

ACTION REPORT
STATE WATER CONTROL BOARD MEETING
TUESDAY, DECEMBER 4, 2007

Tuesday, December 4, 2007
House Room C
General Assembly Building
9th & Broad Streets
Richmond, Virginia

Board Members Present:

W. Shelton Miles, III
Thomas D. C. Walker
R. Michael McKenney
John B. Thompson

Komal K. Jain
W. Jack Kiser
Robert Wayland

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|-------------|--|---|
| I. | Minutes (September 25, 2007) | Approved w/amendment |
| II. | Final Regulations
Virginia Water Protection Permit Program Regulation and VWP
General Permit Regulations – Conform to State Statute
VPDES General Permit for Noncontact Cooling Water Discharges
VPDES General Permit from Petroleum Contaminated Sites,
Ground Water Remediation, and Hydrostatic Tests
Water Reclamation and Reuse Regulation | Adopted amendments
Adopted amendments
Adopted amendments
Adopted regulation, but
Deferred action on section 105
Action on section 105 no later
Than June 2008 |
| III. | Proposed Regulations
Amendment of the Water Quality Management Planning Regulation
(Merck and Opequon Petitions)
Tier III Water Quality Standards Amendments – Canoeable Waters | Approved proposal for public
comment
Approved proposal for public
comment |
| IV. | Permits
Cumberland Landfill VWP Permit (Cumberland Co.) | Approved permit |
| V. | Significant Noncompliance Report | Received report |
| VI. | Consent Special Orders (VPDES)
Northern Regional Office
The City of Fredericksburg
Oak Grove Mennonite Church (Madison Co.)
Tidewater Regional Office
Hy-Mark Cylinders, Inc. (Hampton)
Valley Regional Office
Nelson County Service Authority
Harrisonburg Rockingham Regional Sewer
Authority – North River WWTP | Approved orders |
| VII. | Consent Special Orders (VWP and Others)
Tidewater Regional Office
VA Timberline, LLC (Isle of Wight Co.) | Approved orders |

West Central Regional Office
Lewis Kennett (Franklin Co.)
Southwest Regional Office
Russell Co. Development Group, LLC (Russell Co.)

VIII. Consent Special Orders (Oil)

Piedmont Regional Office
I.A.S. of VA, Inc. (Richmond)

Approved order

IX. Public Forum

X. Other Business

Revolving Loan Fund
Water Supply Planning Briefing

Division Director's Report
Future Meetings

Approved list
Received briefing and staff to
Report at future meeting on
Scheduling a water resource
Management conference
Received report
Tentatively set 4/10-11/2008

ADJOURN

Virginia Water Protection Permit Program Regulation and VWP General Permit Regulations – Conform to State Statute: The staff will present revisions to the Virginia Water Protection Permit Program regulation and the four VWP general permit regulations as the result of statute changes enacted by the 2007 General Assembly.

General VPDES Permit for Noncontact Cooling Water Discharges of 50,000 GPD or Less (9 VAC 25-196): The purpose of this agenda item is to request that the Board adopt a final general permit regulation. At the Board's June meeting, the staff presented a draft regulation for Noncontact Cooling Water Discharges of 50,000 GPD or Less (9 VAC 25-196). A public comment period on the proposed rulemaking was held from August 20th through October 19th, and a public hearing was held on October 3rd in Richmond. There were no comments received during the public comment period, and no citizens attended the public hearing. Consequently, the only change to the regulation since the Board last reviewed the draft was the correction of one minor typo.

General VPDES Permit for Discharges from Petroleum Contaminated Sites, Ground Water Remediation, and Hydrostatic Tests (9 VAC 25-120): The purpose of this agenda item is to request that the Board adopt a final general permit regulation. At the Board's June meeting, the staff presented a draft regulation for Discharges from Petroleum Contaminated Sites, Ground Water Remediation, and Hydrostatic Tests (9 VAC 25-120). A public comment period on the proposed rulemaking was held from August 20th through October 19th, and a public hearing was held on October 3rd in Richmond. There were no comments received during the public comment period, and no citizens attended the public hearing. Consequently, no changes have been made to the regulation since the Board last reviewed the draft.

Final Water Reclamation and Reuse Regulation, 9VAC25-740: This is a final regulation. At the December 2007 meeting of the Board, the staff will ask the Board to adopt the Water Reclamation and Reuse Regulation, 9VAC25-740.

Previous Board Actions and Public Comment:

On October 3, 2002, the Board approved the draft Regulation for Wastewater Reclamation and Reuse (9VAC25-740) for public comment. The public comment period began on February 24 and concluded on April 25, 2003, and included one public hearing held on April 2, 2003. Based on public comments received during this period, the Department of Environmental Quality, Water Quality Division (DEQ) determined that a broader and more flexible regulation strategy should be developed for wastewater reclamation and reuse than that proposed in the draft regulation. Subsequently, no further action to develop the proposed regulation was taken.

Following the initial effort to develop a water reuse regulation, the DEQ published four notices of intended regulatory action (NOIRAs) on September 19, 2005, for a technical regulation on wastewater reclamation and reuse, and for three General Virginia Pollution Abatement (VPA) Permit Regulations on reclaimed water reuses that would reference the technical regulation.

Due to the significant lapse of time between development of the original draft technical regulation (9VAC25-740) and the NOIRA to redraft the regulation, and to avoid public confusion regarding two different drafts of the technical regulation, the Board authorized withdrawal of the originally proposed draft of 9VAC25-740 on September 27, 2005.

A second draft of the technical regulation referred to as the Water Reclamation and Reuse Regulation (9VAC25-740), was approved by the Board for public comment on March 9, 2007. The public comment period began on August 6, 2007, and concluded on October 9, 2007, and included three public hearings as follows:

<u>Date</u>	<u>Location</u>	<u>Hearing Officer</u>
September 17, 2007	Roanoke, VA	Shelton Miles
September 21, 2007	Virginia Beach, VA	Thomas Walker
September 24, 2007	Glen Allen, VA	Robert Wayland

During the public comment period, DEQ received 72 written comments that resulted in 11 changes to the regulation between draft and final stages.

The subject regulation requires that permitted providers of reclaimed water establish service agreements or contracts with end users that contain requirements in the regulation applicable to the intended reuses of the reclaimed water. Therefore, end users, in most cases, will not be required to obtain a permit for reuses of reclaimed water and General VPA Permit Regulations for reclaimed water reuses are unnecessary. If it is evident after adoption and implementation of the subject regulation that there is need for the agency to permit end users or specific groups of end users, General VPA Permits for reclaimed water reuses will be reconsidered at that time.

Background and Purpose:

On April 9, 2000, the General Assembly approved House Bill 1282, which amended Sections 62.1-44.2 and 62.1-44.15:15 of the Code of Virginia. Section 62.1-44.2 now defines the purpose of the State Water Control Law to, among other things, promote and encourage the reclamation and reuse of wastewater in a manner protective of the environment and public health. Additionally, Section 62.1-44.15:15 makes it the duty of and gives authority to the Board to promote and establish requirements for the reclamation and reuse of wastewater that are protective of state waters and public health as an alternative to directly discharging pollutants into state waters.

The purpose of the subject regulation is to satisfy mandates of the State Water Control Law by establishing: (1) treatment standards for reclaimed water relative to the potential for discharge to state waters or human contact by specific reuse categories, and (2) technical and operational requirements for the reclamation and distribution of wastewater. Contained in the regulation are two sets of treatment standards and monitoring requirements for the reclamation of municipal wastewater, and provisions to develop treatment standards for the reclamation of industrial wastewater on a case-by-case basis. For six reuse categories (urban – unrestricted access, irrigation - unrestricted access, irrigation – restricted access, landscape impoundments, construction, and industrial), the regulation specifies required treatment standards and allows for the approval of other reuses and associated treatment standards commensurate with the quality of the reclaimed water and its intended reuse. This regulation also details requirements for application and permitting; design, construction, operation and maintenance of water reclamation systems and reclaimed water distribution systems; management of pollutants from significant industrial users; access control and signage; public education and notification; management of reclaimed water in use areas; record keeping; and reporting. The treatment standards and other requirements of the proposed regulation are to be implemented through VPDES or VPA permits issued primarily to generators and distributors of the reclaimed water.

In that the subject regulation meets the mandates of State Water Control Law, the regulation is essential for protection of the Commonwealth’s environment and natural resources from pollution, impairment or destruction; and to protect the health, safety and welfare of its citizens.

Issues:

The following is a list of some of the more significant issues identified among the public comments received on the draft Water Reclamation and Reuse Regulation, along with the recommended resolution that may remain potentially controversial in the final regulation. Where reasonably possible, agency staff addressed these issues through revisions to the final regulation as described below.

