



ARLINGTON COUNTY, VIRGINIA

**County Board Agenda Item
Meeting of January 21, 2012**

DATE: December 21, 2011

SUBJECT: Approve the County's membership in the Virginia Nutrient Credit Exchange Association, Inc. for participation in the Nutrient Credit Exchange program and approve modifications to the existing Water Quality Improvement Fund (WQIF) Grant Agreement.

C. M. RECOMMENDATIONS:

1. Approve the County's membership in the Virginia Nutrient Credit Exchange Association, Inc. ("The Exchange").
2. Authorize the County Manager to execute the Nutrient Credit Services Agreement, subject to County Attorney review.
3. Approve the modifications to the existing WQIF Grant Agreement.
4. Authorize the County Manager to execute the Grant Agreement modification, subject to County Attorney review.
5. Approve the authority of the Department of Environmental Services (DES) Water Pollution Control Bureau (WPCB) to determine the five-year future credits to be sold on an annual basis

ISSUES: Approval by the County Board is required to join The Exchange and modify the terms and conditions of the existing WQIF Grant Agreement.

There are no outstanding issues.

SUMMARY: One of the components of the \$568 million WPCB MP01 project was to improve the level of treatment for nitrogen and phosphorous. Since these new treatment processes have been in place, the WPCB has consistently removed nitrogen and phosphorous significantly below permitted levels, creating nutrient credits that can be sold through The Exchange. Although credits will default to the WQIF if not sold by the County, in order to have this occur in an orderly manner, it is necessary to modify the Grant Agreement concerning this aspect. Additionally, the modification to the Grant Agreement will update cost estimates of the project

County Manager:

County Attorney:

Staff: Lawrence Slattery, Bureau Chief, WPCB

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which have been included in previous County Capital Improvement Programs and have been fully funded. Joining The Exchange and updating the Grant Agreement will benefit the environment, meet the conditions of the County's Department of Environmental Quality (DEQ) discharge permit, provide revenue, and offer flexibility for the County to cost effectively meet future nutrient limits.

BACKGROUND: In January 2003, the County Board endorsed the MP01 upgrade and expansion project at the DES WPCB to enable the County to meet current and future wastewater capacity demands in the most environmentally appropriate manner. The capital improvements of MP01 are providing increased wastewater processing capacity to meet existing and anticipated permit requirements, and have allowed the WPCB to consistently remove nitrogen and phosphorous to levels significantly below the permitted amounts.

In 2005, legislation was passed that created the Nutrient Credit Exchange Program in order to allow the State to achieve nutrient reductions in a timely and cost effective manner. In 2007 HB 1710/SB771, Item 2 authorized DEQ to ensure the efficient use of grants authorized by the Water Quality Improvement Act, including use of the Nutrient Credit Exchange Program.

The current Nutrient Credit Exchange system is complementary with existing nutrient and discharge permit limits and local water quality standards. All credit trades require DEQ approval. This system does not allow for any degradation of the receiving water quality, is strongly supported by the Chesapeake Bay Foundation, and was unanimously supported by the Environment and Energy Conservation Commission on November 14, 2011.

The WPCB's enhanced nutrient removal limits are 3.0 mg/l and 365,467 lb/year for nitrogen and 0.18 mg/l and 21, 928 lb/year for phosphorous. On average, the WPCB has been removing nitrogen and phosphorous significantly below these limits thus creating tradable credits.

DISCUSSION: The Nutrient Credit Exchange is an impartial mechanism (association) that serves as a central trading exchange to allow members (waste water treatment plants that are permitted point sources) discharging into the same major basins (stream/water body/tributary, there are five basins in Virginia – Shenandoah/Potomac, Rappahannock, James, York, and Eastern Shore) to buy and sell credits in a stabilized market in such a manner that the overall water quality throughout the stream and Chesapeake Bay is better than currently exists and will improve for the long-term, more rapidly, and in a cost effective manner.

Currently, there are 86 members on the exchange of which 53 are public municipal wastewater treatment plants, 21 are private industrial facilities, and 12 are consultants. Local municipal organizations that are members include: Alexandria Sanitation Authority, Fairfax County, Loudoun Water, and Prince William County Service Authority.

Nutrient credit trading is environmentally effective because it enables the application of limited resources and capital funds to the most cost effective options to reduce nutrients discharged into the watersheds and the Chesapeake Bay thus achieving the nutrient reduction goals and limits more quickly and at lower cost. The trading results in more nutrients removed for the same funds invested. The 2007 legislation requires DEQ to direct the limited grant funding to

facilities that can most cost effectively provide nutrient removal. Other facilities are allowed to achieve their limits through the use of the Nutrient Credit Exchange Program. Since 2007, the WQIF Grant Agreements with facilities require that the grantees shall make all credits generated in a calendar year available through The Exchange. Nutrient credit trading also provides economic incentives, via the sale of credits, to reduce nutrient discharges. This system allows the State of Virginia to meet overall nutrient reduction goals in a timely manner, addresses future regional growth, provides nutrient reductions for the long-term future, and ensures that water quality is protected.

Allowing the County to join The Exchange would provide a platform to trade/sell credits generated by the enhanced treatment at the WPCP. A 3 – 5 year waiting period is normally required prior to receiving revenue from credits. This results from facilities committing to nutrient credits 3 – 5 years in advance and is consistent with the terms that the initial members were exposed to and also provides stability to the credit exchange market. The exchange rates for the nutrient credits vary, but for CY15, they are currently are \$3.05/lb for Class A nitrogen credits and \$0.10/lb (estimate) for Class B nitrogen credits and \$4.93/lb for Class A phosphorous credits and \$0.50/lb (estimate) for Class B phosphorous credits. Staff estimates a range from \$22,000/year to \$410,000/year in revenue depending on the type and amounts of credits sold and the demand for the credits. Staff recommendation includes capping the credits sold to 70% of the estimated credits to be generated in the future, so that there is a 30% buffer for operational issues and other needs.

There are no property rights to these credits, and therefore any credits created by the WPCB but not traded will default to DEQ and the WQIF. Thereafter DEQ may use the credits (with no revenue provided to the County) for use as needed for facilities unable to meet their permit requirements or waste load allocations. In the future, all excess credits generated will be necessary for new or expanding communities as the waste load allocations are fixed for the various tributaries and basins that discharge to the Chesapeake Bay. To have an orderly transfer of the credits, the WQIF requires all grant recipients make available all credits generated available to aid in implementing the Nutrient Credit Exchange program. The County's \$96 million ENR (Enhanced Nutrient Removal) WQIF Grant Agreement was entered into prior to this requirement. Therefore, WQIF is requesting that the County modify its Grant Agreement to include this requirement and make it consistent with other grant recipients. Additionally, the modification will make the Grant Agreement consistent with the WPCP DEQ issued permit and update cost estimates.

FISCAL IMPACT: Membership in The Exchange will create a potential new Utility Fund revenue source for the County, beginning approximately five (5) years in the future, and provide a return on the significant investment the Board approved to the Water Pollution Control Plant. Given the plant's current average treated flow of approximately 23 million gallons per day, assuming a flow rate of 25 mgd, and average removal of nitrogen of 1.0 mg/l (actual is 1.3+ mg/l) and phosphorous of 0.08 mg/l (actual is 0.12+ mg/l), and assuming 70% of the credits are sold as Class A, the amount the County could receive for available credits is approximately \$22,000 to \$410,000/year. A portion of the revenue generated would be allocated to the Interjurisdictional Partners as they contribute toward the plant's operating and maintenance

expense, and also its capital improvements. The actual cash flow is significantly dependent on the demand for credits. An annual membership fee of \$3,125/year is required for participation.

NUTRIENT CREDIT SERVICES AGREEMENT

THIS NUTRIENT CREDIT SERVICES AGREEMENT (this “Agreement”) made by and between the Virginia Nutrient Credit Exchange Association, Inc., (the “Nutrient Exchange”) and the undersigned owner or operator of a Permitted Facility included in the Exchange Compliance Plan (the “Participant”).

BACKGROUND

A. The Participant owns or operates a certain facility or facilities regulated under the General Virginia Pollutant Discharge Elimination System Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia, 9 VAC 25-820, issued by the State Water Control Board and Department of Environmental Quality (collectively “DEQ”) for a five-year permit term beginning January 1, 2007 or as hereafter modified or reissued from time to time (the “Watershed General Permit”).

B. The Nutrient Exchange is a Virginia non-stock corporation comprised of permittees subject to the Watershed General Permit and is authorized by section 62.1-44.19:17 of the Code of Virginia to assist permittees with Watershed General Permit compliance and to facilitate voluntary nutrient credit trading.

C. Among other requirements, the Watershed General Permit (9 VAC 25-820-70, Part I B) imposes limitations on the discharge of two nutrients, total nitrogen and total phosphorus, from the Participant’s Permitted Facility(ies), and requires the Participant to submit to DEQ by August 1, 2007 and each February 1 thereafter, either individually or through the Nutrient Exchange, a compliance plan (9 VAC 25-820-40 and -70 Part I D) identifying how its Permitted Facility(ies) will comply with such limitations.

D. On behalf of the Participants and based on the data provided and decisions made by the individual Participants, the Nutrient Exchange has developed, and intends to maintain by means of the Watershed General Permit-required annual Plan Updates, a compliance plan for each of Virginia’s five major river basins (collectively the “Exchange Compliance Plan”) to assist the Participants in complying with the Watershed General Permit compliance plan requirement.

E. In addition, Participants in the Exchange Compliance Plan have the option of exchanging nutrient Credits. The Exchange Compliance Plan identifies firm commitments for the purchase and sale of Class A Credits at the request of numerous individual Participants who have elected to participate as Class A Buyers or Class A Sellers, and further establishes a market for and provides all Participants with the option of later purchasing available Class B Credits on more flexible terms to assist in maintaining compliance during unanticipated circumstances.

