Piedmont Regional Office
MAR 2 9 2013
RECEIVED

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
4949-A Cox Road, Glen Allen, Virginia 23060
(804) 527-5020 Fax (804) 527-5106
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

STATE WATER CONTROL BOARD ENFORCEMENT ACTION
SPECIAL ORDER BY CONSENT
ISSUED TO
CHARLES CITY COUNTY, VIRGINIA
for the
ADMINISTRATION BUILDING WWTF
VPDES Permit No. VA0060585

SECTION A: Purpose

This is a Consent Order issued under the authority of Va. Code §§ 10.1-1185 and 62.1-44.15(8a) and (8d), between the State Water Control Board and Charles City County, for the purpose of resolving certain violations of the State Water Control Law and the applicable permit and/or regulations.

SECTION B: Definitions

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

1. "AB Facility" means Charles City County Administration Building Wastewater Treatment Facility (WWTF) located at 10900 Courthouse Road, Charles City, Virginia.

2. "AB Permit" means the VPDES Permit No. VA0060585 issued for the AB Facility which became effective on October 30, 2003, and expired on October 29, 2008. The AB Permit was re-issued and became effective on April 14, 2009 and expires on April 13, 2014.

3. "Board" means the State Water Control Board, a permanent citizen's board of the Commonwealth of Virginia as described in Va. Code §§ 10.1-1184 and 62.1-44.7.

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

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

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

7. "DMR" means Discharge Monitoring Report.

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

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

10. "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.

11. "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.

12. "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.

13. "Permit Regulation" means 9 VAC 25-31-10, *et seq.*, the Virginia Pollutant Discharge Elimination System Permit Regulation.

14. "PRO" means the Piedmont Regional Office of DEQ, located in Glen Allen, Virginia.

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

16. "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.

17. "TKN" means total kjeldahl nitrogen.

18. "TSS" means total suspended solids.

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

20. "VAC" means Virginia Administrative Code.

21. "VPA" means Virginia Pollution Abatement.

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 County owns and operates the Administrative Building Wastewater Treatment Facility located at 10900 Courthouse Road, in Charles City, Virginia. The AB Facility is subject to the AB Permit which allows the County to discharge treated sewage and other municipal wastes from the AB Facility into Courthouse Creek in strict compliance with terms, limitations and requirements outlined in the AB Permit.

2. Courthouse Creek is located in the James River Basin (Lower). Courthouse Creek was assessed as fully supporting the Aquatic Life, Wildlife, and Recreation Uses during the 2010 305(b)/303(d) cycle. The stream was assessed as fully supporting with observed effects for the Fish Consumption Use because it is included in the Virginia Department of Health fish consumption advisory for kepone. Courthouse Creek has been considered a Tier 2 water. The water is not proposed for designation as Tier 3 Exceptional Waters.

   The discharge was addressed in the Chesapeake Bay TMDL, which was approved by the EPA on December 29, 2010. It was included in the aggregated total nitrogen, total phosphorus, and total suspended solids wasteload allocations for non-significant wastewater dischargers in the lower James River tidal freshwater estuary (JMSTF1).

3. On April 10, 2008 and April 16, 2008, the Department informed the County that the Permit Regulation (Part II.M. of the AB Permit and 9 VAC 25-31-100.D) required that the County submit an application for renewal of the AB Permit by May 3, 2008.

4. On May 29, 2008, June 24, 2008, and July 30, 2008, the Department issued WLs to the County for its failure to submit the AB Facility permit application. No response was received from the County.

5. On August 14, 2008, the Department performed an inspection of the AB Facility and reviewed the DEQ AB Permit file. The following violations were noted as the result of the inspection and file review:

    a. Failure to properly operate and maintain systems of treatment and control, as required by Part II.Q of the AB Permit. Department staff noted during the inspection that significant repairs were needed in order to make the AB Facility operational.
    b. Failure to notify the Department about the use of an unauthorized herbicide as a method of treatment, as required by Part II.J.2 of the AB Permit. During the inspection County staff reported that herbicides had been used to kill vegetation on the sand filters recently. The Material Safety Data Sheet (MSDS) indicates that this herbicide is toxic to aquatic life.
    c. Failure to submit a permit application within 180 days before the expiration of the AB Permit, as required by Part II.M of the AB Permit and 9 VAC 25-31-100.D. DEQ staff noted during the file review that the Department still had not received the permit application from the County.
    d. Failure to provide a written response to the WLs, as required by Va. Code §62.1-44.21 and Part II.D of the AB Permit. DEQ staff noted during the file review that the Department still had not received a response to the WLs from the County.

6. On August 26, 2008, the Department sent the County the report from the inspection that was performed on August 14, 2008. The Department requested that the County respond to the Compliance Recommendations section of the inspection report by September 30, 2008. The Department did not receive a response from the County.

7. On September 19, 2008, the Department issued NOV Number W2008-09-P-0002 to the County for its failure to submit a permit application within 180 days before the expiration of the existing AB Permit, as required by Part II.M of the AB Permit and 9 VAC 25-31-100.D.

