



WATER QUALITY MANAGEMENT PERMIT

A. PERMITTEE (Name and Address):	CLIENT ID#: 391235	B. PROJECT/FACILITY (Name):
Crystal Kangas 1685 Route 143 Lenhartsville, PA 19534		1685 Route 143 Lenhartsville SRSTP

C. LOCATION (Municipality, County):	SITE ID#: 459349
Greenwich Township, Berks County	

D. This permit amendment approves the construction/modification/operation of sewage facilities consisting of:
<ul style="list-style-type: none"> - One 1500-gallon 2-compartment concrete septic tank with Orenco biofilter ; - One 800-gallon Orenco fiberglass recirculating tank and textile filter media, Advantex AX20RTUV, with float and alarm; - UV disinfection with Orenco UV lamp and sensor and alarm which inactivates effluent pump in event of lamp failure; - 4" Submersible pump; - Discharge via 4" pipe to stream.

The treatment system replaced a failing sand filter system.

Pump Stations: N/A	Manure Storage:	Sewage Treatment Facility:
Design Capacity: N/A GPM	Volume: N/A MG	Annual Average Flow: 0.0004 MGD
	Freeboard: N/A inches	Design Hydraulic Capacity: 0.0005 MGD
		Design Organic Capacity: _____ lb/day

E. APPROVAL GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING:
<ol style="list-style-type: none"> 1. Transfers: Water Quality Management Permit No. <u>0696410</u> dated <u>December 19, 1996</u> and <u>0696410 amendment 12-1</u> dated <u>April 4, 2013</u> and conditions, supporting documentation and addendums are also made part of this transfer. 2. Permit Conditions Relating to Sewerage are attached and made part of this permit. 3. Special Conditions for <u>Small Flow Treatment Facilities</u> are attached and made part of this permit.

F. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS:
<ol style="list-style-type: none"> 1. If there is a conflict between the application or its supporting documents and amendments and the attached conditions, the attached conditions shall apply. 2. 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. 3. 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.

PERMIT ISSUED:	BY:	TITLE:
July 2, 2025	<u>Maria D. Bebenek</u> <u>Maria D. Bebenek, P.E.</u>	<u>Clean Water Program Manager</u> <u>Southcentral Regional Office</u>

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION**PERMIT CONDITIONS RELATING TO SEWERAGE**

For use in Water Quality Management Permits

(Check boxes that apply)

General

- 1. The Department of Environmental Protection (DEP) considers the registered 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 permittee shall adopt and enforce an ordinance requiring the abandonment of privies, cesspools or similar receptacles for human waste and onlot sewage disposal systems on the premises of occupied structures accessible to public sewers. All such structures must be connected to the public sewers.
- 3. 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.
- 4. 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.
- 5. When construction of the approved sewerage facilities is completed and before they are placed in operation, the permittee shall notify DEP so that a DEP representative may inspect the facilities.
- 6. If, at any time, the sewerage facilities covered by this permit create 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.
- 7. 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.
- 8. This permit does not relieve the permittee of its obligations to comply with all federal, interstate, state or local laws, ordinances and regulations applicable to the sewerage facilities.
- 9. This permit does not give any real or personal property rights or grant any exclusive privileges, nor shall it be construed to grant or confirm any right, easement or interest in, on, to or over any lands which belong to the Commonwealth.
- 10. The authority granted by this permit is subject to all effluent requirements, monitoring requirements and other conditions as set forth in NPDES Permit No. **PAG043558** and all subsequent amendments and renewals. No discharge is authorized from these facilities unless approved by an NPDES Permit.

Construction

- 11. An Erosion and Sedimentation (E&S) Plan must be developed prior to construction of the permitted facility, pursuant to Title 25 Pa. Code Chapter 102, and implemented during and after the earth disturbance activity.
If the activity involves 5 or more acres of earth disturbance, or from 1 to 5 acres of earth disturbance with a point source discharge to surface waters of the Commonwealth, an NPDES permit for the Discharge of Stormwater Associated with Construction Activity is required.
In addition to the state NPDES permitting requirements, some municipalities, through local ordinances, require the E&S Control Plan to be reviewed and approved by the local County Conservation District office prior to construction. For specific information regarding E&S control planning approval and NPDES permitting requirements, please contact your local County Conservation District office.
- 12. The facilities shall be constructed under the supervision of a Pennsylvania registered Professional Engineer in accordance with the approved reports, plans and specifications.

