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Air, Energy & Materials Sustainability
Division of Air Quality and Radiation Protection
Bureau of Stationary Sources
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HEARING OFFICER'S REPORT

Response to Public Comments

FOR

Passaic Valley Sewerage Commission

600 Wilson Ave., Newark
ESSEX COUNTY, NEW JERSEY, 07105

Program Interest (PI) Number: 07349 Permit Activity Number: BOP210002

AIR POLLUTION CONTROL OPERATING PERMIT (TITLE V)

Hearing Officer

Kenneth Ratzman
Assistant Director

Kenneth Ratzman Digitally signed by Kenneth Ratzman Date: 2025.02.13 14:53:25 -05'00'

HEARING OFFICER'S REPORT

List of Commenters at the October 1, 2024 public hearing (in alphabetical order):

No.	Name	Association
1.	Sharonda Allen	Food and Water Action
2.	Hailey Benson	Resident
3.	Bill Beren	Chair, Sierra Club Gateway Group, Montclair
4.	Pranita Bijlani	Resident
5.	Jane Califf	Retired Director of Outreach at Rutgers Newark, Department of Urban Education
6.	Gary Conger	Resident
7.	Holly Cox	Resident
8.	Brendan DaSilva[1]	Resident
9.	Rachel Dawn Davis	Water Spirit
10.	Chloe Desir	Ironbound Community Corporation
11.	Samantha DiFalco	Food and Water Watch
12.	Lorin Fernandez	Resident
13.	Ted Glick	350 New Jersey Rockland
14.	Henry Heivly	Interfaith Climate Justice Group
15.	Leah Ives	Ironbound Community Corporation
16.	Stephanie Martinez-Shedah	Resident
17.	Cynthia Mellon	New Jersey Environmental Justice Alliance
18.	Elizabeth Ndoye	Food and Water Watch
19.	Colin Parts[1]	Earthjustice
20.	David Pederson	Resident
21.	Maya Ponton-Arnoff	Resident
22.	David Pringle	Empower New Jersey
23.	Mark Roberts	Resident
24.	Paula Rogovin[1]	Food and Water Watch
25.	Jonathan Smith	Earthjustice
26.	Matt Smith	Food and Water Watch
27.	Tracey Stephens	First Congregational Church/Interfaith Climate Justice Alliance
28.	Chris Tandazo	Resident
29.	Vanessa Thomas	Ironbound Community Corporation
30.	JV Valladolid	Resident
31.	Nancy Zak	Ironbound Community Corporation

Commenters noted with the superscript [1] also submitted written comments to the New Jersey Department of Environmental Protection (NJDEP).

List of Additional Commenter(s) from whom only written comments were received (in alphabetical order):

No.	Name	Association
1.	Clean Energy Group (Signed by Abbe Ramanan)	Clean Energy Group
2.	Earthjustice (on behalf of Ironbound Community Corporation) – (Signed by Jonathan Smith, Casandia Bellevue, Colin Parts, Cassidy Childs, and Maria Lopez-Nuñez)	Earthjustice and Ironbound Community Corporation
3.	Steven Fenster	Action Network
4.	Daniela Gioseffi	Ethical Culture Society of Essex County
5.	June Haran	Action Network
6.	Colin Kelly	Resident
7.	Marilyn Manganello	Action Network
8.	William McClelland	Action Network
9.	New Jersey Environmental Justice Alliance (Signed by Brooke Helmick)	New Jersey Environmental Justice Alliance
10.	Christina Pindar	Action Network
11.	Diane Schwarz	Action Network
12.	Sierra Club, New Jersey Chapter (Signed by Anjuli Ramos-Busot)	Sierra Club, New Jersey Chapter
13.	United States Environmental Protection Agency (Sent by Suilin Chan)	United States Environmental Protection Agency
14.	Vote Solar (Signed by Elowyn Corby)	Vote Solar
15.	Bill Wolfe	Resident

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ACRONYMS AND ABBREVIATIONS

AERMOD: AMS/EPA Regulatory Model

AMS: American Meteorological Society

AO-25: NJ Administrative Order 2021-25

AP-42: Compilation of Air Pollutant Emissions Factors from Stationary Sources

APCA: Air Pollution Control Act

BACT: Best Available Control Technology

BPU: Board of Public Utilities

BTU: British Thermal Units

CAA: Clean Air Act

CEMS: continuous emission monitoring systems

CFR: Code of Federal Regulations

CO: carbon monoxide

CO2: carbon dioxide

CO2e: carbon dioxide equivalent

CTG: combustion turbine generators

DEP: Department of Environmental Protection

e.g.: for example

EGU: electric generating unit

EJ: Environmental Justice

EPA: Environmental Protection Agency

EV: electric vehicle

FEMA: Federal Emergency Management Agency

GHG: greenhouse gas

GR: group

H2: diatomic hydrogen / hydrogen gas

H2S: hydrogen sulfide

HAP: hazardous air pollutant

hr: hour

ICC: Ironbound Community Corporation

i.e.: that is

LAER: Lowest Achievable Emission Rate

lb: pound

MACT: Maximum Achievable Control Technology

MMBtu: million British thermal units

MW: megawatt

N2: diatomic nitrogen / nitrogen gas

NAAQS: National Ambient Air Quality Standards

NESHAP: National Emission Standards for Hazardous Air Pollutants

N.J.A.C.: New Jersey Administrative Code

NJDEP: New Jersey Department of Environmental Protection

NJEJA: New Jersey Environmental Justice Alliance

N.J.S.A.: New Jersey Statutes Annotated

NNSR: Nonattainment New Source Review

NO2: nitrogen dioxide

NOx: oxides of nitrogen

NSPS: New Source Performance Standards

OC: oxidation catalyst

OS: operating scenario

Pb: lead

PM: particulate matter

PM-2.5, PM2.5: particulate matter with an aerodynamic diameter of 2.5 microns or smaller

PM-10, PM10: particulate matter with an aerodynamic diameter of 10 microns or smaller

ppmvd: parts per million by volume, dry basis

PSD: Prevention of Significant Deterioration

PSE&G: Public Service Electric and Gas Company

PVSC: Passaic Valley Sewerage Commission

RACT: Reasonably Available Control Technology

RfC: reference concentration

RFP: request for proposal

SCR: selective catalytic reduction

SO2: sulfur dioxide

SOTA: State of the Art

SPGF: Standby Power Generation Facility

TM: Technical Manual

tpy: tons per year

TSP: total suspended particulate matter

Transcript: October 1, 2024 Public Hearing Transcript

U: emission unit

URF: unit risk factor

USEPA: United States Environmental Protection Agency

VOC: volatile organic compounds

WWTP: wastewater treatment plant

yr: year

A) Public Process Requests

Extension Requests

1. **Several commenters requested an extension of the public comment period.**

COMMENT: The Department's proposed permit violates stated principles of environmental justice by allowing a fourth gas plant to be constructed in the majority Black and Brown overburdened community in Newark's Ironbound neighborhood. Administrative Order 2021-25 (AO-25) states that "all public comment periods ... shall be extended by an additional thirty (30) days upon the written request of member(s) of the overburdened community indicating that an extension is necessary to provide the information requested under Paragraph 2(b)." Further, the Air Pollution Control Act implementing regulations allow the Department to extend the comment period on a proposed permit or permit modification beyond the 30 days required by AO-25. *See* N.J.A.C. 7:27-22. ll(h). Here, an extension of the comment deadline is necessary to allow community members and organizations engaged in the Passaic Valley Sewerage Commission's (PVSC) permit application to adequately comment on the proposed permit. The burden to highlight the impacts on the community falls on community members because PVSC's AO-25 compliance statement failed to fully discuss the impacts its proposed gas plant would have on the existing stressors in the community, and because PVSC has yet to adequately respond to any of the alternative proposals for cleaner, cheaper methods to meet the facility's alleged emergency power needs without building yet another polluting gas plant in the Ironbound community. More time is needed for the community to be able to meaningfully engage on PVSC's complex, technical, and ill-conceived proposal. Therefore, the Department should add at least an additional 30 days to the comment period on PVSC's proposed permit, so that the written comment deadline is no earlier than December 2 (after the November 28-29 Thanksgiving holiday). (Written: Earthjustice on behalf of the Ironbound Community Corporation)

COMMENT: The Department should grant a 30-day extension of the comment deadline. (Transcript: Jonathan Smith)

COMMENT: Please extend the comment period since there is less than a month from the public hearing date to submit comments. (Transcript: JV Valladolid)

COMMENT: The Department should agree to a 30-day extension of the comment period for a project as significant as this one. (Transcript: Ted Glick)

COMMENT: The Department should grant a 30-day extension of the comment period. (Transcript: Rachel Dawn Davis)

COMMENT: The comment period should be extended. (Transcript: Cynthia Mellon)

RESPONSE: The Department commenced its review of PVSC's application for a Significant Modification of PVSC's Operating Permit pursuant to the Air Pollution Control Act rules and the Federal Title V Program after the AO-25 process was completed. Once the Department completed its technical review of the application, the Department published notice of its intent to approve the Operating Permit Significant Modification for the facility pursuant to Title V of the Federal Clean Air Act, the Federal rules at 40 CFR 70, and the State rules at N.J.A.C. 7:27-22. The Department held a 60-day public comment period on the draft permit from August 30, 2024 through October 29, 2024.The original comment period was 30 days longer than the mandatory 30-day comment period required by State rules at N.J.A.C. 7:27-22.11. Therefore, an additional extension of the comment period was not required pursuant to State rules.

As set forth in AO-25, members of the community are to be provided, to the extent possible, at least 60 days for comment on permits in overburdened communities. And upon written request, provided an additional 30 days to submit "information regarding existing conditions within the overburdened community and potential facility-wide environmental and public health stressors that could result in adverse impacts upon the overburdened community were the regulated activity approved." The facility held its 60-day public comment period from April 4, 2022 through June 3, 2022. Upon written request, the comment period was extended for an additional 30 days through July 3, 2022.

The written request to extend the comment period pertaining to the Department's notice of intent to approve the draft permit indicated that more time was needed to respond to the facility's inadequate discussion of the impacts of the gas plant on the existing stressors in the community and inadequate response to the community's alternative proposals for cleaner alternatives. These items are related to the AO-25 process, which was completed on July 18, 2024, when the Department published the Environmental Justice Decision and Imposition of Special Conditions. Therefore, an additional period for public comment is not required; nor would the additional time be likely to result in the Department receiving comments relevant to the notice of intent to approve the draft permit.

Requests for Hearings and Comments

2. **Several commenters made requests related to the way in which the public hearing was conducted and comments were accepted.**

COMMENT: Thank you for having other languages involved in this process. Are the comments being translated virtually? They do not appear to be translated in real time in this location. (Transcript: JV Valladolid)

COMMENT: The Department should include innovative translations services as part of its meetings for the benefit of the community. (Transcript: Rachel Dawn Davis)

COMMENT: Is it possible to send comments to an email address or to call and leave a voicemail, just in case a person does not have email? (Transcript: JV Valladolid)

RESPONSE: The public hearing on PVSC's Operating Permit, which was held on October 1, 2024, met all of the basic requirements set forth in the relevant rules at N.J.A.C. 7:27-22.11. But the Department went further to ensure accessibility by playing a recording of the opening statement in three other languages: Spanish, Portuguese, and Haitian Creole. The opening statement advised participants that their comments could be provided (verbally or in writing) in the commenter's preferred language. At the hearing, which was held in person and virtually, participants were advised that written comments would be accepted through October 29, 2024 and could be submitted through email or in hard copy. The email address and postal address for the submission of comments were provided in the opening statement. The Department also posted on its website, at https://dep.nj.gov/boss/public-notices/, a public notice with information concerning the comment period, the submission of comments, and the public hearing. The public notice on the Department's website was posted in four languages: English, Spanish, Portuguese and Haitian Creole. Though comments were not accepted via voicemail, an individual without email access could still comment on the permit application in the language of their choice by mailing a hard copy of their comments to the Department. And though comments received during the hearing were not translated live, participants were advised that they could speak in their preferred language at the hearing and those comments would be translated for a response by the Department.

Criteria for Permit Applicant to Request an Extension

3. **COMMENT**: The Department should officially advise the permit applicant of the criteria that must be met before a request for an extension/exemption may be made. By advising the applicant in advance, the Department will be able to preempt any potential requests that do not meet the criteria. (Written: United States Environmental Protection Agency)

   RESPONSE: There are many reasons why the facility may need to request an extension to the deadlines in EJ conditions. These reasons include, but are not limited to, the following: supply chain delays, implementation of innovative technologies which may need to be installed, tested, and modified for compatibility with the facility's operations, and unforeseen events, as was seen with Hurricane Sandy. Consequently, establishing a set of criteria for requesting an extension could limit the Department's ability to grant requests and inhibit the eventual compliance of the EJ condition.

B) Authority / Legal

Permit Renewal

1. **COMMENT**: PVSC submitted a permit renewal application in 2019 to renew the current operating permit, which has an expiration date of October 6, 2020. Despite the regulations of the Environmental Protection Agency (EPA) and State of New Jersy requiring the Department to have acted on this permit within 18 months, the permit renewal application remains pending, and PVSC has been operating under an application shield ever since. PVSC's permit renewal application has thus been pending for over five years, with no clear timeframe for when the Department will act on that renewal. Under the Department's previous policy, no matter the timing of the Department's approval of this 2019 application, approval would have resulted in a renewal into the 2020-2025 permit term; but the Department recently issued a new policy under which approval will now result in renewal into a five-year term starting on the date of the Department's final action on the permit. This means that the Department has, in effect, granted renewal into the 2020-2025 permit term without providing an opportunity for public comment, as required by the Clean Air Act. Commenters therefore submit these comments for the permit renewal that never happened, without prejudice to their ability to submit additional comments once the Department acts on the pending 2019 renewal application.

   The Department's new renewal policy not only denies the public the opportunities to comment that are envisioned by the Clean Air Act (CAA), 42 U.S.C. §§ 7401 et seq, but also delays application of the full protections of the Environmental Justice rules at N.J.A.C. 7:1C (EJ Rule). Under the timetable envisioned by the CAA and State regulations, PVSC would have had to submit its renewal application for the 2025-2030 term by October 6, 2024, and the full EJ Rule would apply to the permit when the Department acts on that renewal in 2025. But because of the Department's new policy and unlawful withholding of action on the permit renewal, it will be years before the full EJ Rule applies to the permit. The possibility that the full New Jersey Environmental Justice Law, N.J.S.A. 13:1D-157, et seq. (EJ Law) will first apply to PVSC's permit years after the 2020 passage of the EJ Law is untenable. The Department should apply the full protections of the EJ Rule now. (Written: Earthjustice on behalf of Ironbound Community Corporation)

   RESPONSE: The Department issued guidance on Operating Permit Renewal dates on June 20, 2022, after it determined that using the date of renewal approval (rather than a continuous five-year terms) is consistent with EPA policy and practice, as well as the policy and practice of other states that have Title V operating permit programs. The commenter is correct that prior to this guidance, the Department would have set a renewal date based upon a five-year interval, regardless of the date of approval. That practice resulted in an inconsistent process that sometimes resulted in a facility having to file a second renewal application before the prior renewal application was approved. In other words, some facilities would have two

renewal applications pending for Department approval simultaneously. By adopting the policy and practice of EPA and other states, the Department will reduce this inefficiency without depriving the public of its right to comment. Whether there are two renewal applications or one, the review process is exactly the same, including the comment period. As noted by the commenter, the EJ Rule will apply when PVSC files its next renewal application. But the EJ Rule could not have been applied to PVSC's renewal application filed in 2019, because that application was deemed complete prior to the adoption of the EJ Rule.

Applicability of the EJ Law and EJ Rule

2. **Several commenters stated that the requirements of the EJ Law and EJ Rule should be applied to the review of this permit application.**

   COMMENT: The EJ Law requires pollution reductions in already over-polluted areas of the State, like the Ironbound. The Department's draft permit does the opposite. Even with all of the proposed environmental justice (EJ) conditions, this permit modification would still cause an increase in plantwide emissions of pollution, like volatile organic compounds (VOCs), sulfur dioxide (SO2), particulate matter (PM), hazardous air pollutants (HAPs), and carbon dioxide (CO2). This would not be acceptable under the EJ Law. (Transcript: Jonathan Smith)

   COMMENT: The Department should deny PVSC's proposal to build a new power plant in the most overburdened neighborhood of the State. Under the EJ Law and the EJ Rule, the Department would *have to* deny PVSC's permit application. The EJ Law and EJ Rule state that the Department must deny a permit for a new or expanded facility where the facility cannot avoid causing or contributing to one or more adverse stressors within an overburdened community. The exception to this requirement is where there is no reasonable alternative and the proposed modification would serve a compelling public interest. As many commenters demonstrated in their AO-25 comments, the gas plant is not necessary to meet the needs of the Ironbound, and there are reasonable, less-polluting alternatives to the gas plant. Thus, if the EJ Rule were applied to this application, the Department would be required to deny it.

