

December 30, 2020

Mr. Jeffrey Meyer, Manager Division of Air Enforcement Bureau of Air Compliance & Enforcement - Northern 7 Ridgedale Avenue Cedar Knolls, NJ 07927

Subject: Essex County Resource Recovery Facility Program Interest (Title V) Number 07736 NEA200001-07736 – Administrative Consent Order Progress Report #2

Dear Mr. Meyer:

On behalf of Covanta Essex Company and in accordance with the Item #17 under the above referenced Administrative Consent Order (ACO) NEA200001-07736, attached is Progress Report #2 explaining the status of Covanta Essex Company's compliance with the Compliance Schedule required by the ACO.

If you have any questions or need additional information please contact Patricia Earls of my staff at 973-817-7322 or pearls@covanta.com.

Sincerely,

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David Blackmore Facility Manager

Attachments

Mr. Jeffrey Meyer Page 2



"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this letter and all attached documents and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fine or imprisonment or both, for submitting false, inaccurate, or incomplete information."

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David Blackmore Facility Manager

12/30/20 Date

Covanta Essex Company, PI #07736 Progress Report #2 NEA200001-07736 – Administrative Consent Order, Item #17

A. Identification of Site and Reference to ACO

Covanta Essex Company, PI #07736 Administrative Consent Order (ACO) NEA200001-07736

B. Status of Permitting and Planning Approvals, and any work at the site and progress to date

Status of Permitting and Planning Approvals:

There are currently no permitting or planning approvals pending or in progress related to the requirements of the ACO.

Work at the site and progress to date:

- On November 19, 2020, Covanta Essex Company submitted a report to the Department providing detailed estimates of all emissions associated with the purple plumes including, but not limited to, iodine and other associated acid gases, and the methodologies used to estimate the amount and duration of the emissions. This was required under Phase II, paragraph a)1 and was submitted within 45 days of the effective date of the ACO.
- Covanta's current Community Relations Plan has been shared with Mercury Public Affairs (Mercury), the independent contractor hired to propose and/or review the existing Public Outreach program for Covanta Essex Company. Pursuant to Phase I paragraph a) of the ACO, Mercury will develop a formal public outreach program and/or review and supplement as necessary, Covanta's existing program as detailed in the Community Relations Plan shared with Mercury. A plan, detailing the program, shall be developed by Mercury and shall include, but not be limited to, procedures to provide timely updates on any operational upsets that result in permit excursions, periodic notifications to local community groups, including electronic and other agreed to forms of communication and the establishment of a website link. The website link has already been established. A final report is due to be submitted by January 7, 2021, which is 90 days after the effective date of the ACO.
- Pursuant to Phase I paragraph b) of the ACO, the above-referenced plan and program also provides that Covanta shall conduct a community outreach event to communicate with local community groups on a bi-annual basis. On December 16, 2020, a virtual Open Meeting was conducted via a Zoom webinar by Covanta for the Essex facility from 5:00 to 6:00 pm. During the Open Meeting, a presentation was provided by Jack Bernardino, the Area Asset Manager for New Jersey, Dave Blackmore, the Facility Manager for the Essex facility, and Paul Gilman, the Chief Sustainability Officer for Covanta. Patricia Earls, the New Jersey Regional Environmental Manager also assisted with the presentation. Participants in the Open Meeting included members of the local community, members of the NJDEP, members of various local Environmental groups, local schools, and local media. The presentation has

also been posted on the Covanta Essex website and was emailed to all registrants for the Open Meeting. The presentation has also been included with this report as Attachment 1.

- Pursuant to Phase I paragraph d) of the ACO, Tetra Tech, an independent contractor hired to develop new protocols or supplements, as necessary, to Covanta's existing waste receipt, inspection and handling protocols has submitted a draft report on the recommended protocols and procedures to Covanta which is currently under internal review. The final procedures and protocols, including requirements listed under Phase I d)i through d)v, will be submitted to the Department for review no later than January 7, 2021, which is 90 days after the effective date of the ACO. These procedures/protocols will be incorporated into the final mitigation plan required to be submitted after approval by the Department.
- On December 9, 2020, comments were received from Luis Lim of the Bureau of Air Monitoring on the evaluation to determine if there is a monitor that would provide continuous, accurate and reliable analysis of vapor phase iodine in an industrial environment in the event that iodine gas was generated from iodinated waste in the tipping floor and pit area that was submitted to NJDEP on November 6, 2020. Covanta Essex and TetraTech are reviewing comments by Mr. Lim
- Covanta will submit for DEP approval a modeling protocol prepared by AECOM, an independent third party environmental consultant. The protocol will be submitted to the Bureau of Evaluation and Planning and will address a) Technical Manual 1002 Guidance on Preparing an Air Quality Modeling Protocol and b) Technical Manual 1003 Guidance on Preparing Risk Assessment for Air Contaminant Emissions. Upon approval of the protocol, AECOM will conduct the modeling and risk assessment consistent with the protocol approval. The final protocol is under internal review and will be submitted by January 7, 2021, which is 90 days after the effective date of the ACO.
- On December 7, 2020, Covanta submitted the report on efforts undertaken to identify the formation of purple plumes at the facility located in Lancaster PA and operated by Covanta Lancaster, Inc. to the Department as required under Phase II, paragraph (c) of the ACO. The report included information that explains the formation of purple plumes, including the estimated iodine feed rate that may lead to the formation of a purple plume. This report was submitted within 60 days of the effective date of the ACO.

