

June 11, 2018

Via Email

David Owen
New Jersey Department of Environmental Protection
Air Quality Permitting Program
401 E. State Street, 2nd Floor
PO Box 420
Trenton, NJ 08625
david.owen@dep.nj.gov

Re: Newark Bay Cogeneration Partnership Air Pollution Control Operating Permit

Dear Mr. Owen:

On behalf of the Ironbound Community Corporation, Earthjustice and the Environmental and Natural Resources Law Clinic at Vermont Law School submit the following comments on the New Jersey Department of Environmental Protection's ("NJDEP's") draft Air Pollution Control Operating Permit renewal and modification dated January 24, 2018 ("Newark Bay Permit" or "the Permit") for Newark Bay Cogeneration Partnership, LLP's natural gas and diesel-fired power plant located at 462 Avenue P, Newark, New Jersey ("Newark Bay"). NJDEP is issuing the Newark Bay Permit under New Jersey regulations that implement Title V of the Clean Air Act, 42 U.S.C. §§ 7661-7661f ("Title V"), a statute whose purpose is "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population," *id.* § 7401(b)(1).

NJDEP must strengthen the Newark Bay Permit to protect Newark's air quality and promote the health and welfare of Newark residents, particularly the residents of the Ironbound neighborhood of Newark's East Ward, where Newark Bay is located. Nearly a fifth of Newark's population lives in the four square miles of the Ironbound neighborhood, making it one of the most densely populated areas of the city. It is also one of the most diverse, with two-thirds of the population born outside the United States. Over a quarter of the population is below the poverty level.

The Ironbound and Newark more broadly are emblematic of the communities described in New Jersey Governor Phil Murphy’s recent Executive Order No. 23 on Environmental Justice: they are “historically . . . low-income communities . . . of color [that] have been exposed to disproportionately high and unacceptably dangerous levels of air, water, and soil pollution, with the accompanying potential for increased public health impacts . . . often fac[ing] other serious problems beyond environmental issues, including health risks and housing challenges.” N.J. Exec. Order No. 23 (Apr. 20, 2018), <http://www.nj.gov/infobank/eo/056murphy/pdf/EO-23.pdf>.

According to NJDEP’s Data Miner website, over 3,300 facilities with environmental permits are located within the two zip codes that cover the Ironbound. *See* N.J. Dep’t of Env’tl. Protection, DataMiner, <https://www13.state.nj.us/DataMiner> (follow “search by site” then “search by ZIP code”) (last visited June 11, 2018). These include more than 200 facilities that store and use hazardous materials on site, over 70 of which store a large enough volume of hazardous chemicals to trigger the requirement to submit hazardous chemical inventory forms. And the U.S. Environmental Protection Agency’s (“EPA’s”) EJSCREEN website shows that the census blocks within three miles of Newark Bay have Environmental Justice Indices in the 80th and 90th percentiles for *every* environmental justice variable—including PM2.5, ozone, diesel PM, air toxic cancer risk, respiratory hazard index, and proximity to facilities with Clean Air Act Risk Management Plans—regardless of whether the reference comparison is the U.S., EPA Region 2, or New Jersey average. *See* EPA, EJSCREEN Report, “3 mile Ring Centered at 40.719738,-74.132013, New Jersey, EPA Region 2” (generated June 5, 2018) (attached as Exhibit 1).

Executive Order No. 23 entrusts NJDEP to lead the State in “ensur[ing] all New Jersey residents, regardless of race, ethnicity, color, national origin, or income, receive equal protection under the laws of this State, [and] are able to live and work in a healthy and clean environment . . .” N.J. Exec. Order No. 23. NJDEP must take a first step in carrying out the administration’s commitment to environmental justice by employing the measures below to strengthen the Newark Bay Permit and protect the public health and welfare of the surrounding environmental justice communities.

I. NJDEP MUST CONDUCT A COMPREHENSIVE RISK ASSESSMENT THAT CONSIDERS CUMULATIVE IMPACTS TO ALL NEARBY POPULATIONS, INCLUDING POPULATIONS HELD IMMEDIATELY ADJACENT TO NEWARK BAY.

As part of the Newark Bay Permit renewal and modification process, NJDEP conducted a “Level 2 Facility-Wide Risk Assessment” of HAP emissions newly added or modified in the Permit. *See* Memorandum from Air Quality Evaluation Section Bureau of Evaluation & Planning to Operating Permit Section Bureau of Stationary Sources (July 7, 2017) (“Risk

Assessment”). But this Risk Assessment is deficient on a number of grounds. NJDEP must redo this Risk Assessment, and instead conduct a more comprehensive risk assessment of emissions from Newark Bay that properly accounts for all cumulative impacts on nearby populations, including the detained and incarcerated populations in facilities directly adjacent to Newark Bay.

A. NJDEP Must Conduct a Comprehensive Risk Assessment, not Just a Risk Screening.

New Jersey Administrative Code Section 7:27-22.8(a) requires applications for major or minor modifications to existing operating permits, like the Newark Bay Permit, to conduct air quality simulation modeling. The regulation requires this modeling to be conducted in accordance with NJDEP technical manuals on Air Quality Modeling (“Technical Manual 1002”) and Risk Assessment (“Technical Manual 1003”). N.J. Admin. Code § 7:27-22.8(c). Technical Manual 1003 specifies that this requirement may be satisfied either through a “risk screening” or through a “comprehensive risk assessment.” Jon S. Corzine, N.J. Dep’t of Env’tl. Protection, Technical Manual 1003 Guidance on Risk Assessment for Air Contaminant Emissions 1 (2009) (“Technical Manual 1003”), <http://www.state.nj.us/dep/aqpp/downloads/techman/1003.pdf>. Certain types of facilities must always conduct the more searching comprehensive risk assessment rather than the simpler risk screening. *Id.* at 12-13.

For the Newark Bay Permit application, NJDEP completed a “Level 2 Facility-Wide Risk Assessment” of HAP emissions using EPA’s AEROMOD modeling software. *See* Risk Assessment. This corresponds to the risk assessment protocol for a “second-level risk screening” under Technical Manual 1003. *See* Technical Manual 1003, at 11. But the more searching “comprehensive risk assessment” is required for Newark Bay because it falls under two categories listed in Section 4.1 of Technical Manual 1003: “[C]ogeneration units” and “Sources subject to Prevention of Significant Deterioration (PSD) which list air toxics in their permits.” Both of these categories of facilities must submit a comprehensive risk assessment, rather than the more basic risk screening, to satisfy the requirements of New Jersey regulations. *Id.* at 13.

It is critical that NJDEP conduct air quality dispersion modeling and more precisely consider the location of nearby receptors, as required under a “comprehensive risk assessment.” *See id.* This is particularly important given that, as explained below, NJDEP has failed to consider any impacts on populations immediately adjacent to Newark Bay. And as explained below, NJDEP must use worst-case source-specific emission information in this comprehensive risk assessment, rather than general AP-42 emission factors that may not be representative of actual emissions from Newark Bay.

Accurate and comprehensive assessment of the risks posed by Newark Bay is vital, particularly in light of the very real health impacts of the hazardous air pollutants Newark Bay emits. The Risk Assessment, for example, lists a hazard quotient for the short-term non-

cancerous effects of the manganese emitted by Newark Bay of 0.68. *See* Risk Assessment at 4 tbl.2. In high concentrations, manganese is known to cause lung irritation.¹ The science is well established on the toxic effects of arsenic, lead, and cadmium, also emitted by Newark Bay.² Medical research has also established the links between lead and cadmium exposure and the effect on brain development and birth defects in children.³ And the carcinogenic effects of benzo (a) pyrene and arsenic are also well-documented.⁴ NJDEP must do a comprehensive risk assessment that fully analyzes these health hazards.

B. The Risk Assessment Must Consider Cumulative Impacts on the Ironbound Community.

The current risk assessment makes no mention of cumulative impacts on the Ironbound community of Newark, an area that both NJDEP and EPA have identified as an environmental justice community of concern. As noted above, Ironbound residents are subject to cumulative impacts from the multiple polluting facilities located in their neighborhood. It is therefore imperative that NJDEP's Risk Assessment account for the cumulative impacts of all polluting facilities located within this community, and not just look at the impacts of Newark Bay in isolation.

As noted above, NJDEP has been directed by Governor Phil Murphy to take the lead to ensure that all State departments and agencies consider environmental justice in implementing their statutory and regulatory responsibilities, including in the evaluation and assessment of permitting decisions. *See* N.J. Exec. Order No. 23. Part of carrying out that responsibility includes adequate consideration and solicitude for City of Newark Ordinance 16-0803, which mandates procedures to “[p]rotect the health of all residents, regardless of race, culture or income, from exposure to pollution linked to adverse health effects, *including . . . cumulative impacts.*” Newark, N.J., Ordinance 16-0803 (July 11, 2016) (emphasis added). This ordinance was passed under an express recognition that “State law and regulation on environmental pollution currently focuses primarily on individual rather than cumulative impacts from proposed

¹ *See* Agency for Toxic Substances and Disease Registry, Public Health Statement-Manganese CAS#: 7439-96-5 (2012), <https://www.atsdr.cdc.gov/ToxProfiles/tp151-c1-b.pdf>.

² *See* Agency for Toxic Substances and Disease Registry, Public Health Statement-Lead CAS#: 7439-92-1 (2007), <https://www.atsdr.cdc.gov/ToxProfiles/tp13-c1-b.pdf> (explaining that long-term lead exposure results in decreased performance of nervous system functions); Agency for Toxic Substances and Disease Registry, Public Health Statement-Cadmium CAS#: 7440-43-9 (2012), <https://www.atsdr.cdc.gov/ToxProfiles/tp5-c1-b.pdf> (explaining that cadmium can be harmful to fetus development).

³ *Id.*

⁴ *See* Toxicological Review of Benzo (a) Pyrene-Executive Summary, IRIS-Nation Center for Environmental Assessment-Office of Research and Development-EPA (Jan. 2017).

projects when assessing eligibility for permits related to the environment, *limiting the ability of State agencies to provide protection from the cumulative impacts of pollution on human health.*” *Id.* (emphasis added). NJDEP must not perpetuate this gap in State-level review, and must instead consider the cumulative impacts of the permit applicant facility together with all other facilities in environmental justice communities like the Ironbound when conducting risk assessments.

NJDEP need not embark on this cumulative impact analysis from a blank slate. In a 2009 report, the Cumulative Impacts Subcommittee of the Environmental Justice Advisory Council to NJDEP described various cumulative impact analysis techniques that could serve as models for NJDEP’s own cumulative impact analyses.⁵ These include models developed by EPA, the California Air Resources Board, and researchers in California and Massachusetts.⁶ At the very least, NJDEP should cross-reference the Newark Bay Risk Assessment with the results of previous risk assessments for polluting facilities in the Ironbound area that NJDEP has already conducted. The current Risk Assessment’s predicted short-term cancer risk hazard quotient of 0.68 for manganese or 0.0103 for lead, for example, would not be so “negligible” when added to the hazard quotients for these pollutants associated with the many other polluting facilities in the Ironbound. This is especially so given that the current Risk Assessment fails to consider emissions from the more than 19 facilities in Newark that EPA estimates emit more lead into the air than Newark Bay.⁷

By considering cumulative impacts, NJDEP would comply with EPA Region 2’s Interim Environmental Justice Policy, which provides guidance to states conducting environmental justice analyses, including guidance in the permitting phase.⁸ That policy encourages permitting personnel to consider additional measures for monitoring, risk reduction, and the prevention and preparedness of accidental releases when considering permits in environmental justice communities.⁹ In accordance with this guidance, NJDEP should not only consider cumulative impacts in its Risk Assessment, but should also “set additional monitoring requirements, or

⁵ See Env’tl. Just. Advisory Council, *Strategies for Addressing Cumulative Impacts in Environmental Justice Communities* 18-20 (2009), http://www.nj.gov/dep/ej/docs/ejac_impacts_report200903.pdf.

⁶ See *id.* at 10-17; see also N.J. Clean Air Council, *The Cumulative Health Impacts of Toxic Air Pollutants on Sensitive Subpopulations and the General Public* 5 (2011), <http://www.state.nj.us/dep/cleanair/hearings/pdf/phr2011.pdf>.

⁷ See EPA, 2014 National Emissions Inventory (NEI) Data (2014), <https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data>.

⁸ See EPA Region 2, *Interim Environmental Justice Policy* 29–30 (2000), https://www.epa.gov/sites/production/files/2015-09/documents/region_2_interim_environmental_justice_policy_2000.pdf.

