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LUIS A. QUINTANA Vice Chairman

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July 31, 2025

VIA E-MAIL

Ms. Jillian Alexander
Environmental Justice Project Coordinator
New Jersey Department of Environmental Protection
Office of the Commissioner
Office of Environmental Justice
401 East State Street, 7th Floor East Wing
Mail Code: 402
Trenton, New Jersey 08626

Re: Passaic Valley Sewerage Commission

Standby Power Generation Facility Permit Activity Number: BOP210002

Semi-Annual Environmental Justice Compliance Report Reporting Period: January 1, 2025 through June 30, 2025

Dear Ms. Alexander:

In accordance with the Passaic Valley Sewerage Commission's Air Pollution Control Permit Significant Modification (Permit Activity Number BOP210002, Program Interest Number 07349), enclosed please find PVSC's Semi-Annual Environmental Justice Compliance Report for the reporting period of January 1, 2025, through June 30, 2025.

The report will also be furnished to the Ironbound Community Corporation and posted to PVSC's website.

GREGORY A. TRAMONTOZZI Executive Director

ALBERT LUKIN Clerk

Ms. Jillian Alexander New Jersey Department of Environmental Protection July 31, 2025 Page 2

Should you have any questions, or require additional information, please call me at (973) 817-5980. Thank you for your consideration of this matter.

Sincerely,

PASSAIC VALLEY SEWERAGE COMMISSION

Thomas A. Laustsen PE, BCEE Chief Operating Officer

reaks

c: Danny Wong, NJDEP
 Hazel Applewhite, Chief Executive Officer, ICC
 Gregory Tramontozzi, Esq., Executive Director, PVSC
 Craig Spencer, Plant Superintendent, PVSC
 Patricia Lopes, Dir. of Process Control Engineering and Regulatory Compliance, PVSC
 John Bolcar, PE, Chief Engineer, PVSC
 Michael D. Witt, Esq., General Counsel, PVSC

Semi-Annual Environmental Justice Compliance Report PVSC Standby Power Generation Facility (SPGF) Permit Activity Number: BOP210002 Program Interest Number: 07349

GR2 EJ Special Conditions

Reporting Period: January 1, 2025, through June 30, 2025

- **1.** <u>Ref. No. 1 (Special Condition 1):</u> PVSC is authorized to operate the combustion gas turbine (CTGs) under the following conditions:
 - a. Up to forty-eight (48) hours in advance of a storm event with notice to the Department via 1-877-WARN DEP, the Ironbound Community Corporation and through a public notice on PVSC's website.
 - i. "Storm event" is defined as: storms determined by the New Jersey Office of Emergency Management as having the capability of disrupting power service to the facility.
 - ii. Maximum annual hours: 960 total (2 units x 10 storm events).
 - b. Emergency Operation where a power outage has occurred because of an emergency; or a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu with notice to the Department via 1-877-WARN DEP, the Ironbound Community Corporation and through a public notice on PVSC's website.
 - i. An emergency is defined as any situation that arises from sudden and reasonably unforeseeable events beyond the control of an owner or operator of a facility, such as an unforeseen system capacity shortage caused by an act of God, that requires immediate corrective action to prevent system collapse or to restore normal operations at the facility. [N.J.S.A. 13:1D-160(d)]

Activities Undertaken:

- Hours of SPGF operation for storm events during reporting period: 0 hours.
- Hours of SPGF operation for non-storm emergency events during reporting period: 0 hours.
- Hours of SPGF operation for PJM voltage reduction request during reporting period: 0 hours.

Total hours of emergency operation during reporting period: 0 hours.

- **2. Ref. No. 2 (Special Condition 1, continued):** PVSC is authorized to operate the combustion gas turbine (CTGs) under the following conditions:
 - c. Once per month for necessary testing and maintenance upon 48 hours' notice to the

Department via 1-877-W ARN DEP, the Ironbound Community Corporation and through a public notice on PVSC's website.

- i. Testing and maintenance operations shall be conducted each month but are not authorized for a unit in months where that unit has already operated.
- ii. Maximum annual hours: 288 (96 per unit)
- iii. Maximum monthly hours: 24 (total)
- iv. Maximum daily hours: 8 (per unit)
- d. Maximum total annual hours of CTG operation for storm event preparation and testing and maintenance are not to exceed 1,248 hours.
- 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. [N.J.S.A. 13:1D-160(d)]

Activities Undertaken:

- Dates of maintenance operations: none.
- Monthly hours of maintenance operation during reporting period: 0 hours.
- Daily hours of maintenance operation per unit during reporting period: 0 hours.

Total hours of maintenance operation for the calendar year to date: 0 hours

- 3. Total SPGF run hours to date for calendar year: 0 hours. (Emergency + Maintenance)
- **4. Ref No. 3 (Special Condition 2):** Decommission Operations and Maintenance (O&M) Building Boilers #2 and #3 listed as U11 in PVSC's Title V Air Pollution Control Operating Permit by December 31, 2027, unless a written request is submitted to and approved, in writing, by the Department. PVSC shall provide a proof of decommissioning to the Department, the Ironbound Community Corporation and through a public notice on PVSC's website. If PVSC chooses to replace the equipment, the new equipment must be powered by a renewable energy source. [N.J.S.A. 13:1D-160(d)]

Activities Undertaken:

 PVSC has retained a consultant (Hazen & Sawyer) to provide design services both preconstruction and during construction. PVSC held a kickoff meeting with the consultant on June 9, 2025.

