

CONFIDENTIAL PERSONALLY IDENTIFIABLE INFORMATION

Brooks W Garrison, RA



August 16, 2024

Frank Jon, Environmental Engineer
U.S. Environmental Protection Agency, Region 2
Permitting Section, Air and Radiation Division
Ted Weiss Federal Building
290 Broadway, 25th Floor
New York, NY 10007-1866
By Electronic Filing: jon.frank@epa.gov

RE: Outer Continental Shelf Draft Air Permit to Construct and Operate Atlantic Shores Proj.1&2 - Draft EPA Permit #: OCS-EPA-R2 NJ 02 - Public Notice Dtd. July 12, 2024

Dear Mr. Jon:

Reference is made to the Public Notice dated July 12, 2024 in the above referenced matter (the “Public Notice”) issued by the U.S. Environmental Protection Agency (“EPA”) (together, the “Draft Air Permit” or “Project”)¹.

¹ “**Public Notice: Atlantic Shores Offshore Wind Project 1, LLC, Atlantic Shores Project 1 and Project 2. Public Comment Period Extended. Publish Date July 12, 2024;**” <https://www.epa.gov/nj/atlantic-shores-offshore-wind-project-1-llc-atlantic-shores-project-1-and-project-2-public>. The summary description of the Public Notice, as published, reads as follows:

“Summary

The United States Environmental Protection Agency (EPA), Region 2 provides notice of and requests public comments on the draft Clean Air Act, Outer Continental Shelf (“OCS”) Permit to Construct and Operate for the Atlantic Shores Offshore Wind Project 1, LLC, Atlantic Shores Project 1 and Project 2 (referred to here collectively as the Atlantic Shores Project). The Atlantic Shores Project will be located within the OCS at approximately 7.6 nautical miles (8.7 statute miles) east from the New Jersey shoreline.

The Atlantic Shores Project will comprise of up to 200 wind turbine generators, up to 8 small, 5 medium, or 4 large offshore substations, and inter-array cables. The wind turbine generators use the energy of the wind, a source of renewable energy, and convert it to electricity. The electricity generated by the wind turbine generators will then be transported via inter-array cables to the offshore substations. The offshore substations will receive that electricity and then transmit it via offshore submarine export cables to onshore substations in the State of NJ, where it will be transmitted to the electric grid. It is anticipated that the Atlantic Shores project will generate approximately 2,470 megawatts of electrical power.

If finalized, the OCS air permit would regulate offshore air pollutant emissions from the construction and operation of the Atlantic Shores Project on the OCS.

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Applicants or Respondents

Atlantic Shores Offshore Wind Project 1, LLC
1 Dock 72 Way, Floor 7
Brooklyn, NY 11205
United States

Docket Numbers

- [EPA-R02-OAR-2024-0312](#)”;

Related Documents

- [Draft Permit \(pdf\)](#)
- [Public Notice \(pdf\)](#)
- [Fact Sheet \(pdf\)](#)

How to Comment

Comments Due August 16, 2024

Written comments on the draft OCS air permit may be submitted in writing by email by August 16, 2024.

The comment period end date has been extended from the August 13, 2024, date in the Public Notice.

Submit comments to:

Frank Jon

Jon.Frank@epa.gov

U.S. EPA, Region 2

Air and Radiation Division

Permitting Section

All comments should include the name, email and mailing address of the person commenting; you must raise all reasonably ascertainable issues and submit all reasonable available arguments supporting your position by the end of the comment period. For additional information on how to comment, please see “Public Notice” available at <https://www.epa.gov/caa-permitting/caa-permits-issued-epa-region-2>.

Public Hearing

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As a volunteer with Defend Brigantine Beach, Inc. and Downbeach (nka Defend Our Oceans NJ), and as a stakeholder, I am writing to express significant concerns about the proposed Atlantic Shores Offshore Wind turbines “located approximately 8 nautical miles (or 9 statute miles) from the Brigantine National Wilderness area located in the E.B. Forsythe National Wildlife Refuge, a Class 1 Area, in New Jersey,” for the quality of health and welfare for Brigantine residents of Brigantine, as detailed in Draft EPA Permit Number: OCS-EPA-R2 NJ 02 - Public Notice Dated July 12, 2024 (the “Project”).

For the reasons set forth herein, I respectfully request a No Action Decision be made.

Air Emissions Findings: The proposed wind turbines, standing at 1,047 feet above ground level, pose a severe risk to health and quality of life during construction and operation by

A public hearing for the Atlantic Shores draft OCS air permit will be held at 6 p.m. EST on August 12, 2024. The hearing will be held virtually via Zoom. The public hearing registration form is included on the EPA’s website at https://usepa.zoomgov.com/meeting/register/vJlft-mgpzktH4b85J6OmO42_EwZV6g1N8Y.

Any person who wishes to participate in the public hearing may register in advance using the above link. The Zoom link for the public hearing will then be sent to the email address you provide in the registration form. Anyone who wishes to speak during the public hearing must register using the Zoom link no later than August 8, 2024.

The hearing will be conducted in English. If you cannot speak, read, write, or understand the English language or you are a person with disabilities and need reasonable modifications and/or auxiliary aids and services, please email greally.maya@epa.gov or call 212-637-3588 to request services free of charge no later than July 31, 2024.

For additional information on the public hearing, please see “Public Notice” included under "Related Documents" and available at <https://www.epa.gov/caa-permitting/caa-permits-issued-epa-region-2>.

The EPA will issue a final permit decision after reviewing all the public comments submitted. Please note, only those who provided written or oral comment on the draft permit may request an administrative review of the final permit decision. Those who did not provide written or oral comment may only request a review of the changes from the draft permit to the final permit decision. Please see "Public Notice" included under "Related Documents" and available at <https://www.epa.gov/caa-permitting/caa-permits-issued-epa-region-2> for more information about appeal procedures.”

