



## WATER QUALITY MANAGEMENT PERMIT

<p>A. PERMITTEE (Name and Address): CLIENT ID#: <b>52334</b>  <b>Pottstown Borough Authority Montgomery County</b>  <b>100 East High Street</b>  <b>Pottstown, PA 19464</b></p>	<p>B. PROJECT/FACILITY (Name):  <b>Pottstown Borough Sewer System &amp; STP</b>  <b>(UV Disinfection &amp; Sludge Dewatering)</b></p>	
<p>C. LOCATION (Municipality, County): SITE ID#: <b>237350</b>  <b>Pottstown Borough, Montgomery County</b></p>		
<p>D. This permit amendment approves the construction and operation of sewage facilities consisting of: Ultraviolet Light Disinfection and Additional Sludge Dewatering.</p> <p>The Project proposes the replacement of the existing chlorine gas disinfection system with an ultraviolet (UV) light disinfection system and liquid chlorine disinfection system for standby disinfection and peak flow treatment. The UV disinfection system will be located inside one of the existing chlorine contact tanks. The project also includes installation of Belt Filter Press for sludge dewatering in addition to the existing centrifuges.</p> <p><b>UV System</b>  The proposed UV System will have a single channel containing four (4) Trojan non-contact UV disinfection banks (Trojan UVSigna). The UV System is sized to deliver a minimum UV dose of 30 mJ/cm<sup>2</sup> at a flow rate of 40 MGD with 65% UV Transmittance (UVT). The unit will have four banks will be configured in series. The weir gate downstream will control the water level in the UV System. A total of 96 lamps will be installed. The chlorine disinfection system will be used if any failures occur at the WWTP and can be utilized to supplement disinfection for peak flows.</p> <p><b>Chlorine Disinfection</b>  The proposed chlorine disinfection system will use liquid chlorine (sodium hypochlorite) to provide disinfection when required at the WWTP. The chlorine system will consist of two redundant double-walled bulk chemical storage tanks, two redundant chemical transfer pumps, four single-walled chemical day tanks with containment basins, and two chemical metering pump skids equipped with two redundant peristaltic metering pumps. Sodium hypochlorite will be stored at the existing Chlorine Building (Bulk Storage Outside, Day Storage Inside). When in operation, chlorine will be injected at the influent of the available chlorine contact tank treatment trains to provide a minimum of 15 minutes of chlorine contact time. Each chlorine contact tank was designed to provide a chlorine contact time of 15 minutes at 16 MGD. Also, the hypochlorite will be available to chlorinate RAS.</p> <p><b>Belt Filter Press</b>  The proposed Belt Filter Press is proposed in supplement with the existing centrifuges for additional dewatering. The flow capacity of the proposed Belt Filter Press with the vertical mix drum is 200 gpm. Polymer is proposed to be used with the Belt Filter Press. As a result, it is expected to produce 2 to 3 dry tons of dewatered sludge per hour enough capacity to meet PBA WWTP's dewatered sludge needs. The conveyor will transport the dewatered sludge to the existing dumpster outside of the dewatering building where it will be hauled to a landfill.</p>		
<p>Pump Stations: _____  Design Capacity: _____ GPM</p>	<p>Manure Storage:  Volume: _____ MG  Freeboard: _____ inches</p>	<p>Small Flow Sewage Treatment Facility (SFTF):  Annual Average Flow: <b>12.85</b> MGD  Design Hydraulic Capacity: <b>15.6</b> MGD  Design Organic Capacity: <b>23,000</b> lbs/day</p>
<p>E. APPROVAL GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING:</p> <ol style="list-style-type: none"> <li><b>Amendments:</b> All construction, operations and procedures shall be in accordance with the Water Quality Management Permit Amendment application dated _____ and its supporting documentation and addendums dated _____, which are hereby made a part of this amendment.</li> <li>Permit Conditions for SFTFs are attached and made part of this permit.</li> </ol>		
<p>F. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS:</p> <ol style="list-style-type: none"> <li>If there is a conflict between the application or its supporting documents and amendments and the attached conditions, the attached conditions shall apply.</li> <li>Failure to comply with the rules and regulations of DEP or with the terms or conditions of this permit shall void the authority given to the permittee by the issuance of this permit.</li> <li>This permit is issued pursuant to the Clean Streams Law Act of June 22, 1937, P.L. 1987, as amended 35 P.S. §691.1 <i>et seq.</i> Issuance of this permit shall not relieve the permittee of any responsibility under any other law.</li> </ol>		
<p>PERMIT ISSUED:   <u>July 19, 2024</u></p>	<p>BY: <u>/s/</u>  <b>Thomas L. Magge</b>  <b>Clean Water Program Manager</b>  <b>Southeast Regional Office</b></p> <p>TITLE:</p>	



