Reworld Essex Company (formerly Covanta Essex Company), PI #07736
Progress Report #36
NEA200001-07736 – Administrative Consent Order, Item #17

A. Identification of Site and Reference to ACO

Reworld 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:
Other than the Title V Operating Permit Renewal (BOP170001) and the Solid Waste Operating Permit Renewal (RRF200001), there are currently no other permitting or planning approvals currently pending or in progress related to the requirements of the ACO.

Work at the site and progress since submittal of Progress Report #35 on June 29, 2026:

- Implementation of the Communications and Community Engagement Plan is ongoing.

- Reworld Essex Company held an in-person Open Meeting at Sihana Café on Washington Street in Newark on June 9, 2026 from 5 pm to 7 pm for community members to attend to learn about what we do and ask questions about the facility and sign up for plant tours. We had 4 attendees at the event.

- A response to a request from the Title V Operating Permit renewal permit reviewer for information on HAP emissions from the facility was submitted on June 29, 2026. A response to another request from the permit reviewer regarding whether we can comply with the new the emission standards listed in Table 3 of 40 CFR Part 60, "Subpart WWWW Emission Guidelines and Compliance Times for Large Municipal Waste Combustors Constructed on or Before January 23, 2024" was submitted on August 13, 2026.

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:

- We will work to respond to any additional questions on the Title V Operating Permit renewal permit from the permit reviewer to ensure the permit renewal can be issued.

- We will also work to respond to any questions on the pending Solid Waste Operating Permit renewal to ensure the permit renewal can be issued.

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

See the table, included as Attachment 1 to this report, that lists action items required by the ACO along with required due dates and actual completion dates where applicable. The only action item that remains open is the incorporation of the purple plume mitigation procedures into the Title V Operating Permit renewal and the Solid Waste Operating Permit renewal which are both pending with the NJDEP.

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

Reworld Essex Company continues to implement our Community Outreach efforts and enhanced tipping floor inspection procedures 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 and 2020, and subsequent permanent re-direction of that waste to another non-Reworld disposal facility, has resulted in no further purple plume opacity events at Reworld Essex Company since April 7, 2020.

Going forward, Reworld Essex Company hosts two Open Meetings per year. Each December, the Open Meeting is held virtually to avoid weather issues and allow for a greater level of attendance as observed during previous December virtual meetings that have been held each year since 2020. Each June, the Open Meeting is an in-person event held either at the facility or at another location in the Ironbound section of Newark. Due to scheduling conflicts, the June 2025 event was not able to be conducted. The December Open Meeting was conducted on December 11, 2025 as a virtual event. There were approximately 8 non-Reworld attendees at the event. There were no questions received from the attendees. Reworld Essex Company held an in-person Open Meeting at Sihana Café on Washington Street in Newark on June 9, 2026 from 5 pm to 7 pm for community members to attend to learn about what we do and ask questions about the facility and sign up for plant tours. We had 4 attendees at the event.

As part of greater transparency with the local community, Reworld Essex Company implemented an additional notification procedure whereby the Ironbound Community Corporation (ICC) is contacted by phone and email of any emission exceedance events at the facility. Ms. Maria Lopez-Nunez, who was the former Deputy Director, Organizing and Advocacy for the ICC, was notified of each event in the past. Due to management changes at ICC, this has not been done this year. We will work to determine who should be notified going forward. Efforts have been made to get other organizations and local residents to sign up for the mailing list on our webpage to receive notifications of facility events, but no sign ups have been received to date from these groups.

In 2018, Covanta Essex, now Reworld Essex, installed 10 HD digital cameras on the tipping floor. These originally included 2 cameras with additional pan, tilt and zoom (PTZ) capability. In 2019, after the increase in purple plume events, 2 of 10 HD digital cameras in the overhead location in front of Bays 2 and 13 were replaced with the PTZ cameras for a total PTZ capability for 4 of 10

cameras. This PTZ capability allows for greater visual observation of loads. All recorded video footage by the cameras is stored and available for review for up to 40 days.