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EPA's own admissions in its Public Notice², associated Fact Sheet³ and draft Permit⁴. There will certainly be toxic air emissions from the C&C and O&M phases of the Project, as well as operations, adding to existing air hazards. By EPA's admissions in its Fact Sheet, contained in its Public Notice, let alone from the draft Permit also contained therein, there will be the

² Public Notice, p. 2: **"FINDINGS:**

The draft OCS air permit regulates the offshore emission of air pollutants from the construction and operation of the Atlantic Shores Project on the OCS. The emissions result from the combustion of ultra- low sulfur diesel fuel in the marine engines onboard the majority of marine vessels that will be used to construct and to operate and maintain the project, and from the combustion of low sulfur diesel marine gas oil from a few specific marine vessels that may be unable to burn ultra-low sulfur diesel fuel. The project will also use portable diesel engines temporarily located on the wind turbine generators and offshore substations during construction. The majority of these portable engines will become permanent diesel engines that will be located on each offshore substation and used occasionally during the project's operation for regular testing and in case of the need for emergency power if the connection to the grid is lost. Both the portable and permanent diesel engines will use ultra-low sulfur diesel fuel. A very small amount of air pollutants, in the form of fugitive emissions, will come from ultra-low sulfur diesel fuel storage tanks, and painting and cleaning conducted for maintenance purposes. A small amount of sulfur hexafluoride emissions will also result from switchgears in the wind turbine generators and offshore substations, comprised of electrical equipment insulated with sulfur hexafluoride (a greenhouse gas). The air pollutants addressed by the draft permit include nitrogen oxides, carbon dioxide, volatile organic compounds, total suspended particles, particulate matter, particulate matter with an aerodynamic diameter less than or equal to 10 microns, particulate matter with an aerodynamic diameter less than or equal to 2.5 microns, sulfur dioxide, and greenhouse gases."

³ Fact Sheet, p. 12; air emissions are regulated by both EPA and State of New Jersey (original footnotes contained in brackets): "Air pollutant emissions generated from the project will include nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter (PM), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM_{2.5}) ["NO_x and SO₂ are precursors for PM_{2.5}."], total suspended particles (TSP) ["New Jersey's regulations"], volatile organic compounds (VOC) ["NO_x and VOC are precursors to and the measured pollutants for the criteria pollutant ozone"], non-methane hydrocarbons (NMHC) ["New Jersey's regulations"], lead (Pb), greenhouse gas (GHG), sulfuric acid mist (H₂SO₄), and hazardous air pollutants (HAPs) ["The HAPs emissions that would result from the project are estimated to result from fuel combustion in engines."]."

⁴ Draft Permit, at 18-19; most troubling is the certainty of SF₆ air emissions, it is **a greenhouse gas on the EPA's own list of regulated chemicals as cited in the draft Permit: "SF₆-Insulated Electrical Switchgears and G3-Insulated Bus Duct....** However, due to possible equipment leakage, the SF₆-insulated electrical switchgears will be fugitive emission sources of SF₆, a greenhouse gas. SF₆ emissions will also occur during refilling events at the OCS Facility during the operational life of the project." Sulfur Hexafluoride is also on New Jersey's Hazardous Substance List because it is regulated by OSHA and cited by ACGIH, DOT and NIOSH; <https://www.nj.gov/health/eoh/rtkweb/documents/fs/1760.pdf> ("**HAZARD SUMMARY** * Sulfur Hexafluoride can affect you when breathed in... * Breathing Sulfur Hexafluoride can irritate the nose and throat. * Breathing Sulfur Hexafluoride may irritate the lungs causing coughing and/or shortness of breath. Higher exposures can cause a build-up of fluid in the lungs (pulmonary edema), a medical emergency, with severe shortness of breath. * High exposure can cause headache, confusion, dizziness, suffocation, fainting, seizures and coma. * Sulfur Hexafluoride may damage the liver and kidneys. * Repeated high exposure can cause deposits of Fluorides in the bones and teeth, a condition called 'Fluorosis.' This may cause pain, disability and mottling of the teeth.... **IDENTIFICATION** * Sulfur Hexafluoride is a colorless, odorless gas. It is used in electrical circuit interrupters electric piping, and as a gaseous insulator.") (Emphasis in original).

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following emissions, which are exponentially magnified by the amount of potential chemical products used for the offshore sub stations (“OSSs”)⁵ as illustrated by the following chart:

<u>EPA Notice</u> ⁶	<u>BOEM: Each Large Offshore Substation (“OSSs”) Can Use Up To:</u>
“combustion of ultra-low sulfuric diesel fuel”	20,000 gallons of diesel fuel
“A small amount of sulfur hexafluoride emissions from the electrical equipment insulated with sulfate hexafluoride (a greenhouse gas).”	9,480 lbs. sulfur hexafluoride ⁷
	185,000 gallons of mineral oil
	400 gallons of sulfuric acid (batteries)
	3,050 gallons of water/ethylene glycol
	54 gallons of AFFF-Firefighters aid
	794 pounds of refrigerant
	15 gallons of lubricant

Air Quality Impacts: The presence of these towering structures according to EPA’s and Atlantic Shores’ own documents have increasing potential for dangerous air emissions and further highlights the potential for substantial adverse effects on air quality. Air pollutant emissions include, according to the EPA’s Draft Permit for the Project: nitrogen oxides, carbon dioxide, volatile organic compounds [aka VOCs, or forever chemicals⁸], total suspended particles, particulate matter, with an aerodynamic diameter less than or equal to 10 micron, particulate matter with an aerodynamic diameter less than or equal to 2.5 microns, sulfur dioxide, greenhouse gas, HAPs (hazardous air pollutants), Sulfur hexafluoride (SF₆), Ultra Low Sulfur Diesel (“ULSD”) storage tanks “which will emit fugitive VOC emissions” and other activities which will do the same.⁹ And based on its potential to emit air pollution, the Atlantic Shores Project is subject to the CAA’s Prevention of Significant Determination (“PSD”) and Non-

⁵ Atlantic Shores Offshore Wind COP, Table 7.0-2, List of Potential Chemical Products Used for OSSs, September 2021; <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Atlantic-Shores-COP-Volume-1-Project-Description.PDF>.

