

Old North State Water Company, LLC.

2021 Wastewater
Annual Report



Residents of Briar Chapel,

2021 Overview

There is a lot of positive changes that occurred in 2021 and even better things to come in 2022 for the wastewater system that serves Briar Chapel. Old North State Water Company, LLC (ONSWC) has employed a full time staff of certified operators and maintenance personnel that monitor, operate and repair the wastewater treatment plant, collection system, pump stations and reclaimed irrigation in the Briar Chapel Community. We trust the transition in customer service and the new operators are providing the best relationship between Briar Chapel and ONSWC. We have multiple certified operators on site daily that take great pride in environmental compliance and customer service.

Reclaimed Irrigation and Briar Chapel Parkway and Great Ridge Parkway grassed medians

As of January 1, 2022, ONSWC has transitioned all reclaimed spray irrigation operation away from the third party irrigation contractor to our full time staff. Full irrigation start up is planned for mid March 2022.

If you are not aware, the grassed medians on Briar Chapel Parkway and Great Ridge Parkway are certified reclaimed irrigation spray fields. **Please refrain from parking or driving on these grassed medians. The tires cause damage to the spray heads and lines and increase operation cost, which leads to an increase for Briar Chapel sewer bills.** When the irrigation zone is activated, the damaged spray heads and lines cause water run off and ponding which is a violation of the state permit.

2021 construction projects

- The force main bypass project started in 2020 was completed in May of 2021. This line took the structurally deficient 8" PVC force main out of service that was the cause of numerous spills and leaks.
- Phase 13 and Phase 14 sewer lift stations were completed and brought online.
- SD East (commercial area at 15/501) sewer lift station has been mostly completed.
- The wastewater plant expansion was intended to be completed by the end of 2021 but due to weather and supply chain issues we are now expecting construction to hopefully be completed in mid April 2022. Just to recap, we are still integrating specific equipment into the WWTP expansion that will address the many issues we heard from the residents in 2020 and 2021. First, the WWTP will be converted to diffused aeration. The current WWTP has floating aerators and floating mixers. Diffused aeration will go a long way to lessen the odor and noise. Second, an odor control system will be integrated into the plant expansion. The system is a two-stage system that combines biofiltration with an activated carbon polishing filter. The influent screen, the screening dumpster, and the flow equalization tanks (where the wastewater enters the plant) are the principal sources of potential odors at the plant; they will be covered/enclosed to contain all the airspaces above or around these units. A force air ventilation system will pull the air from these spaces through the biofilter. The biofilter media supports the growth of sulfide reducing bacteria, which will remove 99% of the hydrogen sulfide in the air as well as other odorous compounds. The cleaned air will continue to the carbon polishing filter, which will remove any remaining hydrogen sulfide insoluble organic compounds that get through the first stage biofilter. ONSWC has also taken the initiative to make sure we have multiple back up pumps, blowers, parts for repairs and equipment for these repairs. ONSWC is thoroughly testing the reclaimed water system prior to irrigation startup to repair and clear each zone for a good, clean, and problem free start up.

Fats Oils and Grease (FOG) and Disposable wipes

We ask for your continued efforts to eliminate fats, oils and grease (FOG) from the wastewater system. They are harmful to your pipes and can cause sewage backups into your home. FOG is also harmful to the wastewater system as they cause clogs that create expensive environmental repairs and creates issues with the pumps and the floats which in turn cause can overflows. There is a Grease Goblin flyer in this report and you will be seeing more from the Grease Goblin in coming months.

The usage of flushable wipes causes problems with your sewer system an can create clogs. “Flushable wipes” are not really flushable. Please refrain from flushing “flushable wipes”.

It is recommended, FOG and disposable wipes be discarded in the trash can and not the sewer!

In closing, Old North State Water Company is 100% committed to providing the Briar Chapel community with a safe and responsible wastewater system and the best customer service available from our operators and our customer service department. We are looking forward to 2022 and completing some needed upgrades. If you need anything, our customer service department is available to assist at 1-877-511-2911 option 1.