C. Difficulties or problems encountered during the reporting period, and actions taken to rectify any difficulties or problems

There have been no difficulties encountered during this reporting period.

D. Activities planned for the next reporting period

Activities planned for the next reporting period are as follows:

- The plan detailing the Public Outreach Program that is recommended by Mercury which shall include, but not be limited to, procedures to provide timely updates on any operational upsets that result in permit excursions, periodic notifications to local community groups, including electronic and other agreed to forms of communication will be submitted to the Department for review no later than January 7, 2021, which is 90 days after the effective date of the ACO.
- The final waste procedures and protocols recommended by Tetra Tech, including requirements listed under Phase I d)i through d)v, will be submitted to the Department for review no later than January 7, 2021, which is 90 days after the effective date of the ACO.
- The written protocol prepared by AECOM for submittal to the Bureau of Evaluation and Planning that is consistent with a) Technical Manual 1002 Guidance on Preparing an Air Quality Modeling Protocol and b) Technical Manual 1003 Guidance on Preparing Risk Assessment for Air Contaminant Emissions will be submitted by January 7, 2021, which is 90 days after the effective date of the ACO. Upon approval of the protocol, AECOM will conduct the modeling and risk assessment consistent with the protocol approval.
- Additional follow-up will be conducted as needed to address the comments from Mr. Luis Lim of the Bureau of Air Monitoring on the iodine monitor evaluation to determine the availability and feasibility of iodine monitoring options.

E. The required and actual completion dates for each item required by this ACO

See the updated table, included as Attachment 2 to this report, that lists action items required by the ACO along with required due dates and actual completion dates where applicable.

F. An explanation of any non-compliance with the compliance schedule

There are no instances of non-compliance with the schedule.

G. Evaluation of all corrective measures implemented to date

Covanta Essex Company continues to implement Community Outreach efforts and enhanced tipping floor inspection procedures in order to prevent iodinated waste from being combusted in the boilers. The successful identification of the source of the iodinated waste believed to have caused the purple plume events in 2019 through April of 2020, and subsequent permanent re-direction of that waste to another non-Covanta disposal facility, has resulted in no further purple plume opacity events at Covanta Essex Company since April 7, 2020.

The annual Open Meeting that was held virtually on December 16, 2020 from 5:00 to 6:00 pm via a Zoom webinar by Covanta for the Essex facility was a successful event given the levels of attendance and participation by members of the public. There was a question and answer segment which allowed the facility to address comments specifically from members of the public in an open and interactive forum.

Attachment 1

Powering Today. Protecting Tomorrow.

Covanta Essex Open Meeting | December 16, 2020

Covanta Essex Company

- Opened 1990
- Superior, sustainable waste management for 22 municipalities and the surrounding region
- Processes up to 985,500 tons of waste <u>annually</u>, in turn:
 - Eliminate nearly 1 million tons of CO₂ emissions
 - Generate enough renewable electricity for approximately 46,000 homes
 - Recycle enough metal to build 21,000 cars





