DEQ-VALLEY
MAR 24 2011
TO:
FILE:

COMMONWEALTH of VIRGINIA

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

David K. Paylor
Director

Amy Thatcher Owens
Regional Director

STATE WATER CONTROL BOARD
ENFORCEMENT ACTION - ORDER BY CONSENT
ISSUED TO
RIVANNA WATER AND SEWER AUTHORITY
FOR
MOORES CREEK REGIONAL STP AND INTERCEPTOR SYSTEM
VPDES Permit No. VA0025518

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 Rivanna Water and Sewer Authority, regarding the Facility and RWSA's interceptor system, for the purpose of resolving certain violations of the State Water Control Law and the Permit and the Regulation.

SECTION B: Definitions

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

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

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. "The City" and "Charlottesville" means the City of Charlottesville, a political subdivision of the Commonwealth of Virginia. Charlottesville is a person within the meaning of Va. Code § 62.1-44.3.

4. "CTC" means Certificate to Construct.

5. "CTO" means Certificate to Operate.

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

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

8. "DMR" means Discharge Monitoring Report.

9. "Facility" or "Plant" means the Moores Creek Regional Sewage Treatment Plant owned and operated by RWSA which is located at 695 Moores Creek Lane in Charlottesville, Virginia. The Facility treats and discharges sewage and other municipal wastes, for the residents and businesses of the City of Charlottesville, the University of Virginia and portions of Albemarle County.

10. "I&I" means Inflow and Infiltration.

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. VA0025518, which was issued under the State Water Control Law and the Regulation to RWSA on May 1, 2006 and which expires on April 30, 2011.

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

18. "RWSA" means the Rivanna Water and Sewer Authority, an authority created pursuant to the Virginia Water and Waste Authorities Act, Va. Code § 15.2-5100 *et seq.* Rivanna is a "person" within the meaning of Va. Code § 62.1-44.3.

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. "STP" means sewage treatment plant.

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

23. "VAC" means the Virginia Administrative Code.

24. "VPDES" means the Virginia Pollutant Discharge Elimination System.

25. "VRO" means the Valley Regional Office of DEQ, located in Harrisonburg, Virginia.

26. "Warning Letter" or "WL" means a type of Notice of Alleged Violation under Va. Code § 62.1-44.15.

SECTION C: The Board's Findings of Facts and Conclusions of Law

1. RWSA owns and operates the Facility and a sanitary sewer transmission system, which includes both gravity and force mains, which serves Charlottesville, the University of

Virginia and portions of Albemarle County, Virginia. RWSA is a wholesale wastewater utility, receiving and treating wastewater from the collection systems owned and operated by the City and ACSA. The Permit authorizes RWSA to discharge treated sewage and other municipal wastes from the Facility, to Moores Creek, in strict compliance with the terms and conditions of the Permit.

2. Moores Creek is located in the James (Middle) River Basin. Moores Creek from its confluence with the Ragged Mountain Dam receiving stream downstream to its confluence with the Rivanna River is listed in DEQ's 303(d) report as impaired for benthics, E. coli and fecal coliform. The impairment is attributed to urban non-point discharges/ urban runoff (urbanized-high density area), wildlife other than waterfowl, other non-point source discharges and agriculture.

   Schenk's Branch is located in the James (Middle) River Basin. Schenk's Branch from its headwaters downstream to its confluence with Meadow Creek is listed in DEQ's 303(d) report as impaired for benthics. The source of impairment is attributed to urban runoff / urban non-point discharges (urbanized-high density area) and other non-point source discharges.

   Meadow Creek is located in the James (Middle) River Basin. Meadow Creek from where it becomes a perennial stream downstream to its confluence with the Rivanna River is listed in DEQ's 303(d) report as impaired for benthics, E. coli and fecal coliform. The impairment is attributed to urban runoff / urban non-point discharges (urbanized-high density area), wildlife other than waterfowl, and other non-point source discharges.

3. The design flow of the Facility has been rated and approved as 15 MGD, measured as a monthly average flow.

4. RWSA is presently constructing a Facility upgrade to comply with annual nutrient wasteload allocations which took effect on January 1, 2011. In addition, the construction upgrade will increase the Facility's ability to treat peak flows to 37.5 MGD and then ultimately to 45 MGD by 2013. RWSA is also in the process of increasing the sizing/capacity of the Meadow Creek Interceptor to improve the transmission of wastewater to the Facility. RWSA expects to be able to meet its annual nutrient waste load allocations for calendar year 2011 through unit processes brought on-line with construction in-progress. However, if RWSA is unable to meet its annual allocations, it will purchase nutrient credits until construction of sufficient treatment units are completed.

5. RWSA owns 42.1 miles of transmission system pipeline and seven (7) pump stations, which together constitute the interceptor line system transmitting wastewater to the Facility from the City and portions of Albemarle County.

6. The City and ACSA each own and operate a sanitary sewer collection system which collects sewage within its individual jurisdictional boundary and transfers it to the Facility for treatment.