1. Point of compliance for Level 1 reclaimed water (9VAC25-740-70 B)

The Virginia Association of Municipal Wastewater Agencies, Inc. (VAMWA) and the Hampton Roads Planning District Commission (HRPDC) – Directors of Utilities Committee, stated that the point of compliance for Level 1 reclaimed water after open storage at the reclamation system was operationally impractical and recommended that there be no difference in the point of compliance for Level 1 and Level 2 water treatment. They also recommended deleting the requirement that reclaimed water at the reclamation system meet applicable reclaimed water standards prior to discharge to a reclaimed water distribution system, and instead, transferring this responsibility to the reclaimed water distribution system, citing existing language under 9VAC25-740-110 B 9 of the regulation which requires maintenance of reclaimed water quality in the distribution system.

We agree that the point of compliance for Level 1 reclaimed water should be the same as that for Level 2 reclaimed water at the reclamation system and language in 9VAC25-740-70 B has been revised to reflect this. It is reasonable and appropriate to expect that reclaimed water from the reclamation system meet the standards for which it is permitted prior to discharge to a reclaimed water distribution system. Any degradation of Level 1 reclaimed water once in the reclaimed water distribution system will be addressed per 9VAC25-740-110 B 9, which requires the quality of reclaimed water in a distribution system be *maintained* to meet standards for the intended reuses of the reclaimed water in accordance with 9VAC25-740-90.

However, we do not believe it is appropriate to delete the requirement that reclaimed water at the reclamation system meet applicable reclaimed water standards prior to discharge to a reclaimed water distribution system. Design and operational requirements for reclaimed water distribution systems contained in the proposed regulation are *not* intended to *correct* substandard water received directly

from the reclamation system. Therefore, no further changes to the language in 9VAC25-740-70 B were made.

New language has also been added to 9VAC25-740-100 C 1 requesting a description of how reclaimed water quality in a distribution system will be maintained to satisfy requirements of 9VAC25-740-110 B 9 and to further clarify responsibilities of the generator versus the distributor to maintain reclaimed water quality.

2. Time requirements for bacterial sampling (9VAC25-740-80 A 4 a)

HRSD, VAMWA, and HRPDC – Directors of Utilities Committee, stated that the universal requirement to collect bacterial samples for reclamation systems treating municipal wastewater between 10:00 a.m. and 4:00 p.m. should be revised to: (a) allow for greater flexibility on a case-by-case basis, and (b) to address a conflict this creates with corrective action threshold resampling for bacteria specified in 9VAC25-740-70 C.

We do not believe this suggested change is justified. Bacterial sampling at the reclamation system should be representative of peak flows to the system during which the greatest volume of water will be treated. For a reclamation system of municipal wastewater, at least one peak flow can be anticipated within the period between 10:00 a.m. and 4:00 p.m. This sampling period is unrelated to periods of peak demand for the reclaimed water from the reclamation system, particularly where flow equalization is available at the reclamation system. The bacterial sampling period between 10:00 a.m. and 4:00 p.m. is consistent with bacterial sampling periods included in the Sewage Collection and Treatment Regulations (9VAC25-790). However, in order to allow more flexibility, we have modified the language to allow the permittee an exception to the requirements where they can demonstrate that peak flows to the reclamation system occur outside this time frame, and to exclude bacterial resampling performed in accordance with 9VAC25-740-70 C.

3. Assumed nutrient losses to state waters from irrigation reuse with non-BNR reclaimed water linked to nutrient credits allowed for reclamation and reuse (9VAC25-740-100 C 2)

The draft regulation that went to public comment contained Department of Conservation and Recreation (DCR) recommendations concerning the reduced waste load discharge of total nitrogen (N) and total phosphorus (P) a wastewater treatment facility with the General VPDES Watershed Permit (9VAC25-820) could report. These recommendations included: (i) an increase in assumed losses to state waters of annual N and P loads applied within a service area by non-bulk irrigation with reclaimed water not meeting biological nutrient removal (non-BNR reclaimed water) (i.e., annual average 8 mg/l total N and 1 mg/l total P) from 10 percent for both N and P to 30 and 20 percent for N and P, respectively; and (ii) the addition of assumed losses to state waters of 15 and 10 percent of annual N and P loads, respectively, that are applied within a service area by bulk irrigation with non-BNR reclaimed water, in additions to nutrient management plan requirements for this type of irrigation.

During the public comment period, the agency received several comments from HRSD, VAMWA, HRPDC – Directors of Utilities Committee, Virginia Tech, Loudon County Sanitation Authority, the WaterReuse Association, and Mr. Bernard C. Nagelvoort, all opposing the language recommend by DCR. Major concerns expressed in the comments were as follows:

- Imposing assumed nutrient losses on irrigation reuse of non-BNR reclaimed water will provide only a small nutrient load reduction compared to the reductions from wide-scale implementation of point source nutrient controls, and will act to discourage water reclamation and reuse and the associated positive benefits to the Chesapeake Bay.
- For bulk irrigation reuse (>5 acres) with non-BNR reclaimed water, application of assumed nutrient losses is not necessary given all the other measures to manage nutrients that are required in the regulation for these sites, including a nutrient management plan (NMP) prepared

by a nutrient management planner certified by DCR, stringent irrigation setbacks, prohibition against any runoff, and “supplemental” rates or irrigation.

- For non-bulk irrigation (≤ 5 acres) with non-BNR reclaimed water, the TAC agreed to an approach that would manage nutrients by service area rather than by individual end users, whereby the provider of the reclaimed water would use total volume of reclaimed water reused for non-bulk irrigation and concentrations of N and P in the reclaimed water to calculate monthly N and P loads to the service area. The TAC also agreed initially to the concept of assumed nutrient losses of 10 % for both total N and total P. The revised percentages of assumed nutrient loss in the draft regulation greatly exceeded what was agreed upon by the TAC and were never justified regarding need, efficacy, or scientific basis to the TAC.
- The assumed nutrient loss percentages are not scientifically and technically sound because assumptions for nutrient loss from the landscape should not be drawn from nutrient efficiencies measured for non-irrigated agriculture or irrigated agriculture performed under imprecise water management plans; appropriately irrigated vegetation with reclaimed water containing soluble, and readily plant available, nitrogen and phosphorus should enable rapid and efficient plant assimilation of these nutrients; appropriately operated irrigation should not result in runoff from the reuse sites; and the soluble (largely non-particulate) P that occurs in reclaimed water should rapidly infiltrate into the soil where it is less likely to be transported in surface runoff than surface applied P from a nutrient source such as animal manure.
- The NPDES permit program in general and the General VPDES Watershed Permit (9VAC25-820) are not designed to accommodate accounting and reporting of assumed nutrient losses from irrigation reuse with non-BNR reclaimed water.
- The assumed nutrient losses should be applied equitably to all forms of irrigation, not just to irrigation reuse with reclaimed water, which could potentially contribute nutrients to surface waters.

Given the complex nature of this issue, we believe that it should be referred back to the technical advisory committee (TAC) for further discussion and resolution. To avoid delaying adoption of the subject regulation, subdivisions C 3 b (3) and C 3 c (5) of section 9VAC25-740-100 have been moved to a new section, 9VAC25-740-105. DEQ is recommending deferred adoption of this single section for further discussion by the TAC and a second action by the Board based on subsequent staff recommendations.

4. Major modification of VPDES permits to add water reclamation and reuse requirements (9VAC25-740-30 B)

In the draft Water Reclamation and Reuse Regulation, modification of a VPDES permit to add water reclamation and reuse standards, monitoring requirements and conditions was designated a minor modification. During the public comment period for the draft regulation, EPA Region III informed DEQ staff that such an action could not be a minor modification under the Clean Water Act definitions, but that administrative authorization of these requirements in association with a VPDES permit could be allowed without modification of the permit.

Therefore, 9VAC25-740-30 B of the subject regulation has been revised to allow administrative authorization of water reclamation and reuse standards, monitoring requirements and conditions for existing VPDES permits without modification of the permit. No change was made to 9VAC25-740-30 B regarding modification of existing VPA permits, which will remain minor modifications with minimal exception. Language was also added to require an application for water reclamation and reuse projects in accordance with 9VAC25-740-100 (Application for permit) for minor modification of a VPA permit or an administrative authorization associated with a VPDES permit described in 9VAC25-740-30 B. Although these changes will not eliminate the time required to process the application and prepare the appropriate requirements for a specific project, they eliminate fees associated with a major

permit modification and public notice of the draft permit, thereby serving to promote and encourage water reclamation and reuse.

Proposed Rulemaking to Amend Nutrient Waste Load Allocations for Merck and FWSA-Opequon STP in 9 VAC 25-720-50.C. (Water Quality Management Planning Regulation, Shenandoah-Potomac River Basin): Staff plans to make recommendations to proceed to public comment on proposed amendments to the Water Quality Management Planning Regulation (9 VAC 25-720), regarding nutrient waste load allocations for two significant dischargers in the Shenandoah-Potomac River Basin, the Frederick-Winchester Service Authority-Opequon Water Reclamation Facility and the Merck facility in Rockingham County.