   The only reason that the EJ Rule does not apply here is because of the Department's own delay in issuing the EJ Rule and because of the Department's decision to move PVSC's initial application through the AO-25 process, despite discrepancies that should have required PVSC to resubmit its application. The completeness determination happened despite the fact that PVSC's AO-25 Compliance Statement contained many fundamental differences from the permit modification that PVSC submitted. The Department itself noted these substantial discrepancies, but failed to require PVSC to resubmit its application to correct the issues. Had PVSC been required to submit an application correcting the discrepancies, or had the Department otherwise deemed the July 2021 application incomplete or issued the EJ Rule more quickly, the application likely would have been subject to the EJ Rule and the Department would have been required to deny it. (Written: Earthjustice on behalf of Ironbound Community Corporation)

COMMENT: Pursuant to the EJ Law, the Department is required to make decisions that protect EJ communities. Simply because this plan was formed prior to the EJ rule, is no justification to give it a pass legally. This community should be given the respect that it was due before the passing of the EJ Law, and the Department should live up to the responsibility of protecting EJ communities, which is only now finally written into the EJ Law. The principles underlying the EJ Law, should be observed in this decision. (Transcript: Leah Ives)

COMMENT: This project was not subject to a cumulative impacts and health assessment as it would have been under the EJ Law. It is likely that this project would not have been allowed under the EJ Law had it been subject to it. (Transcript: Samantha DiFalco)

COMMENT: The abbreviated EJ review of this permit failed to include an assessment of the cumulative environmental and public health impacts of the proposed gas plant, which is basically the whole point of the EJ Law. (Transcript: Holly Cox)

COMMENT: Even though the permit application was submitted before the EJ Law was signed, the Department has the scientific knowledge to protect the people of the Ironbound. (Transcript: Paula Rogovin)

COMMENT: Under the EJ Law, the Department is supposed to deny a permit like this one because the gas plant would add to pollution in the community and there are feasible alternatives that PVSC failed to adequately consider. But because the Department took so long to issue the EJ Rule, PVSC's submitted its permit application before the rules were adopted. The Department may well approve this new pollution source even though it is clearly in violation of the EJ Law. That is outrageous and you should be ashamed that the approval is based on a technicality. (Transcript: Ted Glick)

COMMENT: The Department knew of the rulemaking process for the EJ Law. The Department knew that these laws were going to put conditions in place that were going to be strong enough for this permit to be denied. But the Department still allowed PVSC to continue its process of applying for a permit, even though the Department knew that it was going to be denied eventually. Even now, the conditions that have been set in place for this permit are not safe. These conditions could easily be turned into a loophole for the company to continue operations in a different way. (Transcript: Chris Tandazo)

COMMENT: The Commissioner promised many people, including community members, and local, State, and national environmental justice leaders, that the EJ Rule would be adopted in November 2021. The EJ rule was delayed by over 18 months. Had the rules not been delayed, those rules would be applicable. Additionally, the permit has changed over time. Those changes are enough reason for you to deny the permit and make them reapply, subject to the EJ Rule. (Transcript: David Pringle)

COMMENT: In the State of New Jersey, the importance of cumulative impacts has been highlighted through the landmark 2020 New Jersey EJ Law, which requires the Department to evaluate environmental and public health impacts of certain facilities on overburdened communities when reviewing certain applications. The Newark community is a predominantly Black and Brown working-class community, which has been marked as an EJ community by the Department's Environmental Justice map, and currently ranks at approximately the 90th percentile for New Jersey indicators of environmental burden. Furthermore, the proposed facility site would be placed in a census block, which is currently home to 22 of the 26 Department-identified stressors and directly next to a census block that is positive for 21 of the 26 stressors. To place another facility in an area that is densely populated by permitted air pollution sites would not only bring about additional environmental and health risks for the community, but would stand directly in contradiction with the Department's outlined goals of environmental justice and with the EJ Law. The Department must deny this permit application. (Written: New Jersey Environmental Justice Alliance)

COMMENT: The Ironbound is a predominantly Black and Brown community already facing disproportionate environmental burdens, leading to serious health and quality of life impacts for vulnerable local residents. It is inappropriate and unacceptable for a new facility to be constructed in an existing overburdened community, such as the Ironbound. The State acknowledged that the Ironbound was overburdened through the passage of New Jersey's landmark EJ Law, which requires regulators to take local environmental and health impacts into account while reviewing permits for polluting facilities. The effort by PVSC to add another facility to a neighborhood that already houses four gas plants is at odds with the spirit of the law. (Written: Vote Solar)

COMMENT: The Department should not approve the draft permit allowing PVSC to build and operate a polluting gas plant in the already overburdened Ironbound community. Approval of the permit would violate the principles of environmental justice. The Department has repeatedly voiced its commitment to promoting environmental justice and following the principles of environmental justice as laid out in New Jersey's EJ Law. In spite of this, the Department is proposing to allow PVSC to operate a facility that would be the fourth gas plant in the Ironbound, a predominantly Black and Brown community that the Department classifies as overburdened. The Ironbound ranks around the 90th percentile statewide for most of the indicators for environmental burdens. And the proposed permit would allow PVSC to emit 16 tons of HAPs, 107 tons of carbon monoxide (CO) and about 80 tons of VOCs per year into the community. Even with the changes that were proposed through the EJ Law process, PVSC's emissions of VOCs, HAPs, carbon monoxide (CO), nitrogen dioxide (NOx), SO2, and PM will all increase. The law requires that the Department deny a permit where a new facility will add to the environmental burden that an overburdened community faces. Therefore, the Department should deny the permit modification to add a gas plant at PVSC. (Transcript: Colin Parts)

COMMENT: This is an overburdened community that was supposed to be protected by the EJ Law. This community is linguistically isolated and income and racially segregated. This community cannot tolerate any more possible facilities. The Department should support the community by not allowing this permit. The permit application really has gone in through a loophole of having the EJ Law take over two years to be implemented. When the facility did submit the application, their EJ review was outdated. The Ironbound community simply does not want another source of pollution; another reason to have negative public health outcomes like having the highest rate of asthma in the entire State of New Jersey; another power plant. (Transcript: JV Valladolid)

COMMENT: As many of you know, the Ironbound neighborhood is a four-square-mile, low-income, Black and Brown community that already has three fossil fuel power plants, the State's largest waste treatment facility, the State's largest garbage incinerator and a 17 mile Superfund site. The community is already overburdened. This proposed project is contrary to the principles under the EJ Law. This proposed plan will increase emission of pollutants. The EJ Law is meant to protect overburdened communities. Under the EJ Law, the DEP should be rejecting permits like PVSC's, but you are allowing this to be built on a technicality. It is your job and your duty to protect human health. Allowing this permit not only does not do that, it does the opposite. (Transcript: Vanessa Thomas)

COMMENT: There was no cumulative environmental and public health impacts review of this application. The effects of the air pollution from this plant combined with the other three plants in the Ironbound, plus the high amount of diesel truck traffic, air pollution from the incinerator plant, and the airport have never been determined. This puts PVSC in danger of violating our State's new EJ Law. The Department should deny the application for the power plant permit. (Transcript: Elizabeth Ndoye)

COMMENT: The PVSC permit application was submitted and deemed administratively complete before the adoption of the EJ Rule. The Department may not retroactively impose regulatory requirements. In this case, PVSC's permit was submitted before the EJ Rules were on the books. The Department should withdraw the draft permit and reconsider a new permit application with EJ Rules in place. (Written: Bill Wolfe)

RESPONSE: PVSC's permit application was deemed complete for Department review on July 23, 2021. The EJ Law at N.J.S.A. 13:1D-157, specifies that implementation of the law begins upon adoption of rules pursuant to the Administrative Procedures Act, N.J.S.A. 52:14B-1 et seq. The EJ Rule at N.J.A.C. 7:1C became effective on April 17, 2023, almost two full years after the Department determined that PVSC's permit application was deemed complete. Therefore, the EJ rule does not apply to the PVSC permit. Further, any inconsistencies between PVSC's AO-25 Compliance Statement and the permit application are irrelevant to the completeness determination. Finally, the Department did not delay the rulemaking process. This rulemaking was the first of its kind, and the Department was deliberate about ensuring the process was both inclusive and thorough, which required time.

Administrative Order Authority

3. **COMMENT**: The draft permit is fatally flawed. An Administrative Order (AO) of the Commissioner may not establish substantive binding regulatory requirements. An AO is only binding on Department employees in their administrative functions. Binding substantive regulatory requirements can only be imposed pursuant to rulemaking, as authorized by the legislature. (Written: Bill Wolfe)

   RESPONSE: The APCA and CAA grant the Department the authority to issue a final Operating Permit pursuant to N.J.A.C. 7:27-22. Once issued, an "applicant, registrant, or permittee may request a contested case hearing pursuant to the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq., and the New Jersey Uniform Administrative Procedure Rules, N.J.A.C. 1:1 regarding a decision made by the Department." N.J.A.C. 7:27-1-32. Thus, PVSC has the opportunity to request a hearing to contest any of the requirements in the final permit.

APCA / CAA Authority

4. **COMMENT**: The Air Pollution Control Act (APCA), N.J.S.A 26 :2C-1, and by extension the federal CAA, grant the Department the authority to deny this air permit application. The APCA vests that regulatory authority in the Department to determine the extent to which sources will be burdened by regulation. The Department has the power to control the issuance of permits under the Act. The Act clearly anticipates the possibility that the Department may deny permits, stating that permits may not be issued unless the applicant for the permit has demonstrated that the facility will operate in accordance with the APCA and any regulations issued under it. And the Department's implementing regulations plainly state that the Department's final decision on an application for a permit modification may be a denial of that permit. (Written: Earthjustice on behalf of Ironbound Community Corporation)

   RESPONSE: The Department agrees that the APCA and CAA grant the Department the authority to deny a permit application that does not meet the regulatory requirements. In this case, the Department has determined that the final permit issued to PVSC meets all of the regulatory requirements under the APCA and CAA.

5. **COMMENT**: The NJ APCA does not authorize the Department to base permit conditions on EJ reviews or EJ issues, including location in a designated EJ community or the presence of disparate impacts. The regulations adopted by the Department to implement New Jersey's APCA do not authorize the Department to consider and base permit conditions on EJ issues. The EJ conditions were state-only applicable requirements; thus, the basis for the conditions appears to be State law. However, the state-only conditions impact a Federal permit subject to EPA review and approval pursuant to the CAA. It appears Federal and State law are implicated. (Written: Bill Wolfe)

RESPONSE: The APCA gives the Department broad authority to promulgate rules "preventing, controlling and prohibiting air pollution throughout the State." That authority is not limited to the requirements of the Federal CAA. Thus, for many years, the Department has issued Title V permits that include State-only conditions. And those permits have implemented both Federal and State law.

Civil Rights Act

6. **Several commenters argue the issuance of the permit would be a violation of Title VI of the Civil Rights Act.**

COMMENT: The Department should not approve the draft permit allowing PVSC to build and operate a polluting gas plant in the already overburdened Ironbound community. Approval of the permit would violate the principles of environmental justice and civil rights. As a recipient of Federal funds, the Department is required to comply with Title VI of the Civil Rights Act, which prohibits discrimination on the basis of race, color, and national origin. (Transcript: Colin Parts)

COMMENT: A Federal court has recently struck down EPA's authority to consider disparate impacts and cumulative impacts in EPA permits, finding that Congress did not provide that authority (see: U.S. District Court Judge Cain, Judgment pursuant to the ruling in State of Louisiana v. EPA, No. 2:23-cv-00692, W.D. La. Jan. 23, 2024, Aug. 22, 2024). Additionally, there are other Title VI cases out of New Jersey that make it virtually impossible to litigate the issue of whether the issuance of a draft permit violates the Civil Rights Act. For example, the Third Circuit Court's holding, in South Camden Citizens in Action v. New Jersey Department of Environmental Protection, 274 F.3d 771 (3d Cir. 2001) https://www.gibbonslaw.com/resources/publications/third-circuit-closes-seconddoor-on-plaintiffs-in-south-camden-environmental-justice-case-05-02-2002 (Written: Bill Wolfe)

RESPONSE: To the extent that one commenter argues that approval of the permit would violate Title VI of the Civil Rights Act, but does not identify the objectionable provisions of the permit, the Department is unable to respond. Nonetheless, the Department does not agree that the approval of this permit is tantamount to discrimination on the basis of race, color, or national origin. The remaining comments are beyond the scope of this permit application.

EJ Conditions

Rationale

7. **COMMENT**: Neither the New Jersey EJ Law nor the New Jersey APCA authorize the imposition of some of the "conditions" in the draft permit (e.g. solar and battery storage). Furthermore, there is no data or scientific rationale linking the emissions from the facility and the proposed conditions. The Department did not provide a scientific basis or data for a causal nexus between the conditions and a cognizable adverse impact. The Department cannot just pull permit conditions out of a hat. (Written: Bill Wolfe)

   RESPONSE: To the extent that the commenter argues that there is no data or scientific rationale linking the emissions from the facility and the proposed conditions, but does not identify the objectionable conditions, the Department is unable to respond directly. More generally, the rationale for the EJ conditions are set forth in the Environmental Justice Decision issued by the Department on July 18, 2024. Please see Response B2, explaining the Department's determination that the EJ Rule does not apply to the PVSC permit. In contrast, the Department does have the authority to issue an Operating Permit pursuant to the APCA and CAA. And as explained in Response B3, upon issuance of the final permit PVSC has the opportunity to request a hearing to contest any of the requirements in the final permit.

Permanency

8. **Several commenters argue that the permit should be changed to clarify that the EJ Special Conditions are permanent.**

   COMMENT: The Department must ensure that the permit clearly states that all EJ Conditions are permanent, consistent with the EJ Decision. While the draft Permit posted on the Department's website does include the EJ Decision at the end as an attachment, that is insufficient, since there is no guarantee that the EJ Decision attachment will remain in all future PVSC permits. The Department included the EJ Conditions in the permit to supposedly counterbalance the emission increases that it is allowing in an overburdened community, but the EJ Conditions are of little comfort if they can be amended away in some years' time and if their emission reductions are not enforceable in the meantime. Therefore, it is imperative that the Department incorporate the EJ Conditions' emissions reductions into the permit as enforceable limits, along with language stating that the EJ Conditions shall not be superseded or removed in any future permit amendment. (Written: Earthjustice on behalf of Ironbound Community Corporation)

   COMMENT: If the Department is going to approve the permit for the gas plant, the permit conditions must reflect the EJ determination that the EJ conditions are permanent and cannot be removed from the permit. (Transcript: Jonathan Smith)

   COMMENT: When the EJ review was announced, the Commissioner insisted that the conditions being proposed are incredibly harsh and they can never be changed. And that is inaccurate. (Transcript: David Pringle)

RESPONSE: The EJ Decision issued by the Commissioner on July 18, 2024 did not indicate that the special conditions would be permanent. The language in Section 7 of the EJ Decision provides notice that the special conditions shall survive future permit modifications. This does not mean that those conditions cannot be modified, only that those special conditions are the minimum standards that must be applied to prevent backsliding on emission limits and control technology. It would be counter-productive for the Department to make any condition of a permit permanent since the Department should include increased stringency of emission requirements in any future modification or renewal requests. To underscore this point, the Department will add the following language to the General Provisions and Authorities section of the final permit: "Special Conditions derived from an Environmental Justice Decision may not be changed unless a modification request is proposed and the Department determines that there is good cause shown for the request and that the emissions reductions derived from the special conditions would not be decreased as a result of the modification."

Emission Reductions

9. **Several commenters claim that the draft permit will allow an increase in emission.**

COMMENT: The Department's decision regarding the special conditions that would be imposed on the PVSC permit under the EJ Law ignored many commenters' concerns and failed to impose sufficient conditions. The decision's list of special EJ Conditions appears to simply incorporate, as-is, the conditions that PVSC itself proposed in its AO-25 Compliance Statement, without any amendments, improvements, or criticism of PVSC's proposals. While the Department touted the fact that these EJ Conditions would result in facility-wide emission reductions, the EJ Decision failed to disclose that even with these reductions, the gas plant permit modification will still increase overall emissions from PVSC. The Department had the opportunity to set a high standard for the implementation of the EJ Law by denying PVSC's proposal to add to the Ironbound's disproportionate environmental burden, but the Department's EJ Decision ultimately failed to live up to the ideals of the EJ Law. Accordingly, the Department must set facility-wide annual emission limits for all the pollutants that the PVSC facility emits and ensure that those emission limits reflect the expected emission reductions from the proposed EJ Conditions. The Department's Statement of Basis promises that its proposed EJ Conditions will result in a certain amount of emission reductions at the facility, but those emission reductions are nowhere to be found in the Draft Permit. The Department has issued permits with facility-wide pollutant emissions in the past, and should do the same here. Otherwise, the supposed emission reductions from the EJ Conditions would be unenforceable. The Department's EJ Decision repeatedly represented that these would be "mandatory emission reductions," but a quick glance at the permit shows that there is nothing "mandatory" about the supposed emission reductions from the EJ Conditions. (Written: Earthjustice on behalf of Ironbound Community Corporation)

COMMENT: The gas plant will result in an increase in emissions at PVSC's facility, allowing PVSC to emit 16 tons of HAPs, 107 tons of CO, about 80 tons of VOCs, nearly 70 tons of NOx, 18 tons of PM_{10}, and about three tons of PM2.5 per year into the community. Despite the promises of emission reductions during the EJ Law review process, there is no pollutant whose emissions would decrease under the Draft Permit. The proposed changes will increase PVSC's VOC emissions by 1.34 tons per year (tpy), NOx by 2.21 tpy, CO by 4.09 tpy, SO2 by 0.670 tpy, total suspended particles (TSP) by 2.78 tpy, PM10 by 2.78 tpy, PM2.5 by 2.78 tpy, total HAPs by 0.267 tpy, acrolein by 0.0110 tpy, ethylene dibromide by 0.0000911 tpy, formaldehyde by 0.256 tpy, ammonia by 1.31 tpy, and 23,000 tpy of CO2 equivalent. There is no pollutant whose emissions would decrease under the Draft Permit. Even if the EJ Conditions' emission reductions were taken into account. Subtracting the EJ Condition emission decreases from the gas plant emission increases still results in a net increase of 0.09 tpy for VOCs, 0.68 tpy for SO2, 2.46 tpy for TSP, 2.56 tpy for PM10, 2.64 tpy for PM2.5, 0.2 tpy for HAPs, and 14,200 tpy for CO2 equivalent.

These emissions will pose serious health risks to the community. At least ten of the HAPs that PVSC is allowed to emit are carcinogenic. VOCs and NOx are precursors to ground-level ozone, which can irritate the respiratory tract, reduce lung capacity, and aggravate lung diseases like asthma, emphysema, and chronic bronchitis. This is particularly concerning because one in four children in Newark have asthma, and asthma is the main reason that children in Newark miss school. PM10 and PM2.5 are health hazards because they can aggravate respiratory diseases like asthma and chronic obstructive pulmonary disease in the short term. Further, chronic exposure (like the exposure experienced by people living in areas with high PM levels - such as the Ironbound) to PM2.5 is associated with reduced lung function and even premature death.

The gas plant is an unnecessary facility that will unjustly force the residents of the Ironbound to bear further disproportionate environmental impacts. Therefore, the Department should deny PVSC's permit modification. (Written: Earthjustice on behalf of Ironbound Community Corporation)

COMMENT: If the Department is going to approve the permit for the gas plant, the conditions in the draft permit should be improved to adequately protect the people of the Ironbound and meet the requirements of the EJ Law. The permit should set a facility-wide annual emission limit that incorporates the emission reductions set forth in the EJ conditions. The EJ conditions do not appear in the draft permit. If these are not included, the EJ conditions mean nothing. (Transcript: Jonathan Smith)

COMMENT: A number of scientists and healthcare professionals have weighed in on the proposed PVSC plant. They have said that an additional gas-fired power plant in the Ironbound will increase air pollutants such as CO2, NOx, particulate matter, SO2, and VOCs in the Ironbound. Further, these air pollutants have been linked to a host of health problems including respiratory and cardiovascular disease, autism, learning disabilities, cancer, and neurodegenerative disease. Based on the science, the Department should not allow another gas-fired plant in the Ironbound. The Department should protect the community from future stillbirths, miscarriages, cancers and other health impacts. (Written & Transcript: Paula Rogovin)

COMMENT: The proposed PVSC facility is located within a census block that is adverse for 22 of the 26 stressors measured by the Department, and is adjacent to a community that is adverse for 21 of those 26 stressors. Both census blocks are adverse for four of the five "concentrated air pollution categories" including ozone, cancer risks from particulate matter, cancer risks from air toxics, and non-cancer risks from air toxics. As the Department itself has noted, the density of permitted air pollution sites is more than five times higher in the Ironbound than the point of comparison. Even with the changes that the Department suggested through the EJ law process, the facility's emissions of VOCs, HAPs, CO, NOx, SO2, and PM will all be greater than the emissions from its current operations. The Department's proposed permit would allow PVSC to emit 16 tons of HAPs, 107 tons of CO, and about 80 tons of VOCs per year. Further, nothing in the permit states that the permit conditions added during the EJ process could not be removed during a future permit modification. (Written: Daniela Gioseffi)

COMMENT: There is a clear nexus between air pollution and health. As such it is incumbent upon the Department to ensure that permit modifications, which could increase emission levels, are not approved unless strictly necessary and dire. PVSC's permit modification application includes a request to install three natural gas-fired turbine generators, two natural-gas fired emergency black start generators and two diesel-fired emergency fire pump engines. Additionally, the application highlights a usage of five percent H2 in CTG fuel, which refers to hydrogen blending. Altogether, if approved, this permit modification application would increase the total CO2e emissions by 23,000 tons per year as well as increase all other emissions types (VOC, NOx, CO, SO2, TSP, PM10, PM2.5, Pb and HAPs). When evaluating permits in EJ areas, the Department must consider and prioritize reducing local air pollutant emissions as well as CO2 and greenhouse gas (GHG) emissions. The EPA has made a lengthy list of the health impacts associated with pollutants, including but not limited to, CO, SO2, PM, NO2, and VOCs. The Department should not approve the proposed permit modifications given the increased emissions of toxic air pollutants that are an unacceptable health risk to the residents of the Ironbound and the Newark area, especially when also considering the additional risk of multiple other sources of air pollution concentrated in the area. In accordance with the spirit of the landmark New Jersey EJ Law, the Department must establish stringent limitations and ensure that all measures to reduce emissions have been considered and taken before approving a modification. (Written: New Jersey Environmental Justice Alliance)

COMMENT: By adding a gas plant, the air pollutants produced by the facility will increase. This does not even account for the air impacts during the construction period or the ozone that will develop due to these pollutants being released into one of the worst heat islands in the country. The current air pollution in the Ironbound community causes one in four children to have asthma and contributes to cancer and cardiovascular problems. (Transcript: Leah Ives)

COMMENT: In responding to the EJ review, the facility insists that there will be no increase in pollution. However, that is not factually accurate. (Transcript: David Pringle)

RESPONSE: As discussed in Response B2, the Department determined that PVSC's permit application was complete prior to the adoption of the EJ Rule. However, the Department reviewed the permit application pursuant to AO-25, which directs the Department to apply special conditions to the maximum extent allowable to avoid or minimize environmental or public health stressors upon the overburdened community consistent with applicable statutes and regulations. After review, the Department determined, based upon the certified information provided in the permit application, that all of the proposed new or modified equipment and air pollution control devices comply with all applicable State and Federal regulations. The special conditions set forth in the Environmental Justice Decision issued by the Department on July 18, 2024, represent the Department's implementation of the directives of AO-25 to avoid or minimize environmental or public health stressors upon the overburdened community consistent with applicable statutes and regulations.