Attachment 1

Reworld Essex Company (formerly Covanta Essex Company) ACO Requirements

Requirement	Description	Deadline	Required Due Date	Actual Completion Date
Phase I a)	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 groups to determine notification schedules and deliverables for purposes of planning and program development.	Within 30 calendar days of effective date of ACO	11/9/2020	11/6/2020
Phase I b)	The plan and program shall also provide that COVANTA conduct a community outreach event to communicate with local community groups on a bi-annual basis.	Bi-annual	Ongoing	12/16/2021
Phase I c)	COVANTA **shall complete and submit the plan to the Department for comment**.	Within 90 calendar days of effective date of ACO	1/7/2021	1/7/2021
Phase I c)	Within fourteen (14) calendar days after addressing any modifications to the plan, **COVANTA shall initiate the planned program**.	Within 14 calendar days of addressing NJDEP comments on Community Outreach plan	11/16/2021	11/16/2021 - Plan implementation was already in progress
Phase I d)	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 include but are not limited to items listed below under Phase I d)i through v.	Within 30 calendar days of effective date of ACO	11/9/2020	11/6/2020
Phase I d)i	Procedures to increase education and outreach to all customers and haulers via direct communications with responsible entities and printed messaging on all invoice bills regarding acceptable/prohibited waste types.	Within 90 calendar days of effective date of ACO	1/7/2021	1/7/2021
Phase I d)ii	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 the facility and inspection/interception protocols to ensure these waste types are not processed through the facility.	Within 90 calendar days of effective date of ACO	1/7/2021	1/7/2021
Phase I d)ii	As a potential measure for enhancing COVANTA's iodine waste inspection/interception protocols, **Iodine monitors shall be evaluated for their potential effectiveness to monitor vapor phase iodine.** The evaluation shall be submitted to the Bureau of Air Monitoring within thirty (30) calendar days of the effective date of this ACO.	Within 30 calendar days of effective date of ACO	11/9/2020	11/6/2020

Requirement	Description	Deadline	Required Due Date	Actual Completion Date
	Response to NJDEP comments on iodine monitor evaluation received on 12/11/20	No required deadline for response	NA	4/6/2021
	Response to NJDEP comments on iodine monitor evaluation received on 5/18/21	No required deadline for response	NA	Call held on 6/29/21 to discuss comments
	Submittal of Halogenated Waste Pollution Prevention Plan report to NJDEP by July 30, 2021 pursuant to agreement made on call on 6/29/21	7/30/2021	7/30/2021	7/29/2021
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	NA	NA
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	1/7/2021
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	1/7/2021
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	1/7/2021
Phase I e)	Within ninety (90) calendar days of the effective date of this ACO, excepting the Iodine 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	1/7/2021
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	5/7/2022 (Saturday)	5/9/2022
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	7/23/2021	7/20/2021

Requirement	Description	Deadline	Required Due Date	Actual Completion Date
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
Phase II a)2.	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 Manual 1003 Guidance on Preparing Risk Assessment for Air Contaminant Emissions.	Within 90 days of effective date of ACO	1/7/2021	1/7/2021
	Response to NJDEP comments on air quality modeling protocol received on 2/26/21	Within 60 days of receipt of comments	4/26/2021	4/21/2021
Phase II a)3.	**Once reviewed and approved by the Department, an independent third party shall conduct the modeling and risk assessment consistent with the protocol approval and submit results within 45 calendar days of Department approval.**	Within 45 calendar days of protocol approval	7/23/2021	7/20/2021
Phase II a)4.	**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, Covanta is encouraged to include posting the findings on its website. **Covanta will disclose the non-negligible health impact within 5 days of receiving the verified findings.**	Within 5 days of receiving non-negligle health impact results	NA	No non-negligible health impacts identified
Phase II b)	**A mitigation plan shall be submitted to the Department for inclusion into COVANTA ESSEX COMPANY's Solid Waste and Title V permits. The mitigation plan shall consider findings from the evaluation of waste generators and how tipping floor procedures can be adjusted to improve a visual assessment of waste deliveries.** Upon approval, the mitigation plan shall be referenced in the pending Title V Operating Permit renewal (BOP170001) under review by the Department and shall be incorporated into the renewal of the current Solid Waste Facility Permit (RRF190001) which expires February 23, 2021.	Plan shall be submitted upon approval by the Department of the protocols and procedures required to be submitted under Phase I e) within 90 days of effective date of ACO	1/10/2022	Modification of O&M manual to include procedures was submitted in response to SW Operating Permit NOD on 1/10/22. Response to second technical NOD submitted on 5/9/22. This will also be incorporated in the Title V renewal.

Requirement	Description	Deadline	Required Due Date	Actual Completion Date
Phase II c)	**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 plumes including the estimated iodine feed rate where the creation of a plume event has been made.**	Within 60 calendar days of effective date of ACO	12/8/2020	12/7/2020
Item 14	**All reports submitted to the Department shall be made available on COVANTA ESSEX COMPANY's website within one week of being submitted to the Department.** This requirement shall exclude the report required and identified in Phase II, paragraph c.	Within 1 week of submittal of any required report to NJDEP.	Ongoing	Completed as applicable.
Item 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.	11/1/2022	11/1/2022
Item 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