# VIRGINIA WATER QUALITY IMPROVEMENT FUND

## **GUIDELINES**

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Richmond, Virginia
September 22, 2005

www.naturalresources.virginia.gov

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### **GUIDELINES**

#### INTRODUCTION

The purpose of the Virginia Water Quality Improvement Act of 1997 (Act) is "to restore and improve the quality of state waters and to protect them from impairment and destruction for the benefit of current and future citizens of the Commonwealth" (Section 10.1-2118 of the *Code of Virginia*). The Act was amended in 2005 to better reflect current water quality needs and priorities in Virginia particularly the implementation of Chesapeake Bay "Tributary Strategy Plans" and the removal of Virginia waters on the Clean Water Act list of impaired waters. Because this is a shared responsibility between state and local governments and individuals, the Act also creates The Water Quality Improvement Fund (Fund). The Code establishes the purpose of the Fund "to provide Water Quality Improvement Grants to local governments, soil and water conservation districts, institutions of higher education and individuals for point and nonpoint source pollution prevention, reduction and control programs" (Section 10.1-2128.B. of the *Code of Virginia*).

The Department of Environmental Quality has the responsibility to provide technical and financial assistance to local governments, institutions of higher education and individuals for the control of point source pollution. The Department of Conservation and Recreation has the responsibility to provide technical and financial assistance to local governments, soil and water conservation districts, institutions of higher education and individuals for nonpoint source pollution prevention, reduction and control programs. Because of the nature of nonpoint source pollution controls, the Department of Conservation and Recreation will seek the assistance and support of other state agencies to provide the necessary expertise and resources to properly implement the nonpoint source elements of the Act.

Payments into the Water Quality Improvement Fund in accordance with the Chesapeake Bay Watershed Nutrient Exchange Program created under 62.1-44.19:12 shall be utilized in a manner to achieve point or nonpoint source reductions in accordance with the requirements established in the nutrient exchange program in addition to the requirements presented in these guidelines. Since the fund is nonreverting, any money not spent in the fiscal year appropriated will remain in the Fund for use in subsequent years. Note that grants from the Fund will be provided as matching funds to the recipient.

### **DEFINITIONS**

The following definitions apply to these guidelines:

- "Agricultural Best Management Practice" as used within these guidelines shall mean those practices outlined within the Virginia Agricultural BMP Manual published by the Department of Conservation and Recreation.
- "Chesapeake Bay Agreement" means the Chesapeake Bay Agreement of 2000 and any amendments thereto.
- "Fund" means the Virginia Water Quality Improvement Fund established by the Virginia Water Quality Improvement Act, Section 10.1-2128 of the *Code of Virginia*.
- "Impaired water" means water that is not meeting one or more state water quality standards, as required by the Clean Water Act; water with fish or shellfish harvesting prohibition by the Virginia Department of Health; and/or water where biological monitoring indicates moderate to severe impairment and is listed by stream segment on Virginia's 303(d) Total Maximum Daily Load Priority List.
- "Individual" means any corporation, foundation, association or partnership, or one or more natural persons.
- "Institutions of higher education" means any educational institution meeting the requirement of Section 60.2-220 of the *Code of Virginia*.
- "Local government" means any county, city, town, municipal corporation, authority, district (including soil and water conservation districts), commission or political subdivision of the Commonwealth.
- "Nonpoint source pollution" means pollution of state waters washed from the land surface in a diffuse manner and not resulting from a discernible, defined or discrete conveyance.
- "Nutrients" means nitrogen and phosphorus.
- "Point source pollution" means pollution of state waters resulting from any discernible, defined or discrete conveyance.
- "Publicly-owned treatment works" means a publicly-owned sewage collection system consisting of pipelines or conduits, pumping stations and force mains, and all other construction, devices, and appliances appurtenant thereto, or any equipment, plant, treatment works, structure, machinery, apparatus, interest in land, or any combination of these, not including an onsite sewage disposal system, that is used, operated, acquired, or constructed for the storage, collection, treatment, neutralization, stabilization, reduction, recycling, reclamation, separation, or disposal of wastewater, or for the final disposal of residues resulting from the treatment of sewage, including but not limited to: treatment or disposal plants; outfall sewers, interceptor

sewers, and collector sewers; pumping and ventilating stations, facilities, and works; and other real or personal property and appurtenances incident to their development, use, or operation.

