
Summary Final Report

Virginia Stormwater Program Review, September 2011

U.S. Environmental Protection Agency
Region III
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Special Note

Staff and contractors of Region III of the U.S. Environmental Protection Agency (EPA) performed a review of Virginia's construction and municipal stormwater management programs, as discussed in this document, in late September 2011. At that time, Virginia's Department of Conservation and Recreation (VDCR), the agency responsible for implementing the state's construction and municipal stormwater programs, was in a period of transition. Several senior administrative personnel had recently retired, and the program was in the process of making reorganizational changes in response to these and other factors.

VDCR staff recommended that EPA Region III perform its review of Virginia's construction and municipal stormwater programs after the reorganizational changes were complete and staff vacancies were filled to gain a better understanding of the programs' operations. EPA, however, opted to perform its review in September 2011 for several reasons: EPA viewed the timing as an opportunity to assist and perhaps inform VDCR in its reorganization; and given the critical timing with respect to Phase II Watershed Implementation Development, reissuance of the Phase I Municipal Separate Storm Sewer System (MS4) permits, and implementation of the Commonwealth's new stormwater regulations, delaying the review seemed impractical. EPA Region III has oversight responsibility for Virginia's construction and stormwater management programs under the federal Clean Water Act.

VDCR has indicated to EPA Region III subsequent to the September 2011 review that they have their new program management structure/team in place, and they have begun rolling out the revised construction-related regulations even though those regulations are not required to be fully implemented until 2014. VDCR also reports that coordination between VDCR's central office and regional offices is a focus of the new management.

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1. Executive Summary

This report includes observations and several recommendations to enhance the operations of Virginia's construction stormwater program and municipal separate storm sewer system (MS4) program. The review team found several positive attributes about the programs. Staff are committed and knowledgeable, and regional office (RO) staff members have developed positive working relationships with staff of local erosion and sediment control programs. The central office (CO) maintains an up-to-date record of the universe of facilities being regulated under the construction and MS4 programs. The CO has a written enforcement policy and provides training related to the enforcement policy on at least an annual basis. The CO and ROs collectively track compliance and enforcement activities under the construction program, and the CO reviews all annual reports received under the MS4 program and follows up on those not received on a timely basis.

The review team also found a number of limitations associated with Virginia's programs. The most significant of these are the need to eliminate the Phase I MS4 permit backlog, improved compliance policies for the MS4 program, funding and staffing issues, the need to prepare for the implementation of the new provisions of the state stormwater regulations, and the need for post-construction best management practice (BMP) management and training. Tracking and prioritization mechanisms for implementing, managing, and enforcing the construction stormwater program are inadequate in the CO and ROs due to funding and staffing limitations. The review team stresses the need for enforceable Phase I MS4 permits and a Phase II general MS4 permit. Protocols for consistent management of the MS4 program, including tracking and enforcement, are generally lacking in the CO. The state's current development of a web-based DCR e-Permitting System will help address some of the aforementioned issues.

2. Introduction

With assistance from PG Environmental, LLC (PG), the U.S. Environmental Protection Agency (EPA) Region III office conducted a review of the Virginia Department of Conservation and Recreation's (VDNR) construction and municipal stormwater programs on September 19–20, 2011, and September 27–29, 2011. EPA and VDNR also met in a follow-up meeting on December 9, 2011 for the purpose of clarifying findings and discussing follow-up actions. This summary report describes the observations generated by this program review.

2.1 Purpose of Effort

EPA conducts periodic reviews of state programs as part of its oversight responsibilities under the Clean Water Act (CWA). EPA also discusses program goals and objectives with authorized states as part of annual CWA section 106 grant negotiations.¹ Generally, EPA's program reviews have not included substantive discussions about stormwater. EPA Region III aims to integrate stormwater into the annual review process over time. This report describes the observations associated with the Virginia (VDNR) program review.

¹ EPA awards section 106 grants to CWA-authorized states on an annual basis (subject to congressional appropriations).

The intent of the review is to support development of a DCR-authored Management Plan to address notable short-comings in the program. That Plan is being released concurrently with this Final Report.

2.2 Background

Virginia is authorized to administer the CWA’s National Pollutant Discharge Elimination System (NPDES) program (33 U.S.C. § 1251 *et seq.*). Initially, the Virginia Department of Environmental Quality (VDEQ) administered the NPDES program, while the VDCR oversaw the state’s erosion and sediment (E&S) control program. The two departments were realigned in 2005. VDEQ is now responsible for wetlands, NPDES industrial facilities and wastewater treatment plants, and the Total Maximum Daily Load (TMDL) development program. VDCR is responsible for oversight of the local E&S control programs, stormwater management, NPDES construction and municipal stormwater control, nonpoint source control, nutrient management and elements of the Chesapeake Bay Preservation Act. EPA authorized the DCR to administer NPDES permits in January 2005.

The Virginia Stormwater Management Program (VSMP) is governed by the CWA and the Virginia Stormwater Management Act (§§ 10.1–603.1 *et seq.*) and implementing regulations (4 VAC 50-60-10 *et seq.*). VDCR is authorized to undertake enforcement actions under the VSMP program pursuant to Virginia Code §10.1-603.2:1.

The Virginia Erosion and Sediment Control Law and attendant regulations establish 19 minimum technical criteria (see sidebar) for certain land-disturbing activities greater than 10,000 square feet while VSMP regulations require permit coverage for construction activities one acre and greater.² In part, VDCR implements its stormwater control requirements through the *VSMP General Permit for Discharges of Stormwater from Construction Activities* (VAR 10). VDCR implements post-development stormwater requirements in conjunction with the VAR 10 permit. Recent regulatory efforts have modified the existing post-development design criteria found in the regulations; these modified criteria are to be implemented in coordination with the renewed VAR 10 permit.

VDCR’s Minimum Standards and Specifications for E&S Control

1. Soil Stabilization
2. Soil Stockpile Stabilization
3. Permanent Stabilization
4. Sediment Basins and Traps
5. Stabilization of Earthen Structures
6. Sediment Traps and Sediment Basins
7. Cut and Fill Slopes Design and Construction
8. Concentrated Runoff Down Slopes
9. Slope Maintenance
10. Storm Sewer Inlet Protection
11. Stormwater Conveyance Protection
12. Work in Live Watercourse
13. Crossing Live Watercourse
14. Regulation of Watercourse Crossing
15. Stabilization of Watercourse
16. Underground Utility Line Installation
17. Vehicular Sediment Tracking
18. Removal of Temporary Measures
19. Stormwater Management

In addition to the above, the VSMP permit regulations require that construction activities that result in a land disturbance of greater than or equal to one acre, or equal to or greater than 2,500 square feet, in all areas within jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation and Management

² *Virginia Register*, Volume 27, Issue 26, effective September 13, 2011.

regulations, which were adopted pursuant to the Chesapeake Bay Preservation Act,³ meet state erosion and sediment control and stormwater management requirements. At this time, VDCR does not issue any individual construction stormwater permits; it does, however, have the authority to require individual permits under the VSMP regulations at 4 VAC 50-60-410.

