



WATER QUALITY MANAGEMENT PERMIT

<p>A. PERMITTEE (Name and Address): CLIENT ID#: 310873 Horsham Air Guard Station 1120 Fairchild Street Horsham, PA 19044-5256</p>	<p>B. PROJECT/FACILITY (Name): Horsham Air Guard Station (Stormwater Treatment System)</p>	
<p>C. LOCATION (Municipality, County): SITE ID#: 665758 Horsham Township, Montgomery County</p>		
<p>D. This permit approves the construction and operation of stormwater treatment system consisting of submersible pump station at Horsham Air Guard Station.</p> <p>The stormwater treatment system consists of two process trains, each rated at 250 gpm and each consisting of four filter vessels in series for a total of eight filter vessels. Stormwater is pumped into one of the two process trains which consists of four vessels in series: Sand, Zeolite, Granular Activated Carbon and an ion-exchanged resin. The resin bed has been installed to remove any traces of PFOA and PFOS. The sand filter vessels will be periodically backwashed at a rate of 400 gpm either via timer or via a pressure drop setting. Sand filter backwashing will occur on only one process train at a time, with the other train remaining in service.</p> <p>A pumping station will be installed adjacent to the storm basin, which will consist two 250 gpm submersible pumps with a velocity of 2.9 fps and a flow rate of 0.36 MGD. After the pumping station, there will be a value vault which will include check valves, shut off valves, and connections to a common 6" force main which will then convey flows from the pumping station into the treatment building and into the two treatment system trains. A 30" long trench drain will be installed within the basin perpendicular to the existing discharge line between the outfall structure and the discharge point of the basin. This trench drain will be below the existing discharge point, and there will be a direct connection between the existing discharge pipe and the trench drain. All flows will therefore go into the trench drain which will discharge into the wet well of the pumping station.</p> <p>The backwashing of the sand filters will require a pump of 400 gpm. After flows are treated through the two treatment trains, they will be combined and discharged into the backwash vault. This vault will hold 10,000 gallons of treated water. A 400 gpm submersible pump is installed in the backwash vault and that will be utilized for the backwash flow that is necessary for the sand filters. Inside the backwash vault is a weir which will control the level in the vault. Flows that go over the weir will fall into a 12" discharge pipe which will then connect to the existing concrete discharge structure of the basin.</p>		
<p>Pump Stations: <u>Submersible Pumps</u></p> <p>Design Capacity: <u>2- 250 (Stormwater Pumps) GPM</u> <u>1- 400 (Backwash Pump) GPM</u></p>	<p>Manure Storage:</p> <p>Volume: _____ MG</p> <p>Freeboard: _____ inches</p>	<p>Industrial Wastewater Treatment Facility:</p> <p>Annual Average Flow: _____ MGD</p> <p>Design Hydraulic Capacity: <u>0.720</u> MGD</p> <p>Design Organic Capacity: _____ lb/day</p>
<p>E. APPROVAL GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING:</p> <ol style="list-style-type: none"> New Permits: All construction, operations and procedures shall be in accordance with the Water Quality Management Permit application dated <u>November 5, 2020</u>. Permit Conditions Relating to Industrial Wastewater are attached and made part of this permit. 		
<p>F. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS:</p> <ol style="list-style-type: none"> If there is a conflict between the application or its supporting documents and amendments and the attached conditions, the attached conditions shall apply. 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. 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 et seq. Issuance of this permit shall not relieve the permittee of any responsibility under any other law. 		
<p>PERMIT ISSUED: 3/29/2021</p>		<p>BY: <u>/s/</u></p> <p>TITLE: Thomas L. Magge Clean Water Program Manager Southeast Regional Office</p>



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

PERMIT CONDITIONS RELATING TO INDUSTRIAL WASTEWATER
For use in Water Quality Management Permits

(Check boxes that apply)