7. Since 2006, RWSA, the City, and ACSA have worked together to conduct flow studies, analyze flow data, assess wet weather limitations, calibrate a transmission system computer model, forecast future dry weather flows through land development projections and identify inflow and infiltration reduction goals across all sewer collection systems connected to the Facility. The goal of these projects is to assure adequate capacity in the transmission and treatment systems with emphasis on addressing unpermitted discharges. The three entities are working cooperatively to upgrade their respective sewer collection systems.

8. In submitting reports and DMRs, as required by the Permit, RWSA has reported a number of unpermitted discharges from the Facility and interceptor lines since April 2006 through March 2011, in violation of Parts I.A and II.F of the Permit. RWSA attributed the unpermitted discharges to inflow and infiltration volume from the collection systems that exceeded the hydraulic capacities of the Facility and its interceptors during periods of heavy rainfall. These unpermitted discharges were to Schenk's Branch, Meadow Creek and Moores Creek. In addition, RWSA reported exceedances of the ammonia effluent limits contained in Part I.A of the Permit during November 2009 that RWSA attributed to high rainfall events which hydraulically overloaded the Facility beyond its design capacity thereby adversely affecting treatment efficiencies.

9. On January 13, 2010, VRO issued Warning Letter No. W2010-01-V-1005 to RWSA for the ammonia loading maximum and concentration maximum effluent limits violations during November 2009.

10. On March 10, 2010, VRO issued Warning Letter No. W2010-03-VRO-1005 to RWSA for the unpermitted discharge of approximately 90,000 gallons of wastewater to Moores Creek on January 17, 2010.

11. On April 2, 2010, Department staff met with representatives of RWSA, the City, and ACSA to discuss the unpermitted discharges, the capacity and collection system restrictions that led to the discharges and the necessary corrective actions undertaken and planned for the future. DEQ requested the three entities each submit a plan and schedule of corrective actions to address I&I and capacity issues in their individual collection systems.

12. On April 21, 2010, VRO issued Warning Letter No. W2010-04-VRO-1014 to RWSA for the unpermitted discharges to State waters from August 2008 through March 2010.

13. By letter dated May 7, 2010, RWSA responded to the Warning Letter laying out its general improvement plan to address the unpermitted permitted discharges based on information gathered and the studies conducted.

14. By letter dated May 27, 2010, RWSA submitted to DEQ a summary of completed and in-progress corrective actions, and a plan and schedule of future corrective actions to address the unpermitted discharges.

15. 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."

16. 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.

17. Va. Code § 62.1-44.15(5a) states that a VPDES permit is a "certificate" under the statute.

18. The Department has issued no permits or certificates to RWSA authorizing the discharge of wastewater from the Facility other than VPDES Permit No. VA0025518.

19. Moores Creek, Meadow Creek, and Schenk's Branch are surface waters located wholly within the Commonwealth and are "state waters" under State Water Control Law.

20. Based on RWSA's DMRs, RWSA's letters to DEQ, the Warning Letters, the April 2, 2010 meeting, and file reviews, the Board concludes that RWSA has violated the Permit and/or Va. Code § 62.1-44.5 and 9 VAC 9 VAC 25-31-50, because treated and untreated sewage and municipal wastes from the Facility and RWSA's collection system have been discharged to State waters and these discharges were not in compliance with a permit or certificate issued by the Board, the Regulation and the Va. Code, as described in paragraph C(8) above.

21. In order for RWSA to provide for compliance with the Permit, the Regulation and Va. Code § 62.1-44.5, DEQ and representatives of RWSA 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 RWSA, and RWSA hereby agrees to:

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

2. During the estimated 2 year interim period during which Facility improvements will be completed, RWSA will operate and maintain the Facility in accordance with its approved O&M Manual, the Sewage Collection and Treatment Regulations (9 VAC 25-790-10, *et seq.*) and with generally accepted practices and procedure in the municipal wastewater industry.

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend this Order with the consent of RWSA for good cause shown by RWSA, 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 described 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, RWSA admits to the jurisdictional allegations, and agrees not to contest, but does not admit, the findings of fact and conclusions of law in this Order.

4. RWSA consents to venue in the Circuit Court of the City of Charlottesville for any civil action taken to enforce the terms of this Order.

5. RWSA 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 RWSA 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. RWSA does not waive any rights or objections it may have in any enforcement action by other federal, state, or local authorities arising out of the same or similar facts to those recited in this Order.

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. RWSA 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. RWSA shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. RWSA 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 RWSA 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 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 RWSA. Nevertheless, RWSA 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. RWSA 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

   b. the Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to RWSA.

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

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, RWSA voluntarily agrees to the issuance of this Order.

And it is so ORDERED this 5th day of August, 2011.

Amy T. Owens, Regional Director
Department of Environmental Quality

Rivanna Water and Sewer Authority voluntarily agrees to the issuance of this Order.

Date: 3/22/2011 By: _____, Executive Director
(Person) (Title)
Rivanna Water and Sewer Authority

Commonwealth of Virginia

City/County of ALBEMARLE

The foregoing document was signed and acknowledged before me this 22 day of MARCH, 2011, by THOMAS L. FREDERICK who is

EXECUTIVE DIRECTOR of Rivanna Water and Sewer Authority on behalf of the Rivanna Water and Sewer Authority.

