated.
- USEPA grossly underestimates the increase in WTE facility annual operating costs for the proposed operational modifications.
- Elimination of SSM and monitor downtime will result in violations, some of which are unavoidable.



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Concerns with USEPA's New Regulations (continued..)

- Absent WTE facilities for solid waste management, landfills will then become the primary method of solid waste disposal.
- High likelihood of future landfills within low-income communities in rural/suburban areas.
- Increased long distance shipment of waste from urban areas to rural areas.
- Increased Greenhouse Gas (GHG) generation.
- Recycling rates will decrease.
- Increased dependence on fossil fuels for electricity generation (PBREF 1 & 2 generate renewable energy that is equivalent to powering 90,000 homes).
- The deadline for comment does not allow sufficient time for WTE owner/operators to evaluate the impact on their facilities.



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What is SWA's Near-term Plan?

- Request a 60-day time extension from USEPA (until May 25, 2024) to fully evaluate the impacts of the new air emission limits.
- Staff has had discussions with FDEP to seek approval to evaluate the effectiveness of some of the operational modifications proposed by USEPA.
- Met with Covanta (PBREF 1 & 2 operator) to develop test protocols for the above operational modifications being proposed by USEPA.
- Test data will provide some insight into the likelihood of complying with the new air emission limits without significant retrofit.
- We are collaborating with the Florida Waste to Energy Coalition (FWTEC) to join the industry in voicing our concerns to USEPA.
- We are working with the Waste to Energy Association (WTEA) and others who may pursue litigation against USEPA.
- We are considering sending letters to members of Congress requesting assistance.







February 21, 2024

The Honorable Michael S. Regan Administrator

U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, DC 20460

RE: Request for 60-Day Extension of Public Comment Period for Proposed Rule Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Large Municipal Waste Combustors Voluntary Remand Response and 5-year Review, Docket ID: EPA-HQ-OAR-2017-0183

Dear Administrator Regan:

The Solid Waste Authority of Palm Beach County (Authority) respectfully submits this letter requesting that the U.S. Environmental Protection Agency (EPA) extend the public comment period for the proposed rule "Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Large Municipal Waste Combustors Voluntary Remand Response and 5-year Review," Docket ID: EPA-HQ-OAR- 2017-0183, (Proposed Rule) by 60 days from March 25, 2024 to May 25, 2024.

The Authority is a Special District created in 1975 by an Act of the State of Florida Legislature to manage the municipal solid waste (MSW) generated in Palm Beach County (County). Since that time, the Authority has created an award winning Integrated Solid Waste Management System (ISWMS), providing the critical infrastructure required to serve the solid waste management needs of the 1.5 million residents and thousands of County businesses in an environmentally conscious and cost-effective manner. The key elements of our ISWMS include a 2000 TPD RDF Facility (PBREF#1) operating since 1989 and a 3000TPD Mass Burn facility (PBREF#2) operating since 2015. Together these facilities process over 1.8 million tons of post recycled municipal waste annually. As such the Authority has a strong interest in commenting on the Proposed Rule.

This extension is being requested to allow the Authority to complete an engineering study and data collection effort at both PBREF #1 and #2 to evaluate the technical and economic viability of complying with the proposed MACT standards. The initial evaluation plan (approximately 10 days) would focus on attempting to achieve the reagent flow rates/concentrations required to comply with the proposed standards for NO_x and SO_x. Depending on the results this would be followed by a longer (approximately 30 days) program to investigate any potential impacts on the processing and emission control equipment

The Honorable Michael S. Regan U.S. Environmental Protection Agency Administrator

performance. The attached letter to the Florida Department of Environmental Protection, Division of Air Resource Management dated February 16, 2024, provides a detailed summary of the program. In that the facilities will be down for several weeks for the scheduled spring maintenance outages this program cannot be completed within the current 60-day comment program.

The Authority has demonstrated a 35-year history of environmental stewardship and values EPA's recognition of PBREF#2 as the state-of-the-art facility as such we hope that EPA recognizes the value of this effort and favorably considers the requested extension.

Should there be any questions or should you require any additional information please contact me directly at your convenience.