Staff has reviewed the comments received in response to the Notice of Intended Regulatory Action and the Director has established an ad-hoc technical advisory committee. A meeting of the committee is planned for early November; results of discussions will be conveyed to the Board at their December meeting along with any recommendations for future actions to be presented for approval.

BACKGROUND

At the Board's March 8, 2007 meeting, staff presented information on two petitions for increased nutrient allocations, one for the Frederick-Winchester Service Authority-Opequon Water Reclamation Facility and the other for the Merck facility in Rockingham County, both located in the Shenandoah-Potomac River basin. While both facilities seek an increase in nutrient allocations, the basis for the requests is different.

The FWSA-Opequon petition requested that a larger design capacity be used as the basis for calculating the facility's allocation. The Merck petition requested that higher nitrogen and phosphorus concentrations, ones that can be attained by the treatment facility, be used to set its allocations.

A complicating factor with these requests for higher nitrogen allocations is that the total delivered nitrogen load (from point and nonpoint sources) under the Shenandoah-Potomac's Tributary Strategy is already estimated to exceed the State's allocation commitment by about 300,000 pounds per year, and any further increase to individual facility allocations will add to this surplus unless an offset is identified.

The Board decided that the best course of action was to move forward into the rulemaking process to consider what the appropriate allocations should be for both facilities. The additional opportunity for public comment would be beneficial to all concerned given the importance of the Bay nutrient allocations, to the communities and industry involved, as well as to the quality of Virginia's rivers and the Chesapeake Bay. The Board approved a recommendation to proceed with the normal rulemaking process that allows for full public participation throughout and consideration of all information submitted during the NOIRA phase to aid in formation of the proposal. Staff was to return to the Board with a proposal for consideration on whether or not to continue with the rulemaking process and solicit public comment on the proposal.

CURRENT STATUS

- Notice of Intended Regulatory Action published in the Virginia Register on 8/20/07.
- Public Meeting held 9/19/07.
- Public Comment Period closed 9/24/07; submittals by Chesapeake Bay Foundation, Shenandoah Riverkeeper, and one private citizen, all generally raising concerns about excessive nutrient discharges in the Shenandoah-Potomac basin and opposing the requested increases.

- FWSA has submitted plans and specifications for their plant expansion project; expect project to be bid in Jan. 2008 and construction substantially complete by Dec. 2010. At the 9/19 Public Meeting, FWSA expressed their desire for this rulemaking to move expeditiously in order to meet the Dec. 2010 deadline for plant expansions necessary for increased waste load allocation consideration.
- In order for Merck to effectively continue to drive business opportunities within its Virginia operation, the site needs certainty in its nutrient allocation. In 2005 Merck identified to the DEQ the need to conduct a study of its waste treatment operation and influent loads to reflect discharge allocations that are technically feasible after implementation of Biological Nutrient Removal treatment technology. Merck worked expeditiously to conduct and complete its pilot scale assessments of these treatment options. This evaluation is now complete and Merck plans to invest \$18 million in order to install a Bardenpho (4-stage) biological treatment system, a near-state-of-the-art nutrient reduction technology (NRT), to effectively meet its requirements under the rule. The 3-phase NRT installation project is scheduled to be complete by the third quarter of 2010; Merck is targeting an earlier completion date in order to ensure contractor availability. An early installation also allows for Merck to effectively test the technology to ensure compliance by January 1, 2011. Merck has therefore requested that the rulemaking move as quickly as possible, seeking final amendments to become effective in Nov. 2008.
- A Technical Advisory Committee [TAC] meeting is planned for early November; results of discussions will be conveyed to the Board at their December meeting along with any recommendations for future actions to be presented for approval.

Another issue recently raised that may be relevant to the FWSA-Opequon request is possible transfer of the effluent from Frederick County's landfill into the Opequon plant for treatment, and accommodating the nutrient loads in the leachate under a "regionalization" concept.

COMPARISON OF EXISTING ALLOCATIONS AND PETITION REQUESTS

The basis for the existing discharge allocations and requested revisions are as follows:

FWSA-Opequon	Design Flow (MGD)	Annual Avg TN Concentration (mg/L)	TN WLA (lbs/yr)	Annual Avg TP Concentration (mg/L)	TP WLA (lbs/yr)
SWCB-Approved	8.4	4.0	102,331	0.3	7,675
Petition Request	12.6	3.0	115,122	0.3	11,506
Difference =	+ 4.2	- 1.0	+ 12,791	No change	+ 3,831

Merck	Design Flow (MGD)	Annual Avg TN Concentration (mg/L)	TN WLA (lbs/yr)	Annual Avg TP Concentration (mg/L)	TP WLA (lbs/yr)
SWCB-Approved	1.2	4.0	14,619	0.3	1,096
Petition Request	1.2	12.0	43,835	1.2	4,384
Difference =	No change	+ 8.0	+ 29,216	+ 0.9	+ 3,288

If approved as requested, the total discharge nitrogen waste load allocation for the Shenandoah-Potomac basin would be increased by 42,007 lbs/yr, and the total discharge phosphorus allocation by 7,119 lbs/yr. The estimated increases in the loads delivered to tidal waters are:

- FWSA-Opequon: - TN delivered load increase = 9,465 lbs/yr (0.74 delivery factor)
- TP delivered load increase = 2,950 lbs/yr (0.77 delivery factor)
- Merck: - TN delivered load increase = 12,855 lbs/yr (0.44 delivery factor)
- TP delivered load increase = 2,532 lbs/yr (0.77 delivery factor)

Staff expects to develop a final proposal following discussions among the Technical Advisory Committee.

Consideration of a Fast Track Rulemaking to Amend the Water Quality Standards Regulation to Designate Portions of Little Stony Creek in Scott County and North River in Augusta County as Exceptional State Waters (9 VAC 25-260-30): Staff intends to ask the Board at their December 4, 2007 meeting for approval to initiate a rulemaking to amend the Water Quality Standards regulation to designate as Exceptional State Waters portions of two waters (North River in Augusta County and Little Stony Creek in Scott County) with canoe opportunities on United States Forest Service (USFS) property. The staff proposal will be for a fast track rulemaking as the amendment is expected to be non-controversial because the federal government is the only impacted riparian landowner. Based on site visit observations, staff has concluded that both waters meet the eligibility criterion of possessing an exceptional environmental setting and providing opportunities for outstanding recreational activities. The presence of litter and graffiti at an easily accessible location in Little Stony Creek had initially raised concerns among staff regarding suitability of this segment for designation, but planned actions by local government and USFS should address this issue.

Virginia Water Protection Permit No. 07-1108 - Cumberland County Development Company, LLC - Cumberland County Landfill: Cumberland County Development Company, LLC (CCDC) proposes to construct and operate a privately owned, solid waste disposal facility in Cumberland County, Virginia. The proposed landfill provides both short and long-term needs for non-hazardous solid waste disposal in the state. The proposed project will also provide Cumberland County with a significant source of revenue. Brown and Caldwell submitted a Joint Permit Application (JPA), received May 9, 2007, for the wetland and stream impacts for this proposed facility. The JPA was deemed complete on June 1, 2007, with the submittal of clarification to stream and wetland impacts. CCDC has also submitted the Notice of Intent and Part A permit application per the Virginia Solid Waste Management Regulations.

The site's facility boundary encompasses 557 acres, with a 315-acre waste management unit boundary and about 242 acres for the landfill disposal area. Within the facility boundary, 1.30 acres of waters of the U.S. are to be impacted (0.69 acres of forested wetlands and 0.61 acres of stream - 9305 linear feet of impact).

The local government was notified on May 16, 2007, and riparian property owners were advised by letter of June 14, 2007, of the permit application. The proposed issuance of this VWP permit was published in the Farmville Herald on July 27, 2007, and in the Cumberland Bulletin on July 26, 2007. By letter dated July 24, 2007, Ms. Judy Ownby, County Administrator, was notified of the proposed issuance. Public notice ended on August 27, 2007.

COMMENTS FROM INITIAL PUBLIC NOTICE AND RESPONSES

From the public notice of the VWP permit, 131 letters, faxes, and e-mails were received. Most letters just requested that a public hearing be held. Two letters (and referenced by Ms. Tammy Belinsky)

inferred that there were additional wetlands and streams on the property which will be impacted (photos were sent). There were 118 letters against landfill, and 13 letters in favor of the landfill. Tammy Belinsky, from the Environmental Law Group, representing Residence Against Pollution (RAP), provided the following comments.

COMMENT 1: Virginia's nontidal, headwater wetlands are important resources and, at this time, the Department of Environmental Quality has only begun to develop the tools necessary to begin to evaluate impacts to wetlands on a cumulative basis. The agency is ill-equipped to make any decisions that impact non-tidal wetlands and headwater-forested wetlands in particular until such time that the agency can assess all cumulative hydrologic impacts from eliminating not only the non-tidal wetlands, in the case of the proposed Cumberland County landfill, but in combination with the obliteration of several miles of tributary streams including impacts to ground and surface waters, including Maxey Mill Creek.

