



Permitting for Environmental Results (PER)

NPDES Profile: Virginia

PROGRAM RESPONSIBILITY

State of Virginia: NPDES authority for base program, general permitting, federal facilities, pretreatment
EPA Region 3: NPDES authority for biosolids

Program Integrity Profile

This profile characterizes key components of the National Pollutant Discharge Elimination System (NPDES) program, including program administration and implementation, environmental outcomes, enforcement, and compliance. EPA considers profiles to be an initial screen of NPDES permitting, water quality, enforcement, and compliance programs based on self-evaluations by the States and a review of national data. EPA will use the profiles to identify program strengths and opportunities for enhancements. For more information, please contact Richard Weeks, Virginia Department of Environmental Quality, at (804) 698-4484 or Francisco Cruz, EPA Region 3, at (215) 814-5734.

Section I. Program Administration

1. Resources and Overall Program Management

The State of Virginia:

Section 402 of the Clean Water Act (CWA) established the NPDES to limit pollutant discharges into streams, rivers, and bays. In the State of Virginia, the Department of Environmental Quality (DEQ) administers the program as the Virginia Pollutant Discharge Elimination System (VPDES).

The State of Virginia has received authorization for all aspects of the NPDES program that can be authorized to States except the biosolids (sludge) program. Virginia does not foresee DEQ requesting authorization to administer the NPDES biosolids program. Virginia's NPDES permit regulations are consistent with the federal regulations for biosolids, but Virginia has elected not to request authorization.

Virginia received authorization from EPA to administer the NPDES base program on March 31, 1975; for federal facilities on February 9, 1982; for pretreatment on April 14, 1989; and for general permits on May 20, 1991. Before receiving authorization to administer these aspects of the NPDES program, the State of Virginia agreed to a memorandum of understanding and submitted the Attorney General's opinion that Virginia had authority to administer the NPDES program in accordance with the federal regulations.

The VPDES program in Virginia consists of permitting, inspection, and compliance components and is implemented through seven regional DEQ offices with oversight from DEQ's Office of Water Permit Programs in the Division of Water Quality in Richmond. DEQ's regional offices have primary responsibility for issuing VPDES permits, performing inspections, and ensuring compliance. The Office of Water Permit Programs is responsible for overall program oversight, for development of regulations

to ensure program conformance with State laws and federal regulations, and for establishing program guidance documentation to ensure consistency and conformance in implementation by the regional offices.

The most recent significant management change was the addition of a new regional office in 2001. In addition, there has been some consolidation of the permitting and inspection programs in the Office of Water Permit Programs. In a March 29, 2004, letter, the Virginia Secretary of Natural Resources informed EPA Region 3 that the State of Virginia has passed legislation to consolidate certain State stormwater programs within the Department of Conservation and Recreation (DCR). The consolidation calls for the transfer of the federally approved construction and municipal separate storm sewer (MS4) stormwater permit programs from DEQ to DCR. DEQ will continue to issue permits to industrial stormwater dischargers. Under the federal regulations, a new State agency is not authorized to administer a previously approved program until EPA approves the revision to the program. EPA Region 3 has been working with the State of Virginia to complete the transfer. A preliminary transmission is expected in October 2004 outlining transfer requirements with the final transfer documentation to be received by the end of calendar year 2004. There have been no other significant management changes in the program. An organizational chart of the Division of Water Quality, as well as the regional offices, is provided. In Virginia, 149 major facilities and 1,156 minor facilities have individual NPDES permits. Approximately 1,934 non-stormwater minor facilities are covered by general permits. Virginia currently implements the Water Protection Program with a staff of approximately 159.5 full-time equivalents (FTEs) and an average annual budget of approximately \$9.8 million. Approximately \$3 million of that budget is State grant funding made available by EPA under CWA section 106.

Virginia provides training for water permit program staff, including permit writers, inspectors, and whole effluent toxicity (WET) and pretreatment staff through various means. The agency has an in-house office of training that identifies and coordinates individual and group training opportunities, including those available through federal, State, and professional organizations. In addition, peer mentor contacts are provided for new and existing staff, and periodic program-specific conferences are coordinated with the goal of sharing new developments and procedures every year. Virginia NPDES program managers attend the EPA Region 3 Annual NPDES States' Meeting, at which the Region and Region 3 States discuss current NPDES program issues from the national, Regional, and States' perspectives.

EPA Region 3:

For the biosolids program, EPA Region 3 has one staff person, the Biosolids Coordinator, devoted to all Region 3 States. No Region 3 State has authorization for the biosolids program. In 1996 Virginia showed interest in seeking authorization by amending the VPDES Permit Regulation and issuing the implementation guidance for land application and surface disposal of sewage sludge. However, because of the recent State budget constraints and the lack of incentives offered by EPA, it is highly unlikely that Virginia will seek authorization to administer the biosolids program in the near future.

EPA should consider funding opportunities to provide incentives to States to pursue program authorization and increase the resources assigned to the program. This could increase efficiency in the implementation of the program and eliminate dual State and federal biosolids program implementation.

2. State Program Assistance

Coordination and assistance activities are discussed throughout this profile.

In 1996 Virginia was poised to seek program authorization for the land application and surface disposal components of the biosolids program, but budget constraints have hindered progress and the State is unlikely to seek authorization anytime soon.

3. EPA Activities in Indian Country

Not applicable because there are no federally recognized Tribes in Virginia.

4. Legal Authorities

EPA is conducting a comprehensive review of the State's legal authorities. This review has not yet been completed. As a result, EPA is reserving this section of the profile; when the legal reviews are complete, EPA will update profiles to include the results of the reviews.

Two petitions for withdrawal of Virginia's NPDES authority are currently active. The first, submitted August 10, 1993, by the Southern Environmental Law Center, Chesapeake Bay Foundation, and Environmental Defense Fund, raised issues associated with representational standing, enforcement, and public notice. The second, submitted June 1, 1998, by R.I.S.E., raised issues of representational standing.

5. Public Participation

An evaluation of the State's legal authorities regarding public participation will be included in the legal authority review. As noted above, the legal authority review section of this profile is reserved pending completion of the legal authority review.

The State of Virginia:

The public participation policy for the adoption of regulations is governed by (1) the Administrative Process Act (chapter 40, title 2.2 of the Code of Virginia); (2) the State Water Control Board's Public Participation Guidelines (9 VAC 25-10 of the Virginia Administrative Code); and (3) the Governor's Executive Order (2002).

The State Water Control Board is made up of seven citizens, appointed by the governor, from the State of Virginia at large. Current members include lawyers, businessmen, and farmers. The Board adopts regulations that prescribe the regulatory mechanisms for public input in the development of regulations and permit and enforcement actions. The board also directly hears from members of the public who participated during those regulatory mechanisms when final action on a regulation, enforcement action, or permit action is taken by the board.

The above established minimum procedures for the adoption or amendment of regulations and are used for all VPDES regulation adoption and amendment processes, including general permit issuances, unless

the State of Virginia is merely incorporating federal CFR language into Virginia's regulations. In that case, the action is exempt from the 2-year regulation development process. However, whenever the exempt action is taken, the State Water Control Board must affirm that it will respond to petitions for reconsideration at any time.

For permit actions, the public process is established in (1) the State Water Control law (chapter 3.1 of title 62.1 of the Code of Virginia); (2) the VPDES permit regulation (9 VAC 25-31 of the Virginia Administrative Code); and (3) the Board's Procedural Rule No. 1 (9 VAC 25-230 of the Virginia Administrative Code).

Section 62.1-44.16 of the State Water Control law requires that a public notice of every industrial wastewater application be published once a week for two successive weeks in a newspaper of general circulation in the county or city where the certificate is applied for or by such other means as the Board may prescribe. Section 62.1-44.19 of the State Water Control law has the same requirement for sewerage systems and sewage treatment works.

Section 62.1-44.15:4 D provides that, upon receipt of an application for the issuance of a new or modified permit other than those for agricultural production or aquacultural production activities, the Board notify in writing the locality where the discharge does or is proposed to take place.

Section 62.1-44.15:01 provides that after June 30, 1994, before promulgating any regulation under consideration or granting any variance to an existing regulation, or issuing any permit, if the board finds that there are localities particularly affected by the regulation, variance, or permit, the board must do the following:

- Publish, or require the applicant to publish, a notice in a local paper of general circulation in the localities affected at least 30 days prior to the close of any public comment period. Such notice must contain a statement of the estimated local impact of the proposed action, which at a minimum must include information on the specific pollutants involved and the total quantity of each that may be discharged.
- Mail the notice to the chief elected official and chief administrative officer and planning district commission for those localities.