Sincerely,

Dan Pellowitz Executive Director



YOUR PARTNER FOR SOLID WASTE SOLUTIONS

February 16, 2024

Mr. Jeff Koerner, P.E. Division Director Florida Department of Environmental Protection Division of Air Resource Management 2600 Blair Stone Road, MS #5505 Tallahassee, FL 32399-2400

Subject: Perform Engineering Study to comply with New MACT Standards Palm Beach Renewable Energy Facility No.1 (PBREF-1) Palm Beach Renewable Energy Facility No. 2 (PBREF-2) Title V Air Operating Permit No. 0990234-043-AV

Dear Mr. Koerner:

The Solid Waste Authority of Palm Beach County (Authority) owns Palm Beach Renewable Energy Facility No.1 (PBREF-1) and Palm Beach Renewable Energy No.2 (PBREF-2) collocated at the Palm Beach Renewable Energy Park (PBREP) in West Palm Beach, Florida. These facilities are operated by Covanta (Plant Operator) under Title V Air Operation Permit No. 0990234-043-AV. As you are aware, the United States Environmental Protection Agency (USEPA) is proposing to amend the New Source Performance Standards (NSPS) and Emission Guidelines (EG) for large municipal waste combustors (LMWC) as published in the Federal Register on January 23, 2024.

USEPA assumes that the new air emission limits can be met by making minor adjustments to operations and small capital investments to upgrade and retrofit existing Air Pollution Control (APC) equipment. As discussed with you on February 8, 2024, the Authority wishes to evaluate the current APC systems at both facilities by performing an engineering study and data gathering of emission profiles to comply with the new Maximum Achievable Control Technology (MACT) standards being proposed by USEPA.

The findings from this study will be important to present to USEPA as part of the 60-day comment period which ends on March 25, 2024. The Authority in conjunction with the Plant Operator is proposing to conduct a short-term 10-day assessment as outlined below to evaluate the setpoints for reagents, such as lime and urea, that can comply with the new proposed standards for SO₂ and NO_x emissions. Additionally, USEPA has not considered the potential impacts of altering one component of an APC system on another type of APC equipment located downstream, as in the case of increasing the amount of lime slurry at PBREF-2 and the operation of the Selective Catalytic Reduction (SCR) system.

Mr. Jeff Koerner February 16, 2024 Page 2

ENGINIEERING STUDY PROTOCOL (10-day)

PBREF-1:	Unit 1 ((EU001) and Unit 2 ((EU002),	1800 tons/day	Refuse Derive	d Fuel (RDF) MWC.
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Parameter	Current	Current Set	Test Set	MACT
	Limit	Point	Point	Proposed
				Limit
SO2	29 ppm 24-hr	23 ppm	16 ppm	20 ppm 24-hr
	geo or 75%			geo
	Reduction			
NOx	250 ppm 24-hr	150 ppm	100 ppm	110 ppm 24-hr

- Estimated start schedule: 2/19/24 to 2/29/24 (note: planned turbine outage scheduled for March 2nd until March 29th).
- Setpoint for SO2 will be 16 ppm. Current setpoint is 23 ppm.
- Setpoint for NOx will be 100 ppm. Current setpoint is 140 ppm.
- Steam flow setpoint will be 320klb/hr. Fuel dependent.
- EU001 and EU002 will be part of the study.
- Results will be trended and recorded using the plant's Distributed Control System (DCS) and CEMS systems.
 - o SO2 ppm
 - o NOX ppm
 - o Furnace temperatures
 - o Steam Flow
 - Fabric Filter conditions (i.e., differential pressure, cleaning counts)
 - SDA performance nozzle spray, slurry metering pump, strainer, outlet temperature, etc.
 - Ash conveyor potential impact (increased volume, moisture level)
 - Lime delivery system performance slakers, tanks, main pumps, etc.
 - Urea delivery system performance pumps, lances, tank, etc.
 - o Reagent supply chain availability
 - o Ash generation rates/weight
 - o Ash pH
- All operations and permit limit conditions will be monitored, and test will be aborted if any adverse conditions surface.

PBREF- 2: Unit 3 (EU024), Unit 4(EU025) and Unit 5 (EU026) 3000 tons/day Mass Burn MWC.