F. The Nutrient Exchange serves as the central trading exchange to facilitate the execution and reporting of these voluntary nutrient Credit Exchanges by and among its Participants in accordance with its Credit Exchange Policy, the Watershed General Permit and,

when applicable, Water Quality Improvement Fund Grant Agreements entered into by and between a Participant and DEQ.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and conditions herein, the parties hereto agree as follows:

1. Annual Compliance Plan Updates. The Nutrient Exchange agrees to update the Exchange Compliance Plan annually and submit such Plan Update to DEQ for approval on or before the deadline (currently February 1 of each year) specified in Part I D of the Watershed General Permit. The Plan Update shall include updated information as provided by the Participant in accordance with the Credit Exchange Policy for its Permitted Facility(ies), including revisions to relevant facility-specific information. The Participant shall assist the Nutrient Exchange in the development of the Plan Update by providing information reasonably requested by the Nutrient Exchange in accordance with an annual Plan Update schedule to be established by the Nutrient Exchange.

2. Annual Reports. The Participant agrees to submit to the Nutrient Exchange a copy of the Participant's annual report to DEQ required by Part I F of the Watershed General Permit (9 VAC 25-820-70), and such other information as may be reasonably requested by the Nutrient Exchange to assist in the annual Reconciliation of Credit Exchanges for each Compliance Year.

3. Annual Credit Exchange Reconciliation. The Nutrient Exchange agrees to conduct an annual Reconciliation process for the timely execution of the Credit Exchanges elected by the Participants as specified in the Exchange Compliance Plan. The Participant agrees to implement any previously elected Class A Credit or Class B Credit Exchanges in accordance with the Credit Exchange Policy.

4. Incorporation of Credit Exchange Policy. The provisions of the Credit Exchange Policy are hereby incorporated as if such provisions were fully set out herein. For convenient reference, a copy of the current version of the Policy is attached hereto.

GENERAL PROVISIONS

5. Definitions. Terms not specifically defined herein shall have the definitions provided in the Credit Exchange Policy.

6. Term. The Agreement shall be in effect once signed by both parties and shall have an initial term through and including June 30, 2013. This term is coincident with the five year Planning Period covered by the current Exchange Compliance Plan (January 1, 2008 through December 31, 2012) plus a six month period (January 1, 2013 through June 30, 2013) for the Reconciliation process for the fifth Compliance Year (2012). Such term shall automatically extend by one year, without notice, upon submittal to DEQ of each annual update of the Exchange Compliance Plan beginning with the 2009 Annual Update due February 1, 2009,

unless (a) the Participant withdraws as provided herein or (b) the Nutrient Exchange provides notice to the Participant prior to completion of the Plan Update that it will not extend the term of this Agreement.

7. Amendments to Credit Exchange Policy and Exchange Compliance Plan. The Nutrient Exchange and the Participant acknowledge that the Credit Exchange Policy and the Exchange Compliance Plan may be amended from time to time as a result of changes desired by the Participants, the Exchange Board of Governors or DEQ, possible changes to law, and other factors. It is agreed that changes thereto shall become effective upon notice to the Participants or upon a later effective date as may be specified in such notice.

8. Withdrawal. The Participant shall have the following rights to withdraw from the Nutrient Exchange and the Exchange Compliance Plan.

(a) Withdrawal Upon End of Current Term. This Agreement shall not automatically extend for an additional year upon the Plan Update as provided in Paragraph 6 if the Participant elects to withdraw by providing notice of such election to the Nutrient Exchange at least four years and nine months (57 months) prior to the expiration of the term of this Agreement or before any later date as the Nutrient Exchange may specify during the Plan Update process. In the event of such withdrawal, the Nutrient Exchange shall omit the Participant and its Permitted Facilities from the additional Compliance Year (the new Year 5) added to the Plan during the Plan Update process for that year. For example, if a Participant in the Exchange Compliance Plan for the five year Planning Period covering January 1, 2008 through December 31, 2012 desires to withdraw and not extend this Agreement for an additional year (*i.e.*, through December 31, 2013), the Participant shall provide its withdrawal notice on or before October 1, 2008.

(b) Withdrawal During Term in Response to Policy or Plan Amendment. Notwithstanding any other provision of this Agreement, if any change to the Credit Exchange Policy or the Exchange Compliance Plan pursuant to Paragraph 7 would result in a material adverse effect on the Participant within the five year Planning Period covered by the Exchange Compliance Plan then in effect, the Participant may withdraw from the Agreement by written notice delivered to the Nutrient Exchange within sixty (60) days of such Participant's notice of the change, unless the Nutrient Exchange in its discretion further amends the Credit Exchange Policy or Exchange Compliance Plan within ninety (90) days of receiving such notice in a manner that eliminates the material adverse effect. Such withdrawal shall be effective January 1 of the Compliance Year for which the material adverse effect would first otherwise occur. The Participant shall participate in the Reconciliation and execute all Credit Exchanges planned for each Compliance Year prior to the effective date of withdrawal and pay all Credit costs or receive Credit revenue through and including such Compliance Year. In addition, the Participant shall continue to pay all applicable fees or dues in the ordinary course through the effective date of such withdrawal.

(c) Withdrawal During Term for Other Reasons. In addition to the right to withdraw during the term of this Agreement as provided in Subparagraph 8(b), the Participant shall have the right to withdraw during the term of this Agreement through the Plan Update

process if the following conditions are satisfied: (i) the Board determines that the Participant's withdrawal, alone or in combination with other modification requests, would not have a material adverse effect during the Planning Period on the Nutrient Exchange or any non-withdrawing Participants, (ii) the Participant is and agrees to remain current on all fees and Credit purchase costs as are due or may come due through and including the time of completion of the Reconciliation process for the last Compliance Year for which its Permitted Facilities are covered by the Plan, and (iii) the Participant agrees to cooperate fully in the Reconciliation for the last Compliance Year for which its Permitted Facilities are covered by the Plan. Such withdrawal shall be effective subject to the foregoing conditions upon submittal of the Plan Update by the Nutrient Exchange to DEQ as provided in Paragraph 1 above.

9. Annual Fee. The Nutrient Exchange's obligations under this Agreement shall be contingent on the continued adequate funding of the Nutrient Exchange through fees applicable to and paid by the Participants. Following execution of this Agreement by both parties and by approximately November 2008, the Nutrient Exchange shall issue an invoice to the Participant in the amount shown on Attachment A under the column labeled "Nov. 2008." Such invoice shall also include the amount, if any, invoiced by the Nutrient Exchange to the Participant in approximately March 2008 (as shown under the column labeled "Mar. 2008") but not yet paid by the Participant. The Participant agrees to pay such invoice within forty-five (45) days of the invoice date. Beginning with the 2009 Plan Update, following submittal of each annual Plan Update to DEQ the Nutrient Exchange shall issue an invoice to the Participant for the annual fee. The Participant shall pay such invoice within forty-five (45) days of the invoice date or by July 31 of the calendar year in which the invoice is issued, whichever is later. The Nutrient Exchange agrees to periodically update such schedule to add the fee amount for future years and in so doing intends to keep the annual fees specified therein to the lowest level sufficient for proper operation in the discretion of the Board. The Board anticipates establishing annual fees associated with and payable after the 2009, 2010, 2011 and 2012 Plan Updates, respectively, at less than a maximum of twice the annual fee currently scheduled on Attachment A for Nov. 2008. If an annual fee associated with any Plan Update through and including the 2012 Plan Update were to exceed this maximum anticipated fee, in that event the Participant may withdraw in accordance with the same procedures provided in Paragraph 8(b) of this Agreement. For the 2009 Plan Update, the Board's current estimate is that the annual fee will be the same amount as the Nov. 2008 fee shown on Attachment A. Upon receipt of a written request from the Participant, the Nutrient Exchange agrees to provide the Participant with an accounting of its receipts and disbursements for the two fiscal years immediately preceding the fiscal year in which the written request is received. The Participant agrees to pay applicable fees when due. Failure to pay any annual fee invoice within forty-five (45) days shall result in an administrative charge of one hundred dollars (\$100). In the event the Participant fails to pay any annual fee invoice within ninety (90) days of the invoice date, without limiting any other remedies, the Board in its discretion may terminate this Agreement and eliminate the Participant's Permitted Facilities from the Plan. Such termination shall not relieve the Participant of its obligation to pay any amounts due prior to the date of termination.

10. Waiver of Liability of the Nutrient Exchange. In recognition of the benefits derived by Participants and the nature of the Nutrient Exchange, to the extent permitted by law the Participant waives any causes of action and rights of recovery for liability of the Nutrient

Exchange and its Board of Governors, officers, employees, consultants and other advisors, for any losses or damage to the Participant, other than due to the gross negligence or intentional misconduct thereof.

11. Authorization of Signature. The Participant and the Nutrient Exchange each represent and warrant that its execution of this Agreement by the undersigned is fully authorized and validly performed.

12. No Partnership. Nothing contained in this Agreement shall create any partnership, trust, or joint venture with regard to the Nutrient Exchange and any or all Participants.

13. Third Party Beneficiaries. This Agreement is solely for the benefit of the Nutrient Exchange and its Participants and their permitted successors and assignees and shall not confer any rights or benefits on any other person.

14. Notices. Notices pursuant to Paragraphs 6 and 8 shall be delivered at the following address by U.S. Mail, certified with return receipt, and shall be deemed given when received (or delivery is refused) by the party to whom such notice or communication is directed. A party may change its address for such notice in writing as provided herein.

If to the Nutrient Exchange: Virginia Nutrient Credit Exchange Association, Inc.
ATTN: Secretary
P.O. Box 51
Richmond, Virginia 23218-0051

If to the Participant: _____

with a copy to the Participant's Designated Representative.

Any other notices and communications pursuant to this Agreement shall be made by or to the Participant's Designated Representative, or alternate when appropriate, each as designated the Participant from time to time in accordance with the Bylaws of the Nutrient Exchange.