- "Reasonable sewer costs" means the amount expended per household for sewer service in relation to the median household income of the service area as determined by guidelines developed and approved by the State Water Control Board for use with the Virginia Water Facilities Revolving Loan Fund established pursuant to Chapter 22 (§ 62.1-224 et seq.) of Title 62.1.
- "Sediment" means 1) soil particles which become dislodged and mobilized by water in the form of rain once the absorption capacity of the soil is exceeded, resulting in erosion of the land, and transport of soil to a receiving waterbody, and 2) soil particles that are dislodged from streambanks and shorelines by agents such as fast-moving water or wind, or animals, or soil particles transported by wind from distant sources and directly deposited in a waterbody.
- "Significant discharger" means (i) a publicly-owned treatment works discharging to the Chesapeake Bay watershed with a design capacity of 0.5 million gallons per day or greater, (ii) a publicly-owned treatment works discharging to the Chesapeake Bay watershed east of the fall line with a design capacity of 0.1 million gallons per day or greater, (iii) a planned or newly expanding publicly-owned treatment works discharging to the Chesapeake Bay watershed, which is expected to be in operation by 2010 with a permitted design of 0.5 million gallons per day or greater, or (iv) a planned or newly expanding publicly-owned treatment works discharging to the Chesapeake Bay watershed east of the fall line with a design capacity of 0.1 million gallons per day or greater, which is expected to be in operation by 2010.
- "Southern Rivers Watersheds" means those watersheds located in Virginia that drain to water bodies other than the Chesapeake Bay including waters draining directly to the Atlantic Ocean.
- "**State-of-the-art nutrient removal technology**" means technology that will achieve at least a 3 mg/L total nitrogen concentration or at least a 0.3 mg/L total phosphorus concentration in effluent discharges.
- "State waters" means all waters on the surface or under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdictions.
- "Suspended solids" means the portion of total solids in water that is retained by a glass fiber-filter. Suspended solids analyses are important in the control of biological and physical wastewater treatment processes and for assessing compliance with regulatory wastewater effluent limits. The measurement of suspended solids is commonly used as a water quality parameter to assess the amount of sediment entering a waterbody.
- "Total Maximum Daily Load" (TMDL) means the maximum amount of a pollutant that a waterbody can receive without violating water quality standards. A TMDL includes best estimates of pollution from nonpoint sources, natural background sources, pollution from point sources, a margin of safety, and takes into account seasonal variations.

"Tributary Strategy Plans" means plans that are developed by the Secretary of Natural Resources pursuant to the provisions of the Chesapeake Bay Agreement for the tidal tributaries of the Chesapeake Bay and the tidal creeks and embayments of the western side of the Eastern Shore of Virginia. This term shall include any amendments to the tributary strategy plans initially developed by the Secretary of Natural Resources pursuant to the Chesapeake Bay Agreement.

"Water Quality Improvement Grants" means grants available from the Fund to local governments, institutions of higher education, and individuals for projects designed (i) to achieve nutrient reduction goals in tributary strategy or (ii) to achieve other water quality restoration, protection or enhancement benefits.

### **DEVELOPMENT OF THESE GUIDELINES**

Section 10.1-2129.B. of the *Code of Virginia* specifies that "the Secretary of Natural Resources, in consultation with the Secretary of Agriculture and Forestry, the State Forester, the Commissioner of Agriculture and Consumer Services, and Directors of the Departments of Environmental Quality and Conservation and Recreation and with the advice and guidance of the Board of Conservation and Recreation, the Virginia Soil and Water Conservation Board, the State Water Control Board, and the Chesapeake Bay Local Assistance Board, shall develop written guidelines that (i) specify eligibility requirements; (ii) govern the application for and distribution and conditions of Water Quality Improvement Grants; and (iii) list criteria for prioritizing funding requests."

The Code also specifies that "in developing the guidelines the Secretary shall evaluate and consider, in addition to such other factors as may be appropriate to most effectively restore, protect and improve the quality of state waters: (i) specific practices and programs proposed in any tributary strategy plan and the associated effectiveness and cost per pound of nutrients removed; (ii) water quality impairment or degradation caused by different types of nutrients released in different locations from different sources; and (iii) environmental benchmarks and indicators for achieving improved water quality. The process for development of guidelines pursuant to this subsection shall at a minimum, include (a) use of an advisory committee composed of interested parties; (b) a sixty-day public comment period on draft guidelines; (c) written responses to all comments received; and (d) notice of the availability of draft guidelines and final guidelines to all who request such notice."

For information regarding these guidelines, contact the Office of the Secretary of Natural Resources at 804-786-0044 or visit <a href="www.naturalresources.virginia.gov">www.naturalresources.virginia.gov</a>. Information is also available from the Department of Environmental Quality (<a href="www.deq.virginia.gov">www.deq.virginia.gov</a>) and the Department of Conservation and Recreation (<a href="www.der.virginia.gov">www.der.virginia.gov</a>). Specific contact information is on page 20 of this document.