Mr. Jeff Koerner February 16, 2024 Page 3

Parameter	Current Limit	Current Set Point	Test Set Point	MACT Proposed Limit
s'o2	24 ppm 24-hr	21.5 ppm	16 ppm	20 ppm 24-hr
	geo 25.0 lb/hr			geo
	24-hr geo			
NOx	50 ppm 24-hr	35 ppm	35 ppm	50 ppm 24-hr
	45 ppm 12-mo			
	rolling 37.4			
	lb/hr 24-hr			

- Estimated start schedule: 3/4/24 to 3/14/24.
- Setpoint for SO2 will be 16 ppm. Current setpoint is 21.5 ppm.
- Setpoint for NOx not proposed to change unless there is an affect from increased lime slurry. Current setpoint is 35 ppm.
- Steam flow setpoint will be 300klb/hr. Fuel dependent.
- EU024, EU025, and EU026 will be part of the study.
- Results will be trended and recorded using the plant's Distributed Control System (DCS) and CEMS systems.
 - o SO2 ppm
 - NOX ppm N/A
 - o Furnace temperatures
 - o Steam Flow
 - Fabric Filter conditions (i.e., differential pressure, cleaning counts)
 - SDA performance atomizer, outlet temperature, etc.
 - Ash conveyor potential impact (increased volume, moisture level)
 - Lime delivery system performance slakers, tanks, main pumps, strainers, etc.
 - o Catalyst performance low temperature potential interlock trip
 - Ammonia delivery system performance N/A
 - o Reagent supply chain availability
 - Ash generation rates/weight
 - o Ash pH
- All operations and permit limit conditions will be monitored, and test will be aborted if any adverse conditions surface.

The Plant Operator will minimize and mitigate for any adverse effects during the study period to ensure compliance with the current permit limits. Depending upon the findings of the 10-day study, the Plant Operator plans on performing a similar protocol for 30-days to see if there are any unintended effects on the boilers, APC equipment, and ash characterization. If new setpoints can be achieved to meet the proposed limits, the Plant Operator may also perform limited emissions testing on other pollutants (i.e., ammonia slip, dioxin/furan, etc.) to ensure that compliance will be met with all permit limits.

Mr. Jeff Koerner February 16, 2024 Page 4

The Authority greatly appreciates your assistance and prompt consideration of this matter because the Plant Operator wishes to proceed with this study in the very near future. If you have any questions or need additional information, please contact Mary Beth Morrison at mmorrison@swa.org or at (561) 640-4000 ext. 4613.

Sincerely,

Daniel Pellowitz Executive Director

cc: Hastings Read, FDEP-Tallahassee David Read, FDEP- Tallahassee Johanna Polycart, FDEP-SED Ramana Kari, SWA Ray Schauer, SWA Mary Beth Morrison, SWA Kyle Pinon, SWA Jim Epsilantis, Covanta Timothy Blackman, Covanta Stephanie Allois, Covanta



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Research Triangle Park, NC 27711

OFFICE OF AIR QUALITY PLANNING AND STANDARDS

February 23, 2024

Mr. Raymond H. Schauer Director, Facility Contract Operations Solid Waste Authority of Palm Beach County 7501 North Jog Road West Palm Beach, Florida 33412

Via electronic mail: rschauer@swa.org

Dear Mr. Schauer:

Thank you for your February 21, 2024, letter to the U.S. Environmental Protection Agency (EPA) requesting an extension of the comment period for the proposed rule "Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Large Municipal Waste Combustors Voluntary Remand Response and 5-year Review."

On December 20, 2023, EPA issued a proposal that would strengthen standards for large municipal waste combustors. The proposed standards reflect current technologies available to control pollution in a cost-effective fashion. In the proposal, EPA provided a 60-day public comment until March 25, 2024. EPA considers standard criteria when evaluating requests for extensions of rulemaking public comment periods. Each rulemaking is subject to applicable statutory requirements, such as the Administrative Procedure Act and the statute that provides the legal basis for EPA's proposed rulemaking. The Agency has evaluated and balanced multiple practical, programmatic, and policy considerations, and, at this time, is not planning to extend the public comment period. If this information changes, an announcement will be published in the *Federal Register*.

Again, thank you for your letter. We look forward to your continued engagement on this rulemaking.

Sincerely,

Penny Lassiter Director Sector Policies and Programs Division



SUBMISSION VIA ELECTRONIC MAIL a-and-r-Docket@epa.gov

May 15, 2023

The Honorable Michael S. Regan Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, DC 20460

Re: <u>Federal Non-rulemaking Docket ID No. EPA-HQ-OAR-2022-0920</u> – Reviewing Emission Standards for Clean Air Act Section 129 Pollutants from Large Municipal Waste Combustor Source Category

Dear Administrator Regan:

Thank you for the opportunity to comment on the Environmental Protection Agency's (EPA) review of emissions standards for Clean Air Section 129 pollutants from the Large Municipal Waste Combustor (LMWC) source category.