⁶ Public Notice at 2.

⁷ *Id.*; Atlantic Shores Offshore Wind COP, ix, List of Acronyms and Abbreviations, September 2021; <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Atlantic-Shores-COP-Volume-1-Project-Description.PDF>; (Sulfur hexafluoride is SF₆).

⁸ EPA regulates VOCs at Federal level in 40 CFR 59, which is the National Volatile Organic Compound Emission Standards For Consumer And Commercial Products. National VOC emission standards for certain categories of products are also regulated pursuant to Section 183(e) of the Clean Air Act. It is paradoxical that EPA is allowing the Project to use PFAS at a time when the federal agency is supposedly seeking to reduce exposure from these forever chemicals. <https://www.epa.gov/pfas/press-releases-related-pfas>.

⁹ Draft Permit at 8.

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Attainment New Source Review requirements, federal standards that apply to diesel engine, and several New Jersey State air regulations, because the Project has “the potential to **emit over 250 tons per year of any regulated NSR pollutant during both C&C and O&M.**” (Emphasis added).¹⁰

Inadequate Mitigation Measures: Any proposed mitigation measure must be comprehensive and prioritize safety over financial compensation. The potential for catastrophic accidents from leakage of SF₆ alone, necessitates a more substantial and comprehensive mitigation strategy that addresses the full scope of mitigation measures and risks these turbines introduce.

Environmental and Community Impact: The introduction of such obstructions could jeopardize health and the risks these turbines bear to our community and the safety of visitors are unacceptable. Respiratory health in the Atlantic County area for the Brigantine community is already compromised as evidenced by the designation of Atlantic City and Brigantine as overburdened communities (“OBC”) protected by New Jersey’s Environmental Justice Law and Federal Environmental Justice.¹¹ At a federal fact finding hearing on offshore wind held this week on August 13, 2024, Congressman Jeff Van Drew emphasized the health impacts to residents from the C&C and O&M phases of the Project.¹²

Impacts on Asthma: New Jersey law must be considered according to and along with the EPA’s own regulations. Residents in the overburdened communities (NJ law) and EJ communities (federal designation) of Atlantic City and neighboring Brigantine are already burdened with asthma.¹³ The construction and operation debris will disrupt their breathing and the quality of life for residents in these areas. EPA’s EJScreen analysis on pp. 61-62 of the Fact Sheet is flawed and contradictory. While “Atlantic City was found to be above the 80th percentile for three indices,” importantly, “if the area of interest exceeds the 80th percentile for one or more of the EJ indices, then EPA considers that the permitting action may have a high potential for EJ concerns that need to be addressed.” In fact, Atlantic City’s own Chelsea Condo Association, right in the epicenter of the proposed OSSs in Atlantic City, is shown to have 80-90% Asthma impacts on the EPA’s EJScreen Environmental Justice Mapping Tool, as shown in the screen grab below.¹⁴ There are 16 Air Pollution Sites reporting to EPA within the defined

¹⁰ Fact Sheet at p. 23.

¹¹ See <https://dep.nj.gov/ej/>; “NJ’s EJ Law requires DEP to evaluate the environmental and public health impacts of certain facilities on overburdened communities and issue decisions on those facilities’ permit applications.” Further, “The U.S. Environmental Protection Agency (EPA) defines environmental justice as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”

¹² See <https://youtu.be/axqdSN0M96Q>

¹³ See <https://dep.nj.gov/ej/>; asthma rates for OBCs Atlantic City and Brigantine.

¹⁴ See EPA EJScreen; <https://ejscreen.epa.gov/mapper/index.html>

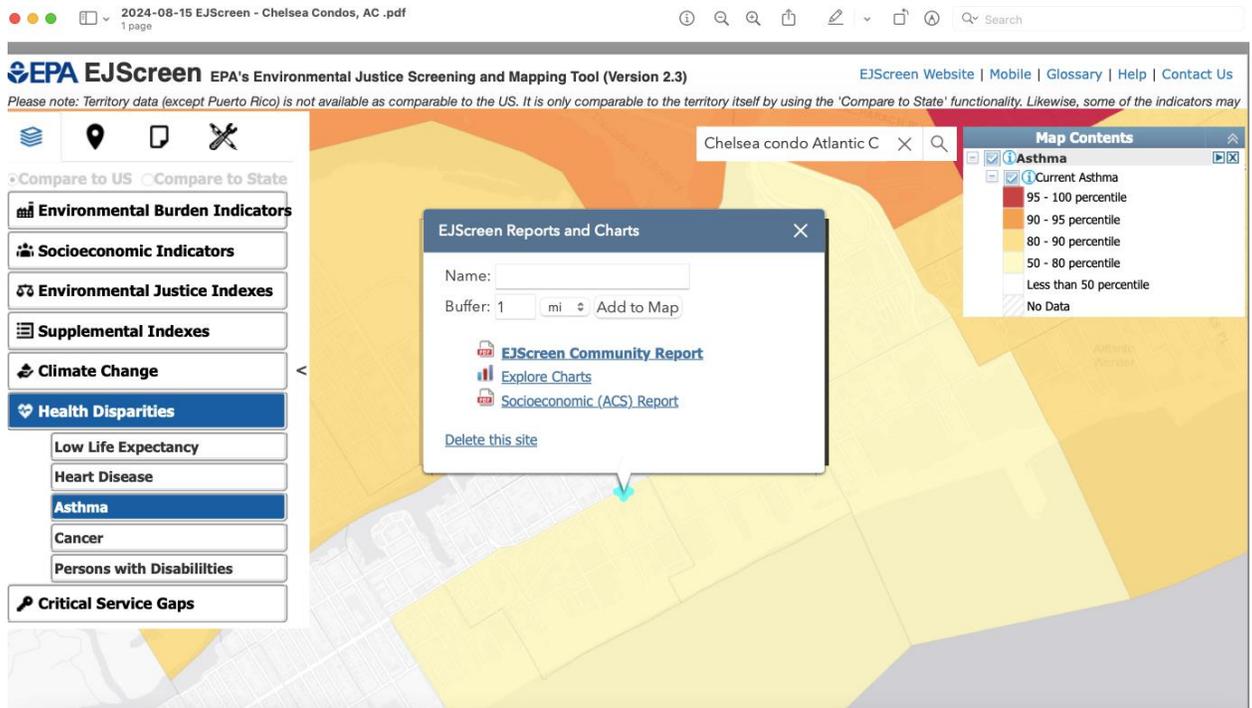
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area, an overwhelming number of polluted areas - not to mention the 6 Brownfields, 1 Toxic Release Inventory and 12 Water Discharges. It should be noted there are also 5 Schools and 1 Hospital that also stand to be impacted by the C&C and O&M within the defined area. The whole point of EJ mapping is to make sure that overburdened communities such as Atlantic City do not suffer disproportionate impacts due to their socioeconomic and impacted health status.