- Upcoming reporting period activities include the consultant preparing and submitting a draft preliminary design report to address the decommissioning of the boilers. PVSC expects the draft report on or before August 31, 2025.
- **5.** Ref. No. 4 (Special Condition 3): Decommission the Head End Emergency Generator (600-kilowatt (kW) diesel engine generator) listed as U102 OS1 "CAT 600" in PVSC's Title V Permit within 120 days of completing commissioning of the SPGF, unless a written request is submitted to and approved, in writing, by the Department. PVSC shall provide a proof of decommissioning to the Department, the Ironbound Community Corporation and through a public notice on PVSC's website. If PVSC chooses to replace the equipment, the new equipment must be powered by a renewable energy source. [N.J.S.A. 13:1D-160(d)]

Activities Undertaken:

- Procurement of turbine generators for SPGF.
- Preparation of design documents for the construction of the SPGF.
- Award on June 12, 2025, of a contract to Skanska/Railroad SPGF JV for the construction of the SPGF.
- Upcoming reporting period activities include holding a pre-construction meeting the contractor and a review of preliminary submittals regarding from the contractor. Preliminary submittals are expected to start being submitted on or before August 31, 2025.
- **6. Ref. No. 5** (**Special Condition 4**): Decommission two Oxygen Production Boilers designated as U5 Oxygen Production Boilers 1 & 2 in the Title V Permit by December 31, 2027, unless a written request to extend completion of the Oxygen Production Facility Replacement Project is submitted to and approved in writing by the Department. PVSC shall provide a proof of decommissioning to the Department, the Ironbound Community Corporation and through a public notice on PVSC's website. If PVSC chooses to replace the equipment, the new equipment must be powered by a renewable energy source. [N.J.S.A. 13:1D-160(d)]

Activities Undertaken:

- On July 15, 2021, PVSC retained a consultant (TYLin) for the preparation of the design documents to upgrade the Oxygen Production Facility.
- On January 6, 2025, PVSC advertised for the procurement of equipment for the Oxygen Production Facility. On April 9, 2025, PVSC received one (1) bid. The bid was found to be unresponsive and rejected by vote of the Commissioners on June 12, 2025.
- Upcoming reporting period activities include rebidding for procurement of the equipment necessary to upgrade the Oxygen Production Facility.

7. Ref. No. 6 (Special Condition 5): Decommission two Grit and Screening Boilers designated as U7 Grit and Screening Boilers 1 & 2 in the Title V Permit by December 31, 2025, unless a written request is submitted to and approved in writing, by the Department. PVSC shall provide a proof of decommissioning to the Department, the Ironbound Community Corporation and through a public notice on PVSC's website. If PVSC chooses to replace the equipment, the new equipment must be powered by a renewable energy source. [N.J.S.A. 13:1D-160(d)]

Activities Undertaken:

- On July 17, 2014, PVSC retained a consultant (TYLin) to prepare the design documents to upgrade the Head End Facility and Substation M, which includes the elimination of the boilers.
- On November 23, 2020, PVSC awarded a contract to Railroad Construction Company for the construction of the upgrades.
- On January 4, 2021, construction commenced. Construction of the facility is ongoing and is anticipated to be substantially complete in November 2026.
- The referenced boilers have been decommissioned and disconnected from all utilities.
- Upcoming reporting period activities include providing documentation to NJDEP and Ironbound Community Corporation that the boilers have been decommissioned.
- 8. Ref. No. 7 (Special Condition 6): Install additional air pollution control equipment to the four Sludge Heat Treatment ("Zimpro") Boilers listed as U20 in the Title V Permit by December 31, 2027, unless a written extension request is submitted to and approved by the Department. PVSC shall apply to the Department 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, unless a written extension request is submitted to and approved, in writing, by the Department. If PVSC chooses to replace any of the four boilers, the new units must be powered by a renewable energy source. [N.J.S.A. 13:1D-160(d)]

Activities Undertaken:

- On June 12, 2025, PVSC retained a consultant (Black & Veatch Corp.) to perform a feasibility study and to provide design, bidding services and design services during construction for the "Zimpro Boiler Emission Control Additions Project."
- Upcoming reporting period activities include holding a kick-off meeting for the design portion for this project and the initiation the preparation of the design documents.
- **9. Ref. No. 8 (Special Condition 7):** Install the maximum feasible and no less than five (5) MW of solar panels at the PVSC Facility by December 31, 2026, unless a written extension request is submitted to and approved by the Department. By or before June 30, 2025, PVSC shall

submit to the Department a feasibility study analyzing the maximum feasible solar capacity and proposing an installation schedule for the Facility. The feasibility study shall be distributed to the Ironbound Community Corporation and through a public notice on PVSC's website. [N.J.S.A. 13:1D-160(d)]