### **SECTION A**

### NONPOINT SOURCE PROJECTS

### **CHAPTER 1: GOALS AND OBJECTIVES**

The goal of the nonpoint source grant component of the Virginia Water Quality Improvement Fund (WQIF) is to improve water quality throughout the Commonwealth of Virginia and in the Chesapeake Bay by reducing nonpoint source pollution. Nonpoint source pollution is a significant cause of degradation of state waters throughout the Commonwealth. Within the Chesapeake Bay watershed the immediate priority is to implement the Tributary Strategies, which focus on reducing nutrients, sediment and suspended solids entering the Chesapeake Bay and its tributary rivers. In the Southern Rivers watersheds (Virginia waters not draining to the Chesapeake Bay), the goal is to achieve measurable improvements in water quality, which can include nutrient and sediment reductions as well as reduction of other pollutants. Particular attention will be paid to reducing the causes of impairment for stream segments on the 303(d) TMDL list of impaired waters prepared by the Virginia Department of Environmental Quality. Other uses of grant funds may include providing protection or restoration of other priority waters such as those containing critical habitat or that serve as water supplies.

### **CHAPTER II: ELIGIBLE ACTIVITIES**

Eligible categories of activities for funding support are the Agricultural Best Management Practices Cost-Share Program, Conservation Reserve Enhancement Program, Water Quality Initiative Projects and Cooperative Nonpoint Source Pollution Programs with Local Governments.

Agricultural Best Management Practices Cost-Share Program – Agricultural conservation practices that are most effective in reducing excess nutrients and sediment from agricultural lands will be implemented through the Virginia Agricultural Best Management Practices (BMP) Cost-Share Program. The Program is administered by the Department of Conservation and Recreation with reliance on local implementation by the state's Soil and Water Conservation Districts (SWCDs or districts). Specified amounts of WQIF funds are made available to districts to enable implementation of cost-effective, priority BMPs that farmers will implement with financial incentives to offset their costs. BMPs supported through state financial incentives must be implemented in accordance with the *Virginia Agricultural BMP Manual*. Cost share expenditures are guided by agreements signed by DCR and the 47 districts.

Conservation Reserve Enhancement Program – WQIF funds will be utilized to support Virginia's commitment for participation in the USDA Conservation Reserve Enhancement Program (CREP). More than 75% of the total CREP program funding is provided by federal dollars and the state share will be provided with WQIF funds. Under the USDA-administered CREP program, which is implemented through the SWCDs, eligible landowners may receive

cost-share financial incentives for eligible program BMPs for establishment of riparian buffer and wetlands restoration and for rental payments for up to 15 years. DCR also provides additional financial incentives to landowners to enter into permanent easements on the riparian lands. WQIF funding provides Virginia's share of the landowner BMP payments and supports the acquisition of permanent easements. The present CREP acreage goals for which Virginia has contractual obligations with USDA are 25,000 acres for the Virginia Chesapeake Bay Watershed and 15,000 acres in the Southern Rivers area.

Water Quality Initiatives – Funding for water quality initiatives will be considered by the Department of Conservation and Recreation to address other nonpoint source pollution priority needs and particularly cost effective, innovative and new initiatives which further advance Virginia's nonpoint source programs and provide for measurable water quality improvements. These may include initiatives with other state agencies, soil and water conservation districts, planning district commissions, local governments, educational institutions and individuals on nonpoint source pollution reduction, education, research and implementation projects. Examples may include but are not limited to initiatives to provide further incentives for agricultural and urban nutrient management activities, alternative waste management and reuse alternatives for animal waste products, diet and feed management projects to reduce nutrient content and more efficiently manage animal wastes, water quality impairments from mining operations, animal waste transport projects, riparian buffer initiatives and other effective forest management programs, conservation easement programs, innovative urban stormwater and effective urban BMP practices and restoration projects which provide for measurable water quality improvements.

**Cooperative Nonpoint Source Pollution Program Projects with Local Governments** – In accordance with § 10.1-2127.B. and C. of the Code of Virginia, DCR will work cooperatively with local governments to provide matching funds for nonpoint source projects which address locally identified solutions for nonpoint source problems that cause local water quality problems and/or contribute to the impairment of other state waters outside the jurisdiction. These projects, which shall be evaluated on a competitive basis, should clearly delineate state and local government responsibilities for the water quality initiatives to be supported by WQIF funding. Projects that implement one or more components of a tributary strategy to address nutrient and sediment reductions will receive the highest priority in the Chesapeake Bay drainage area. Other state priorities include projects that address reducing a pollutant/source which is the cause of impairment for one or more stream segments on the 303(d) TMDL list of impaired waters prepared by the Virginia Department of Environmental Quality or which provide protection or restoration of other priority waters such as those containing critical habitat or water supply waters or which further the implementation of the Chesapeake Bay Preservation Act in Tidewater Virginia. Example projects may include but are not limited to urban and suburban nonpoint source initiatives to include stormwater management, septic system rehabilitation, effective urban BMP initiatives, reimbursements for local tax credits that produce water quality improvements and acquisition of conservation easements related to the protection of water quality and stream buffers.