2.3 Basic Structure of Virginia's Stormwater Programs

VDCR consists of a central office (CO) and seven regional offices (ROs)—Abingdon, Christiansburg, Richmond, Staunton, Suffolk, Tappahannock, and Warrenton. Both the CO and the ROs play key roles in implementing Virginia's stormwater programs. The CO develops the policies, regulations, and guidance associated with the construction and MS4 programs; it also writes and issues the VSMP permits. The ROs perform the day-to-day implementation tasks associated with the construction stormwater program, such as inspections and oversight. The ROs do not have direct responsibility for any MS4 program-related tasks. VDCR CO staff, however, report that certain RO responsibilities are imperative to implementing the program. CO staff are involved in providing technical assistance to ROs on a daily basis.

3. Program Review Approach

In advance of the on-site meetings, the review team forwarded a questionnaire requesting background information on the program to the state's construction and MS4 CO contacts. A copy of the questionnaire is provided as appendix A to this report. Review team members used VDCR's responses to the questionnaire as the basis for the on-site reviews. Members of the program review team included the following:

- **EPA Region III Review Team Members:** Andy Dinsmore and Jenny Molloy
- **PG Review Team Members:** Jan McGoldrick, Max Kuker, and Sarah Look.

The review team met with the program staff of VDCR's CO on September 19–20, 2011 and the Richmond Regional Office (Richland RO) on September 20, 2011. The review team met with program staff of the Suffolk Regional Office (Suffolk RO) on September 27–28, 2011 and the Warrenton Regional Office (Warrenton RO) on September 29, 2011. Attendance lists for the meetings are provided as appendices B through E.

The evaluation of operations at the CO and three ROs consisted of two parts—an interview of stormwater program staff and a brief review of stormwater program files, including general permits, permittee inventories (universe lists), E&S control plans, and compliance and enforcement (C&E) documents. The interview included a discussion with several members of the staff regarding the current status of the program and its daily operations. Various components of the discussions are detailed in the appropriate sections of this report. The file review consisted of examining the files of several stormwater permittees to determine whether the CO and ROs are properly issuing permits, conducting compliance inspections and other reviews, performing enforcement duties where required, and documenting activities based on the state's stormwater program regulations and standard NPDES program procedures.

³ Chesapeake Bay Preservation Act localities are those in Tidewater Virginia, as defined in the Act.

4. Observations and Recommendations: Construction Stormwater Program

The VDCR CO is responsible for developing the regulations, policies, and guidance materials for the program; handling permit fees; issuing individual permits and general permit coverages; processing permit terminations; and conducting enforcement. VDCR's ROs are responsible for day-to-day implementation of the program, which includes technical assistance, inspections, compliance assessment and support, compliance tracking, informal enforcement, and reporting. The stormwater staff of the ROs report to their respective regional managers, who in turn report to an RO operations manager who is located in the CO and reports to the VDCR director. There are no reporting lines between the ROs and the CO stormwater program manager (position described below) nor between the two CO programs (stormwater and RO operations). The RO operations manager and the CO stormwater program manager, however, do meet jointly with their Division Director each week to discuss regulatory issues. They also remain in frequent contact via email and in-house meetings.

4.1 Overall

The CO stormwater program has approximately 4.5 full-time equivalents (FTEs) devoted to the construction stormwater program. The staff includes the stormwater program manager and the stormwater compliance and enforcement manager. The enforcement manager has additional responsibilities beyond the construction stormwater program; however, she spends approximately 50 percent or more of her time on the construction stormwater program. The staff also includes one dedicated contract employee and one FTE. These personnel each spend approximately 75 percent of their time reviewing registrations, processing permit fees, and issuing permits, among other activities. The program includes two additional FTEs who handle C&E activities. Given retirements in the past year and other movements within VDCR, the stormwater program in the CO is down by at least three FTEs.

Staff in the ROs visited (Richmond, Suffolk, and Warrenton) also reported being short of personnel and unable to fill vacancies. The Richmond RO has approximately five FTEs devoted to the construction stormwater program, although some staff members also support programs other than stormwater. The Suffolk RO has one FTE, while the Warrenton RO has two. The ROs each have vacant positions they are unable to fill because of a Department-wide hiring freeze. Two positions in the Suffolk RO have been vacant for more than two years.

Recent amendments to the VSMP regulations require, effective with reissuance of the VSMP general permit in 2014, erosion and sediment control plans and post-development stormwater management plans to be reviewed and approved prior to issuance of VSMP permit coverage. Local governments delegated under the Chesapeake Bay Preservation Act or that have an MS4 permit will be required to develop local programs consistent with these regulatory modifications, whereas other local governments will need to choose whether to develop a local program or have one run by the VDCR. Local programs are to also include inspection, compliance and enforcement activities. The modified regulations intend for local governments to implement construction and post-development stormwater controls that are consistent with those required under VSMP general permit coverage. CO staff noted that they expect to strongly encourage local governments in the latter category to adopt the program. VDCR personnel are in the

process of conducting individual meetings with localities, Planning District Commissions, and Soil and Water Conservation Districts. In November 2011, VDCR mailed a letter and fact sheet on the benefits of local adoption to the state's various localities. VDCR will likely encourage smaller entities that do not have the economies of scale to take on the program to coalesce under some regional authority that does. VDCR will be the responsible entity for implementing the program in any jurisdiction that does not adopt it. CO and RO staff members anticipate additional changes in the stormwater program because of a recent department-wide functional assessment and workforce/staffing review; however, they do not yet know what those changes will be.

One of the key initiatives in the modified Virginia Stormwater Management regulations (4VAR50-60-10 et seq), which became effective September 13, 2011, is to develop partnerships with local governments in implementation of consistent stormwater regulations. These partnerships are either mandated by state statute (localities that hold MS4 permits and localities located in Tidewater Virginia that implement the Chesapeake Bay Preservation Act) or can be entered into voluntarily. These partnerships will allow for less redundancy and overlap with localities, increased compliance, and facilitated program oversight and enforcement, and they will consolidate the efforts of limited state and local staff.

Changes to the regulations are not due to be fully implemented until 2014. The CO construction stormwater staff are in the process of developing the guidance and other tools to aid local governments in implementing the regulations. From the review team's perspective, there appears to be some uncertainty on the part of CO staff to put an implementation plan in place until after VDCR has finished making its organizational changes. CO capacity limitations also seem to account for some of the delays in this area.