RESPONSE: DEQ agrees that wetlands are important resources. Because of that fact, the Virginia Water Protection Regulation requires avoidance of wetlands and minimization of wetland impacts to the greatest extent practicable with preference to subsequent on-site mitigation, otherwise, off-site mitigation. If neither on-site nor off-site mitigation can be accomplished, alternatives include purchase of wetlands within a wetlands bank or payment into the Trust Fund. In this particular case, the permittee will provide both on-site and off-site mitigation through (1) preservation with stream buffers; and, (2) purchase of wetland credits from the Byrd Creek Mitigation Bank. Currently, mitigation in the permit is in accordance with the minimum set forth in guidance and statute (forested wetland mitigation of 2:1).

As for cumulative impacts, currently, the only permitted impacts to Maxey Mill Creek are allowed under a VWP general permit (WP3-07-0502), which permits 781 linear feet of stream impact and no wetland impacts. This permit is for the Cumberland County Industrial Access Road and all impacts are due to culverting the streams.

There is only one other VWP permit within the same watershed, but a different creek. The permit for Oakland Estates (WP1-06-2367), which is on a tributary to Salle Creek (tributary to Deep Creek), has impacts of 0.07 acres PFO. The impact is at least 6 miles up Salle Creek before running into Deep Creek. Maxey Mill Creek is at least 10 miles upstream from the junction of Salle Creek and Deep Creek.

The Maxey Mill / Deep Creek watershed has a drainage area of 80.76 square miles (51,686 acres), and the watershed is mostly agricultural and forested. Current foresting and crop practices may also impact this watershed. There is no indication that the permitted impacts of Cumberland County Industrial Access Road (0.05 acres of stream), the Oakland Estates (0.07 acres), and the addition of the Cumberland County Landfill impacts of 1.28 acres, would produce any adverse impact to the current downstream water quality in this watershed.

COMMENT 2: The members of RAP question whether the proposed project will impact less than two acres of non-tidal wetlands. Members of RAP are also members of a hunting club that previously leased the proposed landfill site for hunting and know the property very well. Members have submitted comments documenting the true scope of the wetlands that will be impacted. In addition, if the footprint of the landfill crosses a wetland it is unclear whether the portion of the wetland outside of the footprint has been assessed as an impacted wetland.

RESPONSE: DEQ had already been made aware of the potential of other wetlands on the site and has reviewed the submitted photographs. A delineation of wetlands and streams on the site was confirmed by the Corps of Engineers by letters of August 22, 2006, April 23, 2007 and May 4, 2007 and the permitted impacts are based on the location of the landfill disposal area (footprint) and facility

boundary with respect to those confirmed wetland and stream areas. Wetlands on the site that are outside of the facility boundary are not considered impacted according to state law and regulation.

COMMENT 3: If the facility proposes to expand in the future, such expansion is likely to impact additional wetlands on the balance of the applicant's property and so it is possible that the applicant avoided the bar to landfill development found at Virginia Code § 10.1-1408.5 for wetlands impacts of two or more acres. If the permit is issued, it should prohibit impact to additional wetland resources so that this applicant has only one bite at the wetland apple instead of many. To achieve this limitation, the permit file must accurately document all of the wetlands on the entire property owned by the applicant.

RESPONSE: Based on the current law, DEQ would not allow the landfill to expand in a manner that would result in an overall impact to two or more acres. The applicant has indicated that based on the current landfill disposal area and the daily tonnage being received, the landfill is expected to operate for about 25 - 30 years prior to closing. However, any future expansions would be predicated on existing laws and regulations (both solid waste and VWP) at the time of the request.

COMMENT 4: The combination of impacting headwater non-tidal wetlands and also eliminating surface water courses technically violates Virginia Law where impacts to wetlands that are located within 100 feet of surface waters are prohibited. Eliminating the streams should not be an avenue of avoiding the intent of the law.

RESPONSE: The prohibition of locating within 100 feet of a surface water is in reference to an expansion of a landfill, not a new landfill. Section 10.1-1408.5. B. of the Virginia Solid Waste Management Act states "The Director may issue a solid waste permit for the expansion of a municipal solid waste landfill located in a wetland only if the following conditions are met: (i) the proposed landfill site is at least 100 feet from any surface water body..."

In addition, Section 10.1-1408.5. D. of the Virginia Solid Waste Management Act states "This section shall not apply to landfills which impact less than two acres of nontidal wetlands." This landfill will result in impacts under two acres so the requirements of this section of the law are not applicable.

COMMENT 5: RAP asserts that the applicant has not evaluated all practicable alternatives to this landfill site. The applicant has restricted its analysis geographically, within 10 miles of the proposed site, without basis and the applicant must be made to evaluate alternatives that are not in Cumberland County and that are not in Virginia.

RESPONSE: The company looked at three different sites; however, from the standpoint of landfill siting, wetland impacts are only one of several applicable landfill siting criteria (e.g., recreational areas, wildlife areas, historic areas, existing land uses, increased traffic, etc.). In addition, other conditions of the site (e.g., hydrogeologic, seismic, faults, etc.) need to be evaluated. In this particular case, the site was approved by the locality and DEQ will address the appropriateness of this specific site both in terms of wetland impacts (through the VWP permit process) and other landfill siting criteria (through the solid waste permit process).

COMMENT 6: In regard to the wetlands mitigation proposed by the applicant, it is noteworthy that the applicant has proposed only the minimum required under the law and regulations. The impacts from obliterating miles of headwater-stream-courses in combination with non-tidal forested wetland acreage appears an extraordinary proposal, the losses resulting from which are severe. If ever there was a case for the DEQ requiring more of the applicant by way of mitigation this is the case. Requiring only the minimum mitigation under the law is wholly inadequate for a project with impacts that are admittedly severe.

RESPONSE: The approved conceptual mitigation package is consistent with the type and extent of wetlands and streams being impacted, and follows state law, regulation and guidance on compensatory mitigation.

COMMENT 7: The comparison of functional values associated with the mitigation is far too simplistic, especially for non-tidal forested wetlands adjacent to streams that will be obliterated.

RESPONSE: The approved conceptual mitigation package is consistent with the type and extent of wetlands and streams being impacted, and follows state law, regulation and guidance on compensatory mitigation.

COMMENT 8: The DEQ should reach out to the Virginia Department of Health in regard to ground water protection for the adjacent landowners and not just wait and see whether the Department of Health responds to the agency notice of the pending permit action. The record must include an assessment of potential impacts to the adjacent landowners' groundwater supplies as well as a plan for monitoring the adjacent landowners' groundwater supplies and the cost and means of replacing such supplies once impacted.

RESPONSE: We agree that ground water protection is an important issue; however, by law it is considered as part of the solid waste permit, and the application for this permit is still under review. The solid waste permit will require a ground water monitoring system and monitoring plan which is intended to detect impacts from the landfill, if any. Upon public notice of the draft solid waste permit, the VDH may have comments relative to it. As part of standard review practices for VWP projects, the VDH was provided a comment period. They did not raise any concerns relative to the VWP permit.

COMMENT 9: RAP objects to the issuance of the proposed VWP permit on the basis that the solid waste management plan and the amendment proposed for the purpose of incorporating the proposed landfill have not been developed with the public participation expressly required by agency regulations. The landfill permit itself cannot be issued without the adoption of a lawful solid waste management plan, and by analogy neither should the pending VWP permit for the landfill be granted until such time as the citizens of Cumberland County are allowed to participate in solid waste management planning as prescribed by agency regulation at 9VAC20-130-130 and 9VAC20-130-175. The proposed amendments to these regulations further document the intent of the agency to exclude the general public from having a voice in determining the future and quality of life in their communities and are in no way a shield from the effect of the current regulations.

RESPONSE: The issuance of a VWP permit for a landfill is not tied to a solid waste management plan (SWMP). However, the SWMP (for Prince Edward and Cumberland counties) was, in fact, modified to address the new landfill with opportunity for public input.

The local government agreed to the siting of this proposed landfill within Cumberland County and the planning unit submitted the amended SWMP plan to include the proposed landfill. The information provided to DEQ by the planning unit indicates that the amendment to the SWMP, which included information on the proposed landfill, was available for public review starting in mid-December 2006 and a public hearing was held by the County Board of Supervisors on January 3, 2007. The record also indicates that comments were received from citizens during the public hearing. The citizens may be able to work with the local government to ensure that the Host Community Agreement addresses their concerns and is in the best interests of the County's residents. The Department is currently processing the solid waste permit application to ensure that it meets all of Virginia's regulatory and technical requirements for protection of human health and the environment. The solid waste permit will also require public participation.