The board must accept written comments for at least 15 days after any hearing on the regulation, variance, or permit unless the board votes to shorten the period. A public hearing is scheduled for any permit issuance that creates significant public interest or when a direct request for a public hearing is made.

There are also provisions in the board's Procedural Rule No. 1 (9 VAC 25-230) that deal with public hearings on permits. Public hearings are held and the results of the public hearing presented to the State Water Control Board. Permits that are going to be issued are listed on DEQ's Web site and are available for public comment. If sufficient interest in a permit is shown, a public hearing is held.

Public participation in the regulatory process and in the permitting process is encouraged and all comments on water quality concerns are considered during the decision on the regulation or permit.

All materials not legally exempted from the Freedom of Information Act requirements are available to the public for review or copying (at cost) during normal business hours of the agency.

EPA Region 3:

As part of EPA's initiative to place NPDES permits on the Web through Envirofacts, major permits issued since November 1, 2002, including several permits and fact sheets issued by the State, are available through EPA's Web site. Instructions for accessing these documents are available at <http://www.epa.gov/npdes/permitdocuments>. As of June 12, 2004, 6 of 35 major permits issued by the State since November 1, 2002, have been posted on the Web site. The remaining 29 are in the process of being added to the Web site.

6. Permit Issuance Management Strategy

The State of Virginia:

DEQ currently has 10 VPDES general permits that were developed to improve the efficiency and consistency of permits for select categories of discharges. General permits are used when the discharging facilities are similar and the development of individual permit limits is not necessary. Copies of Virginia's general permits are available at <http://www.deq.state.va.us:8765/deq/query.html?qt=general+permit&submit=Go>.

DEQ has individually tailored reissuance management programs in each of its seven regions with the goal of evenly distributing permit issuance workload in the regions. DEQ developed and periodically reevaluates a VPDES inspection strategy to address changing workloads, priorities, and available resources.

DEQ periodically conducts assessments of the VPDES program's resources, efficiency, and needs. However, such assessments are not routinely conducted. The results of assessments of the VPDES are made available to the public. Generally, the benefits of conducting self-assessments has been to better allocate resources and identify efficiencies in implementing the program. Resource availability has been the greatest obstacle to conducting routine self-assessments.

Virginia does not have a process in place in the VPDES permitting program whereby permits are issued on a watershed basis. Virginia has seven regional offices, which generally cover different watersheds, through which the VPDES program is implemented. This fact makes watershed permitting difficult because of the programmatic and administrative workload difficulties it would create related to large numbers of permits being reissued in a year in which all the permits in a "watershed" are reissued, and relatively few in other years. However, Virginia is considering and implementing alternative approaches to the same concept through programs such as Total Maximum Daily Loads (TMDLs) and water quality management plans. Virginia uses the wasteload allocations developed in its CWA section 208 area waste treatment management plan for the calculation of water quality-based limits for biochemical oxygen demand and total suspended solids.

Virginia does not have a water quality trading program in place; however, the State is considering such a program at this time.

Virginia has several computer-based models and screening tools that are used routinely by permit writers. These include a standard stream model for evaluating the impact of a discharge on in-stream dissolved oxygen concentrations in routine applications, and a statistical model for the development of wasteload allocations for toxic parameters.

Virginia's NPDES fact sheets are very thorough and have been used as a reference in the EPA's NPDES Permit Writers' Training Course.

Virginia uses the EPA Region 3 NPDES checklist. The permitting checklist is a tool that consists of a series of questions describing the permit to ensure permit consistency and afford the opportunity for expedited review. This checklist has helped the State to enhance the consistency of permits from its regional offices and has been used as a training tool for new permit writers.

Virginia has not adopted electronic reporting mechanisms. However, such mechanisms are currently under research and development, with a focus on electronic signature and payment issues. The problems associated with these issues have not yet been resolved.

Virginia does not currently accept applications from PASS or an equivalent State system.

Virginia has done an outstanding job on keeping the NPDES backlog of major, minor, and general permits low. See Table 1.

Table 1: Percentage of Facilities Covered by Current Permits in Virginia

	2000	Nat'l Avg.	2001	Nat'l Avg.	2002	Nat'l Avg.	2003	Nat'l Avg.	2004
Major Facilities	89.3%	74%	81.4%	76%	91.4%	83%	90.6%	84%	94.6%
Minor Facilities Covered by Individual Permits	29.7%	69%	93.5%	73%	90.7%	79%	89.5%	81%	88.9%
Minor Facilities Covered by Individual or Non-stormwater General Permits	N/A	N/A	N/A	N/A	95.3%	85%	94.8%	86%	94.0%

Source: Permit Compliance System (PCS), 12/31/00; 12/31/01; 12/31/02; 12/31/03. (The values in the National Data Sources column of the Management Report, measures #19 and #20, are PCS data as of 6/30/04.)

As of June 29, 2004, approximately nine major permits had been expired for more than 2 years and none had been expired for 10 years or more. As of June 29, 2004, 13 minor permits had been expired for more than 2 years and no minor permits had been expired for 10 years or more.

Table 2: Virginia's NPDES Permits Universe

	Major Facilities	Minor Facilities with Individual Permits	Minor Non-stormwater Facilities with General Permits	SIUs (including CIUs)	CAFOs
No. of Sources	149	1,156	1,934	408	150
% of National Universe	2.2%	2.7%	4.9%	1.9%	0.8%

Notes: SIUs = significant industrial users; CIUs = categorical industrial users; CAFOs = concentrated animal feeding operations.

EPA Region 3:

In 2001 Region 3 and each of its States developed Permit Review Plans to assist in tackling the backlog issue. These plans were developed to identify and prioritize permits for State development and helped streamline EPA review and oversight. Each year Virginia identifies in its work plan for State grant funding under CWA section 106 the list of permits that will be issued during the fiscal year. It is Region 3's intention to convert from its Permit Review Plan process to the Permit Prioritization process of the Permitting for Environmental Results (PER) Strategy.

7. Data Management

The State of Virginia:

The State does not use EPA's Permit Compliance System (PCS) to manage its NPDES program. The State's data management system is the Comprehensive Environmental Database System (CEDS). The database was designed to meet the needs of the VPDES program and provide a mechanism to upload information to PCS. The State uses this system to track environmental information including sanitary sewer overflows (SSOs), combined sewer overflows (CSOs), stormwater, and CAFO permits and pretreatment and biosolids programs. In addition, database and geographic information systems are used to identify priority segments listed as impaired waters under CWA section 303(d). Management procedures are in place to ensure that priority segments are identified during the evaluation of a VPDES permit application.

CEDS is a real-time database system, and data are available for performing queries and analysis within 24 hours of data entry. The CEDS data are currently not directly available to the public; however, DEQ staff make reasonable attempts to satisfy public requests for information, both formal and informal, on a timely basis.

Data are extracted monthly from CEDS and formatted into XML files, and batches are submitted into PCS through the Central Data Exchange (CDX)/Interim Data Exchange Format (IDEF). Virginia maintains a staff position responsible for performing PCS uploads from the CEDS database system and identifying and resolving discrepancies between the two databases. With the exception of the latitudes and longitudes of outfalls at minor facilities (see below), DEQ currently enters all the PCS data requirements listed in the PCS CWA section 106 grant requirements.

The State collects latitude and longitude data at both the facility and outfall levels for major and minor facilities and enters the data into CEDS. Latitude and longitude data for 100% of the permitted outfall

pipes are included in CEDS. All pipe level latitude and longitude data for major facilities are also entered into PCS. Pipe level latitude/longitude data are obtained from permit applications. There is no formal procedure for validating latitude/longitude data. Some data are verified using global positioning system units in the field or electronic mapping software. Management Report measure #14 indicates that 45.7% of pipes at facilities covered by individual permits contain latitude and longitude information in PCS. The State of Virginia needs to improve the latitude and longitude information for minor facilities.

Quality control considerations were taken into account in the design of CEDS, and management and data entry procedures were developed to ensure that the information in the database is accurate and current. For discharge monitoring reports (DMRs), the following quality assurance and quality control (QA/QC) procedures are followed:

- DMRs are manually reviewed by staff in the regional offices every month.
- DMRs are keyed in CEDS by the 24th of each month.
- To ensure the accuracy of the data, regional staff manually review major DMR data in CEDS each month before uploading them.
- DEQ Central Office staff run quality assurance reports every month to identify possible data inadequacies. Regional staff review and verify these reports.
- DEQ regional office staff generate quality assurance reports for special conditions and compliance schedule events to verify the status of the events before uploading data to PCS.

The State ensures data quality used for NPDES compliance through on-site laboratory inspections and the Discharge Monitoring Report Quality Assurance (DMRQA) Program. Commercial laboratories used by permittees are inspected annually. Virginia relies heavily on DMRQA to target laboratories (NPDES facilities and commercial laboratories) having analytical problems. The DMRQA program is a process of using known chemical samples to ensure the accuracy of chemical analyses.