- 13. A Pennsylvania registered Professional Engineer shall certify that construction of the permitted facilities was completed in accordance with the application and design plans submitted to DEP, using "Post Construction Certification" (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. If requested, "as-built" drawings, photographs (if available) and a description of any DEP-approved deviations from the application and design plans must be submitted to DEP within 30 days of certification.
- 14. Manhole inverts shall be formed to facilitate the flow of the sewage and to prevent the stranding of sewage solids. The manhole structure shall be built to prevent undue infiltration, entrance of street wash or grit and provide safe access to facilitate manhole maintenance activities.
- 15. 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

- 16. 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.
- 17. The sewers shall have adequate foundation support as soil conditions require. Trenches shall be back-filled to ensure that sewers will have proper structural stability, with minimum settling and adequate protection against breakage. Concrete used in connection with these sewers shall be protected from damage by water, freezing, drying or other harmful conditions until cured.
- 18. Stormwater from roofs, foundation drains, basement drains or other sources shall not be admitted directly to the sanitary sewers.
- 19. The approved sewers shall be maintained in good condition, kept free of deposits by flushing or other cleaning methods and repaired when necessary.
- 20. The sewerage facilities shall be properly operated and maintained to perform as designed.
- 21. The attention of the permittee is called to the highly explosive nature of certain gases generated by the digestion of sewage solids when these gases are mixed in proper proportions with air and to the highly toxic character of certain gases arising from such digestion or from sewage in poorly ventilated compartments or sewers. Therefore, at all places throughout the sewerage facilities where hazard of fire, explosion or danger from toxic gases may occur, the permittee shall post conspicuous permanent and legible warnings. The permittee shall instruct all employees concerning the aforesaid hazards, first aid and emergency methods of meeting such hazards and shall make all necessary equipment and material accessible.
- 22. An operator certified in accordance with the Water and Wastewater Systems Operator Certification Act of February 21, 2002, 63 P.S. §§1001, et seq. shall operate the sewage treatment plant.
- 23. The permittee shall properly control any industrial waste discharged into its sewerage system by regulating the rate and quality of such discharge, requiring necessary pretreatment and excluding industrial waste, if necessary, to protect the integrity or operation of the permittee's sewerage system.
- 24. 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 a sewer manhole.
- 25. All connections to the approved sanitary sewers must be in accordance with the corrective action plan as contained in the approved Title 25 Pa. Code Chapter 94 Municipal Wasteload Management Annual Report.
- 26. 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 257 and the Federal Clean Water Act and its amendments.

SPECIAL CONDITIONS

Water Quality Management Permit No. 0696410 T-1

Kangas Residence

A. Small Flow Sewage Treatment Facilities

1. Installation

Installation of small flow sewage facilities should be performed by a competent, experienced individual to ensure that the treatment units/structures are constructed in accordance with the guidelines in the Small Flow Sewage Treatment Manual and any manufacturer's recommendations.

The Department must be notified prior to construction and at the completion of construction so inspection can be scheduled. All subsurface facilities such as sand filters should be inspected prior to backfilling.

Extreme care shall be exercised in the operation of machinery and vehicles during or after installation to prevent damage to the system.

2. Operation and Maintenance

Any person receiving permits to construct and operate a small flow treatment facility to treat and discharge sewage is responsible for the operation and maintenance of the facilities, and for any health nuisances or pollution problems which may result.

Access to all tanks or compartments of each tank shall be provided by a removable cover to provide for easy operation and maintenance.

Several key factors with respect to operation and maintenance follow:

- a. It is crucial that adequate disinfection of the sewage be continuously provided on a year round basis to minimize public health risk. Therefore, regular and routine attention must be given to ensure that disinfection equipment is operational (e.g., adding chlorine tablets to erosion feed system, filling chlorine solution crock, etc.). If using chlorine, a small chlorine residual (approximately 0.5 mg/l) must be maintained in the treated discharge. NOTE: Erosion chlorinators are prone to 'bridging' of the tablets which results in no chlorine contact. Regular maintenance is necessary to identify and correct this problem.
- b. The depth of sludge and scum in the septic tank should be measured at least once a year. When the top of the sludge layer in the tank or any compartment of the tank is found to be less than 12 inches below the bottom of the outlet baffle, or if the bottom of the scum layer is within three inches of the outlet baffle, the tank must be pumped. Annual pumping may be substituted for measurement. Such cleaning is recommended to minimize plugging of the sand filter with solids and avoid deterioration of the treated effluent. Failure to pump treatment and dosing tanks often results in costly repairs or replacement. NOTE: Following septic tank cleaning, all interior surfaces of the tank should be inspected for leaks and cracks using a strong light. Pumped-out septic tanks contain toxic gases; therefore, only a properly equipped, trained, and experienced person should attempt to enter and repair a septic tank if this should become necessary. **THE HOMEOWNER SHOULD NOT ENTER A SEPTIC TANK.**
- c. The use of biological or chemical additives in the septic tank is not recommended or necessary.
- d. Dosing tanks should be opened at least once a year and settled solids removed as necessary.

- e. Aerobic treatment plants shall be maintained in accordance with manufacturer's instructions, or pumped at least once a year to remove excess solids in order to minimize plugging of the sand filter and avoid deterioration of the discharge.
- f. An operation and maintenance manual for the owner's use is to be provided by the designer.
- g. For mechanical equipment (i.e., aerobic treatment units, spray nozzles, etc.), a service contract with the equipment representative must be executed so periodic inspection and "as needed" services are provided.
- h. To minimize water usage, water conservation fixtures should be used (e.g., 1.6-gallon flush toilets, shower and faucet restrictors, and front loading washers).