COMMENT 10: The agency must consider the comments of Cumberland County's own consultant in its evaluation of the pending landfill permit application. The County's own engineer identified multiple issues of concern in its review of the pending Virginia Department of Environmental Quality landfill permit application. The issues include: inadequate and highly questionable geologic assessment including concerns of fractured geology that potentially poses a risk to ground and surface water, on-site observations that indicate that the floodplain analysis is inadequate and cautioning against the development of appurtenant structures including storm water and waste handling units in a visually obvious floodplain, and wholly inadequate assessment of depth-to-groundwater as conducted only at the most dry time of year. These are significant issues for which more study and public review and comment is warranted, and which must be addressed before an adequate assessment of impacts to wetlands can be performed. Should the County's consultant express any additional health, safety, and environmental impact concerns in regard to the VWP permit at issue here, RAP hereby adopts such concerns by reference.

RESPONSE: The issue of siting a landfill is addressed through the solid waste permit process. The Virginia Solid Waste Management Act requires that, based on the location, a number of items be addressed (e.g., recreational areas, wildlife areas, historic areas, existing land uses, increased traffic, etc.). In addition, other conditions of the site (e.g., hydrogeologic, seismic, faults, etc.) are also evaluated. Finally, the Act requires that any new landfill be located outside the 100-year flood plain.

OTHER GENERAL COMMENTS: General comments were received that requested protection of wetlands and the environment, protection of people by using the laws and regulations, and protection of quality of life. The above are a function of DEQ's wetlands laws and regulations as well as the solid waste laws and regulations.

No other comments specific to the requirements of the draft VWP permit were received. Other general comments were related to the following:

- a. wanting a public hearing – This was typically a request with no specific reasons. The hearing was granted.
- b. general objection to landfill
- c. deny permit
- d. general approval of landfill
- e. decreasing property values – This would be an issue for the locality.

There were comments received that, with the exception of the first one, will be addressed through the solid waste permit process which falls under the purview of the Waste Board regulations. The permitting process for a solid waste permit is a two-part process (Parts A and B). The Part A application addresses siting (e.g., recreational areas, wildlife areas, historic areas, existing land uses, increased traffic, hydrogeologic conditions, seismic conditions, faults, etc.). The Part B application, which is submitted after approval of the siting, addresses the landfill design, construction, operation, closure and post-closure. During the Part B process, the draft permit is taken through the public participation process which includes a public hearing. The solid waste regulations also require that the solid waste management plan be up-to-date.

- a. lack of public participation on the solid waste management plan – This is part of the solid waste program. The update of the solid waste management plan is a separate process outside the permit process. The plan went through public participation and a public hearing was held by the County Board of Supervisors. The amended solid waste management plan was approved on September 28, 2007.
- b. protection of ground water – This is addressed by the Part B application of the solid waste permit process. The permit will require a ground water monitoring plan.

- c. protection of air quality – This is addressed through the operations, which is a Part B application consideration. In addition, the landfill will require an air permit to be issued to address emissions from the unit.
- d. traffic problems – This is addressed by the Part A application of the solid waste permit process. VDOT completes a traffic study and provides any needed requirements.

COMMENTS FROM PUBLIC HEARING AND RESPONSES: Based on the number of comments received during the public notice period, a notice of public hearing was published in The Farmville Herald. The public hearing for the proposed issuance of VWP Permit Number 07-1108 was held on November 5, 2007, at 7:00 p.m., in the Cumberland County Elementary School. Mr. John Thompson served as the hearing officer for the public hearing. During the public hearing 25 people spoke with no written comments submitted. Of the 25, eight (8) spoke out against the landfill and 17 spoke in favor of it.

The comments received from the eight (8) that were opposed to the landfill were as follows:

a. Mr. Dennis Pritchertt felt that the siting of the landfill was done behind closed doors by the locality.

RESPONSE: This issue cannot be addressed by the Virginia Water Protection Permit (VWPP) Regulation (9 VAC 25-210-10 et seq.). The approval to locate a landfill is a decision by the local government. The technical merits of the approved location for a landfill will be addressed through the solid waste permit process which falls under the purview of the Waste Board regulations.

b. Both Mr. Dennis Pritchertt and Ms. Janet Habel expressed concerns over increased truck traffic (including accidents and breakdowns) on the roads along with trash and leachate getting on the roads from the trash trucks.

RESPONSE: Once again, this issue cannot be addressed by the VWPP Regulation. Increased truck traffic is addressed in the Part A application review for the solid waste permit. Blowing trash (from landfills and trucks) and leachate management is addressed in the Part B application review for the solid waste permit. These items fall under the purview of the Waste Board regulations.

c. Mr. Dennis Pritchertt and Ms. Janet Habel wanted to know who would be responsible for the leaking landfill and the associated clean-up costs (ground water) and any surface contamination.

RESPONSE: This leaking landfill issue is addressed by the solid waste permit which falls under the Waste Board regulations. First, landfills are required to have ground water monitoring systems to detect contamination of the ground water prior to it leaving the facility boundary. Second, these regulations require financial assurance to be posted to address this issue. Financial assurance is currently required for the 30-years post-closure period and longer, if that period is extended by the DEQ Director. In addition, if surface water contamination is occurring via runoff, it can be addressed by the State Water Control Law and DEQ's VPDES regulation.

d. Mr. Dennis Pritchertt, Ms. Janet Habel, Mr. Ronald E. Plumkey and Mr. Robert Coxon expressed concern over the potential for ground water contamination and the need for potable water, which, for the local residents, is derived from ground water. The liner will eventually leak.

RESPONSE: This issue is addressed by the solid waste permit which falls under the Waste Board regulations. The permit requires ground water monitoring throughout the operational life and post-closure period. If the ground water becomes contaminated, the regulations require that the necessary remediation is implemented to protect human health and the environment.

e. Mr. Dennis Pritchertt noted the existence of a nearby landfill (Maplewood in Amelia County) with 85 years capacity remaining.

RESPONSE: This need for a landfill is addressed by the Virginia Solid Waste Management Act which provides two methods of determining the need for a new landfill within Virginia. They utilized one of the requirements within the Act and demonstrated the need.

f. Mr. Ronald E. Plumkey and Ms. Janet Habel noted that any “disaster” (e.g., heavy rainfall runoff) could result in problems with downstream water supplies, including Richmond and Henrico, and could result in disease or other health issues. The storm water ponds will be inadequate. RESPONSE: This issue is addressed by (1) the solid waste permit which falls under the Waste Board regulations and, (2) the VPDES general permit for storm water associated with an industrial activity, under which the owner/operator will need to apply for coverage. The solid waste permit requires collection of runoff from the active face of the landfill, which is handled through the landfill’s leachate collection system. The VPDES general permit requires the implementation of best management practices for storm water runoff and storm water monitoring. In severe events, there would likely be a number of other factors which would be of concern to water quality in streams and rivers.

Report On Significant Noncompliance: Two permittees were reported to EPA on the Quarterly Noncompliance Report (QNCR) as being in significant noncompliance (SNC) for the quarter ending June 30, 2007. The permittees, their facilities and the reported instances of noncompliance are as follows:

Permittee/Facility: Arlington County, Arlington County Water Pollution Control Facility

Type of Noncompliance: Failure to Meet Permit Effluent Limit (Ammonia Nitrogen, March 2007), Failure to Submit Required Data (Sampling Results for Total Cyanide and Total Selenium, June 2007)

City/County: Arlington County, Virginia

Receiving Water: Four Mile Run

Impaired Water: Four Mile Run is listed on the 305(b) report as impaired due to fecal coliform and *e coli* contamination as well as the presence of PCBs in fish tissue. The sources of the impairments are unknown.

River Basin: Potomac and Shenandoah River Basin

Dates of Noncompliance: March and June 2007

Requirements Contained In: VPDES Permit

DEQ Region: Northern Virginia Regional Office

Due to the isolated nature of the ammonia violation, the fact that the facility is currently being upgraded to improve wastewater treatment and that the reporting violations were the result of operator error, which has been addressed, the staff of the Northern Virginia Regional Office have determined that enforcement action is not warranted in this matter.

Permittee/Facility: City of Fredericksburg, Fredericksburg Wastewater Treatment Plant

Type of Noncompliance: Failure to Meet Permit Effluent Limits (Total Suspended Solids, Total Kjeldahl Nitrogen)

City/County: Fredericksburg, Virginia

Receiving Water: Rappahannock River

Impaired Water: The Rappahannock River is listed on the 305(b) report as impaired due to fecal coliform, *e coli* and chloride contamination as well as the presence of PCBs in fish tissue and the absence of sufficient levels of dissolved oxygen to support aquatic life. The sources of the *e coli* and PCB contamination are unknown. The presence of excess amounts of fecal coliform has been attributed, in part, to municipal point source discharges. With respect to the issue of dissolved oxygen, possible sources of impairment are airborne deposition, industrial point sources, municipal point sources, out of state sources, agricultural activities and stormwater runoff. The presence of excess amounts of chloride has been attributed to natural conditions.

River Basin: Rappahannock River Basin

Dates of Noncompliance: February, March, April, May and June 2007

Requirements Contained In: VPDES Permit

DEQ Region: Northern Virginia Regional Office

A Consent Special Order, containing a schedule of corrective action and a penalty which addresses the referenced violations has been executed by the City and is currently at public notice. Staff of the Northern Virginia Regional Office anticipate that the order will be presented to the Board at its December meeting.

