



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

**STATE WATER CONTROL BOARD
ENFORCEMENT ACTION - ORDER BY CONSENT
ISSUED TO
NORTHUMBERLAND COUNTY
FOR
CALLAO WASTEWATER TREATMENT PLANT
VPDES Permit No. VA0091421**

SECTION A: Purpose

This is a Consent Order issued under the authority of Va. Code § 62.1-44.15, between the State Water Control Board and Northumberland County, regarding the Callao Wastewater Treatment Plant, for the purpose of resolving certain violations of the State Water Control Law, the Regulation and the Permit.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "305(b) report" means the report required by Section 305(b) of the Clean Water Act (33 United States Code § 1315(b)), and Va. Code § 62.1-44.19:5 for providing Congress and the public an accurate and comprehensive assessment of the quality of State surface waters.
2. "Board" means the State Water Control Board, a permanent citizens' board of the Commonwealth of Virginia, as described in Va. Code §§ 10.1-1184 and 62.1-44.7.
3. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia, as described in Va. Code § 10.1-1183.
4. "Director" means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1-1185.

5. "Discharge" means discharge of a pollutant. 9 VAC 25-31-10
6. "Discharge of a pollutant" when used with reference to the requirements of the VPDES permit program means:
 - (a) Any addition of any pollutant or combination of pollutants to surface waters from any point source; or
 - (b) Any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.
7. "DMR" means Discharge Monitoring Report.
8. "Effluent" means wastewater – treated or untreated – that flows out of a treatment plant, sewer, or industrial outfall.
9. "Facility", "Plant" or "WWTP" means the Callao wastewater treatment plant located at 104 Harryhogan Road, Callao, Virginia, which treats and discharges treated sewage and other municipal wastes, for the residents and businesses of Callao.
10. "County" means Northumberland County, a political subdivision of the Commonwealth of Virginia. The County is a "person" within the meaning of Va. Code § 62.1-44.3.
11. "Notice of Violation" or "NOV" means a type of Notice of Alleged Violation under Va. Code § 62.1-44.15.
12. "O&M" means operations and maintenance.
13. "Order" means this document, also known as a "Consent Order" or "Order by Consent," a type of Special Order under the State Water Control Law.
14. "Permit" means VPDES Permit No. VA0091421, which was issued under the State Water Control Law and the Regulation to the County on December 10, 2014 and which expires on November 30, 2019.
15. "Pollutant" means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 USC § 2011 *et seq.*)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water... 9 VAC 25-31-10.
16. "Pollution" means such alteration of the physical, chemical, or biological properties of any state waters as will or is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety, or welfare or to the health of

animals, fish, or aquatic life; (b) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (c) unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses, provided that (i) an alteration of the physical, chemical, or biological property of state waters or a discharge or deposit of sewage, industrial wastes or other wastes to state waters by any owner which by itself is not sufficient to cause pollution but which, in combination with such alteration of or discharge or deposit to state waters by other owners, is sufficient to cause pollution; (ii) the discharge of untreated sewage by any owner into state waters; and (iii) contributing to the contravention of standards of water quality duly established by the Board, are “pollution.” Va. Code § 62.1-44.3.

17. “PRO” means the Piedmont Regional Office of DEQ, located in Glen Allen, Virginia.
18. “Regulation” means the VPDES Permit Regulation, 9 VAC 25-31-10 *et seq.*
19. “State Water Control Law” means Chapter 3.1 (§ 62.1-44.2 *et seq.*) of Title 62.1 of the Va. Code.
20. “State waters” means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands. Va. Code § 62.1-44.3.
21. “Va. Code” means the Code of Virginia (1950), as amended.
22. “VAC” means the Virginia Administrative Code.
23. “VPDES” means Virginia Pollutant Discharge Elimination System.
24. “Warning Letter” or “WL” means a type of Notice of Alleged Violation under Va. Code § 62.1-44.15.

SECTION C: Findings of Fact and Conclusions of Law

1. The County owns and operates the Plant. The Permit allows the County to discharge treated sewage and other municipal wastes from the Plant, to an unnamed tributary of Lodge Creek, in strict compliance with the terms and conditions of the Permit.
2. The unnamed tributary of Lodge Creek is located in the Potomac River Basin. Lodge Creek is listed in DEQ’s 305(b) report as impaired due to the presence of enterococci at levels above water quality standards. The causes of the impairment have been variously described as non-point source or unknown discharges. Lodge Creek is also listed due to the presence of high levels of E. coli. The cause of the E. coli impairment is unknown. Finally Lodge Creek is listed as impaired due to low levels of dissolved oxygen. The causes of the impairment are both natural conditions (low stream velocity) and non-point source discharges.