⁹ *Id.*

require the permitted facility to make monitoring data more readily accessible to the impacted community;” “consider improved or more stringent standard operating procedures (SOPs) to reduce releases, and therefore exposure;” and add “requirements for emergency preparedness . . . to reduce the risk from an accidental or unpermitted release.”¹⁰

NJDEP should also look to other states for guidance about conducting a cumulative impact analysis. California was one of the first states in the nation to statutorily require adequate consideration of impacts on environmental justice communities. Cal. Gov’t Code § 65040.12. The California Environmental Protection Agency and its Office of Environmental Health Hazard Assessment developed “CalEnviroScreen” in 2012, a tool built upon a 2010 report that described the underlying science and a general method for identifying communities that face multiple sources of pollution.¹¹ The methodology of the CalEnviroScreen provides a science-based tool to screen places for relative cumulative impacts, incorporating both the pollution burden on a community—including exposures to pollutants, their public health and environmental effects—and community characteristics, specifically sensitivity and socioeconomic factors. The scientific foundation for addressing cumulative impacts on these communities is based on evidence of: (1) the relationship between environmental pollution and health effects; (2) disparities in exposures and environmental conditions; (3) differences in intrinsic and socioeconomic (non-intrinsic) sensitivity to pollutants; and (4) health disparities among various segments of the population.¹²

The Ironbound area already faces some of the highest levels of pollution from multiple sources including toxic waste sites, industrial plants, and heavy city and port traffic. NJDEP must consider the cumulative impacts of this pollution concentrated in the densely populated, largely minority and low-income neighborhoods of the Ironbound Community during the permit review for Newark Bay.

C. The Risk Assessment Must Consider the Detained and Incarcerated Populations Directly Adjacent to Newark Bay.

Regardless of the type of risk assessment conducted by NJDEP, the assessment must consider the sensitive populations in the Delaney Hall Detention Facility (“Delany Hall”) and the

¹⁰ *Id.*

¹¹ Cumulative Impacts, Building a Scientific Foundation, Cal. Env’tl. Prot. Agency and the Office of Environmental Health Hazard Assessment (2010),

<https://oehha.ca.gov/media/downloads/calenviroscreen/report/081910cidraftreport.pdf>;

CalEnviroScreen 3.0,

<https://oehha.ca.gov/media/downloads/calenviroscreen/report/ces3report.pdf>.

¹² *Id.*; *A Screening Method for Assessing Cumulative Impacts*, Int. J. Env’tl. Research & Public Health (2012), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3315269>; *Cumulative Environmental Impacts: Science and Policy to Protect Communities*, Annual Review of Public Health (2016), <https://www.ncbi.nlm.nih.gov/pubmed/26735429>.

Essex County Correctional Facility (“ECCF”), both located directly adjacent to Newark Bay. These populations “do not choose where they live, they cannot choose to leave, and they have no voice when it comes to the foundational question of where [these facilities were] constructed.”¹³ The current risk assessment impermissibly ignores these populations that are highly susceptible to Newark Bay’s pollution.

Delaney Hall is located approximately 130 meters southeast from Newark Bay’s smokestacks and has a capacity of 1,200 persons.¹⁴ The ECCF site, meanwhile, is directly north of Newark Bay and has buildings 150 meters from Newark Bay’s smokestacks. ECCF has an authorized capacity of 2,434 persons.¹⁵ U.S. Immigration and Customs Enforcement (“ICE”) has contracted with Essex County to house up to 1,250 male and female immigration detainees at both Delaney Hall and ECCF.¹⁶ In Fiscal Year 2015, 1,099 immigration detainees were held in Delaney Hall, while 1,749 immigration detainees were held in ECCF.¹⁷

NJDEP currently requires health risk assessments to consider the health risks to sensitive receptors with the greatest predicted impact. “[S]ensitive receptors can include, *but are not limited to*: residents of occupied homes, hospitals, schools, and parks.” N.J. Dep’t of Env’tl. Protection, DRAFT Technical Manual 1002 Guidance on Preparing an Air Quality Modeling Protocol 46 (2018) (emphasis added). NJDEP’s recently proposed changes to its Technical Manuals make clear that, even for a “second-level risk screening” (labeled “refined risk assessment” in the draft manual), impacts must be calculated *both* “at the receptor with the highest predicted air concentration in the 5-year simulation (AERMOD)” *and* at all “sensitive receptors (nearest residence, daycare centers, hospitals, nursing homes, playgrounds, etc.)

¹³ Nathalie Prescott, *Prisoner (In)consideration in Environmental Justice Analyses*, Geo. Env’tl. L. Rev. (May 31, 2016), <https://gelr.org/2016/05/31/prisoner-inconsideration-in-environmental-justice-analyses/>.

¹⁴ The Geo Group, Inc., <https://www.geogroup.com/FacilityDetail/FacilityID/213>.

¹⁵ Marie VanNostrand, Luminosity with Drug Policy Alliance, *New Jersey Jail Population Analysis: Identifying Opportunities to Safely & Responsibly Reduce the Jail Population 15* (2013), https://www.drugpolicy.org/sites/default/files/New_Jersey_Jail_Population_Analysis_March_2013.pdf.

¹⁶ Intergovernmental Service Agreement between the U.S. Dep’t of Homeland Sec., U.S. Immigration and Customs Enf’t, Office of Enf’t and Removal Operations, and Essex Cty., §§ 1.C, 3 <https://www.documentcloud.org/documents/1658066-essex-county-igsa-contract.html>.

¹⁷ See TRAC Immigration, *Detainees Leaving ICE Detention from the Delaney Hall Detention Facility* (2016), <http://trac.syr.edu/immigration/detention/201509/DHDFNJ/exit/>; TRAC Immigration, *Detainees Leaving ICE Detention from the Essex County Correcti[o]nal Facility (Jail)* (2016), <http://trac.syr.edu/immigration/detention/201509/ESSEXNJ/exit/>.

located within the defined modeling grid.” N.J. Dep’t of Env’tl. Protection, DRAFT Technical Manual 1003 Guidance on Preparing an Air Quality Modeling Protocol 6 (2018).

Places of detention and incarceration meet the criteria of a “sensitive receptor” and must be included as such in NJDEP’s risk assessments. Like schools, hospitals, and nursing homes, which NJDEP expressly recognizes as sensitive receptors, places of detention and incarceration are facilities that house large quantities of people for long periods of time. But detained and incarcerated people are uniquely sensitive populations because they do not choose where they are held and cannot choose to leave, and thus have no ability to avoid the constant exposure to pollution emitted by the facilities that surround them. Further, the unique immobility of the detained and incarcerated can compound particular susceptibilities of subpopulations. Recent changes in ICE policy, for example, mean that ICE detention centers now house more pregnant women and more asylum seekers—persons whose health may be compromised after experiencing persecution or torture in their home countries.¹⁸

Despite these sensitivities, NJDEP’s risk assessment entirely overlooks the populations that are held in Delaney Hall and ECCF. The risk assessment’s description of the populations surrounding Newark Bay notes only, “The land use surrounding the facility contains [sic] is of the commercial/industrial/transportation category. The nearest residential housing is 1.2 km from the site to the northwest. The nearest school is Hawkins Elementary School 0.93 km to the northwest.” Risk Assessment at 2. It does not appear that NJDEP considered the impacts on the incarcerated population located directly adjacent to Newark Bay.¹⁹ And even though NJDEP’s modeling shows that “[t]he location of the maximum annual concentration for all pollutants was approximately 700 meters northeast of the stacks,” Risk Assessment at 3, NJDEP fails to consider that a 700-meter vector from Newark Bay’s stacks covers the *entirety* of the ECCF property. See Map of Newark Bay and Surrounding Area with Vector (attached as Exhibit 2). NJDEP thus ignores the detained and incarcerated population in ECCF even though the agency’s modeling finds that this population will bear the brunt of the air impacts from Newark Bay.

Moreover, the close proximity of Newark Bay means persons held at Delaney Hall and ECCF are some of the most at risk of accidental releases and other chemical disasters. The

¹⁸ See Maria Sacchetti, *Trump Administration Ends Automatic Release from ICE Detention for Pregnant Women*, Chicago Tribune (March 29, 2018), <http://www.chicagotribune.com/news/nationworld/ct-trump-immigration-policy-pregnancy-20180329-story.html>.

¹⁹ In addition, the Risk Assessment notes, “Modeling was performed in the urban mode with using a population parameter of 900,000.” Risk Assessment at 2. It is not clear whether this population parameter includes the detained and incarcerated population numbers. When NJDEP redoes the Risk Assessment, it must make sure that its analysis includes these numbers.

detained and incarcerated are typically not considered in emergency response and evacuation plans.²⁰ As explained further below, NJDEP must protect the communities of Newark, and particularly the thousands of persons held adjacent to Newark Bay, by requiring Newark Bay to adopt a Risk Management Plan and take adequate measure to protect against accidents and mitigate their effects, as the Clean Air Act requires.

Moreover, the failure to consider impacts on detained and incarcerated populations adjacent to the facility has civil rights and environmental justice implications. Nationwide, the population detained by ICE is majority Hispanic,²¹ while Blacks are incarcerated at rates five times greater than Whites.²² But that discrepancy is even greater in New Jersey, where the Black incarceration rate is a whopping 9 times greater than the equivalent White rate.²³ Black inmates make up 54% of New Jersey's incarcerated population even though only 14% of New Jersey's general population is Black.²⁴ And nationwide, the median income prior to incarceration for incarcerated people is 41% less than for non-incarcerated people.²⁵ NJDEP's failure to consider the low-income, Hispanic, and Black populations held in Delaney Hall and ECCF runs counter to Governor Murphy's Executive Order on Environmental Justice, not to mention the mandates of state and federal environmental justice and civil rights law. *See* N.J. Exec. Order No. 23; *see also* 42 U.S.C. §2000d; Exec. Order NO. 12898 (Feb. 11, 1994).

²⁰ *See, e.g.*, U.S. Dep't of Justice, A Guide to Preparing for and Responding to Jail Emergencies, at vii (2009), <https://s3.amazonaws.com/static.nicic.gov/Library/023494.pdf> (“[I]n too many jails, [emergency] preparation is seriously substandard or lacking altogether.”): *see also id.* at 114 (recommending that jails “analyze[] the surrounding area for potential situations involving hazardous materials, including the proximity of chemical and fertilizer manufacturing and storage facilities, and transportation routes”).

²¹ *See* TRAC Immigration, *ICE Deportations: Gender, Age, and Country of Citizenship* (2014), <http://trac.syr.edu/immigration/reports/350/>.

²² Leah Sakala, *Breaking Down Mass Incarceration in the 2010 Census: State-by-State Incarceration Rates by Race/Ethnicity*, Prison Policy Initiative (May 28, 2014), <https://www.prisonpolicy.org/reports/rates.html>.

²³ Sakala, *supra*, New Jersey Incarceration Rates by Race/Ethnicity, 2010, <https://www.prisonpolicy.org/graphs/2010rates/NJ.html> (also showing that New Jersey incarcerates Hispanics and American Indians/Alaska Natives at rates roughly 3 times more than Whites).

²⁴ Sakala, *supra*, Blacks are Overrepresented in New Jersey Prisons and Jails, https://www.prisonpolicy.org/graphs/2010percent/NJ_Blacks_2010.html.

²⁵ *See*, Press Release, Prisons of Poverty: Uncovering the Pre-Incarceration Incomes of the Imprisoned, Prison Policy Initiative (July 9, 2015), <https://www.prisonpolicy.org/reports/income.html>.

NJDEP must redo the Risk Assessment to fully take into consideration the sensitive populations detained and incarcerated at Delaney Hall and ECCF, who are ceaselessly exposed to the worst of Newark Bay's pollution with no ability to avoid it.

II. NEWARK BAY MUST NOT BE ALLOWED TO ESTIMATE ITS HAP EMISSIONS USING AP-42.

Many if not all of the emission limits in the Newark Bay Permit were estimated using EPA's AP-42 emission factors. But AP-42 emission factors are unreliable in this context and therefore are an inappropriate basis for the Permit's emission limits. The Permit's emission limits must be recalculated using more appropriate and accurate methodologies.

AP-42 emission factors merely represent "an average of a range of emission rates." EPA, Introduction to AP-42, Vol. 1, 5th ed., 2 ("EPA AP-42") <https://www3.epa.gov/ttn/chief/ap42/c00s00.pdf>. This means that "approximately half of the subject sources will have emission rates greater than the emission factor and the other half will have emission rates less than the factor. As such, a permit limit using an AP-42 emission factor would result in *half of the sources being in noncompliance.*" *Id.* (emphasis added). Because of this range of uncertainty, EPA has cautioned: "Use of these factors as source-specific permit limits and/or as emission regulation compliance determinations is *not recommended by EPA.*" *Id.* (emphasis added).

Though EPA specifies some situations in which the use of AP-42 emission factors may be appropriate, none of those situations apply here. For example, emissions factors "may be appropriate" for making "source-specific emission estimates for areawide inventories." *Id.* They may also be appropriate in some permit applications, such as "applicability determinations and in establishing operating permit fees." *Id.* The Newark Bay Permit, in contrast, did not rely on these emission factors for permissible reasons such as areawide inventories, applicability determinations, or establishing operating fees—instead, the Permit inappropriately relied on the emission factors to establish an emission limit in the air permit and to determine compliance with the ambient air quality standards.