15. Netting of Payments. The Nutrient Exchange may, but shall not be obligated to, net any payments to the Participant for such Participant's sales of Credits or otherwise with any fees past due, other authorized charges past due, or charges for Credits purchased past due to the Nutrient Exchange.

16. Integration. This Agreement (including the Credit Exchange Policy incorporated herein by reference) contains the entire agreement between the Nutrient Exchange and the Participant as to the subject matter hereof and supercedes all previous written and oral negotiations, commitments, proposals and writings, including those of counsel. Except as

otherwise provided herein or in the Credit Exchange Policy, no amendments may be made except by a writing signed by the parties.

17. Change in Law. Other than as specifically provided in the Credit Exchange Policy, in the event of any material change in applicable laws or regulations the parties shall work together to amend the Agreement to conform to such change in law, while maintaining as closely as practical the provisions and intent of this Agreement.

18. Governing Law; Severability. This Agreement shall be construed in accordance with and governed for all purposes by the laws of the Commonwealth of Virginia. If any term or provision of this Agreement, the deletion of which would not adversely affect the receipt of a material benefit by either party hereunder, shall be held by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby and each other term and provision of this Agreement shall remain valid and enforceable to the fullest extent permitted by law. It is the intent of the parties to this Agreement, and the parties agree, that in lieu of any term or provision of this Agreement that is illegal, invalid or unenforceable, the parties in good faith shall supply as part of this Agreement a legal, valid and enforceable term or provision as similar to such illegal, invalid or unenforceable term or provision as may be possible.

IN WITNESS WHEREOF, the parties have caused the execution of this Agreement as of the date first written above.

**VIRGINIA NUTRIENT CREDIT EXCHANGE
ASSOCIATION, INC.**

By: _____

Name: _____

Title: _____

Date: _____

PARTICIPANT NAME

By: _____

Name: _____

Title: _____

Date: _____

ATTACHMENT A

ANNUAL FEE SCHEDULE

<u>Class</u>	<u>Participant's Total TN WLA (lbs/yr)</u>	<u>Mar. 2008</u>	<u>Nov. 2008</u>
Very Large	>400,000	\$1,750	\$3,500
Large	400,000- 75,001	\$1,250	\$2,500
Standard	75,000- 15,001	\$750	\$1,500
Small	≤15,000	\$250	\$500

**ANNUAL FEE SCHEDULE UPDATE
(ISSUED: MAY 26, 2010)**

<u>Class</u>	<u>Participant's Total TN WLA (discharge lbs/yr)</u>	<u>Annual Fee</u>
Very Large	>400,000	\$4,250
Large	400,000-75,001	\$3,125
Standard	75,000-15,001	\$1,875
Small	≤15,000	\$625



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1005, Richmond, Virginia 23218
Fax (804) 698-4500 TDD (804) 698-4021
www.deq.virginia.gov

L. Preston Bryant Jr.
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

Mar. 14, 2007

Mr. Larry Slattery
Arlington County
3402 South Glebe Rd.
Arlington, VA 22202

RE: WQIF Grant Agreement #440-S-07-10

Dear Larry:

Enclosed is your copy of the above-referenced Water Quality Improvement Fund grant, which has been signed by both the Authority and the DEQ Director. The amount of the grant agreement is shown as \$96,176,190 for cost share associated with nutrient reduction technology at the WWTP.

We look forward to working with you on designing and implementing this nutrient related project, to the mutual benefit of the grantee and the Commonwealth. If you need additional information or clarification, please call me at (804) 698-4466.

Sincerely,

A handwritten signature in black ink, appearing to read 'Robert Ehrhart', written in a cursive style.

Robert Ehrhart
Chesapeake Bay Program

Enclosure

cc: A. J. Young, DEQ – NRO
Carol Bryar, DEQ – Finance
Walter Gills, DEQ-CAP

**VIRGINIA WATER QUALITY IMPROVEMENT FUND
POINT SOURCE GRANT AND
OPERATION AND MAINTENANCE AGREEMENT**

Contract #440-S-07-10

THIS AGREEMENT is made as of this 13th day of March 2007, by and between the Director of the Virginia Department of Environmental Quality in his official capacity, or his designee (the "Director"), and Arlington County (the "Grantee").

Pursuant to the Virginia Water Quality Improvement Act of 1997, Chapter 21.1, Title 10.1 of the Code of Virginia (1950), as amended (the "Act"), the General Assembly created the Virginia Water Quality Improvement Fund (the "Fund"). The Director, in coordination with the Director of the Department of Conservation and Recreation, is authorized by the Act to make Water Quality Improvement grants related to point source pollution control, in accordance with guidelines established pursuant to Section 10.1-2129 of the Code, and enter into agreements with grantees under the Act which shall, in accordance with Sections 10.1-2130 and 10.1-2131, provide for the payment of the total amount of the grant and require proper long-term operation, monitoring and maintenance of funded projects.

The Grantee has been approved by the Director to receive a Grant from the Fund subject to the terms and conditions herein to finance thirty-five (35) percent of the cost of the Project, which consists of the design and installation of Nutrient Removal Technology as described herein. The Grantee will use the Grant to finance that portion of the Project Costs not being paid for from other sources as set forth in the Project Budget in Exhibit B to this Agreement. Such other sources may include, but are not limited to, the Virginia Water Facilities Revolving Fund, Chapter 22, Title 62.1 of the Code of Virginia (1950), as amended.

As required by the Act, this Agreement provides for payment of the Grant, design and construction of the Project, and proper long-term operation, monitoring, and maintenance of the Project. This Agreement is supplemental to the State Water Control Law, Chapter 3.1, Title 62.1 of the Code of Virginia (1950), as amended, and it does not limit in any way the other water quality restoration, protection and enhancement, or enforcement authority of the Director, the State Water Control Board (the "Board") or the Department of Environmental Quality (the "Department").

**ARTICLE I
DEFINITIONS**

1. The capitalized terms contained in this Agreement shall have the meanings set forth below unless the context requires otherwise and any capitalized terms not otherwise defined herein shall have the meaning assigned to such terms in the Act:

(a) "Agreement" means this Virginia Water Quality Improvement Fund Point Source Grant and Operation and Maintenance Agreement between the Director and the Grantee, together with any amendments or supplements hereto.

(b) "Authorized Representative" means any member, official or employee of the Grantee authorized by resolution, ordinance or other official act of the governing body of the Grantee to perform the act or sign the document in question.

(c) "Extraordinary Conditions" means unforeseeable or exceptional conditions resulting from causes beyond the reasonable control of the Grantee such as, but not limited to fires, strikes, acts of God, and acts of third parties that singly or in combination cause material breach of this Agreement.

(d) "Facility" means all plants, systems, unit processes, equipment or property related to the Project, and owned, operated, or maintained by the Grantee and used in connection with the treatment of wastewater.

(e) "Grant" means the particular grant described in Section 4.0 of this Agreement, with such changes thereto as may be approved in writing by the Director and the Grantee.

(f) "Monetary Assessment" means a contractual or stipulated penalty as described in Section 10.1-2130 of the Code.

(g) "Nutrient Removal Technology" means state-of-the-art nutrient removal technology, biological nutrient removal technology, or other nutrient removal technology, as further described in Section 10.1-2117 of the Code.

(h) "Preliminary Engineering Proposal" means the engineering report and preliminary plans for the Project as described in 9 VAC 25-790-110, as modified by the final engineering design approved by the Department.

(i) "Project" means the particular Nutrient Removal Technology described in Exhibit A to this Agreement to be designed and constructed by the Grantee with, among other monies, the Grant, with such changes thereto as may be approved in writing by the Director and the Grantee.

(j) "Project Budget" means the budget for the Project as set forth in Exhibit B to this Agreement, with such changes thereto as may be approved in writing by the Director and the Grantee.

(k) "Project Costs" means costs of the Project described in the Project Budget as permitted by the Act with such changes thereto as may be approved in writing by the Director and the Grantee.

(l) "Project Engineer" means the Grantee's engineer who must be a licensed professional engineer registered to do business in Virginia and designated by the Grantee as the Grantee's engineer for the Project in a written notice to the Department.

(m) "Project Schedule" means the schedule for the Project as set forth in Exhibit C to this Agreement, with such changes thereto as may be approved in writing by the Director and the Grantee.

ARTICLE II **SCOPE OF PROJECT**

2. The Grantee will cause the Project to be designed, constructed and placed in operation as described in Exhibit A to this Agreement to meet an effluent concentration limitation of 3.0 mg/l for total nitrogen on an annual average basis.

ARTICLE III
SCHEDULE

3. The Grantee will cause the Project to be designed, constructed and placed in operation in accordance with the Project Schedule in Exhibit C to this Agreement.

ARTICLE IV
COMPENSATION

4.0. Grant Amount. The total grant award from the Fund under this Agreement is \$96,176,190 and represents the Commonwealth's thirty-five percent share of the eligible Project Costs. Any material changes made to the Project after execution of this Agreement, which alter the Project Costs, will be submitted to the Department for review of grant eligibility. The amount of the grant award set forth herein may be modified from time to time by agreement of the parties to reflect changes to the Project and/or grant eligible Project Costs.

4.1. Payment of Grant. Subject to the availability of monies in the Fund allocated to point source pollution control and Section 4.3 herein, the Department will pay the Grantee for costs incurred by the Grantee in an amount equal to thirty-five percent of Project Costs allowable under the Act and guidelines published pursuant thereto. Disbursement of the Grant will be in accordance with the payment provisions set forth in Section 4.2 herein and the Project Budget.

4.2. Application of Grant Funds. The Grantee agrees to apply the Grant solely and exclusively to the payment, or the reimbursement of the Grantee for the payment, of Project Costs. The Department will disburse the Grant to the Grantee not more frequently than once each calendar month (unless otherwise agreed by the Department and the Grantee) upon receipt by the Department of the following:

(a) A requisition approved by the Department, signed by the Authorized Representative and containing all receipts, vouchers, statements, invoices or other evidence of the actual payment of Project Costs or that the Project Costs have been incurred, and all other information called for by, and otherwise being in the form of, Exhibit D to this Agreement.

