



EA # VR07-0701

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

VALLEY REGIONAL OFFICE

Douglas W. Domenech
Secretary of Natural Resources

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David K. Paylor
Director

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Regional Director

**STATE WATER CONTROL BOARD
ENFORCEMENT ACTION - ORDER BY CONSENT
ISSUED TO
FLUVANNA COUNTY SCHOOL BOARD
FOR
FLUVANNA COUNTY HIGH SCHOOL STP
VPDES Permit No. VA0030767**

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 Fluvanna County School Board, regarding the Facility, 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. "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. "CBOD₅" means 5 day carbonaceous biochemical oxygen demand.
3. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia, as described in Va. Code § 10.1-1183.
4. "Director" means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1-1185.
5. "DMR" means Discharge Monitoring Report.

6. "D.O." means dissolved oxygen.
7. "Facility" or "Plant" means the Fluvanna County High School Sewage Treatment Plant owned and operated by FCSB which is located at 3717 Central Plains Rd. in Palmyra, Virginia, which treats and discharges treated sewage and other municipal wastes for the school in Fluvanna County.
8. "FCSB" means the Fluvanna County School Board, a body corporate under Va. Code § 22.1-71 that is charged with the supervision of schools within Fluvanna County. FCSB is a person within the meaning of Va. Code § 62.1-44.3.
9. "MLSS" means mixed liquor suspended solids.
10. "Notice of Violation" or "NOV" means a type of Notice of Alleged Violation under Va. Code § 62.1-44.15.
11. "O&M" means operations and maintenance.
12. "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.
13. "Permit" means VPDES Permit No. VA0030767, which was issued under the State Water Control Law and the Regulation to FCSB on October 9, 2008 and which expires on September 30, 2013.
14. "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.
15. "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.

16. "Regulation" means the VPDES Permit Regulation, 9 VAC 25-31-10 *et seq.*
17. "School" means the Fluvanna County High School.
18. "State Water Control Law" means Chapter 3.1 (§ 62.1-44.2 *et seq.*) of Title 62.1 of the Va. Code.
19. "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.
20. "STP" means sewage treatment plant.
21. "TSS" means total suspended solids.
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.

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

1. FCSB owns and operates the Facility, which serves the Fluvanna County High School with 1143 students in Fluvanna County, Virginia. The Permit authorizes FCSB to discharge treated sewage from the Facility, to an unnamed tributary to Raccoon Creek, in strict compliance with the terms and conditions of the Permit.
2. The unnamed tributary to Raccoon Creek is located in the James (Middle) River Basin. Raccoon Creek is not listed in DEQ's 303(d) report as impaired.
3. The design flow of the Facility has been rated and approved as 0.025 MGD, measured as a monthly average flow.
4. Historically (since 2007), FCSA has had problems consistently meeting certain permit effluent limitations, primarily CBOD₅ and ammonia.
5. FCSB has taken and continues to take multiple steps to correct the problems associated with the violations experienced at the STP, including:

- a. Reviewed all cleaners and chemicals used at the school;
 - b. Influent tested to identify abnormal wastewater strengths;
 - c. Installed new fine bubble diffusers and chemical feed pump for pH adjustment;
 - d. Pumped out and cleaned all the treatment units and made repairs;
 - e. Re-seeded the Plant;
 - f. Installed insulation over aeration tanks;
 - g. Adjusting aeration blower timers; and,
 - h. Developing daily wasting rates.
6. In submitting reports and DMRs, as required by the Permit, FCSB has reported that it exceeded ammonia, CBOD and TSS effluent limitations contained in Part I.A. of the Permit during the periods January, February, April, May, August, September, October, November and December 2010. FCSB has attributed the violations to various episodic problems including dissolved oxygen in the aeration basin, breakage of a sludge return pump which caused a washout of the Plant, high strength influent flows that contained a substance that caused a shock to the treatment efficiency, insufficient pH control to foster proper nitrification and influent flows that exceed the design capacity...
 7. On March 10, 2010, VRO issued NOV No. W2010-03-V-0002 to FCSB for CBOD concentration average and loading average effluent limits violations during January 2010. The CBOD₅ violations were attributed to the apparent introduction of a substance that caused a shock to the treatment efficiency.
 8. On April 9, 2010, VRO issued NOV No. W2010-04-V-0002 to FCSB for CBOD₅ concentration average, concentration maximum, loading average and loading maximum effluent limit violations during February 2010. The CBOD₅ violations were attributed to the continuing effects of the shock to the treatment efficiency after the apparent introduction of a substance in January 2010.
 9. By letter dated May 27, 2010, FCSB submitted to DEQ a summary of completed and in-progress corrective actions, and a plan and schedule of future corrective actions to address the effluent limitation violations.
 10. On June 10, 2010, VRO issued NOV No. W2010-06-V-0003 to FCSB for ammonia concentration average and concentration maximum effluent limits violations during April 2010. FCSB attributed the ammonia violations to the breakage of a sludge return pipe which caused the washout of the Plant and adversely effected treatment efficiency.
 11. On June 10, 2010, Department staff met with representatives of FCSB to discuss the NOVs, the violations cited and additional corrective actions FCSB needed to take to come into compliance. DEQ requested FCSB submit a plan and schedule of additional corrective actions to address the continuing violations.
 12. By letter dated June 24, 2010, FCSB submitted to DEQ a plan and schedule for corrective actions to address the effluent limitation violations.