### **CHAPTER III: MATCHING FUNDS**

Requirements for matching funds for WQIF funds shall be as outlined below:

**Agricultural Best Management Practices Cost-Share Program** – WQIF funds that are allocated to the Agricultural BMP Cost Share Program will be spent in accordance with the cost-share guidelines and matching funds requirements outlined in the Virginia Agricultural BMP Manual.

**Conservation Reserve Enhancement Program** – WQIF funds allocated to the Conservation Reserve Enhancement Program will be spent in accordance with the USDA CREP program requirements and matched as required by this program.

Water Quality Initiatives – WQIF funds allocated for water quality initiatives will be made from the Fund for 50% of the cost of a project, with the remaining 50% supplied from other federal, state, local or private sources. Projects demonstrating high cost-effectiveness for nutrient or sediment reduction and where the fiscal constraints of the applicant are demonstrably severe, a grant beyond the stated percentages may be awarded. The Director of the Department of Conservation and Recreation shall consult with the Secretary of Natural Resources before approving grants above a 50% level.

Cooperative Nonpoint Source Pollution Program Projects with Local Governments – WQIF funds provided to local governments shall be matched with 50% of the cost of the project being supplied from sources provided or secured by localities. However, some local governments who are able to demonstrate fiscal stress may be eligible to receive a greater percentage of funding for approved projects. All requests for greater than 50% funding will be evaluated by considering the applicant's comparative revenue capacity, revenue efforts and fiscal stress rating, as reported by the Virginia Commission on Local Government. The Director of the Department of Conservation and Recreation shall consult with the Secretary of Natural Resources before approving grants greater than a 50% level.

#### CHAPTER IV: DISTRIBUTION AND APPLICATION FOR FUNDS

The Department of Conservation and Recreation is responsible for managing the distribution of the nonpoint WQIF grants. This includes managing the allocation of funding to the Agricultural Cost Share Program and Conservation Reserve Enhancement Program and soliciting applications for Water Quality Initiative grants and Cooperative Nonpoint Source Pollution Program Projects with Local Governments. In distributing the nonpoint source grants, a priority will be given to implementation of agricultural best management practices. The Department is responsible for establishing a competitive application process for Water Quality Initiative grants and Cooperative Nonpoint Source Pollution Program Projects with Local Governments.

### **CHAPTER V: CRITERIA FOR PRIORITIZING FUNDING REQUESTS**

The following criteria will be utilized in prioritizing the distribution of funds for Water Quality Initiative grants and Cooperative Nonpoint Source Pollution Program Projects with Local Governments:

- pounds of total nitrogen and the pounds of total phosphorus reduced by the project;
- whether the location of the water quality restoration, protection or improvement project or program is within a watershed or subwatershed with documented water nutrient loading problems or adopted nutrient reduction goals;
- documented water quality impairments to be addressed;
- availability of other funding mechanisms for the project;
- implementation of cooperative programs developed pursuant to subsection B of § 10.1-2127;
- project cost-effectiveness in achieving measurable reductions of nonpoint source pollutants including nutrients and sediments; and
- whether the project addresses a priority water quality initiative identified by the Governor, the General Assembly, the Secretary of Natural Resources, or DCR.

The Department of Conservation and Recreation staff will review all applications for consideration for funding and may form a grant review committee, comprised of other state agencies and interested parties, as appropriate, to provide necessary technical expertise and guidance in prioritizing the funding requests.

The Director of the Department of Conservation and Recreation shall make final funding determinations in accordance with Section 10.1-2132.B. of the WQIA.

Allocations of funding to the Agricultural Cost Share Program and the Conservation Reserve Enhancement Program will be made separately in accordance with the requirements established for these programs and by the consideration of the criteria established above, as specified in the *Code of Virginia*.

### **CHAPTER VI: GRANT AGREEMENTS**

All Water Quality Improvement Grants are governed by a legally binding and enforceable grant agreement between the recipient and DCR as outlined in Section 10.1-2130 of the *Code of Virginia*. Such agreements require reporting by the grant recipient of the estimated pollutant reductions to be achieved by the project and requirements for ongoing operation and maintenance. The Department may utilize multi-year agreements to administratively manage these funds as determined appropriate by the Department and grant recipient.

Agreements between DCR and local SWCDs for the distribution of state funds for the Agricultural Best Management Practices Cost-Share Program and the Conservation Reserve Enhancement Program shall be administered in accordance with separate requirements developed for these programs and shall be presented to the Virginia Soil and Water Conservation Board prior to becoming effective. These programs quantify and track estimated pollutant reductions from each conservation practice installed and require that installed conservation practices be maintained by the landowner for the anticipated practice lifespan with follow-up inspections by DCR or the SWCDs to ensure compliance.