Blockgroup ID:	340010001002
State:	NJ
Asthma among Adults percentile:	85 %ile
Asthma Prevalance:	11.7



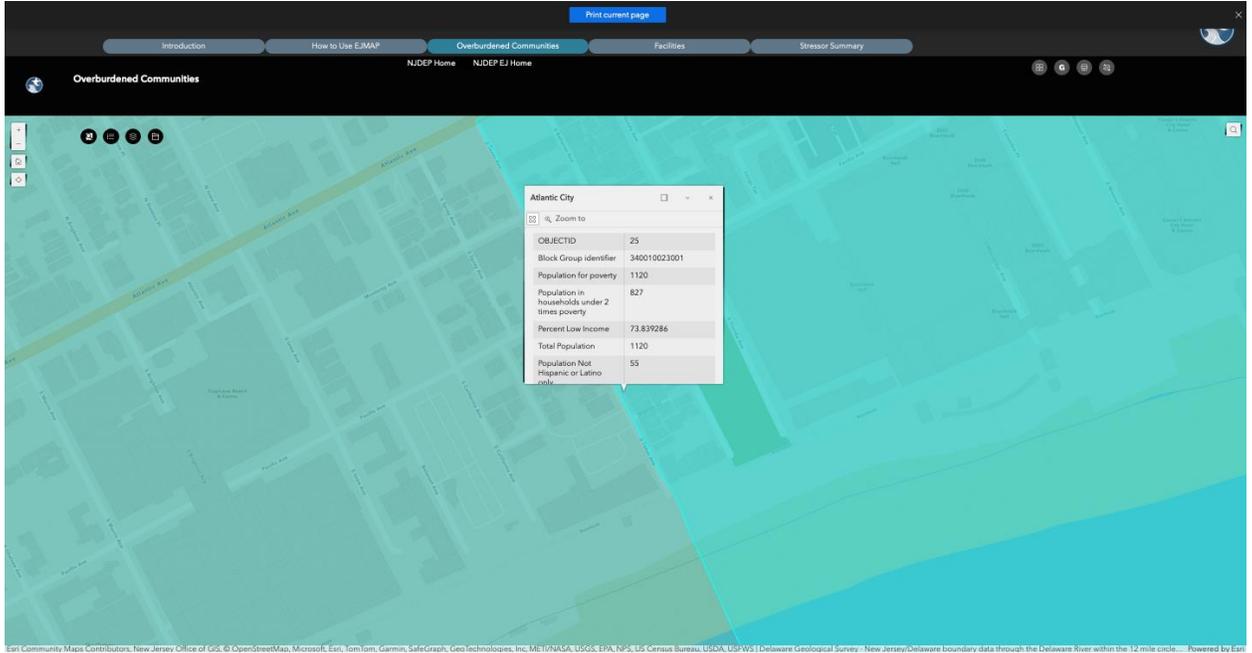
The Chelsea neighborhood may also be found on New Jersey's overburdened communities EJ map, below.¹⁵

¹⁵ [https://experience.arcgis.com/experience/548632a2351b41b8a0443cfc3a9f4ef6/page/Overburdened-Communities/?print_preview=true&utm_medium=email&utm_source=govdelivery#data_s=id%3AdataSource_4-Environmental Justice EJ Law Combined Stressor Summary 5832~dataSource_1-Overburdened Communities under the New Jersey Environmental Justice Law 2022 9716%3A25](https://experience.arcgis.com/experience/548632a2351b41b8a0443cfc3a9f4ef6/page/Overburdened-Communities/?print_preview=true&utm_medium=email&utm_source=govdelivery#data_s=id%3AdataSource_4-Environmental%20Justice%20EJ%20Law%20Combined%20Stressor%20Summary%205832~dataSource_1-Overburdened%20Communities%20under%20the%20New%20Jersey%20Environmental%20Justice%20Law%202022%209716%3A25)

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Please take note that Brigantine is 4.5 statute miles and downwind from Atlantic City. Similarly, Brigantine has its own OBC.

It is unacceptable that we continue to bear these negative impacts due to the Atlantic Shores wind project.