PCS currently shows more minor permits than Virginia's CEDS system. A comparison of facilities is needed to determine the cause(s) of this discrepancy. If the discrepancy is due to the presence of data in PCS for minor facilities that are no longer permitted, corrections should be made in PCS to reflect the inactivation of those facilities.

NOTE: Due to fundamental differences in the configuration of PCS and CEDS, entering outfall-level latitude and longitude data for minor facilities requires also entering the respective effluent limits for each outfall. Virginia's current Performance Partnership Grant requires entry of minor source outfall latitude and longitude but does not require entry of effluent limits for such outfalls. In the majority of cases, if a decision has been made not to enter the limits for a minor facility, no outfalls are being created to enter the latitude and longitude data at the outfall level. The decision whether to enter limits data for minor facilities has always been left up to DEQ. Region 3 plans to request that the State begin entering these data. The State of Virginia contends that given the upcoming replacement of PCS by the Integrated Compliance Information System (ICIS), the modifications necessary to make the CEDS outfall structure consistent with PCS are too extensive to undertake in the near term. DEQ is evaluating modifications to

the CEDS structure so that outfall data can be easily uploaded into ICIS in the future. EPA Region 3 plans to review Virginia's plan for corrective action to address this particular issue.

Section II. Program Implementation

1. Permit Quality

The State of Virginia:

Permit quality issues are usually resolved at the regional level during peer or manager review, but may be discussed during monthly conference calls with the central office. They are resolved prior to the continuation of processing. The central office monitors permit quality in quality control reviews and permit audit programs.

Virginia employs an extensive collection of permit guidance manuals to assist permit writers in the preparation of NPDES permits. The guidance manuals are updated periodically to include amended federal regulations and changes in environmental management practice.

Virginia has developed NPDES implementation guidance that has helped in writing excellent fact sheets. Virginia's fact sheets are showcased in EPA's NPDES Permit Writers' Training Course as one of the best documented fact sheets in the nation.

If a water quality-based effluent limit (WQBEL) is more restrictive than a technology-based effluent limit (TBEL), it is included in the VPDES permit. The rationale for WQBELs is included in the VPDES fact sheet, usually in the form of a modeling memorandum or wasteload allocation calculations and statistical evaluations of the reasonable potential for a pollutant to cause or contribute to a violation of a water quality standard. Virginia has very few TMDL segments where point source discharges are the source of an impairment. Development of WQBELs is determined by the suspected cause of the impairment. For example, for stream segments with a fecal coliform bacteria impairment, effluent limits are written such that the discharge itself meets the water quality criteria.

Virginia has developed a computer program that does the "reasonable potential" analysis and calculates the WQBEL using a statistical approach similar to EPA's Technical Support Document. This system has helped the State of Virginia to develop consistent WQBELs. Virginia does not have any special procedures for determining WQBELs in impaired waters in the absence of a TMDL.

In some cases, a lack of monitoring data could prevent the State from establishing in-stream background concentrations for permit effluent limit calculations. These effluent limits would be calculated with a zero-background assumption. An enhancement opportunity could be developing a system to determine background concentrations when extensive monitoring data are not available.

Virginia employs trained permit writers to produce VPDES permits. The permits are reviewed by supervisory personnel prior to public notice and issuance. EPA Region 3 reviews a significant number of VPDES permits to ensure permit quality. Permit quality adjustments are based on these reviews. For example, these reviews showed that permits did not always include requirements to attain 85% of biochemical oxygen demand and total suspended solids as part of the secondary treatment requirement. These requirements were included in subsequent permits.

Virginia revised its WET Program guidance August 24, 2000, by Guidance Memo No. 00-2012 Toxic Management Program Implementation Guidance. The purpose of the guidance is to recommend how and when to use aquatic toxicity testing to assess the reasonable potential for toxicity of a discharge to surface waters. The State trains permit writers in WET by issuing the WET Guidance. The “reasonable potential” analysis includes sublethal effects. The State has been involved in the development of WET permit guidance revisions with EPA to enhance the program.

There are several opportunities for permitting program enhancement, some of which are a system to determine background concentrations when extensive monitoring data are not available, determinations of antidegradation tiers using a system similar to the way water bodies are listed as impaired, and further refinement of the mixing zone policy.

EPA Region 3:

At this time, EPA reviews all major permits. All permits for minor facilities that discharge to waters on the list of impaired waters prepared under CWA section 303(d) are also reviewed.

EPA Region 3 has reviewed 36 permits in calendar year 2004. The Region approves a permit review plan submitted by the State. Errors or omissions are identified in permit reviews. Steps are then taken with the permit writers to rectify errors or omissions.

For the past 18 years, EPA Region 3 and Region 3 States have held an annual States’ NPDES Meeting to discuss NPDES permit issues. In May 2003, about 80 State participants joined representatives from other federal agencies, the River Basin Commissions, and EPA Headquarters and Regional staff to discuss the latest policy, procedures, and expectations in the NPDES compliance, permits, and the TMDL programs. The meeting also included separate breakout sessions on coal mining issues and enforcement and compliance assistance.

EPA conducted its last formal assessment of Virginia’s entire NPDES process in 1996 as part of an assessment that included all authorized States in Region 3. File reviews, interviews with State permit writers and managers, and a simulated permit exercise were part of the assessment. The mock permit exercise was designed to assess the methods used to calculate and apply WQBELs. As a result of this assessment, opportunities for enhancement were identified and pursued by the development of the programs described later in this section.

In June 2003 Region 3’s NPDES permits team adopted the “NPDES Draft Permit Review Standard Operating Procedures” (SOPs), which documents the tasks used during Region 3’s review of State-developed draft permits. The SOP covers topics such as administrative requirements, water quality and technology reviews, communications and coordination, special conditions, and Region 3 procedures on the permit objection process. The SOPs will assist the Region in providing consistency and added quality to NPDES permit reviews across States in Region 3.

Region 3 has also developed and maintains the Permit Tracking System (PTS) as a tool to supplement the national PCS database information. Information in PTS assists the Region’s NPDES permits team and division management in tracking draft permit reviews and permit development; provides detailed information such as locations of CSO and stormwater outfalls; and allows staff members to identify permitting issues such as CAFO information, listings of impaired waters under CWA section

303(d)/TMDL requirements, potential impact under CWA sections 316(a) (thermal discharges) and 316(b) (cooling water intakes), and the like.

EPA Region 3 and the Region's States have developed an NPDES Permit Checklist to use in developing draft NPDES permits. This checklist was developed by the States and the Region with help from EPA Headquarters, with the central tenets in mind, to ensure the quality of draft NPDES permits. The checklist was conceived to reduce resources spent on permit oversight and ensure consistency while serving as a management tool for the States and EPA, adding quality control and including State certification that draft permits meet all regulatory requirements. Virginia has been submitting draft permits to Region 3 accompanied by the checklist, which has reduced the EPA review period to about 3 days compared with 30 days for draft permits submitted without a checklist. The use of the checklist has been instrumental in reducing the Region's backlog numbers to the lowest in the nation.

Region 3 has developed a program that tracks the 12 oldest expired major permits in the Region (the "Daunting Dozen"). The list is constantly updated-as one permit is issued, another backlogged permit takes its place-so that 12 backlogged permits are always on the list until all have been updated. Most of these permits deal with complex permit determinations and are resource-intensive. Since May 2001, only one permit in Virginia has been on this list. At present, Virginia does not have any facility on this list.

Every 2 weeks, Region 3 shares a list of draft permits in-house for review with the Office of Regional Counsel, Office of Municipal Assistance, Office of Compliance and Enforcement, the Pretreatment Program Coordinator, TMDL Program Coordinator, Water Quality Standards Coordinator, and the Regional Watershed Coordinator. This process has helped the Water Protection Division to increase the coordination of the Region's permit oversight with other programs.

EPA's review of draft permits over the past few years has shown that these tools have helped address opportunities for enhancement identified in the 1996 NPDES Assessment Report. Virginia should be commended for its participation in the Region 3 permit quality improvement effort-specifically, the adoption and use of the Region 3 permit quality checklist and cooperation with the Region in establishing a rigorous QA/QC program.

2. Pretreatment

The State of Virginia:

Virginia received authorization to administer the pretreatment program on April 14, 1989. Significant industrial users (SIUs) that have control mechanisms are issued by the publicly owned treatment works (POTW) control authority. The POTW control authority is the only pretreatment issuing authority. As of November 9, 2004, there are 39 POTWs with approved pretreatment programs and 408 SIUs.¹

DEQ staff perform annual audits of the POTWs with approved pretreatment programs. The State identifies any deficiencies the audit report has brought to light, and requires the POTW to respond within 30 days on how the facility will resolve the problems.