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. All relevant and non-superseded conditions of any prior Water Quality Management Permits, decrees or orders issued to the permittee or his predecessor shall be continued in full force and effect and together with the provisions of this permit shall apply to his successors, lessees, heirs and assigns.
- 3. The responsibility for implementing the conditions of this permit shall rest upon the owner, lessee, assignee or other party in responsible managerial charge of the operation producing the wastewaters and waste treatment facilities. Transfer of a permit to a new owner shall not be effective until said transfer has been executed and filed on forms provided by DEP and DEP approved the transfer.
- 4. The permittee shall secure any necessary permission from the proper federal authority for any outfall or industrial waste treatment structure which discharges into or enters navigable waters and shall obtain a separate permit for any stream crossing, encroachment or change of natural stream conditions within the jurisdiction of DEP.
- 5. When construction of the approved facilities is completed and before they are placed in operation, the permittee shall notify DEP in writing so that a DEP representative may inspect the facilities.
- 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. 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.
- 8. Nothing herein shall be construed to be an intent on the part of DEP to approve any present or future act by the permittee, inconsistent with the permittee's lawful powers or with existing laws of this Commonwealth regulating industrial wastes and the practice of professional engineering. This permit shall not be construed to sanction any act otherwise forbidden by any of the laws of the Commonwealth of Pennsylvania or of the United States.

Construction

- 9. This permit is issued under the authorization of The Clean Streams Law and 25 Pa. Code Chapter 91. The permittee shall obtain all necessary permits, approvals and/or registrations under 25 Pa. Code Chapters 102, 105 and 106 prior to commencing construction of the facilities authorized by this permit, as applicable. The permittee should contact the DEP office that issued this permit if there are any questions concerning the applicability of additional permits.
- 10. The facilities shall be constructed under expert engineering supervision and competent inspection, in accordance with plans, designs and other data as herein approved or amended and with the conditions of this permit.
- 11. A Pennsylvania licensed Professional Engineer shall certify that construction of the permitted facilities was completed in accordance with the 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 facilities. The certification must be submitted to DEP before the facility is placed in operation. As-built drawings, photographs (if available) and a description of all deviations from the application and design plans must be submitted to DEP within 30 days of certification.

- 12. The DEP office that issued this permit must be contacted during construction if significant changes are proposed to the approved facilities. Significant changes include, but are not limited to changes to the type(s) of process(es) used for treatment and changes to the design capacities of tanks, impoundments, and conveyance structures or equipment by more than 5% of the original design. For projects involving PENNVEST funding, all changes should be discussed with the DEP project manager prior to implementation. DEP may require the submission of an application to amend this permit. All changes shall be documented in an attachment to the Post Construction Certification form.
- 13. 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 local Waterways Conservation Officer must be notified when explosives are to be used.

Operation and Maintenance

- 14. If at any time the industrial waste treatment facility, or the discharge of the effluent creates a public nuisance, or such discharge is causing or contributing to pollution of the waters of this Commonwealth, the permittee shall immediately adopt remedial measures acceptable to DEP.
- 15. The permittee shall maintain records of "as-built" plans showing all the treatment facilities as actually constructed together with facility operation and maintenance (O&M) manuals and any other relevant information that may be required. Upon request, the "as-built" plans and O&M manuals shall be filed with DEP.
- 16. To ensure operational efficiency and protect the waters of this Commonwealth, the permittee shall maintain skilled operators at all times.
- 17. No stormwater, sewage or other industrial wastes not specifically approved herein shall be admitted to the facilities for which this permit is issued.
- 18. These industrial waste treatment facilities shall be operated and maintained to perform as designed. In order to ensure the efficiency and proper maintenance of the treatment facilities, the permittee shall make periodic inspections to detect any impairment of structural stability, adequate capacity or other requisites which might impair the effectiveness of the approved facilities.
- 19. Collected screenings, slurries, sludge and other solids shall be handled and disposed of in compliance with Title 25 Pa. Code Chapters 287, 288, 291, 297 and 299 (related to permits and requirements for land filling, land application, incineration and storage of industrial sludge), Federal Regulations 40 CFR 257 and the Federal Clean Water Act and its amendments.



**WATER QUALITY MANAGEMENT
 POST CONSTRUCTION CERTIFICATION**

PERMITTEE IDENTIFIER

Permittee	Horsham Air Guard Station
Municipality	Horsham Township
County	Montgomery
WQM Permit No.	<u>4620202</u>
Facility Type	Industrial Waste

All of the above information should be taken directly from the Water Quality Management Permit.

CERTIFICATION

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.

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.

Construction Completion Date (MM/DD/YYYY): _____

<p>Engineer's Seal</p>	Professional Engineer
	Name _____ (Please Print or Type)
	Signature _____
	Date _____
	License Expiration Date _____
	Firm or Agency _____
	Telephone _____
	Permittee or Authorized Representative
	Name _____ (Please Print or Type)
	Signature _____
	Title _____
	Telephone _____