Thank You,

Old North State Water Company, LLC

**WAN'T FEED:
YOUR DRAIN'S
WORST ENEMY**



**the
Grease
Goblin**

LAST SEEN
Loitering in Sinks
and Drains

WAN'TED FOR
Causing Sewer Overflows

Don't Feed the Grease Goblin!

DO

- ✓ Put oil and grease in collection containers
- ✓ Remove oil and grease from kitchen utensils, equipment, and food preparation areas with scrapers/towels/brooms
- ✓ Keep grease out of wash water
- ✓ Place food scraps in collection containers

DO NOT

- Pour oil and grease down drains
- Wash fryers/griddles, pots/pans, and plates with water until oil and grease are removed
- Use hot water to rinse grease off surfaces
- Put food scraps down drains

Help keep this guy out of your drains and in the hands of the proper authorities!

 N.C. DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF POLLUTION PREVENTION AND ENVIRONMENTAL ASSISTANCE 1-800-743-0136

100 copies of this public document were printed on recycled paper at a cost of \$109.85, or \$1.10 per copy.

Briar Chapel 2021

Sanitary Sewer Overflows (SSO's)

March 3, 2021 500 gallon crack in the 8" forcemain on Hill Creek Rd. NCDEQ was notified and a 5 day report was submitted to NCDEQ .

April 12, 2021 1,000 gallon manhole overflow at the intersection of Great Ridge Pkwy and Copper Leaf Ave due to a plug being placed by the developer's contractor to perform testing on the system and not being removed. NCDEQ was notified and a 5 day report was submitted to NCDEQ.

December 20, 2021 50 gallon line break at Lift Station A at 40 Hillcrest Drive. NCDEQ was notified and a 5 day report was submitted to NCDEQ

Reclaimed Water Pipe Break

March 21, 2021 60 gallon reclaimed water irrigation pipe break off Great Ridge Pkwy, about ¼ miles from the intersection with Catullo Rd near the main walking trail. NCDEQ was notified and a 5 day report was submitted to NCDEQ.

May 3, 2021 1,500 gallon clog in irrigation valve leak at Adventure Park on Wilburn Avenue. NCDEQ was notified and a 5 day report was submitted to NCDEQ.

July 11, 2021 345,000 gallon leak due to irrigation contractor leaving the flushing valve open. NCDEQ was notified and a 5 day report was submitted to NCDEQ.

November 3, 2021 2,160 gallon solenoid malfunction causing the irrigation zone to run longer than programmed at Heatherwood and Treywood Lane. NCDEQ was notified and a 5 day report was submitted to NCDEQ.

ROY COOPER
Governor
DIONNE DELLI-GATTI
Secretary
S. DANIEL SMITH
Director



Certified Mail # 7017 2680 0000 2219 4957
Return Receipt Requested

April 09, 2021

John L McDonald
Old North State Water Company LLC
PO Box 10127
Birmingham, AL 35202-0127

SUBJECT: **NOTICE OF VIOLATION**
Tracking Number: NOV-2021-DV-0205
Sanitary Sewer Overflows - March 2021
Collection System Permit No. WQCS00372
Briar Chapel Collection System
Chatham County

Dear Mr. McDonald:

The self-reported Sanitary Sewer Overflow (SSO) 5-Day Report submitted by Old North State Water Company LLC indicates violations of permit conditions stipulated in the subject permit and North Carolina G.S. 143-215.1. Violations include failing to effectively manage, maintain, and operate the subject collection system so that there is no SSO to the land or surface waters and making an outlet to waters of the State for purposes of G.S. 143-215.1(a)(1), for which a permit is required.