¹ These numbers differ from the 34 pretreatment programs and 410 SIUs in the National Data Sources column on the Management Report, measures #8 and #9, because the National Data Sources numbers are PCS data as of June 12, 2004, while the 39 pretreatment programs and 408 SIUs are data from the State's database, CEDS, as of November 9, 2004.

DEQ does not assume the role of control authority or issue control mechanisms to SIUs that discharge to a POTW without an approved pretreatment program. However, if a POTW without a pretreatment program receives discharges from an identified SIU, Virginia requires the POTW to develop a pretreatment program and to issue a permit to the SIU.

3. Concentrated Animal Feeding Operations

The State of Virginia:

DEQ has a fairly long history of issuing State non-NPDES permits to confined animal feeding operations. These operations first received animal waste “No Discharge” certificates, then later were issued Virginia Pollution Abatement (VPA) Permits. The State of Virginia has had a VPA General Permit for Confined Animal Feeding Operations since 1994. Recent developments have been the issuance of the VPA General Permit for Poultry Waste Management (2000) and the ongoing promulgation of a VPDES General Permit for Concentrated Animal Feeding Operations (CAFO).

Virginia expects that approximately 150 livestock and poultry operations will have to convert from their existing VPA permits to VPDES permits based on the number of animals at the facilities. All currently have nutrient management plans (NMPs) and will be expected to maintain approved plans as part of the NPDES permit requirements. All permitted operations under the existing State non-NPDES (currently VPA has 1,175 permitted confined animal feeding operations) are required to maintain approved NMPs.

Current State permits require NMPs as enforceable parts of the permit, as well as the use of best management practices to protect surface water and groundwater. NMPs generally do not address mortality management and chemical handling. These are addressed as part of annual inspections.

DCR tracks these data in terms of nutrient reductions. NMPs are generally developed by certified planners; however, this has not historically been a requirement. Any plans developed after December 31, 2005, must be developed by a certified planner. All plans must be approved by DCR.

All permitted operations are inspected annually, and compliance assistance is available if there are violations. Complaints are investigated, but violations are usually minor in nature and informal correction is usually all that is necessary.

Virginia is on track to meet the federal deadlines for NPDES CAFO program implementation. The State is planning to issue VPDES CAFO permits in a timely manner. The State is on track with the implementation targets of the new regulations and expects to have the program in place by April 2005.²

² The National Data Sources column of the Management Report, measure #15, indicates that Virginia plans to have the CAFO Program Authority by November 2004, while the above indicates that Virginia will have its NPDES CAFO program in place by April 2005. The difference is that the November 2004 date refers to State Water Control Board approval of the new VPDES Regulation and the April 2005 date refers to expected final revision dates for DCR’s Nutrient Management Regulation to address phosphorus in the NMPs.

4. Stormwater

The State of Virginia:

Virginia has issued permits to all 11 of its Phase I MS4s. As of March 24, 2003, all Phase I MS4 permits had been reissued and none have expired since that time. Virginia has issued general permits for industrial activities, construction activities for both Phase I and Phase II (covers both large and small sites), and Phase II small MS4s. About 99 facilities have applied for the Phase II MS4 general permit. Notice of intent (NOI) data are tracked electronically and contain general information about the applicant such as name of owner/operator, outfall location, and receiving water.

The State plans to transfer the operation of its construction and MS4 stormwater programs from DEQ to DCR.

EPA Region 3:

EPA is assisting the State with this program authorization.

5. Combined Sewer Overflows/Sanitary Sewer Overflows

The State of Virginia:

There are three permitted CSO communities in Virginia. CSO requirements are addressed through VPDES permits and orders. Three cities have CSO requirements: Richmond, Lynchburg, and Alexandria. All three have implemented the nine minimum controls. There is one CSO satellite collection system, and a VPDES permit has been issued to the owner. All of Virginia's CSO permits have an approved long-term control plan in place. One community plans to eliminate all CSOs by sewer separation. Communities are doing post-construction monitoring for adherence to water quality standards in accordance with nine minimum control requirements. The Richmond facility is working on a second stage of long-term control plan implementation, having already implemented substantial improvements under a prior approved plan.

SSOs are tracked in DEQ's Pollution Response (PREP) database as illicit discharges. Permits require such events to be reported as illicit discharges. Trend data has not been generated from this database.

DEQ reports SSO events to the Virginia Department of Health. The reports are then sent to the District Health Field Office to determine whether public health warnings should be issued.

EPA Region 3:

Region 3 has recently become aware that Phase II NPDES permits issued to CSO communities in the Region might not contain all provisions required in Phase II permits, and anticipates issuance of a final memorandum from EPA Headquarters regarding how NPDES permits should conform to the 1994 CSO Policy. The Region intends to research the issue further and follow up with the States as gaps are identified.

6. Biosolids

The State of Virginia:

Although Virginia does not have EPA authorization to administer the federal biosolids program under 40 CFR part 503, DEQ has authority to administer the land application and surface disposal of sewage sludge under the VPDES Permit Regulation, 9 VAC 25-31-420 through 9 VAC 25-31-720. The sewage sludge provisions under the VPDES Permit Regulation are consistent with federal regulations under 40 CFR part 503.

Section 62.1-44.19:3 of the Code of Virginia prohibits land application, marketing, and distribution of sewage sludge without a permit. It specifies that the owners of treatment works are not to land apply, market, or distribute sewage sludge except in compliance with a valid VPDES permit. It also specifies that the contractors are not to do so without a current Virginia Pollution Abatement Permit from DEQ or a current permit from the Virginia Department of Health (VDH). Land application of biosolids is therefore an activity regulated by DEQ and VDH.

Regulation of biosolids in Virginia is administered through the Biosolids Use Regulation adopted by VDH and VPDES permit regulation adopted by DEQ. In accordance with the VPDES Permit Regulation, DEQ approves the POTWs' sludge management plan through the issuance of a VPDES permit to the owner or operator of the POTW. A POTW owner or operator may include specific sites for land application of biosolids within its sludge management plan. Routine soil monitoring for land application sites is a permit condition. For frequent application (once every year), a longer list of parameters (including nine metals) must be monitored. For infrequent application (once every 3 years), a short list (soil, pH, and nutrients) must be monitored. DEQ's CEDS is used to track the compliance of sludge quality, but only for major POTWs. Minor POTWs are not required to report. When an owner assigns responsibility for off-site biosolids use operations to a private contractor, a VDH permit is issued to the contractor in accordance with the Biosolids Use Regulations. The VDH is responsible for permitting, monitoring, compliance, and enforcement of the private contractors. A site-specific technical evaluation, including nutrient management, is conducted for each permit issued. Virginia's regulations are based on many years of development. The regulations provide site-specific standards that regulate the quality of biosolids, the application of biosolids, and site access restrictions that protect public health and the environment.

The VPDES Permit Regulation requires the owner/operator of a POTW to submit the sewage sludge management information (the Sludge Management Plan or SMP) with the VPDES permit application. DEQ approves the SMP through the issuance of the VPDES permit to the owner of the POTW. If the land application option is chosen, the VPDES permit includes sludge limitations and monitoring, record keeping and reporting requirements, and the like. The owner may include in the SMP specific sites for land application of biosolids, and additional soil monitoring and site management requirements may be included in the VPDES permit issued to the POTW. When an owner assigns responsibility for off-site biosolids use operations (land application, marketing, and distribution) to a private contractor, the contractor is required to obtain a VDH permit pursuant to the Biosolids Use Regulations (12 VAC 5-585).

In 1996 the State was poised to seek authorization by amending the VPDES Permit Regulation and issuing the implementation guidance for land application and surface disposal of sewage sludge.

However, because of recent State budget constraints, it is highly unlikely that Virginia will seek authorization to administer the sewage sludge program soon.

Impediments to seeking program authorization are insufficient personnel for biosolids permitting and inspections and the lack of a database for tracking aspects of the sewage sludge program.

EPA Region 3:

EPA promulgated the sewage sludge use or disposal regulation, title 40 of the Code of Federal Regulations (CFR) part 503, on February 19, 1993. This rule establishes standards that apply to publicly, privately, and federally owned facilities that generate or treat sewage sludge as well as to any person who uses or disposes of sewage sludge or domestic solids. These standards consist of general requirements; pollutant limits; management practices; operational standards; and requirements for monitoring, record keeping and reporting. The rule includes requirements for the beneficial use of sewage sludge as well as the generation of high-quality sludge-based soil amendments and fertilizer products that are given away or sold on the open market. The rule is designed to protect public health and the environment when sewage sludge is beneficially applied to land, placed in a surface disposal site, or incinerated. It was developed in accordance with the 1987 amendments to the Clean Water Act.

