



# COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY  
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VWP Individual Permit Reissuance Number 91-0216  
Effective Date: January 12, 2010  
Expiration Date: January 11, 2025

## VIRGINIA WATER PROTECTION PERMIT REISSUED PURSUANT TO THE STATE WATER CONTROL LAW AND SECTION 401 OF THE CLEAN WATER ACT

Based upon an examination of the information submitted by the owner, and in compliance with § 401 of the Clean Water Act as amended (33 USC 1341) and the State Water Control Law and regulations adopted pursuant thereto, the State Water Control Board (board) has determined that there is a reasonable assurance that the activity authorized by this permit, if conducted in accordance with the conditions set forth herein, will protect instream beneficial uses and will not violate applicable water quality standards. The board finds that the effect of the impact, together with other existing or proposed impacts to surface waters, will not cause or contribute to a significant impairment to state waters or fish and wildlife resources.

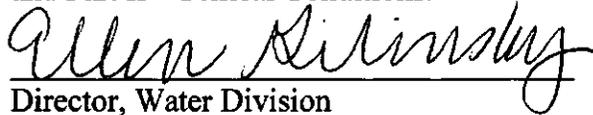
**Permittee:** County of Stafford

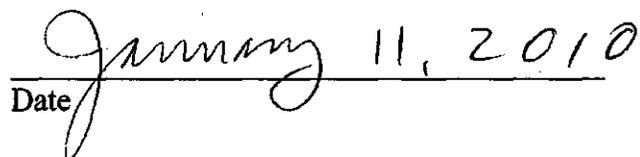
**Address:** POB 339, Stafford, Virginia 22554

**Activity Location:** Smith Lake/Aquia Creek, Stafford County, VA

**Activity Description:** The continued operation of a water supply reservoir on Aquia Creek for municipal water supply purposes.

The permitted activity shall be in accordance with this Permit Cover Page, Part I - Special Conditions, and Part II - General Conditions.

  
Director, Water Division

  
Date January 11, 2010

*A. Authorized Activities*

This permit authorizes the withdrawal of surface water from the Smith Lake Reservoir on Aquia Creek in accordance with all permit conditions contained herein, and specifically detailed in Part I.D. The authorization is based on information contained in the application materials dated March 11, 2008, received by DEQ on or about March 11, 2008, and deemed complete by DEQ on June 25, 2009, as well as additional correspondence from the applicant dated May 26, 2009, July 15, 2009, and August 14, 2009.

*B. Permit Term*

This permit is valid for 15 years from the date of issuance. A new permit may be necessary for the continuance of the authorized activities, including water withdrawals, or any permit requirement that has not been completed. At least **120 calendar days** prior to the expiration of this permit, the permittee shall notify DEQ in writing of his or her intent to continue one or more of the authorized activities. A new permit application shall be required by DEQ at that time. DEQ, acting on behalf of the State Water Control Board, may issue a new permit or may issue a new permit with new or modified conditions, or the Board may deny the issuance of a permit at that time.

*C. Standard Project Conditions*

1. The activities authorized by this permit shall be executed in such a manner that any impacts to stream beneficial uses are minimized. As defined in §62.1-10(b) of the Code, “beneficial use” means both instream and offstream uses. Instream beneficial uses include, but are not limited to, the protection of fish and wildlife habitat, maintenance of waste assimilation, recreation, navigation, and cultural and aesthetic values. Offstream beneficial uses include, but are not limited to, domestic (including public water supply), agricultural, electric power generation, commercial, and industrial uses. Public water supply uses for human consumption shall be considered the highest priority.
2. No activity shall substantially disrupt the movement of aquatic life indigenous to the water body, including those species that normally migrate through the area, unless the primary purpose of the activity is to impound water.
3. Flows downstream of the project area shall be maintained to protect all uses.
4. No activity shall cause more than minimal adverse effect on navigation, and no activity shall block more than half of the width of the stream at any given time.
5. The activity shall not impede the passage of normal or expected high flows, and any associated structure shall withstand expected high flows.

6. Measures shall be employed at all times to prevent and contain spills of fuels, lubricants, or other pollutants into surface waters.
7. Virginia Water Quality Standards shall not be violated in any surface waters as a result of the project activities.