As an active member of several industry organizations, Local Government for Renewable Energy, the Waste-to Energy Association, and the Florida Waste-to Energy Coalition, the Solid Waste Authority of Palm Beach County, Florida (Authority) concurs with and fully supports the comments being submitted separately by these organizations on behalf of the industry. This correspondence is intended to provide specific supplemental information relative to the community we serve.

BACKGROUND

The Authority is a Special District created in 1975 by an Act of the State of Florida Legislature to manage the municipal solid waste (MSW) generated in Palm Beach County (County). Since that time the Authority has created an award winning Integrated Solid Waste Management System (ISWMS), providing the critical infrastructure required to serve the solid waste management needs of the 1.5 million residents and thousands of County businesses in an environmentally conscious and cost-effective manner. The cost of the system is borne by the rate payers. The Authority's rate payers are all owners of improved real property in the County, which includes approximately 700,000 residential units and 265 million square feet of commercial property.

The guiding principle in planning, designing, and implementing our ISWMS is the goal to manage all the MSW created in the County within the County and WTE is a critical tool in achieving this goal. To that end the Authority's ISWMS is modeled after the current EPA hierarchy including waste reduction, recycling, energy recovery and landfilling.

WASTE REDUCTION/COMMUNITY OUTREACH

The Authority engages in extensive outreach efforts. The primary goal of the Authority's public outreach efforts is to teach the 1.5 million residents and 9.1 million annual visitors of the County about the Authority's award-winning ISWMS, including the benefits of waste minimization and proper recycling. The Authority is recognized as an approved art and science field trip provider by the School District of Palm Beach County and maintains other partnerships within the community. The Education Team delivers nearly 200 programs each year to more than 12,000 children, adults, government and technical officials, and international groups. Education programs consist of in-school, virtual, community and onsite experiences primarily at the Authority's LEED Platinum Education Center. The Authority participates in more than 30 community events per year and hosts two annual events at the Authority with a reach of more than 250,000 people.

RECYCLING

While some critics of WTE falsely claim that WTE competes with recycling, as of 2021, the County has the 2nd highest recycling rate in the State of Florida and is one of the few counties to exceed the State's 75% recycling goal. The Authority successfully operates a countywide multifaceted recycling program that includes a dual-stream recycling program, multiple Home Chemical Drop-off/Recycling Centers, and a Biosolids Processing/Recycling Facility. We also issue permits to and encourage the development of private facilities that recycle and reuse hundreds of thousands of tons of vegetative waste and construction debris. Through our WTE facilities we generate clean renewable energy from post-recycled waste, recover metals, advance the beneficial use of WTE ash-derived aggregates in construction, and extract residual ferrous and non-ferrous metals post-combustion by employing an Advanced Metals Recovery process all in an effort to recover resources and preserve valuable landfill capacity.

RENEWABLE ENERGY

As the only proven technology capable of managing the thousands of tons of post-recycled municipal solid waste we receive per day, the Authority is committed to WTE as the preferred sustainable alternate to landfill disposal as it is a proven net greenhouse gas reducer. If there was a technology better proven to handle the scope and scale of the waste volumes we manage, the Authority would have adopted it. Renewable Energy Facility #1 (REF1) was commissioned in 1989 and after 20 years of successful operation was subsequently refurbished in 2010 at a cost of approximately \$175M. The scope of the refurbishment included replacing and upgrading the combustion units and the emission control equipment including significant upgrades to the air pollution control equipment with next-generation scrubbers for acid-gas control, fabric filter baghouses for Particulate Matter, Carbon Injection for mercury, dioxin, and furan, and Selective Non-Catalytic Reduction for NOx control.

In 2015 the Authority commissioned Renewable Energy Facility #2 (REF2), the first new WTE facility built in North America in over 25 years. At a cost of approximately \$700M REF2 incorporates the most modern combustion controls and emission control technology available including Selective Catalytic Reduction for NOx control. The implementation of REF2 from initial discussions through planning, financing, procurement, permitting, design, construction, and commercial operation took 10 years. The Authority conducted extensive outreach and received then and continues to receive overwhelming support from the community.

To date, these two REFs combined have processed over 33M tons of post-recycled MSW, recovered approximately 1.2M tons of metals and delivered 14.8M MWh of clean renewable energy to the grid.