All publicly, privately, and federally owned facilities that generate or treat sewage sludge as well as any person who uses or disposes of sewage sludge or domestic septage must submit a sewage sludge NPDES Form 2S permit application. EPA Region 3 reviews and tracks the sewage sludge permit applications; however, the Region has not issued any sewage sludge permits to facilities in Virginia. The 40 CFR part 503 requirements are self-implementing, meaning that EPA does not need to issue permits to take an enforcement action.

EPA Region 3 developed a sewage sludge inspection form for POTWs that apply their sewage sludge to the land and an inspection form for the land applicators of sewage sludge. To date, EPA Region 3 has not inspected any facilities or land applicators of sewage sludge in Virginia. When an inspection is performed this information will be entered into PCS or ICIS.

When EPA Region 3 receives a sewage sludge complaint from a citizen in Virginia, the Region first coordinates with the State to gather any information that may be helpful in resolving the complaint. Complaints are tracked in EPA Region 3's citizen complaint database.

EPA Region 3 developed a sewage sludge DMR form that is used by facilities that are required to report (i.e., all major facilities, any minor facilities required to have a pretreatment program) to EPA by February 19 of each year. The report information is entered into PCS. EPA Region 3 obtains a print out from PCS to determine the amount of sewage sludge generated annually and the amount of sewage sludge that is used or disposed of (i.e., land application, surface disposed, sent to a municipal solid waste landfill, incinerated, or sent to another facility for treatment). Currently, 54% of Virginia's sewage sludge is being applied to the land or distributed for reuse.

Section III. NPDES Compliance Monitoring and Enforcement Response

In a separate initiative, EPA's Office of Enforcement and Compliance Assurance (OECA), EPA Regions, and the Environmental Council of the States have developed a tool for assessing State performance in enforcement and compliance assurance to ensure that States meet agreed-upon minimum performance levels and provide a consistent level of environmental and public health protection nationwide. OECA will use the State profiles to focus these efforts and identify areas needing further discussion and evaluation.

1. Enforcement Program

The State of Virginia:

Virginia has published an Enforcement Manual that describes the ways that DEQ addresses noncompliance, including informal actions, notices of violation, administrative and judicial actions, and referral of cases to EPA. This manual includes criteria for determining which type of response is appropriate. The main criteria are the size of the facility and the impact or potential of release. DEQ has also developed a draft revised manual, dated September 18, 2002, which retains much of the same language as the earlier version but includes a model schedule for processing all water program enforcement cases. The draft version of the manual sets forth the expectation that negotiations for a consent order should be concluded within 180 days for case initiation for major facilities and within 210 days for minor facilities.

The December 1, 1999, version of the Enforcement Manual represents DEQ's official policy. This manual incorporates EPA's criteria for significant noncompliance, "special emphasis violators," and exceptions listing. The manual sets forth the expectation that noncompliance will be addressed within 3 months and incorporates EPA's acknowledgment that 6 to 8 months may be necessary to finalize an action where complex injunctive relief is required.

This manual states that, for a consent order to be executed without civil penalties, the following criteria should be met: (1) environmental impact is nonexistent or minimal; (2) the facility is not a chronic violator; and (3) the facility is making a good-faith effort to comply.

DEQ considers civil penalties to be appropriate where (1) the facility has failed to respond to technical assistance efforts; (2) the facility is violating enforcement orders without mitigating circumstances; (3) violations are avoidable; (4) noncompliance is continuing or likely to recur; (5) violations are knowingly made; and (6) violations result in environmental damage. The manual also provides a methodology for calculating civil penalties, applying a statutory maximum of \$25,000. The manual provides that the gravity of the violation, economic benefit that resulted to the violator, and "cost of injunctive relief" components shall be calculated.

The baseline civil penalty is the greater of (1) the sum of the cost of the injunctive relief and gravity components or (2) the economic benefit component. DEQ subtracts the cost of injunctive relief from the baseline civil penalty and may further reduce the penalty up to 30% based on several factors, including

(1) size and type of facility, (2) a history of recalcitrance, (3) promptness of injunctive response, (4) quick settlement, (5) litigation considerations, and (6) ability to pay.

Virginia's laws require that each formal action be approved by a State Water Control Board that meets quarterly to review such actions. Waiting for this review can add up to 90 days to the time necessary for addressing a violation formally. In addition, unilateral compliance orders require public notice and hearing.

The State demonstrates a strength by having specific procedures documented to address enforcement and compliance. A more detailed ranking of the priority of enforcement actions and areas of increased emphasis of compliance efforts may be helpful. The Region will stress prioritization and optimization of enforcement actions and plans when negotiating future work plans. Virginia's CEDS database indicates that 14% of instances of significant noncompliance were addressed by formal enforcement actions, 79% of facilities in significant noncompliance returned to compliance without formal enforcement actions, 11 formal enforcement actions were taken against major facilities, and 32 formal enforcement actions were taken against minor facilities during the period October 1, 2002, through September 30, 2003.³

DEQ measures the effectiveness of its enforcement actions by tracking the number of facilities that are returned to compliance. Pollutant load reductions are estimated by a number of programs independent of the enforcement process, including (1) the SARA Title III Toxics Release Inventory, (2) the Reduction of Toxics in State Waters Report (prepared yearly and presented to three State legislative committees), and (3) the Annual Report on Implementation of the Chesapeake Bay Agreement, Status of the Tributary Strategies, and Status of Water Quality for Virginia's Chesapeake Bay and Tributaries.

Regional and State enforcement activities are often coordinated during the quarterly enforcement meetings. Other contacts occur in the interim when compliance and enforcement issues arise. Typically, whichever agency (State or EPA) has spent inspection or investigation resources to discover the violation has the lead for the follow-up compliance and enforcement activity. Region 3 has taken State-referred NPDES cases. States refer cases to Region 3 when they feel a compelling federal interest exists and also when they feel they are dealing with a particularly recalcitrant entity.

EPA Region 3:

Each quarter the EPA Region 3 NPDES Branch has a meeting or conference call with each approved State to discuss facilities in significant noncompliance, facilities on the exceptions list, wet-weather compliance, and enforcement issues. Follow-up activities, such as who will take what action against which facility, are discussed. The NPDES Branch reviews State enforcement actions during quarterly noncompliance calls and records the status and progress of each action. Penalty amounts are discussed during these meetings; the States are encouraged to at least capture the economic benefit of noncompliance through their penalties. The Virginia enforcement manual penalty calculation formula does allow for collection of economic benefit, when economic benefit is greater than the cost of

³ The data in the National Data Sources column on the Management Report, measures #35 through #38, are based on PCS data for October 1, 2002, through September 30, 2003, downloaded on June 12, 2004. For these measures, data pulls from PCS give different results than data pulls from Virginia's database, CEDS. The results from the CEDS system are shown in the Additional Data column. DEQ is working to ensure that the appropriate CEDS fields are uploaded to PCS in order to accurately document enforcement related activities.

injunctive relief/corrective action plus the amount of civil charge calculated. In general, State enforcement actions tracked through this process have been determined adequate.

Region 3 measures the environmental effects and results of its enforcement actions through evaluations of facility compliance, compliance rates, human health risk reductions, and pollutant load reductions. Facility compliance is the only acceptable outcome of an enforcement action. Compliance rates of a given segment of the regulated community are assessed before and after compliance and enforcement activities. Health risk reductions are estimated based on risk (e.g., source water protection that can be achieved through the elimination of contaminants). Pollutant load reductions are estimated based on loading reductions obtained following enforcement actions.

2. Record Keeping and Reporting

The State of Virginia:

Compliance schedule items and effluent limitation requirements are entered into Virginia's CEDS. The system automatically flags violations of schedule items and limitation requirements, assigns points to the violations, and generates a noncompliance report that compliance and enforcement program staff subsequently review and act on in accordance with the Compliance Auditor's and Enforcement Manuals.

DEQ maintains an Excel spreadsheet for tracking enforcement actions (and, as part of the PER process, has provided a copy to EPA). This tracking systems shows the type of action taken against the facility and the penalties collected. EPA's current Performance Partnership Grant Work plan with Virginia does not require that this information be entered into PCS. However, Virginia enters the date and type of each enforcement action into PCS. Correspondence providing summaries of quarterly noncompliance calls with Virginia are another source of information about actions taken at the State level. One way that Virginia's tracking system could be improved would be to add information regarding the types of violations associated with the action and what portion of the penalty collected represents economic benefit.

EPA Region 3:

See section II.6, Biosolids.