Further, NJDEP's own guidance allows permit applicants to use AP-42 and other emission factors when proposing emission limits "only . . . in the absence of other reliable methods."²⁶ The guidelines state that "it is the applicant's responsibility to propose an emission limit that accurately demonstrates the potential to emit (PTE)" and lists various calculation

²⁶ Memorandum from John Preczewski, P.E., Assistant Director of Air Quality Permitting Program to Air Quality Permitting Staff 1 (Dec. 14, 2007), <http://www.state.nj.us/dep/aqpp/permitguide/GuidelinesEvalPropEmissRates.pdf>.

methods that should be used instead of the AP-42 emission factors.²⁷ The guidelines also say that NJDEP staff “should not automatically raise or lower emission limits for existing sources based on changes in AP-42,” which appears to be what Newark Bay is asking for here, particularly with respect to the seven newly added hazardous air pollutants.²⁸

In addition, EPA rates the reliability of the emissions factors found in AP-42, but many of the emission factors that apply to Newark Bay receive the lowest ratings from EPA. As EPA explains, “some emission factors are derived from tests that may vary by an order of magnitude or more,” and “[a]ir pollution control devices also may cause differing emission characteristics.” EPA AP-42, at 3-4. The emission factors are rated A (highest) to E (lowest), with “factors based on many observations, or on more widely accepted test procedures, . . . assigned higher rankings. Conversely, a factor based on a single observation of questionable quality, or one extrapolated from another factor for a similar process, would probably be rated much lower.” *Id.* at 8. For factors rated B or lower, “it is not clear if the facilities tested represent a random sample of the industry.” *Id.* at 9. For factors rated D or E, “there may be reason to suspect that these facilities do not represent a random sample of the industry.” *Id.* at 10.

Emission factors for natural gas combustion are contained in AP-42 Section 1.4. *See* EPA AP-42 § 1.4, <https://www3.epa.gov/ttn/chief/ap42/ch01/final/c01s04.pdf>. Many emission factors for natural gas combustion are D-rated, which means below average, or E-rated, which means poor. *Id.* at tbls.1.4-1 to 1.4-4. Emission factors for CO, PM, and VOC from natural gas combustion are all rated B or lower, calling into question the reliability of the use of these factors for the Newark Bay Permit. *Id.* And as relevant to the seven hazardous air pollutants added to the Permit, emissions factors for arsenic, cadmium, lead, and manganese are all rated D or E, meaning that they emission factors likely do not represent a random sample of the industry.

In addition, the use of AP-42 emission factors to calculate emission limits that apply from preconstruction permits or other technology-based standards is particularly troublesome. The Newark Bay Permit contains preconstruction VOC emission limits which expressly include formaldehyde. *See* Permit GR2 Condition #3; *id.* U1/U2 OSI Conditions #17, 18; *id.* U1/U2 OS2 Conditions #18, 19. But the only method for calculating formaldehyde emissions indicated in the Permit is AP-42. *See, e.g., id.* U1/U2 OS2 Condition #30. To the extent that these preconstruction permit VOC limits were calculated using AP-42 to determine subcomponent

²⁷ *Id.*

²⁸ *Id.* at 2; *see also* N.J. Admin. Code § 7:27-22.30(e) (encouraging Title V permit renewal applicants to “submit proposed methods to be used to determine the actual emissions of each significant source operation . . . where a different method is more accurate than the general methods provided for in the guidelines for emission statement preparation.”).

formaldehyde emissions—or emissions of any other subcomponent VOC—such a method of determining the emission limit is not permissible, and must be rectified in the final Permit.

NJDEP thus must require that the Permit’s emission limits use source-specific emission testing or other, more accurate emission quantification methods. Given that the emission limits for the newly added hazardous air pollutants, in particular, are based on emission factors rated unreliable by the EPA, it imperative that NJDEP require accurate quantification of these emissions.

III. NJDEP MUST REQUIRE NEWARK BAY TO OBTAIN MANDATORY EMISSION OFFSETS.

The Newark Bay Permit Statement of Basis indicates the following change: “Addition of N.J.A.C. 7:27-18.2(a) citations for NO_x and VOC limits, because the facility was required to obtain emission offsets for NO_x and VOC when it was constructed.”). *See* Statement of Basis § III(A)(12). These offsets were required through the preconstruction permit in 1993 because Newark Bay would otherwise have contributed to an existing violation of a National Ambient Air Quality Standard. 42 U.S.C. § 7502(c); N.J. Admin. Code § 7:27-18.2(a)(1). To the extent that this change to the Permit is not merely an administrative amendment but, instead, signifies that Newark Bay has not yet obtained mandatory emission offsets, NJDEP must ensure that Newark Bay obtains these offsets as soon as possible.

These offsets are critical because Newark Bay is located in an ozone nonattainment area, and Newark Bay emits excess emissions of the ozone precursors oxides of nitrogen (“NO_x”) and volatile organic compounds (“VOC”). *See* N.J. Admin. Code § 7:27-18.2(a)(1); State of New Jersey Dep’t of Env’tl. Prot., Air Pollution Control Operating Permit Renewal No. BOP160001 § C Pollutant Emissions Summary (“Newark Bay Draft Permit”). Without these offsets, Newark Bay’s emissions of VOCs and NO_x—which are precursors to ozone—prevent Newark from ultimate attainment with the national standards for ozone. Ozone at this level can cause and exacerbate asthma and lung diseases, and prevent sensitive populations from enjoying the outdoors.²⁹ NJDEP must require Newark Bay to obtain all of these required emissions offsets *in Newark* and a compliance schedule to provide assurances to the community that NJDEP will enforce noncompliance with this requirement.

IV. NJDEP MUST NOT ALLOW NEWARK BAY TO AVOID REPORTING ITS PM_{2.5} AND FORMALDEHYDE EMISSIONS.

The Newark Bay Permit amends prior permits for the facility to avoid reporting formaldehyde emissions, and instead allows these emissions to be reported merely as a part of

²⁹ *See* Air Quality Guide for Ozone, <https://www.airnow.gov/index.cfm?action=pubs.aqiguideozone>.

VOC emissions. *See* Statement of Basis § III.11. The Permit would similarly not require any reporting of PM_{2.5} emissions because “the PM-2.5 limits are equal to the PM-10 limits, and PM-2.5 is a subset of PM-10.” *Id.* § III.5. NJDEP must not allow these amendments to the Permit that will keep the agency and the public in the dark about emissions of these hazardous pollutants.

The Newark Bay Permit contains distinct emission limits of 113 tons per year (“tpy”) of PM₁₀ and 113 tpy of PM_{2.5}. *See* Statement of Basis § III. Nevertheless, the Permit does away with any monitoring, recordkeeping, or recording requirements for PM_{2.5} under the assumption that compliance with the PM₁₀ standard would indicate compliance with the PM_{2.5} standard. *Id.* § III.5. But the Permit fails to consider the situation of non-compliance: monitoring that indicates a violation of the PM₁₀ standard does not necessarily indicate whether the PM_{2.5} standard is also violated. For example, if monitors show PM₁₀ emissions of 200 tpy, PM_{2.5} emissions may be 100 tpy (compliant) or 150 tpy (non-compliant).

Newark Bay would have NJDEP effectively remove the PM_{2.5} emission limits from the Permit by removing any PM_{2.5} monitoring, recordkeeping, and reporting requirement. This runs afoul of the Clean Air Act and 40 C.F.R. part 70 requirements that a Title V permit assure compliance with “all” applicable requirements. *See* 42 U.S.C. § 7661a(b)(5)(A) (States must have adequate authority to “issue permits and assure compliance by all sources required to have a [Title V] permit under . . . with each applicable [Title V] standard, regulation or requirement.”); 40 C.F.R. § 70.6(a) (Each permit shall include “[e]mission limitations and standards, including those operational requirements and limitations that assure compliance with *all* applicable requirements at the time of permit issuance.”) (emphasis added); *id.* § 70.4(b)(3)(i) (State attorney general must confirm that the state will “[i]ssue permits and assure compliance with *each* applicable requirement and requirement of this part by all part 70 sources.”) (emphasis added).

EPA guidance has directly spoken to the issue: “Title V allows for the establishment of a streamlined requirement, *provided that it assures compliance with all applicable requirements it subsumes.*” Memorandum from Office of Air Quality Planning & Standards to Office of Ecosystem et al. 11 n.9 (Mar. 5, 1996) (“White Paper 2”) (emphasis added), <https://www.epa.gov/sites/production/files/2015-08/documents/wtppr-2.pdf>. With respect to monitoring, permitting agencies must “compare whether the monitoring proposed would assure compliance with the streamlined limit to the same extent as would the monitoring applicable to each subsumed limit. If not, and if the monitoring associated with the subsumed limit is also relevant to and technically feasible for the streamlined limit, then monitoring associated with a subsumed limit (or other qualifying monitoring) would be included in the permit.” *Id.* at 12. Newark Bay’s proposal to do away with all PM_{2.5} monitoring plainly does not assure compliance with PM_{2.5} emission limits, so, as EPA directs, NJDEP must include PM_{2.5} monitoring in the Permit.

The proposal to effectively do away with the PM2.5 emission limit and replace it with a PM10 limit is particularly worrisome because the health effects of PM2.5 are far greater than PM10. Unlike PM10, PM2.5 can be inhaled deep into the respiratory tract and lungs, and subsequently, enter the bloodstream.³⁰ Consequently, increased exposure to PM2.5 can lead to asthma attacks, coughing, shortness of breath, bronchitis, lung cancer, and premature death.³¹ On the other hand, the consequences of PM10 are less severe, but can irritate the eyes, nose, and throat.³²

Further, Newark Bay must increase its monitoring practices to regulate PM2.5 emissions because, historically, New Jersey has struggled to maintain air quality standards for PM2.5.³³ Specifically, Essex County was a non-attainment area for PM2.5 from 2005 to 2012.³⁴ NJDEP has set up 21 monitoring stations (the closest being at the Newark Firehouse) to measure PM2.5 emissions.³⁵ The purpose of these monitors was to take the gravimetric analysis of PM2.5 every three days, as well as continuously operating monitors to ensure compliance with air quality standards.³⁶ However, according to a phone communication with NJDEP, this testing will decrease in frequency to once every five years.

Newark Bay's proposal to do away with formaldehyde reporting should also not be allowed. While the Permit includes formaldehyde as a VOC and requires reporting of total VOCs, no monitoring, recordkeeping, or reporting of formaldehyde itself is required. *See* Newark Bay Draft Permit GR2 Condition #8; *id.* U1/U2 OS1 Condition #31; *id.* U1/U2 OS2 Condition #30. But here too, EPA instructs that “[w]here a single VOC limit subsumes multiple HAP limits, the permit must be written to assure that each of the subsumed limits will not be exceeded.” White Paper 2 at 10. Indeed, NJDEP cites the 40 C.F.R. part 63 subpart YYYYY maximum achievable control technology (“MACT”) standard for its unmonitored formaldehyde

³⁰ N.J. Dep't of Health Assessment Data, *Health Indicator Report of Fine Particulate Matter (PM2.5) in Outdoor Air* (2016), <https://www26.state.nj.us/doh-shad/indicator/view/NJEPHTAIR.PM25viol.html>.

³¹ *Id.*

³² N.J. Dep't of Env'tl. Protection, *Fine Particles (PM2.5)* (2016), <http://www.nj.gov/dep/dsr/trends/pdfs/pm.pdf>.

³³ N.J. Dep't of Env'tl. Protection, *State Implementation Plan (SIP) Revision for the Attainment and Maintenance of the Fine Particulate Matter (PM2.5) National Ambient Air Quality Standards* (2012), <http://www.nj.gov/dep/baqp/newpm25/12013/PM2.5%20Redesignation%20SIP%20Final.pdf>.

³⁴ U.S. EPA, *New Jersey Nonattainment/Maintenance Status for Each County by Year for all Criteria Pollutants* (2018), https://www3.epa.gov/airquality/greenbook/anayo_nj.html.

³⁵ N.J. Dep't of Env'tl. Protection, *Ambient Air Monitoring Network Plan 2012* (2012), http://www.njaqinow.net/App_Files/Ozone%20Summaries/net-plan-2012-final.pdf.

³⁶ *Id.*

emission limit, but nowhere does that MACT allow for formaldehyde emissions to be subsumed within a VOC limit, nor does the MACT allow for formaldehyde emissions to be otherwise monitored through a surrogate pollutant. *See generally*, 40 C.F.R. § 63, Subpt. YYYYY. To the contrary, that MACT specifically contains a “91 ppbvd or less at 15 percent O₂” formaldehyde concentration limit that is missing from the draft Permit, and must be included before the Permit is finalized. *Id.* § Pt. 63, Subpt. YYYYY, Tbl. 1. In addition, the requirement for formaldehyde-specific monitoring for the concentration limit in the MACT suggests that compliance with the Permit’s formaldehyde emission rate limits—based on this MACT—similarly requires formaldehyde-specific compliance monitoring.

Newark Bay has the potential to emit 3.4 tons of formaldehyde per year—two orders of magnitude greater than any other hazardous air pollutant emitted at the facility. *See Newark Bay Draft Permit at 24.* And formaldehyde emissions pose uniquely harmful public health risks. Formaldehyde is a probable carcinogen when inhaled in large concentrations. *See ATSDR-CAS-50-00-0-Formaldehyde*, Agency for Toxic Substances and Disease Registry; *Formaldehyde Risk Assessment Update-Office of Toxic Substances-USEPA*, at 22-23 (Jun. 11, 1991). Additionally, formaldehyde poses other public health risks besides cancer such as asthma, bronchitis, and pulmonary edema. *See id.* And just as with the PM_{2.5} emission limit, Newark Bay would write the 3.4 tpy formaldehyde emission limits out of the permit by not requiring any monitoring, recordkeeping, or reporting of formaldehyde emissions.