Unknown nature of the vessels being used: “Atlantic Shores states that **they have not yet selected the specific vessels that will carry out the offshore construction activities.** Therefore, for the purposes of this OCS application, Atlantic Shores provided **representative vessel types rather than specific vessels**, and vessel specifications were based on typical ranges for each type of vessel. Because the number of vessels and the number of vessel trips depend on the specific vessels used, **estimates** were generated using sample vessels and preliminary project plans. Atlantic Shores proposes to use various marine vessels, which have onboard marine engines¹⁶ and construction equipment, for the following purposes: (1) for the C&C phase to construct the above- described offshore project components; and (2) for the O&M phase to

¹⁶ Fact Sheet fn. 9: “40 C.F.R. § 1042.901 defines a “marine engine” as “a nonroad engine that is installed or intended to be installed on a marine vessel. This includes a portable auxiliary marine engine only if its fueling, cooling, or exhaust system is an integral part of the vessel. A fueling system is considered integral to the vessel only if one or more essential elements are permanently affixed to the vessel. There are two kinds of marine engines: (1) Propulsion marine engine means a marine engine that moves a vessel through the water or directs the vessel's movement. (2) Auxiliary marine engine means a marine engine not used for propulsion.”

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maintain and repair the offshore project components.”¹⁷ (Emphasis added). Should additional vessels be required, “The draft permit specifies that the permit must be amended to include those new OCS sources. This would include additional marine vessels that anchor to the seabed that are not already specified in the permit, or any marine vessels that would attach to WTGs, OSSs, or to other marine vessels that are OCS sources (in which case the ‘stationary source aspects’ of these vessels (e.g., non-propulsion marine engines) would constitute the emission sources and will be regulated under 40 C.F.R. Part 55).”¹⁸ Further, according to EPA in the Fact Sheet at p. 38, Atlantic Shores takes no responsibility for the air polluting emissions from marine vessels that it is procuring. “Atlantic Shores explained that it would be extremely costly to replace, retrofit, or upgrade leased vessels in order to use add-on pollution controls or implement inherently lower-emitting practices or design.” That is an egregious dereliction of duty by both Vendor/Atlantic Shores and Regulator/EPA. Atlantic Shores must be held responsible for its machinery, or EPA should find another Vendor.

Unknown contracts for the vessels: From the Fact Sheet, **the types of vessels and thus emissions are only estimates, with reasonable potential for more air pollution than publicly noticed.** “According to Atlantic Shores, most or all C&C and O&M **contracts will not be finalized** until after the project reaches financial closure, which will not occur until after all permits, including the OCS air permit, are issued. Thus, since the specific marine vessels have not yet been contracted and remained unknown at the time of this OCS application, the application was based on marine vessels and marine engines that are **representative** of the types, configurations, and sizes that are **anticipated to be used** during C&C and O&M.”¹⁹ (Emphasis added).

Speculative marine vessel types and speculative marine engines: Representative “marine vessel **types** used for C&C and O&M and their marine engines can be found in the application and the draft permit.

There will also be marine engines that will be located onboard marine vessels and used to power construction equipment located onboard marine vessels during C&C or to provide power during commissioning to each of the WTGs and OSSs. Atlantic Shores **anticipates** that all of these engines will be Category 2 marine engines.”²⁰ (Emphasis added).

This is all too uncertain. EPA needs to do its job and make its applicants complete their applications in full, without omissions, before a Permit application is submitted to the Public for

¹⁷ EPA Permit Application, Atlantic Shores Offshore Wind Project 1, LLC (the “Fact Sheet”) at 8.
https://www.epa.gov/system/files/documents/2024-07/atlantic-shores-ocs-fact-sheet-july-11-2024_0.pdf

¹⁸ *Id.* at 22.

¹⁹ *Id.* at 9.

²⁰ *Id.* at 13.

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review. EPA must not promote an incomplete application, when potential for toxic greenhouse emissions are certain from EPA's own published findings.

As a result, it is more likely than not that Atlantic Shores being favored by the EPA, the process is opaque and the Public is prejudiced against disclosure resulting in this arbitrary and capricious public notice and permit process.

Request for Comprehensive Review: I urge the EPA to conduct a thorough and comprehensive review of the proposed wind turbines' impact on aviation safety and community welfare. It is crucial that all potential risks are meticulously assessed, and that the safety, health, air quality and well-being of the community and local residents are prioritized.

The EPA's Public Notice contemplates no reports except for once a year to assess the impact of the proposed wind turbine project by Atlantic Shores on air emissions. Considering the grotesque potential for particulate matter and dangerous SF6 emissions by the lubricants involved in the construction and operation of the turbines, why aren't more reports required by Atlantic Shores? There is no contract, so any "promise" by Atlantic Shores rings hollow.²¹

The Public Notice, in pertinent part on pp. 1-2, describes the air pollutants and emissions effects of the proposed Project as follows:

“FINDINGS:

The draft OCS air permit regulates the offshore emission of air pollutants from the construction and operation of the Atlantic Shores Project on the OCS. The emissions result from the combustion of ultra- low sulfur diesel fuel in the marine engines onboard the majority of marine vessels that will be used to construct and to operate and maintain the project, and from the combustion of low sulfur diesel marine gas oil from a few specific marine vessels that may be unable to burn ultra-low sulfur diesel fuel. The project will also use portable diesel engines temporarily located on the wind turbine generators and offshore substations during construction. The majority of these portable engines will become permanent diesel engines that will be located on each offshore substation and used occasionally during the project's operation for regular testing and in case of the need for emergency power if the connection to the grid is lost. Both the portable and permanent diesel engines will use ultra-low sulfur diesel fuel. A very small amount of air pollutants, in the form of fugitive emissions, will come from ultra-low sulfur diesel fuel storage tanks, and painting and cleaning conducted for maintenance purposes. A small amount of sulfur hexafluoride emissions will also result from switchgears in the wind turbine generators and offshore substations,

²¹ Draft Permit at 54.