**D. Water Withdrawal Conditions**

1. The maximum *daily* volume of surface water withdrawn from the Smith Lake Reservoir shall not exceed 15.0 million gallons (mg).
2. The maximum *annual* volume of surface water withdrawn from the Smith Lake Reservoir shall not exceed 2.8 billion gallons (bg).
3. A minimum in-stream flow rate (in cubic feet per second, or cfs) shall be released from the existing Smith Lake Reservoir dam on Aquia Creek. The minimum flow rate released from the dam shall be a percentage of the mean annual flow or the natural inflow to the reservoir, whichever value is less, per the table below:

<b>Period</b>	<b>Reservoir Percent Full</b>	<b>Minimum Flow Rate To Be Released</b>
March 1 – May 31	> = 80%	40% of MAF (14.3 mgd), or inflow, whichever is LESS
March 1 – May 31	< 80%	20% of MAF (7.2 mgd), or inflow, whichever is LESS
June 1 – February 28 or 29*	> = 80%	20% of MAF (7.2 mgd), or inflow, whichever is LESS
June 1 – February 28 or 29*	> = 60% but < 80%	15% of MAF (5.4 mgd), or inflow, whichever is LESS
June 1 – February 28 or 29*	> = 40% but < 60%	7.5% of MAF (2.7 mgd), or inflow, whichever is LESS
June 1 – February 28 or 29*	< 40%	0.7 mgd or inflow, whichever is LESS

\* The last day of February in a leap year.

Mean Annual Flow (MAF) for Aquia Creek at Smith Lake shall be 35.8 million gallons per day (mgd), which is the mean annual discharge (cubic feet per second, or cfs) multiplied by a factor of 1.577 to compensate for the difference in drainage area between the gage and the dam and converted from cfs to mgd, of the United States Geologic Survey (USGS) Aquia Creek at Garrisonville Gage (No. 01660400) for the period of record, 1972 through 2008.

Natural Inflow (inflow) shall be the daily mean discharge (or daily mean stream flow) measured at the Aquia Creek at Garrisonville Gage, multiplied by a factor of 1.577 to

compensate for the difference in drainage area between the gage and the dam, and then converted from cfs to mgd.

*E. Monitoring, Notification, and Reporting*

1. The permittee shall monitor stream discharge (stream flow) in Aquia Creek at the USGS Aquia Creek at Garrisonville Gage (No. 01660400) on a daily basis whenever withdrawals from the reservoir occur. Discharge can be obtained using the USGS web page USGS Real-Time Water Data for the Nation at <http://waterdata.usgs.gov/nwis/rt>. The daily mean discharge (daily mean stream flow) *from the previous day* shall be used to determine whether the % MAF or the natural inflow is the lesser value to be released from the reservoir dam, in accordance with Part I.D.3.

Within 30 days of this reissuance of VWP Individual Permit No. 91-0216, the permittee shall submit to DEQ an alternative method for determining the natural inflow (daily mean discharge) into the reservoir in the event that the USGS gage or web page malfunctions. Failure to determine the previous day's daily mean discharge shall not constitute reason on the part of the permittee for noncompliance with the terms and conditions of this permit.

2. In the event that the Governor or the Virginia Drought Coordinator declares a drought emergency in the Northern Piedmont Drought Evaluation Region, which includes but is not limited to Stafford County, the permittee shall implement either the provisions directed by the declaration, or the mandatory conservation measures detailed in the Stafford County Water Supply Emergency Ordinance (Article II, Division 2 of Ordinance No. 06-24), whichever is most restrictive. The permittee shall be responsible for determining when drought emergencies are declared.
3. Any fish kills or spills of fuels or oils shall be reported to DEQ Northern Regional Office immediately upon discovery at 703-583-3800. If DEQ cannot be reached, the spill shall be reported to the Virginia Department of Emergency Management (DEM) at 1-800-468-8892 or the National Response Center (NRC) at 1-800-424-8802.
4. The permittee shall notify DEQ within 14 days of the completion of construction of the Rocky Pen Run Reservoir project, and at that time shall provide the expected date on which the reservoir will begin receiving inflow.

DEQ will evaluate all data reported per the requirements of Virginia Water Protection Individual Permit No. 99-2064 for the Rocky Pen Run Reservoir and may re-evaluate the maximum withdrawal limits and minimum in-stream flow requirements contained in this permit for Smith Lake Reservoir. The re-evaluation may result in the modification of this Virginia Water Protection Individual Permit No. 91-0216 in accordance with the Part II General Conditions.

5. The permittee shall report all authorized surface water withdrawals to the DEQ Office of Surface and Groundwater Supply Planning at P.O. Box 1105, Richmond, Virginia, 23218 by **January 31<sup>st</sup>** of the year following the year in which the withdrawals occurred. *Reporting surface water withdrawals in accordance with the conditions of this permit satisfies the reporting requirement for the Water Withdrawal Reporting Regulation 9VAC25-200-10 et seq.* The annual monitoring report shall contain the following information at a minimum:
- a. the permittee's name and address;
  - b. the VWP permit number (91-0216);
  - c. the permittee's assigned facility identification number for reporting surface water withdrawals under 9VAC25-200-10 et seq;
  - d. the calendar date;
  - e. the daily mean discharge (daily mean stream flow) for the previous day at the Aquia Creek at Garrisonville Gage (No. 01660400);
  - f. the daily percent full value for the Smith Lake Reservoir;
  - g. the calculated daily discharge in million gallons per day (mgd) to be released from the Smith Lake Reservoir each day, as specified in Part I.D.3 of the permit conditions;
  - h. the actual daily discharge in mgd that is released from the Smith Lake Reservoir each day and a description of the method used to estimate the actual daily discharge released from the Smith Lake Reservoir;
  - i. the daily volume of water (million gallons) that is withdrawn from Smith Lake Reservoir;
  - j. the method of measuring the withdrawal;
  - k. the largest single-day volume withdrawn (million gallons) that occurred in the reporting year, and the month in which it occurred;
  - l. the monthly Account Consumption History for all water sold *in the reporting year* to the United States Marine Corps; and
  - m. the dates on which mandatory water conservation measures were implemented in the service area supplied by the authorized surface water withdrawal.