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF CLEAN WATER

**PERMIT CONDITIONS FOR SFTFs**

**General**

1. The Department of Environmental Protection (DEP) considers the licensed Professional Engineer whose seal is affixed to the design documents to be fully responsible for the adequacy of all aspects of the facility design.
2. The outfall sewer or drain shall be extended to the low water mark of the receiving body of water. Where necessary to ensure proper mixing and waste assimilation, an outfall sewer or drain may be extended with appurtenances below the low water mark and into the bed of a navigable stream provided that the permittee has secured an easement, right-of-way, license or lease from DEP in accordance with Section 15 of the Dam Safety and Encroachments Act, the Act of November 26, 1978, P.L. 1375, as amended.
3. The approval is specifically made contingent on the permittee acquiring all necessary property rights, by easement or otherwise, providing for the satisfactory construction, operation, maintenance and replacement of all sewers or sewerage structures in, along, or across private property with full rights of ingress, egress and regress.
4. If, at any time, the SFTF covered by this permit creates a public nuisance, including but not limited to, causing malodors or causing environmental harm to waters of the Commonwealth, DEP may require the permittee to adopt appropriate remedial measures to abate the nuisance or harm.
5. If, after the issuance of this permit, DEP approves a municipal sewage facilities official plan or an amendment to an official plan under Act 537 (Pennsylvania Sewage Facilities Act, the Act of January 24, 1966, P.L. 1535 as amended) in which sewage from the herein approved facilities will be treated and disposed of at other planned facilities, the permittee shall, upon notification from the municipality or DEP, provide for the conveyance of its sewage to the planned facilities, abandon use and decommission the herein approved facilities including the proper disposal of solids, and notify DEP accordingly. The permittee shall adhere to schedules in the approved official plan, amendments to the plan, or other agreements between the permittee and municipality. This permit shall then, upon notice from DEP, terminate and become null and void and shall be relinquished to DEP.
6. The approval of the plans, and the authority granted in this permit, if not specifically extended, shall cease and be null and void 5 years from the issuance date of this permit unless construction or modification of the facilities covered by this permit has begun on or before the fifth anniversary of the permit date.
7. This permit does not relieve the permittee of any obligations to comply with all federal, interstate, state or local laws, ordinances and regulations applicable to the sewerage facilities.
8. This permit does not give any real or personal property rights or grant any exclusive privileges, nor shall it be construed to grant or confer any right, easement or interest in, on, to, or over any lands which belong to the Commonwealth.
9. The authority granted by this permit is subject to all effluent requirements, monitoring requirements, and other conditions as set forth in the NPDES Permit and all subsequent amendments and renewals. No discharge is authorized from these facilities unless approved by an NPDES Permit.

**Construction**

10. The SFTF shall be constructed under the supervision of a Pennsylvania licensed Professional Engineer in accordance with the approved reports, plans and specifications. Any deviations from approved plans or specifications so revised should, therefore, be submitted well in advance of any construction work, which will be affected by such changes to the permit to allow sufficient time for review and approval. Structural revisions or other minor changes not affecting capacities, flows or operations will be permitted during construction without approval. Upon request, "as-built drawings" clearly showing such alterations shall be filed with DEP at the completion of the work.
11. When construction of the approved SFTF is completed and before it is placed in operation, the permittee shall notify DEP in writing so that a DEP representative **may** inspect the facilities. A Pennsylvania licensed Professional Engineer shall certify that construction of the permitted facilities was completed in accordance with the WQM application and design plans submitted to DEP, using the Post Construction Certification form (3800-PM-WSFR0179a). It is the permittee's responsibility to ensure that a Professional Engineer is on-site to provide the necessary oversight and/or inspections to certify the SFTF. The certification must be submitted to DEP within 30 days following completion of the SFTF, along with as-built drawings, photographs (if available), and a description of any DEP approved deviations from the NOI and design plans. The SFTF may not be placed into operation until DEP receives the completed Professional Engineer's certification.

12. The local Waterways Conservation Officer of the Pennsylvania Fish and Boat Commission (PFBC) shall be notified when the construction of any stream crossing and/or outfall is started and completed. A written permit must be secured from the PFBC if the use of explosives in any waterways is required and the permittee shall notify the local Waterways Conservation Officer when explosives are to be used.

### **Operation and Maintenance**

13. The permittee shall maintain SFTF operation and maintenance (O&M) manuals at the facility and ensure proper O&M of the permitted facility. The permittee shall file the O&M manuals with DEP upon request.
14. Stormwater from roofs, foundation drains, basement drains or other sources shall not be admitted directly to the SFTF.
15. The SFTF shall be properly maintained so that the facility will perform as designed.
16. There shall be no physical connection between a public water supply system and a sewer or appurtenance to it which would permit the passage of any sewage or polluted water into the potable water supply. No water pipe shall pass through or come in contact with any part of the SFTF.
17. Collected screenings, slurries, sludge and other solids shall be handled and disposed of in compliance with Title 25 Pa. Code, Chapters 271, 273, 275, 283 and 285 (related to permits and requirements for land filling, land application, incineration and storage of sewage sludge), Federal Regulations (40 CFR Part 257) and the Federal Clean Water Act and its amendments.



**WATER QUALITY MANAGEMENT  
 POST CONSTRUCTION CERTIFICATION**

<b>PERMITTEE IDENTIFIER</b>	
Permittee	Pottstown Borough Authority Montgomery County
Municipality	Pottstown Borough
County	Montgomery
WQM Permit No.	<u>4621401 - A1</u>
Facility Type	Sewage
<b>All of the above information should be taken directly from the Water Quality Management Permit.</b>	
<b>CERTIFICATION</b>	
<p>This certification must be completed and returned to the permits section of the DEP's regional office issuing the WQM permit within 30 days of completion of the project and received by DEP prior to operation, and if requested, as-built drawings, photographs (if available) and a discussion of any DEP-approved deviations from the design plans during construction.</p>	
<p>I, being a Registered Professional Engineer in Pennsylvania, do hereby certify to the best of my knowledge and belief, based upon personal observation and interviews, that the above facility approved under the Water Quality Management Permit has been constructed in accordance with the plans, specifications and modifications approved by DEP.</p>	
<p>Construction Completion Date (MM/DD/YYYY): _____</p>	
<p style="font-size: 2em; opacity: 0.5;">Engineer's Seal</p>	<b>Professional Engineer</b>
	Name _____ (Please Print or Type)
	Signature _____
	Date _____
	License Expiration Date _____
	Firm or Agency _____
	Telephone _____
	<b>Permittee or Authorized Representative</b>
	Name _____ (Please Print or Type)
	Signature _____
	Title _____
	Telephone _____