



Pennsylvania
**Department of
Environmental Protection**

June 25, 2026

Trevor L. Orth, Plant Manager
Constellation Energy Generation, LLC
2625 River Road
Middletown, PA 17057

Re: Public Water Supply
Construction Permit No. 2225518
PWS ID No. 7220917
APS ID No. 1153976
Auth ID No. 1564536
Treatment Plant Upgrades
Londonderry Township, Dauphin County

Dear Trevor Orth:

Issuance of the enclosed construction permit is authorized in accordance with the provisions of the laws of the Commonwealth. **Our office should be notified at least 30 days prior to the completion of construction so that an inspection can take place if necessary. The proposed facilities may not be placed into service until you obtain a separate public water system operation permit from the Department.**

The most up-to-date regulations for Public Water Supplies, which we believe are self-explanatory, can be found at the following web address:

<http://www.pacode.com/secure/data/025/chapter109/chap109toc.html>

Please have your authorized representative and supervising engineer complete the enclosed Certificate of Construction/Modification Form and submit it to our office when requesting our inspection. Please make provisions to comply with certification before construction begins.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board) pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800.654.5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at www.ehb.pa.gov or by contacting the Secretary to the Board at 717.787.3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717.787.3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions, please contact Thomas Filip at tfilip@pa.gov or at 717.705.4941.

Sincerely,

Joseph M. Mattucci

Joseph M. Mattucci
Program Manager
Safe Drinking Water Program

Enclosures

cc: Charles A. Kehew, II, P.E., James R. Hoilley & Assoc., Inc.
Debra Musser, Constellation Nuclear (email)
Andrew Spriggle, Constellation Nuclear (email)

Trevor L. Orth, Plant Manager
Constellation Energy Generation, LLC

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bcc: Shawn Cable (pdf)
Thomas Filip (pdf)
Joseph Mattucci (pdf)
David Linton, Harrisburg East District Office (pdf)
OnBase

Charles A. Kehew, II, P.E.
James R. Hoilley & Assoc., Inc.
18 South George Street, Suite 300
York, PA 17401

Debra Musser Constellation Nuclear (Debra.Musser@constellation.com)

Andrew Spriggle, Constellation Nuclear (Andrew.Spriggle@Constellation.com)

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This permit is issued subject to all Department of Environmental Protection Rules and Regulations now in force and the following Special Conditions:

1. Upon completion of construction in accordance with the approved plans and specifications, the permittee shall submit the *Certificate of Construction/Modification* to the Department. Certification shall state that the work was completed in accordance with the approved plans and specifications and shall be signed by the professional engineer or other person responsible for the work. Certification shall include adequate operation and maintenance information for the approved facilities is available, on site, for use by the public water system's personnel.
2. Prior to issuance of an Operation Permit, the facilities shall be properly disinfected in accordance with 25 PA Code, Chapter 109.711 of the Safe Drinking Water regulations and the most recent procedures established by the American Water Works Association (AWWA). The facilities shall be tested for coliform bacteria in accordance with AWWA standards. The samples shall be analyzed by a Department-accredited laboratory. A copy of the satisfactory microbiological test results shall be submitted with the *Certificate of Construction/Modification*.
3. Wells
 - A. The maximum pumping rate from the OSF Well shall not exceed forty (40) gallons per minute (gpm).
 - B. The maximum pumping rate from the Building 48 Well shall not exceed thirty (30) gpm.
4. Iron & manganese treatment (Entry Point Nos. 101 (OSF Well) & 102 (Building 48 Well)):
 - A. The permittee shall collect and analyze samples for iron and manganese concentrations from the raw water at each well at least once every calendar year. The samples shall be analyzed by a Department accredited laboratory for total iron and total manganese concentrations.
 - B. The permittee shall collect and analyze finished water samples for iron and manganese concentrations at each entry point at least quarterly. The samples shall be analyzed by a Department accredited laboratory for total iron and total manganese concentrations.
 - C. The permittee shall notify the Department within one (1) hour following discovery or receipt of any sample result of the finished water which exceeds 0.3 mg/L of manganese.
 - D. The Permittee shall monitor and record the free chlorine at least daily at the sample tap on the filter effluent. The minimum free chlorine residual shall not be less than 0.2 mg/L. If the free chlorine residual falls below 0.2 mg/L, the permittee shall perform an investigation to determine the cause and take appropriate corrective actions. The Permittee shall document the actions in the operator's logbook.
 - E. The manganese dioxide coated media filter tanks are limited to a maximum flow rate of thirty (30) gpm each with a maximum surface loading rate of ten (10) gpm/ft².