The EJ Special Conditions are not only attached to the permit, but are also individually listed in the permit. See Environmental Justice Decision and Imposition of Special Conditions Pursuant to Administrative Order No. 2021-25 attached to the permit and Group 2 (GR2) in the compliance plan. The proposed facility-wide reductions are a net overall reduction in the emission of air pollutants from the facility and can be seen in Table 4 of the EJ Decision Document. The permit does not reflect the future emission reductions, because those limits will not be in place until the EJ Conditions are implemented by the facility. Once on-site measures are processed through a modification application(s), the net overall reduction in the emission of air pollutants will be reflected in the permit.

Contributions to Stressors

10. **COMMENT**: The proposed permit modifications will contribute to adverse cumulative stressors in the overburdened Ironbound community where PVSC is located, and the Department's proposed special EJ Law conditions will fail to adequately mitigate PVSC's contribution to these adverse cumulative stressors. Accordingly, the Department should deny the permit application. (Written: Earthjustice on behalf of Ironbound Community Corporation)

    RESPONSE: As explained in Response B9, the Department determined, based upon the certified information provided in the permit application, that all of the proposed new or modified equipment and air pollution control devices comply with all applicable State and Federal regulations. As a result, the Department has no authority to deny the permit

application. Nevertheless, the special conditions set forth in the Environmental Justice Decision issued by the Department represent the Department's implementation of the directives of AO-25, which is to avoid or minimize environmental or public health stressors upon the overburdened community consistent with applicable statutes and regulations.

Inclusion in Permit

11. **COMMENT**: When it was announced that the Department was going to approve the permit, there was supposed to be a condition that PVSC would only run the plant once a month as a test. That condition was not included in the statement of basis for the Draft Permit. Though the permit application should be denied, if the Department is going to approve it, that condition would certainly mitigate a lot of the impacts of the plant. (Transcript: Bill Beren)

    RESPONSE: The Department included the condition stating that PVSC is only allowed to operate the combustion gas turbine generators once per month for necessary testing and maintenance of the draft permit, Ref.# 2 of GR2 EJ Special Conditions.

Greenhouse Gas Requirements

12. **COMMENT**: N.J.S.A. 26:2C-59 mandates that the Department use a 20-year time horizon to calculate the global warming potential of methane, based on the Intergovernmental Panel on Climate Change Assessment Report. According to the draft permit, the total emissions of CO2 equivalent from the facility are 310,000 tons per year. However, it is impossible for the public, scientists, the legislature, and a reviewing court to determine whether the Department complied with N.J.S.A. 26:2C-59 because: (1) the emissions are not disaggregated by emission source or by individual pollutant; (2) the methodology for deriving CO2 equivalence is not included; (3) the conversion factors for methane to CO2 equivalent are not provided; and (4) the total methane emissions are not provided. The Department must provide transparent data and methods, including methane conversion to CO_2 equivalence the Department employed and affirmatively state whether the draft permit complied with N.J.S.A. 26:2C-59. This omission has been highlighted to the Department previously in: (1) public comments submitted in response to another draft permit; (2) a July 2023 article; and (3) a July 2023 letter to the Commissioner. (Written: Bill Wolfe)

    RESPONSE: For the review of the Operating Permit application, the methane emissions were converted to CO2 equivalent emissions to determine whether greenhouse gas emissions (GHG) could be subject to the provisions of 40 Code of Federal Regulations (CFR) Part 52.21 Prevention of Significant Deterioration (PSD). 40 CFR Part 52.21(b)(49) outlines the procedures to be followed to determine if GHG are subject to the PSD regulations. 40 CFR Part 52.21(b)(49)(ii) states the following:

    For purposes of paragraphs (b)(49)(iii) through (iv) of this section, the term tpy CO2e emissions shall represent an amount of GHGs emitted, and shall be computed as follows:

    (a) Multiplying the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas' associated global warming potential published at Table A–1 to subpart A of part 98 of this chapter—Global Warming Potentials.

(b) Sum the resultant value from paragraph (b)(49)(ii)(a) of this section for each gas to compute a tpy CO2e. Table A-1 to Subpart A of 40 CFR Part 98 bases Global Warming Potential on a 100-year time horizon.

Consequently, for the Title V Operating Permit application, CO2 equivalent emissions must be calculated using a 100-year time horizon, not a 20-year time horizon. The Department has been delegated the authority by the USEPA to issue Operating Permits, which must comply with all Federal Regulations. The calculation of CO2 equivalent emissions for the Operating Permit Modification is done to determine applicability to 40 CFR Part 52.21, and not to assess the global warming impact of a greenhouse gas.

13. **COMMENT**: Though PVSC is a major source pursuant to the Department's regulations, the draft permit does not include any provisions to regulate CO_2 emissions in any way (e.g. pollution control requirements, emissions limits, operating conditions, offsets, air pollution fees, mitigation, monitoring, reporting, record keeping). The Department has a mandatory duty to regulate and control air pollutants and to do so consistently across all pollutants. By failing to include this information, it is impossible to determine whether the draft permit is consistent with the emission reduction goals and timetables of the Global Warming Response Act. Further, the Department's failure to regulate CO_2/greenhouse gas emissions violates applicable law and makes the permit "arbitrary and capricious" and an "abuse of discretion" due to "omission" and "clear error." Based on this and other flaws, the Department should withdraw the draft permit. (Written: Bill Wolfe)

RESPONSE: The Department's review of this permit application is limited to the scope of the application that is before it. In this case, the application for a modification of the Air Pollution Control Operating Permit is limited to the addition of three 28 megawatt natural turbines, two 2000 kilowatt natural gas black start engines, and two 1.54 million BTU/hr emergency fire pumps. The operation of this equipment has the potential to increase the facility's total carbon dioxide emissions by 23,000 tpy. The facility's revised total potential to emit carbon dioxide is 310,000 tpy. Although there is an increase in carbon dioxide emissions, the Department does not have the authority to regulate these emissions from any of the facility's existing or proposed equipment. Though there are carbon dioxide regulations which apply to stationary source operations, this permit application is not subject to either regulation. The Federal regulations concerning the Prevention of Significant Deterioration (PSD) of air quality at 40 CFR 52.21(b)(49)(iv), do not apply to this permit because the facility does not meet the criteria for a new or existing major facility as set forth in the PSD rules. Likewise, the Department's rules, Control and Prohibition of Carbon Dioxide Emissions, at N.J.A.C. 7:27F do not apply to this permit application because the facility does not operate an "electric generating unit" that would be covered under the applicability section of the rules. Accordingly, this permit meets the applicable statutory or regulatory requirements.

Affirmative Defense

COMMENT: The Draft Permit contains unlawful affirmative defense provisions that must be deleted. General provisions 2(c), 10(a), and 10(b) state that PVSC will be able to assert an affirmative defense if the facility does not comply with its mandatory emissions limits in cases of emergency or during startup, shutdown, or malfunction. However, these blanket regulatory affirmative defenses are unlawful. In 2023, EPA finalized a rule to delete the affirmative defense provision from 40 C.F.R. § 70.6(g) (the federal provision on which permit provision l0(a) relies) in order to comply with a D.C. Circuit decision holding that EPA did not have the authority to create a blanket affirmative defense provision for equipment malfunctions through a regulation. Therefore, permit provision l0(a) no longer has any legal basis and must be deleted.

EPA's 2023 rulemaking additionally stated that other affirmative defense provisions in state law are similarly "inconsistent with the EPA's interpretation of the enforcement structure of the CAA in light of prior court decisions from the U.S. Court of Appeals for the D.C. Circuit." States are required to delete their state-law affirmative defense provisions and general provisions 2(c) and l0(b) are such provisions. These permit provisions rely on N.J.A.C. 7:27-22.16(1), but EPA has specifically found that N.J.A.C. 7:27-22.16(1) relies on the same unlawful reasoning as 40 C.F.R. § 70.6(g), and thus must be deleted. In light of the new EPA rule, the Department must delete the unlawful general provisions at 2(c), l0(a), and l0(b). (Written: Earthjustice on behalf of Ironbound Community Corporation)

RESPONSE: To address this concern, the Department is modifying the General Provisions related to the affirmative defense (General Provisions 2(c) and 10) to state:

> General Provision 2(c):
> (c) If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, and the permittee intends to assert an affirmative defense, consistent with General Provision #10 below, the violation shall be reported by 5:00 PM of the second full calendar day following the occurrence, or of becoming aware of the occurrence.
>
> General Provision 10:
> 10. The permittee may not assert an affirmative defense to penalty liability for non-compliance with a provision or condition of the operating permit that is based on any federally delegated regulation, including but not limited to NSPS, NESHAP, or MACT. An affirmative defense to penalty liability for non-compliance with a provision or condition of the operating permit may be asserted by a permittee if:
>
> 1. The provision or condition of the operating permit is based solely on State or local law; and
> 2. The affirmative defense is asserted and established as required by N.J.S.A. 26:2C-19.1 through 19.5.

C) Air Quality Concern

Overburdened

1. **Several commenters express opposition to the draft permit, citing the overburdened nature of the area in which the PVSC is located.**

   COMMENT: Newark already suffers from significant air pollution due to the large number of polluting sources, such as the port, the trucking, the highways, the airport, the trash, and the current power facilities. The Department should not allow another power plant in our neighborhood. The children deserve clean air. (Written: Colin Kelly)

   COMMENT: Residents in the Ironbound community are already overburdened by combined health impacts from numerous fossil fuel facilities in the area - the incinerator, three power plants, heavy industry, planes from liberty airport, trucks from Port Newark, and more. (Written: Paula Rogovin)

   COMMENT: The proposed PVSC gas-fired power plant would be located in an already overburdened community. PVSC would be the fourth gas plant to be constructed in the Ironbound, a predominantly black and brown community subject to disproportionate environmental burdens. The Ironbound is ranked around the 90th percentile statewide for most indicators of environmental burden. Approving this permit would be contrary to the principles under the EJ law. Had the Department adopted the EJ Rule sooner, this PVSC permit would not been approved on a technicality. (Written: Daniela Gioseffi)

   COMMENT: The gas plant proposed to be permitted would be a new, major source of air pollution in an overburdened community where residents already deal with the health impacts of deadly levels of air pollution from numerous sources including the State's largest trash incinerator, three other power plants, industrial sites including a fat rendering plant, legacy pollution from four superfund sites and more than 100 brownfields, pollution from the airport and shipping port, and hundreds of daily truck trips and car traffic. (Written: Diane Schwarz, Marilyn Manganello, William McClelland, Christina Pindar)

   COMMENT: The Ironbound is a roughly four-square mile neighborhood in Newark, New Jersey, that is home to about 50,000 primarily Black and Brown working-class residents. As a whole, the Ironbound bears a disproportionate environmental burden compared to the rest of New Jersey. Under New Jersey's EJ Law, the entirety of the Ironbound is considered "overburdened." The two overburdened census tracts closest to PVSC's facility are adverse for 23 and 21 of the 26 environmental and public health stressors that the Department measures under the EJ Law. Both PVSC and the proposed gas plant will contribute to the density and proximity stressor category under the EJ Rule. The two block groups closest to PVSC's facility are adverse for all three density and proximity stressors that the Department measures, with more than four times as many permitted air pollution sources per square mile as the geographic point of comparison.

Both of the tracts closest to PVSC have non-cancer risks from air toxics more than twice as high as the geographic point of comparison, and a cancer risk from air toxics nearly twice as high as the geographic point of comparison. One tract also has roughly four times the ground level ozone as the geographic point of comparison. Further, more than 4,000 facilities with environmental permits are located within the two zip codes that encompass the Ironbound.

The EPA's EJScreen Tool also shows that the area ranks around the 90th percentile or higher for nearly every environmental justice index. For example, it is in the 94th percentile state-wide for toxic air releases and the 92nd percentile for NOx and PM2.5 emissions.

The proposal by PVSC is to build what would be the fourth natural-gas-fired power plant to be constructed in the Ironbound community. The power plant will be yet another permitted source of air pollution impacting these already overburdened communities. Because the gas plant would contribute to the adverse cumulative environmental and public health stressors that the Ironbound faces, the Department should deny PVSC's permit modification application. (Written: Earthjustice on behalf of Ironbound Community Corporation)

COMMENT: Approving this permit is adding to the detriment of an overburdened community that is already home to three fossil fuel plants and other industrial pollution. Approving this permit detracts from the goal of 100 percent clean energy, perpetuates a cycle of harm, and deepens feelings of disillusionment within the community. The Department should prioritize clean energy and better protect the health of the residents in this community. (Transcript: Chloe Desir)

COMMENT: This would be the fourth fossil fuel plant in this community. This predominantly black and brown community is also home to a garbage incinerator, over 100 brownfield sites, and the longest Superfund site in EPA history. (Transcript: Leah Ives)

COMMENT: The Department should not grant a permit to make the air quality even worse for the residents of the Ironbound where it is unhealthy to breathe the air every minute of every day. A vote for a fourth gas plant in an already overburdened community inundated with health inequities is environmental racism. Granting a permit for another fossil fuel plant now, at this moment in history, when we all know that burning fossil fuels is causing extreme heat, storms, winds, flooding, etc., is a vote of mind-boggling ignorance. Allowing a fourth methane gas power plant in Newark's Ironbound Community, one of the most polluted regions in the entire country, makes a mockery of Governor Murphy's Climate and Environmental Justice commitments. (Transcript: Holly Cox)

COMMENT: The proposed power plant would cause even more danger to public health and the environment in a place that is already saturated with those problems. The Department should not grant the permit. (Transcript: Henry Heivly)

COMMENT: Please do not approve this permit. We have an Environmental Justice Law in the State of New Jersey. Yet there is a permit application to construct another destructive, cancer-causing structure here. The air quality is so bad that is has health and educational implications. Young people have lead poisoning, neurotoxins in their body, and it is very

difficult for them to learn properly. Allowing another fossil fuel plant to be built in the City of Newark is environmental racism. Having been in education since 1995, I have never seen so many children with cancer and it is disturbing. There are greener alternatives to the gas plant, such as vertical wind turbines that could go on rooftops and solar. Even if these alternatives are not as efficient, lower efficiency is preferable to sick children. (Transcript: Sharonda Allen)

COMMENT: The testimony from professionals and community members has provided clear points to deny this permit application. Even the EJ assessment from PVSC included data that indicated there will be more pollution. The Department should not enable a polluting facility to continue to exist and continue to operate in a neighborhood that is already over-polluted. This whole month, multiple facilities have exploded throughout the country. Chemical facilities, fossil fuel facilities have exploded and not just from the hurricane that just happened, but in general. These facilities bring danger to our communities. There are whole neighborhoods around these facilities that have been built, and these communities have no other option but to deal with it. Folks in the communities where these facilities are going to be sited have to choose between that or death. Decisions about permits may harm a lot of community members and the harm is not just to this generation, but future generations. (Transcript: Chris Tandazo)

COMMENT: The Department should not approve the permit because it is in the Ironbound neighborhood, which is an environmental justice community that is already overburdened by existing pollution sources. Adding more pollution by approving this permit would further exacerbate these injustices, both in the Ironbound and beyond. (Transcript: David Pederson)

COMMENT: A gas-fired power plant will increase air pollutants in the Ironbound, a community that already experiences some of the worst air pollution, heat island effects, and asthma rates in the country. Newark should not be forced to include more gas plants. (Transcript: Hailey Benson)

COMMENT: Newark is being suffocated. The Department should not approve a new fossil fuel permit in an overburdened black and brown community. The Department should find a way to deny this permit because it is in the best interest of the Ironbound community to be as restrictive as possible when it comes to the construction of any more fossil fuel plants that would produce pollution and poison the community. (Transcript: Maya Ponton-Arnoff)

COMMENT: A fourth gas power plant in Newark is obscene, ridiculous, and embarrassing. The Ironbound is filled with factories, a large incinerator, multiple power plants, and Port Newark. It is your responsibility to ensure that there is no more environmental injustice for Newark. (Transcript: Lorin Fernandez)

COMMENT: In 1983, the country's largest dioxin discovery was here in the Ironbound. At that time, there were people in white coats going around sweeping up dirt. One of my high school students, who was in her 20s at the time of the discovery told me that she used to play on those dirt piles. And she had two children with birth defects, and was suffering from liver damage and cancer. This neighborhood should not become overwhelmed. People say to move if you do not like it. But not all people have the means to move away. (Transcript: Nancy Zak)

COMMENT: If someone were to look up the EJ law to see what it means, it refers to the residents of communities who are already suffering disproportionately from environmental public health negative outcomes. An example in Newark is the large incinerator burning garbage. When you burn trash, it makes dioxin, it makes other chemicals. Additionally, the Passaic River is known as the longest contaminated site in the country. And there are already three power plants that are basically in every four to 10 blocks within the Ironbound Community. Being able to breathe is a privilege that a lot of people living here do not have. (Transcript: Stephanie Martinez-Shedah)

COMMENT: New Jersey is a racially and economically segregated state, which has educational, environmental, and health implications. There cannot be real social and economic mobility and opportunity or a level playing field if some communities have unfair health challenges due to the constant bombardment of environmental toxins that make it hard to go to school and work, and can and often do lead to health and learning issues, absences due to illness and diminished quality of life. The environmental justice law purports to address these implications. The Department must deny the air permit application to build a fourth power plant in this already heavily overburdened community. An alternative solution should be considered. (Transcript: Pranita Bijlani)

RESPONSE: The Department may deny an application for a permit modification if the provisions and conditions contained in the application fail to comply with the applicable State and Federal regulations. In this case, the Department determined, based upon the certified information provided in the permit application, that all of the proposed new or modified equipment and air pollution control devices comply with all applicable State and Federal regulations. As discussed in Response B2, PVSC's application was deemed complete two full years before the EJ rules became effective. As a result, the EJ rules do not apply to this permit application. Thus, objections to the permit citing the EJ law and/or EJ rule provisions, are not a basis for the Department to deny this permit application.