Virtual Tour



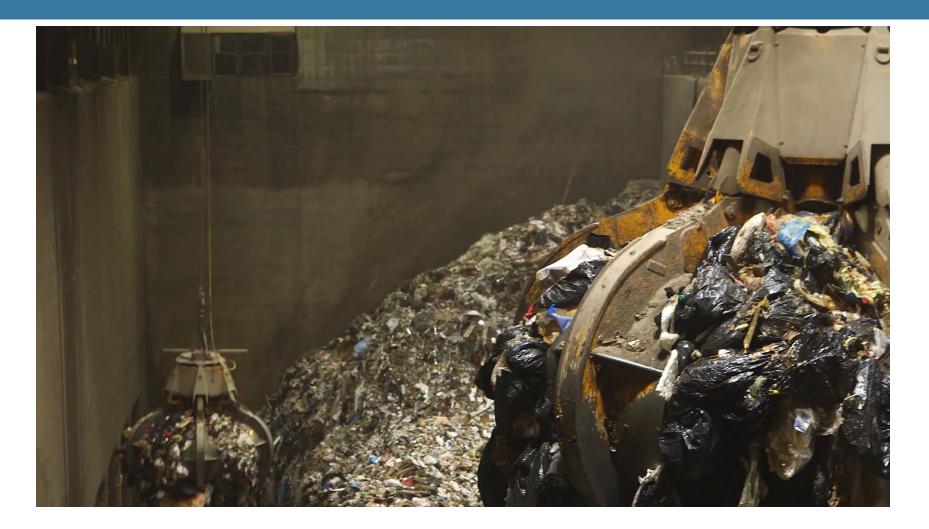
Waste Receiving & Tipping





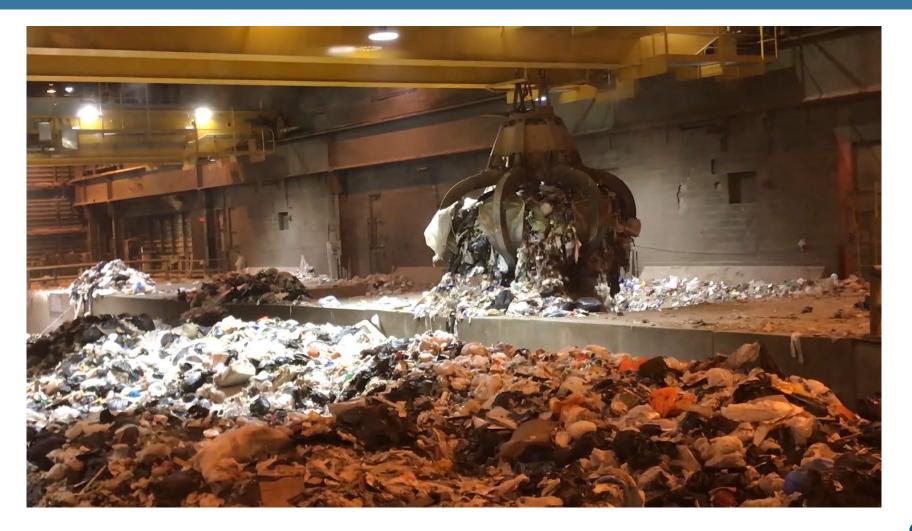


Grapple Cranes



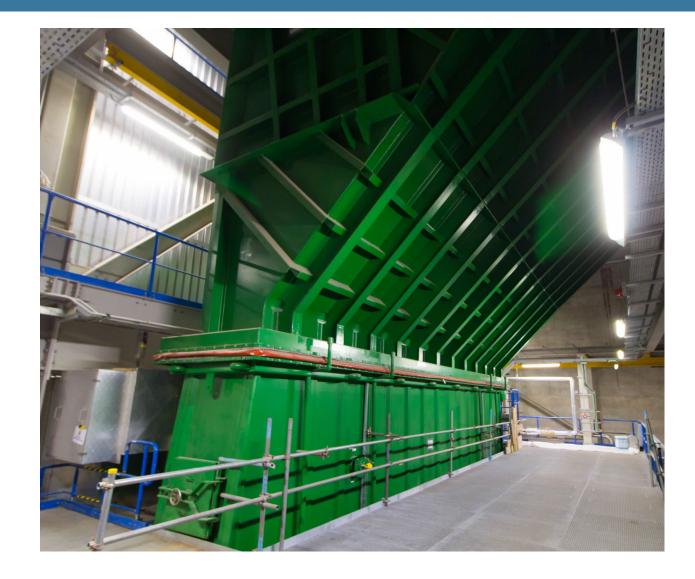


Boiler Charging





Feed Chute





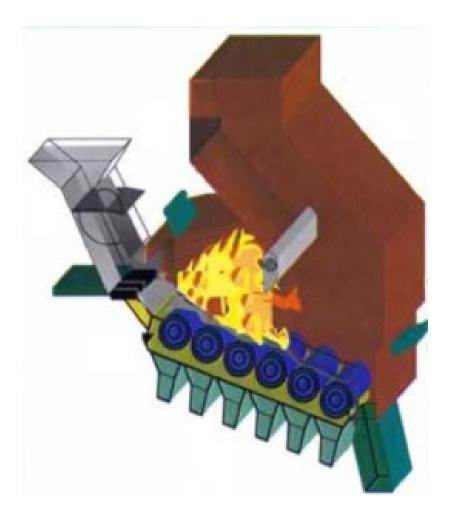
Hydraulic Feed Rams





Roller Grate Technology





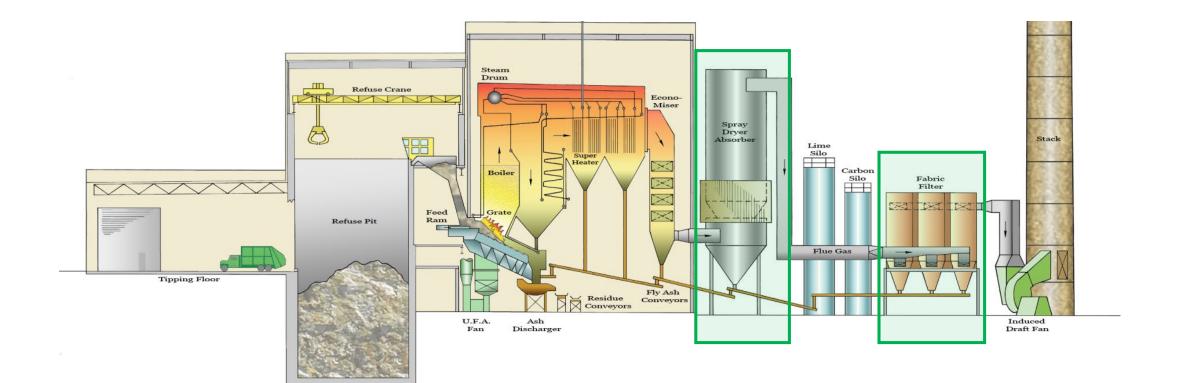


Combustion Process



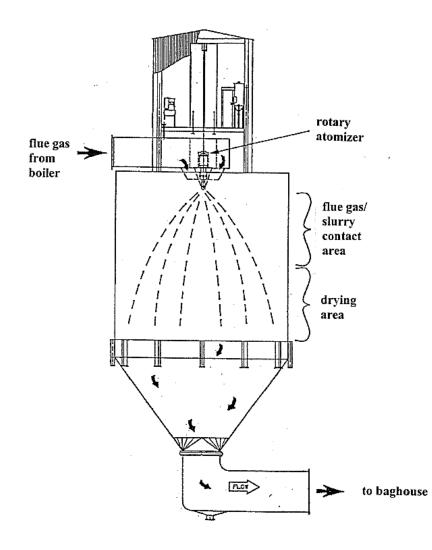


Plant Design – Emissions Control





Spray Dry Absorbers for Acid Gas Control



- System neutralizes acid gases using a lime slurry in a scrubber reactor
- Activated carbon is injected into the flue gas for heavy metal capture