Funding for the VSMP permitting program is primarily from income derived through permit fees. Construction permit fees range from \$200 to \$500, depending on the size and nature of the construction activity. Construction is a market-driven enterprise, which means that funding for the program can be influenced by economic factors beyond the state's control. CO staff reported that the number of construction permits has dropped by about 600 permits a year in the past several years due to national, state, and local economic constraints. Those staff, however, reported that the rate of change, or slope of the decrease, appears to be leveling off.

- **Observation 1:** Even though VDCR is implementing several aspects of the NPDES program, it is not receiving any portion of the state's federal CWA section 106 grant. Those funds are used exclusively by VDEQ.
- **Observation 2:** VDCR is developing a transition plan that spells out how and by whom the various program functions are to be performed from the present day through the time the revised VSMP is transferred to the local governments. Although it is important to have strong regulations and solid permit requirements in place, the construction stormwater program will be only as effective as what the local programs and VDCR are prepared to implement. EPA has concerns for the local capacity and skills to adequately implement the program.

It is critical that VDCR clearly enunciate its expectations of local governments and that the performance standards be high. Local governments need to know they will be evaluated routinely and according to consistent criteria.

VDCR CO noted that a plan for development of the above schedules and implementation issues was in large part dependent upon final regulatory development, which occurred the week prior to EPA's review. In that plan, VDCR identified over 20 areas where it needed to develop guidelines, policies, and outreach materials regarding the modified regulations. Following EPA's program review, VDCR has developed implementation schedules and plans, sent letters to localities that may elect to develop programs, developed a "Frequently Asked Question" document, conducted a webinar for local governments, scheduled a full day training session at the 2012 Environment Virginia conference, conducted employee training, and conducted numerous outreach meetings that continue to be held.

- **Observation 3:** VDCR staff commented that the strength of their new VSMP regulations resides in the post-construction standards. Though deed restrictions will require maintenance of post-construction BMPs, there is still uncertainty over the oversight to ensure long-term accountability for post-construction BMPs.
- **Observation 4:** Post-construction BMPs are more complex than construction BMPs. VDCR is in the process of developing training and certification on this topic, including training for their own staff who can then train local staff. However, this is a critical element that will require a great deal of ongoing vigilance to ensure that site plan reviews, inspections and other program tasks are adequately carried out.
- **Observation 5:** VDCR personnel voiced concern over existing workloads and their ability to fulfill their duties. Limited staff and resources may impede VDCR in effectively implementing and enforcing its latest VSMP regulations. The team fully believes existing department staff their best to implement the program. However, there appears to simply not be enough bodies to perform the required work. Unless VDCR's construction stormwater program is effectively implemented and enforced, its ability to protect water quality is limited. Federal regulations require that approved NPDES states operate programs that are at least as stringent as the applicable CWA requirements. Inadequate program capacity leads to backlogs in activities and thus can have negative implications for public health and the environment. VDCR has a work load analysis in progress; EPA emphasizes the importance of this analysis, and implementation of adequate staffing plans based on the results.

4.2 Facility Universe

VDCR CO staff reported a total of 6,717 current and active construction general permits, including a breakout by RO, as follows:

Current and Active Construction General Permits in Virginia by Regional Office			
Abingdon	398	Suffolk	1,004
Christiansburg	691	Tappahannock	1,086
Richmond	1,368	Warrenton	1,753
Staunton	417	Total	6,717

VDCR presently provides oversight of 162 local E&S control programs. The Agency also directly regulates land disturbing activities on state and federal lands and activities undertaken by utilities, interstate and intrastate pipeline companies, and railroad companies. The ROs manage the day-to-day aspects of the program. Depending on the RO, either one staff member is assigned to manage all of the RO's state and federal projects or, if RO staff members are assigned to different sections of the region, each is responsible for the state and federal projects located in his or her particular section.

The ROs receive monthly land disturbance permit lists from their local governments. Staff in the three ROs reported comparing those reports against information in their own databases to identify potential new permittees. When they find an entity on the local government list but not in their database, they send a letter about the program and owner/operator responsibilities and then they place the site on their schedules to visit. For the Richland RO, those potentially new sites take priority on the inspection schedule. Warrenton RO inspectors indicated that they get to the new sites as they can. Suffolk RO exclusively focuses its inspections on new sites.

- Observation 6:** The review team finds the state's approach for identifying entities that require general permit coverage logical. Staff review of the materials, however, is inefficient. The process involves the RO inspectors' comparing local government lists to emails and internal Microsoft Word, Access, and Excel documents containing permittee information.

4.3 Permitting Activities

The construction general permit requires covered parties to develop stormwater pollution prevention plans (SWPPPs). The SWPPPs must be prepared prior to application for permit coverage and the start of construction. They are to be prepared in accordance with good engineering practices and must include an E&S control plan approved under Virginia's E&S control law; a post-construction stormwater management plan; a stormwater pollution prevention plan; and TMDL requirements for impaired streams. The review team requests that VDCR clarify whether the CO or ROs will be responsible for making general permit coverage decisions because the general permit is an NPDES permit, even when the program is delegated to the local governments. (VDCR has responded that the CO will make the ultimate decisions regarding general permit coverage.)

- Observation 7:** The effective date of the VAR 10 is July 1, 2009, and the expiration date is June 30, 2014. CO personnel expect to begin drafting the new permit in the summer of 2012. EPA expects to "comment upon, object to or make recommendations with respect to the proposed general permit" in keeping with the requirements at 40 CFR 123.44.

- **Observation 8:** There are inconsistencies and inefficiencies in how the RO staff track data associated with the general permittees. Staff in the three ROs visited indicated that they could use guidance in this area. The review team observed that the RO inspectors have developed their own tracking mechanisms using Microsoft Access, Excel, or other similar programs. RO inspectors have to incorporate data from a variety of sources (e.g., CO permit registration system, local government land disturbance reports, inspection reports) to summarize and determine the status of a permittee. Some of the data collected are not current by the time the ROs have access to it or the time to use it. Staff commented on the need for a centralized database so that inspectors can input and review data in real time.

The CO is in the process of developing a centralized tracking system, which the office refers to as the DCR e-Permitting System. This e-Permitting System will allow for communication between the CO, ROs, and local governments. Localities will be able to check and approve registration statements, check financial requirements, and perform other functions. The RO and CO could use the system to issue permits and track inspection, compliance, and enforcement activities. The CO staff members believe the system will improve communication among program players and help solve inefficiencies for and between the ROs and CO.