Emissions & Health Impacts

2. **Several commenters express opposition to the draft permit, citing the negative health impacts associated with the emissions.**

COMMENT: The Department should not approve this permit. Children living in the Ironbound already have a strong likelihood of getting asthma. I want to raise my children here. I want my children and my wife to be able to breathe. I do not want toxins. And I want the people who do not have the means to leave to be able to breathe. It is incredibly selfish to prioritize money over human life. Please stop this project. (Transcript & Written: Brendan DaSilva)

COMMENT: The proposed new gas plant would worsen air quality in an already overburdened community. Children in particular are highly impacted by the environmental conditions in Newark. Twenty-five percent of children, more than three times the national rate, are diagnosed with asthma. High rates of unmanaged asthma in this community are a major contributor to chronic school absenteeism, which in turn contributes to an educational achievement gap and loss of social and emotional support. The addition of yet another pollution source would further worsen the health of Newark's youngest residents. (Written: Diane Schwarz, Marilyn Manganello, William McClelland, Christina Pindar)

COMMENT: The proposed gas plant poses a significant threat to air quality in an already overburdened community. This new source of pollution would exacerbate existing health issues, particularly for children, where asthma rates are three times the national average. Such environmental stress contributes to chronic absenteeism and hinders educational achievement. (Written: June Haran, Steven Fenster)

COMMENT: Newark is the fastest warming city in New Jersey, heating up much more rapidly than the rest of the State. And as we continue to face the impacts of the climate crisis and the extreme heat pollution caused by facilities like this, volatile compounds, nitrogen oxides, and other pollutants will combine with heat and the sun to create ground level ozone. As one in four kids in Newark already suffers from asthma, we cannot have the situation get any worse. (Transcript: Samantha DiFalco)

COMMENT: Fossil fuel power plants are one of the leading causes of respiratory illnesses. The Department should deny the permit to build another gas plant in the Ironbound, where cancer and asthma rates are disproportionately higher than anywhere else in the State. (Transcript: Elizabeth Ndoye)

COMMENT: The draft permit limits are not health protective. Though the limits are technology based, they cannot make emissions safe for our health. There will never be any way to make the emissions from the proposed new gas burners safe for our health because there is no safe level of air pollution. It affects every cell and organ in our bodies, and the damage it does is often irreversible and can be passed on to subsequent generations through epigenetic changes. (Transcript: David Pederson)

COMMENT: Methane extraction contaminates precious freshwater resources, which are rapidly depleting. Hydrogen uses even more water. Methane is deadly and prolonged in the air when mixed with hydrogen. While some agencies have sued toward accountability, other government agencies are still trying to invest in this technology. It is perplexing. This project threatens community health and exacerbates existing environmental injustices, as highlighted by the testimony of an Ironbound resident with severe respiratory issues. I lost my older brother, who lived to be just shy of eight years old. He was part of a cancer cluster in northern New Jersey, which was a result of environmental contamination. His loss and passing is a constant reminder for me of the urgency to address and prevent environmental hazards. The Department should deny this air permit and champion environmental justice and water protection. Squeaky clean energy consumption should be the goal, like green infrastructure and stormwater management initiatives that would support PVSC and other government agencies. (Transcript: Rachel Dawn Davis)

COMMENT: Scientists and health professionals have said that chemical exposures from air pollution will increase and worsen conditions for people who suffer from diabetes, asthma, and other adverse health conditions. A lot of people in the community have spoken out in opposition to the gas plant because of the consequences of this dirty project. (Transcript: Stephanie Martinez-Shedah)

COMMENT: The first line of the permit says the facility is classified as a major facility based on its potential to emit 81.75 tons per year of volatile organic compounds. That first line is very creepy. The permit allows individual hazardous air pollutants to be emitted. Half of these pollutants are probably a mystery to most of us, but benzene is bad and that is allowed by the permit. The permit allows formaldehyde and chloroform. That is toxic and unfair to the people of the Ironbound, the people of Newark, and the people of New Jersey. (Transcript: Jane Califf)

COMMENT: I am a long-term, long-time resident of the Ironbound neighborhood of Newark. Newark is one of the most environmentally polluted zip codes in the U.S. This project will inevitably increase the environmental burden this community already carries. Given what we know about the effects of burning fossil fuels on people's health and the environment, it is shocking that PVSC continues with its plan to site this facility in the Ironbound. It represents a cynical disrespect for people's lives and health. There are alternatives. This permit should not be granted. (Transcript: Cynthia Mellon)

COMMENT: The pollution generated by this fourth power plant will directly impact the Newark residents. But no matter where you live in New Jersey, you are already breathing polluted air. When our skies were orange, the polluted air did not come from New Jersey or New York; The polluted air came from Canada. In May of 2024, PVSC participated in what they call the Great Falls cleanup of the Science Expo in Paterson, New Jersey. PVSC wants to teach our children about the environment, but they are polluting the environment. PVSC knows that the greenhouse gases produced by their plant have a direct impact on the health of Newark and the surrounding communities. PVSC knows that residents are plagued by health inequities from decades of environmental racism. PVSC knows that children are vulnerable to all this pollution. PVSC knows that adding another gas plant is in violation of our State's climate and environmental justice goals. The Department knows this as well. Allowing another power plant would be an injustice. (Transcript: Lorin Fernandez)

RESPONSE: Before issuing this draft permit, the Department carefully reviewed the analysis of the potential emissions and health impacts. The Department identified acrolein and formaldehyde as the hazardous air pollutants (HAPs) that may be emitted from the three natural gas-fired combustion turbines and the two black start generators listed in the Operating Permit application. Both of these HAPs have the potential to be emitted above the applicable reporting thresholds in N.J.A.C. 7:27-17.9, Table 3A. The only other equipment at the facility which emits either of these HAPs above their applicable reporting thresholds is the Sludge Filter Press Operation (Equipment Designation E27), which emits formaldehyde. As a result, the facility-wide emissions of acrolein and formaldehyde were evaluated in the health risk assessment. If there are any additional HAPs emitted by the facility above reporting thresholds, those will be required to be evaluated at the time of permit renewal through risk screening and/or modeling analysis.

The maximum allowable formaldehyde and acrolein emission rates in the application and the maximum allowable formaldehyde emission rate from the Sludge Filter Press Operation were modeled using permitted stack parameters and the latest AERMOD model version 21112 in urban mode. It should be noted that worst-case parameters were used in the analysis. An in-depth load screening analysis was conducted to determine the worst-case emission rates and stack parameters to be used in the analysis. In addition to the required receptor grid, special attention was given to sensitive receptors in this analysis. Appropriate sensitive receptors were added in the direct vicinity of the facility while a dense receptor grid (100 meters x 100 meters) was added over the Ironbound District community in Newark, northwest of the facility, as well as over the Droyer's Point community in Jersey City, across the Newark Bay. The AERMOD model generated the maximum ambient impact levels (in micrograms per cubic meter) for each HAP. Both carcinogenic and non-carcinogenic risks were assessed in the analysis. Carcinogens are those chemicals that have been shown to cause cancer, either in people or animals. Noncarcinogens have other kinds of health effects, affecting such things as development, reproduction, respiration, the liver, kidney or other organs. The health risks in the analysis were determined using each HAP's Reference Concentration (RfC) for non-carcinogenic risk, and formaldehyde's Unit Risk Factor (URF) for carcinogenic risk. An RfC is a measure developed to help estimate risks from noncarcinogens. Exposure to a chemical below the RfC, even over a long period of time, is not expected to have any negative effect on health. A URF can be defined as the upper-bound excess probability of contracting cancer

as the result of a lifetime of exposure to a carcinogen.

The following tables list the potential Short-Term Non-Carcinogenic Health Risks (Table 1), potential Facility-Wide Non-Carcinogenic Health Risks (Table 2), and potential carcinogenic formaldehyde Health Risks (Table 3):

Table 1. Short-Term Non-Carcinogenic Health Risks

Pollutant	Maximum Short-term Concentration ($\mu g/m^3$) [(a)]	Reference Concentration ($\mu g/m^3$)	Hazard Quotient[(b)]	Result
Acrolein	1.07	2.5	0.428	Negligible
Formaldehyde	13.05	55	0.237	Negligible

(a) $\mu g/m^3$ is micrograms per cubic meter

(b) Table 1 shows the maximum calculated short-term non-carcinogenic risk for each HAP. The maximum short-term hazard quotient is 0.237 for formaldehyde emissions and the maximum short-term hazard quotient for the acrolein emissions is 0.428; the NJDEP negligible hazard quotient threshold is 1.(see Footnote 1 below)

Table 2. Long-Term Non-Carcinogenic Risk

Pollutant	Maximum Long-term Concentration ($\mu g/m^3$)	Reference Concentration ($\mu g/m^3$)	Hazard Quotient[(a)]	Result
Acrolein	0.00492	0.02	0.246	Negligible
Formaldehyde	0.42951	9	0.048	Negligible

(a) Table 2 shows the maximum calculated long-term non-carcinogenic risks. The maximum long-term hazard quotient is 0.048 for the formaldehyde emissions and the maximum long-term hazard quotient is 0.246 for the acrolein emissions; the NJDEP negligible hazard quotient threshold is 1. (see Footnote 1 below)

Table 3. Facility-Wide Carcinogenic Risk

Pollutant	Maximum Long-term Concentration ($\mu g/m^3$)	Unit Risk Factor $(\mu g/m^3)^{-1}$	Cancer Risk[(b)]	Result
Acrolein [(a)]	-	-	-	-
Formaldehyde	0.42951	1.3E-05	5.58E-06	Negligible

(a) There is no unit risk factor for acrolein

(b) Table 3 shows the maximum calculated carcinogenic risks from the entire facility. A maximum incremental cancer risk of less than 5.9 in a million was calculated for formaldehyde emissions; the NJDEP facility-wide cancer risk threshold considered negligible is 10 in a million. (see Footnote 1 below)

Footnote 1 for all Tables 1, 2, and 3 - The health impact levels were determined using:

1) Technical Manual (TM) 1002, "Guidance on Preparing an Air Quality Modeling Protocol" (https://www.state.nj.us/dep/aqpp/downloads/techman/1002.PDF) which provides guidance on how to develop and conduct air quality modeling.

2) TM1003 "Guidance on Preparing a Risk Assessment for Air Contaminant Emissions" (https://www.state.nj.us/dep/aqpp/downloads/techman/1003.pdf) which outlines how health risk determinations are conducted.

As shown in Tables 1, 2, and 3 above, the inhalation health risks from the HAP emissions of the three natural gas-fired combustion turbines and the two black start generators and the Sludge Filter Press Operation are negligible.

The three natural gas-fired combustion turbines and two black start generators will emit the following criteria pollutants: volatile organic compounds (VOC), carbon monoxide, oxides of nitrogen (NO_x), particulates, and sulfur dioxide. These criteria pollutants, except VOC, have National Ambient Air Quality Standards (NAAQS). Ground level ozone is also a criteria pollutant with a NAAQS. VOC and NO_x are classified as precursors to ground level ozone formation. NAAQS are established by the USEPA to protect human health with an adequate margin of safety. None of the criteria pollutants exceeded the emission threshold levels for the Prevention of Significant Deterioration air quality analysis requirements set forth at 40 Code of Federal Regulations Part 52.21 and the emission threshold levels set forth at 40 Code of Federal Regulations Part 51 Subpart I "Non-attainment New Source Review (NNSR)."

As a result, it can be concluded that the criteria emissions from the turbines will not cause or significantly contribute to an exceedance of any NAAQS.

Any off-property impacts, including odors or visible emissions generated during construction activities, would be a violation of N.J.A.C. 7:27-5 and can be reported to the NJDEP hotline (1-877-6337).

Climate Impacts

3. **Several commenters express opposition to the draft permit, citing climate impacts associated with the emissions.**

COMMENT: This year we are experiencing extreme heat, drought, flooding, wildfires, and massive and destructive hurricanes, caused by the burning of fossil fuels like what PVSC plans to burn at what would be the fourth gas plant in the Ironbound of Newark. Healthcare professionals and scientists oppose the PVSC gas plant because the pollution from gas-fired plants contribute to the climate crisis. (Written & Transcript: Paula Rogovin)

COMMENT: The approval of this gas plant would contradict New Jersey's climate commitments, worsening the effects of global heating in one of the fastest warming states. Further, the emissions from the plant would violate Governor Murphy's pledge for 100 percent clean energy by 2035. (Written: June Haran, Steven Fenster)

COMMENT: If the Department approves PVSC's gas plant permit application, the facility will undermine our State's climate commitments and the health impacts from the gas plant will be made worse as the climate crisis intensifies. New Jersey is one of the fastest warming states in the country, and Newark is experiencing extreme heat more than other parts of the State due to the urban heat island effect. Pollution emitted from the gas plant will worsen global heating at a time when scientists all agree we must get off fossil fuels. This will also violate Governor Murphy's commitment to 100 percent clean energy by 2035. (Written: Diane Schwarz, Marilyn Manganello, William McClelland, Christina Pindar)

COMMENT: If you approve this permit application, it will land in court and probably go on for quite a while. A number of courts around the country are starting to make the right decisions when it comes to issues like this. Courts are beginning to rule that government agencies have not done serious analyses of the climate and EJ impacts. So, do the right thing. (Transcript: Ted Glick)

COMMENT: Data shows that New Jersey is warming at a faster rate than neighboring states. It is also known that the effects of climate change are more significantly felt in low-income communities. The Department should not approve the addition of yet another environmental pollutant, in the form of a gas plant. (Written: Christina Pindar)

COMMENT: PVSC has wasted money and squandered time. We are in the middle of a climate emergency and the world's sixth mass extinction event. Extreme climate events are becoming more frequent, more scary, and are hitting closer to home; the science is clear. The colossal devastation we are seeing from this week's hurricane Helene was caused by global warming, which is caused by burning oil and gas. Helene went from a category one to a category four in 12 hours. Building another fossil fuel plant to protect against damage caused by fossil-fueled storms is crazy. (Transcript: Holly Cox)

COMMENT: Science has made clear that burning gas contributes to toxic air and to the climate emergency we are now experiencing. This has been known for decades. This week's Hurricane Helene was more intense and more destructive because of the burning of fossil fuels. Therefore, this gas plant should not move forward. (Transcript: Tracey Stephens)

COMMENT: Fossil fuels cause climate change, and if this generation is to have a future, fossil fuels should be opposed. The pollution and danger to the public health that this gas plant will cause far outweighs any possible benefits. (Transcript: Henry Heivly)

COMMENT: The Department should deny these permits. Pollution knows no zip code. The methane, CO2, and noxious gasses that PVSC emits from its plant here will not only pollute the air of the black and brown folks of Newark, but everyone in New Jersey and beyond. Your families will be adversely impacted as well. A global tipping point is closer than ever before. Temperatures are higher than ever, particularly in Newark, which constantly has higher temperatures than most cities on the Eastern Seaboard. Flooding, famine, drought, and fires are causing massive death, destruction, and forced migration. Mega storms like Helene are becoming commonplace. Species are becoming extinct at alarming rates. (Transcript: Elizabeth Ndoye)

COMMENT: The recent floods throughout the southern United States kind of pinpoints the problems that the sewage commission is facing here and makes us wonder whether all of the improvements that have been made since Hurricane Sandy are sufficient. The Sewage Commission has a lot of responsibility. And they need to be 100 percent ironclad that their equipment and their sewer plant is going to run. However, the biggest increase in pollution from the proposed plant is CO2, which is, the main cause of global warming. It is counterintuitive and ridiculous, to propose a power plant that is contributing to global warming as a solution to global warming. So, we have to look at things from that perspective. (Transcript: Bill Beren)

COMMENT: This hearing is happening right after the devastation of Hurricane Helene. It is really ironic that given the deepening crisis due to the fossil fuel industry and the heating up of the climate that this permit would increase greenhouse gas emissions here in Newark. The climate crisis is very serious. There are now 419 parts per million of CO2 in the atmosphere. Scientists have said that a safe number in terms of the amount of CO2 in the atmosphere is 350 parts per million. Serious action needs to be taken. (Transcript: Ted Glick)

COMMENT: The rapidly worsening climate emergency demands that we reduce and ultimately cease our use of fossil fuels, and this permit would do the opposite. Not only does natural gas emit carbon dioxide when burned, but because it is methane, it is prone to leaks. Methane is also problematic because it has a climate warming potential that is 86 times more potent than carbon dioxide. The Department should reject this permit in its entirety to protect the people of the Ironbound and beyond. (Transcript: David Pederson)

COMMENT: Governor Murphy ran on the platform of 100 percent clean energy by 2050. This goal will be impossible to achieve when adding a new fossil fuel plant. (Transcript: Hailey Benson)

COMMENT: The Earth has experienced six mass extinctions. Recent research calls for an immediate 75 percent reduction in methane emissions, which is a deadly environmental hazard. Approval of this air permit would directly undermine that goal. (Transcript: Rachel Dawn Davis)

COMMENT: Not only does further investment in these fossil-fuel-based technologies hurt the Ironbound worst and first, but it also hurts everyone. Right now, investments in fossil-fuel-based energy, result in flooding and wildfires in massive sections of this country, in Nepal, in Pakistan, and places all over the world. The Department should deny this project. (Transcript: Maya Ponton-Arnoff)

RESPONSE: The Department is aware that New Jersey has unique climate challenges, such as the rate of warming and sea-level rise. In that same vein, New Jersey has unique characteristics, such as its level of electric demand, transportation needs, geography, population density, and more. As the State transitions to meet its climate goals, fossil fuel-fired EGUs will be expected to reduce their emissions to an-ever increasing degree. Currently, there is no ban on fossil fuel-fired EGUs. The Department may not deny an application for a permit modification if the provisions and conditions contained in the application comply with the applicable State and Federal regulations. In this case, the Department determined, based upon the certified information provided in the permit application, that all of the proposed new or modified equipment and air pollution control devices comply with all applicable State and Federal regulations, including those provisions that regulate greenhouse gas emissions.