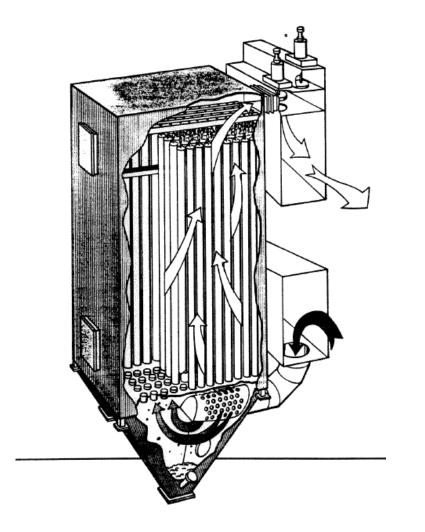


Flue Gas Treatment





Baghouses – more than particulate control



- Flue gas passes through thousands of long, thin bags
- Cake forms on outside of bag enhancing particulate capture and adsorption
- Cake with carbon contributes to further fine particulate, acid gas, mercury and dioxin control
- Bags are cleaned by pulses of high-pressure air or reverse flow



Turbine Generator – Electricity Generation

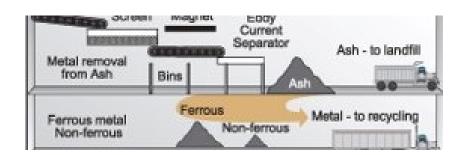








Ash & Metal Removal







Continuous Emissions Monitoring and Control





Waste-to-Energy

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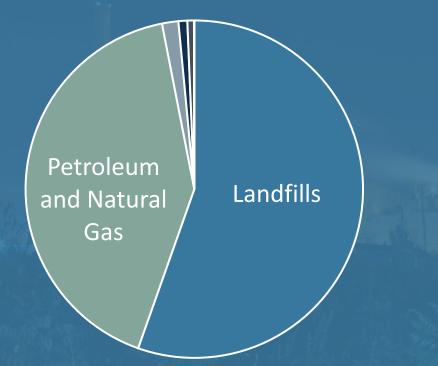
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STREN E

Landfill vs. Waste-To-Energy

New Jersey Reported Methane Emissions (2019)



• Landfills.....

- Emit methane a GHG 84-86x more powerful than CO₂
 - NJ Landfills emitted over one million metric tons CO₂ equivalent in 2019
- Generates leachate that can contaminate groundwater
- Creates impacts for 100 years or more

• WTE....

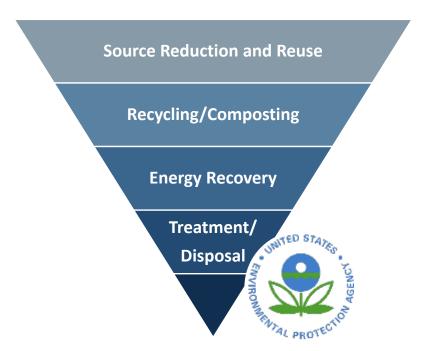
- Recovers energy from waste: 550 kWh per ton
- Recovers metals for recycling
- Only net-negative source for greenhouse gas emissions
 - 22% of NJ's total renewable energy
- Safely disposes of unused medications

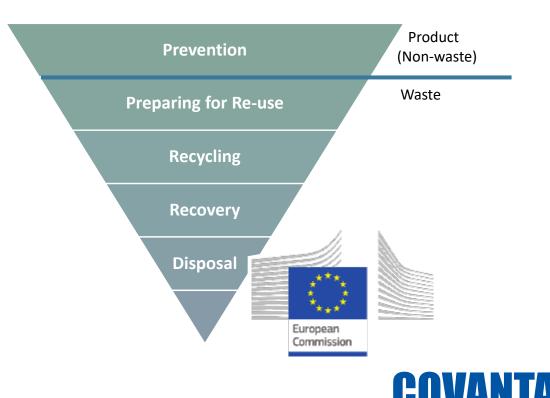
*Based on data made available through the US EPA's Greenhouse Gas Reporting Program



Waste Management Hierarchy

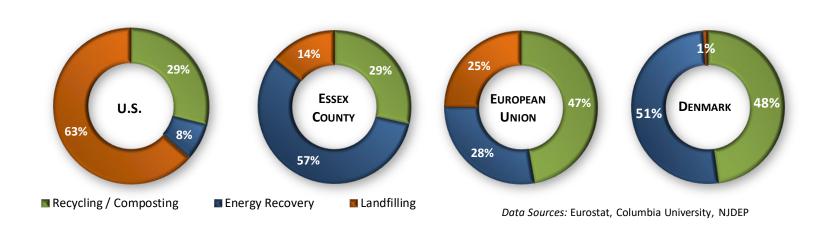
- The US EPA and the EU have ranked the most environmentally sound strategies for municipal solid waste disposal in a landfill is considered the worst and final option
- The EU has set a target for all 27 countries to landfill 10% or less of all waste generated by 2035 in its landmark Landfill Directive