Other efforts are underway to improve data access by ROs, including a pilot project in the Richland RO using tablets in the field for access to "real time" data, and development of an on-line Access database so that ROs can have access to new permittee information sooner.

- **Observation 9:** Based on interviews conducted, it was apparent that some RO staff are unclear on the capabilities of the DCR e-Permitting System and its applicability to their activities. They also are uncertain the system will actually be implemented and, if so, when. The review team recommends that the CO provide details about the DCR e-Permitting System to RO staff. Given the expertise of RO personnel and their role as customers of the system, the review team strongly recommends that the CO actively solicit the RO's participation in designing the system. The team also recommends that the CO seek input from C&E staff in designing the system. There is considerable need for a centralized data system in that realm of the program, and C&E staff could provide useful insights.

4.4 Compliance and Enforcement Activities

The CO compliance and enforcement team has responsibility for the following oversight activities with respect to the ROs: (1) developing guidance for conducting compliance and enforcement activities; (2) training RO staff to conduct activities according to approved guidance, including review of informal enforcement actions; (3) advising RO staff on VDCR's informal enforcement strategy, application of guidance, and legal issues as they arise; (4) conducting compliance auditing to track and record the status of informal enforcement actions through to a "return to compliance;" and (5) compiling and maintaining a public record audit.

The ROs conduct inspections of permittees, provide compliance and technical assistance, undertake informal enforcement (described below), and refer cases to the CO for formal enforcement, among other activities.

- **Observation 10:** Between July 1, 2009 and December 1, 2010, the ROs conducted 3,025 inspections. Staff at each RO visited indicated that the RO's inspection priorities are complaint-driven. Although the review team appreciates that the ROs need to respond to complaints, the review team is concerned that the approach is not water quality-based. Complaint calls are often not related to a water quality problem. The review team recommends that the ROs develop standard operating procedures for prioritizing inspections that emphasize the protection of water quality. The NPDES regulations require that a state program maintain "[a] program which is capable of making comprehensive surveys of all facilities and activities subject to the State Director's authority to identify persons subject to regulation who have failed to comply with permit application or other program requirements." (40 CFR 123.26(b)(1)).

VDCR's policies and guidance related to compliance and enforcement are summarized in the *Stormwater Management Enforcement Manual* (DCR VSWCB-012; 02/06). The underlying philosophy of VDCR has been to resolve permit problems by providing compliance assistance and, only if necessary, by taking enforcement actions. Generally, VDCR RO staff conduct inspections and identify noncompliance in (1) inspection reports with verbal warnings, which include deadlines for correcting noncompliance and reinspection dates, or (2) Requests for Information (RFIs; i.e., no permit registration).

Where voluntary compliance is not achieved, the ROs undertake informal enforcement actions, which include issuing Notices of Corrective Action (NOCAs, which are analogous to EPA's Notices of Violation) or Final Requests for Information (i.e., failure to register for permit coverage). If informal action does not result in a return to compliance, the ROs are to refer the case to the CO for formal enforcement action. The CO's enforcement steps include an enforcement meeting with a schedule of compliance and may include an administrative order or court ordered consent decree. The CO C&E staff indicated that when ROs have a permittee that is in significant noncompliance (SNC), they issue a NOCA and refer the case to the CO for formal enforcement. The C&E manager was well aware of EPA's wet weather SNC criteria. Richland RO staff members reported that they typically issue up to three NOCAs before referring a case for formal enforcement.

The CO tracks compliance/noncompliance from the inspection report stage through to resolution (return to compliance or referral to the Office of the Attorney General or EPA). The information is tracked on a spreadsheet. Every month the CO sends a list of cases where some compliance action was taken and requests status updates as well as information on new cases. A permittee is not dropped from the list until it has returned to compliance, either through the ROs' provision of compliance assistance or through informal/formal enforcement actions.

CO C&E staff reported that they expect that the current *Stormwater Management Enforcement Manual* or its update will be used by local governments once local stormwater management plans are approved by the Board.

VDCR reports the following number of informal and formal enforcement actions as having been taken in 2010:

Enforcement Actions in 2010	Office	Number
Inspections (25% initial inspections; 75% reinspections)	ROs	1,975
Inspection report/verbal warnings	ROs	1,700 (est.)
Informal Enforcement		
Requests for Information	ROs	205
Final Requests for Information	ROs	23
Notices of Corrective Action	ROs	47
Formal Enforcement		
Enforcement meetings and compliance schedules	CO	63
Administrative orders/civil suits	CO	8
Civil charges and penalties	CO	\$204,498

The data suggest that VDCR typically identifies problems through its inspections and that the majority of inspections are reinspections. The data also show that most of the compliance problems identified are addressed through informal enforcement activities.

Richland RO staff reported that VDCR has an annual goal of inspecting between 15 to 20 percent of its VSMP permittees. When asked where the goal is stated, the staff members were unsure but thought it had come from a VDCR strategic plan.

- Observation 11:** Statewide in 2010, VDCR conducted initial inspections at approximately 494 sites (25% of 1,975 inspections), which represents approximately 7.3 percent of the total universe of permittees (494/6,720). The review team strongly encourages VDCR to increase the number of inspections it performs and develop priorities for inspection based on potential water quality impacts. Of the three ROs visited, only the Richland RO is meeting the annual inspection goal. It is inspecting between 25 and 30 percent of its permittee coverages. The Suffolk RO and Warrenton RO are each inspecting approximately 10 percent or less, which staff members stated is due to limited capacity.

In the past five and one-half years, VDCR has had 108 enforcement actions, 20 formal resolutions (consent decrees and consent special orders), and total civil charges and penalties of \$417,548. VDEQ's results under the industrial stormwater program for the same period were 21 formal resolutions and \$201,696. The VDCR C&E manager said, "As can be seen, our compliance and enforcement efforts are exactly in line with VDEQ's program efforts, only we have collected twice as much in civil charges and penalties."

VDCR C&E staff reported the successful completion of three complex litigations in 2010: Hovnanian, Beazer, and HOT Lanes. They indicated that all three cases were resolved in the state's favor and resulted in approximately \$136,000 in civil penalties.

CO enforcement staff indicated that there was a need on the part of the CO and ROs to upload information to a centralized database that would be compatible with current datasets. There are issues with inefficiency between the CO enforcement team and the ROs. The current permit issuance database does not provide real-time information on permit status; each RO provides a monthly status of RFI and NOCA activities, inspection results, and resolutions to the enforcement team. In addition, RO staff members do not have the ability to check the enforcement status of permittees in their jurisdictions; they have to contact the CO enforcement team for the status of an individual case. There is typically a two and one-half week delay in permit coverage issuances and RO updates. CO staff are working toward development of a sequel server tracking system that will allow instantaneous updates to eliminate delays.