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5. Cartridge filter:

The 5-µm cartridge filter shall be replaced by an ANSI/NSF Standard 61 certified cartridge filter.

6. PFAS removal treatment (Entry Point Nos. 101 (OSF Well) & 102 (Building 48 Well)):

- A. Each PFAS Treatment vessel shall be filled with at least 20 ft³ of Calgon Filtrasorb 400 AR+ 12x40 GAC media.
- B. The Permittee shall sample raw water, at each well, for concentrations of any per-and polyfluoroalkyl substances (PFAS) for which there is an established MCL or EPA has a Final Health Advisory Level at least annually. The samples must be analyzed by a laboratory accredited by the Department for PFAS analysis, and the results must be reported to the Department in accordance with the appropriate reporting instructions.
- C. The Permittee shall sample for concentrations of any PFAS for which EPA has a Final Health Advisory Level at least annually at each entry point. The samples must be analyzed by a laboratory accredited by the Department for PFAS analysis, and the results must be reported to the Department in accordance with the appropriate reporting instructions.
- D. The Permittee shall sample for concentrations of any PFAS for which there is an established MCL at least once every quarter at each entry point. The initial sample shall be taken within ten (10) days of issuance of the Operation Permit and startup of the treatment plant. The samples shall be analyzed by a laboratory accredited by the Department for PFAS analysis, and the results must be reported to the Department in accordance with the appropriate reporting instructions. After four consecutive quarters of sampling, the Permittee shall sample as per 25 Pa. Code Chapter 109.301.
- E. The Permittee shall notify the Department within one (1) hour following discovery or receipt of any entry point sample result which exceeds an MCL or an EPA Final Health Advisory Level.
- F. The Permittee shall conduct PFAS performance monitoring for PFOA & PFOS at the **mid-point sample tap** between the lead and polishing treatment vessels at least once every calendar quarter. The samples shall be analyzed by a Department accredited laboratory for PFAS analysis. The samples must be analyzed by a laboratory accredited by the Department for PFAS analysis, and the results must be reported to the Department in accordance with the appropriate reporting instructions.

Break-through is defined as when any PFAS performance sample result exceeds a Department MCL or an EPA Final Health Advisory Level.

The Permittee shall notify the Department within five (5) business days following discovery or receipt of any performance monitoring sample result which exceeds an established MCL or an EPA Final Health Advisory Level.

The Permittee shall change out the media in the lead vessels as soon as practicable. The lead vessels may remain in service until new media is available to change out. When the Permittee is

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ready to initiate media change out, the lead vessels shall be removed from service, and the polishing treatment vessels shall become the lead vessels. The treatment vessels removed from service must then be refilled with new media or replaced with like vessels filled with new media and then reinserted into position as the polishing vessels. The vessels with new media must be placed into service as the polishing vessels within ninety (90) days of discovery of any mid-point breakthrough.

The Permittee shall notify the Department within five (5) business days of completing this work.

If the Permittee cannot place the polishing vessels back into service within ninety (90) days following discovery of a breakthrough sample, the Permittee shall notify the Department within one (1) business day and sample the entry point for concentrations of any PFAS for which there is an established MCL. The Permittee shall continue to sample the entry point for concentrations of any PFAS for which there is an established MCL at least every 30 days until the new polishing vessels are placed into service.

G. Prior to operation of any new Granular Activated Carbon (GAC) Vessel or after any GAC media change out, the Permittee shall:

1. Backwash the GAC vessel per the manufacturer's recommendations.
2. Filter-to-waste the vessel at least one (1) filter bed volume.
3. Sample for pH and arsenic in the feed water and in effluent line of the new or change out GAC vessel after the filter-to-waste is complete. The pH samples shall be analyzed by an appropriately calibrated pH meter following an EPA approved method. The arsenic samples shall be analyzed by a laboratory accredited by the Department for arsenic. The accredited laboratory shall report the sample results to the Department. The vessel shall not be placed back into service until the following requirements are met:
 - a. The effluent arsenic concentration from the vessel is less than 5 µg/L, or
 - b. The effluent arsenic concentration from the vessel is less than 10 µg/L and no greater than 3 µg/L above the feed water sample result, and
 - c. The effluent water pH from the vessel is within one (1) pH unit of the feed water pH.
4. If effluent line sample results do not meet the requirements in section "6.G.3," repeat sections "6.G.1" through "6.G.3" until the requirements in section "6.G.3" are met and the GAC vessel is returned to service.

