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ENGL 121: Writing About Cities

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Subject: Decommissioning Covanta Essex

Establishing Context

Covanta Essex, originally known as the Essex County Resource Recovery Facility and owned by the Port Authority of New York and New Jersey, was built in 1990. The facility is a waste-to-energy facility located off of Interstate 95 in Newark, New Jersey. Covanta operates 11 other sites across the tri-state area and 36 across the continental United States. This facility is tasked with generating energy via the incineration of waste, and currently processes 2,800 tons of waste daily—or just under 1 million tons annually—and has a consistent throughput of 64 megawatts . Notably, this facility is less than a ten minute drive from the Ironbound, a predominantly Portuguese and Central-American neighborhood in Newark’s East Ward. This neighborhood and the surrounding area suffer from the consequences of long term environmental mistreatment due to Newark’s history with a heavy and often unregulated industrial presence, the bulk of which was not regulated by modern standards.

Explanation of the Problem

Covanta Essex poses a risk to the local population’s health and quality of life. As with all commercial facilities that produce emissions, Covanta Essex must adhere to thresholds established by federal and state bodies regarding certain harmful molecules and pollutants. Despite these regulations, however, the plant has been consistently in violation of emissions thresholds. Since a contract that Covanta negotiated in 2013, the plant has been cited more than

300 times for violating these limits. Most notably, in 2019 the plant's smokestack emitted pink fumes, later confirmed to be caused by burning waste containing improperly disposed-of iodine. Though there have been efforts by local environmental justice groups and community advocates to force the plant into compliance, Covanta has offered little action besides a statement asserting their commitment to improve.

Policy Alternatives

The most impactful proposal to the Ironbound community would be to cease operations at Covanta Essex. This option prevents further potential emissions incidents and gives relief to the overburdened community, as well as providing justice for the establishment of the plant at a time when the community was not able to adequately represent its grievances.

Another potential option is to allow the plant to continue operations, but limit the quantity of volatile materials as waste arrives at the facility from being incinerated. This proposal acknowledges the role that the plant plays in processing a non-insignificant amount of waste from Essex County and some of Manhattan. One option would be to prevent Covanta Essex from processing any non-standard forms of waste, such as medical bio-waste, non-reactive chemical agents, and materials known to contain volatile materials in meaningful quantities, such as the improperly handled fertilizer waste that led to the iodine fumes. These more exotic materials should be processed at facilities that are not immediately around large population centers. In this implementation, Covanta Essex would trend towards being a bio-waste facility. The plant would also not be as reliant on the currently installed 'baghouse' technology to filter out harmful contaminants from entering the atmosphere. While this solution is promising, it is logistically challenging, and expensive—and therefore unattractive—to Covanta. It does not necessarily

improve the quality of life for the Ironbound, as a garbage incinerator still produces an unpleasant odor.

A variation on this proposal is to divert more of the waste received and processed at the plant to other nearby facilities, perhaps pertaining to Covanta as well. Reducing the quantity of waste processed at this site would ease the burden on the Ironbound. This solution is potentially better for the community than the previous, but it is more logistically challenging to implement, as it would require a redesign of the current transportation system that brings waste to the plant.

Recommended Action

In order to better the living conditions of the Ironbound and surrounding environment, Covanta should cease operations at this facility. Its proximity to a highly populated community and the circumstances in which the facility was established makes evident the disregard for the well-being of those who live here. The facility generates power for the entirety of Essex County, but the burden of environmental and health hazard is not equitably shared. The power generated by this facility, though a net positive to the grid, does not constitute a major percentage of the power consumed by the state.

Considerations with this proposal include finding solutions for the near 1 million tons of waste that is currently processed at the site. For at least a portion of the stream, there is an alternative. New facilities being utilized by New York City take compostable waste, and through a process similar to digestion, convert the waste into natural gas, which can be fed back into the power grid to power homes. The remaining waste currently has no similar alternative, and would end up in landfills. To prevent this, this proposal can be extended to include the conversion of the Essex County Resource Recovery Facility into a large-scale recycling center. With this recommendation, environmental and community justice can be delivered.

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