- **Observation 12:** The current semi-automated system VDCR uses to track compliance is adequate, yet it reflects an inefficient use of CO and RO stormwater staff time in a program with significant capacity limitations. The review team strongly recommends that the DCR e-Permitting System be designed to accommodate the needs of the compliance and enforcement sides of the program and the needs of CO and RO staff.
- **Observation 13:** Richland RO staff commented that most non-Chesapeake Bay localities do not have water quality as part of their mindsets in their plan review processes. VDCR staff note that they expect this shortcoming will be remedied with implementation of the revised program.

Staff in each of the three ROs evaluated by the review team noted that they had developed positive relationships with most of the localities in their jurisdictions.

- **Observation 14:** There is a perception among some RO staff that there are inconsistencies in how VDCR staff takes informal enforcement actions. Some regional staff asked for additional guidance in this area. CO staff is available to provide guidance as needed and does so routinely. The review team encourages VDCR to conduct regular training to foster consistency among the ROs and to provide guidance as needed.
- **Observation 15:** At the Suffolk RO, Excel Paving Company has failed to apply for permit coverage for three different construction sites. Although Suffolk RO staff members have dealt with the company several times, the contractor has had recurring permit coverage issues. During the review the review team did not see any documentation of enforcement against the contractor in the Suffolk RO's files. If the RO has taken enforcement action, clearly it should have records of such actions in its files. Subsequently VDCR did provide copies of inspection reports, photos and Requests for Information. However, there was still insufficient evidence of either return to compliance or escalated enforcement. Pursuant to 40 CFR 123.26(a), "State programs shall have procedures for receipt, evaluation, retention and investigation for possible enforcement of all notices and reports required of permittees and other regulated persons (and for investigation for possible enforcement of failure to submit these notices and reports)." Moreover, the requirements for compliance evaluation programs under the NPDES regulations at 40 CFR 123.26(b)(1) require states to have "[a] program which is capable of making comprehensive surveys of all facilities and activities subject to the State

Director’s authority to identify persons subject to regulation who have failed to comply with permit application or other program requirements.” EPA recognizes severe staffing shortages in the Suffolk RO.

- **Observation 16:** Some RO staff have concerns regarding the timeframes applicable to the formal enforcement action process and the guidance applicable to escalating cases for formal enforcement action. The review team encourages the CO to conduct training to ensure that RO staff understands the applicable timeframes, the applicable guidance for escalating cases, and avenues RO staff may employ for additional guidance and information, or both.

4.5 Data Management

The CO currently uses an Access database program to track permit applications, the receipt of permit fees, and the issuance of permits under the construction program. ROs have to call the CO to obtain data from the system. Data entry occurs approximately twice a week. The CO prints full reports from the system for the ROs and a more limited report for the VDCR Director on a bimonthly basis.

As noted earlier in this report, the CO is in the process of developing a centralized tracking system (i.e., DCR e-Permitting System). The alpha version of the program is funded and is scheduled to be completed in August 2012. The beta version is scheduled to be finished 18 months before the construction program is delegated to the local governments.

- **Observation 17:** The review team supports VDCR’s efforts to develop the DCR e-Permitting System. State NPDES compliance evaluation programs are required to have procedures for “[m]aintaining a management information system which supports the compliance evaluation activities of this part” (40 CFR 123.26(e)(4)).

4.6 Regulations, Policies, and Guidance

VDCR has developed considerable guidance in support of its stormwater programs. In addition to the *Stormwater Management Enforcement Manual* described in the previous section, VDCR has developed the *Guidance Document on Virginia Stormwater Management Program Site Inspection Strategies* (DCR-VSWCB-024; 3/11). The program has developed other criteria and guidance for regulated parties, including the following: *Virginia Stormwater Management Handbook* (“Blue Book”), *Virginia Erosion and Sediment Control Handbook*, and VSMP Permit Regulations (“Engineer’s Toolkit”).

4.7 Training, Education, and Outreach

- **Observation 18:** On an annual or biannual basis, CO C&E staff plan, organize, and conduct a day-long compliance and enforcement training session in which CO and RO program staff are expected to participate. The last session was held on June 24, 2010, and the following topics were discussed: EPA’s state review framework (SRF), VDCR’s ongoing efforts to increase compliance with general permit registration requirements, cases of significant noncompliance, EPA’s significant noncompliance wet weather

policy, and evidentiary problems using case studies. CO staff reported that they believe the training sessions should be held twice a year, but budget constraints have made that impossible of late.

CO construction stormwater staff reported that they expect a need for training at the local level given the changes in the state's E&S control laws and with the planned delegation of the program to the local level in 2014. At present, CO staff members do not know who will provide this training or how given the current organizational uncertainties at VDCR.

All three of the ROs visited mentioned that staff would benefit from specialized training. Specific training topics suggested by the RO staff include basic engineering, runoff reduction methods, wetland delineation, emerging technologies, perennial stream determinations, hazardous materials, and Occupational Safety and Health Administration (OSHA) training. Developing the stormwater body of knowledge in the RO would decrease the need for technical guidance from the CO.

Virginia has an Erosion and Sediment Control Training and Certification Program, which is a tool for local and state officials to obtain certain certifications to implement the E&S control program across the state. Staff in the CO stated that the E&S inspectors' module in the program is inadequate and needs to be modified. In addition, staff in the Suffolk RO stated that the regional land disturber program tests for stormwater certification are not challenging enough for the level of understanding needed of VSMP inspectors.

- **Observation 19:** Staff in the Richland RO and Warrenton RO stated that the best way to train localities in stormwater management would be to implement a certification program. Having the ability to decertify inspectors would provide the incentive to maintain an adequate stormwater knowledge base. The review team finds these suggestions valid and encourages VDCR to consider them further, perhaps as part of the transition plan recommended under Observation 2.

4.8 Oversight of Regional Offices

- **Observation 20:** As noted previously, the CO staff have no oversight responsibilities for RO personnel in terms of implementing the construction stormwater program. CO staff members provide policy and some technical guidance but cannot allocate tasks to the ROs due to the organizational structure of the stormwater program. The channels through which RO staffing is funded also have implications for the operations staff can perform. Some RO personnel have responsibilities for programs outside stormwater.

In its recent restructuring, VDCR has created an RO Operations Manager position, which was recently filled. The Operations Manager operates out of the CO, but his role is to create consistencies among the ROs and their interactions with CO staff. Priorities for the Operations Manager are supposedly workload allocation, consistency, and policy. Warrenton RO staff indicated that the Operations Manager plan to visit each RO on a monthly basis. In the past, communication between the CO stormwater program and ROs was facilitated through a monthly conference call. Staff in the Warrenton RO stated that the monthly conference calls recently stopped (July 2011). (VDCR CO staff commented subsequent to the review that the retirements of program management staff (see “Special Note” at the outset of the document) occurred at this time. The conference calls resumed in September 2011 and have occurred on a bi-monthly basis since then.)