LANDFILL

The Authority currently operates a landfill adjacent to the REFs with an expected life expectancy of 2054 assuming the continuation of WTE. In the absence of WTE, that landfill would have been depleted more than a decade ago. The vast majority of the landfilled material is non-putrescible WTE ash and materials not suitable for combustion. Landfills have a finite capacity, and it was the need to preserve landfill space and the inability to secure additional landfill capacity in the County that drove the decision to build REF2.

In 2005, with the rapid depletion of landfill airspace, the Authority initiated the process to permit the Authority's 1,600-acre Western Landfill Site adjacent to the Arthur R. Marshall Loxahatchee National Wildlife Refuge and explore expanding WTE capacity. The Authority initiated a series of workshops for public outreach. As a result of significant opposition to the Western Landfill from the U.S. Fish and Wildlife Commission, numerous environmental groups, and the local community, the Authority began a search for alternate sites in the County in 2007. While the Authority received offers from three willing sellers of alternate landfill sites in the western area of the County, the very same entities that opposed the Western Landfill Site opposed the alternate sites as well.

Ultimately, the Board rejected all these sites and directed staff to accelerate development of REF2 as the only viable alternative to a new landfill. Siting a new landfill in the County would be extremely challenging and is not supported by the public. EPA has asked what we would do without WTE. Our response is that we would be loading up trucks or railcars with MSW and shipping it out of the County.

ENVIRONMENTAL JUSTICE

EPA has raised environmental justice concerns. The Authority's Palm Beach Renewable Energy Park (PBREP), located in West Palm Beach, Florida, is the main campus of our operation. It was originally located, designed and constructed in the late 1980s after an extensive and exhaustive site selection process that included evaluating more than a dozen sites throughout the County. The PBREP is located between the Florida Turnpike and the Grassy Waters Preserve, a 23square mile wetland ecosystem that serves as a source of drinking water supply to the City of West Palm Beach. Our adjacent neighbor is a country club with million-dollar homes. More importantly, the demographics of the population in the immediate vicinity of PBREP are not dissimilar from the demographics of the County as a whole.

EPA QUESTIONS

The Authority offers the following in response to the EPA information request presented in the Federalism and Unfunded Mandates Reform Act (UMRA) Consultation Presentation:

• Regarding any facility closures or planned closures within the next 3-5 years, the Authority is currently considering the replacement of REF1. The result of the MACT review could impact our final decision.

- Regarding significant upgrades in control technology at facilities, the Authority has invested in significant upgrades at REF1 and REF2 as described above. There are no planned future upgrades at this time aside from the potential replacement of REF1.
- Regarding the size of communities that LMWC units collect waste, REF1 and REF2 serve a permanent population of approximately 1.5M residents concentrated in the eastern portion of the County.

ADDITIONAL INFORMATION AND CONCERNS

We have the following comments and questions:

- It is very difficult to provide meaningful comments to the three options being proposed by EPA without being provided the data and assumptions that were used to calculate these cost estimates. We request that EPA provide this information so that we can assess the specific impacts on our facilities and operations.
- EPA is planning to promulgate the new MACT regulations with an effective date of December 2024 with a five (5) year timeline for the WTE facilities to comply. Given that the Authority is considering shutting down REF1 and replacing it, and the reality that a new facility cannot be brought online in five (5) years, the Authority could potentially be forced to shut down REF1 before its replacement can be built or to expend significant resources on a facility nearing the end of its useful life. Will EPA consider different standards for existing and new sources?
- Has EPA considered that the increased costs presented in its three options will be borne by the local government's ratepayers, all of whom are small entities?
- Is EPA planning to conduct a residual risk analysis to quantify the impacts and the costbenefit of the proposed MACT regulations? Without conducting a risk assessment, how can EPA determine if revisions to MACT are truly appropriate?

In closing, the Authority supports rational, achievable, science-based, and risk-based emission limits that can be met with currently proven, commercially available technology. The Authority believes that the new limits must consider the reality that what can be implemented in a new plant or expansion may not be achievable in a retrofit. The path EPA takes in the promulgation of the new MACT standards could have a material impact on our ability to manage the County's waste efficiently and effectively, and on the cost of doing so, and in fact threaten the very survival of WTE in Palm Beach County which could result in greater reliance on landfilling, a lower recycling rate, and an increased greenhouse gas footprint.

Sincerely,

Dan Pellowitz Executive Director