13. On August 12, 2010, VRO issued NOV No. W2010-08-V-0005 to FCSB for ammonia concentration average and concentration maximum effluent limits violations during May 2010. FCSB attributed the ammonia violations to the breakage of a sludge return pipe in April which caused the washout of the Plant and continued to effect treatment efficiency.
14. On October 14, 2010, DEQ issued NOV No. W2010-10-V-0001 to FCSB for TSS and CBOD₅ loading average, loading maximum and concentration average, and ammonia concentration average and concentration maximum effluent limits violations during August 2010. FCSB attributed the violations to startup problems after the Plant was taken offline for cleaning and repairs.
15. On November 9, 2010, VRO issued NOV No. W2010-11-V-0002 to FCSB for CBOD₅ loading average, ammonia concentration average and ammonia concentration maximum effluent limits violations during September 2010. The reasons for the CBOD₅ and ammonia violations were unknown.
16. On December 9, 2010, VRO issued NOV No. W2010-12-V-0004 to FCSB for ammonia concentration average and ammonia concentration maximum effluent limits violations during October 2010. The reasons for the ammonia violations were unknown.
17. By letter dated December 16, 2010, FCSB responded to the November 9, 2010 NOV, laying out its further general corrective actions and submitting its additional effluent sampling data that supersedes the permit requirements.
18. On January 12, 2011, VRO issued NOV No. W2011-01-V-0001 to FCSB for an ammonia concentration average effluent limit violation during November 2010. The ammonia violation was attributed to high influent flows during the last sampling event in the later part of the month.
19. By letter dated February 3, 2011, DEQ requested FCSB submit to DEQ for review and approval a detailed plan and schedule for additional corrective actions to return the Facility to full and consistent compliance with the permit's effluent limitations.
20. By letter date February 18, 2011, FCSB submitted a plan and schedule of corrective actions to return the Facility to consistent compliance with the Permit. Portions of this plan and schedule are incorporated into Appendix A of this Order.
21. FCSB's operating logs indicate that it discharged treated wastewater from the Plant every day during the periods of the violations.
22. 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."

23. 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.
24. Va. Code § 62.1-44.15(5a) states that a VPDES permit is a "certificate" under the statute.
25. The Department has issued no permits or certificates to FCSB authorizing the discharge of wastewater from the Facility other than VPDES Permit No. VA0030767.
26. The unnamed tributary to Raccoon Creek and Raccoon Creek are surface waters located wholly within the Commonwealth and are "state waters" under State Water Control Law.
27. Based on FCSB's DMRs, FCSB's letters to DEQ, NOV's, the June 10, 2010 meeting, and file reviews, the Board concludes that FCSB has violated the Permit and Va. Code § 62.1-44.5 and 9 VAC 9 VAC 25-31-50, as described in section C.
28. In order for FCSB to return to compliance, DEQ staff and representatives of the FCSB 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 FCSB, and FCSB agrees to:

1. Perform the actions described in Appendix A and Appendix B of this Order;
2. During the estimated 30 month's interim period during which Facility improvements will be completed, FCSB will operate the STP in a workmanlike fashion so as to produce the best quality effluent that the Facility is capable of producing; and
3. Pay a civil charge of ~~\$3381~~ 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

FCSB shall include its Federal Employer Identification Number (FEIN) [(54-6025086)] 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 FCSB for good cause shown by FCSB, 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, FCSB admits the jurisdictional allegations, findings of fact, and conclusions of law contained herein.
4. FCSB 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. FCSB 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 FCSB 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. FCSB 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. FCSB shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. FCSB 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 FCSB 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 FCSB. Nevertheless, FCSB 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. FCSB petition 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 FCSB.

Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve FCSB 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 FCSB 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 FCSB 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 FCSB to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of FCSB.
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, Fluvanna County School Board voluntarily agree to the issuance of this Order.

And it is so ORDERED this 23rd day of September, 2011.



Amy T. Owens, Regional Director
Department of Environmental Quality

Fluvanna County School Board voluntarily agrees to the issuance of this Order.