The review team recommends that the CO stormwater program manager and the compliance and enforcement manager work closely with the new manager of the ROs to ensure his or her understanding of the construction stormwater program on an ongoing basis. (VDCR CO staff reported subsequent to the review that these meetings are in fact occurring on a weekly basis.)

5. Observations and Recommendations: MS4 Stormwater Program

Virginia relies on state statutes and regulations to establish minimum standards and expectations for MS4 permit operators. VDCR is responsible for the issuance, denial, revocation, termination, and enforcement of individual and general VSMP permits for the control of stormwater discharges from MS4s. The MS4 program is managed and implemented by the CO only; the ROs do not have MS4 program-related responsibilities. Therefore, there are no observations relative to the ROs in the discussion below.

5.1 Facility Universe

VDCR reported having 11 Phase I MS4 individual permits and 91 Phase II MS4 general permit enrollees. The Phase I permittees are split almost evenly in that six are cities and five are counties. The distribution of the 91 Phase II permittees is as follows: 36 cities, 15 counties, 29 schools/universities/hospitals, 3 transportation agencies, and 19 federal facilities.

VDCR plans to review the 2010 Census data to determine the new universe of potentially regulated areas and to identify any additional MS4s that might need coverage.

By reviewing available federal property maps VDCR has identified several federal facilities that do not have MS4 permit coverage but may require it. Many other federal facilities lie outside most recent urbanized area data and do not. The list does not include National Wildlife Refuges or federal facilities covered under industrial stormwater permits. VDCR CO staff reported subsequent to this review that they are in the process of establishing a partnership between VDCR, VDEQ, and federal facilities.

- **Observation 21:** VDCR staff reported having difficulties in getting some federal facilities to acknowledge their responsibilities. It is recommended that VDCR staff keep EPA informed of these issues so that EPA can intervene if necessary.

5.2 Permitting Activities

The current Phase II MS4 general permit was issued in 2008 and expires in 2013. CO staff report that the 2013 general permit will likely include technical criteria, local program criteria, state projects, general requirements, permit applications, and permit conditions. It will include requirements for consistency with other laws and regulations, including E&S control. It possibly could include requirements for impaired waters and waters with approved TMDLs, procedures for permit termination and transfers of permit coverage, natural resource protection consideration, monitoring processes, amendments to forms, and amendments to MS4 program plan requirements. EPA notes that these are minimum requirements it would expect to see in the new permit.

The VDCR stormwater program manager stated his sincere desire to rewrite the Phase I permits. He is experiencing difficulty communicating with the Phase I entities since EPA has taken enforcement action against a number of them. Phase I representatives will not talk to VDCR staff on the advice of their attorneys. VDCR hopes to lead the permit renewal process with an MS4 in northern Virginia.

- **Observation 22:** The review team strongly urges the state to develop and issue meaningful and enforceable Phase I individual permits and a Phase II general permit with conditions consistent with MS4 program goals and TMDL requirements. Moreover, EPA expects to “comment upon, object to or make recommendations with respect to the proposed general permit” in keeping with the requirements at 40 CFR 123.44.

The VDCR staff expect resistance as they move forward with revising the Phase I and Phase II MS4 permits. The municipalities tend to work as a bloc when negotiating with VDCR. The development community has deep roots and a history in regulatory activities. Surprisingly, there is little involvement in the stormwater program by environmental organizations. VDCR staff stated that the Phase II MS4 general permit does not provide coverage for municipalities that own or operate facilities with industrial activities. Such municipalities would be required to have industrial stormwater permits.

5.3 Compliance and Enforcement Activities

- **Observation 23:** VDCR staff do not generally conduct inspections of the permitted MS4s. Compliance and enforcement activities appear limited to review of annual reports and some associated follow-up visits. In 2010, VDCR issued 23 RFIs. The RFIs were for annual reports not being submitted on time. The review team urges VDCR to inspect its MS4s. State NPDES compliance evaluation programs are required to have procedures and ability for “(2)[i]nitial screening. . . of all permit . . . information to identify violations and to establish priorities for further substantive technical evaluation; (3) when warranted, conducting a substantive technical evaluation following the initial screening of all permit . . . compliance information to determine the appropriate agency response.” (40 CFR 123.26(e)). Inspections provide one of the means through which states conduct initial screening.

Both Phase I and II MS4s have annual report requirements. CO staff reported that they would like to improve the format and requirements for these reports. Specifically, they would like to limit the Phase I MS4s to reporting key details (no more than two pages per section). Currently, the Phase I MS4s are providing considerable narrative, which tends to bury or obscure their true actions. CO staff would like to provide specific guidance to the Phase II MS4s because they tend not to provide enough detail in their reports.

- **Observation 24:** The review team supports VDCR’s efforts to update its annual report forms. The team urges VDCR to implement these actions soon—even before the next permit cycle. EPA suggests that VDCR evaluate EPA’s MS4 Report Form.

CO staff review the annual reports submitted by the Phase II MS4s by comparing them to the entity’s MS4 program plan.

5.4 Data Management

- **Observation 25:** Currently, CO staff use tables in Microsoft Access to track the MS4 programs. They also need to determine how they will work with the watershed implementation plans for the Chesapeake Bay. The review team recommends that the CO develop a system accessible to the ROs for tracking MS4 permitting program elements.

5.5 Training, Education, and Outreach

- **Observation 26:** CO staff indicated that the majority of Phase II MS4s are not adequately reporting, therefore it is difficult to determine if permit requirements are being met. The CO thus has to take additional steps to ensure that each MS4 achieves

compliance. The review team recommends that VDCR establish training and outreach objectives with its Phase II MS4s in order to educate them about the Department's expectations and to ultimately improve their compliance with MS4 program plan requirements. The review team believes this Observation underscores the importance of VDCR's having enforceable MS4 permit and program plan requirements.

The CO handles all MS4-related tasks. CO staff reported, however, that the VDCR realignment process could result in some of the MS4 program duties being transferred to the ROs. The staff expressed concern regarding how the ROs would be able to get up to speed on the program quickly enough given capacity limitations and other factors.

- **Observation 27:** Should VDCR decide to decentralize implementation of the MS4 program, the review team recommends the development of a transition plan specifying the roles and responsibilities for the program going forward. The transition plan should specify how those responsible for implementation will receive the training and resources they need to function effectively.