Activities Undertaken:

- On June 30, 2025, PVSC submitted a feasibility study to NJDEP and to the Ironbound Community Corporation entitled, "Passaic Valley Sewerage Commission – Solar Energy and Battery Energy Storage System Feasibility Study," dated June 30, 2025. The study provides a summary solar installation progress to date and identifies proposed locations for five (5) MW of solar and battery energy storage systems. The document was also posted to PVSC's website.
- To date a total of 1.42 MW of solar panels have been installed at the PVSC Facility on various roof tops and floodwalls.
- Over the last several months, the design of 1.27 MW of canopy solar for the final clarifier walkway solar was completed and was submitted to the Department of Community Affairs (DCA) for review and approval. DCA approved the design on July 3, 2025.
- Upcoming reporting period activities include: (1) delivery of structural steel components for the final clarifier walkway solar system, with construction expected to follow; and (2) commencement of design for the installation of 2.50 MW of ground mounted solar and additional floodwall mounted solar.
- **10. Ref. No. 9 (Special Condition 8):** Install the maximum feasible and no less than five (5) MW of battery storage capacity at the PVSC Facility by December 31, 2026, unless a written request is submitted to and approved, in writing, by the Department. By or before Jun 30, 2025, PVSC shall submit to the Department a feasibility study analyzing the maximum feasible battery storage capacity and proposing an installation schedule for the Facility. The feasibility study shall be distributed to the Ironbound Community Corporation and through a public notice on PVSC's website. [N.J.S.A. 13:1D-160(d)]

Activities Undertaken:

 On June 30, 2025, PVSC submitted a feasibility study to NJDEP and to the Ironbound Community Corporation entitled, "Passaic Valley Sewerage Commission – Solar Energy and Battery Energy Storage System Feasibility Study," dated June 30, 2025. The study provides a summary solar installation progress to date and identifies proposed locations for five (5) MW of solar and battery energy storage systems. The document was also posted to PVSC's website.

- PVSC, with its consultant, Advanced Solar Products, is in the process of meeting with potential partners regarding the need to furnish and install 5 MW of battery storage systems.
- In March 2025, Advanced Solar Products assisted PVSC to seek funding under the Fiscal Year 2024 FEMA Building Resilient Infrastructure and Communities (BRIC) grant for a battery energy storage system (BESS). Unfortunately, this program has been cut.
- Upcoming reporting period activities include: (1) continued meetings with Advanced Solar Products determine if the design and construction of the BESS could be performed directly with Advanced Solar Products and its partner(s); and (2) PVSC will meet with PSEG to discuss the interconnection application for BESS.
- 11. Ref. No. 10 (Special Condition 9): PVSC shall initiate the transition of the CTGs from natural gas to green hydrogen or another technically feasible renewable fuel source within 120 days of commissioning the SPGF, unless a written request is submitted to and approved, in writing, by the Department. By and before June 30, 2025, PVSC shall submit to the Department a feasibility study analyzing the transition options and proposing a transition schedule for the Facility. The feasibility study shall be distributed to the Ironbound Community Corporation and through a public notice on PVSC's website. [N.J.S.A. 13:1D-160(d)]

Activities Undertaken:

- On June 30, 2025, PVSC submitted a feasibility study to NJDEP and ICC entitled "Transition to Hydrogen Fueled Combustion Turbines Feasibility Study," dated June 30, 2025, to the NJDEP on June 30, 2025, which identifies four scenarios and concludes that only 5% green hydrogen cofiring during an 8-hour monthly event derived from 5MW of solar power could be confidently implemented within 120 days of commissioning the SPFG.
- Upcoming reporting activities include the continued evaluation of feasibility to transition the turbines to green hydrogen, including the availability of green hydrogen and the feasibility to generate and store green hydrogen onsite.
- 12. Ref. No. 11 (Special Condition 10): PVSC shall submit a semi-annual Environmental Justice Compliance Report (Report) to the Department on January 31 and July 31 of each year. The report shall address each Special Condition and include (a) restatement of the condition, (b) summary of PVSC's efforts to fulfill the condition, (c) a detailed explanation of the compliance activities undertaken during the preceding six-month reporting period, and (d) a description of compliance activities anticipated in the forthcoming six-month reporting period. PVSC shall distribute each Report to the Ironbound Community Corporation and through a public notice on PVSC's website. The semi-annual reporting will be deemed complete once all Special Conditions have been met. [N.J.S.A. 13:1D-160(d)]

Activities Undertaken:

- This semi-annual Environmental Justice Compliance Report, dated July 31, 2025, was submitted to the Department, the Ironbound Community Corporation, and through a public notice on PVSC's website.
- **13.** Ref. No. 12 (Special Condition 11): Failure to comply with any Special Condition shall be deemed an ongoing violation of PVSC's Title V Permit that constitutes grounds for revocation of authority to operate the SPGF. [N.J.S.A. 13:1D-160(d)]

Activities Undertaken:

• All conditions are being addressed as discussed above.