3. Inspections

The State of Virginia:

Inspections are targeted based on the size and potential impact of the permitted discharge. Because of limited staff resources and increased workload from stormwater permit inspections, the frequency of inspections at major dischargers was reduced from once every year to once every 2 years under the current strategy. Industrial and municipal minor permittees are inspected once every 2 years and small permittees (municipal permittees with flows less than 0.04 million gallons per day and industrial dischargers such as car washes, sand and gravel operations, and water treatment plants) are inspected every 5 years. Facilities with compliance and enforcement issues are inspected at a higher frequency at the discretion of the regional offices.

The Virginia DEQ's structure provides for oversight, including peer review in the regional offices and procedural and technical assistance in the central office, and good communication among the DEQ regions and central office, including a monthly conference call to solve compliance problems or discuss compliance issues that arise. A computerized database that automatically generates reminder letters and fast-track capabilities in the procedural process assist with timeliness.

Priority is given to larger discharges and permittees judged to have a higher potential for environmental harm. Stormwater construction permits present significant scheduling issues because the total universe is highly variable seasonally and regionally. Inspectors have a goal of inspecting one construction stormwater permitted facility per month per inspector. Construction sites are also inspected in response to complaints from the public. Complaint-driven inspections typically result in more inspections than the goal of one inspection per month per inspector.

Inspectors are instructed to do a detailed file review of one parameter during each laboratory inspection. A detailed review involves tracing one parameter from the laboratory bench sheet through all transcriptions to the DMR. If analytical or transcription errors are found, the file search is expanded to determine whether the problem is systemic or just a one-time occurrence. All reported parameters receive at least a cursory review involving a review of procedures and analytical calculations.

Virginia usually does not target watersheds for inspection. Inspections are prioritized based on the size and potential impact of the discharge. EPA Region 3 initiatives such as the recent emphasis on stormwater have resulted in the deemphasis of inspection of major facilities to free up staff resources for stormwater inspections. To improve compliance within the sector, DEQ regions have unilaterally targeted specific sectors that have proved to be problematic.

Under Virginia's Inspection Strategy (referenced under Virginia's Performance Partnership Grant Work plan), all NPDES-permitted facilities (with the exception of stormwater) are to be inspected at varying frequencies. In response to EPA's emphasis on stormwater, DEQ has shifted resources away from the inspection of major facilities to stormwater facilities and this has resulted in a change in the frequency of major facility inspections from once every year to once every 2 years.

EPA Region 3:

See section II.6, Biosolids.

4. Compliance Assistance

The State of Virginia:

DEQ maintains an Innovative Technology Program that has several components:

- Encouraging participation in demonstration/validation programs (such as EPA's Environmental Technology Verification program) that generate credible performance data.
- Exploring opportunities to join with other States in reciprocal acceptance of new technologies and removal of impediments to new technology.

- Enhancing awareness of new technologies among potential users and regulators; connecting technology developers and entrepreneurs to supporting business and technical resources.
- Performing outreach and helping companies to showcase new environmentally preferable technologies.

DEQ maintains an Office of Environmental Education and an Office of Pollution Prevention. The Department has established the Virginia Mentoring Network and the Virginia Environmental Excellence Program (VEEP).

Section IV. Related Water Programs and Environmental Outcomes

1. Monitoring

The State of Virginia:

As an FY2004 section 106 grant commitment, an update of the State's comprehensive monitoring strategy will be completed by September 30, 2004. One of the general goals of this strategy update is to develop the means to increase both the percentage and type (e.g., wetlands) of waters assessed in the State. Over the past reporting cycles, there has been a general upward trend in the percentage of waters assessed. For the 2004 Integrated Reporting cycle, the State is developing its report using the categories suggested in the 2004 Integrated Reporting guidance. This is helping to identify where additional monitoring is needed as water segments are placed in Category 3 (insufficient data to decide whether any designated uses are impaired).

DEQ's water quality monitoring strategy identifies 19 specific objectives with one category specific to permits and one category specific to trends. Permit monitoring stations are established to provide water quality information in support of permit actions. Water quality sampling, as it relates to point source influences, is performed (1) to provide data for the calculation of permit limits for the issuance, reissuance, and/or modification of effluent limitations; and (2) when water quality problems are suspected, to provide data to detect and document water quality impairments or to evaluate permit adequacy, whether permitted dischargers are in compliance with permit limits or not. The majority of the permit stations are established to support permit renewals, which occur on a 5-year cycle. Virginia currently has approximately 300 long-term water quality trend stations in its monitoring network. Many of these stations have 30 years' worth of monitoring data. The objective of this monitoring is to provide adequate data and analytical procedures for short-, medium-, and long-term statistical evaluation of water quality variation and trends within identifiable, geographically defined water bodies.

There remains good coordination between the assessment/monitoring programs and the TMDL program in Virginia. Monitoring for TMDL development continues to be a significant component of the State's program.

2. Environmental Outcomes

The State of Virginia:

The results of Virginia's monitoring and assessment activities (as presented in its water quality inventories prepared under CWA section 305(b) in the 2002 and 2004 reporting cycles) indicate that the percentage of assessed rivers/streams and lakes/reservoirs waters impaired by municipal and industrial NPDES discharges had remained very low or nonexistent and relatively steady. Only the reported data for estuarine waters (predominately the Chesapeake Bay) have shown substantial increases in the area and percentage of estuarine waters impaired by municipal and industrial NPDES discharges. These increases in estuarine figures are an artifact resulting from a policy change on linking sources with impairments and not the result of increased spatial impairment.

Virginia has a total of 50,537 river/stream miles, 25.4% of which were assessed for aquatic life designated use and 17.1% for recreation designated use. Virginia has indicated that 6.2% of the assessed river/stream miles were impaired for swimming in its 2000 CWA section 305(b) report. Virginia has 120,751 lakes acres, 92.0% of which were assessed for the aquatic life designated use and 85.1% for the recreation designated use. Of the assessed lakes acres, 0.1% are impaired for swimming.

3. Water Quality Standards

The State of Virginia:

Virginia has a designated use description for all State waters. One designation is protection of aquatic life, including fish and shellfish (for growth and survival as well as human consumption), wildlife, and recreation in and on the water. Virginia also designates public water supplies as a use for special protection. The State Water Control Board has adopted general narrative criteria and numeric criteria for toxics; conventional pollutants (dissolved oxygen, temperature, pH); bacteria; and taste, odor, and aesthetics. All the criteria are based on national criteria under CWA section 304(a) or other federal guidance and are specifically designed to protect the uses listed. Furthermore, incorporation of these criteria into the permitting, monitoring, and assessments programs ensure that the designated uses are protected. The State is developing water quality standards for nutrients along with requirements necessary to protect the Chesapeake Bay.

On November 8, 2002, Virginia adopted EPA's new recommended bacteria indicators of E. coli and enterococci and has made significant progress in implementing Beach Act requirements.

In 2000, DEQ updated its Continuing Planning Process for Water Quality Management in conformance with section 303(e)(1) of the CWA. This document describes the coordination of the water quality management activities of DEQ and its partner agencies.

The State implements its antidegradation policy through State-developed permitting guidance.

EPA approved the amended Virginia Water Quality Standards on December 11, 2003, concluding the triennial review. The State has invested a significant amount of time in developing Chesapeake Bay criteria and as a result has not announced the beginning of a new triennial review. The State is expected to publish a "Notice of Intended Regulatory Action" in the next few months announcing the start of the triennial review.

4. Total Maximum Daily Loads

The State of Virginia:

Permits with TMDLs associated with them are identified in DEQ's CEDS database. In addition, planning staff in each DEQ regional office maintain a list of approved TMDLs and consult those lists when reviewing draft VPDES permits to ensure that any TMDL wasteload allocations are appropriately incorporated in the permit. In most cases, wasteload allocations are identified in the TMDL by permittee and they transfer directly into permit limits. Stormwater related wasteload are implemented through best management practices.

EPA Region 3:

The 2003 EPA Region 3 States' NPDES meeting was combined with the second annual EPA Region 3 States TMDL Meeting due to the growing number of TMDLs that are directly impacting permit limits. Close to 80 State participants joined representatives from other federal agencies, the River Basin Commissions, and EPA Headquarters and Regional staff to discuss the latest policy, procedures, and expectations in the NPDES compliance, permits, and the TMDL programs.