6. Summary of Observations and Recommendations

Listed below are the primary observations and recommendations resulting from the evaluation of Virginia's stormwater program. For more specific information pertaining to each comment, please refer to the cited sections of the report. Please note that not all observations have recommendations.

6.1 Capacity and Funding

- *Regarding funding designation for the state's stormwater programs.* Even though VDCR is implementing several aspects of the NPDES program, it is not receiving any portion of the state's federal CWA section 106 grant. Those funds are used exclusively by VDEQ. **(Observation 1, Section 4.1, Overall)**
- *Regarding issues relating to lack of capacity in the CO and ROs.* VDCR personnel voiced concern over existing workloads and their ability to fulfill their duties because of understaffing. Limited staff and resources may impede VDCR in effectively implementing and enforcing its latest VSMP regulations. The team fully believes existing department staff try their best to implement the program. However, there appears to simply not be enough bodies to perform the required work. Unless VDCR's construction stormwater program is effectively implemented and enforced, its ability to protect water quality is limited. Federal regulations require that approved NPDES states operate programs that are at least as stringent as the applicable CWA requirements. Inadequate program capacity leads to backlogs in activities and thus can have negative implications for public health and the environment. **(Observation 5, Section 4.1, Overall)**
- *Regarding impacts to training due to funding and capacity issues.* On an annual or biannual basis, CO C&E staff plan, organize, and conduct a day-long compliance and enforcement training session in which CO and RO program staff are expected to participate. CO staff reported that they believe the training sessions should be held twice

a year, but budget constraints have made that impossible of late. (**Observation 19, Section 4.7, Training, Education, and Outreach**)

- *Regarding staffing and capacity issues relating to the state's compliance activity responsibilities.* Statewide in 2010, VDCR conducted initial inspections at approximately 494 sites (25% of 1,975 inspections), which represents approximately 7.3 percent of the total universe of permittees (494/6,720). The review team strongly encourages VDCR to increase the number of inspections it performs and develop priorities for inspection based on potential water quality impacts, as recommended under Observation 10. At present, VDCR is not meeting its own inspection goal in some ROs (those that are understaffed). Of the three ROs visited, only the Richland RO is meeting the annual inspection goal. The Suffolk RO and Warrenton RO are each inspecting approximately 10 percent or less, which staff stated is due to limited capacity. (**Observation 12, Section 4.4, Compliance and Enforcement Activities**)

6.2 Program Modifications

- *Regarding the need to prepare for changes to construction stormwater program.* The review team is concerned that VDCR does not yet have a transition plan in place that spells out how and by whom the various program functions are to be performed from the present day through the time the program is transferred to the local governments. The review team strongly encourages VDCR to immediately develop a transition plan that addresses such questions as the following (**Observation 2, Section 4.1, Overall**):
 - How will local governments be encouraged and prepared to adopt the program? Will an outreach campaign be initiated? Over what time frame will it be pursued?
 - What criteria will be used to evaluate whether a local program will be approved to implement the program? Over what time frame?
 - What oversight activities will VDCR perform to ensure that approved local government programs are performing adequately? What will the frequency of those activities be?
 - What happens if there is no local program? Who is going to do what and when?
- *Regarding the preparation for changes to delegation of MS4 stormwater program responsibilities.* The CO handles all MS4-related tasks. CO staff reported, however, that the VDCR realignment process could result in the MS4 program being transferred to the ROs for day-to-day implementation. The staff expressed concern regarding how the ROs would be able to get up to speed on the program quickly enough given capacity limitations and other factors. Should VDCR decide to decentralize implementation of the MS4 program, the review team recommends the development of a transition plan specifying the roles and responsibilities for the program going forward. The transition plan should specify how those responsible for implementation will receive the training on other elements of the MS4 program other than construction in which they are well-

qualified) and resources they need to function effectively. (**Observation 28, Section 5.5, Training, Education, and Outreach**)

6.3 Construction General Permit and Post-Construction BMPs

- *Regarding the development and issuance of the new construction general permit.* The effective date of the VAR 10 is July 1, 2009, and the expiration date is June 30, 2014. CO personnel expect to begin drafting the new permit in the late summer/early fall of 2012. EPA expects to “comment upon, object to or make recommendations with respect to the proposed general permit” in keeping with the requirements of 40 CFR 123.44. (**Observation 7, Section 4.3, Permitting Activities**)
- *Regarding preparation for post-construction BMP management.* VDCR staff commented that the strength of their new VSMP regulations resides in the post-construction standards. The review team believes VDCR needs to indicate who is going to be responsible for ensuring the integrity/continued maintenance of post-construction BMPs once a permit ends. (**Observation 3, Section 4.1, Overall**)
- *Regarding training for post-construction BMP management.* Post-construction BMPs are more complex than construction BMPs, and they require ongoing oversight periods. VDCR needs to place particular emphasis on this issue in their training strategy for RO staff and local governments in performing post-construction reviews. RO staff interviewed noted that local governments often do not have staff with the skill sets needed to perform construction stormwater reviews, much less post-construction examinations. (**Observation 4, Section 4.1, Overall**)

6.4 MS4 General and Individual Permits

- *Regarding the development and issuance of new Phase I and Phase II MS4 permits.* The review team strongly urges the state to develop and issue meaningful and enforceable Phase I individual permits and a Phase II general permit with conditions consistent with MS4 program goals and TMDL requirements. Moreover, EPA expects to “comment upon, object to or make recommendations with respect to the proposed general permit” in keeping with the requirements at 40 CFR 123.44. (**Observation 23, Section 5.2, Permitting Activities**)
- *Regarding federal facilities and MS4 coverage.* VDCR has identified several federal facilities that do not have MS4 permit coverage by reviewing available federal properties maps. VDCR staff reported sometimes having difficulties in getting some federal facilities to acknowledge their responsibilities. It is recommended that VDCR staff keep EPA informed of these issues so that EPA can intervene if necessary. (**Observation 22, Section 5.1, Facility Universe**)

6.5 Facility Universe and Data Management

- *Regarding the VDCR data sources for tracking permittees.* The review team finds the state’s approach for identifying entities that require general permit coverage logical. Staff

review of the materials, however, is inefficient. The process involves the RO inspectors comparing local government lists to emails and internal Microsoft Word, Access, and Excel documents containing permittee information. (**Observation 6, 4.2, Facility Universe**)