8. The AB Permit expired on October 29, 2008.

9. On November 14, 2008, the Department issued NOV Number W2008-10-P-0002 to the County for the violations described in paragraphs C.5.c. and d. The NOV also included a citation for the County's failure to provide a written response to the Compliance

Recommendations made in the inspection report, as required by Va. Code §62.1-44.21 and Part II.D of the AB Permit.

10. On December 6, 2008, the Department received an electronic copy of the application.

11. On December 23, 2008, January 6, 2009, and January 26, 2009, the Department notified the County in writing that the application was incomplete and requested additional application information.

12. On January 11, 2009, the Department performed a follow-up inspection of the AB Facility and reviewed the DEQ AB Permit file. The violations observed during the August inspection with regard to the County's failure to properly operate and maintain systems of treatment and control were ongoing and the following new violations were noted as the result of the inspection and file review:

    a. Discharge of wastewater to state water without a VPDES permit, as prohibited by §62.1-44.5.A.1. The AB Permit expired on October 31, 2008, but the DMRs submitted for November and December 2008 and January 2009 monitoring periods noted discharges of wastewater.
    b. Failure to submit a complete permit application within 180 days before the expiration of the AB Permit, as required by 9 VAC 25-31-100.D. DEQ staff noted during the file review that the Department received a permit application from the County, however, it remained incomplete.
    c. Failure to provide a written response to the Compliance Recommendations section of the inspection report dated August 26, 2008, as required by Va. Code §62.1-44.21. DEQ staff noted during the file review that the Department still had not received a response to the Compliance Recommendations from the County.

13. On February 3 and 12, 2009, DEQ staff and County representatives met to discuss the issues at the AB Facility.

14. On February 9, 2009, the Department deemed the permit application administratively complete.

15. On March 13, 2009, the Department issued NOV Number W2009-03-P-0004 to the County for the violations described in paragraph C.12, and the outstanding violations observed during the August inspection.

16. DEQ reissued the AB Permit on April 14, 2009.

17. On April 29 and April 30, 2009, the Department performed follow-up inspections of the AB Facility and reviewed the DEQ AB Permit file. The following violations were noted as the result of the inspections and a subsequent file review:

a. Failure to properly operate and maintain systems of treatment and control, as required by Part II.Q of the AB Permit. Department staff noted during the inspection that significant repairs were needed in order to make the AB Facility operational.
b. Failure to adhere to permitted limits, as required by Part I.A.(1) of the AB Permit, Va. Code § 62.1-44.5, and 9 VAC 25-31-50. Department staff conducted field analysis of samples from the permitted outfall on April 29, 2009 that revealed a DO of 2.36 mg/L, versus a permitted minimum concentration of 6.0 mg/L.
c. Failure to analyze permitted discharges for pH, DO, and chlorine, as required by Part I.A.1 of the AB Permit. DEQ staff noted during review of DMRs and supporting documents for the April 2009 monitoring periods that it did not appear that pH, DO, and chlorine analysis were being performed once per day when a discharge occurred.
d. Failure to calibrate and perform maintenance procedures on monitoring instrumentation, as required by Part II.A.2 and 3 of the AB Permit. During the inspection AB Facility staff could not provide Department staff with documentation to verify that calibration and maintenance were being performed at the AB Facility.
e. Failure to maintain on site records, as required by Part II.B.1 and Part II.B.2 of the AB Permit. Department staff reviewed the records that were available and found that the sample and bench sheet records were not being maintained to the extent required.

18. On August 10, 2009, Department issued NOV Number W2009-07-P-0002 to the County for the violations described in paragraph C.17. The NOV also included a citation for the County's failure to submit a revised O&M Manual or a written statement confirming the accuracy and completeness of the current O&M Manual by July 13, 2009, as required by Part I.C.2 of the AB Permit.

19. On December 3, 2009, the Department issued NOV Number W2009-11-P-0007 to the County for its failure to adhere to permitted limits as required by the AB Permit Part I.A, Va. Code § 62.1-44.5, and 9 VAC 25-31-50. The monitoring results reported on the September 2009 DMR noted the average and maximum concentration of BOD_5 at 170 mg/L. The analytical summary submitted with the September 2009 monitoring results listed BOD results obtained on September 11, 2009 as 172 mg/L. In addition, the analytical summary contained a footnote which stated, "BOD dilutions exhibited potential toxic effect". The County failed to notify and report the potential toxicity revealed by the BOD_5 analysis as required by the AB Permit, Va. Code § 62.1-44.5, and 9 VAC 25-31-50. The monitoring results reported on the October 2009 DMR noted a BOD_5 average loading of 579 grams/day versus a permit allowable average loading of 510 grams/day, an average and maximum concentration of BOD_5 at 139 mg/L versus the permit allowable average concentration of 30 mg/L and maximum concentration of 45 mg/L. The County failed to report this instance of noncompliance as required by the AB

Permit. The County also failed to submit an updated O&M Manual, as required by Part I.C.3 of the AB Permit.