Prior to executing the grant agreements for Water Quality Initiative projects or Cooperative Nonpoint Source Pollution Program Projects, the Department of Conservation and Recreation will prepare and make available a list of the proposed grant agreements for public review and comment for a period of at least 30 days but no more than 60 days.

### **SECTION B**

### POINT SOURCE PROJECTS

### **CHAPTER I: PROGRAM COMPONENTS**

### I. Goals and Objectives

The main objectives of the Water Quality Improvement Fund (WQIF) point source program are as follows:

- 1. Concentrate efforts on implementing point source nutrient control actions proposed in the tributary strategy plans, as defined by Section 10.1-2117 of the *Code of Virginia*.
- 2. Make the WQIF compatible and consistent with existing funding programs administered by the Department of Environmental Quality (DEQ) Construction Assistance Program (CAP).
- 3. Enhance customer service and convenience by integrating the WQIF procedures, to the maximum extent possible, with those in use by the CAP. This may include:
  - schedules for application, review, and award;
  - general notifications, solicitation letters, and public participation methods;
  - application information and documentation for reimbursement requests;
  - criteria for prioritizing projects;
  - definitions for eligible components of the scope of work;
  - assessment of "reasonable sewer costs" as defined by Section 10.1-2177; and
  - construction evaluations on active projects.
- 4. Subsequent to implementation of the tributary strategy plans and as available funding allows, support other projects related to point source pollution controls that are clearly demonstrated as likely to achieve measurable and specific water quality improvements.
- 5. Assist with identifying other potential funding sources for the local share of projects.
- 6. Support and enhance the point source pollution program through separate technical assistance funding made available to local governments and individuals.

### **II.** Project Prioritization - Funding Distribution

The Virginia Water Quality Improvement Act (the "Act") directs the Secretary of Natural Resources to develop:

- written guidelines for distribution and conditions of WQIF awards; and
- criteria for prioritizing funding requests outside the Bay watershed.

For projects located in the Chesapeake Bay watershed, the Act requires that the Director of the Department of Environmental Quality enter into grant agreements with all facilities designated as significant dischargers that apply for grants.

For projects located outside the Chesapeake Bay watershed, the criteria for prioritizing funding requests includes:

- the pounds of nutrient reduction for each project;
- whether the location of the project is within a watershed or subwatershed with documented nutrient loading problems or adopted nutrient reduction goals;
- whether the location of the project is within a watershed with a documented water quality impairment; and
- availability of other funding mechanisms.

### III. Project Eligibility

The WQIF is currently a special-purpose grant program, and the type and location of a point source project eligible for funding is specified under Section 10.1-2131 of the Act. Until all tributary strategy plans are developed and implemented, grants shall only be made for the purpose of financing the cost of design and installation of biological nutrient removal facilities or other nutrient removal technology at publicly-owned treatment works designated by DEQ as a significant discharger. "For purposes of these guidelines, publicly-owned treatment works that use the Public-Private Education Facilities and Infrastructure Act (the "Act"; Section 56-757.1, et seq.) to facilitate design and installation of nutrient removal technology shall be eligible for WQIF grant funds available pursuant to \$10.1-2129.A.2 of the Water Quality Improvement Act." A tributary strategy plan is considered "implemented" regarding point source actions when the plan's recommended point source nutrient controls have been installed.

Funding for projects other than nutrient removal within the Chesapeake Bay Watershed is permitted if the Director of the DEQ determines that there is sufficient funding available for substantial and continuing progress in implementing the tributary strategies (Section 10.1-2131.C. of the Act). Such eligible projects must clearly demonstrate the likelihood of achieving measurable and specific water quality improvements.

The General Assembly may designate through the Appropriations Act the allocation of funds deposited into the Fund. These designations may detail circumstances under which a grantee is eligible for funding, who otherwise would not be eligible according to these guidelines.

Information on any such special appropriations and eligibility criteria contained in a future Appropriations Act will be included in the Request for Proposals soliciting WQIF Point Source Grant Applications.

#### IV. Allowable Costs

Under the Water Quality Improvement Act, WQIF point source grants shall be used solely to finance the costs of design and installation of biological nutrient removal facilities or other nutrient removal technology at publicly-owned treatment works for compliance with the effluent limitations for total nitrogen and total phosphorus as required by the tributary strategy plans or applicable regulatory requirements. Subsequent to the implementation of the tributary strategy plans, or if the Director makes the finding provided for in Section 10.1-2131.C of the Act, the DEQ Director may authorize WQIF grants for projects that are clearly demonstrated to achieve measurable and specific water quality improvements. The program will allow that nutrient control systems be sized to treat the flow in any reasonable and necessary expansion of the wastewater facility, which is generally limited to a 20-year design life. In general, associated pre-design and final design costs will be eligible for cost share. Joint or regional projects that involve more than one publicly-owned facility are eligible and encouraged where cooperative arrangements exist and economies of scale may be realized.