D) Specific Permit Condition

Renewable Energy Conversion

1. **Several commenters expressed opposition to the consideration of hydrogen gas or biogas as meeting the definition of a "renewable energy source."**

   COMMENT: Under the terms of the permit, PVSC is required to initiate a transition to hydrogen or another feasible renewable energy. But hydrogen is a dangerous and polluting power source that is not an acceptable alternative. First, hydrogen poses a much higher risk of explosions than natural gas and it is more prone to leaking than natural gas. Second, hydrogen is itself an indirect greenhouse gas, further contributing to the climate change-fueled storms that the gave rise to PVSC's stated need for the gas plant in the first place. Third, burning hydrogen could increase PVSC's NOx emissions by up to six times the NOx emissions of a gas-fired plant, in a community where ozone levels are already unacceptable. Fourth, to burn hydrogen, the plant would need to be retrofitted, which would require, spending even more money on PVSC's already expensive project. Finally, there is no guarantee that hydrogen would be a sufficiently reliable alternative. Nowhere in the proposed permit or its application does PVSC propose to store two-weeks-worth of hydrogen onsite. Storing that much hydrogen would be dangerous, so PVSC would likely be using trucks or pipes to bring in the hydrogen, which are subject to the same type of interruptions as natural gas. (Written: Daniela Gioseffi)

   COMMENT: Under the terms of the permit, PVSC would be required to utilize hydrogen or a feasible renewable energy source. The Department should not approve the usage of hydrogen as it poses a significant and substantial health and safety risk to workers and host communities. Evidence shows that combusting hydrogen could substantially increase NOx emissions by about 6x as much compared to a gas-fired power plant. Although proponents of hydrogen will claim that co-firing has a potential to lower carbon emissions, it is critical to note that NOx is a precursor to fine particulate matter as well as ozone, which is a greenhouse gas and contributor to climate change. Furthermore, PVSC's ability to safely procure, transport, and store the amount of hydrogen fuel necessary to power the emergency plant is questionable. There is no guarantee that the utilization of hydrogen would be reliable or ready in an emergency situation and therefore should not be considered an appropriate solution. In addition to the emissions risks, hydrogen explosions put workers and surrounding communities at risk as hydrogen fires burn hotter and brighter than methane. Funds could be better directed to safer alternatives. (Written: New Jersey Environmental Justice Alliance)

   COMMENT: Hydrogen combustion produces NOx, a significant source of air pollution and one that is already present in unacceptably high levels in the Ironbound. Further, any hydrogen that is itself produced using natural gas accelerates our use of and deepens our dependence on fossil fuels. Even hydrogen that is produced using clean energy runs the serious risk of diverting renewable resources from other pressing uses. Burning hydrogen in the Ironbound is an unacceptable solution. The Department should deny the application to modify the permit. (Written: New Jersey Environmental Justice Alliance)

COMMENT: The Department should remove the EJ Condition that instructs PVSC to initiate a "transition" to burning "green hydrogen or another technically feasible renewable energy source" since hydrogen is dangerous, wasteful, and can be even more polluting than burning methane gas. At the very least, the Department should require a public comment period on any such "transition."

Studies have indicated that hydrogen combustion can cause more health-harming pollution than burning fossil gas. Yet the Department still proposes to require PVSC to blend hydrogen with natural gas as early as 120 days after the gas plant is commissioned. This means PVSC's hydrogen proposal would have the exact opposite impact from what is intended, with increased NOx emissions contributing to the ozone stressor in the Ironbound and pushing all of Northern New Jersey closer to extreme ozone nonattainment. It is also worth noting that while PVSC's AO-25 Statement indicates its plan to bum 65 to 100 percent hydrogen, the Department's calculated emission reductions from the EJ Conditions assume the use of only five percent hydrogen, which obfuscates the ballooning of NOx emissions that will result from the actual intended hydrogen use.

Hydrogen's highly flammable, explosive, odorless, and colorless nature makes it all the more dangerous and ill-advised to transport, store, and utilize so close to a residential area. Advocacy groups across the country have cautioned against the rollout of hydrogen in anything but the most hard-to-decarbonize sectors. If improperly transported or stored, hydrogen leaks can accumulate in confined spaces at dangerous concentrations, greatly increasing the risk of explosion. Both science and history show that the use of hydrogen at these quantities is a veritable landmine that should never be placed within a stone's throw of a residential neighborhood.

PVSC is planning to install turbines designed for fossil gas with the intention of retrofitting them to burn hydrogen in a process that could take up to 10 years according to its Compliance Statement. If PVSC really does intend to burn 100 percent hydrogen down the line, its turbines would not be able to burn blends with such high percentages of hydrogen. So not only would the turbines need to be updated, but the remainder of the system, such as the piping, vents, and more, would also need to be retrofitted to withstand the stress of hydrogen burning. Given that the expected useful life of these turbines is 20 years or more, PVSC would be refurbishing the turbines less than halfway into their useful life. If PVSC is indeed planning to burn hydrogen, the cost-effective route would be to install turbines that can safely burn hydrogen from the start.

The Department is requiring PVSC to transition to burning "green hydrogen." This means hydrogen fuel produced by splitting water molecules using solar, wind, or some other renewable energy. However, only about 0.02% of global hydrogen is currently produced using "green" energy. That is because green hydrogen currently costs $500-1,250 per ton of carbon abatement. Before the cost of green hydrogen can be brought down, the costs of renewable energy in general must be reduced. Unless buildout of renewables increases exponentially, causing the cost of renewable energy to plummet, green hydrogen will likely remain prohibitively expensive. Cost prohibitions aside, the very production of green hydrogen is inherently wasteful, since it diverts direct power from renewable energy to

produce a secondary source that then provides indirect power. This is peak inefficiency. Taken together, PVSC's plan to transition to green hydrogen in a decade is highly improbable. The most likely scenario is that PVSC will either continue utilizing only natural gas, or a blend of fossil fuel based hydrogen and natural gas, which would be even more detrimental to the neighboring communities.

There is also the question of how PVSC purports to obtain this green hydrogen to power its turbines. PVSC claims it will be able to generate enough solar power to produce green hydrogen on site via electrolysis. If PVSC does anticipate being able to produce enough solar energy to create the green hydrogen, it should simply skip the green hydrogen and just use solar power. And while PVSC's AO-25 Compliance Statement suggests that it may produce hydrogen from the facility's "waste streams" such as, presumably, digester methane, any hydrogen so produced would not be "green" and should not be allowed under the permit. If the hydrogen cannot be produced on site, it must be delivered by ship, truck, rail, or pipeline, but all these methods pose their own problems. While hydrogen can be liquified and transported by ship, liquification is both costly and energy intensive as it must be kept extremely cold to remain stable. Transport by truck or rail would also be impractical, as the compressed tube trailers needed to transport hydrogen are expensive and can only carry small volumes over a limited distance. Moreover, unless these trucks were themselves electric, they would also be contributing additional diesel emissions to the Ironbound. Lastly, while pipelines would solve some of the logistical challenges faced by the aforementioned methods of transport, the current pipeline infrastructure for natural gas is incompatible with hydrogen due to the molecular differences, necessitating the buildout of entirely new infrastructure that is estimated to cost up to 68 percent more than existing conventional pipelines.

Regardless of the method of transport, the hydrogen must also then be stored on site for use during any future natural disaster. However, the same issues hydrogen faces for transport persist for storage. Hydrogen requires immense amounts of space to be kept in its gaseous state.

Alternatively, storing hydrogen in a liquified or pressurized state presents similar issues of temperature, energy conversion loss, and costs as the previously mentioned transportation options. Lastly, producing green hydrogen using electrolysis requires an immense amount of freshwater. It would be both irresponsible and unethical to divert freshwater away from local communities to subsidize the production of green hydrogen. If PVSC does indeed intend to create its own green hydrogen via electrolysis on site, the Ironbound would once again bear the brunt of PVSC's operations as freshwater is diverted from its neighborhoods and into the facility.

For all of these reasons, PVSC must not be allowed to burn hydrogen. (Written: Earthjustice on behalf of Ironbound Community Corporation)

COMMENT: The permit mentions hydrogen as a cleaner alternative, but that is actually very dangerous. The community does not feel safe about having hydrogen as a cleaner proposal when there are battery storage and solar alternatives. (Transcript: JV Valladolid)

COMMENT: The permit should not include hydrogen as an appropriate energy source for transitioning the plant away from gas. This suggestion violates the principles of the EJ Law, because hydrogen is known to omit NOx and is more prone to leaks and explosions than gas. The PVSC permit should only include renewable, non-hydrogen solutions. (Transcript: Leah Ives)

COMMENT: The permit would allow the possibility of the use of fossil-fuel-based hydrogen. This is an extremely bad idea, which comes with all of the same environmental racism and systemic problems as fossil-fuel-based power alone. And in many cases, it would increase overall air pollution when you take into account the heavy metals, NOx, and other things that come with hydrogen, as well as risks of explosion. (Transcript: Maya Ponton-Arnoff)

COMMENT: The Department's hydrogen EJ Condition would require PVSC to transition to "green hydrogen or another technically feasible renewable energy source." The Department must, at the least, change this language to ensure that the gas plant does not burn false solutions like biogas that are deceptively touted as "renewable." Emissions from burning "renewable" methane can exceed emissions from burning fossil-derived methane. EPA's AP-42 emission factors estimate that, in some instances, the combustion of landfill gas or digester gas can have higher emissions of CO, VOCs, NOx, particulate matter, SO2, and HAPs (like 1,3- Butadeine, acetaldehyde, benzene, and toluene) than the combustion of fossil-derived methane. Replacing the combustion of fossil-based methane with the combustion of "renewable" methane is not an emission-reduction measure cognizable under the EJ Law. (Written: Earthjustice on behalf of Ironbound Community Corporation)

COMMENT: EJ Special Condition 10 states that the PVSC shall transition the proposed natural gas turbines to green hydrogen or another technically feasible renewable energy resource within 120 days of commissioning the standby facility. In the Compliance Statement provided in its Title V Operating Permit Significant Modification Application, PVSC stated that the manufacturer was confident that the proposed turbines “will accept 65% hydrogen, with the goal of being 100% hydrogen capable by 2030.” It should be noted that, while the manufacturer of the proposed turbines was not disclosed, a comparable hydrogen-capable turbine manufactured by GE Vernova is only capable of combusting up to 50 percent hydrogen, and does not currently have an available timeline for 100 percent hydrogen combustion. Because hydrogen is less energy dense than natural gas, combusting a blend of hydrogen and natural gas will not lead to a one-to-one reduction in carbon emissions. This, combined with hydrogen’s role as an indirect greenhouse gas which extends the lifetime of methane in the atmosphere, means that combusting a blend of 50 percent hydrogen would only lead to a 10 percent reduction in lifecycle greenhouse gas emissions. Additionally, when combusted hydrogen produces six times as much of the harmful air pollutant nitrogen oxide (NOx) as natural gas. Even in hydrogen-capable combustion turbines in which air pollution control technologies can be effectively applied, NOx emissions will remain the same as that of a newer natural gas plant, consigning nearby communities to decades more of harmful pollution. Switching the proposed turbines to combust green hydrogen fuel will not alleviate the environmental justice concerns related to this development and may even worsen conditions for nearby communities. (Written: Clean Energy Group)

RESPONSE: GR2, Ref.# 10 (EJ Special Condition #9) is intended to require the combustion turbine generators (CTGs) to transition away from a fossil fuel source to a renewable source, such as green hydrogen. The Department is aware that any established or currently under development energy sources will have their advantages and disadvantages, which is why green hydrogen was used as an example, and not made a requirement. Further, this condition is in addition to the requirement that PVSC install the maximum feasible solar and battery to further reduce reliance on fossil fuels for emergency power. Prior to initiating any modification of the CTGs, PVSC is required to perform a feasibility study that will detail options for proposed renewable energy sources and a timeline for the transition. The feasibility study must be provided to the Department, the Ironbound Community Corporation, and made available on PVSC's website, as required by GR2, Ref.# 10 (EJ Special Condition #9). If PVSC wishes to transition to a renewable energy source that requires an air permit due to its emissions, PVSC will be required to file a permit modification application. At that time, the language of the EJ Special Condition is flexible enough to allow the Department to evaluate the permit modification application in light of the safety and environmental variables, as well as the availability of innovative renewable fuels. Accordingly, the Department has made no determination about the use of green hydrogen, biogas, or any other renewable fuel source.

2. **COMMENT**: Special Conditions 8 and 9 state that the PVSC will be required to install a minimum of 5 MW of solar and 5 MW of battery storage at the facility by December 31, 2026. While solar plus storage technology can provide emissions-free renewable power to the facility, the minimum standard of 5 MW of solar panels and battery storage is not enough to meaningfully reduce emissions from the three 28 MW natural gas turbines, nor have any requirements regarding the use of solar plus storage to reduce emissions been established. In an analysis of emissions from hybrid solar plus storage and fossil fuel power plants since 2018, it was found that in hybrid gas turbine and battery systems in which the battery storage asset was sized to be significantly smaller than the gas turbine, emissions remained the same or worse than in non-hybrid plants.

   Furthermore, unless the system is configured such that the battery is called upon before the gas turbine, emissions reductions are minimal at best. There is adequate space available within the footprint of the proposed facility for a much larger battery system as well as on-site solar panels. If Special Conditions 8 and 9 are intended to reduce the air pollution burden the proposed facility will place on the already overburdened environmental justice communities of Newark, the minimum size of the battery storage system should be at least 23 MW, and the minimum size of the solar should be 10 MW. Furthermore, PVSC should be required to call on the battery storage system first for backup power in the event of an outage, with the proposed gas turbines only being called upon in the event of a longer duration outage. (Written: Clean Energy Group)

   RESPONSE: As described in GR2, Ref.# 8 and 9 (EJ Special Conditions #7 and 8), PVSC is required to perform a feasibility study that will detail an analysis of the maximum feasible solar capacity and maximum feasible battery storage capacity prior to the installation of solar panels and battery storage. The feasibility study must be provided to the Department, the

Ironbound Community Corporation, and made available on PVSC's website, as required by GR2, Ref.# 8 and 9 (EJ Special Condition #7 and 8). PVSC is required by these conditions to install the maximum feasible solar panel and battery storage capacity, determined by the feasibility studies, which shall be no less than 5 MW each. Further, GR2, Ref.# 2 states:

"e. CTG operation, including black start capability, under (a) and (b) above may only be commenced where options for utilization of onsite renewable energy source (i.e. battery, solar or other future installations) have been exhausted. This does not apply to the operation of the CTGs during storm preparation mode." (GR2, Ref.# 2)

This requires that PVSC utilize the battery before the gas turbines, except when operating during storm preparation.

Non-Polluting Emission Control Technology

3. **COMMENT**: The Department is proposing to approve the use of an oxidation catalyst at the gas plant for emission control. Oxidation catalysts and other thermal oxidizers use combustion to control emissions like VOCs and HAPs, but the combustion process itself can result in the emissions of NOx, acid gases, metals like arsenic and mercury, and even new VOCs and HAPs not previously present in the exhaust. Instead of this pollution control technology, the permit should require PVSC to use non-polluting odor and pollution control technologies like carbon adsorption, which can achieve 99 percent VOC control efficiency, greater than the paltry 60 percent proposed in the gas plant draft permit. (Written: Earthjustice on behalf of Ironbound Community Corporation)

   RESPONSE: The carbon monoxide and volatile organic compound control device installed on each natural gas turbine is an oxidation catalyst. An oxidation catalyst works by using a precious metal coating to chemically react with CO and hydrocarbons to convert them into carbon dioxide and water vapor. The two HAPs associated with the SPGF, formaldehyde and acrolein, have been modeled and have negligible risk. Section 3.14 of the State of the Art Manual for Stationary Combustion Turbines, lists an oxidation catalyst as incorporating advances in the art of air pollution control as developed for the kind and amount of air contaminant emitted. Activated carbon is not a technically feasible control device for combustion turbines since the effectiveness of the activated carbon is dependent on inlet stream temperature; carbon adsorption units generally operate at ambient temperatures, and carbon beds exposed to high temperatures are prone to catch fire. For these reasons, the Department approved the use of an oxidation catalyst.

4. **COMMENT**: PVSC's proposed reliance on selective catalytic reduction (SCR) and thermal oxidizers, as both of these technologies are problematic. There are many other facilities in the United States that have suffered repeated NOx emission limit violations due to SCR failures. Furthermore, the aqueous seria reductant that SCR uses is corrosive and irritating and can also harm marine ecosystems in the event of a spill, which is important, given that the permit is located near a waterway. And lastly, due to imperfections in the way that SCR works, the use of SCR can actually also create new ammonia emissions that would otherwise not be there due to the phenomenon known as ammonia slip. Thermal oxidizers are problematic, as

they actually can create NOx emissions. This factor weighs heavily in favor of rejecting the proposed permit due to those increased emissions. (Transcript: David Pederson)

RESPONSE: The Department noted that the carbon monoxide and volatile organic compound control device installed on each natural gas turbine is not a thermal oxidizer, but an oxidation catalyst. An oxidation catalyst works by using a precious metal coating to chemically react with CO and hydrocarbons to convert them into carbon dioxide and water vapor. No natural gas is used to operate the oxidation catalyst, and, consequently no NO_x is generated from use of the oxidation catalyst.

With respect to the permit's reliance on SCR, the Department notes that SCR is an established and recognized control technology for NO_x emissions. SCR is shown as an approved control technology on many combustion units in the USEPA's RACT/BACT/LAER Clearinghouse and stack tests conducted in New Jersey and in other states have confirmed that SCR has met all NO_x and ammonia emission limitations. Moreover, the following compliance plan requirements will assist in ensuring that the maximum allowable oxides of nitrogen emissions will not be exceeded:

1. The 19% ammonium hydroxide flowrate to the SCR control device must be greater than or equal to 0.03 gallons per minute (gpm) and less than or equal to 0.08 gpm. This flowrate must be continuously monitored and recorded.

2. The SCR catalyst bed temperature must be greater than or equal to 825 degrees Fahrenheit (^oF) and less than or equal to 855 ^oF. This temperature must be continuously monitored and recorded.

3. The catalyst array(s) must be maintained and replaced in accordance with the recommendations of the manufacturer and as necessary based on emission levels indicated during the periodic emission monitoring. All relevant information on maintenance conducted must be recorded.

In the SCR control system, the catalyst promotes a reaction between the 19% ammonium hydroxide and NO_x, and the products of the reaction are nitrogen (N_2) and water. As the commenter states, there is the potential for ammonia to be emitted from the treatment of NO_x. Accordingly, the maximum allowable ammonia mass emission rates and concentrations are included in the compliance plan, and these levels must be verified through stack emissions testing.

Release of stored materials through spills is beyond the scope of an Operating Permit issued pursuant to Title V of the Clean Air Act and N.J.A.C. 7:27-22. Regulations which address such environmental discharges can be found at 40 CFR Part 68—Chemical Accident Prevention Provisions.

Higher NOx, VOC, and CO Control Efficiencies

5. **COMMENT**: The Department is proposing to require NOx control of only 71 percent, but SCR can achieve control efficiencies of 95 percent or more. Similarly, the Draft Permit's 60 percent VOC and 65 percent CO destruction and removal efficiency requirement is absurdly low considering that EPA recognizes catalytic oxidizer control efficiencies of 99.9 percent VOC and 98 percent CO. Indeed, the Department's generally applicable guidance requires all non-catalytic oxidizers to have a minimum design destruction efficiency of 99 percent. Therefore, PVSC must be required to have enough catalyst to properly oxidize all pollutants of concern, especially formaldehyde, which the gas plant will emit at over 500 pounds per year. To the extent lower control efficiencies are necessary during startup and shutdown periods because higher efficiencies are unachievable before the system is hot enough, the Department should relegate the lower control efficiencies to the 25-minute startup and 10-minute shutdown operating scenarios only and apply control efficiencies of greater than 95 percent for the SCR and 99 percent for the oxidation catalytic/carbon adsorption for all other times. (Written: Earthjustice on behalf of Ironbound Community Corporation)

   RESPONSE: The SPGF meets the most stringent CO, ammonia, and NOx emission concentration limits in Section 3.14 of the State of the Art Manual for Stationary Combustion Turbines, and, therefore, the control equipment incorporate advances in the art of air pollution control as developed for the kind and amount of air contaminant emitted. Likewise, the formaldehyde emissions have been modeled and have negligible risk as explained in greater detail in Response C2, which addresses health risk for HAPs in this application.