20. On February 19, 2010, the Department issued NOV Number W2010-02-P-0004 to the County for its failure to adhere to permitted limits as required by the AB Permit Part I.A, Va. Code § 62.1-44.5, and 9 VAC 25-31-50. The monitoring results reported on the November and December 2009 DMRs noted TSS average concentrations of 40 mg/L and 49 mg/L respectively, versus permit allowable average concentration of 30 mg/L. The monitoring results reported on the November 2009 and December 2009 DMRs noted DO minimum concentrations of 4.0 mg/L and 5.0 mg/L respectively, versus permit allowable minimum concentration of 6.0 mg/L. The monitoring results reported on the December 2009 DMR noted TSS average loading of 556 grams/day and TSS maximum concentration of 49 mg/L versus the permit allowable average loading of 510 grams/day and maximum concentration of 45 mg/L. The County failed to report the noncompliance for the November and December 2009 monitoring periods as required by the AB Permit.

21. On July 13, 2010, the Department issued NOV Number W2010-06-P-0003 to the County for its failure to adhere to permitted limits as required by the AB Permit Part I.A, Va. Code § 62.1-44.5, and 9 VAC 25-31-50. The monitoring results reported on the February, March, April and May 2010 DMRs noted TSS average concentrations of 180 mg/L, 34 mg/L, 54 mg/L and 42.7 mg/L respectively, versus permit allowable average concentration of 30 mg/L. The monitoring results reported on the February and April 2010 DMRs noted TSS maximum concentrations of 180 mg/L and 54 mg/L, respectively, versus permit allowable maximum of 45 mg/L. The monitoring results reported on the March, April and May 2010 DMRs noted BOD_5 average concentrations of 76 mg/L, 67 mg/L and 74 mg/L respectively, versus permit allowable average concentration of 30 mg/L. The monitoring results reported on the March, April and May 2010 DMRs noted BOD_5 maximum concentrations of 76 mg/L, 67 mg/L and 74 mg/L, respectively, versus permit allowable maximum of 45 mg/L. The monitoring results reported on the January, March, April and May 2010 DMRs noted DO minimum concentrations of 5.0 mg/L, 3.1 mg/L, 3.8 mg/L and 3.8 mg/L respectively, versus permit allowable minimum concentration of 6.0 mg/L. The monitoring results reported on the March 2010 DMR noted Cl_2 technical minimum concentration of 0.1 mg/L, versus permit allowable minimum concentration of 0.60 mg/L. The monitoring results reported on the February 2010 DMR noted TSS average loading of 790 grams/day and TSS maximum loading of 790 grams/day versus the permit allowable average and maximum loadings of 510 grams/day and 770 grams/day, respectively. The County failed to report the noncompliance for the January, February, March, April and May 2010 monitoring periods as required by the AB Permit.

22. On September 7, 2010, the Department issued NOV Number W2010-09-P-0002 to the County for its failure to adhere to permitted limits as required by the AB Permit Part I.A, Va. Code § 62.1-44.5, and 9 VAC 25-31-50. The monitoring results reported on the June

and July 2010 DMRs noted DO minimum concentrations of 4.3 mg/L and 4.5 mg/L respectively, versus a permit allowable minimum concentration of 6.0 mg/L.

23. On February 17, 2011, the Department issued NOV Number W2011-02-P-0007 to the County for its failure to adhere to permitted limits as required by the AB Permit Part I.A, Va. Code § 62.1-44.5, and 9 VAC 25-31-50. The monitoring results reported on the December 2010 and January 2011 DMRs noted the average and maximum concentrations of BOD_5 at 53 mg/L and 54 mg/L respectively, versus a permit allowable average concentration of 30 mg/L and maximum concentration of 45 mg/L.

24. On August 5, 2011, the Department issued NOV Number W2011-08-P-0002 to the County for its failure to properly operate and maintain systems of treatment and control, as required by Part II.Q of the AB Permit; failure to analyze permitted discharges for pH, DO, and chlorine, as required by Part I.A.1 of the AB Permit; failure to calibrate and perform maintenance procedures on monitoring instrumentation, as required by Part II.A.2 and 3 of the AB Permit; and failure to maintain on site records, as required by Part II.B.1 and Part II.B.2 of the AB Permit.

25. On April 3, 2012, the Department issued NOV Number W2012-03-P-0009 to the County for its failure to adhere to permitted limits as required by the AB Permit Part I.A, Va. Code § 62.1-44.5, and 9 VAC 25-31-50. The monitoring results reported on the December 2011 and February 2012 DMRs noted the average concentrations of BOD_5 at 34 mg/L and 114 mg/L respectively, versus a permit allowable average concentration of 30 mg/L. Additionally, the monitoring results on the February 2012 DMR noted the maximum concentration, average loading and maximum loading of BOD_5 as 114 mg/L, 1294 g/day, and 1294 g/day respectively, versus permit allowable limits of 45 mg/L, 510 g/day and 770 g/day respectively. Finally, the monitoring results on the February 2012 DMR noted the minimum concentration of DO at 4.13 mg/L, versus a permit allowable limit of 6.0 mg/L.