As provided in Section 10.1-2131.C. of the Act, the cost for design and installation of biological nutrient removal, state-of-the-art nutrient removal technology, or other nutrient control technology (including recycle/reuse) at publicly-owned treatment works meeting the nutrient reduction goal in an approved tributary strategy plan and incurred prior to execution of a grant agreement is eligible for reimbursement from the WQIF. Such expenses must be necessary and attributable to the project and the debt must be incurred or construction begun after June 2000 (when the Chesapeake 2000 Agreement established the revised nutrient reduction goals aimed at removing the Bay and its tidal tributaries from the "Impaired Waters List" by 2010). Reimbursement shall be made pursuant to an executed agreement consistent with the Act. If the original source of funding for the nutrient reduction facilities was the State Revolving Loan Fund (RLF), the WQIF grant shall be applied to the principal of any outstanding balance of the loan.

The purchase of land, easements, and/or rights-of-way are not allowable costs, nor are any legal, administrative, and engineering expenses related to these purchases, unless the land is an integral part of the treatment process. Other stipulations on allowability of cost may also apply, and all costs are reviewed and considered on a case-by-case basis.

### V. Reimbursement

Disbursement of grant funds is made on a periodic reimbursement basis not more frequently than once per month. Invoices must substantiate all requests for disbursement of grant funds. All payment requests must be reviewed and approved by DEQ staff prior to actual disbursement of funds. Reimbursement requests must be submitted in duplicate, one copy to the appropriate DEQ Regional Office and one copy to DEQ's Chesapeake Bay Program.

The availability of grant funds in the WQIF for point source pollution control projects is subject to appropriation by the General Assembly and allocations made by the Secretary of Natural Resources. In the event of a shortfall, the Commonwealth is strongly committed to managing the WQIF to ensure full funding of all executed agreements and to following an equitable process for distribution of available funds among all grantees. This distribution process (such as Pro Rata of estimated construction expenses) will be addressed in more detail in the agreement signed with each grant recipient.

### VI. State Cost Share Percentage

As provided in Section 10.1-2131.E of the Act, grants shall be awarded in the following manner:

- 1. In communities for which the ratio of annual sewer charges to reasonable sewer cost is less than 0.30, the Director of the Department of Environmental Quality shall authorize grants in the amount of 35 percent of the costs of the design and installation of biological nutrient removal facilities or other nutrient removal technology;
- 2. In communities for which the ratio of annual sewer charges to reasonable sewer cost is equal to or greater than 0.30 and less than 0.50, the Director shall authorize grants in the amount of 45 percent of the costs of the design and installation of biological nutrient removal facilities or other nutrient removal technology;
- 3. In communities for which the ratio of annual sewer charges to reasonable sewer cost is equal to or greater than 0.50 and less than 0.80, the Director shall authorize grants in the amount of 60 percent of the costs of design and installation of biological nutrient removal facilities or other nutrient removal technology; and
- 4. In communities for which the ratio of annual sewer charges to reasonable sewer cost is equal to or greater than 0.80, the Director shall authorize grants in the amount of 75 percent of the costs of the design and installation of biological nutrient removal facilities or other nutrient removal technology.

The "reasonable sewer cost" for each WQIF grantee will be determined using guidelines developed and approved by the State Water Control Board for use with the Virginia Water Facilities Revolving Fund. The grantee's annual sewer charge shall be defined as the average yearly expense for residential sewer service per connection that is currently being charged at the time application is made for WQIF cost-share. The above ratios will be calculated by dividing the current annual sewer charge by the reasonable sewer cost. Where multiple jurisdictions are provided sewer service through a District/Authority or an inter-municipal sewer agreement, a weighted average of the median household income and a weighted average sewer charge will be calculated for comparison to the "reasonable sewer costs." Annual sewer charges will be requested as part of each application.

As authorized by § 62.1-44.19:15, WQIF may receive payments as a result of the acquisition of nutrient allocations. Such payments shall be promptly applied to achieve equivalent point or

nonpoint source reductions in the same tributary beyond those reductions already deemed necessary by state or federal law or as established in the relevant tributary strategy.

If appropriations are made to the WQIF from surplus funds remaining after any fiscal year, grants awarded using those funds shall be for the sole purpose of designing and installing state-of-the-art nutrient removal technologies at publicly-owned treatment works designated as significant dischargers. These funds shall also be available for grants to eligible applicants when the design and installation of state-of-the-art nutrient removal technology utilizes the Public-Private Education Facilities and Infrastructure Act (Section 56-575.1 et seq.). The grant amount to be awarded shall use the above ratios to determine the cost-share percentage.