   To be clear, the potential VOC emissions from each turbine is below the 5 ton per year threshold that would trigger the applicability of N.J.A.C. 7:27-22.35(b), Advances in the Art of Air Pollution Control. Nevertheless, the VOC emissions are being controlled by an oxidation catalyst, which Section 3.14.3.2 of the SOTA Manual for Stationary Combustion Turbines classifies as state-of-the-art technology. Therefore, the control equipment required by this permit incorporates advances in the art of air pollution control, which is greater control than would be required pursuant to the APCA and CAA.

NOx, CO, VOC, and Ammonia Limits

6. **COMMENT**: The Draft Permit allows ammonia emissions up to five ppmvd, VOC emissions up to four ppmvd, CO emissions up to three ppmvd, and NOx up to 2.5 ppmvd during storm preparation mode or testing. At other times, including presumably the emergency operation mode allowed by the EJ Conditions, the Draft Permit allows CO emissions up to 250 ppmvd, VOC up to 50 ppmvd, and NOx up to 25 ppmvd. The Department provides no explanation for why permissible emissions in some operating scenarios should be orders of magnitude higher than in other operating scenarios. These limits can and should be lowered to no higher than 2 ppmvd for all operating scenarios. (Written: Earthjustice on behalf of Ironbound Community Corporation)

RESPONSE: It is true that some emission concentration limitations in some operating scenarios are orders of magnitude higher than in other operating scenarios. This is necessary because the emission concentration limitations are not the same for all operating scenarios. For instance, during startup and shutdown, the SCR and oxidation catalysts cannot be operated. Nonetheless, the permit includes several maximum allowable NOx, CO, and VOC emission concentrations to address all of the applicable regulations. Below is an explanation of the concentration limits, as required by the applicable regulations, for the proposed equipment under various operating scenarios:

1. The proposed turbines are subject to N.J.A.C. 7:27-16.9 "Stationary Combustion Turbines." N.J.A.C. 7:27-16.9(b) states, "The owner or operator of any stationary combustion turbine shall cause it to emit CO in concentrations that do not exceed 250 parts per million by volume, dry basis (ppmvd) at 15 percent oxygen." N.J.A.C. 7:27-16.9 (c) states, "The owner or operator of any stationary combustion turbine shall cause it to emit VOC in concentrations that do not exceed 50 ppmvd at 15 percent oxygen." These limitations reflect Reasonably Available Control Technologies and must be met at all times. These limitations are in the U103 OS Summary portion of the compliance plan.

2. The proposed turbines are subject to 40 Code of Federal Regulations Part 60 Subpart KKKK, "Standards of Performance for Combustion Turbines" at 40 CFR 60.4300 to 60.4420. 40 CFR 60.4320(a) establishes a maximum NOx (total) emission rate of 25 ppmvd at 15 percent oxygen. The stack test to confirm compliance for this limit must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice.

3. During steady state operation, when the SCR and catalytic oxidizer control devices can be operated, the following emission limitations must be achieved: VOC limitation 4 ppmvd corrected to 15 percent oxygen, CO limitation 3 ppmvd corrected to 15 percent oxygen, and NOx 2.5 ppmvd corrected to 15 percent oxygen.

The most stringent CO, ammonia, and NOx emission concentration limitations are consistent with the levels in the Section 3.14 State of the Art Manual for Stationary Combustion Turbines (SOTA Manual), and, therefore, the control equipment incorporate advances in the art of air pollution control as developed for the kind and amount of air contaminant emitted.

The VOC concentration limitation of 4 ppmvd corrected to 15 percent oxygen is higher than the 2 ppmvd corrected to 15 percent oxygen standard in the SOTA Manual for Stationary Combustion Turbines.

The "4 ppmvd" concentration limit in the permit is based on the worst-case concentration provided in the vendor emission estimates, which corresponds to a 50 percent load. All other cases presented in the vendor emissions estimates list VOC concentrations at "1 ppmvd," which includes 75 percent load cases, which do comply with the SOTA Manual and are less than the "2 ppmvd" limit mentioned by the commenter.

Turbine operation at 50 percent load would be minimal because the turbines were sized to provide power for the full facility with two units in operation. In addition, the VOC emissions are being controlled by an oxidation catalyst which Section 3.14.3.2 “CO and VOC Control Technology” classifies as SOTA technology and the VOC emissions from each turbine is below the 5 ton per year threshold applicability level in 7:27-22.35(b) Advances in the Art of Air Pollution Control. Accordingly, the Department has set the appropriate limits.

Expected Storm Event Preparation Time

7. **COMMENT**: The Draft Permit currently allows PVSC to operate the gas turbines up to 48 hours prior to a storm event that the New Jersey Office of Emergency Management anticipates may have the capability of disrupting power service to the facility. But the gas turbines do not need 48 hours to ramp up. Indeed, the Draft Permit itself recognizes this by limiting the turbine startup operating scenario to no more than 25 minutes. Siemens represented to PVSC that the gas turbines would be able to reach full load in just 12 minutes. It does not make sense for the Draft Permit to allow such a long storm preparation period while requiring PVSC to "exhaust" its solar and battery storage power *before* commencing the storm preparation period, as the EJ Condition requires. This means that the Department is making PVSC empty its battery storage while it is still connected to the grid, so that it has *no* stored energy during the storm when it theoretically could lose grid power. This "exhaustion" provision only makes sense if the Department requires PVSC to use battery power once the grid connection is lost, instead of requiring PVSC to drain the battery before it needs it the most. This storm-preparation startup time must therefore be removed, or at least significantly shortened. (Written: Earthjustice on behalf of Ironbound Community Corporation)

   RESPONSE: The commenter correctly notes that startup of the gas turbines is limited in the permit to a period not exceeding 25 minutes (U301, OS2, Ref.#1). This limitation on startup of the turbines applies to any and all times PVSC starts the combustion turbines. Storm preparation operation, however, is not a startup scenario but rather a normal, non-emergency operation that is permitted to occur prior to an anticipated loss of power (emergency) caused by a storm event. In the document *Response to NJDEP Comments Dated December 22, 2022*, PVSC describes storm preparation operation as follows:

   “Should there be a pending storm event, PVSC has requested in its permit application the ability to run the SPGF up to 48 hours ahead of a pending storm. The WWTP treatment processes are complex and require shutdown and startup sequencing to provide the proper level of treatment needed. To go through all these sequences at this large facility could take up to 48 hours.”

   Further, the commenter noted that an EJ Special Condition (GR2, Ref.# 2) includes a requirement to exhaust renewable energy sources, such as battery and solar, prior to starting up the combustion turbines. While this is generally true, the permit condition includes an exception to this requirement during the storm preparation operation (see condition below with emphasis added). This exception means that renewable energy sources are not required to be utilized prior to the combustion turbine during storm preparation, when grid power is still available, which would reserve these sources for use during an emergency loss of power.

"e. CTG operation, including black start capability, under (a) and (b) above may only be commenced where options for utilization of onsite renewable energy source (i.e. battery, solar or other future installations) have been exhausted. ***This does not apply to the operation of the CTGs during storm preparation mode.****"* (GR2, Ref.# 2)

Storm Event

8. **COMMENT**: The definition of "storm event" refers to "storms determined by the New Jersey Office of Emergency Management as having the capability of disrupting power service to the facility." But the Draft Permit provides no guidance about when or how the Office of Emergency Management determines what constitutes a storm event that has the capability to disrupt power to PVSC. And it is unclear at what point in time the "storm event" occurs for the purpose of calculating the 48 hours in advance of the storm event that PVSC may operate the gas plant. Does the 48-hour period begin once the storm forms, once the storm reaches New Jersey, or when the storm is predicted to cause a potential power disruption to PVSC? The Department must clarify that the time should be calculated based on when PVSC may lose power, and not at any time before that. (Written: Earthjustice on behalf of Ironbound Community Corporation)

   RESPONSE: The loss of grid power is a criteria for emergency operation, so it would not benefit PVSC to operate the SPGF more than 48 hours before anticipated loss of power, since they would need to shutdown the SPGF at the end of the 48 hours and then restart again once they lose power if they start too early (or violate their permit conditions by continuing to operate). Regardless of when the "storm event" begins, PVSC would still only be allowed to operate the SPGF for 48 hours before needing to begin emergency operation or shutdown. The Department determined that the definition of "storm event" is sufficiently specific in the context of the permit, and will allow PVSC the flexibility to manage their operations in a storm event.

Allowable PM Emissions

9. **COMMENT**: All of the proposed gas plant's operating scenarios include a 4.41 lb/hr emission limit for TSP, PM10, and PM2.5 based on the vendor estimate of 0.014 lb/MMBtu. But based upon EPA's recent Mercury and Air Toxics Rule, which requires existing coal-fired power plants to meet a filterable PM limit of 0.01 lb/MMBtu, the Draft Permit should have a filterable PM limit no higher than 0.01 lb/MMBtu or its equivalent. Further, PVSC should be required to continuously monitor these filterable PM emissions. (Written: Earthjustice on behalf of Ironbound Community Corporation)

   RESPONSE: The Federal regulations promulgated at 40 CFR Part 63, Subpart UUUUU—National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units (Mercury and Air Toxics Rule) do not apply to this permit because PVSC is not proposing to own or operate a coal-fired EGU or an oil-fired EGU as defined in 40 CFR 63.10042.

A particulate continuous emission monitor is not being required since: (1) there is no particulate control device installed whose performance needs to be verified; (2) the actual particulate emission rate will be measured during stack emissions testing; and (3) pipeline quality natural gas is the only fuel that is permitted to be combusted. Consequently, the same fuel combusted during each stack testing event will have the same composition as used on a day-to-day basis.

Continuous Monitoring

10. **Several commenters suggested that continuous emission monitoring should be required.**

COMMENT: The Draft Permit Summary appears to say that monitoring would be minimal once a year and that you have proxies such as run time to measure pollution instead of actually measuring the pollution. That really needs to be clarified. (Transcript: Bill Beren)

COMMENT: The permit makes continuous monitoring optional for emission units like the gas plant and the Zimpro boilers, but continuous emission monitoring should be mandatory everywhere it is possible. Right now, PVSC is required to do one stack test every five years, which means that 98 percent of the emissions are totally unmonitored. The Zimpro boilers alone have the potential to emit an astonishing 30 tons of VOCs per year into an ozone non-attainment area. This is nearly half of PVSC's VOC emissions, but these emissions are largely unmonitored. Emission limits during startup and shutdown are essentially meaningless if they are never monitored, because the monitoring provisions are so inadequate. Neither the Department nor the public can be sure that PVSC is actually meeting the emission limits in the permit. So, the permit must require continuous monitoring. (Transcript: Jonathan Smith)

COMMENT: The Draft Permit's provisions regarding monitoring the gas plant's emissions are currently limited to one stack test for NOx every one or two years, a stack text once every five years for CO, and a stack test only once upon initial startup for VOC, TSP, PM10, PM2.5, and ammonia, with other pollutants like formaldehyde measured through calculations and not monitored at all. This infrequent monitoring fails to meet the Clean Air Act standards that Title V permits "shall set forth ... monitoring ... and reporting requirements to assure compliance with the permit terms and conditions[,]" and permitting authorities must include additional monitoring if needed to "assure compliance" even if the underlying requirement does specify some form of monitoring. Here the Department proposes periodic stack testing to be the only monitoring for many short-term "lb/hr" or continuous "ppmvd" emission limits. The Department has not fulfilled its duty under the EJ Law to add additional monitoring, recordkeeping, and reporting provisions as necessary to avoid contributions to disproportionate impacts in overburdened communities. Since the Department is proposing to *increase* PVSC's allowable emissions by adding the gas plant, the permit needs better monitoring and reporting provisions to not only ensure permit compliance, but also to allow PVSC, the Department, and the public to quickly identify and address any problems with the facility's operations that cause unusually high emissions. Continuous emissions monitoring systems ("CEMS") are particularly important for ammonia and formaldehyde. The

Department's own general guidance requires thermal oxidizers to continuously monitor total hydrocarbons in certain situations. And though the gas plant is not technically covered by the guidance, the Department should nevertheless require continuous monitoring here, consistent with the EJ Law. (Written: Earthjustice on behalf of Ironbound Community Corporation)

RESPONSE: Given the nature of the operation of the SPGF, the Department has determined that the stack emissions testing requirements and control device parametric monitor fulfills the Clean Air Act standards that Title V permits "shall set forth ... monitoring ... and reporting requirements to assure compliance with the permit terms and conditions[,]". Further, as explained in Response B2, the EJ rule does not apply to the PVSC permit application.

Stack Tests

11. **COMMENT**: The permit should require that all stack tests are conducted during the type of operation expected to result in the highest emission level for the tested pollutant, even if that means operating at lower loads. The Draft Permit requires stack testing to be conducted under "worst case" operating conditions. If “worst case” is interpreted to mean when the load is at its highest, then the stack test would undercount emissions for pollutants like formaldehyde that have higher emissions at lower loads. This is particularly true considering emissions for all pollutants are often at their worst during startup and shutdown before emissions control technologies kick in. So, any stack testing of pollutants like ammonia, formaldehyde, VOCs, NOx, and CO should be performed during startup, shutdown, and whichever low-load or high- load steady-state operations are expected to result in the highest emissions. This load sensitivity is further reason why infrequent testing with long stretches of time between tests is unacceptable for adequate monitoring and compliance assurance. The Department must require CEMS for these pollutants to protect the health of neighboring overburdened communities. (Written: Earthjustice on behalf of Ironbound Community Corporation)

    RESPONSE: According to the April 27, 2009 USEPA Memorandum “Issuance of Clean Air Act National Stack Testing Guidance (Testing Memorandum),” Section 5 “Representative Testing Conditions”, Operations during periods of startup, shutdown and malfunction do not constitute representative conditions for the purposes of a performance test. [40 CFR §§ 60.8(c) and 63.7(e)] and it is concluded:

    “In light of the fact that: (a) the Act requires that facilities continuously comply with emission limits; (b) the NSPS, MACT, and NESHAP programs all require that performance tests be conducted under such conditions as the Administrator specifies; and (c) the NSPS and MACT programs further require that such tests be conducted under representative operating conditions; EPA recommends that performance tests be performed under those representative (normal) conditions that:

    -represent the range of combined process and control measure conditions under which the facility expects to operate (regardless of the frequency of the conditions); and

    -are likely to most challenge the emissions control measures of the facility with regard to

meeting the applicable emission standards, but without creating an unsafe condition."

https://www.epa.gov/sites/default/files/2013-09/documents/stacktesting_1.pdf. The permit stack testing conditions, found at U301, OS Summary, Ref.# 2-4, require PVSC to submit a stack testing protocol, which includes a turbine load performance curve to the Department's Emission Measurement Section (EMS). During the protocol review, EMS will determine the load(s) that constitute the highest emissions at representative conditions.

Boilers and Space Heaters

12. **Several commenters suggested boilers and space heaters should be replaced with zero emitting sources.**

COMMENT: The permit must require PVSC to replace boilers with zero emitting electric sources. As written, the EJ conditions allow PVSC to decommission boilers to be replaced by equipment that runs on a "renewable energy source." But if this is interpreted to mean false solutions like hydrogen or renewable natural gas, then those EJ conditions are essentially of no value. The permit should specify that boilers can only be replaced by zero emitting sources, like electric boilers or heat pumps. Further, this should apply to more of PVSC's boilers and heaters, like the ones at the pump station and sludge heat treatment facilities, not just the boiler identified in the current EJ conditions. (Transcript: Jonathan Smith)

COMMENT: Aside from the gas plant, the Draft Permit allows PVSC to operate many other pieces of fossil fuel- fired equipment like 30 boilers and hot water heaters, 21 space heaters, and up to six emergency generators. Yet, the Department's EJ Conditions require PVSC to decommission only six boilers and one diesel emergency generator. One EJ Condition specifies that if PVSC chooses to replace the equipment, the new equipment must be powered by a renewable energy source. The Draft Permit must change this "renewable energy source" language to ensure that the boilers and generators are not replaced with false solutions like biogas or hydrogen that are deceptively touted as "renewable," but can have emissions that equal or exceed the emissions of the current fossil fuel-fired equipment.

The Department should not allow a one-to-one swap to count as an emission-reducing "EJ Condition." Indeed, the Department's estimates of the emission-reduction benefits of the so-called "decommissioning" of these boilers are suspiciously small. They amount to only a fraction of the emissions that the boilers currently emit, with some of the Department's expected emission reductions orders of magnitude smaller than the current emissions. This suggests that the end game was never decommissioning these boilers.

Instead of using vague language that may potentially allow PVSC to simply substitute the burning of one type of fuel with another, the Department must require PVSC to replace all of its current fossil fuel-fired boilers with non-combustion, electric alternatives. By electrifying all its existing boilers, PVSC can abate at least 3.05 tpy of VOCs, 54.55 tpy of NOx, 47.01 tpy of CO, 15.85 tpy of SO2, 6.372 tpy of TSP, and 6.372 tpy of PM10. Commercially available, mature electrotechnologies can replace the existing fossil fuel-fired boilers and hot

water heaters at the facility. Electric boilers have better control systems, allowing for more exact temperature selection, faster ramp-up times, and low downtime. Electric boilers are safer for workers since they do not contribute to indoor air pollution and do not risk gas leaks or explosions. Electrification also lowers costs and delays associated with permitting, since electric heating equipment does not have end-use emissions that would necessitate permit modification applications. The valuation of the co-benefits of electric boilers includes long-term gas and electric price forecasting, and the potential cost savings from battery storage. By switching to non-emitting boilers and avoiding nearly 60 tpy in VOC and NOx emissions, PVSC can also save over $700,000 dollars per year in avoided payments for its emissions that contribute to ozone in a severe ozone nonattainment area. (Written: Earthjustice on behalf of Ironbound Community Corporation)

COMMENT: PVSC should replace its natural gas-fired space heaters with heat pumps. By electrifying the space heating on site, PVSC can reduce its insignificant annual emissions, which currently total 9.2 tpy of NOx, 3.55 tpy of VOCs, and 0.2 tpy of particulate matter. Heat pumps can be up to 4.5 times more efficient than gas-fired furnaces, creating long-term energy cost savings. Analysis shows that switching to a heat pump rooftop unit reduced energy consumption in U.S. commercial buildings by 10 percent and greenhouse gas emissions by 9 percent. (Written: Earthjustice on behalf of Ironbound Community Corporation)

RESPONSE: The PVSC permit provisions at GR2, Ref.# 3, #4, #5 and #6 (EJ Special conditions #2, #3, #4 and #5) are intended to require PVSC to decommission a total of six boilers. Upon decommissioning, PVSC is required to provide proof to the Department, the Ironbound Community Corporation, and through a public notice on PVSC's website. If PVSC chooses to replace any of the boilers that are required to be decommissioned, the new equipment must be powered by a renewable energy source. At this time, the Department cannot be sure that PVSC will submit a permit modification request for replacement of any of the six boilers that must be decommissioned.

The Department is aware that established or innovative renewable energy sources will have their advantages and disadvantages. Thus, if PVSC wishes to transition to a renewable energy source that requires an air permit due to its emissions, PVSC will be required to file a permit modification application in order to replace any of the boilers. At that time, the Department will evaluate the renewable energy source in light of its feasibility, safety, and environmental variables. Equipment that does not have the potential to emit air pollutants, such as electric heat pumps, would not require a permit modification. Given the continuous progress being made in the field of renewables, the Department has made no pre-determination as to the renewable energy source(s) that may be approved.