26. On August 14, 2012, the Department issued NOV Number W2012-08-P-0004 to the County for its failure to adhere to permitted limits as required by the AB Permit Part I.A, Va. Code § 62.1-44.5, and 9 VAC 25-31-50. The monitoring results reported on the March 2012 DMR noted TSS average loading of 647 grams/day and TSS average and maximum concentrations of 57 mg/L versus the permit allowable average loading of 510 grams/day, average concentration of 30 mg/L and maximum concentration of 45 mg/L. The monitoring results reported on the April 2012 and June 2012 DMRs noted the average and maximum concentrations and the average loading of BOD_5 at 60 mg/L, 59 mg/L and 514 g/day respectively, versus a permit allowable concentrations of 30 mg/L, 45 mg/L, and 510 g/day respectively. Additionally, the monitoring results on the July 2012 DMR noted the minimum concentration of DO at 5.27 mg/L, versus a permit allowable limit of 6.0 mg/L. The analytical summary submitted for the April 2012 monitoring period qualified the TSS data 'Y', indicating that 'yield is not within 10-200 mg'. The TSS eDMR data submitted for the April 2012 monitoring period did not

contain a qualifier. The analytical summary submitted for the June 2012 monitoring period reported BOD_5 as > 59 mg/L and the eDMR data submitted did not contain the greater-than sign. The County failed to report data as required by Part II.A of the AB Permit, in that the County failed to report all the permit required information with its noncompliance reports for the April, June and July 2012 monitoring periods as required by the AB Permit.

27. On July 31, 2012, the Department received a compliance update from the County that vegetation growth in the sand filters is being prevented by daily raking of the sand, that it had hired an independent contractor that is a certified wastewater treatment plant operator in August 2011 and that the contract can be obtained from the County's office, that the rotating arm at the AB Facility had been repaired and was operational, that the AB Facility is fundamentally sound and able to handle the volume and type of waste being discharged to it and that proper maintenance will allow the system to be used as it is, that it has implemented the practice of log books which the public works director is checking weekly and that disciplinary actions will be taken if employees fail to document appropriately. The County also submitted a policy for base-level and continued operator training and a certification that it had adequate funding for fiscal year 2012-2013 to operate, repair, and maintain the AB Facility.

28. On October 5, 2012, the Department received a response from the County regarding NOV No. W2012-08-P-0004:

    a. The County asserted that since the time these violations occurred, the County has made significant improvements in staffing, training, and work schedules for specific operators; all of which has worked to improve effluent quality and plant operations and maintenance.

    b. At the time of these violations, the rotating distribution arm was not operational at the facility. This was causing ponding of wastewater on the sand filter media. Since that time, the distribution arm has been repaired to allow it to rotate and staff have been working to rake the sand to allow for more even distribution. This has allowed for more consistent effluent compliance.

    c. The cause of the DO violation was attributed to inadequate training of operators in the storage and operation of testing equipment. The County stated that staff have been provided the proper training.

    d. The County amended and resubmitted the eDMR for the months of April, June, and July 2012 to reflect the addition of the TSS qualifier and the > sign on the BOD parameters, and revised the Reports of Non-Compliance for these 3 months to reflect the required information.

29. On October 22, 2012, the Department received a compliance update from the County that an inspection of the AB Facility's discharge piping showed accumulated sludge, rocks and other debris in the line, and that a section of the line, which had been exposed by erosion, had been replaced.

30. On November 1, 2012, the Department issued NOV Number W2012-10-P-0001 to the County for its failure to adhere to permitted limits as required by the AB Permit Part I.A, Va. Code § 62.1-44.5, and 9 VAC 25-31-50. The monitoring results reported on the August 2012 DMR noted the average concentration of BOD_5 at 31 mg/L, versus a permit allowable concentration of 30 mg/L. Additionally, the County failed to report data as required by Part II.A of the AB Permit, in that the County failed to report all the permit required information with its noncompliance reports for the August 2012 monitoring period as required by the AB Permit, and the County failed to submit the permit required effluent data for the September 2012 monitoring period, due by October 10, 2012 via the DEQ's eDMR.

31. On November 7, 2012, the County provided a follow-up to the October 22nd update, detailing additional repairs and setting a December 10, 2012 completion date.

32. On January 8, 2013, the Department received a request for a Certificate to Construct (CTC) upgrades to the Facility, including a new chlorine disinfection delivery system and a means of recirculating effluent through the trickling filter. The CTC was issued by the Department on January 16, 2013.

33. On February 8, 2013, the County notified the Department that the investigation, repair and cleaning of the discharge line had been completed.

34. Va. Code § 62.1-44.5 states that: "Except 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."

35. The Permit 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.

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

37. The Department has issued no permits or certificates to the County for this facility other than VPDES Permit No. VA0060585.

38. Courthouse Creek is a surface water located wholly within the Commonwealth and is a "state water" under State Water Control Law.

39. Based on the Department records, the Board concludes that the County has violated the AB Permit, the State Water Control Law and the Regulations, as described above.

40. In order for the County to 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

1. Accordingly, the Board, by virtue of the authority granted it pursuant to Va. Code §62.1-44.15, and upon consideration of Va. Code § 10.1-1186.2, the Board orders Charles City County, and Charles City County agrees, to perform the actions described below and in Appendix A of this Order. In addition, the Board orders Charles City County, and Charles City County voluntarily agrees, to a civil charge of **$85,000** in settlement of the violations cited in this Order, to be paid as follows:

   Charles City County shall pay **$45,000** of the civil charge in four quarterly payments, in settlement of the violations cited in the Order in accordance with the following schedule:

   - The first payment of **$11,250.00** shall be made on or before **July 1, 2013;**
   - The second payment of **$11,250.00** shall be made on or before **November 1, 2013;**
   - The third payment of **$11,250.00** shall be made on or before **March 1, 2014 ; and**
   - The fourth payment of **$11,250.00** shall be made on or before **July 1, 2014.**

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

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

   The payment shall include Charles City County's Federal ID number and shall identify that payment is being made as a result of this Order for deposit into the Virginia Environmental Emergency Response Fund.