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comprised of electrical equipment insulated with sulfur hexafluoride (a greenhouse gas). The air pollutants addressed by the draft permit include nitrogen oxides, carbon dioxide, volatile organic compounds, total suspended particles, particulate matter, particulate matter with an aerodynamic diameter less than or equal to 10 microns, particulate matter with an aerodynamic diameter less than or equal to 2.5 microns, sulfur dioxide, and greenhouse gases.

An OCS air permit for OCS sources located within 25 miles of a state's seaward boundary, such as the Atlantic Shores Project, includes federal air requirements under the Clean Air Act, as well as state and local air requirements that are applicable onshore in the "closest onshore area," which in this case is the State of New Jersey. Based on its potential to emit air pollutants, the Atlantic Shores Project is subject to the CAA's Prevention of Significant Deterioration ("PSD") and Nonattainment New Source Review requirements, federal standards that apply to diesel engines, and several New Jersey State air regulations. A detailed description of the air requirements that apply to the Atlantic Shores Project is included in the Fact Sheet which is available on the EPA's website as detailed below.

Air Quality Impacts:

Air quality analysis showed that the impacts on air quality from the construction and operation of the Atlantic Shores Project will not cause or contribute to a violation of applicable National Ambient Air Quality Standards ("NAAQS") or PSD increments. The NAAQS are health-based standards that the EPA sets to protect public health and welfare with an adequate margin of safety. The PSD increments are standards designed to ensure that the air quality in an area that meets the NAAQS does not significantly deteriorate from baseline levels. In addition, an Air Quality Related Values ("AQRV") analysis, including a visibility analysis, was conducted to address the project impacts on the nearby Class I area, as required by the PSD regulations.²²

The Public Notice and Project documents, including Fact Sheet and Draft Permit, state that EPA must consider New Jersey law. Under the construction and maintenance of the Projects as described in the Public Notice and Fact Sheet, there are significant adverse air polluting and other horrible environmental effects, with the real possibility of serious violations. As such, the facilities described under the Public Notice and Project documents will act as major sources of air pollution and other emissions that run afoul of New Jersey law, in so many ways. For example:

²² Public Notice at 1-2.

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The Project neither avoids disproportionate impacts on the New Jersey state protected overburdened communities (“OBCs”) of Atlantic City and neighboring Brigantine²³, nor does it serve a compelling public interest, when its known health and pollution effects are too high and others need to be further studied. In effect, the environment and its population will be irreparably harmed to build and service such a Project.

Similarly, the Project’s own documents provided by EPA discuss Environmental Justice mandates, which will be upset by the construction and operations phases causing certain detrimental air emission effects to Atlantic City’s and neighboring Brigantine’s residents, according to the EPA’s own calculations.

The Project’s own documents from the EPA further reference a number of reasonably foreseeable and troubling sources of air emissions, including in further detail:

1. **SF6:**²⁴ I echo the concerns voiced by Defend Brigantine Beach, Inc. and Downbeach (nka Defend Our Oceans NJ). Have the residents of Atlantic City been informed of the use of these toxic greenhouse emitting chemicals in this project? “According to BOEM documents, the following chemicals will be used by the Atlantic Shores Project.... Have the residents living in close proximity [] been informed of the use of SF6, one of the most potent and persistent greenhouse gas known to man? The U.S Environmental Protection Agency reported, ‘SF6 is the most potent greenhouse gas known. It is 23,500 times more effective at trapping infrared radiation than an equivalent amount of CO2 and stays in the atmosphere for 3,200 years.’ The agency also notes that a relatively small amount can ‘have a significant impact on global climate change’ and that leaks can occur during ‘installation, maintenance and servicing.’ Employees must evacuate the work area during leak events. The question is how many such leaks go unreported.”²⁵ Clean Ocean Action similarly voiced concerns about SF6 in connection with Atlantic City at the EPA’s public hearing held in connection with the Project on August 12, 2024.
2. In addition, the proposed industrial offshore wind turbine power plant development infrastructure OSSs will have a significant negative impact on the existing

²³ Environmental Justice in New Jersey: “Historically, New Jersey’s low-income communities and communities of color historically have been subjected to a disproportionately high number of environmental and public health stressors—including mobile sources of pollution, and numerous industrial, commercial, and governmental stationary sources of pollution. Further compounding this inequity, New Jersey’s overburdened communities (OBCs) often lack important environmental benefits, such as quality green and open spaces, sufficient tree canopy, or adequate storm water management. “
https://experience.arcgis.com/experience/548632a2351b41b8a0443cfc3a9f4ef6?utm_medium=email&utm_source=govdelivery.

²⁴ BOEM, Responses to Comments on the Draft Environmental Impact Statement, at N-737 (“Section 3.4.1, *Air Quality*, includes information on potential air quality... assess[ing] the Project’s potential impacts from sulfur hexafluoride (SF6).”

²⁵ See <https://defendbrigantinebeach.org/get-informed/>.

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and **future residential and commercial use of the adjacent properties**. The proposed industrial power plants will produce unpleasant air particles and emissions, by the EPA's own documents. These factors have a substantial negative impact on adjacent property values.²⁶

3. Demolition work during the construction phase ("C&C") will certainly have air polluting effects, according to the Project's own documents, and will require additional impact analyses according to the Fact Sheet on pp. 59-61.

4. The drilling and land disruption could potentially cause problems with the old buildings and high rises that are not structurally sound in Atlantic City.

5. There will be effects of significant air pollution from offshore vessels. The Project materials clearly show means of air pollution by offshore activities.

6. Incredulously, the Fact Sheet on p. 36, discusses Atlantic Shores **eliminating** cap and trade to mitigate the air polluting effects, for application expediency. "The application also eliminated carbon capture and storage, a GHG control option involving capturing and storing CO2 emissions contained in engine exhaust, as technically infeasible for engines located onboard marine vessels." The Project is already incredibly polluting, yet there is no description of cap and trade for the pollutants located in the OSSs. Notwithstanding that it takes 25 to 37 years to clear emissions,²⁷ anywhere from the length of the project itself to 25% longer than its duration; this Project is not green, but greenwashing the carbon emissions and greenhouse gasses that will result from C&C and O&M of the wind turbine's renewable energy. Shame on Atlantic Shores and EPA.