The permit application currently before the Department does not include proposed changes to any boilers, space heaters, or emergency generators at the site, other than those mentioned in the EJ Special Conditions. Nor were any other boilers, space heaters, or emergency generators included in the EJ special conditions. Accordingly, any comment regarding that equipment is beyond of the scope of the draft permit.

Zimpro Odor Control

13. **COMMENT**: The Department should require non-polluting emission and odor control technology like carbon adsorption at the Zimpro sludge heat treatment boilers and Zimpro odor control system. The Zimpro odor control system currently uses two regenerative thermal oxidizers to control emissions and odors and the Department is proposing to require the installation of new oxidation catalysts at the existing Zimpro sludge heat treatment boilers through an EJ Condition. But thermal oxidizers use combustion to control emissions, which itself counter-productively creates new emissions. Instead, the permit should require PVSC to use non-polluting odor and pollution control technologies like carbon adsorption, which can achieve 99 percent VOC control efficiency, higher than the 98 percent that the Draft Permit requires for the Zimpro odor control system. Further, the control efficiency should be increased to at least 99.9 percent, consistent with what EPA recognizes as achievable. And emissions from all thermal oxidizers should be continuously monitored, consistent with the Department's general guidance requiring thermal oxidizers to continuously monitor total hydrocarbons.

    Additionally, the Draft Permit should require PVSC to reduce the Zimpro odor control system's emissions of butadiene and ethylene dichloride. Both types of emissions can cause serious health effects. Currently, the State of the Art levels for emissions of those two pollutants are 140 lbs/yr for butadiene and 1,600 lbs/yr for ethylene dichloride, respectively. The Draft Permit places a limit of 824 lbs/yr on the Zimpro system's butadiene emissions, which is nearly six times the State of the Art threshold. And the Draft Permit limits the Zimpro system's ethylene dichloride emissions to 3,680 lbs/yr, which is over twice the State of the Art limit. The State of the Art threshold reflects what is possible, and if it is possible to achieve these lower emission levels, then there is no better place to reduce these emissions than at PVSC's plant located within a community already facing such a disproportionate burden.

    In addition, the Department should require continuous monitoring for the Zimpro boilers. Requiring PVSC to install and operate State-of-the-Art air pollution control devices, including, but not limited to, selective catalytic reduction (SCR) and oxidation catalyst (OC) systems by June 30, 2026 at the boilers will not achieve lasting emissions reductions without consistent monitoring to ensure these technologies actually yield emission-reduction benefits. CEMS should be mandatory where the technology exists, and where it is unavailable, more frequent stack testing must be conducted under worst operating conditions. (Written: Earthjustice on behalf of Ironbound Community Corporation)

    RESPONSE: The permit application currently before the Department does not include proposed changes to the Zimpro odor control system. Nor was the odor control system incorporated in the EJ special conditions. Accordingly, any comment regarding that equipment is beyond of the scope of the draft permit.

    With respect to the Department’s requirement that PVSC install and operate State-of-the-Art air pollution control devices at the existing Zimpro sludge heat treatment boilers through an EJ Condition, when PVSC makes an application for the installation and operation of the

control devices, the Department will review and evaluate the type of monitoring and recording that will be required to confirm compliance. This review will consider stack monitoring of emissions, parameter monitoring, and the installation and operation of continuous emission monitoring and recording equipment.

Styrene Emissions

14. **COMMENT**: The Draft Permit must require PVSC to reduce its facility-wide emissions of styrene. The three different sources of styrene from the facility (influent screw pumps, primary clarifiers, and final clarifiers) collectively emit more styrene than the Department's State of the Art threshold. Styrene is a hazardous chemical because it may potentially cause lung cancer, and can negatively affect concentration, memory, balance, and learning ability. While each of the three sources individually does not exceed the State of the Art threshold, the facility's total styrene emissions are nearly 50 percent greater than the State of the Art threshold. Thus, the Draft Permit should place stricter emissions limits on the sources of styrene across the facility. (Written: Earthjustice on behalf of Ironbound Community Corporation)

    RESPONSE: The permit application currently before the Department does not include proposed changes to any of the styrene emitting sources (the influent screw pumps, primary clarifiers, and final clarifiers). Nor were these sources included in the EJ special conditions. Accordingly, any comment regarding that equipment is beyond of the scope of the draft permit.

Sludge Thickening Centrifuge

15. **COMMENT**: The sludge thickening centrifuge's scrubbers should have a higher hydrogen sulfide ("H2S") destruction efficiency and be continuously monitored. PVSC is a constant source of foul odors that negatively affect the quality of life of the surrounding Ironbound community, and many of these odors are likely attributable to the H2S emissions. The Draft Permit requires only a 95 percent destruction efficiency for these H2S emissions, but this should be increased to a destruction efficiency of at least 99 percent. EPA has recognized this as achievable. Further, these emissions should be monitored continuously, since one stack test over the life of the emission unit is clearly insufficient. (Written: Earthjustice on behalf of Ironbound Community Corporation)

    RESPONSE: The permit application currently before the Department does not include proposed changes to the sludge thickening centrifuge, and associated scrubbers. Nor were these sources included in the EJ special conditions. Accordingly, any comment regarding that equipment is beyond of the scope of the draft permit.

Lime Silos and Lime Bins

16. **COMMENT**: The Draft Permit must have additional conditions to ensure that the lime silo and lime bin baghouses are functioning properly. The Draft Permit has no more than 10 conditions for each of these emission sources and baghouses, *none* of which have any monitoring, recordkeeping, or reporting requirements aside from annual dust collector maintenance and monthly visual emission inspection. At a minimum, the current 20 percent opacity (30-min) requirements should be reduced to no higher than 7 percent opacity (6-min), in line with EPA's rule for lime manufacturing plants. And the permit should require continuous monitoring of baghouse pressure, continuous opacity monitoring, and work practice standards to ensure that the baghouse is functioning properly and there is no tear in the bags or other leaks. These are conditions that the Department already requires in permits for baghouses at other facilities, and which EPA requires in federal rules concerning baghouses. (Written: Earthjustice on behalf of Ironbound Community Corporation)

    RESPONSE: The permit application currently before the Department does not include proposed changes to the lime silo and lime bins, or their associated baghouses. Nor were these sources included in the EJ special conditions. Accordingly, any comment regarding that equipment is beyond of the scope of the draft permit

Vehicle Spray Paint Booth

17. **Several commenters suggested emission reducing solutions related to the vehicle spray paint booth.**

    COMMENT: There is no clear explanation for PVSC's need to have a vehicle spray paint facility. But even if vehicle spray painting is necessary for PVSC's operations, then that spray painting should take place at another location that is not in the most overburdened community in the State. (Transcript: Jonathan Smith)

    COMMENT: The Draft Permit allows PVSC to operate a vehicle spray paint booth with a 1.7 MMBtu/hr air heater. This unit is permitted to emit 1.5 tpy of VOCs, 0.0405 tpy NOx, 0.034 tpy CO, and 0.685 tpy particulate matter. It is not clear why on-site vehicle spray painting is a necessary component of PVSC's wastewater treatment operations. If vehicles need to be spray painted, that could happen somewhere that is not already one of the most over-polluted neighborhoods in the State. If PVSC does indeed need to label vehicles on-site as part of its process, it can do so in a manner that does not add to PVSC's already substantial pollution burden. Accordingly, the permit should require the decommissioning of the vehicle spray paint booth and the spray paint booth should be removed from the permit. (Written: Earthjustice on behalf of Ironbound Community Corporation)

    RESPONSE: The permit application currently before the Department does not include proposed changes to the vehicle spray paint booth. Nor were these sources included in the EJ special conditions. Accordingly, any comment regarding that equipment is beyond of the scope of the draft permit.

Gasoline Tank and Vehicle Fleet

18. **COMMENT**: As the Department explained in its Response to Comments on the EJ Rule, "[DEP] expects that, as facilities analyze and propose measures to avoid and minimize contributions to public health and environmental stressors, electrification of operations, including associated vehicles, will be a feasible and implementable compliance option. The permit should require PVSC to electrify its vehicle fleet and install electric vehicle ("EV") charging infrastructure to replace its underground storage tanks." PVSC's emissions include not only the emissions from the facility's fossil-fueled vehicle fleet, but also from the two underground storage tanks that PVSC is permitted to have on-site, totaling 16,000 gallons of gasoline storage. Though PVSC has applied for funding through New Jersey's Clean Fleet Electric Vehicle Incentive Program to install electric vehicle charging equipment, this funding application, by itself, provides no guarantee of emission reductions. Those guarantees would only come if the Department changes the permit to require the decommissioning of underground storage tanks and replacement of PVSC's fossil-fueled vehicles. Zero-emission vehicle and charging infrastructure are readily available and can provide cost savings. The permit should require PVSC to electrify its fleet in order to guarantee these common-sense emission reductions. (Written: Earthjustice on behalf of Ironbound Community Corporation)

    RESPONSE: As explained in Response B2, the EJ rule does not apply to the PVSC permit application. Accordingly, the Department's expectation that facilities will analyze and propose measures to avoid and minimize contributions to public health and environmental stressors pursuant to the EJ rule is beyond the scope of this application. The permit application currently before the Department does not include proposed changes to the vehicle fleet nor the gasoline underground storage tanks. Nor were these sources included in the EJ special conditions. Accordingly, any comment regarding that equipment is beyond of the scope of the draft permit.

E) Other

Facility Not Needed

1. **Several commenters suggested that the proposed Standby Power Generation Facility is not needed.**

   COMMENT: PVSC inexplicably concluded in its assessment of alternatives that none of the alternatives were viable, despite industry experts presenting a renewable alternative to the commission that would dramatically increase its resiliency to any future power outages. Further, PVSC failed to assess whether PSE&G's investments in hardening the grid serving PVSC's facility would change or eliminate the need for their proposed gas plant. PVSC has failed to sufficiently demonstrate that a gas plant is needed. Therefore, the Department should reject the draft permit, which is opposed by the community, elected officials, and many others. (Written: Diane Schwarz, Marilyn Manganello, William McClelland, Christina Pindar)

   COMMENT: There is a question about whether this gas plant is needed. Earlier this year, New Jersey Transit canceled plans for a similar backup power plant, citing improvements to the energy grid. The gas plant that PVSC has proposed would provide backup power if the grid goes down, as happened during Hurricane Sandy. But since that hurricane, over a billion dollars has been invested in the energy grid through the energy straw program, including the substation that services PVSC. There has not been a power outage since Hurricane Sandy. Governor Murphy supports this project based on the concern that sewage might overflow in the streets as it did during Hurricane Sandy. But PVSC has built a flood wall around the entire facility. And what spilled during Hurricane Sandy was only 3.5 percent of the amount of untreated sewage that gets dumped into Newark Bay annually because of combined sewer overflow. While that is a huge issue, this gas plant is not going to solve the larger problem. So, it is worth looking at whether this project is actually needed. (Transcript: Samantha DiFalco)

   COMMENT: The Department should not approve the permit application because the need for the sustainability issues that gave rise to the need for the plant no longer exist. PSE&G has hardened its grid. PVSC has also hardened and improved its own infrastructure by building its own retaining walls to prevent flood destruction. (Transcript: Elizabeth Ndoye)

   COMMENT: The draft permit allows PVSC to run the gas plant during emergencies only. However, their original permit application sought approval to run the plant more frequently to cut costs by offsetting their peak energy demand. Additionally, there have been major improvements to the North Jersey energy grid since Hurricane Sandy. Yet PVSC has never reexamined the need for this environmentally harmful power plant. There are energy alternatives that are not hydrogen. If this permit is granted, what will stop PVSC from applying for amendments to run the power plant more consistently? (Transcript: Hailey Benson)

RESPONSE: The Department's review is limited to the scope of the Operating Permit application that is before it. In this case, the application for a modification of the Air Pollution Control Operating Permit is limited to the installation of three natural gas-fired combustion turbine generators, two natural gas-fired emergency black start generators, and two diesel-fired emergency fire pump engines. When issuing a new or modified Air Pollution Control Operating Permit, the Department does not have a statutory duty or the regulatory authority to conduct a "public need" determination.

Alternative Technology

2. **Several commenters suggested that alternative technology is feasible and should be used to generate the necessary energy to power Passaic Valley Sewerage Commission during emergencies.**

COMMENT: PVSC's permit application is based on incorrect assumptions. Though PVSC claims to need a source that can provide 34 MW of power for two straight weeks, the truth is that during Hurricane Sandy, PVSC only lost power for two days. PVSC was not operating at full capacity the remainder of the two weeks due to other flood-related issues. Further, PVSC historically uses on average only 23 MW of power and has powered down to use only 11.5 MW of power. Thus, PVSC's estimate that it would need 34 MW of power for two weeks is overinflated. A combination of solar power and battery storage is capable of meeting PVSC's realistic energy needs in an emergency. Moreover, a combination of these alternative technologies offer other benefits, such as serving as instantaneous power sources, not being subject to shut-off interruptions that gas pipelines may face in storm conditions, and lower costs. Therefore, the Department should deny the proposed permit and push PVSC to accept the cheaper, safer, more effective, and non-polluting renewable alternatives. (Written: Daniela Gioseffi)

COMMENT: The proposed project demands fossil fuel and hydrogen, the most water consumptive form of energy today, even as the State experiences elevated drought levels. Not only has the applicant failed to demonstrate a genuine need for this project, for the last four years the applicant has failed to consider viable renewable alternatives that could enhance community resilience. The Department must honor the spirit of environmental justice for Newark's communities and New Jersey overall by rejecting the draft permit for this harmful facility. (Written: June Haran, Steven Fenster)

COMMENT: Although PVSC claims that the energy needs in an emergency may require 34 MW of energy for 14 consecutive days, this assertion dismisses key components of historical examples. During Hurricane Sandy, PVSC saw a two-day power outage, significantly shorter than the proposed need of two weeks. Additionally, PVSC has historically seen an average use of 23 MW of power. In short, the applicant has over-inflated the length of the need and estimates of energy use. With this in mind, the Department should revisit the potential to utilize battery storage and solar power. A gas power plant will take longer to ramp up to full power, which could be dire and costly in emergency scenarios. Indeed, FEMA has articulated a concern with reliance on natural gas as a form of emergency power. On the other hand, batteries can operate as nearly instantaneous power sources. Additionally, gas power plants

are risky in storm and hurricane conditions as pipelines can be interrupted. Looking at Hurricane Sandy's historical example, New Jersey Natural Gas shut off service to some customers for nearly a month after the storm. An on-site battery would not experience this delay, but would instead provide reliable energy not dependent on external factors. (Written: New Jersey Environmental Justice Alliance)

COMMENT: As part of its permit application, PVSC determined that there was not sufficient land available within its fence line, or land available in proximity to the facility, to be able to install enough solar panels or batteries to achieve the amount of power needed to run the entirety of the facility in an emergency/loss of power scenario. The Department accepted this analysis. However, PVSC did not consider the usage of decommissioned power plants in proximity to the facility as an option for the possible installation of battery storage and solar panels. For example, Newark Bay Co generation Power Plant is currently decommissioned and should be evaluated by PVSC as well as the Department for an alternative to the build out of fossil fuel burning turbines in the Ironbound community. The Department should not approve this draft permit until it has exhausted the safest and cleanest possible alternatives to provide backup power to such an essential facility. (Written: Sierra Club, New Jersey Chapter)

COMMENT: A combination of solar power and battery storage would adequately meet PVSC's realistic needs. The applicant's claim that it requires an estimated 30-plus MW of power generation sustained for two consecutive weeks should be reassessed based on the facility's current actual energy usage. Local communities have expressed credible concerns that the facility's estimates are overinflated. A combination of local solar energy and energy storage would be capable of meeting the facility's energy needs and would contribute meaningful resilience benefits in the case of an emergency. Solar and storage would provide more rapid backup power than a gas facility and would require no outside fuel; thereby removing the substantial risk that exogenous factors prevent a standby generation facility from fulfilling its purpose. (Written: Vote Solar)

COMMENT: The Department should not allow PVSC to build a gas plant instead of clean energy sources to meet its emergency power needs. (Transcript: Jonathan Smith)

COMMENT: PVSC's permit modification application claims that this gas plant is necessary and there are no alternatives based on overestimates of its power requirements. But a combination of battery storage and solar power is a feasible alternative to this gas-fired power plant. The Department should modify the permit to allow PVSC to use the safer and more effective alternatives that only battery storage can provide instead of a polluting and ineffective gas plant. Battery storage is the instant, reliable power that PVSC states it would need if the facility lost power. (Transcript: Colin Parts)

COMMENT: PVSC's compliance statement is overblown to the extent that it claims it will require 34 megawatts (MW) of power for two weeks. In the compliance statement, PVSC acknowledges that the facility was only disconnected from the grid for roughly two days, not two weeks. Any delay in resuming operations after the facility was reconnected to the grid was a result of PVSC's decision to undertake a gradual process of clearing out facility areas and resuming operations, which was entirely separate from the facility's access to the

electrical grid. The Department must not move forward with this Draft Permit until PVSC's assumptions regarding its energy needs are adequately reviewed; s assumptions should not be taken at face value.

A more realistic assumption for PVSC's power needs is 15MW for 12 hours. This need would be easily met through the use of on-site solar power and battery storage. PVSC's half-hearted consideration of non-polluting alternatives seems largely pretextual, and suggests that PVSC has not been engaging in good-faith efforts to satisfy its emergency power needs in a way that does not pollute the Ironbound. For example, PVSC did not evaluate the responses to its own request for proposal (RFP) for renewables prior to submitting its Compliance Statement.

Unlike the proposed gas plant, which is too slow to start up and shut down and too vulnerable to malfunctions, battery storage could instantly and seamlessly provide electricity to PVSC's facility and power it in isolation from the grid until power is restored. With a well-designed battery-storage system, the shift could take milliseconds. Further, because battery storage does not require external fuel to continue providing power, it is not vulnerable to the same types of disruption as a gas plant that relies on an off-site pipeline system, which is vulnerable during extreme weather events and leak-prone. Grid managers are already using batteries where fossil fuel solutions fail because of batteries' inherent flexibility and reliability.

Additionally, PVSC's assumptions about the need for a gas-fired power plant ignored the over $4.8 billion PSE&G has spent to harden and modernize the electrical grid after Hurricane Sandy. PSE&G has raised the substations surrounding PVSC (such as the Port Street Substation, Waverly Substation, and Bayonne Substation) to be even higher than the highest levels of flooding observed during Hurricane Sandy. Yet, PVSC largely ignored these efforts in its Response to Comments and wrongly wrote off the grid hardening efforts, arguing only that PSE&G could not guarantee the facility would not lose power.

Further, PVSC and the municipalities it serves have invested and will continue investing in green infrastructure and sewer separation projects that would reduce the flow of stormwater that enters the PVSC sewer system during storm events, thereby reducing the electricity needs for PVSC to operate its equipment during storms. All of these efforts will lead to significantly less stormwater runoff and flooding, lowering the risk that PVSC will face the same environmental and energy pressures that it did during Hurricane Sandy.