Powering Today, Protecting

Waste-to-Energy: Global Perspective



WTE is implemented in 25 of 27 European Union

countries, as well as Norway, Iceland and Switzerland*

Waste management in Essex County is as sustainable as



Ivry-Sur-Seine WTE Facility in Paris



SYSAV WTE Facility in Malmö, Sweden



*Data from Confederation of European Waste-to-Energy Plants

in the average E.U. country

Environmental Justice

- We strongly support the new environmental justice law for New Jersey
- We established our own Community Outreach & Environmental Justice Policy in 2011
- We remain committed to upholding this policy

Having open, two-way communication with communities on issues which may be of interest or concern to them...

Having an enhanced public participation strategy with communities on major facility permit actions and engage in substantive conversations with community members during the early stages of the permitting process.



Community Outreach & Environmental Justice Policy

Covanta is committed to engage with and support the communities in which we have or will have facilities. Covanta believes in the meaningful opportunity for all people, regardless of race, ethnicity, color, income, national origin or education level to be knowledgeable and have the right to participate in public decisions and actions which have an impact on their environment and neighborhoods. To implement this policy consistent with our sustainability objectives, Covanta commits:

- To reduce discharges and minimize emissions from our facilities and to reduce other potential impacts of our operations, taking into account cumulative impacts.
- To identify and engage with individuals and organizations in the communities in which we operate, or in which we may operate, that are interested in our operations.
- To have open, two-way communication with communities on issues which may be of interest or concern to them, including environmental and quality of life issues in the community. Such communication shall include participation in meetings with community members or affected groups.



To have an enhanced public participation strategy with communities on major facility permit actions and engage in substantive conversations with community members during the early stages of the permitting process.

To work diligently to respond to issues identified by communities in which we operate.

To promptly and effectively notify the community in the event of situations that may adversely impact the environment or their health.





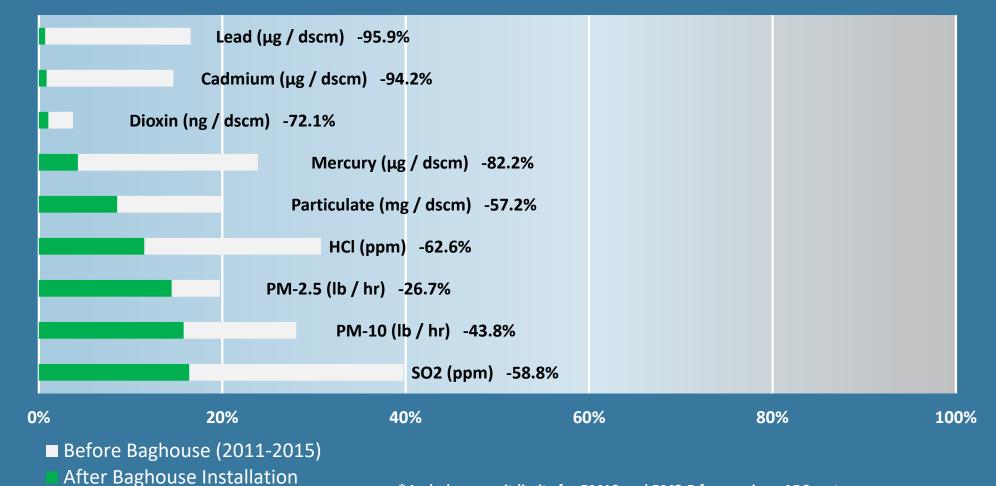
Environmental Justice

- Environmental Justice for Covanta is about action
- Recent investments total approximately \$100 million:
 - New Baghouse Installation reduced emissions up to 90%
 - Low NOx Systems
 - Natural Gas Fueling Station
 - New Metals Recovery System
- We continuously assess opportunities to increase net environmental benefit for Newark



Reductions Following Baghouse Retrofit

Essex County WTE Emissions with Baghouse Compared to Previous APC System



* Includes permit limits for PM10 and PM2.5 for previous APC system



Overall Performance

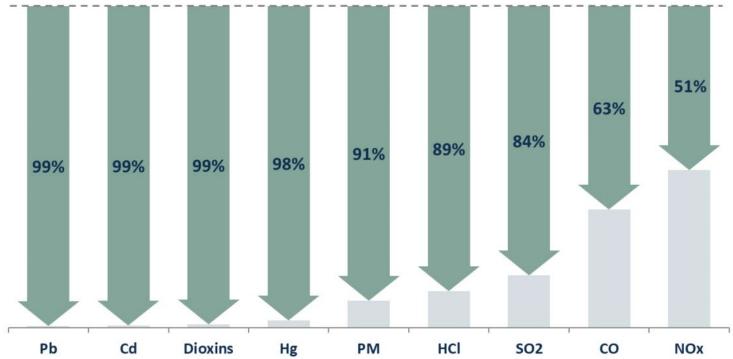
2017-2019 WTE Emissions Compared to Federal Standards

The facility operates up to 99% below federal emissions standards

Emissions compared to federal guidelines for existing facilities (40 CFR 60 Subpart Cb).