(b) If any requisition includes an item for payment for labor or to contractors, builders or material men, a certificate, signed by the Project Engineer, stating that such work was actually performed or such materials, supplies or equipment were actually furnished or installed in or about the construction of the Project.

Upon receipt of each such requisition and accompanying certificate(s) and schedule(s), the Director shall request the Comptroller to issue a warrant directing the State Treasurer to disburse the Grant to the Grantee in accordance with such requisition to the extent approved by the Department.

Except as may otherwise be approved by the Department, disbursements shall be held at ninety-five percent (95%) of the total grant amount to ensure satisfactory completion of the Project. Upon receipt from the Grantee of the certificate specified in Section 4.4 and a final requisition detailing all retainage to which the Grantee is then entitled, the Director, subject to the provisions of this section and Section 4.3 herein, shall request the Comptroller to issue a warrant directing the State Treasurer to disburse to the Grantee the final payment from the Grant.

4.3. Availability of Funds. The Director and Grantee recognize that the availability of monies in the Fund allocated to point source pollution control is subject to appropriation by the General Assembly and allocations made by the Secretary of Natural Resources, and that at times there may not be sufficient monies in the Fund to permit prompt disbursement of grant funds due and owing the Grantee pursuant to this Agreement. To minimize the potential for such disruption in disbursements of grant funds and in satisfaction of its obligations under the Act, the Department covenants and agrees to (1) manage the allocation of grants from the Fund to ensure full funding of executed grant agreements, (2) forecast the estimated disbursements from the Fund in satisfaction of approved grants and make this forecast publicly available each year for use in the Commonwealth's budgetary process, and (3) promptly disburse to the Grantee any grant funds due and owing the Grantee pursuant to this Agreement when sufficient monies are available in the Fund to make such disbursements. The Department may determine that monies are not sufficient to promptly disburse grant funds when there are competing grant requests. To assist the Department in forecasting estimated disbursements, prior to September 30 of each year the Grantee will provide the Department with a written estimate of its projected expenditures on the Project during the next fiscal year using the same line item cost categories in the Project Budget.

4.4. Agreement to Complete Project. The Grantee agrees to cause the Project to be designed and constructed, as described in Exhibit A to this Agreement, and in accordance with (i) the schedule in Exhibit C to this Agreement and (ii) plans and specifications prepared by the Project Engineer and approved by the Department.

4.5 Notice of Substantial Completion. When the Project has been completed, the Grantee shall promptly deliver to the Department a certificate signed by the Authorized Representative and by the Project Engineer stating (i) that the Project has been completed substantially in accordance with the approved plans and specifications and addenda thereto, and in substantial compliance with all material applicable laws, ordinances, rules, and regulations; (ii) the date of such completion; (iii) that all certificates of occupancy and operation (including a Certificate to Operate) for the Project have been issued or obtained; and (iv) the amount, if any, to be released for payment of the final Project Costs.

ARTICLE V **PERFORMANCE**

5.0 The Grantee's Facility shall meet a total nitrogen effluent concentration limitation of 3.0 mg/l on an annual average basis, except as provided in paragraph 5.1 and Article VIII of this Agreement.

5.1 If, pursuant to Section 10.1-1187.6 of the Code, the State Water Control Board approves an alternative compliance method to technology-based concentration limitations in Virginia Pollutant Discharge Elimination System permits, the concentration limitations in Section 5.0 above shall be suspended subject to the terms of such approval. The terms of approval shall include requirements for operation of the installed Nutrient Removal Technology at the treatment levels for which it was designed.

ARTICLE VI **OPERATION AND MAINTENANCE**

6.0 No later than ninety (90) days after issuance of a Certificate to Operate for the Project, the Grantee shall submit to the Department, for review and approval, an operation and maintenance manual for the Project. As required by the Grantee's VPDES permit, the Facility shall be operated and maintained in a manner consistent with the operation and maintenance manual as approved by the Department.

ARTICLE VII
MONITORING AND REPORTING

7.0. **Monitoring.** The Grantee shall monitor compliance with the numerical concentrations in Article V of this Agreement. Monitoring will be conducted at the final effluent from the facility and immediately prior to discharge to Four Mile Run. Sampling frequency and type shall be in accordance with VPDES permit requirements. In the absence of total nitrogen or total phosphorus VPDES permit monitoring requirements, monitoring shall consist of a sample type and collection frequency as specified in the Chesapeake Bay General Watershed Permit Regulation (9 VAC 25-820-70.E.). Each sample will be analyzed for total nitrogen and total phosphorus using EPA-approved test methods and reported to the Department.

7.1. **Reporting.** Beginning with the Project's first full calendar year of operation and each year thereafter, the Grantee will calculate the annual average concentration for total nitrogen and total phosphorus for the calendar year just ended by dividing the sum of the monthly average concentrations by twelve, and submit the results to the Department using the form attached as Exhibit E to this Agreement on or before February 1 of each year. Data excluded from the average based on the occurrence of extraordinary conditions will be identified in the report.

ARTICLE VIII
MATERIAL BREACH

8.0. **Material Breach.** Any failure or omission by the Grantee to perform its obligations under this Agreement, unless excused by the Department, is a material breach.

8.1. **Notice of Material Breach.** If at any time the Grantee determines that it is unable to perform its obligations under this Agreement, the Grantee shall promptly provide written notification to the Department. This notification shall include a statement of the reasons it is unable to perform, any actions to be taken to secure future performance and an estimate of the time necessary to do so.

8.2. **Monetary Assessments for Breach.** In no event shall total Monetary Assessments pursuant to this Agreement exceed (i) \$8,450,725 annually or (ii) \$169,014,450 during the life of this Agreement. Monetary Assessments will be paid into the State Treasury and credited to the Fund. The Director's right to collect Monetary Assessments does not affect in any way the Director's right to secure specific performance of this Agreement using such other legal remedies as may otherwise be available. Within 90 days of receipt of written demand from the Director, the Grantee shall pay the following Monetary Assessments for the corresponding material breaches of this Agreement unless the Grantee asserts a defense pursuant to the requirements of Section 8.3 herein.

(a) Beginning with the Project's first full calendar year of operation following issuance of a Certificate to Operate for the Project, for the exceedance of the numerical concentration limitations applicable under Article V of this Agreement, except where the exceedance is no greater than 0.8 mg/L for total nitrogen or no more than 10%, whichever is greater, an assessment calculated as follows:

For noncompliance with the total nitrogen effluent limitation in Article V, an assessment calculated using the formula in Exhibit F to this Agreement for each one-tenth of a milligram per liter of total nitrogen in excess of the limitation in Article V.

(b) For noncompliance with any deadline in Exhibit C to this Agreement, Article VII of this Agreement, or the failure to submit the operations and maintenance manual in accordance with Article VI of this Agreement, an assessment in the amount of \$500 per day for the first 10 days of noncompliance, and \$1,000 for each day of noncompliance thereafter. Noncompliance with interim deadlines shall be excused where the Grantee complies with the final deadline in Exhibit C to this Agreement.

(c) For noncompliance with the obligation to operate and maintain the Project in a manner consistent with the manual pursuant to Article VI of this Agreement, an assessment in the amount of \$1,000 for each day of noncompliance.

8.3 Extraordinary Conditions.

(a) The Grantee may assert and it shall be a defense to any action by the Director to collect a Monetary Assessment or otherwise secure performance of this Agreement that the alleged non-performance was due to Extraordinary Conditions, provided that the Grantee:

(1) takes reasonable measures to effect a cure or to minimize any non-performance with the Agreement, and

(2) provides written notification to the Department of the occurrence of Extraordinary Conditions, together with an explanation of the events or circumstances contributing to such Extraordinary Conditions, no later than 5 days after the discovery of the Extraordinary Conditions and the resulting impacts on performance.

(b) If the Department disagrees that the events or circumstances described by the Grantee constitute Extraordinary Conditions, the Department must provide the Grantee with a written objection within sixty (60) days of Grantee's notice under paragraph 8.3(a)(2), together with an explanation of the basis for its objection.

8.4 Resolution and Remedy. If no resolution is reached by the parties, the Director or Department may immediately pursue any remedy available at law or equity. In any such action, the Grantee shall have the burden of proving that the alleged noncompliance was due to Extraordinary Conditions. In addition to any other remedy that may be available to the Director or the Department, the Director or Department may bring an action in the Circuit Court of the City of Richmond to enforce this Agreement by injunction or mandamus or stipulated penalties or to recover part or all of the grant funds. No such remedy of the Director or Department shall be deemed to be exclusive or to estop any other such remedy or the bringing of an action to enforce this Agreement. The Grantee agrees to venue to any such action in the Circuit Court of the City of Richmond, either north or south of the James River in the option of the Director. The Grantee further agrees that, in light of the public purpose of nutrient removal, any failure of the Grantee to perform its duties under this Agreement and any failure of the Project to meet the requirements of this Agreement or the requirements of any permit that may be issued by the Board regarding the Project constitutes irreparable harm to the Commonwealth for which the Director or Department lacks an adequate remedy at law.

ARTICLE IX
GENERAL PROVISIONS

9.0. Effect of the Agreement on Virginia Pollutant Discharge Elimination System (VPDES) Permit. This Agreement shall not be deemed to relieve the Grantee of its obligations to comply with the terms of its VPDES permit issued by the Board.

9.1. Prior Agreement Superseded. This Agreement shall supersede and replace any prior Agreement between the Director and the Grantee, together with any amendments or supplements thereto, for the design and installation of nutrient removal technology.

9.2. Disclaimer. Nothing in this Agreement shall be construed as authority for either party to make commitments which will bind the other party beyond the covenants contained herein.