6. All reports required by this permit and other information requested by DEQ shall be signed by the permittee, or a person acting on the permittee's behalf as a duly authorized representative with the authority to bind the permittee.

A person is a duly authorized representative only if 1) the authorization is made in writing by the permittee; AND 2) the authorization specifies either the named individual or the named position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, superintendent, or position of equivalent responsibility.

If a change of the duly authorized representative occurs, the permittee shall immediately notify DEQ in writing, providing the new named individual or named position and contact information for the new duly authorized representative.

7. All submittals to DEQ shall contain the following signed certification statement:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

**A. Duty to Comply**

The permittee shall comply with all conditions of the VWP permit. Nothing in the VWP permit regulations shall be construed to relieve the permittee of the duty to comply with all applicable federal and state statutes, regulations and prohibitions. Any VWP permit violation is a violation of the law, and is grounds for enforcement action, VWP permit termination, revocation, modification, or denial of an application for a VWP permit extension or reissuance.

**B. Duty to Cease or Confine Activity**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the activity for which a VWP permit has been granted in order to maintain compliance with the conditions of the VWP permit.

**C. Duty to Mitigate**

The permittee shall take all reasonable steps to minimize or prevent any impacts in violation of the permit which may have a reasonable likelihood of adversely affecting human health or the environment.

**D. VWP Permit Action**

1. A VWP permit may be modified, revoked and reissued, or terminated as set forth in 9 VAC 25-210 et seq.
2. If a permittee files a request for VWP permit modification, revocation, or termination, or files a notification of planned changes, or anticipated noncompliance, the VWP permit terms and conditions shall remain effective until the request is acted upon by the board. This provision shall not be used to extend the expiration date of the effective VWP permit. If the permittee wishes to continue an activity regulated by the VWP permit after the expiration date of the VWP permit, the permittee must apply for and obtain a new VWP permit or comply with the provisions of 9 VAC 25-210-185 (VWP Permit Extension).
3. VWP permits may be modified, revoked and reissued or terminated upon the request of the permittee or other person at the board's discretion, or upon board initiative to reflect the requirements of any changes in the statutes or regulations, or as a result of VWP permit noncompliance as indicated in the Duty to Comply subsection above, or for other reasons listed in 9 VAC 25-210-180 (Rules for Modification, Revocation and Reissuance, and Termination of VWP permits).

### **E. Inspection and Entry**

Upon presentation of credentials, any duly authorized agent of the board may, at reasonable times and under reasonable circumstances:

1. Enter upon any permittee's property, public or private, and have access to, inspect and copy any records that must be kept as part of the VWP permit conditions;
2. Inspect any facilities, operations or practices (including monitoring and control equipment) regulated or required under the VWP permit; and
3. Sample or monitor any substance, parameter or activity for the purpose of ensuring compliance with the conditions of the VWP permit or as otherwise authorized by law.

### **F. Duty to Provide Information**

1. The permittee shall furnish to the board any information which the board may request to determine whether cause exists for modifying, revoking, reissuing or terminating the VWP permit, or to determine compliance with the VWP permit. The permittee shall also furnish to the board, upon request, copies of records required to be kept by the permittee.
2. Plans, specifications, maps, conceptual reports and other relevant information shall be submitted as required by the board prior to commencing construction.

### **G. Monitoring and Records Requirements**

1. Monitoring of parameters, other than pollutants, shall be conducted according to approved analytical methods as specified in the VWP permit. Analysis of pollutants will be conducted according to 40 CFR Part 136 (2000), Guidelines Establishing Test Procedures for the Analysis of Pollutants.
2. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
3. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart or electronic recordings for continuous monitoring instrumentation, copies of all reports required by the VWP permit, and records of all data used to complete the application for the VWP permit, for a period of at least three years from the date of the expiration of a granted VWP permit. This period may be extended by request of the board at any time.
4. Records of monitoring information shall include:
  - a. The date, exact place and time of sampling or measurements;

- b. The name of the individuals who performed the sampling or measurements;
- c. The date and time the analyses were performed;
- d. The name of the individuals who performed the analyses;
- e. The analytical techniques or methods supporting the information such as observations, readings, calculations and bench data used;
- f. The results of such analyses; and
- g. Chain of custody documentation.