NJDEP must require Newark Bay to properly monitor, records, and reports dangerous PM_{2.5} and formaldehyde emissions so that the Permit is able to “promote the public health and welfare” of Ironbound residents, as required by the Clean Air Act. 42 U.S.C. § 7401(b)(1).

V. NJDEP MUST REMOVE ILLEGAL EXEMPTIONS AND DEFENSES FROM THE PERMIT.

The Newark Bay Permit contains exemptions or affirmative defenses to emission limits during periods of emergency, startup, shutdown, malfunction, maintenance, and fuel transfer, all of which are no longer permissible by law and must be removed from the Permit.

A. NJDEP Must Remove the SSM Exemption for NO_x Emissions.

Condition 27 of the OS Summary for the two main boilers (U1 and U2) impermissibly exempts the facility from complying with its New Source Performance Standard (“NSPS”) total NO_x limit of 95 ppmvd (at 15% O₂) “during start-up, shutdown and fuel transfer periods.” Newark Bay Draft Permit U1/U2 OS Summary Condition #27. But that NSPS expressly states that “[e]xcess emissions shall be reported *for all periods of unit operation, including startup, shutdown and malfunction.*” 40 C.F.R. § 60.334(j) (emphasis added). NJDEP has no discretion to include an exemption that directly contradicts NSPS requirements, and must remove it from the permit.

NJDEP's stated basis of this exemption is a 2002 letter from EPA to Conectiv Operating Services Company. Newark Bay Draft Permit U1/U2 OS Summary Condition #27. That letter was written at a time during which "EPA was still of the belief that its own NSPS and NESHAP regulations could legitimately include exemptions for emissions during SSM [startup, shutdown, and malfunction] events." State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction, 80 Fed. Reg. 33,892; *see also id.* at 33907 ("[A]t that time [1997], the EPA held the view that emission limitations in its own NSPS could be considered 'continuous' [as required by the CAA], notwithstanding the fact that they contained 'specifically excused periods of noncompliance' (i.e., exemptions from emission limitations during SSM events)."

However, in 2008, the D.C. Circuit Court of Appeals held that exemptions from Clean Air Act emission standards during periods of startup, shutdown, or malfunction violated the Act's requirement that all such emission limitations apply "on a continuous basis." *Sierra Club v. E.P.A.*, 551 F.3d 1019, 1026-27 (D.C. Cir. 2008) (citing 42 U.S.C. § 7602(k)). Thus, "EPA's justification for exemptions from emission limitations during SSM events in NSPS . . . made prior to the 2008 decision of the court in the Sierra Club case. . . . is no longer correct." 80 Fed. Reg. at 33,907-08. New NSPS standards issued after 2008 do not include SSM exemptions, and EPA has been eliminating pre-existing SSM exemptions in many federal regulations as they are reviewed and revised pursuant to schedules under the Clean Air Act. *See id.* at 33,890. EPA has also prohibited states from applying SSM exemptions to any NSPS standard incorporated in their SIPs. *See id.* at 33892. Moreover, pre-2008 general NSPS provisions that appear to allow an SSM exemption are, in EPA's own words, "inconsistent with the CAA" and are no longer good law. *Id.* at 33890.

Regardless of whether EPA interpreted the applicable NSPS to allow SSM exemptions in 2002, the current NSPS expressly does not allow for an SSM exemption. Any basis that EPA may have had in 2002 to exempt emissions during periods of startup, shutdown, or fuel transfer is inconsistent with the Clean Air Act and the NSPS regulations and is no longer good law. NJDEP must delete this exemption from Condition 27 of the OS Summary for boilers U1 and U2.

B. NJDEP Must Remove Affirmative Defenses for Startup, Shutdown, Malfunction, Maintenance, and Emergencies.

The Newark Bay Permit includes a general provision that allows Newark Bay to use the occurrence of an "emergency" as a defense to violations of Permit conditions. Newark Bay Draft Permit at 9. In addition, the Permit includes a provision that allows Newark Bay, "in

situations other than those covered above” (*i.e.* during times of non-emergency), to claim an affirmative defense to permit violations that result from “an equipment malfunction, an equipment startup or shutdown, or during the performance of necessary equipment maintenance.” *Id.* at 9. Both affirmative defense provisions are no longer permissible under the Clean Air Act and must be removed from the Permit.

The permit cites 40 C.F.R. § 70.6(g) as a basis for including the “emergency” affirmative defense, and it cites New Jersey regulations as the basis for the “SSM” affirmative defense. *Id.* But in 2014, the D.C. Circuit Court of Appeals held that EPA has no authority to create affirmative defenses to violations of emission standards. *Nat. Res. Def. Council v. E.P.A.*, 749 F.3d 1055, 1063 (D.C. Cir. 2014). This is because the Clean Air Act allows only courts, through adjudication, to determine whether a particular violation is excusable—and not EPA, through regulation. *See id.* at 1063 (“[U]nder the statutory scheme, the decision whether to accept the defendant’s argument is for the court in the first instance, not for EPA”); *see also Sierra Club*, 551 F.3d at 1027-28 (finding that the Clean Air Act requires emission standards to apply continuously, so EPA lacks authority to exempt sources from emission standards).

As a result of the Court’s decision, EPA issued a proposed rule to eliminate the illegal “emergency” affirmative defense provisions of 40 C.F.R. § 70.6(g). *See* 81 Fed. Reg. 38,645 (June 14, 2016). There, EPA recognized that these affirmative defense provisions “*have never been required* elements of state operating permit programs, [and] are being removed because they are inconsistent with the enforcement structure of the Clean Air Act (CAA) and recent court decisions from the U.S. Court of Appeals for the D.C. Circuit.” *Id.* (emphasis added). To wit, EPA explained that, even prior to the proposed elimination of these provisions:

Such emergency affirmative defense provisions *are not required* program elements. States *have never been obligated* to include the § 70.6(g) affirmative defense provision in their part 70 operating permit programs; instead, the provision has *always been discretionary*. Similarly, although the emergency affirmative defense provision is located within the “Permit Content” section of the part 70 and part 71 regulations, *the EPA does not consider the provision to be a required permit term.*³⁷ Thus, the EPA considers the emergency provision to be a discretionary element of both state permitting programs as well as individual operating permits.

³⁷ Indeed, unlike the mandatory permit requirements of sections 70.6(a) and 70.6(c) that use language specifying that all permits “shall include the following elements,” *see, e.g.*, 40 C.F.R. § 70.6(a), the text of section 70.6(g) contains no such mandatory language.

Id. at 38,647 (emphasis added). No New Jersey statute or regulation requires NJDEP to include an affirmative defense provision for emergencies in its Title V permits.

Thus, at no point did either the Clean Air Act or EPA *ever* require NJDEP to include the “emergency” affirmative defense provisions of section 70.6(g) in its operating permits. NJDEP need not wait for EPA’s final rule that will do away with section 70.6(g) in order to remove the affirmative defense provision from state-issued permits because NJDEP *always* had the discretion not to include those provisions in its permits. And now that both EPA and the D.C. Circuit have recognized that these provisions are illegal, it is no longer legally permissible for NJDEP to include these provisions, so NJDEP *must* remove them or risk violating the law.

Moreover, both the D.C. Circuit and EPA make clear that that it is not only the “emergency” affirmative defense provision of section 70.6(g) that is illegal, but also *any* regulatory “affirmative defense” provision, including the Permit’s SSM affirmative defense provision. As EPA explains, state regulations that provide for any affirmative defense “generally implicate the same concerns that prompted the EPA to propose removing 70.6(g),” so “state programs that have provisions that do not exactly mirror the language of 40 CFR 70.6(g), but nonetheless provide for title V affirmative defenses” “would need to be revised.” *Id.* at 38,651. EPA further explains,

[A]ny state program provisions based off of 70.6(g) that purport to establish an “exemption” or “exclusion” to emission limitations (rather than, or in addition to, an affirmative defense for noncompliance) during emergencies, upsets, or malfunctions would also likely need to be removed. To the extent that an emergency defense is characterized as an exemption, this would run afoul of the CAA requirement that emission limitations must apply continuously and cannot contain exemptions.

Id. n.32 (citing *Sierra Club v. Johnson*, 551 F.3d 1019 (D.C. Cir. 2008); 80 Fed. Reg. 33,852).

EPA provided a list of state regulations that would run afoul of this prohibition on affirmative defense provisions. *See* EPA list (attached as Exhibit 3). That list included NJDEP’s regulations NJAC 7:27-22.3(nn) and NJAC 7:27-22.16(l). The latter provision, NJAC 7:27-22.16(l), is cited by NJDEP as support for the SSM affirmative defense in the Newark Bay Permit, and the former provision, NJAC 7:27-22.3(nn), contains identical language to NJAC 7:27-22.16(l). *See* Newark Bay Draft Permit at 9. Thus, both the “emergency” affirmative defense provision of section 70.6(g) and the “SSM” affirmative defense provision from NJDEP regulations are no longer permissible and must be removed from the Newark Bay Permit.

Indeed, the removal of these “affirmative defense” excuses to permit violations is all the more pertinent to Newark Bay given that, since 2010, NJDEP has allowed at least 34 violations of NOx emission limits to go unenforced under the theory that Newark Bay had an affirmative defense to the violation. *See* Violations at the NEWARK BAY COGENERATION PLANT Site - ID Number: 8717 discovered between 2/28/2010 and 5/29/2018 (attached as Exhibit 4). These include at least:

- One violation of the requirement to continuously monitor NOx emissions at least 10% of the time that the source is operating (Permit Condition U1/U2 OS Summary #4);
- Three violations of the requirement to limit NOx emissions to 0.75 lbs/Mw-hr or below (Permit Conditions U1/U2 OS1 #5; U1/U2 OS2 #6; U1/U2 OS3 #3; U1/U2 OS4 #5);
- Ten violations of the requirement to limit NOx emissions to 19.2 lbs/hr or below (Permit Conditions U1/U2 OS1 #3, 4);
- Ten violations of the requirement to limit NOx emissions to 0.03 lbs/MMBTU or below (Permit Conditions U1/U2 OS1 #6, 7); and
- Ten violations of the requirement to limit NOx concentrations to 8.3 ppmdv (Permit Conditions U1/U2 OS1 #8, 9).

Id. NJDEP excused all of the above violations by granting Newark Bay an affirmative defense. But this rote excusal of NOx violations is no longer legal. Particularly in an area that is in perennial nonattainment for ozone, NJDEP’s disregard of continued emission violations of an ozone precursor is not permissible. The Permit already allows Newark Bay to emit 183 tons of NOx every year—more than any other non-GHG pollutant. Newark Bay Draft Permit at 6. DEP must remove the illegal affirmative defense provisions of the Newark Bay Permit and take stronger action on permit violations to ensure that the people of Newark will one day be able to breathe smog-free air.

VI. NJDEP MUST REQUIRE THE PREPARATION OF A RISK MANAGEMENT PLAN AND INCLUDE PROVISIONS TO PROTECT AGAINST ACCIDENTAL RELEASES OF HAZARDOUS SUBSTANCES.

The Newark Bay Permit must require Newark Bay to prepare and adopt a Risk Management Plan and include other provisions to ensure compliance with Newark Bay’s duty under the Clean Air Act to operate in a way that prevents, or minimizes the consequences of, accidental releases of extremely hazardous substances. Particularly given the facility’s close proximity to thousands of detained and incarcerated persons in Delaney Hall and ECCF, it is imperative that NJDEP ensure against chemical disasters.

Clean Air Act section 112(r)(1) requires stationary sources to “identify hazards which may result from . . . releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize

the consequences of accidental releases which do occur.” 42 U.S.C. § 7412(r)(1). This general duty applies to any stationary source that produces, processes, handles, or stores either (a) a chemical that is listed by EPA under 40 C.F.R. Part 68 or (b) “any other extremely hazardous substance” not listed under Part 68. 40 C.F.R. § 68.3. EPA has taken enforcement actions against facilities that fail to meet their general duty to ensure against accidental releases under section 112(r)(1), including releases of ammonia.³⁸

In addition to this general duty requirement, under Clean Air Act section 112(r)(7), facilities that *do* handle a Part 68 chemical must comply with heightened Part 68 risk prevention requirements that go beyond the general duty requirements of section 112(r)(1). *See* 42 U.S.C. § 7412(7); *see also* 40 C.F.R. § 68.1 (“The list of substances, threshold quantities, and accident prevention regulations promulgated under this part [68] do not limit in any way the general duty provisions under section 112(r)(1).”). These include the preparation and submittal of a Risk Management Plan, coordination with local emergency responders, worst-case scenario and accident history analyses, and hazard assessments, as applicable. *See id.* § 68.12. Both the 112(r)(1) general duty requirements and the 112(r)(7) / Part 68 Risk Management Plan requirements are “applicable requirements” of the Clean Air Act that must be addressed in Title V operating permits. *See id.* § 70.2 (“Applicable requirement means . . . [a]ny standard or other requirement under section 112 of the Act, including any requirement concerning accident prevention under section 112(r)(7) of the Act”).