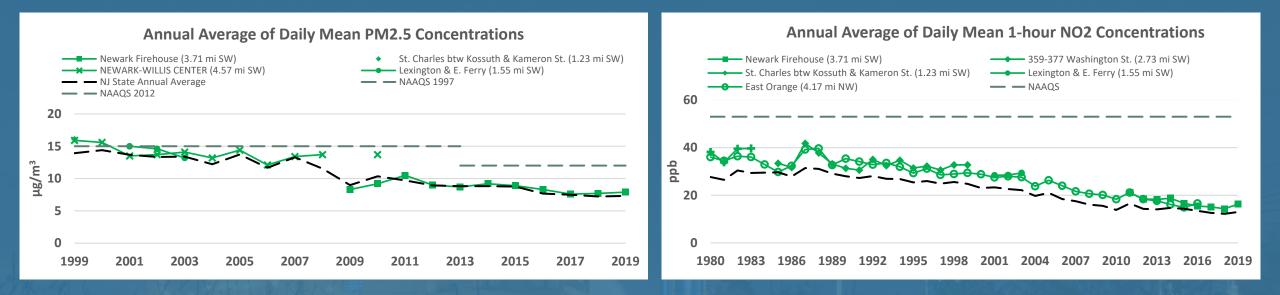
Facility may be subject to more stringent requirements by permit or in accordance with other federal guidelines.

% BELOW FEDERAL STANDARD





Local Air Monitoring Data



- EPA Air Monitoring Data placed at different locations throughout the county show a trend of decreasing overall levels of PM2.5 and NO₂ as well as several other pollutants (SO₂ and Ozone)
- Emissions levels for major pollutants in general have been decreasing over time in Essex County

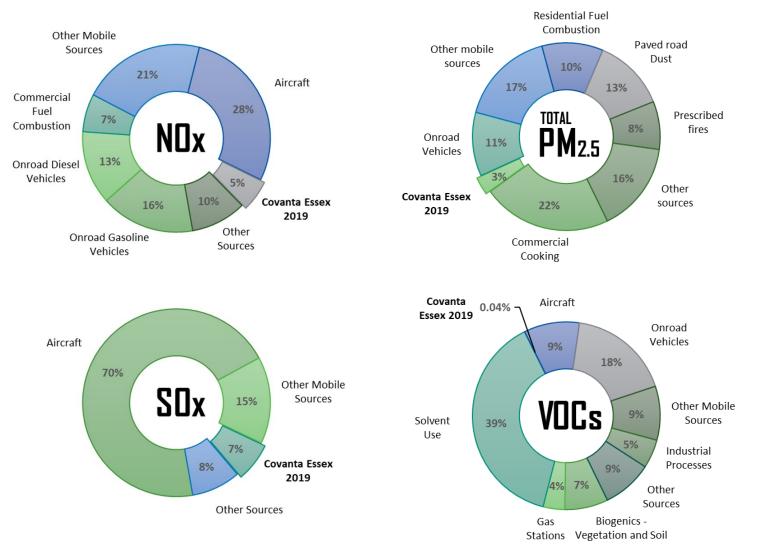


Local Air Emissions

Among emissions sources within the county*, Covanta Essex is a minor contributor of most major pollutants.

* Based on the 2017 US EPA National Emissions Inventory; the most recently released complete inventory.

The facility's emissions are based on the most recent reported annual emissions data from 2019.





Purple/Pink Plumes Update

- Last event was on April 7, 2020
- Used data analysis, annual NJ DEP reports, and tipping floor video to determine source as an industrial facility located in Newark, NJ
- Covanta no longer accepts material from this generator
- Iodine is an irritant at 100 parts per billion (ppb). Modeling by a 3rd party environmental firm estimated the Iodine concentration to be 5 parts per billion at ground level
- Covanta agreed to an Administrative Consent Order (ACO) with the NJDEP for follow-up reports and actions pursuant to the events





What is the Purple Plume?

Visible evidence that iodine is in the waste stream

WE NEED YOUR HELP!! Please keep iodine out of the waste stream



Combustion of iodine can lead to the discharge of unwanted, visible Pink/Purple plumes from the facility stack.



Covanta Essex Workforce Proximity to Facility



- 57% of our employees at Covanta Essex live within 10 miles of the facility
- 30% of our employees in NJ, live within 5 miles of where they go to work



Covanta in the Community

• Partnerships with:

- Boys & Girls Club of Newark
- United Way of Greater Newark
- Salvation Army Newark
- Ironbound Ambulance Squad
- City of Newark
 - Slam Dunk the Junk cleanups
 - Quarterly E-waste collection events
 - Adopt-A-Lot Program
- Ironbound Business Improvement District
- Essex County Turtleback Zoo
- St. Benedicts Prep
- Newark Public Schools





