

North Carolina Department of Environmental Quality

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

October 7, 2015

William L. Pinnix, Director of Engineering
Brunswick County
PO 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 the submitted variance request, as well as the additional information submitted October 1, 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:

- 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 15ANCAC 02T.0305(h)(2)
- 3) In accordance with the provision for alternative design covered under 15A NCCA 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

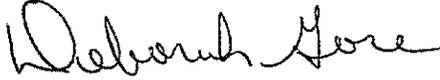
Regardless of the variance approval, in the event that the wastewater collection facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those as may be required by this Division, such as the construction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

All other facilities 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. Submission and approval of permit applications are still required in accordance with applicable rules and regulations.

Variance Request Approval
October 7, 2015

If you have any questions, please contact Michael Leggett, P.E. at 919-807-6312 or via email at michael.leggett@ncdenr.gov.

Sincerely,



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

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

enclosures (all)

cc: William L. Pinnix, PE – Director of Engineering Services (William.pinnix@brunswickcountync.gov)
James Murray, Engineering Technician / Plan Reviewer (james.murray@brunswickcountync.gov)
Wilmington Regional Office, Water Quality Section Regional Operations
Water Quality Central Files – WQCS00184
PERCS Files (electronic copy)



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
2014

Utilities - Request for Approval of Grinder Pump Maintenance Policy - (Jerry Pierce, Director of Public Utilities)

From:
Jerry Pierce, P.E.

Action Item # VIII. - 3.

Date:
7/2/2014

Issue/Action Requested:

Request that the Board of Commissioners approve an amendment to the Grinder Pump Maintenance Policy to allow the county to assume maintenance responsibilities for grinder pump stations that provide sewer service to new and existing multifamily projects and to new and existing commercial properties provided the properties meet the terms of the Grinder Pump Maintenance Policy as amended.

Background/Purpose of Request:

In 2008, the Brunswick County Board of Commissioners approved a Grinder Pump Maintenance Policy. Under the terms of the policy, the county assumed maintenance responsibility for grinder pump stations that provide sewer service to single-family homes. The North Carolina Department of Environment and Natural Resources (NC DENR) permit for the low pressure sewer system had to be in the county's name prior to the county assuming maintenance responsibility. To cover the cost of maintaining the grinder pump stations. A monthly \$5.00 grinder maintenance fee was added to the sewer service charges for all customers who had a grinder pump station covered by the policy.

The policy did not include maintenance of grinder pump stations associated with multifamily projects and commercial projects. Some multifamily projects and commercial properties were located in the Calabash and Sunset Beach Special Assessment Districts. As such, the county installed duplex grinder pump stations at those locations and assumed maintenance responsibilities as the NC DENR Permit was in the county's name.

The county has recently received a request from a multifamily project in St. James that the county assume maintenance responsibility for their duplex grinder pump stations. The proposed Grinder Pump Maintenance Policy Amendment outlines the requirements and terms by which the county will assume maintenance responsibility for multifamily projects and commercial properties. The major requirements are as follows:

1. For all projects, the NC DENR Permit has to be in the county's name.
2. For all projects, plans and specifications have to be submitted to the Engineering Department for review and approval and all construction must be inspected and approved by the Engineering Department.
3. For multifamily projects, the grinder maintenance fee will be charge per unit and for commercial projects the grinder maintenance fee will be based upon the Residential Equivalent Unit (REU) flow associated with the commercial property's use.
4. For existing multifamily and commercial properties, the existing duplex grinder pump station has to be rehabbed to meet the current Brunswick County standards.
5. The permitted sewer flow for new and existing commercial properties cannot exceed 1,680 gpd.
6. For existing multifamily projects, at least 50% of the owners of the units in the building served by the duplex pump station must sign a petition requesting Brunswick County to assume maintenance responsibility for their duplex grinder pump station.

For multifamily and commercial projects, the owners would have the option to maintain the duplex grinder pump station themselves. The county would not install the duplex grinder pump station and would maintain the duplex grinder pump station only if requested by the property owner(s) or Property Owners Association (POA).

County staff recommends that the Board of Commissioners approve the Grinder Pump Maintenance Policy Amendment to allow county maintenance of duplex grinder pump stations at multifamily projects and commercial projects provided they meet the terms of the policy.

Fiscal Impact:

Reviewed By Director of Fiscal Operations

Approved By County Attorney:

Yes

Advisory Board Recommendation:

Approved by Utility Board June 9, 2014

County Manager's Recommendation:

Recommend that the Board of Commissioners approve an amendment to the Grinder Pump Maintenance Policy to allow the county to assume maintenance responsibilities for grinder pump stations that provide sewer service to new and existing multifamily projects and to new and existing commercial properties provided the properties meet the terms of the Grinder Pump Maintenance Policy as amended.

