COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
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Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

STATE WATER CONTROL BOARD
ENFORCEMENT ACTION - ORDER BY CONSENT
ISSUED TO
KING GEORGE COUNTY SERVICE AUTHORITY
FOR
DAHLGREN DISTRICT WASTE WATER TREATMENT PLANT
VPDES Permit No. VA0026514

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 the King George County Service Authority, regarding the Dahlgren District Waste Water Treatment Plant, for the purpose of resolving certain violations of the State Water Control Law and the applicable permit and regulation.

SECTION B: Definitions

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

1. "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.

2. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia, as described in Va. Code § 10.1-1183.

3. "Director" means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1-1185.

4. "DMR" means Discharge Monitoring Report.

5. "Facility" or "Plant" means the Dahlgren District Waste Water Treatment Plant located at 16383 Dahlgren Road, King George, Virginia, a plant which treats and discharges treated

sewage and other municipal wastes, for the residents and businesses located in King George County.

6. "Authority" means the King George County Service Authority, an authority created pursuant to the Virginia Water and Waste Authorities Act, Va. Code § 15.2-5100 *et seq.* King George County Service Authority is a "person" within the meaning of Va. Code § 62.1-44.3.

7. "MLSS" means Mixed Liquor Suspended Solids.

8. "Notice of Violation" or "NOV" means a type of Notice of Alleged Violation under Va. Code § 62.1-44.15.

9. "NRO" means the Northern Regional Office of DEQ, located in Woodbridge, Virginia.

10. "O&M" means operations and maintenance.

11. "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.

12. "Permit" means VPDES Permit No. VA0026514, which was effective on January 12, 2009 and expires on January 11, 2014.

13. "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.

14. "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.

15. "Regulation" means the VPDES Permit Regulation, 9 VAC 25-31-10 *et seq.*

16. "State Water Control Law" means Chapter 3.1 (§ 62.1-44.2 *et seq.*) of Title 62.1 of the Va. Code.

17. "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.

18. "TKN" means Total Kjeldahl Nitrogen.

19. "TSS" means Total Suspended Solids.

20. "Va. Code" means the Code of Virginia (1950), as amended.

21. "VAC" means the Virginia Administrative Code.

22. "VPDES" means Virginia Pollutant Discharge Elimination System.

23. "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 Authority owns and operates the Plant in King George County, Virginia. The Permit authorizes the Authority to discharge treated sewage and other municipal wastes from the Plant, to Williams Creek, located within the Potomac River Watershed, in strict compliance with the terms and conditions of the Permit.

2. The Plant discharges to the tidal segment of Williams Creek. This segment is listed in DEQ's 2010 305(b)/303(d) Integrated Report as impaired for aquatic life use due to low dissolved oxygen, and aquatic plants (Marcrophytes). This segment is listed as impaired for recreational use due to Enterococcus. The source of the impairment is listed variously as agriculture, municipal point sources, industrial discharges, sanitary sewer overflows, loss of habitat, and atmospheric deposition of Nitrogen.

3. In submitting its DMRs, the Authority has indicated that it exceeded discharge limitations contained in Part I, Page 1, Section A, Number 1 of the Permit, for Enterococci in December 2010 and January 2011, for Total Nitrogen for the 2010 and 2011 Calendar Years, Total Phosphorus for the 2010 Calendar Year and for TKN in the January 2011 monitoring period. The Permit exceedances reported in the DMRs are as follows:

    a. During the December 2010 monitoring period, the Authority reported exceeding the concentration average (calculated as a geometric mean) monthly limit for

Enterococci and the 2010 Calendar Year concentration average limit for Total Nitrogen and Total Phosphorus.

b. During the January 2011 monitoring period, the Authority reported exceeding the concentration average (calculated as a geometric mean) monthly limit for Enterococci and the monthly concentration average limit and weekly concentration average maximum limit for TKN.
c. During the December 2011 monitoring period, the Authority reported exceeding the 2011 Calendar Year concentration average limit for Total Nitrogen.
d. The Authority submitted a revised DMR which was rejected by DEQ based on the agency's interpretation of required analytical methods. The revised DMR was done to account for individual sample results below the laboratory Quantitative Limits, in the geometric mean calculation, and rounding. The revised DMR did not show an exceedance of the permitted Enterococci limits for the December 2010 reporting period.