3. In submitting its DMRs, as required by the Permit, the County has reported exceedances of Permit effluent limitations for Total Recoverable Zinc, Total Kjeldahl Nitrogen, Ammonia as Nitrogen and Carbonaceous Biochemical Oxygen Demand (CBOD). The Ammonia exceedances occurred between January and April 2015 and during February 2016. The Total Kjeldahl Nitrogen (TKN) exceedances occurred in January, March and April 2015 and in February 2016. The CBOD exceedance occurred in June 2016 and the Total Recoverable Zinc exceedances occurred in January 2015, May, August, October and November 2016 and January and March 2017. In addition to the foregoing, the County failed to report the results of Total Recoverable Copper monitoring in January 2015 and the results of Tributyltin monitoring for the 1st 2015 semi-annual reporting period and incorrectly reported the frequency of Total Recoverable Zinc monitoring for the March 2015 reporting period.
4. PRO issued Notices of Violation to the County on August 13, 2015, December 8, 2016 and May 9, 2017 for the violations noted above.
5. The County responded to the Notices of Violation by indicating that the 2015 Ammonia and TKN exceedances were due to a faulty blower and mixing pump at the WWTP, both of which were repaired upon discovery of their failure. The 2016 Ammonia and TKN exceedances were attributed to a worn membrane which was also replaced upon discovery of the issue. The County attributed the reporting deficiencies to operator error. A new WWTP operator was hired by the County in May 2016. The County indicated that the CBOD exceedance reported was a case of faulty math, calculation violations have not reoccurred. The County is addressing the Zinc violations in several ways: 1) clean metals sampling techniques have been instituted; 2) hardness data used to generate the Permit's Zinc limits has been vetted and supplemental data is being collected in anticipation of a Permit modification request to allow higher levels of Zinc to be discharged; 3) the installation of hardness adjustment equipment is being considered to enhance Zinc removal; 4) performance of a Water Effects Ratio or comparable study is being considered to justify a change from Total Recoverable to Dissolved Zinc effluent limits; and, 5) WWTP operational changes, specifically increased sludge wasting, have been instituted to improve Zinc removal.
6. The County's operating logs indicate that it discharged treated wastewater from the Plant every day from January 1, 2015 through March 31, 2017.
7. Part I.A.1 of the Permit contains effluent limitations and monitoring requirements, including monitoring frequencies, which the County must meet in its operation of the WWTP.
8. Part II.C of the Permit requires that the results of effluent monitoring be submitted to the Department by the 10th day of the month after the required monitoring period.
9. Part II.F of the Permit prohibits wastewater discharges from the WWTP except in compliance with the terms of the Permit.

10. Va. Code § 62.1-44.5 states that: “[E]xcept in compliance with a certificate issued by the Board, it shall be unlawful for any person to discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances.”
11. The Regulation, at 9VAC25-31-50, also states that except in compliance with a VPDES permit, or another permit issued by the Board, it is unlawful to discharge into state waters sewage, industrial wastes or other wastes.
12. Va. Code § 62.1-44.15(5a) states that a VPDES permit is a “certificate” under the statute.
13. The Department has issued no permits or certificates to the County other than VPDES Permit No. VA0091421.
14. The unnamed tributary to Lodge Creek is a surface water located wholly within the Commonwealth and is a “state water” under State Water Control Law.
15. Based on the DMRs and their associated cover letters, submitted by the County, the Board concludes that Northumberland County has violated Parts I.A.1, II.C and II.F, Va. Code §62.1-44.5 and 9VAC25-31-50, by discharging treated sewage and municipal wastes from the Plant while concurrently failing to comply with the conditions of the Permit, as described in paragraph C(3), above.
16. The County has submitted documentation that verifies that the Ammonia as Nitrogen, TKN, CBOD and reporting violations described in paragraph C(3) above, have been corrected.
17. In order for the County to complete its return to compliance, DEQ staff and representatives of the County have agreed to the Schedule of Compliance, which is incorporated as Appendix A of this Order.

SECTION D: Agreement and Order

Accordingly, by virtue of the authority granted it in Va. Code §§ 62.1-44.15, the Board orders the County, and the County agrees to perform the actions described in Appendix A of this Order

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend this Order with the consent of the County for good cause shown by the County, or on its own motion pursuant to the Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, after notice and opportunity to be heard.
2. This Order addresses and resolves only those violations specifically identified in Section C of this Order. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law

regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility; or (3) taking subsequent action to enforce the Order.