Covanta in the Community

- Highlights:
- Supported the City of Newark Community COVID-19 Fund with Shop Rite gift cards.
- Supported Sustainable Jersey for Schools Bronze certification for all 61 Newark Public Schools with the help of the Go Green Initiative.
- Distributed healthy meals at Camden Street Elementary School
- Held annual Open Meetings for the public with Blueprint Café.
- Introduced sustainability/environmental initiatives at St. Benedict's Prep.
- Partnered with Essex County in Operation Medicine Drop for proper disposal of prescription medication
- Provided holiday gifts for over 40 children through the Salvation Army Angel Tree Program







City of Newark Electronic Waste Collection Event



Thank You



Please visit covanta.com/essex for more information



Attachment 2

Covanta Essex Company ACO Requirements

	COVANTA ESSEX COMPANY ("COVANTA") shall hire an			
	independent public relations consultant or other similarly			
	qualified consultant to develop a formal public outreach			
	program and/or review and supplement as necessary,			
	COVANTA's existing program if one either formally or			
	informally exists. A plan, detailing the program, shall be			
	developed and shall include, but not be limited to,			
	procedures to provide timely updates on any operational			
	upsets that result in permit excursions, periodic notifications			
	to local community groups, including electronic and other			
	agreed to forms of communication and the establishment of			
	a website link. COVANTA shall reach out to local community	Within 30 calendar		
	groups to determine notification schedules and deliverables	days of effective		
Phase I a)	for purposes of planning and program development.	date of ACO	11/9/2020	11/6/2020
	The plan and program shall also provide that COVANTA			
	conduct a community outreach event to communicate with			
Phase I b)	local community groups on a bi-annual basis.	Bi-annual	Ongoing	12/16/2020
,				
	COVANTA shall complete and submit the plan to the	Within 90 calendar		
	Department for comment.	days of effective		
Phase I c)		date of ACO	1/7/2021	In progress
		Within 14 calendar		
	Within fourtoon (14) calendar days after addressing any	days of addressing NJDEP comments		
	Within fourteen (14) calendar days after addressing any	on Community		
Phase I c)	modifications to the plan, COVANTA shall initiate the planned program.	Outreach plan	TBD	
Fliase (C)	COVANTA shall hire an independent waste operations			
	consultant to review and develop new protocols or			
	supplement as necessary, COVANTA's existing waste			
	receipt, inspection and handling protocols. Protocols shall	Within 30 calendar		
		days of effective		
Phase I d)	l d)i through v.	date of ACO	11/9/2020	11/6/2020
	Procedures to increase education and outreach to all			
	customers and haulers via direct communications with	Within 90 calendar		
	responsible entities and printed messaging on all invoice bills	days of effective		
Phase I d)i	regarding acceptable/prohibited waste types.	date of ACO	1/7/2021	In progress
	Specific procedures to address iodinated wastes including			
	methodologies to identify potential generators/sources of			
	these wastes, development of proactive steps to ensure			
	these wastes are not included in the waste streams coming to	Within 90 calendar		
	the facility and inspection/interception protocols to ensure	days of effective		
	these waste types are not processed through the facility.	date of ACO	1/7/2021	In progress
	As a potential measure for enhancing COVANTA's iodine			
	waste inspection/interception protocols, lodine monitors			
	shall be evaluated for their potential effectiveness to			
	monitor vapor phase iodine. The evaluation shall be	Within 30 calendar		
	submitted to the Bureau of Air Monitoring within thirty (30)	days of effective		

Requirement	Description	Deadline	Required Due Date	Actual Completion Date
Phase I d)ii	If the Department deems that the monitors are effective in monitoring vapor phase iodine, the monitors shall be installed, in accordance with Department review and approval, within 60 calendar days of such approval.	Within 60 calendar days of effective date of ACO	TBD	In progress
Phase I d)iii	Installation of Digital Cameras at appropriate locations throughout the facility to monitor waste streams being tipped in the transfer house and being conveyed into the boilers. The Digital Cameras should have recording capability and data retention that can record for 30 days.	Within 90 calendar days of effective date of ACO	1/7/2021	In progress
Phase I d)iv	Additional dedicated training to employees responsible for 1) monitoring truck deliveries and unloading and 2) operating the grapples used to mix waste in the pit and transfer waste from the pit to the feed hopper for each boiler, to train the employees to identify inappropriate waste material.	Within 90 calendar days of effective date of ACO	1/7/2021	In progress
Phase I d)v	Enhanced employee training program to ensure compliance with COVANTA's Solid Waste and Air Permits, applicable Best Management Practices, and procedures for identifying and preventing iodine from entering the Facility.	Within 90 calendar days of effective date of ACO	1/7/2021	In progress
Phase I e)	Within ninety (90) calendar days of the effective date of this ACO, excepting the lodine monitor evaluation noted in d)ii. above, COVANTA shall provide the protocols and procedures outlined above for Department comment.	Within 90 calendar days of effective date of ACO	1/7/2021	In progress
Phase I e)	Within fourteen (14) calendar days after addressing any modifications to the protocols and procedures, COVANTA shall implement same. COVANTA is encouraged to proactively implement any enhanced protocols and procedures outlined above prior to the required 90-day due date	Within 14 calendar days of addressing NJDEP comments on Waste Receipt, Inspection and Handling protocols	TBD	
Phase II a)	Identification and estimation of air pollutant emissions and the air dispersion modeling of the impacts of the identified purple plumes shall be performed by an independent third party, and reports containing the air dispersion modeling results shall be submitted to the Department detailing the estimated potential health impacts associated with the purple plume events. Modeling shall include the impact of iodine associated acid gases with an estimation of emissions. Modeling reports shall be provided to the DEP by a qualified thirdparty modeling expert acceptable to the Bureau of Evaluation and Planning.	Within 45 days of protocol approval	TBD	
Phase II a)1.	Prior to conducting and modeling or health risk assessment COVANTA ESSEX COMPANY shall provide detailed estimates of all emissions associated with the purple plumes including, but not limited to, iodine and other associated acid gases and, the methodologies used to estimate the amount and duration of the emissions within 45 calendar days of the Effective Date of this ACO.	Within 45 calendar days of effective date of ACO	11/23/2020	11/19/2020