Specific incident cited in the subject report include the following:

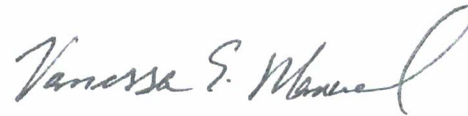
Incident Number	Start Date	Duration (Mins)	Location	Cause	Total Vol (Gals)	Total Vol Surface Water (Gals)	DWR Action
202100979	3/3/2021	390	force main under Hill Creek Road w/in Briar Chapel s/d	Pipe Failure (Break)	1,500	500	Notice of Violation



Remedial actions, if not already implemented, should be taken to correct the above noncompliance. Please submit a written response to this Notice of Violation. Your response is to be received by the regional office within 15 business days following receipt of this violation. Please include any additional documentation about this incident(s) in the response. The submittal will be considered in determining whether the Division will assess a civil penalty for the cited violations.

If you have any questions, please do not hesitate to contact Mitchell Hayes with the Water Quality Section in the Raleigh Regional Office at 919-791-4200 or via email at mitch.hayes@ncdenr.gov.

Sincerely,



 Scott Vinson, Regional Supervisor
Water Quality Regional Operations Section
Raleigh Regional Office
Division of Water Resources, NCDEQ

Cc: Regional Office - WQS File
Laserfiche



ROY COOPER
Governor
 DIONNE DELLI-GATTI
Secretary
 S. DANIEL SMITH
Director



Certified Mail # 7020 3160 0000 2219 2412
Return Receipt Requested

May 20, 2021

John L McDonald
 Old North State Water Company LLC
 PO Box 10127
 Birmingham, AL 35202-0127

SUBJECT: NOTICE OF VIOLATION
Tracking Number: NOV-2021-DV-0262
 Sanitary Sewer Overflows - April 2021
 Collection System Permit No. WQCS00372
 Briar Chapel Collection System
 Chatham County

Dear Mr. McDonald:

The self-reported Sanitary Sewer Overflow (SSO) 5-Day Report submitted by Old North State Water Company LLC indicates violations of permit conditions stipulated in the subject permit and North Carolina G.S. 143-215.1. Violations include failing to effectively manage, maintain, and operate the subject collection system so that there is no SSO to the land or surface waters and making an outlet to waters of the State for purposes of G.S. 143-215.1(a)(1), for which a permit is required.

Specific incident(s) cited in the subject report include the following:

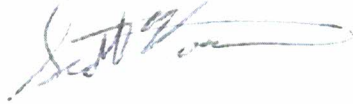
Incident Number	Start Date	Duration (Mins)	Location	Cause	Total Vol (Gals)	Total Vol Surface Water (Gals)	DWR Action
202101170	4/12/2021	120	Intersection of Great Ridge Pkwy and Copper Leaf Ave.	Other	1,000	0	Notice of Violation



Remedial actions, if not already implemented, should be taken to correct the above noncompliance. Please submit a written response to this Notice of Violation. Your response is to be received by the regional office within 15 business days following receipt of this violation. Please include any additional documentation about this incident(s) in the response. The submittal will be considered in determining whether the Division will assess a civil penalty for the cited violations.

If you have any questions, please do not hesitate to contact Mitchell Hayes with the Water Quality Section in the Raleigh Regional Office at 919-791-4200 or via email at mitch.hayes@ncdenr.gov.

Sincerely,



Scott Vinson, Regional Supervisor
Water Quality Regional Operations Section
Raleigh Regional Office
Division of Water Resources, NCDEQ

Cc: Regional Office - WQS File
Laserfiche



ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

S. DANIEL SMITH
Director



NORTH CAROLINA
Environmental Quality

MAILED
8/09/2021

CERTIFIED MAIL 7020 3160 0000 2219 2757
RETURN RECEIPT REQUESTED

August 5, 2021

John L McDonald
Old North State Water Company LLC
PO Box 10127
Birmingham, AL 35202-0127

SUBJECT: NOTICE OF VIOLATION (NOV-2021-DV-0329)
Intent to Assess CIVIL PENALTIES
For Unauthorized Bypass
Briar Chapel Reclaimed Water System
Permit: WQ0028552
Chatham County

Dear Mr. McDonald:

A review has been conducted of the 24-hour self-reporting Bypass report submitted by Robert White on July 14, 2021. The Division of Water Resources (DWR)'s Raleigh Regional Office concludes that the unauthorized bypass violated G.S. 143-215.1(a)(1) and Permit Condition Part II Section 2 (1) of Permit WQ0028552.