Here, Newark Bay stores ammonia in a “14,000 gallon aqueous ammonia storage tank” onsite. Newark Bay Draft Permit at 13. Aqueous ammonia at a concentration of 20% or greater is a Part 68 listed chemical with a threshold amount of 20,000 pounds. *See* 40 C.F.R. § 68.130. The Newark Bay Permit’s only limit on the quantity of aqueous ammonia is a throughput limit of 410,000 gallons per year. Newark Bay Draft Permit Condition U5 OS Summary #2. According to EPA, 410,000 gallons of aqueous ammonia converts to 2.8 million pounds—over 140 times

³⁸ *See, e.g., In re Nupro Industries Corporation*, Consent Agreement (Jan. 30, 2015), [https://yosemite.epa.gov/oa/rhc/epaadmin.nsf/Advanced%20Search/CE34BD3610FF1C9485257DDE002140D4/\\$File/Nupro%20Industries%20Corp.,%20CAA,%20SCAFO,%201-30-2015.pdf](https://yosemite.epa.gov/oa/rhc/epaadmin.nsf/Advanced%20Search/CE34BD3610FF1C9485257DDE002140D4/$File/Nupro%20Industries%20Corp.,%20CAA,%20SCAFO,%201-30-2015.pdf) (ammonia release); *In re Cott Beverages Inc.*, Consent Agreement and Final Order (May 11, 2017) [https://yosemite.epa.gov/oa/rhc/epaadmin.nsf/Advanced%20Search/C6255BC8C091BCE785258145001BC61E/\\$File/cott3358.pdf](https://yosemite.epa.gov/oa/rhc/epaadmin.nsf/Advanced%20Search/C6255BC8C091BCE785258145001BC61E/$File/cott3358.pdf) (ammonia release).

the threshold quantity.³⁹ Even just considering the amount that can be stored at any given time, the 14,000 gallon tank can hold just over 96,000 pounds of aqueous ammonia, well above the threshold quantity.⁴⁰ In addition, the Permit contains no limit on the concentration of ammonia, so a concentration of 20% or greater must be assumed.⁴¹ Thus, Newark Bay handles a Part 68 chemical, and must comply with all applicable Part 68 requirements, including the requirement to prepare and implement a Risk Management Plan.⁴²

Newark Bay's failure to prepare the required Risk Management Plan and comply with other requirements of 112(r) up to this point has real-world implications. In 2009, the most recent year of publicly available Toxic Release Inventory ("TRI") information for Newark Bay, the facility reported 4,559 pounds of ammonia releases. EPA, TRI Report (attached as Exhibit 5). This is down from an astounding 64,355 pounds of ammonia released in 1999, the oldest year of TRI data. *Id.* On a per-day average, in 1999 Newark Bay emitted ammonia at levels nearly twice the 100 pounds per day reportable quantity that would require emergency

³⁹ See EPA, Gallons to Pounds Converter (last visited June 11, 2018), <https://www.epa.gov/sites/production/files/2014-01/gallonspoundsconversion.xls>; see also 40 C.F.R. § 68.115(a) ("A threshold quantity of a regulated [Part 68] substance . . . is present at a stationary source if the total quantity of the regulated substance contained in a process exceeds the threshold.").

⁴⁰ See *id.*

⁴¹ Though the Permit requires Newark Bay to "Keep records of Invoices/Bills of Lading showing material delivered. Per Delivery," Newark Bay Draft Permit Conditions U5 OS Summary #1, 2, the Permit does not require Newark Bay to submit these invoices to NJDEP, let alone require that the invoices specify the concentration of the aqueous ammonia.

⁴² In addition to being a Part 68-listed chemical, ammonia is also an "extremely hazardous substance" under EPCRA, see 40 C.F.R. § 355, App. A, and thus an "extremely hazardous substance" under Clean Air Act section 112(r)(1), see *In re Univar Usa Inc., Consent Agreement* ¶ 13 (2013), [https://yosemite.epa.gov/oa/rhc/epaadmin.nsf/Advanced%20Search/268D776D16C585F585257AF70020FB86/\\$File/Univar%20USA,%20Inc.,%20CAA,%20SCAFO.pdf](https://yosemite.epa.gov/oa/rhc/epaadmin.nsf/Advanced%20Search/268D776D16C585F585257AF70020FB86/$File/Univar%20USA,%20Inc.,%20CAA,%20SCAFO.pdf) ("Extremely hazardous substances [under the Clean Air Act] include, but are not limited to, regulated substances listed pursuant to Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3), at 40 C.F.R. § 68.130, and chemicals on the list of extremely hazardous substances published under EPCRA at 40 C.F.R. Part 355, Appendices A and B"). Thus, even assuming that Newark Bay is not subject to Part 68—which is not the case—Newark Bay would still be subject to the general duty provisions of Clean Air Act 112(r)(1), and the Newark Bay Permit would have to include conditions that ensure this general duty. See 40 C.F.R. § 70.2 ("Any standard or other requirement under section 112 of the Act" is an "applicable requirement" that must be included in a Title V permit).

notification under EPCRA and the Comprehensive Environmental Response, Compensation, and Liability Act (“CRECLA”). *See* 40 C.F.R. § 302.4; *id.* §355.

As noted above, the immediately adjacent Delaney Hall and ECCF facilities have the capacity for over 3,500 detained and incarcerated individuals. A deficient permit has the potential to put this population at risk—a population that quite literally has no possibility to evacuate and is often ignored in emergency response planning—not to mention any staff at the two detention facilities and Newark Bay itself, or the many people that live and work in the Ironbound area. NJDEP cannot allow continued noncompliance with the hazard prevention provisions if the Clean Air Act and *must* require Newark Bay to prepare and implement a Risk Management Plan and comply with all applicable 112(r) provisions.

VII. NJDEP MUST CLARIFY AMBIGUOUS PERMIT CONDITIONS TO ENSURE THE ENFORCEABILITY OF THE PERMIT.

The Newark Bay Permit vaguely incorporates by reference certain necessary limits and standards that are ambiguous to the public, thereby hampering the enforceability of the Permit. The Clean Air Act requires Title V permits to “include enforceable emission limitations and standards . . . and such other conditions as are necessary to assure compliance with applicable requirements [the Act].” 42 U.S.C. § 7661c(a). EPA interprets these provisions “to place limits on the type of information that may be referenced in permits. Although this material may be incorporated into the permit by reference, that may only be done to the extent that its manner of application is clear.” White Paper 2 at 40. Incorporation by reference is permissible only “where it is *specific* enough to define how the applicable requirement applies and where using this approach assures compliance with all applicable requirements. . . . where the referenced material is *unambiguous* in how it applies to the permitted facility, and [where] it provides for *enforceability* from a practical standpoint.” *Id.* (emphasis added). Any information referenced in a Title V permit “must first be . . . available to the permitting authority *and public*” either as part of the public docket for the permit action or in publicly accessible files located at the permitting agency.⁴³ *Id.* at 37.

Specifically, the following Permit conditions contain vague references that must be clarified:

1. Ambiguous references to “the Department’s guidelines”
 - a. IS5 Condition #2
2. Ambiguous references to “operating procedures,” “maintenance procedures,” and “maintenance schedules”

⁴³ In addition, in states like New Jersey that have merged their Title V and NSR programs “it is not possible to incorporate by reference the expired NSR permits.” White Paper 2 at 38-39 n.25.

- a. IS5 Condition #2
 - b. U1/U2 OS Summary Condition #10
 - c. U1/U2 OS Summary Condition #23
 - d. U9 OS Summary Condition #22
3. Ambiguous references to an “approved schedule”
 - a. U1/U2 OS1 Condition #23
 - b. U1/U2 OS1 Condition #24
 - c. U1/U2 OS2 Condition #24
 - d. U1/U2 OS2 Condition #25
 - e. U6 OS1 Condition #2
 - f. U6 OS1 Condition #3
 4. Ambiguous references to the “ozone season”
 - a. U1/U2 OS1 Condition #5
 - b. U1/U2 OS2 Condition #5
 - c. U1/U2 OS2 Condition #6
 - d. U1/U2 OS3 Condition #3
 - e. U1/U2 OS4 Condition #4
 - f. U1/U2 OS4 Condition #5

And while the use of emission factors raises serious issues and should be avoided, as explained above, the following Permit conditions make reference to emission factors without specifying the numerical value of those factors:⁴⁴

- GR2 Conditions #1-7, and 9-14
- U1/U2 OS1 Conditions #27, 28
- U1/U2 OS2 Conditions #28-33

To assure the facility’s compliance with applicable requirements and make these permit conditions enforceable, NJDEP must remove this vague language and replace it with specific, enforceable permit conditions

⁴⁴ To the extent that these emission factors are based on “the average of the latest three consecutive valid stack test runs conducted during the compliance stack testing for that particular unit,” *see, e.g.* Newark Bay Draft Permit GR2 Condition #1, the Permit could easily specify the exact number for these emissions factors, since NJDEP requires Newark Bay to conduct stack tests only once every five years, in advance of permit renewal.

CONCLUSION

Due to the deficiencies described above, the draft permit for Newark Bay does not ensure that the facility will control its air pollution as required by the Clean Air Act. NJDEP must include emissions limits that are enforceable, do away with all illegal exemptions, require mandatory offsets and risk management planning, and fully consider the impacts on the Ironbound area. We urge NJDEP to revise the permit to address the concerns described above, and to provide a clear explanation in the final permit narrative that explains how the proposed permit that it sends to EPA assures the facility's compliance with applicable requirements.

Sincerely,

/s/ Jonathan Smith

Jonathan Smith

Earthjustice

jjsmith@earthjustice.org

212-845-7379

/s/ Rachel Stevens

Rachel Stevens

Lauren Moore

Kyron Williams

*Environmental & Natural Resources Law
Clinic at Vermont Law School*

rstevens@vermontlaw.edu

802-831-1073

On behalf of the Ironbound Community Corporation

C:

Debbie Mans

Deputy Commissioner

New Jersey Department of Environmental Protection

Kenneth Ratzman

Assistant Director, Air Quality Regulation and Planning

New Jersey Department of Environmental Protection

Danny Wong

Bureau Chief, Division of Air Quality

New Jersey Department of Environmental Protection

Exhibit 1

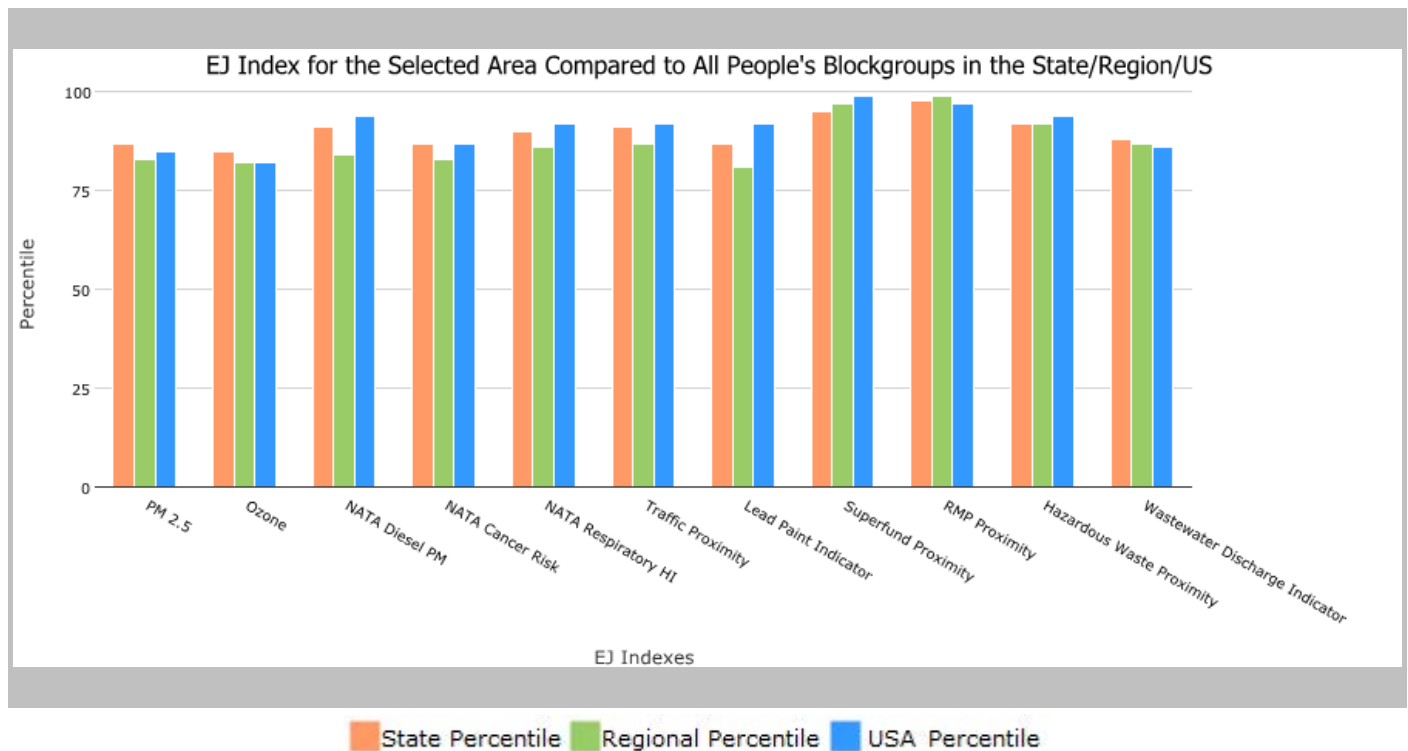
3 mile Ring Centered at 40.719738,-74.132013, NEW JERSEY, EPA Region 2

Approximate Population: 205,052

Input Area (sq. miles): 28.27

(The study area contains 1 blockgroup(s) with zero population.)