5. Safe Drinking Water Act

The Safe Drinking Water Act was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996, the latter amendment requiring actions to protect the drinking water sources (e.g., rivers, lakes, groundwater wells) as well as enhance overall capabilities of water systems. The Safe Drinking Water Act authorizes EPA to set national health-based standards for drinking water, weighing available technology and costs. These enforceable national drinking water regulations require water systems to treat raw water, to test the finished water to ensure that standards are achieved, and to inform the public of the monitoring results, including any exceedance of the standards or failure to monitor. The oversight of water systems can be delegated to States by EPA. Under the Safe Drinking Water Act, States can apply to EPA for the primary enforcement responsibility ("primacy") to administer a Public Water Systems Supervision (PWSS) Program within their jurisdictions, if they can show that they will adopt standards at least as stringent as EPA's and make sure water systems meet these standards. Virginia has continuously maintained its primacy over the PWSS Program since 1977. At present, there are approximately 3,200 water systems serving six million people in Virginia.

Section V. Other Program Highlights

DEQ attempts to simplify the process of obtaining permit coverage and reporting under the permit as much as possible through simplified or electronic procedures and through general permits, and provides accessibility to staff for assistance where needed, including public or other meetings and technical assistance through various programs in the division. DEQ's Web site provides information on all the division's functions. DEQ maintains an Innovative Technology Program that includes the following components:

- Encouraging participation in demonstration/validation programs (such as EPA's Environmental Technology Verification program) that generate credible performance data.
- Exploring opportunities to join with other States in reciprocal acceptance of new technologies and removal of impediments to new technology.
- Enhancing awareness of new technologies among potential users and regulators.
- Connecting technology developers and entrepreneurs to supporting business and technical resources.
- Performing outreach and helping companies to showcase new environmentally preferable technologies.

DEQ maintains an Office of Environmental Education and an Office of Pollution Prevention. DEQ has established the Virginia Mentoring Network and the Virginia Environmental Excellence Program (VEEP).

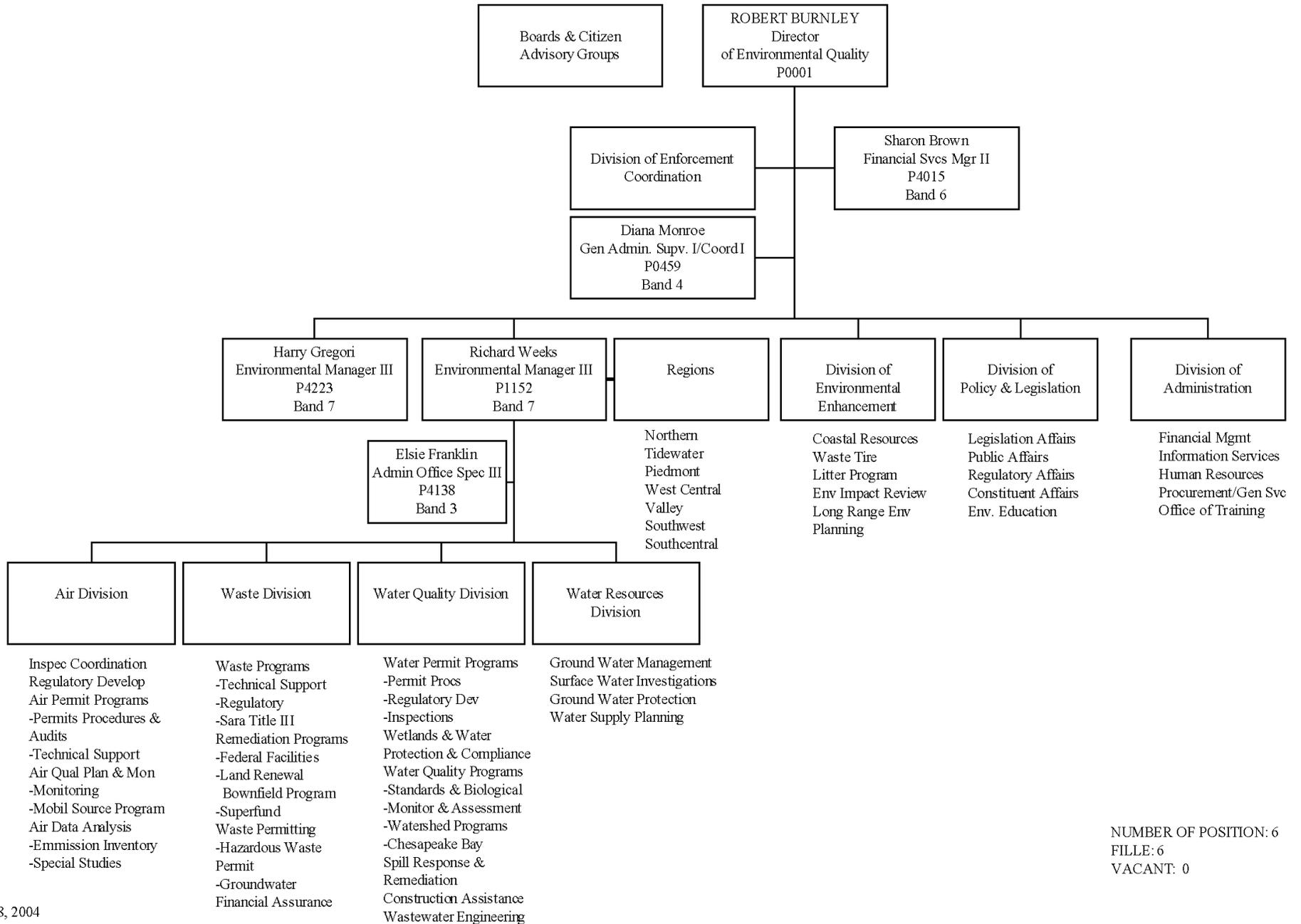
The Virginia Mentoring Network includes individuals and companies that have voluntarily committed to provide free assistance and insight on various environmental topics, such as pollution prevention, environmental management systems, or regulatory issues. Generally, mentoring programs target small businesses or other organizations lacking the resources to hire environmental staff or consultants. However, the Virginia Mentoring Network can also be used as an information-sharing service, where peers can discuss similar issues and problems completely outside of the regulatory arena.

There are two types of participation in the VEEP program, Environmental Enterprise and Exemplary Environmental Enterprise. The Environmental Enterprise or E2 level of participation is for organizations that are interested in beginning or are in the early stages of implementing an environmental management system. The Exemplary Environmental Enterprise or E3 level of participation is for organizations with a fully implemented environmental management system, pollution prevention programs, and demonstrated performance. In July 2000, DEQ signed a memorandum of agreement with EPA Region 3 outlining the agencies' commitment toward regulatory innovation and the Virginia Environmental Excellence Program. The memorandum of agreement identifies the processes and procedures that will be used to review VEEP applications as well as requests by VEEP E3 participants for regulatory flexibility. On April 24, 2002, DEQ signed a second memorandum of agreement on the program with EPA Headquarters, committing EPA and DEQ to work together to coordinate the VEEP and National

Environmental Performance Track programs in terms of administration, marketing, and provision of incentives.

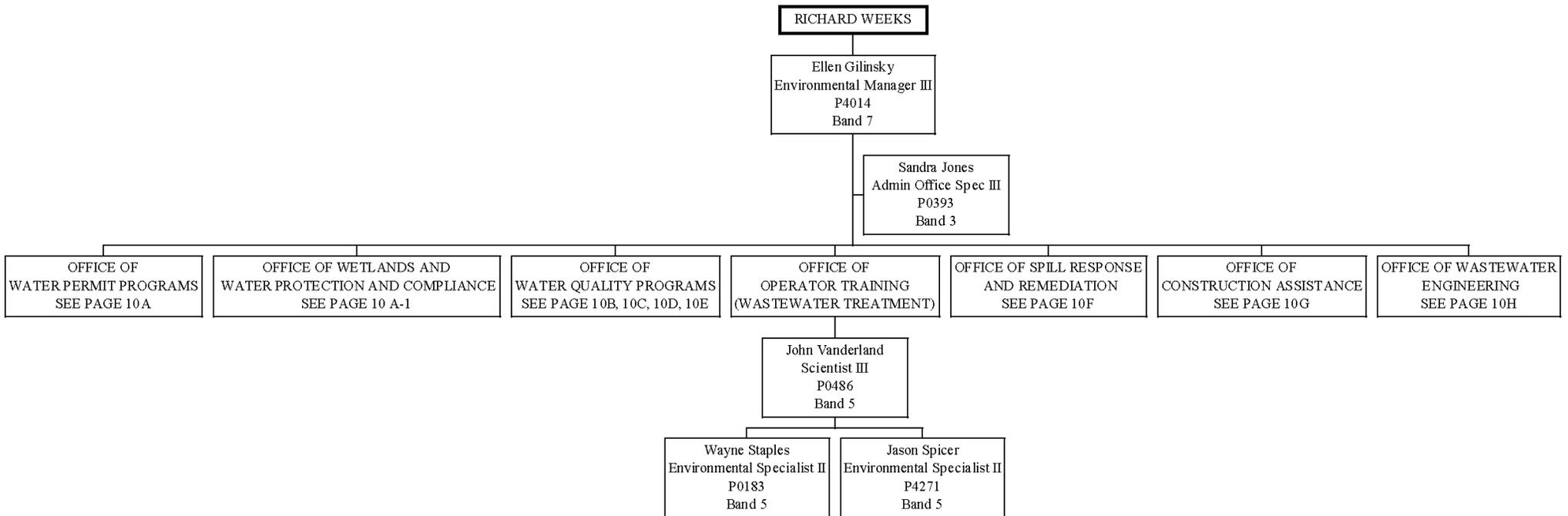
The success of all of these programs is measured by the increase in participation by various organizations and the corresponding decrease in the use of polluting products reported by the member organizations.