The City of Fredericksburg - Consent Special Order w/ Civil Charges: The Fredericksburg WWTP (“facility”) is owned and operated by the City of Fredericksburg (“City”). The facility is the subject of VPDES Permit VA0025127, which authorizes discharges to the Rappahannock River. The City was referred to enforcement on May 11, 2007 for Permit and Regulatory violations including exceedances of TKN, Ammonia, Total Suspended Solids (TSS), Carbonaceous Biochemical Oxygen Demand (CBOD₅), and Phosphorus, failing to meet minimum limits for Total Residual Chlorine (TRC), general operational and maintenance issues, failing to meet Reliability Class I requirements, failing to ensure proper QA/QC protocols were followed during sampling and analytical procedures, failing to properly maintain equipment, and five overflow events which occurred at the influent pump station. DEQ sent Warning Letters (WL) and Notices of Violations (NOV) on February 9, April 10, May 10, June 8, 2007 and July 12, 2007 for the previously noted violations. The City has responded to the February, April, and May Warning Letters and Notices of Violations in letters dated March 2 and May 18, 2007. Within these letters it outlined the steps it has taken to ensure compliance including amending its Standard Operating Procedures (SOP) to reflect the correct measures for complying with QC procedures and ways it is working to address the solids inventory in the facility’s system to reduce TSS and improve treatment and effluent quality. Additionally, the City explained that the March 6, 2007 overflow was caused by a power failure and the March 16, 2007 overflow was caused by high flows overwhelming the influent pumps, which the City is working to repair. DEQ met with the City on April 13, 2007. The City presented improvements made at the facility in response to DEQ inspection reports. The City also sought the assistance of Spotsylvania County to help with the operation and maintenance of the plant as well as the necessary lab and analytical work. DEQ conducted a site visit on June 5, 2007 at which time it documented that the solids within Primary clarifier 2 had gone septic, and the influent pumps, digesters and chlorination system were inoperable. The facility has a total of four influent pumps. One pump of the two operable pumps is dedicated to conveying influent to FMC, while the other is to service the facility. Should the pump that services the facility fail, the facility has no back-up. This issue contributed to the overflow event that occurred on May 13, 2007, the other contributing factor being operator error from failing to follow documented procedures and increasing the pump’s speed prior to a known wet weather event that was about to occur. DEQ conducted a site visit on June 25, 2007 and that the WWTP staff was working to remove the solids remaining within Primary Clarifier 2, the new chlorine vacuum system was functional and general housekeeping issues were improved from the June 5, 2007 visit. DEQ conducted a site visit of the facility on July 16, 2007 in response to odor complaints received. While there, DEQ staff found that the primary clarifiers were still being bypassed, which according to DEQ inspections has been occurring since late May, and flow was being directed to the oxidation ditch which was very dark in color. The secondary clarifiers had a sludge blanket around 2 ½ feet deep and the chlorine contact tank had a sludge blanket approximately 4 feet deep. The effluent color was a dark tan and it was foaming at the end of the step-aeration before it entered the discharge pipe that leads to the river. While taking samples at that point, DEQ staff noted an unusually dark color in the river. Upon further inspection, they found a visible plume in the river where the underground outfall pipe discharges. The City informed DEQ later that day that the influent pump that is dedicated to pumping flow to FMC had broken down and that flow was instead

directed into the plant. The increased flow and the high level of solids within the plant resulted in partially treated sewage being discharged into the river. At the request of DEQ, the City contacted the local health department and Stafford County officials. As a result of the discharge into the Rappahannock River, Stafford County closed nearby beaches for fear of any health risks the discharge may have caused. The City worked to have the broken pump repaired, which was completed and put back into service on July 19, 2007. Once the FMC pump was functioning, the plume in the river subsided. In order to provide back up to the FMC pump, the City brought in a new portable pump. DEQ staff conducted an inspection on July 23, 2007 and found that the discharge from the facility was again causing a visible plume in the river despite the City's being able to pump flow to FMC. DEQ sent a NOV to the City on July 24, 2007 citing its failure to meet Reliability Class I requirements at the facility by not having the required number of influent pumps operational. Due to the seriousness of this situation, DEQ staff began inspecting the facility on a daily basis to see the conditions first hand. Additionally, DEQ requested of the City, and the City agreed, to provide daily updates regarding any changes at the plant. DEQ received the City's monthly Discharge and Monitoring Report (DMR) for the month of July on August 13, 2007. As a result of the operational and maintenance issues that occurred in July, the City experienced permit limit violations for TSS, Phosphorus, CBOD, TKN, and minimum limits for TRC. The Order requires the City to: (1) complete an assessment of the WWTP; (2) evaluate its solids treatment methods including submitting a monthly report on the current solids treatment method; (3) complete a plan to address Reliability Class requirements; (4) calculate a mass balance for solids; and (5) provide DEQ with a report discussing its I&I program. Civil Charge and SEP: \$96,000 A Supplemental Environmental Project (SEP) consisting of donating funds to the Tri-County/City Soil and Water Conservation District (SWCD) will offset 90% of the recommended civil charge.

Oak Grove Mennonite Church - Consent Special Order w/ Civil Charges: Oak Grove Mennonite Church owns and operates the Mt. View Nursing Home ("Mt. View") and the associated Sewage Treatment Plant ("STP") located in Madison County, Virginia. The .0125 MGD STP serves a 40-bed nursing home and a few other buildings on the property for a total population of approximately 95 people. DEQ reissued Mt. View's permit effective June 30, 2004. Mt. View's current referral to enforcement is to resolve Permit effluent violations including: TSS exceedence in December 2006; Residual Chlorine exceedences in July and December 2006; Ammonia exceedence in November 2006; and E. Coli exceedences in July and August 2006; and for failing to take corrective action upon receiving notification from DEQ staff of an evident violation stemming from the presence of a high chlorine residual in the outfall. In addition, solids were noted in the receiving stream during a DEQ inspection on April 2, 2007. DEQ advised Mt. View of these violations in Warning Letters (WLs) sent on: September 8, 2006 (WL No. W2006-07-N-1014); October 5, 2006 (WL No. W2007-01-N-1012); January 10, 2007 (WL No. W2007-01-N-1019); and a Notice of Violation (NOV) sent on February 12, 2007 (NOV No. W2007-02-N-0009). DEQ On March 19, 2007, DEQ staff met with Mt. View staff to discuss these violations and ways to achieve compliance with the permit. Both DEQ and Mt. View agreed that having untrained operators is a large cause of many of the violations. The Consent Order requires Oak Grove to: (1) employ or contract a Class III licensed operator to be onsite at least twice per week; (2) increase chlorine sampling; (3) develop and implement a training program for onsite operators; and (5) submit an addendum to the O&M including additional process control testing and plant troubleshooting. Civil Charge: \$2500.

Hy-Mark Cylinders, Inc. - Consent Special Order with a civil charge: Hy-Mark Cylinders, Inc. ("Hy-Mark") manufactures aluminum cylinders used for the medical field. Storm water discharges from the facility are subject to the Permit through Registration No. VAR051236, which was effective July 1, 2004, and expires June 30, 2009. The Permit authorizes Hy-Mark to discharge to surface

waters storm water associated with industrial activity under conditions outlined in the Permit and requires it to monitor the discharges from its two permitted outfalls for the presence of copper. As part of the Permit, Hy-Mark is required to provide and comply with a Storm Water Pollution Prevention Plan (“SWP3”) for the Hy-Mark facility. On June 20, 2007 DEQ compliance staff conducted an inspection of the facility that revealed the following: overall poor housekeeping and maintenance practices; failure to conduct routine site inspections, comprehensive site compliance evaluations, required training, and benchmark monitoring of storm water discharges for three years; and failure to comply with SWP3 requirements, i.e. failure to provide the non-storm water certification, an updated site map, and complete reports of visual examinations of storm water quality. On July 26, 2007, DEQ issued a Notice of Violation (“NOV”) advising Hy-Mark of the deficiencies revealed during the facility inspection conducted on June 20, 2007. On July 20, 2007, July 26, 2007, August 15, 2007, and September 13, 2007, Hy-Mark submitted responses to DEQ regarding the NOV indicating that it had remedied all the housekeeping and maintenance deficiencies observed during the June 20, 2007 compliance inspection and intended to comply with all Permit requirements including providing for “third-party” compliance inspections, sampling, employee training, and annual comprehensive site compliance evaluations. Hy-Mark also forwarded to DEQ an updated site map and a non-storm water certification. The Order requires Hy-Mark to pay a civil charge within 30 days of the effective date of the Order. Hy-Mark has addressed all Permit and SWP3 deficiencies noted above. To ensure compliance with the Permit and the SWP3, the Order also requires Hy-Mark to submit documentation of routine inspections and a certification of employee training. The Order was executed on October 5, 2007. Civil Charge: \$3,900.