9.3. Non-Waiver. No waiver by the Director of any one or more defaults by the Grantee in the performance of any provision of this Agreement shall operate or be construed as a waiver of any future default or defaults of whatever character.

9.4. Integration and Modification. This Agreement constitutes the entire Agreement between the Grantee and the Director. No alteration, amendment or modification of the provisions of this Agreement shall be effective unless reduced to writing, signed by both the parties and attached hereto. The Department and the Grantee shall confer within six months after each reissuance of the Grantee's VPDES permit for the purpose of determining whether this Agreement should be modified or terminated. This Agreement may be modified by agreement of the parties for any purpose, provided that any significant modification to this Agreement must be preceded by public notice of such modification.

9.5. Collateral Agreements. Where there exists any inconsistency between this Agreement and other provisions of collateral contractual agreements which are made a part of this Agreement by reference, the provisions of this Agreement shall control.

9.6. Non-Discrimination. In the performance of this Agreement, the Grantee warrants that it will not discriminate against any employee, or other person, on account of race, color, sex, religious creed, ancestry, age, national origin or other non-job related factors. The Grantee agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.

9.7. Conflict of Interest. The Grantee warrants that it has fully complied with the Virginia Conflict of Interest Act as it may apply to this Agreement.

9.8. Applicable Laws. This Agreement shall be governed in all respects whether as to validity, construction, capacity, performance or otherwise, by the laws of the Commonwealth of Virginia. The Grantee further agrees to comply with all laws and regulations applicable to the Grantee's performance of its obligations pursuant to this Agreement.

9.8. Records Availability. The Grantee agrees to maintain complete and accurate books and records of the Project Costs, and further, to retain all books, records, and other documents relative to this Agreement for three (3) years after final payment. The Department, its authorized agents, and/or State auditors will have full access to and the right to examine any of said materials during said period. Additionally, the Department and/or its representatives will have the right to access work sites during

normal business hours, after reasonable notice to the Grantee, for the purpose of ensuring that the provisions of this Agreement are properly carried out.

9.10. Severability. Each paragraph and provision of this Agreement is severable from the entire Agreement; and if any provision is declared invalid, the remaining provisions shall nevertheless remain in effect.

9.11. Notices. All notices given hereunder shall be in writing and shall be sent by United States certified mail, return receipt requested, postage prepaid, and shall be deemed to have been received at the earliest of: (a) the date of actual receipt of such notice by the addressee, (b) the date of the actual delivery of the notice to the address of the addressee set forth below, or (c) five (5) days after the sender deposits it in the mail properly addressed. All notices required or permitted to be served upon either party hereunder shall be directed to:

Department: Virginia Department of Environmental Quality
Chesapeake Bay Program
P.O. Box 1105
Richmond, VA 23218
Attn: WQIF Program Manager

Grantee: Arlington County
3402 South Glebe Rd.
3rd Floor
Arlington, VA 22202
Attn: Water Pollution Control Bureau Chief

9.12. Successors and Assigns Bound. This Agreement shall extend to and be binding upon the parties hereto, and their respective legal representatives, successors and assigns.

9.13. Exhibits. All exhibits to this Agreement are incorporated herein by reference.

9.14. Termination. This Agreement shall terminate 20 years after the Agreement is executed by both parties or by an earlier date by agreement of the parties; provided, however, that except for termination for cause due to Material Breach, the Director's obligation under Section 4.1 herein to pay the Grant amount shall survive termination if such amount has not been paid in full as of the termination date.

ARTICLE X
COUNTERPARTS

10. This Agreement may be executed in any number of Counterparts, each of which shall be an original and all of which together shall constitute but one and the same instrument.

WITNESS the following signatures, all duly authorized.

DIRECTOR OF THE DEPARTMENT OF ENVIRONMENTAL QUALITY

By: _____

Date: _____

GRANTEE'S AUTHORIZED REPRESENTATIVE

By: _____

Date: _____

EXHIBIT A

PROJECT DESCRIPTION

Grantee: Arlington County

Grant: #440-S-07-10

Design Package No.1

The significant improvements to be designed for the Arlington County Water Pollution Control Plant (ACWPCP) under DP-1 will provide equalization to minimize wet weather bypasses, provide chemical storage and feed for phosphorus removal, minimize odors from the primary side of the plant; provide treated effluent water for on-site use, prepare for implementation of DP-2, upgrade of associated electrical equipment, and provide for effluent filtration.

The proposed improvements will provide two equalization tanks with volumes of 4.6 million gallons and 6.7 million gallons, for a total of 11.3 million gallons. A new odor control system will be provided at the following areas to treat foul air on the primary side of the treatment works:

- Existing 4.9 MG Equalization Tank;
- Two (2) new Equalization tanks;
- Existing Primary Clarifier Effluent Channel; and
- Existing Potomac Interceptor (raw wastewater).

The odor control system will have a minimum capacity of approximately 30,000 cfm. A new building will be provided to house the chemical storage tanks, feed equipment and metering pumps.

The new effluent filters will be installed to allow for more consistent effluent polishing, phosphorous removal, and denitrification to meet more stringent nutrient limits anticipated to occur in the near future.

A methanol system will be designed to provide supplemental carbon to the primary effluent channel, last pass of each of the aeration tanks, and/or the filters, in order to facilitate denitrification.

A multi-point ferric chloride feed systems will be provided to achieve lower total phosphorous levels. The four locations for ferric chloride addition are:

- Raw wastewater;
- Primary effluent;
- Activated Sludge upstream of the secondary clarifiers; and
- Activated Sludge Effluent (ASE), upstream of the Lime Reaction Tanks (in the interim), or the mono-media filters (in the future).

The ACWPCP Plant Effluent Water (PEW) System is the non-potable water system at the plant used for wash-down, foam control, etc. The PEW system will be upgraded to meet new demands associated with the improvements, as well as improve the overall performance of the system.

Design Package No.2

DP-2 will expand the biological treatment capacity of the ACWPCP from 30 MGD up to 40 MGD and provide for future reduced levels of effluent total nitrogen less than 8 mg/L. It will include the following major elements:

- Demolition of existing lime handling facilities (to provide room for construction of aeration tanks and secondary clarifiers);
- Construction of 1 or 2 new aeration tanks and blower replacements;
- Mixed liquor flow distribution improvements;
- Existing secondary clarifier renovation;
- Construction of 2 or 3 new secondary clarifiers and related pump station;
- Activated sludge effluent pumping system improvements;
- Waste backwash system modifications;
- Security and aesthetic improvements; and
- Supervisory Control and Data Acquisition (SCADA) system.

The ACWPCP currently has facilities that were originally provided to allow lime-clarification to be used for phosphorus removal. These facilities have been modified and are currently used to provide tertiary clarification upstream of the effluent filters (using ferric chloride as a coagulant). As indicated above the structural condition of the Lime Reaction Tanks (LRTs) is very poor and the tanks will need to be demolished. The demolition of the LRTs will facilitate the construction of the new aeration tanks and secondary clarifiers. The following facilities will be demolished:

- Three First Stage LRTs each 120 feet square;
- Three Second Stage LRTs each 120 feet square;
- One multi-story masonry Lime Solids Processing Building which has been modified to provide storage and feed equipment related to the ferric chloride system; and
- Two Lime Sludge Thickeners each approximately 60 feet in diameter that are no longer used.

The ACWPCP currently utilizes four aeration tanks to provide BOD removal and Biological Nutrient Removal (BNR). The tanks are configured to operate in the step feed BNR mode. Each tank has four separate passes. The new aeration tank(s) will be constructed for BNR, redundancy and reliability, and increased capacity. The new aeration tank(s) will be four-pass, step feed biological treatment reactors, similar in arrangement to the existing tanks.

The mixed liquor flow distribution system will be upgraded to provide improved effluent quality and extended to serve the new aeration tanks. Two new flow distribution structures will be provided at each end of the new mixed liquor channel to provide even flow distribution to all of the existing and new clarifiers. At this time it is not clear whether the upgrade and expansion at ACWPCP will require 1 or 2 new aeration tanks. Studies are ongoing to determine the quantity of aeration tanks required to effectively improve treatment capabilities, increase redundancy and reliability, and meet projected flow requirements.

DP-2 will provide two or three new circular secondary clarifiers. Each unit will be 140 feet in diameter, with a sidewater depth of 16 feet. In conjunction with the ongoing studies described above to determine the number the new aeration tanks, the number of new secondary clarifiers is also being evaluated. In addition to the new clarifiers, the six existing clarifiers will be modified as needed to replace old mechanisms and improve sludge withdrawal and scum removal.

A new ASE pump station will be provided with the new clarifiers.

EXHIBIT B

PROJECT BUDGET

Grantee: Arlington County

Grant: #440-S-07-10

The following budget reflects the estimated costs associated with eligible components of the Project.