All of these factors call into question the necessity of the gas plant and provide ample support for the Department to deny this ill-conceived proposal to build another polluting facility in the most overburdened community in the State. (Written: Earthjustice on behalf of Ironbound Community Corporation)

COMMENT: The Department should not approve a permit that undermines the health and well-being of the residents of this community when there are a number of viable alternatives that could provide cleaner, more sustainable energy, such as battery storage, offshore wind, or the utilization of existing decommission power plants. (Transcript: Chloe Desir)

COMMENT: PVSC needs to take advantage of solar, wind, and battery storage. This technology will meet its emergency needs. A natural gas power plant will take hours to ramp up. The permit should include truly renewable solutions, not a power plant. The Department should reject this permit, and push PVSC to implement the safer, more effective, non-polluting renewable alternative that they have failed to consider. (Transcript: Vanessa Thomas)

COMMENT: Expert individuals have offered their services to show PVSC how solar and battery technology are a feasible solution at multiple PVSC public meetings. But PVSC has inflated its power needs in order to rule out all alternatives. PVSC also claims there is not enough physical space on site for the energy needs to be filled by solar and battery. How can we trust PVSC's estimates when the Department's EJ decision points out that PVSC has had opportunities to make improvements in their facility, to lower the emissions they have been pumping into the community? PVSC has chosen not to make those changes without a requirement. While climate resilient infrastructure is urgent, this plan ignores FEMA's explicit statements that gas should not be relied on to provide power in emergencies. This plant is not about community resilience but about profit and will be built at the expense of the community who will be paying both with their tax dollars and their health. The Department should consider renewable alternatives more closely. (Transcript: Leah Ives)

COMMENT: PVSC's failure to conduct an assessment of alternatives to the proposed gas plant raises serious questions. The applicant rejected, without any in house renewable energy expertise, the proposals by two renewable energy firms, who both said that a renewable energy-based hybrid is feasible and less costly to implement and operate than the proposed gas plant. (Transcript: Holly Cox)

COMMENT: If emergency energy is needed, renewables are a much better solution than a gas plant. Gas is time-consuming. Renewables can be much faster, which is what you need in a crisis like Hurricane Sandy. (Transcript: Henry Heivly)

COMMENT: The Department should deny the request for the proposed natural gas power plant. Fossil fuel is the power source of the past. This is a new era of cheaper, more efficient green technology that is fiscally responsible to the taxpayers of New Jersey. (Transcript: Elizabeth Ndoye)

COMMENT: The design that the Sewage Commission has proposed and that the Department is planning to approve is now 14 years old. Technology has changed tremendously. There are other options. The current plan includes two Black Start generators, but the permit requires PVSC to install 15 solar panels and battery storage to replace the Black Star generators. There is no explanation for allowing the installation of Black Star generators if the facility could install solar power to provide that function. (Transcript: Bill Beren)

COMMENT: The Department should reject the application to permit this ill-conceived, unnecessary, and environmentally racist gas power plant in Newark. The Department did not adequately assess alternatives to this gas plant, as they are empowered to do under the Clean

Air Act. Within weeks of Governor Murphy issuing the EJ Administrative Order, PVSC issued an RFP solicitation for clean renewable energy alternatives under a 30-day timeline. PVSC was allowed to skirt the central obligation of the EJ law, so it did not conduct a cumulative environmental and public health assessment. The alternative assessment done by PVSC was an insult to the community who will bear the brunt of the pollution impact. There was no public input opportunity on the alternative solicitation from PVSC. The public meeting that they held was a sham. Meanwhile, advocates commissioned studies and gathered data to show that a clean renewable energy alternative was feasible. PSE&G made a record billion-dollar investment into hardening the grid, including the substation that serves PVSC. Several PSE&G representatives claimed that those improvements made the facility completely hardened to future extreme weather events. PVSC and the Department never engaged PSE&G about whether a gas plant is even needed in the first place given the hardening of the grid. PVSC arbitrarily claimed to need power for 14 days without substantiation. Hurricane Sandy knocked PVSC offline for two and a half days, so that 14 days was not explained. The Department never asked. PVSC also claimed that it did not have enough space on site to develop renewables sufficient to meet that two-week resilient power requirement. But there is now proposed legislation that would allow PVSC to develop beyond their perimeters for critical resiliency projects. PVSC is claiming they cannot do renewables, but they have skirted their responsibilities. It is up to the Department to do a thorough and real alternative assessment, including all of the factors that have been named tonight. (Transcript: Matt Smith)

COMMENT: There are renewable energy based alternatives to this gas plant that have not been considered, despite the fact that the gas plant would place additional pollution in an already overburdened community. New Jersey Transit canceled a fossil fuel project recently, so it is possible and more cost effective. (Transcript: Stephanie Martinez-Shedah)

COMMENT: A number of factors have already reduced the risk of a catastrophic failure of having sewage go in places that we don't want it to go. A few examples include Newark's solar thermal energy corridor, the grid upgrades that PSE&G and others have done, and the wall that PVSC built. There are many alternative actions that PVSC could take such as the Hess gas plant and battery storage. But the Department has refused, repeatedly, to adequately evaluate any of them. Finally, FEMA says gas in the type of emergency that PVSC is planning for is not a reliable alternative because gas lines break. (Transcript: David Pringle)

COMMENT: At the Ironbound Farm this year, young people created a solar energy mechanism that could power people's cell phones and stuff. And I think if the young people could do it, so could PVSC. (Transcript: Nancy Zak)

COMMENT: The Department should consider the cost benefit analysis of battery storage and microgrids as part of this project review. When it comes to the efficiency, the demand response should be considered. If reviewing base load for a project, you must know how much energy it is projected to consume daily, weekly, and monthly. Rooftop solar and community solar should be considered as a means to source the energy for this project. The BPU has committed to one gigawatt of storage, but they are woefully behind in terms of battery storage. Still, the price of sodium ion batteries is dropping rapidly. Microgrids can

provide bidirectional EV charging and provide storage and capacity if needed. The Department should also calculate the cradle to grave CO2 footprint of this project to analyze the costs. (Transcript: Gary Conger)

COMMENT: Per the GR2 Environmental Justice Special Conditions listed in the Draft Permit, PVSC is permitted to operate the proposed standby generating facility, which includes three 28 megawatt (MW) natural gas-fired combustion turbines generators, two 2 MW natural gas- fired emergency black start generators, and two 147 kilowatt (kW) diesel-fired emergency fire pump engines, for up to 48 hours in advance of a storm event, or a total of 960 hours annually, based on an estimate of 10 storm outage events per year, indicating that the facility is anticipated to provide backup generation for an average period of approximately 96 hours during outage events. In the Compliance Statement provided in its Title V Operating Permit Significant Modification Application, PVSC stated: "The PVSC Wastewater Treatment Plant historical average and maximum electrical power demand is 23 megawatts (MW) and 29 MW, respectively. The current planned power consumption is 34 MW to accommodate new flood mitigation measures being implemented under the FEMA Resiliency Program," indicating that the facility typically operates at an average demand of 23 MW and may increase its maximum demand to 34 MW due to planned modifications.

PVSC has not provided sufficient evidence that the proposed three 28 MW combustion turbines are necessary to meet an anticipated maximum demand of 34 MW during a 96-hour outage period, nor has adequate evidence been provided that natural gas-fired combustion turbines are the best technology to reliably provide adequate backup generation during an outage period. During severe weather events, gas-powered generation is only as reliable as the gas supply, which can be disrupted due to freezing conditions, flooding, or other weather conditions. Unlike fuel-reliant technologies, solar and storage technology can operate independent of the grid and fuel supply chains, and if adequately sized can supply power to the entire facility for short-to-medium duration outages. Longer-duration storage technologies, such as Form Energy's iron air battery, which can supply up to 100 hours of resilience, are also quickly reaching maturity.

Development of a 34 MW, four-hour duration battery storage system on-site at PVSC within the 1.5-acre footprint of the proposed standby facility would be feasible. Analysis conducted on the feasibility of large-scale battery storage development in high-density areas in New York City found that four-hour duration storage projects can have a density of 23 to 30 MW per acre, or up to 40 MW under certain conditions. PVSC has indicated that up to seven acres of property is available for development, which would allow for the development of a much longer-duration battery storage system and possible on-site solar. The addition of on-site solar generation would further extend the duration of backup power the battery system would be able to provide. Developing a 34 MW battery storage system, in addition to providing resilient backup power, would also eliminate the need for the standby facility to operate for 48 hours prior to an anticipated storm outage event, as currently outlined in the Draft Permit. Unlike gas turbines, batteries can instantaneously provide maximum power to a facility to prevent uncontrolled shutdown in the event of a power disruption. A battery system would be able to meet the energy needs of the facility during regular power outages and would provide ample time to adjust operations to reduce demand and/or pursue alternate energy sources

such as mobile generators in the unlikely event of an extended outage. If solar is added to the system, the duration of backup power would be extended even further, as the batteries would be able to charge on-site even if grid power is not available. (Written: Clean Energy Group)

RESPONSE: As set forth in the Statement of Basis published with the draft permit, the scope of the Department's review and approval of this application for an Air Pollution Control Operating Permit was limited to the requirements of the Air Pollution Control Act and the relevant provisions of the Federal regulations implementing the Clean Air Act requirements. As discussed in Response B2, this permit was submitted and deemed administratively complete approximately two years prior to the adoption of the EJ rules. Thus, factors such as feasible alternative technology are not within the scope of the Department's review.

Cost

3. **Several commenters suggest that the cost of the Standby Power Generation Facility is not justified.**

COMMENT: PVSC has already spent $55 million in taxpayer dollars on three gas turbines before getting approval for the permit. The gas turbines are unnecessary because PSE&G has already hardened the grid and there are proven solar and battery storage alternatives available. PVSC should return the gas turbines, which will only become stranded assets, and use the refund for solar and battery storage. (Written & Transcript: Paula Rogovin)

COMMENT: If the goal is net zero by 2050, this project is going to be a sunk asset. We are going to be paying for that sunk asset and it is not going to lead to returns. If the goal is to reduce emissions by 2050, this project is not functional and should not be built. (Transcript: Gary Conger)

COMMENT: Battery storage and solar are cheaper alternatives to the proposed gas plant. Solar and battery power are around 70 percent cheaper than this roughly $118 million gas plant. Rather than denying the permit, the Department is proposing to allow PVSC to build an impractical and uneconomic facility in an already overburdened community of color. The Department must not approve this draft permit. (Transcript: Colin Parts)

COMMENT: PVSC can rely on solar power and battery storage to provide the emergency power that PVSC may need in the unlikely event that it loses grid power in a future storm. The installation of adequate battery storage would also save 70 percent of the projected costs of building the gas plant. While the gas plant would cost $118 million, an adequately-sized battery storage system would cost around $36 million. PVSC could use its promised Federal Emergency Management Agency ("FEMA") funding for solar and battery storage instead of the gas plant. In fact, PVSC could further use the battery storage system to save money by using the battery system to provide non-polluting power at peak times on the grid, earning payments for its contributions to the grid and using those payments to offset the costs of the system. (Written: Earthjustice on behalf of Ironbound Community Corporation)

COMMENT: Do not put profit over people. Approving this permit will cost Newark, New Jersey, and the nation millions of dollars due to the public health outcomes. Please deny the permit. The real cost of the PVSC power plant is the emission of all these dangerous chemicals. It is a slow death for the people and children living around here and having to grow up with this. (Transcript: Stephanie Martinez-Shedah)

COMMENT: Though the climate crisis is at our doorstep, PVSC wants to spend over $180 million on another gas-powered, power plant. PVSC could invest $180 million in 100% renewable energy. Hurricane Helene is an example of what is to come. The Department should be an example and advocate for the communities it is supposed to protect. (Transcript: Lorin Fernandez)

RESPONSE: Cost factors are considered when reviewing an Operating Permit application under the following circumstances:

1. When determining whether the replacement of part(s) of equipment included in the process unit, or the replacement of part(s) of control apparatus can be classified to be "Reconstruct" or "Reconstruction," as defined in N.J.A.C. 7:27-22.1.

2. When conducting a case-by-case review, pursuant to N.J.A.C. 7:27-22.35(c) 5.iii, for a state-of-the-art evaluation, cost of the technically feasible control device can be considered. It is stated in Section1.5.iii. Of the General State-of-the-Art Manual that a control measure can be eliminated from consideration based on its economic impacts calculated using the techniques in the latest edition of EPA's Control Cost Manual.

3. When conducting an alternative or facility specific reasonably available technology review, pursuant to N.J.A.C. 7:27-16.7(d) vii., the estimated cost of installation and annual operation can be considered in the review.

4. When conducting a best available control technology analysis, pursuant to 40 CFR 52.21, economic impacts and other costs can be considered.

The PVSC operating permit application is not subject to any of the four regulations listed above. Thus, in this case, cost impacts and considerations are not within the scope of the Department's review pursuant to the CAA or APCA.

General Opposition

4. **Several commenters expressed opposition to the draft permit.**

COMMENT: The Department's proposed permit conditions present out of the box creative solutions to reduce the overall emissions from the facility and improve the air quality of the Ironbound and surrounding communities. However, even with those permit conditions, PVSC should not install the natural gas-burning turbines as a backup source of energy during emergency/loss of power scenarios. (Written: Sierra Club, New Jersey Chapter)

COMMENT: The Department should deny this permit application. Though there is a need to plan for emergencies, especially in the context of a changing climate and increasing climate disaster risk, the current proposal is not adequate, nor is it safe for residents of the Ironbound. The permit applicant should implement emissions reductions strategies to decrease local air pollution, improve public health outcomes, and fight climate change regardless of its plan to construct an additional gas plant. Emissions reductions and additional construction are not mutually exclusive. New Jersey residents, especially those who live in already overburdened communities, should not be forced to accept additional health and environmental burdens to receive emissions-reducing investments that could have been implemented separately at any time. Reducing emissions and decreasing local air pollution should be a consistent priority and strategy. A facility should not propose emissions reductions only when connected to proposals for new industry, which brings along increases in local air pollution and risks exacerbating existing negative health issues throughout the community. (Written: New Jersey Environmental Justice Alliance)

COMMENT: On March 30, 2022, PVSC held a public hearing pursuant to AO-25 on its proposed permit modification. According to PVSC's AO-25 Compliance Statement 202 people attended and 53 people spoke at the public hearing. Only three speakers, all of whom worked for construction trade organizations that may benefit from the planned gas-plant construction, voiced their support for the gas plant. PVSC's September 9, 2022, Response to Comments mischaracterized testimony at that hearing opposing the SPGF as testimony supporting it. This mischaracterization of speakers' testimony is concerning and has likely led to the overestimation of support for the facility. Further, PVSC received 446 written comments during the AO-25 process. Of those comments, 442 were in opposition to the gas plant and only four were in support.

As PVSC's proposal has moved through the permit approval process, elected representatives and other community leaders have also consistently opposed the gas plant. On October 1, 2024, the Department held a public hearing on the Draft Permit. Commenters again pointed to the disproportionate burdens that this plant would have on the Ironbound, and noted that the permit will allow an increase in many emissions from PVSC. The Department should deny PVSC's requested modification based upon this consistent and overwhelming opposition in an already overburdened community. (Written: Earthjustice on behalf of Ironbound Community Corporation)

COMMENT: It is important to have open forums where community members can advocate their positions on issues of concern. In this case, the community is deeply disappointed in and opposes this permit. (Transcript: Chloe Desir)

COMMENT: PVSC and the Department are failing to listen to the residents of the Ironbound, who have been saying for three years that they do not want this plan. This gas plant is opposed by 20 members of the New Jersey Legislature, the Mayor of Newark, U.S. Congressman Andy Kim, Hoboken Mayor Robby Bala, and even Governor Murphy's own wife. Further, it should be noted that the two PVSC commissioners, who are from the Newark city council, have publicly opposed the gas plant. The Department, the PVSC commissioners, and Governor Murphy, should reject this ill-conceived gas plant. (Transcript: Holly Cox)

COMMENT: Everyone has a moral obligation to speak up for the well-being of creation and the health and safety of their neighbors; to speak up for the most impacted and in support of a path to a healthy future for all. The future should be free of fossil fuels and abundant in clean renewable energy. The Ironbound Community in Newark has, for too many years, suffered the worst impacts of fossil fuel pollution, like the increased rates of asthma, cancers and other diseases. During the entire public hearing, not one person or group has spoken in favor of this project. Based upon the strong opposition from the community and elected officials, the Department should reject the permit application for a new gas-fired power plant. (Transcript: Tracey Stephens)

COMMENT: Many people from the Ironbound spoke at the public hearing tonight. Some shared personal stories of the kinds of things that some of the residents living here have to deal with. It would be best for everyone if the Department listened to all of the elected officials and members of the community that oppose the gas plant. The permit should not be approved. (Transcript: Henry Heivly)

COMMENT: There were four power plants actively being proposed at the beginning of Governor Murphy's term. The one in the Meadowlands, the New Jersey Transit plant, and the one in Woodbridge all died. This proposed power plant needs to die too. (Transcript: Bill Beren)

COMMENT: Dozens of elected officials, Newark residents, and over 100 health professionals have spoken out against this plan. Continuing to build fossil fuel infrastructure places our climate, our health, and the lungs of the overburdened community members in the City of Newark at peril. Approving this permit makes a mockery of our State's clean energy, and environmental laws. (Transcript: Matt Smith)

COMMENT: The Department should acknowledge that this project is opposed by many elected officials, including over 20 members of our State Legislature. Therefore, the Department should deny this Draft permit. (Transcript: Hailey Benson)

COMMENT: The Department should not approve the PVSC gas plant air permit. Hundreds of elected officials as well as 130 scientists and health professionals are in opposition to this plant. (Transcript: Stephanie Martinez-Shedah)

COMMENT: I concur with all of the testimony at the public hearing opposing this project and this permit. The community, every single local elected official in the city and the county, the State legislators that represent Newark, and every major New Jersey clean water group are opposed to this project. It is a false choice to pit sewage or clean water risk versus air risk. All of these folks are saying the air risk is greater than the water risk. (Transcript: David Pringle)

COMMENT: I support all of the comments that were made at the hearing critiquing the draft permit. A large number of organizations, every elected official from Newark, and experts that have testified at public hearings have spoken out against this permit. All of these comments should be taken seriously and not just forgotten about. (Transcript: Jane Califf)

COMMENT: The facility information demonstrates that it is putting toxins in our air. Putting toxins into our city is literally killing us. This is ridiculous. The politicians of the city support the position of the residents. (Transcript: Mark Roberts)

RESPONSE: The Department has received, evaluated, and responded to all comments submitted on this draft permit. However, the Department may only deny an application for a permit modification if the provisions and conditions contained in the application fail to comply with the applicable State and Federal regulations. In this case, the Department determined, based upon the certified information provided in the permit application, that all of the proposed new or modified equipment and air pollution control devices comply with all applicable State and Federal regulations.

Pursuant to AO-25, the Department's review of applications for facilities seeking permits in overburdened communities, should, to the maximum extent allowable apply such special conditions as may be necessary to avoid or minimize environmental or public health stressors upon the overburdened community consistent with applicable statutes and regulations. The special conditions set forth in the Environmental Justice Decision issued by the Department on July 18, 2024, represent the Department's implementation of the directives of AO-25. As discussed in Response B2, PVSC's application was deemed complete two full years before the EJ Rule became effective. As a result, the EJ Rule does not apply to this permit application. Thus, objections to the permit citing EJ Rule requirements are not a basis for denial of the permit.