Specific activities in violation of State Law include the following:

Incident Number	Start Date	Location	Cause	Total Vol (Gals)	Total Vol Surface Water (Gals)
202101681	07/11/2021	Cattulo Run	Flush valve left open	345,000	345,000

A Notice of Violation/Intent to Issue Civil Penalty is being issued for the noted violation of North Carolina General Statute (G.S.) 143 215.1 and the facility's NPDES Permit. Pursuant to G.S. 143 215.6A, a civil penalty of not more than twenty-five thousand dollars (\$25,000.00) may be assessed against any person who violates or fails to act in accordance with the terms, conditions, or requirements of any permit issued pursuant to G.S. 143 215.1.

This office requests that you respond to this Notice, in writing, within ten (10) business days after receipt. A review of your response will be considered along with any additional information provided in the submitted report. You will then be notified of any civil penalties that may be assessed regarding the violations. If no response is received in this Office within the 10-day period, a civil penalty assessment may be prepared.



North Carolina Department of Environmental Quality | Division of Water Resources
Raleigh Regional Office | 3800 Barrett Drive | Raleigh, North Carolina 27609
919.791.4200

Remedial actions should have already been taken to correct this problem and prevent further occurrences in the future. The Division of Water Resources may pursue enforcement action for this and any additional violations of State law. If the violations are of a continuing nature, not related to operation and/or maintenance problems, and you anticipate remedial construction activities, then you may wish to consider applying for a Special Order by Consent.

If you have any questions about this letter, please contact Mitch Hayes of the Raleigh Regional Office at 919.791.4261.

Sincerely,



jsr

Scott Vinson, Regional Supervisor
Water Quality Regional Operations Section
Raleigh Regional Office
Division of Water Resources, NC DEQ

cc: NPDES Program Files - Laserfiche
Raleigh Regional Office - Laserfiche



ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
S. DANIEL SMITH
Director



January 24, 2022

John L McDonald
Old North State Water Company LLC
PO Box 10127
Birmingham, AL 35202-0127

SUBJECT: NOTICE OF DEFICIENCY
Tracking Number: NOD-2022-DV-0002
Sanitary Sewer Overflows - December 2021
Collection System Permit No. WQCS00372
Briar Chapel Collection System
Chatham County

Dear Mr. McDonald:

A review has been conducted of the self-reported Sanitary Sewer Overflow (SSO) 5-Day Report submitted by Old North State Water Company LLC. This review has shown the Old North State Water Company LLC to be in violation of the requirements found in the subject permit and/or North Carolina G.S. 143-215.1(a)(1). The violations that occurred are summarized below:

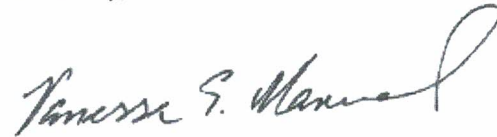
Incident Number	Start Date	Duration (Mins)	Location	Cause	Total Vol (Gals)	Total Vol Surface Water (Gals)	DWR Action
202102288	12/20/2021	40	Hill Creek Road, Chapel Hill, NC 27516	Inflow and Infiltration, Pipe Failure (Break)	unknown	unknown	Notice of Deficiency

Remedial actions, if not already implemented, should be taken to correct the above noncompliance. Please note that the Division of Water Resources (DWR) began assessing civil penalties for severe and/or repeat SSOs starting December 1, 2007. Enforcement decisions are based on volume spilled, volume reaching surface waters, duration, gravity, impacts to public health, fish kills and other factors.



If you have any questions, please do not hesitate to contact Mitchell Hayes with the Water Quality Section in the Raleigh Regional Office at 919-791-4200 or via email at mitch.hayes@ncdenr.gov.

Sincerely,



for Scott Vinson, Regional Supervisor
Water Quality Regional Operations Section
Raleigh Regional Office
Division of Water Resources, NCDEQ

Cc: Raleigh Regional Office - WQS File
Laserfiche