4. DEQ issued a Warning Letter, WL No. W2010-12-N-1006, dated December 14, 2010, for the late submittal of the seventh quarter Toxicity Monitoring Report.

5. DEQ issued a Warning Letter, WL No. W2011-02-N-1003, dated February 11, 2011, for the permit limit exceedances reported during the December 2010 monitoring period.

6. DEQ issued a Notice of Violation, NOV No. W2011-03-N-0008, dated March 14, 2011, for the permit limit exceedances reported during the January 2011 monitoring period.

7. DEQ issued a Notice of Violation on February 28, 2012, NOV No. W2012-02-N-0004 for the permit exceedance reported during the December 2011 monitoring period.

8. The Authority responded to the March 14, 2011 NOV in a letter, dated March 22, 2011. The response stated that the Enterococci exceedances were a result of a loss of filter efficiency at the Plant, contributing to higher TSS and the resulting Enterococci exceedances. The response stated that both the monthly TKN and calendar year total Nitrogen exceedances were due to a combination of high nitrogen septic, high MLSS, and December's low temperatures. The Authority further indicated in correspondence and during conversations held with DEQ staff that its failure to comply with Total Nitrogen and Total Phosphorus limits was related to certain process and design deficiencies at the Facility.

9. On December 13, 2011 an informal proceeding, as provided in § 2.2-4019 of the Code, was held at NRO to provide a basis for a case decision, in the form of a unilateral special order, regarding the matters referenced in WL No. W2010-12-N-1006, WL No. W2011-02-N-1003 and NOV No. W2011-03-N-0008. Although the proceeding was concluded, no unilateral order was issued as a result of the proceeding and the need for the issuance of such an order has been rendered moot, as the matters which were the subject of the proceeding, as well as which are referenced in NOV No. W2012-02-N-0004 are, by agreement of the parties hereto, being settled consensually by this Order.

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 9 VAC 25-31-50, 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. Williams Creek is a surface water located wholly within the Commonwealth and is a "state water" under the State Water Control Law.

14. Based on the DMRs and other reports, the Board concludes that the Authority has violated the Permit and Va. Code § 62.1-44.5 and 9 VAC 25-31-50, 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) and C(4) above.

15. The Authority has submitted documentation that verifies that the TKN and Enterococci violations as described in paragraphs C(3) through C(4), above, have been corrected. The Authority has further indicated that it intends to address the Total Phosphorus and Total Nitrogen violations described above by enhancing process control through the installation of both effluent and process sensors and by enhancing treatment capabilities through the installation of both a supplemental carbon feed system and an advanced biological denitrification and enhanced phosphorus removal treatment system. The Authority subsequently corrected these exceedences. DEQ acknowledges that it currently has no knowledge of any Permit violations, other than those described in paragraphs C(3) and (4) above, for the time period addressed in this Consent Order.

16. In order for the Authority to complete its return to compliance, DEQ staff and representatives of the Authority 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 Authority agrees to:

1. Perform the actions described in Appendices A and B of this Order; and

2. Pay a civil charge of $5320 within 30 days of the effective date of the Order in settlement of the violations cited in this Order.

Payment shall be made by check, certified check, money order or cashier's check payable to the "Treasurer of Virginia," and delivered to:

Receipts Control
Department of Environmental Quality
Post Office Box 1104
Richmond, Virginia 23218

The Authority shall include its Federal Employer Identification Number (FEIN) with the civil charge payment and shall indicate that the payment is being made in accordance with the requirements of this Order for deposit into the Virginia Environmental Emergency Response Fund (VEERF).

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend this Order with the consent of the King George County Service Authority for good cause shown by the Authority, 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 Authority admits the jurisdictional allegations, findings of fact, and conclusions of law contained herein.

4. The Authority 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 Authority 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 further 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 Authority 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 Authority 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 occurrence. The Authority shall show that such circumstances were beyond its control and not due to a lack of good faith or

diligence on its part. The Authority 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 Authority intends 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, their 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 King George County Service Authority. Nevertheless, the King George County Service Authority agrees to be bound by any compliance date of this Order 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 Authority has completed all of the requirements of the Order;

b. the Authority 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 Authority.

Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve the Authority 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 Authority 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 Authority 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 Authority to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of the Authority.

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 Authority voluntarily agrees to the issuance of this Order.

And it is so ORDERED this _____ day of _____, 2012.

_____
Thomas A. Faha, NRO Regional Director
Department of Environmental Quality

King George County Service Authority voluntarily agrees to the issuance of this Order.

Date: June 27, 2012 By: Christopher F. Thomas, General Manager
(Person) (Title)
King George County Service Authority

Commonwealth of Virginia
City/County of King George

The foregoing document was signed and acknowledged before me this 27th day of June, 2012, by Christopher F. Thomas who is General Manager of King George County Service Authority, on behalf of the Authority.

Marcella A. Feltner
Notary Public

7165166
Registration No.

My commission expires: 1/31/2016

Notary seal:

Marcella A. Feltner
Commonwealth of Virginia
Notary Public
Commission No. 7165166
My Commission Expires 1/31/2016

APPENDIX A
SCHEDULE OF COMPLIANCE

King George County Service Authority shall:

1. Within 30 days of the effective date of this Order submit to DEQ for review and approval, a plan and schedule (the "Plan") to address how King George will consistently meet its annual limits for Total Nitrogen and Total Phosphorus. Said Plan will incorporate the measures recommended in that certain Preliminary Engineering Report prepared by Draper Aden Associates for the Dahlgren Wastewater Treatment Plant and dated June 30 2012. The Plan will incorporate the installation of an additional nitrate sensor prior to the Facility's denitrification stage and the installation of an advanced treatment system designed to enhance nutrient removal. The Plan will also provide for funding of construction and/or installation of the above referenced treatment improvement measures in an expeditious fashion.
2. The Plan shall include expeditious funding applications and approvals. The completion schedule shall be based on securing the funding source. Any delay in funding may require an adjustment of the estimated completion date. The Plan will incorporate measures that allow for the installation of continuous monitoring and control sensors as detailed in the Amended Report referenced in paragraph 3below. The quantity, type, and location of the sensors shall be in accordance with recommendations of the Amended Report which are designed to ensure that the Facility will consistently meet the permitted requirements for Total Nitrogen and Total Phosphorus. The Plan will detail the recommended type of advanced treatment technology for denitrification and enhanced phosphorus removal. The Amended Report will further investigate options for precise analytical instrumentation and process control along with capital infrastructure improvements for biological treatment facilities using supplemental carbon that will reliably achieve compliance with Permit discharge limits up to the full rated capacity of the Plant. The plan will also provide for funding of construction and/or installation of the above referenced treatment improvement measures in an expeditious fashion.
3. The Authority will submit the Amended Report, a revised Preliminary Engineering Report, to DEQ, for review and approval, no later than June 30, 2012.

Unless otherwise specified in this Order, King George County Service Authority shall submit all requirements of Appendix A of this Order to:

Virginia Department of Environmental Quality
Attn: Enforcement Staff
13901 Crown Court

Woodbridge, VA 22193

APPENDIX B
INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

From the effective date of this Order until the end of the calendar year in which a Certificate to Operate the Plant upgrades described in Appendix A has been issued, but in no event later than December 31, 2014,the Authority shall monitor, limit and calculate the discharge from Outfall No 001 of the Facility in accordance with VPDES Permit Number VA0026514, except as specified below. These interim limits shall retroactively apply as of the first day of the year in which this Order becomes effective. The foregoing notwithstanding, these interim limits do not supercede the provisions of that certain Virginia Water Quality Improvement Fund Point Source Grant and Operation and Maintenance Agreement, Contract #440-S-08-04, which require that King George meet a Total Nitrogen effluent concentration limit of 4.0 mg/l and a Total Phosphorus effluent concentration limit of 0.3 mg/l, both on an annual average basis, except as provided in paragraph 5.1 and Article VIII of the Agreement.

These requirements shall be construed in light of the Regulation.

Parameter Description	**Parameter Limits**			**Monitoring Requirements**	
	Concentration Minimum	**Concentration Monthly Average**	**Concentration Maximum**	**Sample Frequency**	**Sample Type**
Total Nitrogen – Calendar Year		8.0 mg/l		1/Y	Calculated
Total Phosphorus – Calendar Year		1.0 mg/l		1/Y	Calculated