7. Total Dissolved Solids (Entry Point Nos. 101 (OSF Well) & 102 (Building 48 Well)):

The permittee shall collect and analyze samples for total dissolved solids (TDS) concentrations from the raw water and finished water at each location at least weekly. The samples shall be analyzed by a Department accredited laboratory or by a properly certified operator using an appropriate calibrated field analytical test kit. A non-certified operator may also utilize an appropriate calibrated field analytical test kit, provided the analysis is conducted in accordance with standard operating

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procedures approved by the properly certified operator. These results shall be recorded in the monthly operating report.

8. Lead and Copper Rule:

- A. The Permittee shall conduct follow-up monitoring for lead and copper for two (2) consecutive six-month monitoring periods. The first monitoring period shall begin on January 1 or July 1, whichever follows closest after issuance of a permit to operate. Follow-up monitoring shall be conducted at the same number of sample sites and at the same locations that were used for the initial lead and copper sampling unless extenuating circumstances prevent the use of a particular site. The Permittee shall notify the Harrisburg East District Office at 717.4705.4708 prior to conducting the follow-up monitoring.
- B. The Permittee shall conduct follow-up water quality parameter (pH, alkalinity, and orthophosphate residual) monitoring during each six-month monitoring period until the Department has issued a permit designating water quality parameters for corrosion control treatment.
- C. Upon completion of two (2) consecutive follow-up monitoring periods in which the lead and copper action levels are not exceeded, the Permittee shall submit a completed Form No. 3940-FM-BSDW0003 (Designation of Optimal Water Quality Parameters (WQPs) Request Form) to the Department to request designation of optimal corrosion control treatment performance. This request shall be submitted within thirty (30) days of the end of the second follow-up monitoring period.
- D. Operational/performance samples shall be collected and analyzed at least once per week from each entry point and at least once every 30 days in the distribution system at the water quality parameter monitoring locations for orthophosphate concentration by an appropriate calibrated field analytical test kit. A non-certified operator may also utilize an appropriate calibrated field analytical test kit, provided the analysis is conducted in accordance with standard operating procedures approved by the properly certified operator.

9. GWR 4-log:

- A. The Entry Point 101 (OSF Well) treatment facility shall be operated in accordance with the following conditions to provide 4-log treatment of viruses:
 - 1. The instantaneous maximum flow through the treatment system shall not exceed twelve (12) gpm.
 - 2. The minimum free chlorine residual at the entry point shall not be less than 0.40 mg/L.
 - 3. Continuously monitor and record the free chlorine residual at the entry point while water is served to the public.

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- B. The Entry Point 102 (Building 48 Well) treatment facility shall be operated in accordance with the following conditions to provide 4-log treatment of viruses:
 - 1. The instantaneous maximum flow through the treatment system shall not exceed twelve (12) gpm.
 - 2. The minimum free chlorine residual at the entry point shall not be less than 0.40 mg/L.
 - 3. Continuously monitor and record the free chlorine residual at the entry point while water is served to the public.
10. EPA Method 334:
- A. The Permittee shall conduct and document an initial demonstration of capability (IDC) for all analysts responsible for conducting compliance and/or comparative grab sampling and analysis in accordance with Section 10 of EPA's Method 334.0.
 - B. The Permittee shall conduct and document an initial calibration verification for all instruments used for conducting compliance and/or comparative grab sampling and analysis in accordance with Section 10 of EPA's Method 334.0.
 - C. The Permittee shall submit documentation of completion of Special Conditions (10.A) – (10.B) to the Department with the *Certificate of Construction*.
11. Logs and results:
- A. The permittee shall maintain a treatment system maintenance log onsite. Records shall be kept for a minimum of five years and shall be made available to the Department upon request.
 - B. The results of all field analyses shall be recorded and maintained on site at all times.
12. The Department specifically retains the right to modify, add to or delete any or all Special Conditions attached to this permit. The Department also retains the right to rescind the permit, if in its sole determination, operation of the facilities presents a threat to public health, or the permittee is not in compliance with the Special Conditions.