Date: 6/29/11 By: [Signature] Asst Supt
(Person) (Title)
Fluvanna County School Board

Commonwealth of Virginia
City/County of Fluvanna

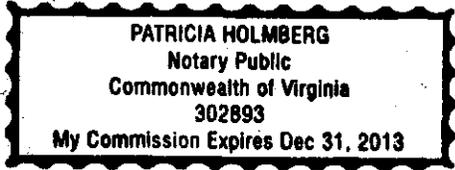
The foregoing document was signed and acknowledged before me this 29 day of June, 2011, by Maurice Carter who is

Asst. Superintendent of the Fluvanna County School Board on behalf of the Fluvanna County School Board.

Patricia Holmberg
Notary Public
302893
Registration No.

My commission expires: 12/31/13

Notary seal:



**APPENDIX A
SCHEDULE OF COMPLIANCE
FLUVANNA COUNTY SCHOOL BOARD**

1. **By June 30, 2011**, FCSB shall select its option to ensure consistent compliance with permit limitations and requirements and shall submit to DEQ for review and approval a plan and schedule for the implementing the chosen compliance option. FCSB shall respond to comments regarding the plan and schedule **within 30 days** of receipt of written comments. Upon approval the plan and schedule shall be incorporated into this Order and become enforceable under this Order.
6/12/2011

2. **By August 31, 2011, 2011**, FCSB shall retain a classified operator in charge holding, at minimum, a Class III wastewater operator's license, to be the operator in charge of the Facility. FCSB shall ensure that an operator is present at the Facility for a minimum of 2 hours per day to ensure the proper and optimal Facility operations.
5/12/2011

3. **By August 31, 2011, 2011**, FCSB shall develop and document standard operating procedures for the Facility designed to ensure the workmanlike operations in accordance with O&M requirements and that will ensure compliance with regulatory requirements and train the Facility's operators on those procedures. These operational changes should be to:
 - a. Conduct daily influent pH testing
 - b. Conduct daily pH monitoring at the influent end of the Aeration Basin;
 - c. Conduct weekly influent ammonia testing;
 - d. Continue to conduct weekly effluent ammonia testing (except during the summer recess June 15 through August 15) (until DEQ approves a return to Permit's required frequency of analysis);
 - e. Calculate a daily wasting rate once per week based on solids retention time (SRT) utilizing weekly MLSS and return activated sludge / suspended solids updated on a weekly basis;
 - f. Develop and maintain a timer schedule for the aeration tank blowers;
 - g. Maintain the D.O. levels in the aeration basin(s) at optimal levels (minimum of 2.0 mg/l) measured on a daily basis;
 - h. Maintain alkalinity control through pH adjustment at pre-determined set points (pH of 6.5 to 8.0, pH of 7.2 is considered ideal);
 - i. Conduct weekly microscopic examination of aeration biomass;
 - j. Determine an optimal MLSS to operate the Facility (both for summer and for winter seasons);s
 - k. Provide sugar feeding during school's snow days and vacation periods to maintain a viable biomass;
 - l. Provide sludge seeding after extended vacations such as Christmas and summer vacations;

- m. Continue to review and monitor cleaning solutions and chemicals used to exclude ammonia ingredients;
- n. Continue to conduct influent testing for chemicals of concern;
- o. Dewater Facility as much as practicable each summer and check for needed repairs and make repairs (every 3 years completely dewater the Facility);
- p. Prepare an annual report that identifies equipment that does not perform its required function, especially noting items that have malfunctioned in the past year; and, Evaluate the remaining useful life for the equipment listed in the Plant's O&M Manual based on known manufacturers' expectations and engineering evaluations. Include this information in the annual report listed in "o" above.

By October 15, 2011, FCSB shall complete the installation of a new power source capable of providing sufficient power to operate the Facility and any other associated equipment. FCSB will need a new power source to proceed with the upgrades identified in Item I above.

5. No later than 14 days following a date identified in the above schedule of compliance FCSB 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.

6. DEQ Contact

Unless otherwise specified in this Order, FCSB 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
(540) 574-7878 Fax
Steven.hetrick@deq.virginia.gov

Approved
9-21-11

**APPENDIX B
 INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

From the effective date of this Order and lasting until 60 days following the CTO issuance for the Facility upgrades or connection to a satellite sewage treatment plant as required in Item 1 of Appendix A, but in no event later than December 31, 2013, FCSB shall monitor and limit the discharge from Outfall No. 001 of the Fluvanna County High School STP in accordance with VPDES Permit Number VA0030767, except as specified below. These interim limits shall retroactively apply, if applicable, as of the first day of the month in which this Order becomes effective.

These requirements shall be construed in light of the Regulation.

Parameter Description	Parameter Limits					Monitoring Requirements	
	Quantity Average	Quantity Maximum	Concentration Minimum	Concentration Average	Concentration Maximum	Sample Frequency	Sample Type
Ammonia-N (Jun-Nov)	NA	NA	NA	23 mg/l	33 mg/l	1/Week	Grab
Ammonia-N (Dec-May)	NA	NA	NA	8.3 mg/l	12 mg/l	1/Week	Grab

NA = Not Applicable