Mary G. Knowles
Notary Public

205978
Registration No.

My commission expires: JULY 31, 2014

Notary seal:

MARY G. KNOWLES
NOTARY PUBLIC
Commonwealth of Virginia
Reg. #205978
My Commission Expires _____

APPENDIX A
SCHEDULE OF COMPLIANCE
RIVANNA WATER AND SEWER AUTHORITY

Plant upgrade

1. **By April 30, 2013**, RWSA shall complete construction of the Facility upgrade with a peak flow of 45 MGD and submit a Certificate to Operate ("CTO") application to DEQ for review and approval. RWSA shall respond to comments on the CTO application **within 30 days** of receiving written comments.

I&I Corrective Actions

RWSA shall conduct collection system rehabilitation work as laid out in its May 27, 2010 letter, on the following schedule:

Meadow Creek Interceptor

2. **By March 31, 2012**, RWSA shall complete construction of the Meadow Creek Interceptor project from the Implementation Plan.

Crozet Interceptor Upstream of Pump Station No. 4.

3. **By September 30, 2011**, RWSA shall complete physical inspections of the gravity sewer pipe sections in the Crozet Interceptor.

4. **By December 31, 2011**, RWSA shall submit to DEQ for review and approval a plan and schedule for rehabilitating defects noted during the inspections of the manholes and gravity sewer pipes in the Crozet Interceptor.

Schenks Branch Interceptor

5. Contingent upon the granting of required easements on City of Charlottesville property by the City by June 27, 2012, RWSA shall develop and submit to DEQ for review and approval its plan and schedule for replacing the existing Schenks Branch Interceptor **by June 30, 2012**. However, should RWSA not obtain the required easements on City property by June 27, 2012, and because RWSA does not have the legal authority to acquire easements on City land by eminent domain, RWSA will pursue an alternate plan and schedule that avoids the need for new easements on City property. The alternate plan and schedule shall be submitted to DEQ for review and approval not later than **September 30, 2012**. RWSA shall respond to any comments on the plan and schedule **within 30 days** of receipt of written comments.

Upon approval of the corrective action plan and schedule, said plan and schedule shall be incorporated by reference into this Order and become enforceable as part of this Order.

Rivanna Interceptor between Meadow Creek Interceptor and Rivanna Pump Station

6. **By June 30, 2011**, RWSA shall complete physical inspections of gravity sewer pipeline sections in the Rivanna Interceptor.

7. **By September 30, 2011**, RWSA shall submit to DEQ for review and approval a plan and schedule for rehabilitating defects noted during the inspections of the manholes and gravity sewer pipes in the Rivanna Interceptor. RWSA shall respond to any comments on the plan and schedule **within 30 days** of receipt of written comments. Upon approval of the corrective action plan and schedule, said plan and schedule shall be incorporated by reference into this Order and become enforceable as part of this Order.

Flow Metering

8. **By March 31, 2012,** RWSA shall complete installation of flow meters at key locations in the interceptor system to provide baseline flow data. These flow meters will remain in place during the I&I rehabilitation process to monitor flow changes in collection system after the I&I projects are completed. This data will be used to measure the success of the I&I projects.

Pump Capacity Upgrade between Rivanna Interceptor and Moores Creek WWTP

9. **By December 31, 2011**, RWSA shall complete the public comment on the alternatives and select the preferred alternative for final design of Rivanna Interceptor pumping and shall submit to DEQ for review and approval a schedule for final design and completion of construction of the alternative chosen. RWSA shall respond to any comments on the corrective action plan and schedule **within 30 days** of receipt of written comments. Upon approval of the corrective action plan and schedule, said plan and schedule shall be incorporated by reference into this Order and become enforceable as part of this Order.

Moores Creek Pump Station Upgrade

10. **By June 30, 2011**, RWSA shall complete final design of the pump station to upgrade the Moores Creek Pump Station and force main from a capacity of 14.9 to 30 to 32 MGD.

11. **By March 31, 2013**, RWSA shall complete construction of the Moores Creek Pump Station and force main upgrade.

12. RWSA shall submit quarterly progress reports to DEQ, with the first report being due **July 10, 2011.** Subsequent Progress Reports will be due by **July 10, October 10, January 10,**

and April 10, along with the Facility's Discharge Monitoring Report until the cancellation of this Order. The quarterly progress reports shall contain:

a. a summary of all work completed since the previous progress report in accordance with this Order;
b. a projection of the work to be completed during the upcoming quarterly period in accordance with this Order; and
c. a statement regarding any anticipated problems in complying with this Order.

13. No later than **14 days** following a completion date identified in the above schedule of compliance RWSA shall submit to DEQ's Valley Regional Office a written notice of compliance or noncompliance with the scheduled item. In the case of noncompliance, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled item.

14. **DEQ Contact**

Unless otherwise specified in this Order, RWSA shall submit all requirements of Appendix A of this Order to:

Steve Hetrick
Enforcement Specialist Sr.
VA DEQ –Valley Regional Office
P.O. Box 3000
Harrisonburg, VA 22801
(540) 574-7833 Phone
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Steven.hetrick@deq.virginia.gov