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	87	83	85
EJ Index for Ozone	85	82	82
EJ Index for NATA* Diesel PM	91	84	94
EJ Index for NATA* Air Toxics Cancer Risk	87	83	87
EJ Index for NATA* Respiratory Hazard Index	90	86	92
EJ Index for Traffic Proximity and Volume	91	87	92
EJ Index for Lead Paint Indicator	87	81	92
EJ Index for Superfund Proximity	95	97	99
EJ Index for RMP Proximity	98	99	97
EJ Index for Hazardous Waste Proximity	92	92	94
EJ Index for Wastewater Discharge Indicator	88	87	86



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

EJSCREEN Report (Version 2017)



3 mile Ring Centered at 40.719738,-74.132013, NEW JERSEY, EPA Region 2

Approximate Population: 205,052

Input Area (sq. miles): 28.27

(The study area contains 1 blockgroup(s) with zero population.)

No map available

Sites reporting to EPA	
Superfund NPL	6
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	1

EJSCREEN Report (Version 2017)



3 mile Ring Centered at 40.719738,-74.132013, NEW JERSEY, EPA Region 2

Approximate Population: 205,052

Input Area (sq. miles): 28.27

(The study area contains 1 blockgroup(s) with zero population.)

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	10	9.32	93	9.08	91	9.14	72
Ozone (ppb)	33.9	36.5	7	36.3	9	38.4	6
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	2.55	1.31	90	1.88	70-80th	0.938	95-100th
NATA* Cancer Risk (lifetime risk per million)	54	42	89	44	70-80th	40	90-95th
NATA* Respiratory Hazard Index	3.9	2.1	96	2.4	80-90th	1.8	95-100th
Traffic Proximity and Volume (daily traffic count/distance to road)	1200	660	85	1800	76	590	89
Lead Paint Indicator (% Pre-1960 Housing)	0.55	0.42	62	0.52	50	0.29	79
Superfund Proximity (site count/km distance)	1.5	0.44	94	0.29	97	0.13	99
RMP Proximity (facility count/km distance)	4.7	0.72	98	0.57	99	0.73	98
Hazardous Waste Proximity (facility count/km distance)	0.25	0.13	90	0.13	91	0.093	93
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.0007	0.66	80	1.1	72	30	66
Demographic Indicators							
Demographic Index	60%	34%	82	37%	77	36%	82
Minority Population	77%	43%	79	43%	75	38%	83
Low Income Population	45%	25%	82	30%	75	34%	69
Linguistically Isolated Population	19%	7%	87	8%	84	5%	92
Population With Less Than High School Education	24%	11%	87	13%	81	13%	82
Population Under 5 years of age	7%	6%	69	6%	69	6%	65
Population over 64 years of age	10%	14%	32	14%	30	14%	34

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: www.epa.gov/environmentaljustice

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

Exhibit 2



Jackcooper Transport Newark NJ

Marine Transport

Elan Chemicals

Lyondell Basell-Equistar Chemicals, LP

BBT Logistics

Preferred Freezer Services Newark

Essex County Correctional Facility

Tacos el paso

Reichhold Chemicals

Pilot Express

Newark Bay Cogeneration

Marine Container Services

Delaney Hall

Measure distance
Click on the map to add to your path
Total distance: 2,306.61 ft (703.05 m)

Exhibit 3

**Removal of Title V Emergency Affirmative Defense Provisions from
State Operating Permit Programs and Federal Operating Permit Program
Proposed Rule
EPA-HQ-OAR-2016-0186**

Title V Affirmative Defense Provisions in State, Local, and Tribal Part 70 Programs

Table 1 of this document contains a tentative list of state, local, and tribal regulations and statutes that may be affected by the EPA’s proposed rulemaking identified above. This list is intended to encompass all affirmative defense provisions contained within EPA-approved part 70 (title V) operating permit programs.¹ Table 2 of this document contains a tentative list of state, local, and tribal EPA-approved title V programs that do not appear to explicitly establish an affirmative defense contrary to the EPA’s interpretation of the Clean Air Act (CAA), as reflected in this proposed rulemaking. These lists do ***not*** constitute any type of determination as to the adequacy or inadequacy of any specific program provisions.

As indicated in the proposed rule identified above, the EPA is requesting comment on whether the provisions identified in Table 1 of this document, as well as any additional title V affirmative defense provisions that are not currently identified in Table 1 of this document, may be affected if the proposed rule is finalized. The EPA is presenting and soliciting comment on these lists *for informational purposes only*. For further information, see Section V.A of the preamble to the proposed rule.

Table 1. Part 70 Programs that Appear to Contain Title V Affirmative Defense Provisions

EPA Region	Permitting Authority	Affirmative Defense Provision
1	Connecticut	RCSA § 22a-174-33(p)(2)
	Maine	06-096 CMR 140(2)(AA)
	Massachusetts	310 CMR 7.00: Appendix C(16)
	Rhode Island	APCR § 29.6.11

¹ This list is *not* intended to include any affirmative defense provisions contained in state regulations or statutes that are not part of an EPA-approved title V program (including state-only regulations, SIP provisions that are not included within a state’s EPA-approved title V program, or statutes that are not included within a state’s EPA-approved title V program).

Title V Affirmative Defense Provisions in State, Local, and Tribal Part 70 Programs

EPA Region	Permitting Authority	Affirmative Defense Provision
2	New Jersey	NJAC 7:27-22.3(nn); NJAC 7:27-22.16(l)
	New York	6 NYCRR 201-1.5; 6 NYCRR 201-6.5(c)
	Puerto Rico	Regla 603, Reglamento para el Control de la Contaminacion Atmosferica
	U.S. Virgin Islands	12 Virgin Islands R. & Regs. § 206-71(d)
3	Delaware	7 DAC 1130.6.7
	District of Columbia	DCMR 20-302.7
	Maryland	COMAR 26.11.03.24
	Virginia	9 VAC 5-80-250
	West Virginia	W. Va. CSR § 45-30-5.7
4	Alabama	ADEM Admin. Code r. 335-3-16-.11(2)
	AL—Huntsville	Huntsville Air Pollution Control R. & Regs. § 3.3.8(b)
	AL—Jefferson Co.	Jefferson Co. Air Pollution Control R. & Regs. § 18.11.2
	Florida	F.A.C. 62-213.440(1)(d)5
	Kentucky	401 KAR 52:020, § 24
	Kentucky—Louisville	LMAPCD Regulation 2.16 § 4.7
	Mississippi	11 Miss. Admin. Code Pt. 2, R. 6.3.G
	South Carolina	S.C. Code Regs. 61-62.70 § 70.6(g)
	Tennessee	Tenn. Comp. R. & Regs. 1200-03-09-.02(11)(e)7
	TN—Chattanooga-Hamilton Co.	Chattanooga City Code § 4-57(g)
	TN—Knox Co.	Knox Co. Air Quality Mgmt. Regs. § 25.70.F.7
	TN—Nashville-Davidson Co.	Metropolitan Health Dept., Div. Pollution Control Regs. § 13-3(g)
	TN—Memphis-Shelby Co.	City of Memphis § 16-77; Shelby County § 3-5

Title V Affirmative Defense Provisions in State, Local, and Tribal Part 70 Programs

EPA Region	Permitting Authority	Affirmative Defense Provision
5	Illinois	415 ILCS 5/39.5.7.k
	Indiana	326 IAC 2-7-16
	Michigan	MCL 324.5527
	Minnesota	Minn. R. 7007.1850
	Ohio	OAC 3745-77-07(G)
6	Arkansas	ACA 014.01.93-001 Reg. 26.707
	Louisiana	LAC 33.III.507.J
	New Mexico	20.2.70.304 NMAC
	NM--Albuquerque	20.11.42.12(E) NMAC
	Oklahoma	OAC 252:100-8-6(e)
7	Iowa	567 IAC 22.108(16)
	Kansas	KAR 28-19-512(d)
	Missouri	10 CSR 10-6.065(6)(C)7
	Nebraska	129 NAC Ch. 11
	NE—Lincoln-Lancaster Co.	Lincoln-Lancaster Co. Air Pollution Control Program Art. 2 § 11
	NE—City of Omaha	Omaha Municipal Code § 41-2
8	Colorado	5 CCR 1001-5, Part C, § VII
	Montana	ARM 17.8.1214(5) to (8)
	North Dakota	N.D.A.C. 33-15-14-06.5.g
	South Dakota	ARSD 74:36:05:16.01(18)
	Southern Ute Tribe	Reservation Air Code § 2-117
	Utah	Utah Admin. Code R307-415-6g
	Wyoming	WAQSR Ch. 6, § 3(l)

Title V Affirmative Defense Provisions in State, Local, and Tribal Part 70 Programs

EPA Region	Permitting Authority	Affirmative Defense Provision
9	Arizona	A.A.C. R18-2-306.E
	AZ—Maricopa Co.	Maricopa Co. Air Pollution Control Regs. Rule 130
	AZ—Pima Co.	Pima Co. Code §§ 17.12.180.E, 17.12.185.D
	AZ—Pinal Co.	Pinal Co. AQCD Reg. 3-1-081.E
	CA—Sacramento Metropolitan	Sacramento Metropolitan AQMD Rule 207 § 414
	CA—San Joaquin Valley	San Joaquin Valley Unified APCD Rule 2520 § 13.4
	CA—San Luis Obispo Co.	San Luis Obispo Co. APCD Rule 216 § L.5
	CA—Santa Barbara Co.	Santa Barbara Co. APCD Rule 1303 § F
	CA—South Coast	South Coast AQMD Rule 3002(g)
	CA—Ventura Co.	Ventura Co. APCD Rule 33.9 § D
	CA—Yolo-Solano	Yolo-Solano AQMD Rule 3.8 § 314
	Hawaii	HAR § 11-60.1-16.5
Nevada	NAC 445B.326	
10	Alaska	18 AAC 50.235
	Idaho	IDAPA 58.01.01.332
	Oregon	OAR 340-214-0360
	OR—Lane Regional	LRAPA § 36-040
	Washington (including local air authorities)	WAC 173-401-645
	WA—EFSEC	WAC 463-78-005(2)

Title V Affirmative Defense Provisions in State, Local, and Tribal Part 70 Programs

Table 2. Part 70 Programs that Do Not Appear to Contain Title V Affirmative Defense Provisions

EPA Region	Permitting Authority
1	New Hampshire
	Vermont
3	Pennsylvania
	PA—Allegheny Co.
	PA—Philadelphia Co.
4	Georgia
	North Carolina
	NC—Forsyth Co.
	NC—Mecklenburg Co.
	NC—Western
5	Wisconsin
6	Texas

EPA Region	Permitting Authority
9	CA—Amador Co.
	CA—Amador Co.
	CA—Antelope Valley
	CA—Bay Area
	CA—Butte Co.
	CA—Calaveras Co.
	CA—Colusa Co.
	CA—El Dorado Co.
	CA—Feather River Co.
	CA—Glenn Co.
	CA—Great Basin
	CA—Imperial Co.
	CA—Eastern Kern Co.
	CA—Lake Co.
	CA—Lassen Co.
	CA—Mariposa Co.

EPA Region	Permitting Authority
9	CA—Mendocino Co.
	CA—Modoc Co.
	CA—Mojave Desert
	CA—Monterey Bay
	CA—North Coast
	CA—Northern Sierra
	CA—Northern Sonoma Co.
	CA—Placer Co.
	CA—San Diego Co.
	CA—Shasta Co.
	CA—Siskiyou Co.
	CA—Tehama Co.
	CA—Tuolumne Co.
	NV—Clark Co.
NV—Washoe Co.	

Exhibit 4

**Violations at the NEWARK BAY COGENERATION PARTNERSHIP L P (07617) discovered
between 6/11/2008 and 6/4/2018**

Jun 04, 2018 04:29

NOTE: The information contained in this report will be limited to the date each program began using the Department's integrated database, NJEMS. The programs began using the system for this information as follows: Air - 10/1998; Hazardous Waste - 1/2000; Water Quality - 7/2000; Water Supply (limited information for Safe Drinking Water and Water Allocation) - 7/2000; Lab Certification (limited information) - 7/2000; Right To Know - 11/2000; TCPA - 12/2001; Land Use 12/2001; DPCC - 1/2002; Solid Waste - 1/2002 and Pesticides - 4/2002; Site Remediation - 3/2003 and Radiation (limited information) - 7/2006. For complete information prior to these dates, please submit an official OPRA request form to the Department. If printing this report, select landscape orientation.