2. Charles City County shall satisfy **$40,000** of the civil charge by satisfactorily completing the Supplemental Environmental Project (SEP) described in Appendix B of this Order.

3. The net project cost of the SEP to Charles City County shall not be less than the amount set forth in Paragraph D.2. If it is, Charles City County shall pay the remaining amount in accordance with Paragraph D.1 of this Order, unless otherwise agreed to by the

Department. "Net project costs" means the net present after-tax cost of the SEP, including tax savings, grants, and first-year cost reductions and other efficiencies realized by virtue of project implementation. If the proposed SEP is for a project for which the party will receive an identifiable tax savings (*e.g.*, tax credits for pollution control or recycling equipment), grants, or first-year operation cost reductions or other efficiencies, the net project cost shall be reduced by those amounts. The costs of those portions of SEPs that are funded by state or federal low-interest loans, contracts, or grants shall be deducted.

4. By signing this Order Charles City County certifies that it has not commenced performance of the SEP.

5. Charles City County acknowledges that it is solely responsible for completing the SEP project. Any transfer of funds, tasks, or otherwise by Charles City County to a third party, shall not relieve Charles City County of its responsibility to complete the SEP as described in this Order.

6. In the event it publicizes the SEP or the SEP results, Charles City County shall state in a prominent manner that the project is part of a settlement of an enforcement action.

7. The Department has the sole discretion to:

    a. Authorize any alternate, equivalent SEP proposed by the Facility; and

    b. Determine whether the SEP, or alternate SEP, has been completed in a satisfactory manner.

8. Should the Department determine that Charles City County has not completed the SEP, or alternate SEP, in a satisfactory manner, the Department shall so notify Charles City County in writing. Within 30 days of being notified, Charles City County shall pay the amount specified in Paragraph D.2., above, as provided in Paragraph D.1., above.

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 occurrence. The County shall show 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 County 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 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 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

    b. 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 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, Charles City County, Virginia voluntarily agrees to the issuance of this Order.

And it is so ORDERED this _____ day of _____, 2013.

_____
Michael P. Murphy, Regional Director
Department of Environmental Quality

Charles City County, Virginia voluntarily agrees to the issuance of this Order.

Date: 3/28/13 By: _____, _____
Zach Trogdon County Administrator

Commonwealth of Virginia
~~City/~~County of Charles City

The foregoing document was signed and acknowledged before me this 28th day of March, 2013, by Zach Trogdon who is the County Administrator of Charles City County, Virginia.

Gina L. Sandy Patterson
Notary Public

7310887
Registration No.

My commission expires: 8/31/2014

Notary seal:

GINA L. SANDY PATTERSON
NOTARY PUBLIC
REGISTRATION # 7310887
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES
AUGUST 31, 2014

APPENDIX A

1. **The County shall immediately** comply with the provisions of the Administrative Building Permit and the approved O&M Manual with respect to maintenance, monitoring, recordkeeping and reporting requirements.

2. **Until the Environmental Management System described in Appendix B of this Order is implemented, the County shall immediately** implement the Quality Assurance/Quality Control program as described in the November 2010 Corrective Action Plan (CAP) and in the general comments item 1 of the May 11, 2011 CAP response letter.

3. The County shall submit a request for a Certificate to Operate (CTO) for improvements to the AB facility chlorine disinfection system **no later than July 1, 2013.**

4. **Beginning March 1, 2013,** the County shall evaluate the septic tanks at the AB Facility on a quarterly basis to determine if solids removal is needed. The County shall have the septic tanks pumped by a septage hauler **within 30 days if it is determined that solids removal is necessary, but in no case less frequently than once per calendar year.** Documentation of the quarterly evaluations, the results of the evaluations, and pumping records shall be maintained with the AB Facility records and made available to DEQ staff for review.

5. The County shall provide additional training to the operators of the AB Facility and the County Director of Public Works by requiring that these employees attend the following training courses as described in the DEQ Wastewater Operator Training Workshop Catalog:

   a) Basic Wastewater Licensure Review (ENV-40)
   b) Basic Lab Skills (DEQ-19)
   c) VPDES Permit Recordkeeping and Reporting (DEQ-16)
   d) Wastewater Math for Operators (DEQ-20)
   e) Sampling and Testing for Small Plants (DEQ-12)

   The employees shall attend and successfully complete all of the above referenced courses at the first date they are offered by the Department after the date of issuance of this Order. Documentation of the completion of the courses shall be maintained with the AB Facility records and made available to DEQ staff for review.

