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*Director*

October 11, 2017

William L. Pinnix, P.E., Director of Engineering  
Brunswick County  
P.O. Box 249  
Bolivia, NC 28422

Subject: Variance Request Approval  
Permit Number WQCS00284  
New/Existing Commercial & Multifamily Pump Stations with Limited Flow  
Brunswick County

Dear Mr. Pinnix:

The Division of Water Resources (Division) has reviewed proposed revisions as submitted on September 26, 2017, with additional information submitted October 11, 2017, for the previously approved variance request as approved on October 7, 2015. The request involved deviation from the requirements of 15A NCAC 02T.0305 for pump stations with low flows that serves multifamily and commercial facilities within the county's service area with the following conditions, with revisions marked in bold:

- 1) This variance only applies to facilities meeting flow rates less than or equal to 1,680 gallons per day (gpd)
- 2) Pump Stations shall:
  - a) Meet the pump reliability requirement per 15A NCAC 02T.0305(h)(1), (meet peak flow with largest pump out of service).
  - b) Provide 24-hours' worth of wastewater storage (installed or upgraded).
  - c) Install/maintain alarms per 15A NCAC 02T.0305(h)(1)(F) in an area that is noticeable to the general public or onsite staff.
  - d) Install/maintain signage per 15A NCAC 02T.0305(h)(2).
  - e) **Provide a lift-out chain for each pump such that a single pump can be removed while the other remains in service, per Part 3.05(B)(3)(a) of the Minimum Design Criteria for Pump Stations and Force Mains.**
- 3) In accordance with the provision for alternative design covered under 15A NCAC 02T.0105(n), facilities meeting the above conditions are exempt from:
  - a) Requirement to install a standby power source or pump per 15A NCAC 02T.0305 (h)(1)(B).
  - b) Requirement to install/maintain a telemetry system per 15A NCAC 02T.0305(h)(1)(E).
  - c) Requirement to inspect these facilities every day per 15A NCAC 02T.0305(a)(4) and WQCS00284 (Condition V.2), however still required to inspect the facility at least once per week.
  - d) **Requirement to provide each pump with a guide rail or cable system, per Part 3.05(B)(3)(a) of the Minimum Design Criteria for Pump Stations and Force Mains.**
  - e) **Requirement to install the check valve in the horizontal position unless the valve is of a ball check type, per Part 3.04(A)(2)(a)(ii) of the Minimum Design Criteria for Pump Stations and Force Mains.**

 Nothing Compares

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Regardless of the variance approval, in the event that the wastewater collection facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those as may be required by this Division, such as the construction of additional or replacement facilities.

All other elements of this project shall be constructed in accordance with all applicable rules and statues including, 15A NCAC 2T; the Division of Water Resources' (Division) Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; and the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable. Approval of the variance request does not constitute approval of the permit.

If you have any questions, please contact Christyn Fertenbaugh, P.E. at (919) 807-6312 or via email at [christyn.fertenbaugh@ncdenr.gov](mailto:christyn.fertenbaugh@ncdenr.gov).

Sincerely,



for Jay Zimmerman, P.G.  
Director, Division of Water Resources

by Deborah Gore, PERCS Supervisor  
Division of Water Resources, NCDEQ

cc: Wilmington Regional Office, Water Quality Section Regional Operations  
Water Quality Central Files - WQCS00284  
PERCS Files (electronic copy)