Disclaimer: All listed violations have been included in Effective enforcement actions. This report lists alleged violations based on facts and information known to the Department at the time the violation information was determined. Errors or omissions in the factual basis for any violation may result in a future change in classification as a violation when such information becomes known. Persons cited for violations may contest the Department's enforcement action or penalty assessment. The resultant final decision may uphold, negate or modify the original violation findings or penalty.

Program Description: Air **Program Interest Type:** AIR OPERATING PERMITS

Program Interest Name: NEWARK BAY COGENERATION PARTNERSHI

Location Address: 414-462 AVE P

Activity Number: NEA 110001 **Program Interest ID:** 07617

Document Type: Settlement Agreement

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHI

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
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Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
During the first quarter of 2008 you failed to fulfill all conditions and provisions of Operating Permit BOP070003 by operating the Cogen Unit #2 while the carbon monoxide (CO) continuous emission monitoring system (CEMS) was unable to quantify CO emissions for 5 days and therefore was considered down during this period. Because Unit #2's oxygen CEMS was down during this period, the CO CEMS was unable to correct raw CO concentrations to 7% oxygen during this period.	SUB 080004	7/7/08	[N.J.A.C. 7:27-22.3 (e)]	Satisfied		7/7/08			Inspection Info	Enforcement Actions Info
You failed to fulfill all conditions and provisions of Operating Permit # BOP070003 by operating the Cogen Unit #1 without the installation and use of continuous emission monitor(s) and recorder(s) for NOx. During the first quarter of 2008 the NOx monitor had only 90.1% data availability.	SUB 080003	7/7/08	[40 CFR 60.13(i)]	Satisfied		7/7/08			Inspection Info	Enforcement Actions Info
You failed to fulfill all conditions and provisions of Operating Permit # BOP070003 by operating the Cogen Unit #1 without the installation and use of continuous emission monitor(s) and recorder(s) for NOx. During the first quarter of 2008 the NOx monitor had only 92.9% data availability.	SUB 080005	9/26/08	[40 CFR 60.13(i)]	Satisfied		9/26/08			Inspection Info	Enforcement Actions Info

Activity Number: NEA 120001

Program Interest ID: 07617

Document Type: Settlement Agreement

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHII

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
<p>During the first quarter of 2011, the concentration of emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of 8.3 ppmv at 15% O2 on January 22 and January 24. AD GRANTED</p> <p>During the first quarter of 2011, the concentration of emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of 8.3 ppmv at 15% O2 on January 23. NO AD REQUESTED</p>	SUB 110005	1/1/11	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		1/1/11			Inspection Info	Enforcement Actions Info

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
<p>During the first quarter of 2011, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of .03 lbs/MMBTU on January 22 and January 24. AD GRANTED</p> <p>During the first quarter of 2011, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of .03 lbs/MMBTU on January 23. NO AD REQUESTED</p>	SUB 110005	1/1/11	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		1/1/11			Inspection Info	Enforcement Actions Info
<p>During the first quarter of 2011, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of 19.2 lbs/hr on January 22 and January 24. AD GRANTED</p> <p>During the first quarter of 2011, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of 19.2 lbs/hr on January 23. NO AD Requested</p>	SUB 110005	1/1/11	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		1/1/11			Inspection Info	Enforcement Actions Info

Activity Number: PEA 100001

Program Interest ID: 07617

Document Type: NOV

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHII

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
During the 1st quarter of 2010, the concentration of emissions of NOx from Cogen Unit #1, Operating Permit BOP080004, exceeded the maximum allowable concentration of 0.03 lb/MMBTU on March 31, 2010.	SUB 100004	5/20/10	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		7/19/10			Inspection Info	Enforcement Actions Info
During the 1st quarter of 2010, the concentration of emissions of NOx from Cogen Unit #1, Operating Permit BOP080004, exceeded the maximum allowable concentration of 19.2 lbs/hr on March 31, 2010.	SUB 100004	5/20/10	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		7/19/10			Inspection Info	Enforcement Actions Info
During the 1st quarter of 2010, the concentration of emissions of NOx from Cogen Unit #1, Operating Permit BOP080004, exceeded the maximum allowable concentration of 8.3 ppmvd @ 15 % O2 on March 31, 2010.	SUB 100004	5/20/10	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		7/19/10			Inspection Info	Enforcement Actions Info

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
You failed to fulfill all conditions and provisions of Operating permit BOP080004 by operating the Cogen Unit #1 without the use of continuous emission monitor and recorder for NOx for a period greater than 10%. Specifically the CEM unit was down for 12% of the time that the source was operating.	SUB 100004	5/20/10	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		7/19/10			Inspection Info	Enforcement Actions Info

Activity Number: PEA 110001

Program Interest ID: 07617

Document Type: NOV

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHII

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
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Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
During the second quarter of 2009, the pound per hour rate of emissions of NOx from the emission unit U1 Cogen #1, Operating Permit BOP080004, exceeded the maximum allowable pound per hour rate of 19.2 on June 3, 2009. AD GRANTED	SUB 090005	4/1/09	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		4/1/09			Inspection Info	Enforcement Actions Info
During the second quarter of 2009, the pound per million BTU rate of emissions of NOx from the emission unit U1 Cogen #1, Operating Permit BOP080004, exceeded the maximum allowable pound per million BTU rate of 0.03 on June 3, 2009. AD GRANTED	SUB 090005	4/1/09	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		4/1/09			Inspection Info	Enforcement Actions Info
During the second quarter of 2009, the ppm concentration of emissions of NOx from the emission unit U1 Cogen #1, Operating Permit BOP080004, exceeded the maximum allowable ppm concentration of 8.3 on June 3, 2009. AD GRANTED	SUB 090005	4/1/09	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		4/1/09			Inspection Info	Enforcement Actions Info

Activity Number: PEA 110002

Program Interest ID: 07617

Document Type: NOV

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHII

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
During the third quarter of 2011, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of 0.03 lb/MMBTU on August 23, 2011. AD GRANTED	SUB 110009	7/1/11	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		7/1/11			Inspection Info	Enforcement Actions Info
During the third quarter of 2011, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of 19.2 lbs/hr on August 23, 2011. AD GRANTED	SUB 110009	7/1/11	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		7/1/11			Inspection Info	Enforcement Actions Info
During the third quarter of 2011, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of 8.3 ppmdv @ 15% O2 on August 23, 2011. AD GRANTED	SUB 110009	7/1/11	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		7/1/11			Inspection Info	Enforcement Actions Info

Activity Number: PEA 120001

Program Interest ID: 07617

Document Type: NOV

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHII

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
During the first quarter of 2011, the emissions of NOx from the emission unit U2 combustion turbine #2, Operating Permit BOP080004, exceeded the maximum allowable limit of 0.03 lbs/MMBTU on January 22 and January 24. AD GRANTED	SUB 110006	1/1/11	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		1/1/11			Inspection Info	Enforcement Actions Info
During the first quarter of 2011, the emissions of NOx from the emission unit U2 combustion turbine #2, Operating Permit BOP080004, exceeded the maximum allowable limit of 19.2 lbs/hr on January 22 and January 24. AD GRANTED	SUB 110006	1/1/11	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		1/1/11			Inspection Info	Enforcement Actions Info
During the first quarter of 2011, the emissions of NOx from the emission unit U2 combustion turbine #2, Operating Permit BOP080004, exceeded the maximum allowable limit of 8.3 ppmdv @ 15% O2 on January 22 and January 24. AD GRANTED	SUB 110006	1/1/11	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		1/1/11			Inspection Info	Enforcement Actions Info

Activity Number: PEA 120002

Program Interest ID: 07617

Document Type: NOV

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHII

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
<p>During the first quarter of 2011, the concentration of emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of 8.3 ppmdv at 15% O2 on January 22 and January 24. AD GRANTED</p> <p>During the first quarter of 2011, the concentration of emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of 8.3 ppmdv at 15% O2 on January 23. NO AD REQUESTED</p>	SUB 110005	1/1/11	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		1/1/11			Inspection Info	Enforcement Actions Info

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
<p>During the first quarter of 2011, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of .03 lbs/MMBTU on January 22 and January 24. AD GRANTED</p> <p>During the first quarter of 2011, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of .03 lbs/MMBTU on January 23. NO AD REQUESTED</p>	SUB 110005	1/1/11	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		1/1/11			Inspection Info	Enforcement Actions Info
<p>During the first quarter of 2011, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of 19.2 lbs/hr on January 22 and January 24. AD GRANTED</p> <p>During the first quarter of 2011, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP080004, exceeded the maximum allowable limit of 19.2 lbs/hr on January 23. NO AD Requested</p>	SUB 110005	1/1/11	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		1/1/11			Inspection Info	Enforcement Actions Info

Activity Number: PEA 130001

Program Interest ID: 07617

Document Type: NOV

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHI

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
You failed to fulfill all conditions and provisions of your operating permit BOP110001 U2 OS1 Ref# 10 by exceeding your CO emission limit on January 16, January 25, February 1, and February 7, 2013.	SUB 130006	7/3/13	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		7/3/13			Inspection Info	Enforcement Actions Info
You failed to fulfill all conditions and provisions of your operating permit BOP110001 U2 OS1 Ref# 12 by exceeding your CO emission limit on January 16, January 25, February 1, and February 7, 2013.	SUB 130006	7/3/13	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		7/3/13			Inspection Info	Enforcement Actions Info
You failed to fulfill all conditions and provisions of your operating permit BOP110001 U2 OS1 Ref# 14 by exceeding your CO emission limit on January 16, January 25, February 1, and February 7, 2013.	SUB 130006	7/3/13	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		7/3/13			Inspection Info	Enforcement Actions Info

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
You failed to fulfill all conditions and provisions of your operating permit BOP110001 U2 OS1 Ref#3 by exceeding your NOx emission limit on January 25, 2013.	SUB 130006	7/3/13	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		7/3/13			Inspection Info	Enforcement Actions Info
You failed to fulfill all conditions and provisions of your operating permit BOP110001 U2 OS1 Ref# 6 by exceeding your NOx emission limit on January 25, 2013.	SUB 130006	7/3/13	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		7/3/13			Inspection Info	Enforcement Actions Info
You failed to fulfill all conditions and provisions of your operating permit BOP110001 U2 OS1 Ref #8 by exceeding your NOx emission limit on January 25, 2013.	SUB 130006	7/3/13	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		7/3/13			Inspection Info	Enforcement Actions Info

Activity Number: PEA 140001

Program Interest ID: 07617

Document Type: NOV

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHII

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
You failed to fulfill all conditions and provisions of Operating Permit #BOP110001, Emission Unit U2, by allowing NOx emissions to exceed the allowable of 0.03 lb/MMBTU on January 28, 2014, for 3 block hours.	SUB 140006	6/27/14	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		6/27/14			Inspection Info	Enforcement Actions Info
You failed to fulfill all conditions and provisions of Operating Permit #BOP110001, Emission Unit U2, by allowing NOx emissions to exceed the allowable of 19.2 lb/hr on January 28, 2014, for 3 block hours.	SUB 140006	6/27/14	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		6/27/14			Inspection Info	Enforcement Actions Info
You failed to fulfill all conditions and provisions of Operating Permit #BOP110001, Emission Unit U2, by allowing NOx emissions to exceed the allowable of 8.3 ppmvd @ 15% O2 on January 28, 2014, for 3 block hours.	SUB 140006	6/27/14	[N.J.A.C. 7:27-22.16 (e)]	Affirmative Defense Approved		6/27/14			Inspection Info	Enforcement Actions Info

Activity Number: PEA 140002

Program Interest ID: 07617

Document Type: NOV

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHIP

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHII

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
During the second quarter of 2014, the concentration of emissions of NOx from the CT2 U2, Operating Permit BOP110001, exceeded the maximum allowable concentration of 8.3 ppmvd @ 15% O2 on April 16, 2014.	SUB 140009	4/1/14	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		4/1/14			Inspection Info	Enforcement Actions Info

Activity Number: PEA 160001

Program Interest ID: 07617

Document Type: NOV

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHII

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
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Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
During the second quarter of 2015, the NOx from the 640 mmbtu/hr gas turbine with HRSG (U1-OS1 CT #1 NG), did not meet the the required NOx (Total) emission of <=0.75 lb/MW-hr. on May 13, 2015. (NOV)	SUB 150009	12/9/15	[N.J.A.C. 7:27-19.5 (g)]	Satisfied		12/9/15			Inspection Info	Enforcement Actions Info

Activity Number: PEA 160002

Program Interest ID: 07617

Document Type: NOV

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHII

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
During the second quarter of 2016, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP150001, exceeded the maximum allowable limit of 0.03 lbs/MMBTU on June 4, 2016. Affirmative Defense granted. (NOV)	SUB 160007	10/18/16	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		10/18/16			Inspection Info	Enforcement Actions Info