7. Does the PIC plant burn coal? Or gas? Regardless, the supposed clean energy effects of the turbines will be lost as the plant will fire up every time the wind turbines are down.²⁸ Further, the Fact Sheet buries this in a footnote on p. 38: "Note that the application has described the non-marine engines being used during O&M for

²⁶ See "Offshore Wind Energy Tourism Impacts For Brigantine and Atlantic County;" <https://defendbrigantinebeach.org/get-informed/>.

²⁷ See Song, "Cap and Trade Is Supposed to Solve Climate Change, but Oil and Gas Company Emissions Are Up," ProPublica, November 15, 2019; <https://www.propublica.org/article/cap-and-trade-is-supposed-to-solve-climate-change-but-oil-and-gas-company-emissions-are-up>.

²⁸ See Fact Sheet at 13: "Types of non-marine engines that will be emission sources of the project include:

- i. Portable diesel generator engines used during C&C that will be temporarily located on the OSS platforms to provide power for (1) construction equipment, lighting, and other tasks; and (2) to pull inter-array or submarine export cables during commissioning. During the O&M phase, these engines will remain on the OSS platforms as permanent generators, which will be used intermittently, such as to provide power for storm protection in the event of a longer-term grid outage and for testing and maintenance purposes, for no more than 500 hours per year for each engine.
- ii. A portable diesel generator engine that will be temporarily located on the WTGs platforms and used to provide power for commissioning at individual WTGs during C&C. This engine will not remain in place during O&M.

All non-marine engines will be CIICE and will use ULSD as fuel. General details on the non-marine engines can be found in the application and the draft permit."

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emergencies, because the applicant intends to use them only in instances such as for **storm protection** when electrical grid power is lost. However, these non-marine engines used during O&M will not qualify as emergency engines as defined in NSPS IIII.”

(Emphasis added). The vagueness of Atlantic Shores’ machinery descriptions as provided in the Public Notice process is laughable, it is so lacking in specificity and there is little detail to aid the Public in trying to evaluate air pollutant potential. Certainly, it is conceivable there will be other times than only “storms” when the turbines are down.

8. The conversion plant will plug into the Grid, but with emissions.²⁹

As a New Jersey homeowner, stakeholder, and concerned citizen, I am writing to respectfully request that the EPA also consider BOEM’s other wind turbine leases in the vicinity of this Project. For example, there is a New York Bight Draft Programmatic Environmental Impact Statement (“PEIS”) for the proposed project comprising six NY Bight lease areas (“the Project”) offshore New Jersey and New York.

In addition, I am writing to record my complete disapproval of the Project, including lack of adequate notice in the PEIS process resulting in loss of due process for the stakeholders and affected environmental justice communities, lack of adequate mitigation analysis, failure to analyze “focused, regional cumulative effects”³⁰ and other violations of NEPA, and respectfully request that EPA rule that the Atlantic Shores projects should be halted in their entirety.

To summarize, this Project should be denied for any number of reasons:

1. Part 55 Air Quality Standard(s) are Exceeded, for Atlantic Shores wind turbines in Brigantine.³¹
2. Not only do this Project’s Atlantic Shores wind turbines reasonably have the potential to exceed EPA emission standards but the cumulative effects of this wind farm must be taken into context with other wind farms: notably the NY Bight project.³²
3. We urge EPA to heed its mandate of fostering health and safety and the national importance of preserving pristine air quality for all, regardless of socioeconomic situation, e.g.: “The mission of EPA is to protect human health and the environment. EPA works to ensure that: Americans have clean air, land and water. National efforts to reduce environmental risks are based on the best available scientific information; Federal laws protecting human health and the environment are administered and enforced fairly, effectively and as Congress intended[.]”³³

²⁹ See Fact Sheet at 7; Draft Permit at 18.

³⁰ See BOEM PEIS, Docket No. BOEM-2024-0001 (“PEIS”), at ES-4.

³¹ See Fact Sheet at 24.

³² See <https://cleanoceanaction.org/issues-campaigns/energy/wind>; Map of Offshore wind energy projects and lease areas in the North Atlantic (Credit: NREL).

³³ See U.S. Environmental Protection Agency, “About EPA Our Mission and What We Do,” <https://www.epa.gov/aboutepa/our-mission-and-what-we-do>.

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4. The Project's wind turbines are already determined to be air polluting by EPA. This unproven technology comprising the tallest turbines in the world will interfere with air quality according to the EPA's own documents.
5. The Atlantic Shores EPA Application is misleading for the following reasons:
6. Atlantic Shores states in its Application that turbines are not air polluting but that is disingenuous: the BOEM application clearly shows they are.³⁴
7. The Application is misleading because Atlantic Shores states that there are no contracts for vessels and no work schedule.
8. The EPA, and by extension, BOEM, need to take into consideration the cumulative effects of not only the Project's Atlantic Shores wind turbines, but also the wind turbines of the nearby Ocean Wind lease area, which is eligible to go back on the market for another lease, in addition to the NY Bight projects, as well as consider other BOEM leases in the surrounding area. Brigantine, less than five miles from Atlantic City, unfortunately straddles all these projects, and **there is a total of more than 1,800 wind turbines now projected for the area.**³⁵
9. That EPA is allowing Atlantic Shores to proceed with speculative plans, and BOEM is hiding the effects of all these wind turbines through the use of a PEIS, not fully studying the effects of the wind turbines, also needs to be taken into consideration. The expediency and cutting corners of both agencies show a failure of good government and demonstrates lack of good faith as does the incomplete project applications submitted by Atlantic Shores. The EPA must act as a governmental check and balance.³⁶

³⁴ Atlantic Shores DEIS, Sec. 3.6.4-26.