The Director may approve a point source grant application request that exceeds the authorized grant amount outlined in Section 10.1-2131.E. of the Act and described above in Section F.1-4. Whenever a grant application exceeds the authorized grant amount outlined above, or when there is no stated limitation on the amount of the grant, the Director shall consider the comparative revenue capacity, revenue efforts and fiscal stress as reported by the Commission on Local Government.

### VII. Grant Agreement

A legally binding and enforceable agreement between the recipient and the Department of Environmental Quality shall govern all WQIF point source grants. In accordance with Section 10.1-2131 of the Act, the agreement shall include the following:

- 1. Numerical effluent concentration limits on nutrient discharges to state waters designed to achieve the nutrient reduction goals of the applicable tributary strategy plan. Consistent with Section 62.1-44.19:12 et seq. of the *Code of Virginia*, such concentration limits shall be based upon the technology installed by the facility and shall be expressed as annual average values.
- 2. Enforceable provisions related to the maintenance of the numerical concentration limits that will allow for exceedences of no more than ten (10) percent and for exceedences caused by extraordinary conditions. The enforceable provisions will also include contractual or stipulated penalties in an amount sufficient to ensure compliance with the agreement, which may include repayment with interest for any non-performance or breach.
- 3. Recognition of the authority of the Commonwealth to make the Virginia Water Facilities Revolving Fund (Section 62.1-224 et seq. of the *Code of Virginia*) available to local governments for their local share of the cost of designing and installing biological nutrient removal facilities or other nutrient removal technology, based on financial need and subject to availability of revolving loan funds, priority ranking, and revolving loan distribution criteria.

Grant agreements shall be made available for public review and comment for a period of no less than 30 days but no more than 60 days prior to execution. In addition to the standard terms and

conditions of a state contract for financial assistance (including, but not limited to, project scope, schedules, budget and compensation provisions), the agreement shall:

- 1. provide for payment of the total amount of the grant, subject to the availability of funds;
- 2. govern design and installation;
- 3. require the grantee to complete installation of the nutrient removal facilities and place them into service regardless of the amount of grant funds received; and
- 4. require proper long-term operation, monitoring and maintenance of funded projects, including design and performance criteria.

#### **VIII.** Technical Assistance Grants

Under Section 10.1-2131 of the Act, the DEQ Director may, at any time, authorize grants, including grants to institutions of higher education, for Technical Assistance (TA) related to nutrient reduction. The criteria used in making determinations for award of TA grants are:

- If the proposals are for work such as pilot demonstration projects and engineering studies for nutrient reduction (e.g., Basis of Design Reports).
- If the proposals will advance the understanding about, and the capabilities of, nutrient-reduction systems.
- If the results of the proposal lead to more cost-effective implementation actions for point sources.
- If the proposal for planning and/or design work is associated with a retrofit project and the applicant is not eligible to receive a construction grant, the TA grant will be limited to a cost-share of no more than 10% of the total construction cost (or cost for design, whichever is less) and must lead to approved plans and specifications.
- If the proposal is associated with evaluating and implementing measures to optimize or enhance existing operations (e.g., interim optimization plans). Projects of this type will generally involve only treatment process or system revisions, rather than changes at the facility that involve construction.

### **CHAPTER II: SUMMARY OF PROGRAM REQUIREMENTS**

#### I. Introduction

This section provides a brief synopsis of the program requirements as they relate to other statutory or regulatory requirements included by reference, such as procurement law, and plans and specifications approval, so that grantees are fully aware of them and can act accordingly.

### II. Procurement

All procurement made during the course of planning, design, and construction of the grant project must be purchased, acquired, or contracted for in accordance with Chapter 7

(Section 11-35 et seq.) of Title 11 of the *Code of Virginia*, also known as the Virginia Public Procurement Act. The WQIF point source program requires all participants to follow the provisions of the Procurement Act regardless of locality size.

#### III. Local Share

Prior to grant award, sufficient documentation must be provided by the applicant to demonstrate that the local share of the project is, or will be, available to fulfill the grantee's obligations under the agreement. Examples of acceptable forms of local share include, but are not limited to, general obligation revenue bonds, other state or federal grant funds or loans, and municipal budget items and revenue streams.

### IV. Pre-Design Studies/Pilot Testing

Eligible pre-design tasks include any essential studies prior to final design, such as bench or pilot scale testing of conventional or innovative technologies, and cost-effectiveness analysis.

The grantee or its consultant will develop a Preliminary Engineering Proposal (PEP) or planning document, which assesses the current situation, projects future needs, develops alternatives, estimates the monetary costs, and presents a selected plan.