- *Regarding the state's tracking mechanisms for managing VSMP permittee responsibilities.* There are inconsistencies and inefficiencies in how the RO staff track data associated with the general permittees. Staff in the three ROs visited indicated that they could use guidance in this area. The review team observed that the RO inspectors have developed their own tracking mechanisms using Microsoft Access, Excel, or other similar programs. RO inspectors have to incorporate data from a variety of sources to summarize and determine the status of a permittee. Some of the data collected is not current by the time the ROs have access to it or the time to use it. Staff commented on the need for a centralized database so that inspectors can input and review data in real time. (**Observation 8, Section 4.3, Permitting Activities**)
- *Regarding the development of the DCR e-Permitting System.* Based on interviews conducted, it was apparent that some RO staff are unclear on the capabilities of the DCR e-Permitting System and its applicability to their activities. They are also uncertain the system will actually be implemented and, if so, when. The review team recommends that the CO provide details about the system to RO staff. Given the expertise of RO personnel and their role as customers of the system, the review team strongly recommends that the CO actively solicit the RO's participation in designing the system. The team also recommends that the CO seek input from C&E staff in designing the system. There is considerable need for a centralized data system in that realm of the program, and C&E staff could provide useful insights. (**Observation 9, Section 4.3, Permitting Activities**)
- *Regarding the lack of input from all entities that are to use the DCR e-Permitting System.* The current semi-automated system VDCR uses to track compliance is adequate, yet it reflects an inefficient use of CO and RO stormwater staff time in a program with significant capacity limitations. The review team strongly recommends that the DCR e-Permitting System be designed to accommodate the needs of the compliance and enforcement sides of the program and the needs of CO and RO staff. (**Observation 12, Section 4.4, Compliance and Enforcement Activities**)
- *Regarding the state's responsibilities under its NPDES permit for compliance activities.* The review team supports VDCR's efforts to develop the DCR e-Permitting System. The team encourages the Department to identify a knowledgeable stormwater program person into the position to oversee development of the system and ensure its ultimate utility to the program. State NPDES compliance evaluation programs are required to have procedures for "[m]aintaining a management information system which supports the compliance evaluation activities of this part" (40 CFR 123.26(e)(4)). (**Observation 18, Section 4.5, Data Management**)
- *Regarding tracking resources in MS4 program.* Currently, CO staff use tables in Microsoft Access to track the MS4 programs. The staff intend to have a module in the

DCR e-Permitting System to track BMPs and C&E activities, but not other MS4 permitting program elements. The CO staff also need to determine how they will work with the watershed implementation plans for the Chesapeake Bay. The review team recommends that the CO develop a database system accessible to ROs for tracking MS4 program elements. (**Observation 25, Section 5.4, Data Management**)

6.6 Compliance Protocols

- *Regarding the state's strategies for construction stormwater compliance activities.* Between July 1, 2009 and December 1, 2010, the ROs conducted 3,025 inspections. At each RO visited, staff indicated that the RO's inspection priorities are complaint-driven. Although the review team appreciates that the ROs need to respond to complaints, the team is concerned that the approach is not water quality-based. The review team recommends that the ROs develop standard operating procedures for prioritizing inspections that emphasize the protection of water quality. (**Observation 10, Section 4.4, Compliance and Enforcement Activities**)
- *Regarding the inconsistencies of the stormwater program in localities across the state.* Richland RO staff commented that most non-Chesapeake Bay localities do not have water quality as part of their mindsets in their plan review processes. They believe that the extent to which water quality is considered is a result of their presence in the field. This Observation further argues for VDCR RO staff to increase their inspection frequency and thus their presence in the field. (**Observation 13, Section 4.4, Compliance and Enforcement Activities**)
- *Regarding the compliance activity schedule for the state's MS4 permittees.* VDCR staff do not generally conduct inspections of the permitted MS4s. Compliance and enforcement activities appear limited to review of annual reports. In 2010, VDCR issued 23 RFIs. The RFIs were for annual reports not being submitted on time. The review team urges VDCR to inspect its MS4s. Inspections provide one of the means through which states conduct initial screening. (**Observation 23, Section 5.3, Compliance and Enforcement Activities**)
- *Regarding the methods in which the state monitors the compliance of its MS4 permittees.* Both Phase I and II MS4s have annual report requirements. CO staff reported that they would like to improve the format and requirements for these reports. Specifically, they would like to limit the Phase I MS4s to reporting key details (no more than two pages per section). Currently, the Phase I MS4s are providing considerable narrative, which tends to bury or obscure their true actions. CO staff would like to provide specific guidance to the Phase II MS4s because they tend not to provide enough detail in their reports. The review team supports VDCR's efforts to update its annual report forms. The team urges VDCR to implement these actions soon—even before the next permit cycle. EPA suggests that VDCR consider EPA's MS4 annual report form. (**Observation 24, Section 5.3, Compliance and Enforcement Activities**)

6.7 Enforcement Protocols

- *Regarding the timeframes for enforcement actions.* Some RO staff have concerns regarding the timeframes applicable to the formal enforcement action process and the guidance applicable to escalating cases for formal enforcement action. The review team encourages the CO to conduct additional training to ensure that RO staff understands the applicable timeframes, the applicable guidance for escalating cases, and avenues RO staff may employ for additional guidance and information, or both. EPA recommends that any, new additional DCR enforcement strategies involving the new construction regulations be developed prior to their implementation. (**Observation 14, Section 4.4, Compliance and Enforcement Activities**)

6.8 Communication and Training

- *Regarding training for local inspectors.* Staff in the Richland RO and Warrenton RO stated that the best way to train localities in stormwater management would be to implement a certification program. Having the ability to decertify inspectors would provide the incentive to maintain an adequate stormwater knowledge base. The review team finds these suggestions valid and encourages VDCR to consider them further, perhaps as part of the transition plan recommended under Observation 2. (**Observation 19, Section 4.7, Training, Education, and Outreach**)
- *Regarding communication with new Regional Office Operations Management.* The CO staff have no oversight responsibilities for RO personnel in terms of implementing the construction stormwater program. VDCR has just established new protocols for RO/CO communication. The review team recommends that the CO stormwater program manager and the compliance and enforcement manager continue to work closely with the new manager of the ROs to ensure his or her understanding of the construction stormwater program on an ongoing basis. (**Observation 20, Section 4.8, Oversight of Regional Offices**)
- *Regarding the state's procedures for enforcing the MS4 program requirements.* CO staff indicated that the majority of Phase II MS4s are not completing all the requirements in their MS4 program plans. Some of the compliance issues are due to economic conditions in the municipalities and others are due to the municipality failing to report the correct information. The CO thus has to take additional steps to ensure that each MS4 is achieving compliance. The review team recommends that VDCR establish training and outreach objectives with its Phase II MS4s in order to educate them about the Department's expectations and to ultimately improve their compliance with MS4 program plan requirements. The review team believes this Observation underscores the importance of VDCR's having enforceable MS4 permit and MS4 program plan requirements. (**Observation 26, Section 5.5, Training, Education, and Outreach**)