6. **Beginning May 10, 2013,** the County shall submit quarterly reports to DEQ, including, but not limited to, the following information:

   a. Any AB Facility repairs undertaken in the preceding calendar quarter.
   b. Calibration records (pH, DO, and chlorine)

Updates shall be due every August 10, November 10, February 10, and May 10 while this Consent Order is in effect. In addition, the February 10th report shall include a certification to DEQ that the County has allocated the appropriate funding to operate, repair, update, and/or replace the AB Facility.

APPENDIX B – Environmental Management System (EMS)

Charles City County shall perform the SEP identified below in the manner specified in this Appendix.

General EMS Provision:

A comprehensive compliance-focused EMS shall be developed, implemented, and maintained by Charles City County. The EMS shall address, at a minimum, the 12 key elements listed below, and shall be described in an "Environmental Management System Manual."

I. Definitions

"**Action Plan**" means a comprehensive plan for bringing the Facilities as defined below, into full conformance with the EMS provisions specified in Paragraph II.D, of this Appendix and fully addressing all Audit Findings identified in the Audit Report.

"**Audit Finding**" means a written summary of all instances of non-conformance with the provisions specified in Paragraph II.D, of this Appendix noted during the EMS audit, and all areas of concern identified during the course of the audit that merit further review or evaluation for potential EMS, environmental, or regulatory impacts.

"**Audit Report**" means a report setting forth the Audit Findings resulting from the audit of a Facility by the Auditor, which meets all of the requirements set forth in Paragraph II.M, of this Appendix.

"**Auditor**" means the appropriately trained company personnel or independent third-party hired by Charles City County to conduct an EMS audit at the Facility, and who meets the requirements set forth in Paragraph II.G, of this Appendix.

"**Corrective Measures**" means those measures or actions appropriate to bring the Facility into full conformance with the EMS provisions of Paragraph II.D, of this Appendix.

"**Environmental Requirements**" means all applicable federal, state, and local environmental statutes and regulations, including permits and enforceable agreements between Charles City County and the respective environmental regulatory agencies.

"**Facility**" means all water treatment or wastewater treatment/disposal facilities owned by the County, operated by the County, or both.

"**Initial Auditor**" means individual(s) meeting the requirements of Paragraph II.A, below, who is selected and/or contracted to perform the Initial EMS Review and Evaluation.

II. Environmental Management System

A. Initial Auditor Selection. Within 60 days of the effective day of this Order, Charles City County shall submit to DEQ in writing:

- the name and affiliation of the Initial Auditor(s) selected by the County to conduct the Initial EMS Review and Evaluation;
- evidence that each Initial Auditor(s) satisfies the qualification requirements of International Organization for Standardization (ISO) 14012 (First edition, 1996-10-01), and that the team conducting the Initial EMS Review and Evaluation, in composite, has a working process knowledge of the Facility or similar operations, and has a working knowledge of federal, state and local environmental requirements which apply to the Facility;
- a schedule, including milestones, for conducting the Initial EMS Review and Evaluation.

B. Initial Environmental Management System Review and Evaluation. Charles City County shall direct the Initial Auditor(s) identified pursuant to paragraph II.A, above, to conduct and complete an Initial EMS Review and Evaluation (commonly referred to as a "gap" analysis) for Charles City County. The designated Initial Auditor(s) shall review and evaluate the current EMS or environmental auditing system, using the elements set forth in paragraph II.D, below to identify where systems or subsystems have not been adequately developed or implemented. The results of the Initial EMS Review and Evaluation shall be documented in a report prepared by the Initial Auditor(s) and provided to the County.

C. Comprehensive Environmental Management System. Based on the Initial EMS Review and Evaluation results and other information, the County shall develop a Comprehensive EMS for the Facilities addressing, at a minimum, the twelve key elements presented in paragraph II.D, below. The purpose of developing the Comprehensive EMS is to assist Charles City County in its efforts to comply with federal, state and local environmental requirements.

D. Environmental Management System Manual. Within two hundred seventy (270) days of the effective date of this Order, Charles City County shall complete the preparation of an "EMS Manual" which shall describe and document the Comprehensive EMS and contain an EMS implementation schedule for each of the described systems and subsystems not already implemented. For each of the elements identified in Paragraph II.D, below, as appropriate, the Manual shall

describe the EMS, in detail, by explaining how the activity or program is or will be:

- established as a formal system, subsystem or task,
- integrated into ongoing department operations,
- continuously evaluated and improved.

The Environmental Management System Manual shall describe respective management systems, subsystems, and tasks for the following elements:

1. Environmental Policy

a. This policy, upon which the EMS is based, must clearly communicate management commitment to achieving compliance with applicable federal, state, and local environmental statutes, regulations, enforceable agreements, and permits (hereafter, "environmental requirements") and continual improvement in environmental performance. The policy should also state management's intent to provide adequate personnel and other resources for the EMS.

2. Organization, Personnel, and Oversight of EMS

a. Describes, organizationally, how the EMS is implemented and maintained.
b. Includes organization charts that identify units, line management, and other individuals having environmental performance and regulatory compliance responsibilities.
c. Identifies and defines specific duties, roles, responsibilities, and authorities of key environmental program personnel in implementing and sustaining the EMS (e.g., could include position descriptions and performance standards for all environmental department personnel, and excerpts from others having specific environmental program and regulatory compliance responsibilities).
d. Includes ongoing means of communicating environmental issues and information to all organization personnel, on-site service providers, and contractors, and for receiving and addressing their concerns.