Bid Package	Unit Process	Capital Cost (\$)	Eligible %	Eligible Cost (\$)	Notes (See B-2)
CP1a	Activated Sludge Effluent Diversion Line	6,473,258	67%	4,337,083	1
CP1a	Demolish Lime Facilities	1,557,783	0%	0	
CP1a	Demolish Lime Reaction Tanks RT	2,587,400	50%	1,293,700	2
CP1a	Demolish Carbon Bldg	2,867,079	100%	2,867,079	3
CP1a	Power to Actuators (work from CP2)	419,729	100%	419,729	3
CP1a	Other Costs	5,644,077	0%	0	
CP1	Flow Equalization	29,579,195	40%	11,831,678	4
CP1	Denitrification Filters	62,827,983	100%	62,827,983	3
CP1	Reroute Recycle	798,572	100%	798,572	3
CP1	Post-Aeration	6,089,793	100%	6,089,793	3
CP1	Multi Point Ferric System, Plant Effluent Water System, Chlor/Dechlor Building, Odor Control Improvements	31,704,456	0%	0	
CP2	Aeration Tank #1-4 (Blower Mods, Diffusers, Piping)	20,071,279	100%	20,071,279	3
CP2	Aeration Tanks #5 & #6 Concrete/Volume	48,562,727	69%	33,508,282	5a
CP2	Aeration Tanks #5 & #6 (Blowers, Diffusers, Piping)	44,469,857	50%	22,234,929	5b
CP2	Flow Distribution Structure #1	9,028,229	38%	3,430,727	6
CP2	Flow Distribution Structure #2	9,158,891	50%	4,579,446	6
CP2	Secondary Clarifiers	67,558,376	35%	23,645,432	8
CP2	Secondary Clarifier Modifications	8,779,456	50%	4,389,728	7
CP2	Backwash tank upgrades	5,015,923	100%	5,015,923	3
CP2	Foam Control	11,144,333	50%	5,572,167	7
CP2	E. Secondary Services pump station Improvements, Primary Effluent Flume (PEF), W. Ferric Chloride Facility, ASE Pump Station, Primary Treatment Building (PTB) Screening	18,523,303	0%	0	
CP2/SGF	Standby Generator	11,879,799	50%	5,939,900	7
	CONSTRUCTION SUBTOTAL	404,741,499	54%	218,853,427	
	Contingency (5%)	20,237,075	54%	10,942,671	
PCS	Rockwell Integration	1,780,592	54%	962,809	
	Design Management (DM) & Construction Mgmt (CM)	30,473,204	55%	16,869,424	
PM	Program Management	51,260,532	54%	27,717,798	
	ENGINEERING and CONSTRUCTION MGMT SUBTOTAL	\$83,514,328	54%	\$45,550,031	
	TOTAL Project Cost	\$508,492,902		\$275,346,130	
	Grant Percentage			x 35%	
	GRANT AMOUNT			\$96,176,190	

EXHIBIT B
PROJECT BUDGET
(continued)

Grantee: Arlington County
Grant: #440-S-07-10

Page B-2: Notes on costs attributable to Nutrient Removal Technology.

1. Eligibility was determined based on DEQ Guidance Memorandum (GM) #06-2012, relative to an expanding facility and clarification needs. The percentage represents a negotiated value using best professional judgment between what DEQ considered eligible (35%) and the grantee's requested eligibility (100%).
2. Eligibility was determined based on GM #06-2012, relative to an expanding facility and placement of additional structures for clarification and aeration. The percentage represents a negotiated value using best professional judgment between what DEQ considered eligible (50%) and the grantee's requested eligibility (100%).
3. Eligible percentage for the unit process, as determined by GM #06-2012.
4. The percentage represents a negotiated value using best professional judgment. Initially, DEQ considered this item ineligible and the grantee's requested 100% eligibility. Eligibility was made consistent with that of the County's previous WQIF grant agreement and (essentially) the nutrient reduction volume for the new biological tanks.
5. a) Eligibility was determined based on GM #06-2012, relative to an expanding facility and placement of additional aeration volume. The percentage represents a negotiated value using best professional judgment between what DEQ considered eligible (39% for AT #5; 100% for AT #6) and the grantee's requested eligibility (100% for both). b) Eligibility was determined based on GM #06-2012, relative to an expanding facility and additional aeration/nitrification needs. The percentage represents a negotiated value using best professional judgment between what DEQ considered eligible (0% for AT #5; 100% for AT #6) and the grantee's requested eligibility (100% for both).
6. The percentages represent a negotiated value using best professional judgment with GM #06-2012 as a starting point. Eligibility for flow distribution structure (FDS) #1 was determined to be 38% based on being consistent with the nutrient reduction portion of Aeration Tanks #1-3; eligibility for FDS #2 was negotiated between what DEQ considered eligible (anoxic/anaerobic portion of tank #4-6; ~39%) and the 100% eligibility requested by the grantee.
7. The percentage represents a negotiated value using best professional judgment. Initially, DEQ considered this item ineligible and the grantee requested 100%eligibility. Eligibility was determined to be 50% for a process/component serving multiple treatment purposes.
8. Eligibility was determined based on GM #06-2012, relative to an expanding facility and additional structures for clarification. The percentage represents a negotiated value using best professional judgment between what DEQ considered eligible (0% for clarifier #7; 50% for clarifier #8; 50% for clarifier #9) and the grantee's requested eligibility (100% for clarifiers 8 and 9).

EXHIBIT C

PROJECT SCHEDULE

Grantee: Arlington County

Grant: #440-S-07-10

The Grantee has proposed the following schedule of key activities/milestones as a planning tool which may be subject to change. In particular, the Grantee acknowledges that the appropriate approval (Certificate to Construct) must be issued by the Department prior to proceeding with construction. Unless authorized by a grant modification, it is the responsibility of the Grantee to adhere to the anticipated schedule for the project as follows:

Activity	Date/Duration
a. Complete construction of Equalization Tanks, pump station, North and South Ferric Feed Facilities, and Odor Control.	July 31, 2009
b. Complete the remainder of Phase 7A including: Deep Bed Denitrification Filter Building with Chlorine Contact Tank, Sodium Hypochlorite Feed Facility, Refurbished Plant Effluent Water Pump Station, Post Aeration System, Sodium Bisulfite Feed Facility, Methanol Feed Facility, and Electrical Distribution Center Replacement.	Oct. 31, 2010
c. Request CTO for Phase 7A.	Oct. 31, 2010
d. Complete construction of various phase 7B components including: Aeration Tanks 5 and 6, Secondary Clarifiers 7 and 8, West Secondary Services and ASE2 Pump Station, Blowers 3, 4 and 5, and the Mixed Liquor Flow Distribution Structures.	March 30, 2010
e. Complete the remainder of Phase 7B including: PTB Backup, Primary Clarifier Modifications, Operations Control Bldg Modifications, Remaining Blower Building Modifications, Existing Aeration Tank 1-4 Modifications, Foam Collection Pump Station, Surface Waste Pump Station, Existing Secondary Clarifier Modifications, East Secondary Services and ASE1 Pump Station Modifications, Primary Effluent Flume, Backwash Storage Tanks, and Electrical Distribution Centers.	July 31, 2011
f. Request CTO for Phase 7B.	August 31, 2011

EXHIBIT D

REQUISITION FOR REIMBURSEMENT
(To be on Grantee's Letterhead)

Department of Environmental Quality
Chesapeake Bay Program
P.O. Box 10009
Richmond, VA 23240
Attn.: WQIF Program Manager

RE: **Virginia Water Quality Improvement Fund Grant**
Contract #440-S-07-10

Dear Program Manager:

This requisition, Number _____, is submitted in connection with the referenced Grant Agreement, dated as of *[insert date of grant agreement]* between the Director of the Virginia Department of Environmental Quality and _____. Unless otherwise defined in this requisition, all capitalized terms used herein shall have the meaning set forth in Article I of the Grant Agreement. The undersigned Authorized Representative of the Grantee hereby requests disbursement of grant proceeds under the Grant Agreement in the amount of \$_____, for the purposes of payment of the Project Costs as set forth on Schedule I attached hereto.

Copies of invoices relating to the items for which payment is requested are attached.

The undersigned certifies that the amounts requested by this requisition will be applied solely and exclusively to the reimbursement of the Grantee for the payment of Project Costs.

This requisition includes (if applicable) an accompanying Certificate of the Project Engineer as to the performance of the work.

Sincerely,

(Authorized Representative of the Grantee)

Attachments

cc: DEQ-Regional CAP Engineer

SCHEDULE 1
 VIRGINIA WATER QUALITY IMPROVEMENT FUND
 VIRGINIA WATER FACILITIES REVOLVING FUND
 FORM TO ACCOMPANY REQUEST FOR REIMBURSEMENT

REQUISITION # _____
 RECIPIENT: County of Arlington
 GRANT #: 440-S-07-10
 LOAN #: C-515319-02

CERTIFYING SIGNATURE: _____
 TITLE: _____

Cost Category	Total Project Cost	WQIF Grant Amount	Loan Amount	Previous Grant Disbursements	Grant Disbursements This Period	Previous Loan Disbursements	Loan Disbursements This Period	Combined Disbursement Total To date	Remaining Balance
Program Mgmt	51,260,532	9,701,229 (18.9%)	12,197,000						
Bond Counsel	36,000	0	36,000						
Construction Package (CP) #1a	19,549,326	3,121,157 (16%)	15,420,531						
Construction Package (CP) #1	131,000,000	28,541,809 (21.8%)	14,000,000						
Construction Package (CP) #2 w/ Standby Generator	254,192,173	44,935,734 (17.7%)	38,000,000						
Design & Mgmt. for CP1a			5,410,949						
Design & Mgmt. for CP1									
Design & Mgmt. for CP2	30,473,204	5,709,343 (18.7%)	9,797,171						
Construction Mgmt (A/E)			3,543,086						
Rockwell Integration	1,780,592	336,983 (18.9%)	0						
Contingency	20,237,075	3,829,934 (18.9%)	1,595,263						
TOTALS:	508,492,902	96,176,190	100,000,000						

Total Grant Amount \$ _____
Previous Grant Disbursement \$ _____
This Grant Request \$ _____
Total Grant Requested to Date \$ _____
Grant Proceeds Remaining \$ _____

Total Loan Amount \$ _____
Previous Loan Disbursement \$ _____
This Loan Request \$ _____
Total Loan Requested to Date \$ _____
Loan Proceeds Remaining \$ _____

CERTIFICATE OF THE PROJECT ENGINEER
FORM TO ACCOMPANY REQUEST FOR REIMBURSEMENT

Grantee: Arlington County
Grant: #440-S-07-10

This Certificate is submitted in connection with Requisition Number _____, dated _____, 20__, submitted by the _____ (the "Grantee") to the Virginia Department of Environmental Quality. Capitalized terms used herein shall have the same meanings set forth in Article I of the Grant Agreement referred to in the Requisition.

The undersigned Project Engineer for _____ hereby certifies that insofar as the amounts covered by this Requisition include payments for labor or to contractors, builders or material men, such work was actually performed or such materials, supplies, or equipment were actually furnished to or installed in the Project.