Requirement	Description	Deadline	Required Due Date	Actual Completio Date
	Within 00 calendar days of the Effective Date of this ACO but			
	Within 90 calendar days of the Effective Date of this ACO but			
	prior to conducting and modeling or health risk assessment			
	COVANTA ESSEX COMPANY shall submit a written protocol			
	that is prepared by an independent third party for DEP			
	approval to the Bureau of Evaluation and Planning that is consistent with a) Technical Manual 1002 Guidance on			
	Preparing an Air Quality Modeling Protocol b) Technical	Within 90 days of		
	Manual 1003 Guidance on Preparing Risk Assessment for Air	effective date of		
Phase II a)2.	Contaminant Emissions.	ACO	1/7/2021	In prograss
Fildse ii dj2.	Once reviewed and approved by the Department, an	ACO	1/7/2021	In progress
	independent third party shall conduct the modeling and risk	Within 45 calendar		
	assessment consistent with the protocol approval and			
	submit results within 45 calendar days of Department	days of protocol	TBD	
Phase II a)3.	approval.	approval	עסו	
	If upon completion of DEP's review of the modeling and risk			
	assessment identified in Phase 2, Paragraph a.3 of this ACO,			
	there are verified findings that the emission of the purple			
	plumes caused a non-negligible health impact (See NJDEP			
	Division of Air Quality Technical Manual 1003) to the public,			
	Covanta shall disclose the findings to the public. In doing so,	Within 5 days of		
	Covanta is encouraged to include posting the findings on its	receiving non-		
	website. Covanta will disclose the non-negligible health	negligle health		
Phase II a)4.	impact within 5 days of receiving the verified findings.	impact results	TBD	
	A mitigation plan shall be submitted to the Department for	Plan shall be		
	inclusion into COVANTA ESSEX COMPANY's Solid Waste and	submitted upon		
	Title V permits. The mitigation plan shall consider findings	approval by the		
	from the evaluation of waste generators and how tipping	Department of the		
	floor procedures can be adjusted to improve a visual	protocols and		
	assessment of waste deliveries. Upon approval, the	procedures		
	mitigation plan shall be referenced in the pending Title V	required to be		
	Operating Permit renewal (BOP170001) under review by the	submitted under		
	Department and shall be incorporated into the renewal of the			
	current Solid Waste Facility Permit (RRF190001) which	days of effective		
Phase II b)	expires February 23, 2021.	date of ACO	TBD	
- <u> </u>				
	COVANTA ESSEX COMPANY shall provide a written report			
	detailing efforts made at the facility located in Lancaster PA			
	and operated by Covanta Lancaster, Inc. The report shall			
	include information that explains the formation of purple	Within 60 calendar		
	plumes including the estimated iodine feed rate where the	days of effective		/= /
Phase II c)	creation of a plume event has been made.	date of ACO	12/8/2020	12/7/2020
	All reports submitted to the Department shall be made			
	available on COVANTA ESSEX COMPANY's website within	Within 1 week of		
	one week of being submitted to the Department. This	submittal of any		
	requirement shall exclude the report required and identified	required report to		
ltem 14	in Phase II, paragraph c.	NJDEP.	Ongoing	Completed to da

Requirement	Description	Deadline	Required Due Date	Actual Completion Date
ltem 17	COVANTA ESSEX COMPANY shall submit progress reports to the Department by the first calendar day of every other month beginning 30 calendar days from the Effective Date of this ACO. Each report shall explain the status of COVANTA ESSEX COMPANY's compliance with the Compliance Schedule required by this ACO and shall include, but not be limited to, the following: A. identification of the site and reference to this ACO; B. the status of permitting and planning approvals, and any work at the site and progress to date; C. difficulties or problems encountered during the reporting period, and actions taken to rectify any difficulties or problems; D. activities planned for the next reporting period; E. the required and actual completion dates for each item required by this ACO; F. an explanation of any non-compliance with the compliance schedule; and G. evaluation of all corrective measures implemented to date.	First calendar day of every other month beginning 30 calendar days from the effective date of ACO.	1/1/2021	12/30/2020
ltem 18	In settlement of the violations cited in the above findings, COVANTA ESSEX COMPANY shall pay a penalty of \$24,400 (Twenty Four Thousand, Four Hundred Dollars) by check made payable to the "Treasurer, State of New Jersey" and remitted to the Division of Revenue at the address stated on the enclosed invoice(s) within thirty (30) calendar days of the Effective Date of this ACO.	Within 30 calendar days of effective date of ACO	11/9/2020	11/5/2020