3. Accountability and Responsibility

a. Specifies accountability and environmental responsibilities of organization's managers, on-site service providers, and contractors

for environmental protection practices, assuring compliance, required reporting to regulatory agencies, and corrective actions implemented in their area(s) of responsibility.

b. Describes incentive programs for managers and employees to perform in accordance with compliance policies, standards and procedures.

c. Describes potential consequences for departure from specified operating procedures, including liability for civil/administrative penalties imposed as a result of noncompliance.

4. Environmental Requirements

a. Describes process for identifying, interpreting, and effectively communicating environmental requirements to affected organization personnel, on-site service providers, and contractors, and then ensuring that Facility activities conform to those requirements (i.e., ongoing compliance monitoring). Specifies procedures for prospectively identifying and obtaining information about changes and proposed changes in environmental requirements, and incorporating those changes into the EMS (i.e., regulatory "change management").

b. Establishes and describes processes to ensure communication with regulatory agencies regarding environmental requirements and regulatory compliance.

5. Assessment, Prevention, and Control

a. Identifies an ongoing process for assessing operations, for the purposes of preventing and controlling releases, ensuring environmental protection, and maintaining compliance with statutory and regulatory requirements. This section shall describe monitoring and measurements, as appropriate, to ensure sustained compliance. It shall also include identifying operations and waste streams where equipment malfunctions and deterioration, operator errors, and discharges or emissions may be causing, or may lead to:

- releases of hazardous waste or other pollutants to the environment,
- threat to human health or the environment, or
- violations of environmental requirements.

b. Describes process for identifying operations and activities where documented standard operating practices (SOPs) are needed to

prevent potential violations or pollutant releases, and defines a uniform process for developing, approving and implementing the SOPs.

c. Describes a system for conducting and documenting routine, objective, self inspections by department supervisors and trained staff, especially at locations identified by the process described in subparagraph a. above, to check for malfunctions, deterioration, worker adherence to SOPs, and unauthorized releases.

d. Describes process for ensuring input of environmental requirements (or concerns) in planning, design, and operation of ongoing, new, and/or changing buildings, processes, equipment, maintenance activities, and products (i.e., operational "change management").

6. Environmental Incident and Noncompliance Investigations

a. Describes standard procedures and requirements for internal and external reporting of potential violations and release incidents.

b. Establishes procedures for investigation, and prompt and appropriate correction of potential violations. The investigation process includes root-cause analysis of identified problems to aid in developing the corrective actions.

c. Describes a system for development, tracking, and effectiveness verification of corrective and preventative actions.

d. Each of these procedures shall specify self-testing of such procedures, where practicable.

7. Environmental Training, Awareness, and Competence

a. Identifies specific education and training required for organization personnel, as well as process for documenting training provided.

b. Describes program to ensure that organization employees are aware of its environmental policies and procedures, environmental requirements, and their roles and responsibilities within the EMS.

c. Describes program for ensuring that personnel responsible for meeting and maintaining compliance with environmental requirements are competent on the basis of appropriate education, training, and/or experience.

8. Environmental Planning and Organizational Decision-Making

a. Describes how environmental planning will be integrated into organizational decision-making, including plans and decisions on

capital improvements, product and process design, training programs, and maintenance activities.

b. Requires establishing written targets, objectives, and action plans by at least each operating organizational subunit with environmental responsibilities, as appropriate, including those for contractor operations conducted at the Facility, and how specified actions will be tracked and progress reported. Targets and objectives must include actions which reduce the risk of noncompliance with environmental requirements.

9. Maintenance of Records and Documentation

a. Identifies the types of records developed in support of the EMS (including audits and reviews), who maintains them and where, and protocols for responding to inquiries and requests for release of information.

b. Specifies the data management systems for any internal waste tracking, environmental data, and hazardous waste determinations.

c. Specifies document control procedures.

10. Pollution Prevention Program

a. Describes an internal program for preventing, reducing, recycling, reusing, and minimizing waste and emissions, including procedures to encourage material substitutions. Also includes mechanisms for identifying candidate materials to be addressed by program and tracking progress.

11. Continuing Program Evaluation and Improvement

a. Describes program for periodic (at least annually) evaluation of the EMS, including incorporating the results of the assessment into program improvements, revisions to the Manual, and communicating findings and action plans to affected employees, onsite service providers, and contractors.

b. Describes a program for periodic audits (at least annually) of Facility compliance with environmental requirements by an independent auditor(s). Audit results are reported to upper management and potential violations are addressed through the process described in element 6 above.

12. Public Involvement/Community Outreach

a. Describes a program for ongoing community education and involvement in the environmental aspects of the organization's operations and general environmental awareness.

E. Environmental Management System Manual. Within three hundred (300) days of the effective date of this Order, Charles City County shall submit a complete EMS Manual to DEQ.

F. Quarterly Reports. Charles City County shall submit implementation status reports to DEQ on a quarterly basis (i.e., reports for periods of January-March, April-June, July-September, and October-December). The status reports shall be due within thirty (30) days after the quarter and every quarter thereafter until the Audit set forth in Paragraph II.J, is completed.