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
During the second quarter of 2016, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP150001, exceeded the maximum allowable limit of 19.2 lbs/hr on June 4, 2016. Affirmative Defense granted. (NOV)	SUB 160007	10/18/16	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		10/18/16			Inspection Info	Enforcement Actions Info
During the second quarter of 2016, the emissions of NOx from the emission unit U1 combustion turbine #1, Operating Permit BOP150001, exceeded the maximum allowable limit of 8.3 ppmdv @ 15% O2 on June 4, 2016. Affirmative Defense granted. (NOV)	SUB 160007	10/18/16	[N.J.A.C. 7:27-22.16 (e)]	Satisfied		10/18/16			Inspection Info	Enforcement Actions Info
During the second quarter of 2016, the NOx from the 640 mmbtu/hr gas turbine with HRSG (U1-OS1 CT #1 NG), did not meet the the required NOx (Total) emission of <=0.75 lb/MW-hr. on May 27, 2016. Affirmative Defense granted. (NOV)	SUB 160007	10/18/16	[N.J.A.C. 7:27-19.5 (g)]	Satisfied		10/18/16			Inspection Info	Enforcement Actions Info

Activity Number: PEA 160003

Program Interest ID: 07617

Document Type: NOV

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHII

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
During the third quarter of 2016, the NOx emissions from the 640 MMBtu/hr gas turbine with HRSG covered under BOP150001-07617, did not meet the the required NOx (Total) emission of <=0.75 lb/MW-hr. on September 18, 2016.	SUB 160010	12/16/16	[N.J.A.C. 7:27-19.5 (g)]	Satisfied		12/27/16			Inspection Info	Enforcement Actions Info

Activity Number: PEA 170001

Program Interest ID: 07617

Document Type: NOV

Responsible Organization: NEWARK BAY COGENERATION PARTNERSHII

Description of Non-compliance	Discovery Activity Number	Discovery Date	Violated Citation	Violation Status	Compliance Due Date	Compliance Achieved Date	Severity	MMR	Related Inspection	Related Enf Actions
<p>During the second quarter of 2017, the NOx lb./MW-hr. emissions, of Cogen #2 Emission Unit U2 of Operating Permit BOP150001, exceeded the maximum allowable NOx limit of 0.75 lb./MW-hr. based on a 24 hour average on June 19, 2017. As required by U2 OS1 Ref #6.</p> <p>*****AD GRANTED***** *****</p>	SUB 170009	9/5/17	[N.J.A.C. 7:27-19.5 (g)]	Satisfied		9/5/17			Inspection Info	Enforcement Actions Info

Exhibit 5



- **You are here:** [EPA Home](#)
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- [TRI](#)
- Form R

Form R

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TRI



FORM R REPORTS

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Document Control Number Beginning with: 1309207991858

Reporting Year Selected: 2009

Search Executed On: MAY-30-2018

Results are based on data extracted on: MAR-07-2018

As a result of the [TRI Reporting Forms Modification Rule](#), beginning in reporting year 2005, the [Toxics Release Inventory Program](#) is no longer collecting latitude and longitude data or EPA program ID data (Including Resource Conservation and Recovery Act (RCRA) IDs, National Pollutant Discharge Elimination System (NPDES) IDs AND Underground Injection Code (UIC) IDs) via the FORM R or FORM A Certification Statement. However, this data will still be made available to TRI data users and will be included in TRI data Reports. For those Reports, this data will be obtained from the [Facility Registry System \(FRS\)](#). Latitude and longitude coordinates used to represent TRI facilities are chosen from the FRS using the "[Pick Best](#)" Process. Primary permitting systems supply FRS with the program IDs that are used to represent TRI facilities. The FRS data that are being used to represent this facility are:

Reference Point/Description	Latitude	Longitude	Collection Method	Accuracy Value
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N/A	40.72056	-74.13157	N/A	N/A
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<u>RCRA ID NUMBER</u>
NJD986623692

<u>NPDES PERMIT NUMBER</u>
NJG082279

<u>UIC ID NUMBER</u>
NO DATA

To correct the FRS latitude, longitude or program ID values click on the "Report an Error" button in the top right corner of this page. Facilities wishing to correct other data elements with the FORM R or FORM A should refer to [the related TRI-MEweb tutorial](#).

For more information, see [Collection of Latitude, Longitude and Program ID Data Has Been Discontinued](#).

PART I. FACILITY IDENTIFICATION INFORMATION (FORM R)

DOCUMENT CONTROL NUMBER: 1309207991858

 Facility Registry System ID: [110001539050](#)

Section 1. Reporting Year

Reporting Year: 2009

Section 2. Trade Secret Information

2.1 Trade Secret: NO

2.2 Sanitized Copy: Unsanitized

Section 3. Certification

<u>CERTIFYING OFFICIAL'S NAME</u>	<u>CERTIFYING OFFICIAL'S TITLE</u>	<u>CERTIFYING OFFICIAL'S SIGNATURE</u>	<u>DATE SIGNED</u>
RICHARD VACCARO	ENVIRONMENTAL COMPLIANCE SPECIALIST	Electronic	09-AUG-10

Section 4. Facility Identification

TRI Facility ID: 07105NWRKB41446

4.1 Facility Name and Address.

Facility Information

<u>NAME</u>	<u>STREET</u>	<u>CITY</u>	<u>COUNTY</u>	<u>STATE</u>	<u>ZIP CODE</u>
NEWARK BAY COGENERATION PARTNERSHIP LP	414-462 AVE P	NEWARK	ESSEX	NJ	07105

<u>BIA Tribal Code</u>	<u>Tribe</u>
NO DATA	NO DATA

Mailing Information

<u>NAME</u>	<u>STREET</u>	<u>CITY</u>	<u>STATE</u>	<u>ZIP CODE</u>
NEWARK BAY COGENERATION PARTNERSHIP LP	414-462 AVE P	NEWARK	NJ	07105

<u>PROVINCE</u>	<u>COUNTRY (NON - US)</u>
NO DATA	NO DATA

4.2 Facility Classification

<u>ENTIRE FACILITY</u>	<u>PARTIAL FACILITY</u>	<u>FEDERAL FACILITY</u>	<u>GOCO FACILITY</u>
YES	NO	NO	NO

4.3 Technical Contact

Not Available to the Public as this information is only for Intranet.

4.4 Public Contact

<u>NAME</u>	<u>PHONE</u>	<u>EXTENSION</u>
RICHARD VACCARO	9737234758	No Data

4.5 NAICS Codes

<u>NAICS CODE</u>	<u>PRIMARY</u>	<u>NAICS CODE DESCRIPTION</u>
221112	YES	Fossil Fuel Electric Power Generation

4.7 Dun Numbers

<u>DUNS NUMBER</u>
NA

5. Parent Company Information

Parent Company Name: No US Parent Company

Parent Company DUNS Number: NA

PART II. CHEMICAL - SPECIFIC INFORMATION

DOCUMENT CONTROL NUMBER: 1309207991858

Section 1. Toxic Chemical Identity

1.1 CAS Number: 007664417

1.2 Toxic Chemical or Chemical Category Name: AMMONIA

1.3 Generic Chemical Name: NA

1.4 Distribution of Each Member of the Dioxin and Dioxin like Compounds Category

<u>NA</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>
NO																

Section 2. Mixture Component Identity

2.1 Supplier Provided Generic Chemical Name: NA

Section 3. Activities and Uses of the Toxic Chemical

3.1 Manufacture the Toxic Chemical:

<u>Produce</u> : NO	<u>Import</u> : NO	<u>On-Site Use/Processing</u> : NO
<u>Sale/Distribution</u> : NO	<u>Byproduct</u> : NO	<u>Impurity</u> : NO

3.2 Process the Toxic Chemical:

<u>Reactant</u> : NO	<u>Formulation Component</u> : NO	<u>Article Component</u> : NO	<u>Repackaging</u> : NO	<u>Impurity</u> : NO
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3.3 Otherwise Use the Toxic Chemical:

<u>Chemical Processing Aid:</u> NO	<u>Manufacturing Aid:</u> NO	<u>Ancillary or Other Use:</u> YES
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Section 4. Maximum Amount of the Toxic Chemical Onsite During the Calendar Year

Maximum Chemical Amount: 10000 to 99999

Section 5. Quantity of the Toxic Chemical Entering each Environmental Medium Onsite**5.1 Fugitive or Non-Point Air Emissions**

<u>NA</u>	<u>TOTAL RELEASE</u> (per year)	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>
NO	287	Pounds	E1 - Emission Factor, Published

5.2 Stack or Point Air Emissions

<u>NA</u>	<u>TOTAL RELEASE</u> (per year)	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>
NO	4272	Pounds	M1 - Monitoring, Continuous

5.3 Discharges to Receiving Streams or Water Bodies

<u>NA</u>	<u>STREAM/WATER BODY NAME</u>	<u>TOTAL RELEASE</u> (per year)	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>	<u>% FROM STORMWATER</u>
YES	NA				

5.4-5.5 Disposal to Land Onsite**5.4.1 Underground Injection Onsite to Class I Wells.**

<u>NA</u>	<u>TOTAL RELEASE</u> (per year)	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>
YES			

5.4.2 Underground Injection Onsite to Class II-V Wells.

<u>NA</u>	<u>TOTAL RELEASE</u> (per year)	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>
YES			

5.5 Disposal to Land Onsite**5.5.1A** RCRA Subtitle C Landfills

<u>NA</u>	<u>TOTAL RELEASE</u> (per year)	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>
YES			

5.5.1B Other Landfills

<u>NA</u>	<u>TOTAL RELEASE</u> (per year)	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>
YES			

5.5.2 Land Treatment/Application Farming

<u>NA</u>	<u>TOTAL RELEASE</u> (per year)	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>
YES			

5.5.3A RCRA Subtitle C Surface Impoundments

<u>NA</u>	<u>TOTAL RELEASE</u> (per year)	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>
YES			

5.5.3B Other Surface Impoundments

<u>NA</u>	<u>TOTAL RELEASE</u> (per year)	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>
YES			

5.5.4 Other Disposal

<u>NA</u>	<u>TOTAL RELEASE</u> (per year)	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>
YES			

Section 6. Transfers of the Toxic Chemical in Wastes to Off-Site Locations**6.1** Discharges to Publicly Owned Treatment Works (POTWs)**6.1.A** Total Quantity Transferred to POTWs and Basis of Estimate

<u>6.1.A.</u>	<u>TOTAL TRANSFERS</u> (per year)	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>

1	NO DATA		NO DATA
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6.1.B POTW Locations

6.1.B.	<u>POTW NAME</u>	<u>ADDRESS</u>	<u>CITY</u>	<u>STATE</u>	<u>COUNTY</u>	<u>ZIP CODE</u>
1	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA

6.2 Transfers to other Off-Site Locations

<u>RCRA Number:</u>	<u>Parent Company Controlled:</u>
<u>Name:</u>	<u>Address:</u>
<u>City:</u>	<u>State:</u>
<u>County:</u>	<u>Zip Code:</u>
<u>Country Code (Non - US):</u>	<u>Province:</u>

<u>TOTAL TRANSFERS (per year)</u>	<u>UNIT OF MEASURE</u>	<u>BASIS OF ESTIMATE</u>	<u>WASTE MANAGEMENT TYPE</u>
NO DATA		NO DATA	NO DATA

Section 7A. On-Site Waste Treatment Methods and Efficiency

7A.1a. Waste Stream: NA

7A.1b.	<u>WASTE TREATMENT METHOD(S) SEQUENCE</u>
1	NO DATA

7A.1d. Waste Treatment Efficiency Estimate:

Section 7B. On-Site Energy Recovery Processes

<u>ON SITE ENERGY RECOVERY PROCESSES</u>
NA

Section 7C. On-Site Recycling Processes

<u>ON SITE RECYCLING PROCESSES</u>
NA

Section 8. Source Reduction and Recycling Activities

SECTION	<u>TYPE OF QUANTITY</u>	<u>UNITS</u>	<u>PRIOR YEAR</u>	<u>CURRENT REPORTING YEAR</u>	<u>FOLLOWING YEAR</u>	<u>SECOND FOLLOWING YEAR</u>
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills		NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	Pounds	1640	4559	4559	4559
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills		NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases		NA	NA	NA	NA
8.2	Quantity Used for Energy Recovery Onsite		NA	NA	NA	NA
8.3	Quantity Used for Energy Recovery Offsite		NA	NA	NA	NA
8.4	Quantity Recycled Onsite		NA	NA	NA	NA
8.5	Quantity Recycled Offsite		NA	NA	NA	NA
8.6	Quantity Treated Onsite		NA	NA	NA	NA
8.7	Quantity Treated Offsite		NA	NA	NA	NA

8.8 One-Time Event Release: 0 Pounds

8.9 Production Ratio: 1.13

8.10 Source Reduction Activities

<u>SOURCE REDUCTION ACTIVITIES</u>	<u>METHOD 1</u>	<u>METHOD 2</u>	<u>METHOD 3</u>	<u>ESTIMATED ANNUAL REDUCTION</u>
NA				

8.11 Additional Data Indicator: NO

Additional Optional Information on Source Reduction, Recycling, or Pollution Control Activities