Nelson County Sewer Authority - Nelson County Regional STP and Wintergreen Mountain STP
- Consent Special Order with a civil charge:

Nelson County Service Authority – Regional STP: Nelson County Service Authority (“NCSA”) owns and operates the Regional STP which is located 1.5 miles west of the intersection of US 29 and SR 56 near the Town of Colleen in Nelson County and serves approximately 100 customers. The Regional STP is the subject of VPDES Permit VA0089729 which allows it to discharge 0.22 MGD of treated wastewater to the Black Creek in the James (Upper) River Basin. NCSA developed a significant history of noncompliance for failures to submit Permit required reports for the Regional STP in a timely manner. DEQ issued NOV’s on May 4, 2005, July 19, 2005, October 17, 2005, May 7, 2007, and June 8, 2007 to NCSA for failures to submit the annual Sludge Reports for the Regional STP, which were due annually on February 19. On May 26, 2005, July 21, 2005, September 28, 2005, DEQ met with NCSA to discuss the violations and provide technical assistance in filling out the required reports and discuss continuing submittal of reports that were deemed incomplete and unacceptable after DEQ review. DEQ issued a NOV on December 15, 2006, to NCSA for:

- a. CBOD effluent violations in October 2006;
- b. failure to respond to an April 14, 2006, technical and laboratory inspection report;
- c. failure to submit the O&M Manual due June 16, 2006; and,
- d. failure to submit the SMP by June 16, 2006.

Nelson County Service Authority – Wintergreen STP: NCSA owns and operates the Wintergreen STP which is located at 143 Headwaters Lane in Nelson County and serves the resort community with approximately 2000 sewer customers. The Wintergreen STP is the subject of VPDES Permit VA0031011, which allows it to discharge 0.30 MGD of treated wastewater to Pond Hollow in the James (Middle) River Basin. DEQ issued a NOV on May 10, 2005, to NCSA for:

- a. total recoverable copper effluent violations in February 2005;
 - b. failure to report E. coli monitoring data for March 2005;
 - c. failure to submit its 2nd (2004) annual Sludge Report, due February 19, 2005;
- and

- d. failure to submit its 1/5-year Water Quality Standards Monitoring Report for the Wintergreen STP, which was due February 10, 2005.

DEQ issued a NOV on July 21, 2005, to NCSA for:

- a. failure to timely submit its 2nd (2004) annual Sludge Report, due February 19, 2005;
- b. failure to submit its 1/5-year Water Quality Standards Monitoring Report for the Wintergreen STP, which was due February 10, 2005; and
- c. submittal of the May 2005 DMR without an original signature.

On July 21, 2005, DEQ met with NCSA to discuss the ongoing violations at the STP. NCSA proposed that measuring total dissolved copper and zinc levels would yield more realistic results than the current permit-mandated total recoverable measurement levels. DEQ used enforcement discretion in allowing NCSA an opportunity to collect measurement data comparing total recoverable data with total dissolved data for both copper and zinc for several months before considering formal enforcement options. During the July 21, 2005, meeting DEQ reviewed the partially completed Sludge Reports for the Wintergreen STP and provided additional technical assistance. DEQ issued NOVs on August 15, 2005, and September 14, 2005, to NCSA for failure to submit its 1/5-year Water Quality Standards Monitoring Report for the Wintergreen STP. On September 28, 2005, DEQ again met with NCSA regarding submittals of the 2nd (2004) annual Sludge Report and the 1/5-year Water Quality Standards Report for the Wintergreen STP facility. While the 1/5-year Report was deemed complete, staff subsequently determined that the Sludge Report was still incomplete. DEQ issued a NOV on October 17, 2005, to NCSA for total recoverable zinc and total recoverable copper effluent limitation violations in August 2005 and failure to submit a complete 2004 PC Sludge Annual Report. DEQ issued NOVs on November 9, 2005 and December 21, 2005, to NCSA for total recoverable copper effluent limitation violations in September and October 2005 respectively. On January 20, 2006, DEQ met with NCSA to discuss Wintergreen's ongoing violations and corrective measures to prevent future violations. Prior to this meeting, NCSA had submitted a report comparing total recoverable data for metals (zinc, nickel, and copper) with dissolved effluent measurements gathered during 2005. DEQ concluded from its analysis of NCSA's metal data comparisons that measuring dissolved metals levels did not appear to be more accurate than measuring total recoverable metals. Following the January 2006 meeting with DEQ, NCSA attempted to control the copper and zinc limits exceedances by altering the effluent pH through chemical addition. However, the Wintergreen DMRs submitted subsequent to beginning the pH adjustment showed continued and chronic failure to meet permitted limits for copper in December 2005 and January, February, September, and October of 2006, and for zinc in December 2005 and March, April, June, July, August, and October of 2006. DEQ issued a NOV on June 9, 2006, to NCSA for land application violations including exceedances of the phosphate loading rates on a Field. DEQ issued NOVs on November 6, 2006, April 10, 2007, May 7, 2007 and June 8, 2007 to NCSA primarily for Total Copper effluent violations in September 2006, February 2007, March 2007 and April 2007, respectively. On June 28, 2007, DEQ again met with NCSA to discuss the continuing violations at both the Regional STP and the Wintergreen STP. At the June 28, 2007, meeting NCSA provided DEQ with outstanding reports and copies of the required O&M Manual and SMP. NCSA also provided a status of their corrective actions to address the ongoing copper and zinc effluent violations at the Wintergreen plant. Subsequent to the June 28, 2007, meeting NCSA provided DEQ with metals sampling data along with hardness data to determine if metals limitations could be either eliminated from the Wintergreen permit or dramatically relaxed. On July 16, 2007, NCSA submitted a permit modification request to remove the metals limitations from the Wintergreen permit and replace them with a hardness minimum limitation. The Permit modification is to go to Public Notice on August 16, 2007. This Permit modification obviates the need for significant plant upgrades with a schedule of compliance to meet metals effluent limitations. The proposed Order, signed by Nelson County Sewer Authority on October 10, 2007, would require Nelson County Sewer

Authority to submit outstanding reports and submit for review and approval an updated O&M Manual and Sludge Management Plan for the Wintergreen STP. Civil Charge: \$18,100.

Harrisonburg-Rockingham Regional Sewer Authority: On the morning of July 23, 2007, DEQ-VRO received a complaint call from a citizen reporting a fish kill in North River below the Harrisonburg-Rockingham Regional Sewer Authority (“HRRSA”) North River WWTF discharge outfall. Later that day, staff of VRO inspected North River and observed hundreds of dead fish as described by the citizen. VRO staff estimated that the fish kill zone extended to a point approximately one mile downstream of the North River WWTF outfall and that, based on the degree of fish tissue decomposition, the kill had occurred on July 19th or 20th. VRO staff suspected elevated chlorine levels in the facility discharge as the cause of the kill after observing bleached submerged aquatic vegetation below the facility outfall. On the afternoon of July 23, 2007, DEQ received a faxed report from the director of HRRSA describing the cause of the fish kill. In the report, HRRSA explained that at a point prior to the fish kill the facility had been experiencing unusual variations in chlorine residual levels. HRRSA further explained in the report that it suspected this variation was based on the long lag time between its chlorine injection point and residual testing location. On July 27, 2007, DEQ issued a NOV to HRRSA citing HRRSA for the above-referenced violations of State Water Control Law. In response, by letter dated July 31, 2007, HRRSA described a set of monitoring and operational modifications being implemented to preclude recurrence of the conditions which produced the fish kill. On August 14, 2007, representatives of DEQ and HRRSA met in an informal enforcement conference to discuss the issues surrounding the fish kill. The Order further addresses the prevention of recurrence of the violation. The proposed Order, signed by HRRSA on September 20, 2007 would require HRRSA to conduct increased dechlorination efficacy monitoring, provide enhanced staff training concerning chlorination and dechlorination, and to clear a line of sight pathway to the receiving stream. Civil Charge: \$18,200.

Mr. Lewis Kennett - Consent Special Order with a civil charge: Mr. Kennett built an impoundment structure and impoundment on his property in April 2003. The Department became aware of the impoundment structure and impoundment in late 2006 or early 2007. Department staff conducted an inspection of the property in January 2007 and determined that the impoundment structure and impoundment should have been permitted under the Virginia Water Protection Permit Program Regulation prior to construction. Department staff worked with Mr. Kennett and his consultant to determine the applicability of the Department’s regulations and the interplay of regulatory requirements from the Corps of Engineers and the Department of Conservation and Recreation (“DCR”). Mr. Kennett needed to defer his decision until DCR promulgated regulations in July 2007 so that he could determine their applicability to his property. Once promulgated, Mr. Kennett could make an informed decision when choosing his course of action. On July 2, 2007, the Department issued Notice of Violation W2007-07-W-002 to Mr. Kennett for construction without a permit. Mr. Kennett notified the Department on July 30, 2007 that he intended to remove the impoundment structure and drain the impoundment. Mr. Kennett also agreed to restore the impacted stream. The Consent Special Order requires Mr. Kennett to pay a civil penalty for the violation noted in the Notice of Violation. The Consent Special Order requires Mr. Kennett to apply for the necessary permits from the Department of Conservation and Recreation and the Department of Environmental Quality, remove the impoundment structure and impoundment, and restore the impacted stream. Civil Charge: \$1,820.