G. Auditor Selection. Charles City County shall select an independent Auditor who:

- was not involved in the Initial EMS Review and Evaluation,
- meets the qualification requirements of ISO 14012 (First edition, 996-10-01),
- has expertise and competence in the regulatory programs under federal, state and local environmental laws.
- The Auditor shall be paid by Charles City County in an amount sufficient to fully carry out the provisions of this Appendix. The Auditor must not be an employee of Charles City County or in any firm contracted to perform work on behalf of Charles City County, and must have no other direct financial stake in the outcome of the EMS audit conducted pursuant to this Order. The Auditor must be capable of exercising the same independent judgment and discipline that a certified public accounting firm would be expected to exercise in auditing a publicly held corporation. If Charles City County has any other contractual relationship with the Auditor, Charles City County shall disclose to DEQ such past or existing contractual relationships.

H. Charles City County shall identify any and all site-specific safety and training requirements for the Auditor(s), and shall ensure that the requirements are met prior to conducting the audit.

I. Audit Plan. Charles City County shall require the Auditor to prepare an EMS Audit Plan.

J. Audit. Charles City County shall require the Auditor to conduct an EMS Audit twelve (12) months after the completion of the EMS Manual, to evaluate the

adequacy of EMS implementation, from top management down, throughout each major organizational unit at the Facility, and to identify where further improvements should be made to the EMS. The EMS Audit shall be conducted in accordance with ISO 14011 (First edition, 1996-10-01), using ISO 14010 (First edition, 1996-10-01), as supplemental guidance. The Auditor shall assess conformance with the elements specified in Paragraph II.D, above and with the EMS Manual, and shall determine the following:

- Whether there is a defined system, subsystem, program, or planned task for the respective EMS element;
- To what extent the system, subsystem, program, or task has been implemented, and is being maintained
- Adequacy of each operation's internal self-assessment procedures for programs and tasks composing the EMS;
- Whether the County is effectively communicating environmental requirements to affected parts of itsorganization, contractors and on-site service providers;
- Whether further improvements should be made to the EMS;
- Whether there are observed deviations from the County's written requirements or procedures;
- And, whether continuous improvement is occurring.

K. Designated representatives from DEQ and other environmental regulatory agencies may participate in the EMS Audit as observers. Charles City County shall make timely notification to designated regulatory contacts regarding Audit scheduling in order to make arrangements for observers to be present. Charles City County personnel or consultants may also participate in the on-site audits as an observer(s), but may not interfere with the independent judgment of the Auditor.

L. Audit Reports. Charles City County shall direct the Auditor to develop and concurrently submit an Audit Report to the County and DEQ for the EMS Audit as required by this Order, within sixty (60) days following the completion of the on-site portion of the Audit. The Audit Report shall present the Audit Findings and shall, at a minimum, contain the following information:

- Audit scope, including the period of time covered by the Audit;
- The date(s) the on-site portion of the Audit was conducted;
- Identification of Audit team members;
- Identification of any County, facility, or consulting representatives and regulatory agency personnel observing the Audit;
- The distribution for the EMS Audit Report;
- A summary of the Audit process, including any obstacles encountered;

- Detailed Audit Findings, including the basis for each finding and each Area of Concern identified;Identification of any Audit Findings corrected or Areas of Concernaddressed during the Audit and a description of the corrective measures and when they were implemented; and
- Certification by the Auditor that the EMS Audit was conducted in accordance with the provisions of this Appendix.

M. Follow-Up Corrective Measures & Action Plan. Upon receiving the Audit Report, the county shall conduct a root cause analysis of the identified Audit Findings, as appropriate, investigate all areas of concern and develop an Action Plan for expeditiously bringing the Facility into full conformance with the EMS provisions in Paragraph II.D of this Appendix and the EMS Manual. The Action Plan shall include the results of any root-cause analysis, specific deliverables, responsibility assignments, and an implementation schedule. The Action Plan shall be submitted to DEQ within forty-five (45) days of receiving the Audit Report. Upon DEQ approval, the Action Plan and implementation schedule shall be an enforceable part of this Order. Deviations from the Action Plan and implementation schedule require prior written authorization from DEQ.

i. Action Plan Completion Certification. Within thirty (30) days of completing all items or activities outlined in the Action Plan, Charles City County shall submit a written Completion Certification to DEQ. The certification shall also include written verification of the final overall and net project cost of the SEP in the form of a certified statement itemizing costs, invoices and proof of payment, or similar documentation. For the purposes of this submittal, net project costs are as defined in paragraph D.3 of the Order.

ii. If the SEP has not or cannot be completed as described in the Order, Charles City County shall notify DEQ in writing no later than July 1, 2014. Such notification shall include:

1. an alternate SEP proposal, or
2. payment of the amount specified in Paragraph D.2 as described in Paragraph D.1.

iii. Charles City County hereby consents to reasonable access by DEQ or its staff to property or documents under the party's control, for verifying progress or completion of the SEP.

All requirements of Appendices A and B of this Order shall be submitted to:

Kyle Ivar Winter, P.E.
Deputy Regional Director
VA DEQ – Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060
804-527-5052
804-527-5106 (fax)
kyle.winter@deq.virginia.gov