(Project Engineer)

(Date)

EXHIBIT E

REPORTING OF ANALYTICAL RESULTS

(continued)

Grantee: Arlington County

Grant: #440-S-07-10

Data Excluded Due to the Occurrence of Extraordinary Conditions: (if applicable; attach explanation)

Date(s): _____

Operator Responsible for Samples: _____ Date: _____

Telephone: _____ Certificate Number: _____

EXHIBIT E

REPORTING OF ANALYTICAL RESULTS

Grantee: Arlington County

Grant: #440-S-07-10

Year: _____

MONTH	PARAMETER	CONCENTRATION (monthly average)	UNITS	FREQUENCY OF ANALYSIS	SAMPLE TYPE
January	Total Nitrogen		mg/l		
February	Total Nitrogen		mg/l		
March	Total Nitrogen		mg/l		
April	Total Nitrogen		mg/l		
May	Total Nitrogen		mg/l		
June	Total Nitrogen		mg/l		
July	Total Nitrogen		mg/l		
August	Total Nitrogen		mg/l		
September	Total Nitrogen		mg/l		
October	Total Nitrogen		mg/l		
November	Total Nitrogen		mg/l		
December	Total Nitrogen		mg/l		
Annual Average	Total Nitrogen		mg/l		

EXHIBIT F

FORMULA FOR CALCULATING MONETARY ASSESSMENT FOR EXCEEDANCE OF NUMERICAL NITROGEN CONCENTRATIONS

Grantee: Arlington County

Grant: #440-S-07-10

Section 1: Nitrogen Exceedances

$$CN = (TNe/TNr) \times AnPay \times PerGrant$$

where:

CN	=	Assessment for Nitrogen Exceedance.
TNe	=	Exceedance in tenths of a milligram per liter.
TNr	=	Expected nitrogen removal (difference between "pre-nutrient removal" annual average concentration and 3.0 mg/l limitation) in tenths of a milligram per liter.
AnPay	=	Annual Payment on sum of grant funds awarded for TN removal under original BNR Project plus Project #440-S-98-08. Assumes principal payments amortized over 20 years for new NRT Project plus prorated remaining useful service life of original BNR project, and an interest rate of 5 percent. Using these assumed values leads to a "cost recovery factor" of 0.0802. The "cost recovery factor" times the Total Grant Amount yields the Annual Payment amount.
PerGrant	=	Percentage of grant received by year of exceedance.

Values used for Grant #440-S-07-10:

Pre-Nutrient Removal TN Concentration	=	19.0 mg/l
Effluent TN Concentration Limitation	=	3.0 mg/l
Grant Amounts for TN Removal:		
• Original BNR Project	=	\$10,816,973
• This NRT Project	=	<u>\$96,176,190</u>
Total Grant Amount	=	\$106,993,163
Useful Service Life:		
• Original BNR Project	=	<u>17</u> years remaining
• This NRT Project	=	20 years
Interest Rate	=	5 percent

Calculated (assumes grant paid 100%):

Expected Removal (TNr)	=	16.0 mg/l
AnPay	=	\$8,450,725
CN	=	\$52,820 (for each 0.1 mg/l TN exceedance)



Rest 3/26/07

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

Fax (804) 698-4500 TDD (804) 698-4021

www.deq.virginia.gov

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

L. Preston Bryant, Jr.
Secretary of Natural Resources

March 16, 2007

Mr. Larry Slattery
Arlington County
3402 South Glebe Rd.
Arlington, VA 22202

RE: Arlington County WQIF Grant Agreement

Dear Larry:

Recently, it was pointed out to us that article 4.5 was an impossibility. As it read, the CTO would have to be provided at the time the statement/notice of substantial completion was issued.

In reviewing this article and preceding text, a typographic error was found on page 3 (Article 4.2) which referenced the incorrect article

Please replace pages 3 and 4 with the attached pages. If you have any questions, please feel free to contact me @ 698-4466.

Sincerely,

A handwritten signature in black ink, appearing to read 'Robert Ehrhart'.

Robert Ehrhart
WQIF Manager

cc: File

ARTICLE III
SCHEDULE

3. The Grantee will cause the Project to be designed, constructed and placed in operation in accordance with the Project Schedule in Exhibit C to this Agreement.

ARTICLE IV
COMPENSATION

4.0. Grant Amount. The total grant award from the Fund under this Agreement is \$96,176,190 and represents the Commonwealth's thirty-five percent share of the eligible Project Costs. Any material changes made to the Project after execution of this Agreement, which alter the Project Costs, will be submitted to the Department for review of grant eligibility. The amount of the grant award set forth herein may be modified from time to time by agreement of the parties to reflect changes to the Project and/or grant eligible Project Costs.

4.1. Payment of Grant. Subject to the availability of monies in the Fund allocated to point source pollution control and Section 4.3 herein, the Department will pay the Grantee for costs incurred by the Grantee in an amount equal to thirty-five percent of Project Costs allowable under the Act and guidelines published pursuant thereto. Disbursement of the Grant will be in accordance with the payment provisions set forth in Section 4.2 herein and the Project Budget.

4.2. Application of Grant Funds. The Grantee agrees to apply the Grant solely and exclusively to the payment, or the reimbursement of the Grantee for the payment, of Project Costs. The Department will disburse the Grant to the Grantee not more frequently than once each calendar month (unless otherwise agreed by the Department and the Grantee) upon receipt by the Department of the following:

(a) A requisition approved by the Department, signed by the Authorized Representative and containing all receipts, vouchers, statements, invoices or other evidence of the actual payment of Project Costs or that the Project Costs have been incurred, and all other information called for by, and otherwise being in the form of, Exhibit D to this Agreement.

(b) If any requisition includes an item for payment for labor or to contractors, builders or material men, a certificate, signed by the Project Engineer, stating that such work was actually performed or such materials, supplies or equipment were actually furnished or installed in or about the construction of the Project.

Upon receipt of each such requisition and accompanying certificate(s) and schedule(s), the Director shall request the Comptroller to issue a warrant directing the State Treasurer to disburse the Grant to the Grantee in accordance with such requisition to the extent approved by the Department.

Except as may otherwise be approved by the Department, disbursements shall be held at ninety-five percent (95%) of the total grant amount to ensure satisfactory completion of the Project. Upon receipt from the Grantee of the certificate specified in Section 4.5 and a final requisition detailing all retainage to which the Grantee is then entitled, the Director, subject to the provisions of this section and Section 4.3 herein, shall request the Comptroller to issue a warrant directing the State Treasurer to disburse to the Grantee the final payment from the Grant.

4.3. Availability of Funds. The Director and Grantee recognize that the availability of monies in the Fund allocated to point source pollution control is subject to appropriation by the General Assembly and allocations made by the Secretary of Natural Resources, and that at times there may not be sufficient monies in the Fund to permit prompt disbursement of grant funds due and owing the Grantee pursuant to this Agreement. To minimize the potential for such disruption in disbursements of grant funds and in satisfaction of its obligations under the Act, the Department covenants and agrees to (1) manage the allocation of grants from the Fund to ensure full funding of executed grant agreements, (2) forecast the estimated disbursements from the Fund in satisfaction of approved grants and make this forecast publicly available each year for use in the Commonwealth's budgetary process, and (3) promptly disburse to the Grantee any grant funds due and owing the Grantee pursuant to this Agreement when sufficient monies are available in the Fund to make such disbursements. The Department may determine that monies are not sufficient to promptly disburse grant funds when there are competing grant requests. To assist the Department in forecasting estimated disbursements, prior to September 30 of each year the Grantee will provide the Department with a written estimate of its projected expenditures on the Project during the next fiscal year using the same line item cost categories in the Project Budget.

4.4. Agreement to Complete Project. The Grantee agrees to cause the Project to be designed and constructed, as described in Exhibit A to this Agreement, and in accordance with (i) the schedule in Exhibit C to this Agreement and (ii) plans and specifications prepared by the Project Engineer and approved by the Department.

4.5 Notice of Substantial Completion. When the Project has been completed, the Grantee shall promptly deliver to the Department a certificate signed by the Authorized Representative and by the Project Engineer stating (i) that the Project has been completed substantially in accordance with the approved plans and specifications and addenda thereto, and in substantial compliance with all material applicable laws, ordinances, rules, and regulations; (ii) the date of such completion; (iii) that all certificates of occupancy and operation (~~including a Certificate to Operate~~) for the Project have been issued or obtained; and (iv) the amount, if any, to be released for payment of the final Project Costs.

ARTICLE V **PERFORMANCE**

5.0 The Grantee's Facility shall meet a total nitrogen effluent concentration limitation of 3.0 mg/l on an annual average basis, except as provided in paragraph 5.1 and Article VIII of this Agreement.

5.1 If, pursuant to Section 10.1-1187.6 of the Code, the State Water Control Board approves an alternative compliance method to technology-based concentration limitations in Virginia Pollutant Discharge Elimination System permits, the concentration limitations in Section 5.0 above shall be suspended subject to the terms of such approval. The terms of approval shall include requirements for operation of the installed Nutrient Removal Technology at the treatment levels for which it was designed.

ARTICLE VI **OPERATION AND MAINTENANCE**

6.0 No later than ninety (90) days after issuance of a Certificate to Operate for the Project, the Grantee shall submit to the Department, for review and approval, an operation and maintenance manual for the Project. As required by the Grantee's VPDES permit, the Facility shall be operated and maintained in a manner consistent with the operation and maintenance manual as approved by the Department.

--- DRAFT ---

**VIRGINIA WATER QUALITY IMPROVEMENT FUND
POINT SOURCE GRANT AND
OPERATION AND MAINTENANCE AGREEMENT
Grantee: Arlington County Grant: #440-S-07-10**

CONTRACT MODIFICATION NO. 1

A. Delete Exhibit B, Project Budget, and substitute in its place the following exhibit:

EXHIBIT B -- PROJECT BUDGET

Grantee: Arlington County

Grant: #440-S-07-10

The following budget reflects the “as-bid” costs associated with eligible components of the Project.