³⁵ See BOEM Docket Number: BOEM-2024-0001, New York Bight Draft Programmatic Environmental Impact Statement, January 2024 at D2-3, D2-4 ("BOEM PEIS") (number of New Jersey turbines only, now totals 1,816 – more than one and a half times the amount than proposed barely twelve months ago). Over 1,800 skyscraper-size wind turbines by BOEM's own count, with blades the size of a football field in length - taking together "as many as three offshore wind projects (Atlantic Shores North, Ocean Wind 1 and Ocean Wind 2) that could be under construction simultaneously in the New Jersey lease areas," and adding to these the additional six NY Bight projects – to give full measure in plain terms of the full impact my fellow Brigantine residents can fully appreciate and that leave us in despair.

³⁶ BOEM promoted a 1,000 page PEIS, including a highly technical Appendix, for such a complex Project comprising six lease areas in the NY Bight, and the cumulative effects on the other regional BOEM lease areas.

Indeed, the PEIS process by BOEM gives short shrift to the mitigation and analysis process of the offshore coasts and cumulative impacts by only providing summary estimates of impacts and providing no plans³⁶ for any of the six NY Bight projects, in opposition to its own acknowledgement of the cumulative impacts that this project will have combined with BOEM's other lease areas.

Appendix C of the PEIS provides for how the Project will be used; however, the qualified impact does not act the way the Project was designed. The PEIS is faster for the federal government but at the same time, its vagueness is giving the wind industry a free pass at the expense of the local environment, New Jersey's local economies, the health and welfare of its human, marine, avian and other coastal inhabitants and ocean floor - all of which will be exposed to and have their ecosystems severely disrupted because of BOEM's inefficiencies in the PEIS process. Further, the Atlantic City area disproportionately will bear the effects of the six NY Bight lease areas' cumulative effects on an already overburdened population, as will the OBCs of Atlantic City and Brigantine during the C&C and O&M phases of the Project.

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That there would be such dangerous environmental and health effects because of installation and operation of the Project as proposed - adding cumulative effects to the other BOEM leases starting only 9 miles offshore - shows that these offshore wind turbine projects' air emissions and air quality effects are not fully mitigated and not discussed by neither EPA in the draft Permit nor BOEM in the PEIS.

In conclusion, as a stakeholder in this Project, I join numerous others including local entities such as my volunteer organization, Defend Brigantine Beach, Inc. and Downbeach (nka Defend Our Oceans NJ) in opposition to the proposed Atlantic Shores wind project that poses severe risks to air quality, safety and community welfare that cannot be mitigated by the current measures proposed.

Further, I respectfully request that EPA consider the lack of adequate notice posed by the incomplete Project applications submitted by Atlantic Shores, resulting in lack of transparency,

The Council on Environmental Quality ("CEQ") and NEPA define cumulative impacts as "Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

BOEM has acknowledged the cumulative effects of their offshore wind program going back to 2007 with their PEIS for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf. With the PEIS for the NY Bight Project, BOEM intends to provide a "baseline analysis that helps to satisfy the requirements of NEPA for offshore renewable energy leasing," because "many wind energy projects will have similar environmental impacts." The PEIS does not satisfy NEPA's cumulative impacts requirement because BOEM has significantly altered and expanded their offshore wind program not only over more than 17 years but even in the past twelve months, making the PEIS's analysis of cumulative environmental impacts inaccurate and outdated and requiring a supplemental or new Environmental Impact Statement analyzing the current program as it now exists."

These are legitimate concerns that many longstanding and respected environmental groups have expressed. For example, at the last virtual public hearing for the PEIS held on February 13, 2024, the Nature Conservancy expressed concern about the lack of plans, among other things. This is a global environmental conservation group in existence for over 73 years. So too did Clean Ocean Action publicly comment, a 40-year old local New Jersey Shore organization advocating for the environment.

Why the rush? "Reduce Redundancies" and "Timely" are the hallmarks of the PEIS process to make it efficient and streamlined for the government but not for the environment or the public. It comes off as political expediency and industrializing the oceans rather than saving the environment from harm. The truth is the clock is ticking for BOEM from the presumptive time limit of two years for completing the EIS in accordance with the CEQ implementing regulations effective May 20, 2022. Rather than reasoned analysis, BOEM's failure to analyze the cumulative environmental impacts of its offshore wind program is arbitrary and capricious and violates NEPA.

Mitigation of the cumulative effects of the projects situated behind overlapping projects are not even shown in the PEIS, in violation of NEPA. Appendix D shows old studies based on 2019, five years ago, not considering the cumulative impacts of the additional BOEM lease sites, thus nullifying mitigation measures. One can only imagine the cumulative emissions effects from thousands of vessel traffic, then layering the six lease projects in the NY Bight plus the additional BOEM lease areas all being worked on at once. The effects of which will result in impacted air quality that BOEM estimated before the cumulative impacts of the NY Bight leases – likely only a starting number, with additional ill effects on humans as well.

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loss of due process, inadequate mitigation in the PEIS as written, and other violations of NEPA, 40 C.F.R. Part 55 and EPA's own policies and procedures, and take all action necessary to prevent any adverse outcomes. A No Action Decision is requested. All Rights Reserved.

Very truly yours,

Brooks W Garrison, RA

cc: Karen J. Baker, Chief, Office of Renewable Energy Programs, BOEM
U.S. Congressman Jefferson H. Van Drew, R-NJ (Dist. 2)
Assemblywoman Claire S. Swift, NJ (Dist. 2- Atlantic)
Mayor Vincent J. Sera, City of Brigantine, NJ
Dr. Suzanne Moore, Defend Brigantine Beach, Inc. and Downbeach (nka Defend Our Oceans NJ)