3. For purposes of this Order and subsequent actions with respect to this Order only, the County admits the jurisdictional allegations, findings of fact, and conclusions of law contained herein.
4. The County consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.
5. The County declares it has received fair and due process under the Administrative Process Act and the State Water Control Law and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to modify, rewrite, amend, or enforce this Order.
6. Failure by the County to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
8. The County shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other unforeseeable circumstances beyond its control and not due to a lack of good faith or diligence on its part. The County shall demonstrate that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. The County shall notify the DEQ Regional Director verbally within 24 hours and in writing within three business days when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order. Such notice shall set forth:
 - a. the reasons for the delay or noncompliance;
 - b. the projected duration of any such delay or noncompliance;
 - c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
 - d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Regional Director verbally within 24 hours and in writing within three business days, of learning of any condition above, which the parties intend to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto and any successors in interest, designees and assigns, jointly and severally.
10. This Order shall become effective upon execution by both the Director or his designee and the County. Nevertheless, the County agrees to be bound by any compliance date which precedes the effective date of this Order.
11. This Order shall continue in effect until:
 - a. The Director or his designee terminates the Order after the County has completed all of the requirements of the Order;
 - b. the County petitions the Director or his designee to terminate the Order after it has completed all of the requirements of the Order and the Director or his designee approves the termination of the Order; or
 - c. the Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to the County.

Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve the County from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

12. Any plans, reports, schedules or specifications attached hereto or submitted by the County and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.
13. The undersigned representative of the County certifies that he or she is a responsible official authorized to enter into the terms and conditions of this Order and to execute and legally bind the County to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of the County.
14. This Order constitutes the entire agreement and understanding of the parties concerning settlement of the violations identified in Section C of this Order, and there are no representations, warranties, covenants, terms or conditions agreed upon between the parties other than those expressed in this Order.
15. By its signature below, the County voluntarily agrees to the issuance of this Order.

And it is so ORDERED this 24 day of August, 2017.



Jefferson D. Reynolds
Enforcement Division Director
Department of Environmental Quality

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Northumberland County voluntarily agrees to the issuance of this Order.

Date: 6/19/17 By: E. Luttrell Tadlock County Administrator
(Person) (Title)

Commonwealth of Virginia
County of Northumberland

The foregoing document was signed and acknowledged before me this 19 day of
June, 2017, by E. Luttrell Tadlock who is
County Administrator of Northumberland County, on behalf of the County.

Mary S. Dodson
Notary Public

151482
Registration No.

My commission expires: 7-31-17

Notary seal:



**APPENDIX A
SCHEDULE OF COMPLIANCE**

The County shall:

- a. Confirm to PRO, on or before July 1, 2017 that the County has instituted clean metals sampling at the WWTP.
- b. Confirm to PRO, on or before August 1, 2017 that the County has revised its O&M manual to include the clean metals sampling techniques referenced above, as well as its practice of wasting approximately 5400 gallons of WWTP sludge each month to enhance Zinc removal.
- c. Submit to PRO, on or before September 1, 2017 a plan and schedule, including a request for a Certificate of Construction, for installation of any hardness adjustment equipment the County intends to install at the WWTP for enhanced Zinc precipitation. Should PRO approve the plan and schedule after confirming that adjustment of the hardness of the Plant's wastewater will not adversely affect Lodge Creek, said plan and schedule shall become a part of and enforceable under the terms of this Order.
- d. Submit to PRO, on or before October 1, 2017, for review and approval, a plan and schedule for any Water Effects Ratio or comparable study it intends to perform to support an anticipated request to modify its Total Recoverable Zinc Permit effluent limits. Upon approval said plan and schedule shall become a part of and enforceable under the terms of this Order.
- e. Within 90 days of its completion of the above referenced study but no later than June 1, 2018 submit to PRO the results of the study and any application that the County intends to make for modification of the Permit's Total Recoverable Zinc limits based on the results of the study or on the results of supplemental hardness data that the County has generated since May 2016. The County shall contemporaneously submit the appropriate application processing fee.
- f. Should PRO determine adjustment of the hardness of the Plant's wastewater would result in adverse effects to Lodge Creek and, should PRO determine that the results of the above reference study or supplemental hardness data do not support modification of the Permit's Total Recoverable Zinc limits, or that such modification would be insufficient to ensure that County could consistently meet such limits, within 60 days of the later of such determinations the County shall submit to PRO, for its review and approval, a plan and schedule to modify the WWTP or its operation to ensure that the County consistently meets its Zinc effluent limits. Upon approval said plan and schedule shall become a part of and enforceable under the terms of this Order.
- g. Until such time as the County completes installation of any hardness adjustment equipment, or completes other modifications of the WWTP or its operation, as

anticipated by subparagraph (f) above and while PRO is processing any supportable permit modification request as anticipated by subparagraph (e) above, the County shall operate the WWTP in a workmanlike manner in order to ensure the highest level of Zinc removal of which the Plant is currently capable.

- h. Unless otherwise specified in this Order, the County shall submit all requirements of Appendix A of this Order to:

Cynthia Akers
VA DEQ – Piedmont Regional Office
4949A Cox Road, Glen Allen, Virginia 23060
Cynthia.Akers@deq.virginia.gov
(804) 698-418