ATTACHMENTS:

Description

- ☐ [Utilities - Utility Board Draft Minutes 6-9-14 - Attach 1](#)
- ☐ [Utilities - Existing Grinder Pump Maintenance Policy - Attach 2](#)
- ☐ [Utilities - Proposed Amendment I to Grinder Pump Maintenance Policy - Attach 3](#)

Amend the existing Grinder Pump Maintenance Policy to add the following sections:

MULTIFAMILY

NEW CONSTRUCTION

The county will provide maintenance for low pressure duplex grinder pump stations installed at new multifamily projects provided the following criteria are met:

1. The NC DENR Authorization to Construct Permit that includes the installation of the duplex grinder pump stations is issued to Brunswick County.
2. The duplex grinder pump stations are installed in accordance with Brunswick County Standard Specifications and Details.
The county staff has inspected and approved the installation of the duplex grinder pump station, control panel, and low pressure force main from the pump station to the county-maintained force main or gravity manhole.
3. A blanket easement or a dedicated easement must be provided for the location of the pump station and force main that allows county crews access to maintain the pump station and force main.
4. A duplex grinder pump station must be installed for each building. If the number of units in the building exceeds eight units, additional duplex grinder pump stations may be required.
5. Any telemetry or standby power capability required to meet NC DENR requirements will be the responsibility of the owner or Property Owners Association (POA).

If the units are individually billed for sewer service, a grinder maintenance fee will be added to the bill for sewer service. If the multifamily project receives one sewer bill for the entire project, a grinder maintenance fee equal to the number of units served times the grinder maintenance fee will be added to the bill for sewer service.

EXISTING CONSTRUCTION

The county will assume maintenance responsibility for low pressure duplex grinder pump stations installed at existing multifamily projects provided the following criteria are met:

1. The NC DENR Authorization to Construct Permit that includes the installation of the duplex grinder pump stations is transferred to Brunswick County.
2. The existing duplex grinder pump stations and control panel are upgraded to meet current Brunswick County Standard Specifications and Details.
3. The county staff has approved the plans for the upgrade of the pump station and panel and approves the final constructed upgrade of the duplex grinder pump station and control panel.

4. The county receives a petition signed by a majority of the owners of the units in the buildings served by the grinder pump station requesting that the county assume maintenance of the grinder pump station or a resolution of the POA if allowed by the POA covenants.
5. A blanket easement or a dedicated easement must be provided for the location of the pump station and force main that allows county crews access to maintain the pump station and force main.
6. Any telemetry or standby power capability required to meet NC DENR requirements will be the responsibility of the owner or POA.

If the units are individually billed for sewer service, a grinder maintenance fee will be added to the bill for sewer service. If the multifamily project receives one sewer bill for the entire project, a grinder maintenance fee equal to the number of units served times the grinder maintenance fee will be added to the bill for sewer service.

COMMERCIAL PROPERTIES

NEW

The county will provide maintenance responsibility for duplex grinder pump stations installed at new commercial projects provided the following criteria are met:

1. The NC DENR Authorization to Construct Permit that includes the installation of the duplex grinder pump stations is issued to Brunswick County.
2. The projected flow from the project is less than 1,680 gallons per day as determined by the NC DENR Wastewater Design Flow Rate Regulation.
3. The duplex grinder pump stations are installed in accordance with Brunswick County Standard Specifications and Details.
4. The county staff has inspected and approved the installation of the duplex grinder pump station, control panel, and force main from the pump station to the county-maintained force main or gravity manhole.
5. A blanket easement or a dedicated easement must be provided for the location of the pump station and force main that allows county crews access to maintain the pump station and force main.
6. Any telemetry or standby power capability required to meet NC DENR requirements will be the responsibility of the owner.

The grinder maintenance fee based upon the REU for the use will be added to the sewer service bill for the commercial business.

EXISTING

The county will assume maintenance responsibility for duplex grinder pump stations installed at existing commercial projects provided the following criteria are met:

1. The NC DENR Authorization to Construct Permit that includes the installation of the duplex grinder pump stations is transferred to Brunswick County.
2. The projected flow from the project is less than 1,680 gallons per day as determined by the NC DENR Wastewater Design Flow Rate Regulation.
3. The existing duplex grinder pump stations and control panel are upgraded to meet current Brunswick County Standard Specifications and Details.
4. The county staff has approved the plans for the upgrade of the pump station and panel and approves the final constructed upgrade of the duplex grinder pump station and control panel.
5. A blanket easement or a dedicated easement must be provided for the location of the pump station and force main that allows county crews access to maintain the pump station and force main.
6. Any telemetry or standby power capability required to meet NC DENR requirements will be the responsibility of the owner.

The grinder maintenance fee based upon the REU for the use will be added to the sewer service bill for the commercial business