### V. Design/Construction

The design and drafting of plans and specifications must conform to the Virginia Sewage Collection and Treatment (SCAT) Regulations [9 VAC 25-790 et. seq.] Close contact with the applicable Regional Offices of the DEQ is helpful in reducing delays at this stage. Since it is likely that installation of the nutrient reduction system is part of a larger scale or more complex plant upgrade or expansion project, a Preliminary Engineering Conference with the Department of Environmental Quality is strongly recommended prior to full-scale design. Final plans and specifications must be submitted for review, comment, and approval to the Department of Environmental Quality. Processing of the plans and specifications will proceed as outlined in the SCAT Regulations, ultimately leading to the issuance of a Certificate to Construct.

The grantee may then proceed to advertise for construction bids, and is encouraged to hold a prebid conference so that the project can be presented to bidders and any questions they may have can be resolved. The bidding document must be structured to the extent practicable such that the cost for eligible project components can be readily determined. The grantee is responsible for, and must retain records that document, the use of proper bidding and bid selection when securing construction services. During construction the grantee must provide project inspection, documented with reports, to track construction progress, quality, and conformance with plans and specifications.

DEQ will conduct periodic (usually monthly) Interim Project Evaluations (IPE) to provide routine monitoring of WQIF construction projects. The IPE will assess compliance with program requirements by verifying that: the project is being managed properly, construction is

generally in accordance with the approved plans and specifications, and disbursement requests coincide with actual work in place.

### VI. Post-Construction/Operation and Maintenance

In addition to awarding the grant, the agreement signed by the grantee and DEQ shall govern the long-term operation and maintenance of the facilities installed with grant funds. Section 10.1-2131.C. of the Act specifies that grant agreements related to nutrient control shall include: (i) numerical concentrations on nutrient discharges designed to achieve the nutrient reduction goals of the applicable tributary strategy plan; and (ii) enforceable provisions related to the maintenance of the numerical concentrations that will allow for exceedences of no more than 10%, and (iii) for exceedences caused by extraordinary conditions (defined in the agreement).

All grant agreements will contain a provision that requires the owner to monitor their discharge and report the total nitrogen and (if applicable) total phosphorus concentrations so that performance can be tracked. If nutrient monitoring requirements are not already contained in the plant's discharge permit, the agreement will specify the same sampling frequencies and analytical methods used in the VPDES permit program.

Agreements may also contain incentives designed to encourage the Grantee to operate the project to achieve pollution reductions greater than specified in the Agreement.

### **CHAPTER III: GRANTEE SELECTION**

### I. Application Solicitation

The annual point source grant cycle begins with the distribution of this guidance document and a solicitation for applications. The deadline for submission of applications is provided in the application form and will allow at least 45 days for proposal development. Applications must be sent to:

Virginia Department of Environmental Quality
P.O. Box 10009
Richmond, VA 23240
ATTN: WQIF Program Manager

### **II.** Grant Priority Funding List Requirements

Funds can only be used to finance the cost to design and install biological nutrient removal, state-of-the-art nutrient removal technology, or other nutrient control technology at publicly-owned treatment works designated as a significant discharger and meeting the nutrient reduction goal in an approved tributary strategy plan. DEQ staff will prioritize the eligible applications using the criteria in Chapter I paragraph (II) of Section B of this section, assess the cost-effectiveness of proposed actions, and review the proposals to ensure consistency with tributary strategy goals. Such prioritization will recognize the requirement under Section 10.1-2131.B. of the Act that the Director shall enter into grant agreements with all facilities designated as significant dischargers that apply for grants. DEQ staff will present the prioritized list of qualified proposals to the State Water Control Board for their information and comment, along with recommendations for funding. Final approval and funding decisions will be made by the DEQ Director who has the responsibility and authority to award grants under this program in accordance with Section 10.1-2122 of the Act.

The state is strongly committed to manage the award and allocation of grants to ensure full funding of all executed agreements, as well as to follow an equitable process for distribution of available funds among all grantees in the event of a shortfall. The distribution process will be addressed in the agreement signed with each grant recipient.

In subsequent years, new projects will be added to the priority list. Once the cost share needs to implement all the Chesapeake Bay Tributary Strategy Plans are satisfied, or it is determined by the DEQ Director that there is sufficient funding above that required for substantial and continuing progress in implementation of the Tributary Strategy Plans, grant applications will be considered for any point source project that is clearly demonstrated as likely to achieve measurable and specific water quality improvements. At that stage, the Act requires that potential grant projects be prioritized, in accordance with specified criteria in Section 10.1-2129, and other factors the Secretary of Natural Resources deems appropriate. No project can receive financial assistance under the WQIF unless it is on the priority-funding list. However, it is not a requirement that projects receive cost share assistance in priority order.

### **Contact Information:**

### **Nonpoint Source Projects:**

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### **Point Source Projects:**

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