Bid Package	Unit Process	Project Cost	Eligible %	Eligible Project Cost	Notes*
CP1a	Activated Sludge Effluent Diversion Line	\$8,469,088	67%	\$5,674,289	1
CP1a	Demolish Lime Facilities	\$1,298,200	0%	\$ 0	
CP1a	Demolish Lime Reaction Tanks RT	\$2,156,245	50%	\$1,078,123	2
CP1a	Demolish Carbon Bldg	\$2,415,812	100%	\$2,415,812	3
CP1a	Power to Actuators (work from CP2)	\$364,707	100%	\$364,707	3
CP1a	Ductbank	\$1,768,748	55%	\$973,331	4
CP1a	Other Costs	\$2,619,293	0%	\$0	
CP1	Flow Equalization	\$29,579,195	40%	\$11,831,678	5
CP1	Denitrification Filters	\$62,827,983	100%	\$62,827,983	3
CP1	Reroute Recycle	\$798,572	100%	\$798,572	3
CP1	Post-Aeration	\$6,089,793	100%	\$6,089,793	3
CP1	Multi Point Ferric System, Plant Effluent Water System, Chlor/Dechlor Building, Odor Control Improvements	\$31,704,456	0%	\$ 0	
CP2	Aeration Tank #1-4 (Blower Mods, Diffusers, Piping)	\$20,071,279	100%	\$20,071,279	3
CP2	Aeration Tanks #5 & #6 Concrete/Volume	\$48,562,727	69%	\$33,508,282	6a
CP2	Aeration Tanks #5 & #6 (Blowers, Diffusers, Piping)	\$44,469,857	50%	\$22,234,929	6b
CP2	Flow Distribution Structure #1	\$9,028,229	38%	\$3,430,727	7
CP2	Flow Distribution Structure #2	\$9,158,891	50%	\$4,579,446	7
CP2	Secondary Clarifiers	\$67,558,376	35%	\$23,645,432	9
CP2	Secondary Clarifier Modifications	\$8,779,456	50%	\$4,389,728	8
CP2	Backwash tank upgrades	\$5,015,923	100%	\$5,015,923	3
CP2	Foam Control	\$11,144,333	50%	\$5,572,167	8
CP2	E. Secondary Services PS Improvements, Primary Effluent Flume, W. Ferric Chloride Facility, ASE Pump Station, Primary Treatment Building Screening	\$18,523,303	0%	\$0	
CP2/SGF	Standby Generator Facility	\$11,879,799	50%	\$5,939,900	8
	CONSTRUCTION SUBTOTAL	\$404,284,265	55%	\$220,442,100	
	CONTINGENCY	\$15,345,299	55%	\$8,374,149	4
	Bond Counsel	\$36,000	0%	\$0	
PCS	Rockwell Integration	\$1,780,592	55%	\$970,895	4
	Design Management (DM) & Construction Mgmt (CM)	\$31,233,245	55%	\$17,051,392	4
PM	Program Management	\$51,260,532	55%	\$27,950,579	4
	BOND COUNSEL, ENGR. C. MGMT & PM SUBTOTAL	\$84,310,369		\$45,972,866	
	TOTAL PROJECT COST	\$503,939,933		\$274,789,115	
	Grant Percentage			x 35%	
	GRANT AMOUNT			\$96,176,190	

NOTES: * See next page for details about costs attributable to Nutrient Removal Technology

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**EXHIBIT B
PROJECT BUDGET
(continued)**

Grantee: Arlington County
Grant: #440-S-07-10

Page B-2: Notes on costs attributable to Nutrient Removal Technology (NRT).

1. Eligibility was determined based on DEQ Guidance Memorandum (GM) #06-2012, relative to an expanding facility and clarification needs. The percentage represents a negotiated value using best professional judgment (“BPJ”) between what DEQ considered eligible (35%) and the grantee’s requested eligibility (100%).
2. Eligibility was determined based on GM #06-2012, relative to an expanding facility and placement of additional structures for clarification and aeration. The percentage represents a negotiated value using “BPJ” between what DEQ considered eligible (50%) and the grantee’s requested eligibility (100%).
3. Eligible percentage for the unit process, as determined by GM #06-2012.
4. Eligibility based on construction cost associated with NRT divided by total construction cost.
5. The percentage represents a negotiated value using “BPJ”. Initially, DEQ considered this item ineligible and the grantee’s requested 100% eligibility. Eligibility was made consistent with that of the County’s previous WQIF grant agreement and (essentially) the nutrient reduction volume for the new biological tanks.
6. a) Eligibility was determined based on GM #06-2012 relative to an expanding facility and placement of additional aeration volume. The percentage represents a negotiated value using “BPJ” between what DEQ considered eligible (39% for AT #5; 100% for AT #6) and the grantee’s requested eligibility (100% for both).

b) Eligibility was determined based on GM #06-2012, relative to an expanding facility and additional aeration/nitrification needs. The percentage represents a negotiated value using “BPJ” between what DEQ considered eligible (0% for AT #5; 100% for AT #6) and the grantee’s requested eligibility (100% for both).
7. The percentages represent a negotiated value using “BPJ” with GM #06-2012 as a starting point. Eligibility for flow distribution structure (FDS) #1 was determined to be 38% based on being consistent with the nutrient reduction portion of Aeration Tanks #1-3; eligibility for FDS #2 was negotiated between what DEQ considered eligible (anoxic/anaerobic portion of tank #4-6; ~39%) and the 100% eligibility requested by the grantee.
8. The percentage represents a negotiated value using “BPJ”. Initially, DEQ considered this item ineligible and the grantee requested 100% eligibility. Eligibility was determined to be 50% for a process/component serving multiple treatment purposes.
9. Eligibility was determined based on GM #06-2012, relative to an expanding facility and additional structures for clarification. The percentage represents a negotiated value using “BPJ” between what DEQ considered eligible (0% for clarifier #7; 50% for clarifier #8; 50% for clarifier #9) and the grantee’s requested eligibility (100% for clarifiers 8 and 9).

--- DRAFT ---

B. Delete existing Exhibit D, Schedule 1, and substitute in its place the following:

SCHEDULE 1

VIRGINIA WATER QUALITY IMPROVEMENT FUND and VIRGINIA WATER FACILITIES REVOLVING FUND

FORM TO ACCOMPANY REQUEST FOR REIMBURSEMENT

REQUISITION # _____

RECIPIENT: County of Arlington

GRANT #: 440-S-07-10

LOAN #: C-515413-01

CERTIFYING SIGNATURE: _____

TITLE: _____

Cost Category	Total Project Cost	WQIF Grant Amount	Loan Amount	Previous Grant Disbursements	Grant Disbursements This Period	Previous Loan Disbursements	Loan Disbursements This Period	Combined Disbursement Total To date	Remaining Balance
Program Mgmt	\$51,260,532	\$9,782,703 (19.1%)	\$12,197,000						
Bond Counsel	\$36,000	\$ 0	\$42,920						
Construction Package (CP) #1a	\$19,092,093	\$3,677,192 (19.3%)	\$11,893,390						
Construction Package (CP) #1	\$131,000,000	\$28,541,809 (21.8%)	\$85,273,874						
Construction Package (CP) #2 w/ Standby Generator Facility	\$249,879,798	\$44,172,444 (17.7%)	\$168,638,435						
Design & Mgmt. for CP1a	\$31,233,245	\$5,967,987 (19.1%)	\$4,325,509						
Design & Mgmt. for CP1									
Design & Mgmt. for CP2			\$7,693,751						
Construction Mgmt (A/E)			\$3,288,549						
Dominion Virginia Power	\$ -	\$ -	\$3,677,069						
Dresser Roots Blowers	\$ 4,312,375	\$763,290 (17.7%)	\$2,647,304						
Rockwell Integration	\$1,780,592	\$339,813 (18.9%)	\$322,199						
Contingency	\$15,345,299	\$2,930,952 (19.1%)	\$ -						
TOTALS:	\$503,939,933	\$96,176,190	\$300,000,000						

Total Grant Amount	\$ <u>96,176,190</u>	Total Loan Amount	\$ <u>300,000,000</u>
Previous Grant Disbursement	\$ _____	Previous Loan Disbursement	\$ _____
This Grant Request	\$ _____	This Loan Request	\$ _____
Total Grant Requested to Date	\$ _____	Total Loan Requested to Date	\$ _____
Grant Proceeds Remaining	\$ _____	Loan Proceeds Remaining	\$ _____

--- DRAFT ---

C. *Add the following Article XI to the Agreement:*

ARTICLE XI
NUTRIENT CREDITS TO BE MADE AVAILABLE FOR EXCHANGE

11. To aid in implementing the Nutrient Credit Exchange Program, the Grantee shall make all Point Source Nitrogen Credits generated in a calendar year available for nutrient allocation compliance. "Point Source Nitrogen Credit" shall have the meaning as defined in Virginia Code §62.1-44.19:13. The amount of Credits and facilities authorized to generate Credits shall be governed by the Watershed General Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading (9 VAC 25-820). The Department shall control Credits not otherwise used by the Grantee for waste load allocations or compliance purposes and will make such Credits reasonably available to other dischargers for nutrient allocation compliance through the Water Quality Improvement Fund. For purposes of this Agreement, "used by the Grantee" shall include any use whereby the Credits are applied to any compliance obligation of the Grantee, included within an individual compliance plan or basin-level compliance plan of the Virginia Nutrient Credit Exchange Association, or traded to and used by the owner or operator of another facility for nutrient allocation compliance.

The contracting parties have caused the Agreement to be modified by the following duly authorized signatures:

GRANTEE

Arlington County

BY: _____

TITLE: _____

DATE: _____

GRANTOR

Department of Environmental Quality

BY: _____

TITLE: _____

DATE: _____