#### **H. Transferability**

This VWP permit may be transferred to a new permittee only by modification to reflect the transfer, by revoking and reissuing the permit, or by automatic transfer. Automatic transfer to a new permittee shall occur if:

1. The current permittee notifies the board within 30 days of the proposed transfer of the title to the facility or property;
2. The notice to the board includes a written agreement between the existing and proposed permittee containing a specific date of transfer of VWP permit responsibility, coverage and liability to the new permittee, or that the existing permittee will retain such responsibility, coverage, or liability, including liability for compliance with the requirements of any enforcement activities related to the permitted activity; and
3. The board does not within the 30-day time period notify the existing permittee and the new permittee of its intent to modify or revoke and reissue the VWP permit.

#### **I. Property rights**

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize injury to private property or any invasion of personal rights or any infringement of federal, state or local law or regulation.

#### **J. Reopener**

Each VWP permit shall have a condition allowing the reopening of the VWP permit for the purpose of modifying the conditions of the VWP permit to meet new regulatory standards duly adopted by the board. Cause for reopening VWP permits includes, but is not limited to when the circumstances on which the previous VWP permit was based have materially and substantially changed, or special studies conducted by the board or the permittee show material and

substantial change, since the time the VWP permit was issued and thereby constitute cause for VWP permit modification or revocation and reissuance.

#### **K. Compliance with State and Federal Law**

Compliance with this VWP permit constitutes compliance with the VWP permit requirements of the State Water Control Law. Nothing in this VWP permit shall be construed to preclude the institution of any legal action under or relieve the permittee from any responsibilities, liabilities, or other penalties established pursuant to any other state law or regulation or under the authority preserved by § 510 of the Clean Water Act.

#### **L. Severability**

The provisions of this VWP permit are severable.

#### **M. Permit Modification**

A VWP permit may be modified, but not revoked and reissued except when the permittee agrees or requests, when any of the following developments occur:

1. When additions or alterations have been made to the affected facility or activity which require the application of VWP permit conditions that differ from those of the existing VWP permit or are absent from it;
2. When new information becomes available about the operation or activity covered by the VWP permit which was not available at VWP permit issuance and would have justified the application of different VWP permit conditions at the time of VWP permit issuance;
3. When a change is made in the promulgated standards or regulations on which the VWP permit was based;
4. When it becomes necessary to change final dates in schedules due to circumstances over which the permittee has little or no control such as acts of God, materials shortages, etc. However, in no case may a compliance schedule be modified to extend beyond any applicable statutory deadline of the Act;
5. When changes occur which are subject to "reopener clauses" in the VWP permit; or
6. When the board determines that minimum instream flow levels resulting from the permittee's withdrawal of water are detrimental to the instream beneficial use and the withdrawal of water should be subject to further net limitations or when an area is declared a Surface Water Management Area pursuant to §§ 62.1-242 through 62.1-253 of the Code of Virginia, during the term of the VWP permit.

#### **N. Permit Termination**

After notice and opportunity for a formal hearing pursuant to Procedural Rule No. 1 (9 VAC 25-230-100) a VWP permit can be terminated for cause. Causes for termination are as follows:

1. Noncompliance by the permittee with any condition of the VWP permit;
2. The permittee's failure in the application or during the VWP permit issuance process to disclose fully all relevant facts or the permittee's misrepresentation of any relevant facts at any time;
3. The permittee's violation of a special or judicial order;
4. A determination by the board that the permitted activity endangers human health or the environment and can be regulated to acceptable levels by VWP permit modification or termination;
5. A change in any condition that requires either a temporary or permanent reduction or elimination of any activity controlled by the VWP permit; and
6. A determination that the permitted activity has ceased and that the compensatory mitigation for unavoidable adverse impacts has been successfully completed.

#### **O. Civil and Criminal Liability**

Nothing in this VWP permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

#### **P. Oil and Hazardous Substance Liability**

Nothing in this VWP permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of the Clean Water Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

#### **Q. Unauthorized Discharge of Pollutants**

Except in compliance with this VWP permit, it shall be unlawful for the permittee to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances;
2. Excavate in a wetland;

3. Otherwise alter the physical, chemical, or biological properties of state waters and make them detrimental to the public health, to animal or aquatic life, to the uses of such waters for domestic or industrial consumption, for recreation, or for other uses;
4. On or after October 1, 2001 conduct the following activities in a wetland:
  - a. New activities to cause draining that significantly alters or degrades existing wetland acreage or functions;
  - b. Filling or dumping;
  - c. Permanent flooding or impounding;
  - d. New activities that cause significant alteration or degradation of existing wetland acreage or functions.