Russell County Development Group, LLC - Consent Special Order with a civil charge: Russell County Development Group, LLC (the “Company”) owns property located on Technology Park Drive in Lebanon, in Russell County. The Company is in the process of building a residential development, Gardenside Village Residential Development, to provide housing for employees anticipated for new

businesses being built in Lebanon. On June 27, 2006, DEQ staff members met on site with representatives of the Company and Annette Poore of the U. S. Army Corp of Engineers. The purpose of this pre-application meeting was to discuss permitting requirements for the proposed Gardenside Village Residential Development. During this visit, DEQ staff noted that development of the site had begun. Approximately 150 linear feet of an unnamed tributary to Little Cedar Creek had been directed into a 24-inch culvert. The existing stream bed had been filled with excess spoil. DEQ staff advised the Company that these impacts to state waters were unauthorized and suggested that all further construction activities in state waters cease until a Virginia Water Protection Permit ("VWPP") could be obtained. On January 22, 2007, DEQ staff members again met with representatives of the Company. The meeting was held to discuss deficiencies in the Joint Permit Application ("JPA") received January 16, 2007, more than six months after the initial project meeting. The JPA was for a VWP Permit for the existing and proposed stream and wetland impacts resulting from development of the site in preparation for construction. Following the meeting, a site visit was conducted. DEQ staff members observed that in addition to the 150 linear feet of stream that had been piped prior to the June, 2006 meeting, an additional 260 linear feet of the stream had been piped. Also, approximately 0.09 acre of wetlands had been filled in order to construct a roadway that is identified in the JPA as Club Court. These additional impacts were also unauthorized. On January 29, 2007, an NOV was issued to the Company for the alleged violations. DEQ and Company officials met on February 12, 2007 to resolve the apparent violations. The wetland delineation for the site was confirmed by the USACOE in October, 2006. A revised application and conceptual mitigation plan were received by DEQ on February 28, 2007. By letter dated March 9, 2007, DEQ deemed the application complete and accepted the conceptual mitigation plan. VWP General Permit Authorization No. WP4-07-0017 was issued April 12, 2007. During a site visit May 2, 2007 to review the final mitigation plan, it was determined that impacts identified as temporary in the mitigation plan and plan sheets were, in fact, permanent in nature, and that other temporary impacts had occurred. Total wetland impacts increased from 0.69 acre to 1.28 acres. Utilizing the Unified Stream Methodology ("USM"), 377 linear feet of stream will require enhancement. Final wetland mitigation is in the form of an "in-lieu fee" for the total 1.28 acres of impact. Payment of \$83,200.00, the fee as determined by the USACOE, was received and accepted by The Nature Conservancy on June 6, 2007. Restoration will be required for all temporary impacts. At the Company's request, DEQ staff and Company personnel met on July 23, 2007 to discuss the draft consent order which had been sent to the Company. Civil Charge: \$23,400.

I.A.S. of VA, Inc. - Consent Special Order with Civil Charge: BP #1 is a retail gas station and convenience store located on Laburnum Avenue in Richmond. It is owned and operated by I.A.S. of VA, Inc. (IAS). On May 22, 2006, DEQ Piedmont Regional Office staff conducted a formal inspection of the facility. The inspector found that the USTs and piping were not being properly monitored and assessed to accurately maintain and operate the corrosion protection system; mandatory records regarding corrosion protection and release protection were not available and financial responsibility documentation was not available. These deficiencies were documented in a Request for Corrective Action that was faxed and mailed to IAS on May 23, 2006. Based on findings during the inspection, staff reported a suspected release at this facility. The release was subsequently confirmed and remediation is in process at the site. Tank 3, the presumed source of the release, has been permanently closed in the ground. On August 23, 2006, the Department issued a Warning Letter to IAS for the unresolved deficiencies cited during the inspection. After receiving no response, the Department issued a Notice of Violation on December 12, 2006. The President of IAS has provided insurance documentation demonstrating Financial Responsibility and has submitted line tightness and leak detector functionality tests for the piping, evidence that an Automatic Tank Gauge was properly installed for monthly monitoring of the tanks and one set of Automatic Tank Gauge test results for the tanks. The remaining work will be completed pursuant to the schedule contained in the Appendix to

the Order. The Order requires that IAS submit release detection records and either commence corrosion protection pursuant to the guidelines contained in the Appendix or permanently close the USTs. Civil Charge: \$11,800.

FY 2008 Virginia Clean Water Revolving Loan Fund Authorizations: Title IV of the Clean Water Act requires the yearly submission of a Project Priority List and an Intended Use Plan in conjunction with Virginia’s Clean Water Revolving Loan Fund Capitalization Grant application. Section 62.1-229 of Chapter 22, Code of Virginia, authorizes the Board to establish to whom loans are made, the loan amounts, and repayment terms. The next step in this yearly process is for the Board to set the loan terms and authorize the execution of the loan agreements. At its September, 2007 meeting, the Board targeted 19 projects totaling \$223,232,181 in loan assistance from available and anticipated FY 2008 resources and authorized the staff to present the proposed funding list for public comment. A public meeting was convened on November 8th. Notices of the meeting were mailed to all loan applicants and advertised in six newspapers across the state. All comments received in response to the notice were in support of the projects targeted for assistance. The staff has conducted initial meetings with the FY 2008 targeted recipients and has finalized the associated user charge impact analyses in accordance with the Board’s guidelines. Based on discussions at these meetings, three changes have been made to the funding list. The Town of Luray’s request (that was previously deferred) has been added based on their accelerated schedule to move forward on their nutrient removal project. The Fauquier County Water and Sanitation Authority’s (FCWSA) loan request for their Marshall STP upgrade has been reduced from \$1,258,390 to \$694,320 based on anticipated WQIF grant funds. Also with regard to Fauquier, it was discovered that the Authority had submitted a separate loan request for a nutrient upgrade to their Remington STP (\$2,175,845), but that they had inadvertently mixed it in with the financial attachments to their Marshall application and it was, therefore, not included on the original funding list. The FCWSA/Remington application was actually received by the original deadline, is a high priority project, and it is recommended that it be added to this year’s funding list. This brings the 2008 funding list up to 21 projects being recommended for authorization at a total amount of \$227,043,051. In accordance with the residential user charge impact analysis conducted for each project, the loan terms listed below are submitted for Board consideration. Once approved, this information and the approved interest rates will be forwarded to VRA for concurrence and recommendation. VRA will prepare the credit summaries and financial capability analyses on the recipients authorized for FY 2008 funding, looking at their repayment capability and individual loan security requirements.

The program sets its VCWRLF ceiling rate on wastewater loans at 1% below the current municipal bond market rate. Since the program will have to leverage this year and sell bonds to fund these projects, we are recommending that the ceiling rate for the FY 2008 wastewater projects not be set until those bonds are sold in the spring of 2008. The ceiling rate will then be established at 1% below the true interest rate on those bonds.

FY 2008 Proposed Interest Rates and Loan Authorizations

	Locality	Loan Amount	Rates & Loan Terms
1	City of Lynchburg	\$12,350,000	0%, 30 years
2	Harrisonburg-Rockingham RSA	\$20,000,000	C, 20 years
3	Town of Colonial Beach	\$2,970,000	0%, 20 years
4	City of Richmond	\$13,000,000	0%, 20 years
5	City of Richmond	\$9,000,000	0%, 20 years
6	Western Virginia Water Authority	\$1,969,000	C, 20 years

7	Alleghany County	\$7,608,595	0%, 20 years
8	Maury Service Authority	\$6,075,000	0%, 20 years
9	HRSD/York STP	\$25,000,000	C, 20 years
10	Prince William County SA	\$35,000,000	C, 20 years
11	Alexandria Sanitation Authority	\$15,000,000	C, 20 years
12	Town of Broadway	\$3,433,536	C, 20 years
13	Arlington County	\$50,000,000	C, 20 years
14	Stafford County/Little Falls Run	\$5,315,755	C, 20 years
15	Tazewell County PSA	\$8,000,000	0%, 30 years
16	Town of Big Stone Gap	\$3,051,000	0%, 20 years
17	Fauquier County WSA/Marshall	\$694,320	C, 20 years
18	Fauquier County/Remington	\$2,175,845	C, 20 years
19	City of Newport News	\$3,200,000	C, 20 years
20	Town of Luray	\$2,200,000	0%, 20 years
21	Cafferty/ARC Property	\$1,000,000	3%, 10 years
	Total Request	\$ 227,043,051	C= Ceiling Rate