DEPARTMENT OF ENVIRONMENTAL QUALITY EXECUTIVE MANAGEMENT



NUMBER OF POSITION: 6
FILE: 6
VACANT: 0

WATER QUALITY DIVISION



NPDES Management Report, Fall 2004

Virginia

			Profile Section	GPRA Goal	Nat. Avg.	National Data Sources		Additional Data	
						State Activities	EPA Activities	State Activities	EPA Activities
NPDES Progress									
Universe	1	# major facilities (6,690 total)	I.1		n/a	149	0		
	2	# minor facilities covered by individual permits (42,057 total)	I.1		n/a	1,156	0		
	3	# minor facilities covered by non-storm water general permits (39,183 total)	I.1		n/a	1,934	0		
	4	# priority permits (TBD)	I.6			--	--		
	5	# pipes at facilities covered by individual permits (142,761 total)	I.7		n/a	2,149	--		
	6	# industrial facilities covered by individual permits (32,505 total)	I.1		n/a	935	0		
	7	# POTWs covered by individual permits (15,197 total)	I.1		n/a	366	0		
	8	# pretreatment programs (1,482 total)	II.2		n/a	34	--	39	
	9	# Significant Industrial Users (SIUs) discharging to pretreatment programs (22,158 total)	II.2		n/a	410	--	408	
	10	# Combined Sewer Overflow (CSO) permittees (831 total)	II.5		n/a	3	--		
	11	# CAFOs (current and est. future) (17,672 total)	II.3		n/a	150	--		
	12	# biosolids facilities (TBD '05)	II.6			--	--		
NPDES Program Administration	13	State or Region assessment of State NPDES program (none (N)/assessment (A)/profile (P))	I.1	50 states 2004	n/a	A, P	P		
	14	% pipes at facilities covered by individual permits w/ lat/long in PCS	I.7		46.3%	45.7%	--		
	15	State CAFO legal authority expected (mo/yr)	II.3	2005	n/a	11/04	n/a	4/05	
	16	# Withdrawal petitions/legal challenges (22 total)	I.4		n/a	2	n/a		
	17	DMR data entry rate	I.7		95%	100%	--		
	18	# permit applications pending (1,011 total)	I.6		n/a	2	--		
NPDES Program Implementation	19	% major facilities covered by current permits	I.6	90%	83.7%	94.6%	n/a		
	20	% minor facilities covered by current individual or non-storm water general permits	I.6	90% 12/04	87.0%	94.0%	n/a		
	21	# major facilities w/permits expired >10 yrs. (56 total)	I.6		n/a	0	0		
	22	% priority permits issued as scheduled (TBD '05)	I.6	95% 2005		--	--		
	23	% pretreatment programs inspected/audited during 5 yr. inspection period	II.2		85.3%	100.0%	--		
	24	% SIUs w/control mechanisms	II.2		99.2%	99.8%	--		
	25	% of CSO permittees with long-term control plans developed or required	II.5	75% 2008	82.2%	100.0%	--		
	26	% CAFOs covered by NPDES permits	II.3		35%	0%	--		
	27	% biosolids facilities that have satisfied part 503 requirements (TBD '05)	II.6			--	--		
	28	# Phase I storm water permits issued but not current (76 total)	II.4		n/a	0	n/a		
	29	# Phase I storm water permits not yet issued (5 total)	II.4		n/a	0	n/a		
	30	Phase II storm water small MS4 permits current (Y/N/D (draft) (35 States)	II.4	100% states 2008	n/a	Y	n/a		
	31	Phase II storm water construction permit current (Y/N/D (draft) (49 States)	II.4	100% states 2008	n/a	Y	n/a		
NPDES Compliance Monitoring and Enforcement Response	32	% major facilities inspected	III.3		71%	51%	4%		
	33	(inspections at minors) / (total inspections at majors and minors)	III.3		76%	84%	95%		
	34	% major facilities in significant non-compliance (SNC)	III.1		20%	7%	--		
	35	% SNCs addressed by formal enforcement action (FEA)	III.1		14%	7%	--	14%	
	36	% SNCs returned to compliance w/o FEA	III.1		70%	86%	--	79%	
	37	# FEAs at major facilities (666 total)	III.1		n/a	7	2	11	
	38	# FEAs at minor facilities (1,660 total)	III.1		n/a	19	30	32	

Explanation of Column Headers:

Profile Section: For each measure, this column lists the section of the profile where the program area (including any additional data for the measure) is discussed.

National Data Sources: The information in these two columns is drawn from two types of sources:

(1) EPA-managed databases of record for the national water program, such as PCS, the National Assessment Database, and the National TMDL Tracking System. NPDES authorities are responsible for populating PCS with required data elements and for assuring the quality of the data. EPA is working to phase in full use of NAD and NNTS as national databases.

(2) Other tracking information maintained by EPA Headquarters for program areas such as CAFOs, CSOs, and storm water.

The [definitions document](#) accompanying this Management Report provides a detailed definition of each data element in the National Data Sources columns.

Additional Data: These columns provide additional data in cases where information from other data sources differs from information in the National Data Sources column for reasons such as different timing of the data "snapshot." Additional data should generally adhere to the same narrative definitions as data in the National Data Sources, and should be derived using similar processes and criteria. Our goal is to work with the States on these discrepancies to ensure consistent and accurate reporting. A State contact is available who can respond to queries. The profiles discuss each additional data element.

State Activities: Information in these columns reflects activities conducted by the State program. (Shaded cells in these columns indicate that the work may not be entirely the State's responsibility, but a breakdown of the data into EPA and State responsibilities is unavailable.)

EPA Activities: Information in these columns reflects activities conducted by the EPA Region within the State.

NPDES Management Report, Fall 2004

Virginia

		Profile Section	GPRA Goal	Nat. Avg.	National Data Sources		Additional Data		
					State Activities	EPA Activities	State Activities	EPA Activities	
Water Quality Progress									
Universe	39	River/stream miles (3,419,857 total)	IV.2		n/a	50,537	n/a		
	40	Lake acres (27,775,301 total)	IV.2		n/a	120,751	n/a		
	41	Total # TMDLs in docket at end of FY 2003 (52,795 total)	IV.4		n/a	1,433	--		
	42	# TMDLs committed to in FY 2003 management agreement (2,435 total)	IV.4		n/a	5	0		
	43	# Watersheds (2,341 total)	IV.2		n/a	--	--		
Water Quality Administration	44	On-time Water Quality Standards (WQS) triennial review completed (42 States)	IV.3		n/a	Y	n/a		
	45	# WQS submissions that have not been fully acted on after 90 days (32 total)	IV.3	<25% submissions	n/a	n/a	0		
Water Quality Implementation	46	State is implementing a comprehensive monitoring strategy (Y/N) (TBD)	IV.1	all states 2005	--	--	--		
	47	% river/stream miles assessed for recreation	IV.2		13.8%	17.1%	n/a		
	48	% river/stream miles assessed for aquatic life	IV.2		22.0%	25.4%	n/a		
	49	% lake acres assessed for recreation	IV.2		49.4%	85.1%	n/a		
	50	% lake acres assessed for aquatic life	IV.2		48.5%	92.0%	n/a		
	51	# outstanding WQS disapprovals (23 total)	IV.3		n/a	0	n/a		
	52	WQS for E. coli or enterococci for coastal recreational waters (12 States)	IV.3	35 states 2008	n/a	Y	n/a		
	53	WQS for nutrients or Nutrient Criteria Plan in place (13 States)	IV.3	25 states 2008	n/a	N	n/a		
	54	Cumulative # TMDLs completed through FY 2003 (10,807 total)	IV.4		n/a	297	--		
	55	# TMDLs completed in FY 2003 (2,929 total)	IV.4		n/a	92	0		
Environmental Outcomes	56	# TMDLs completed through FY 2003 that include at least one point source WLA (5,036 total)	IV.4		n/a	196	--		
	57	% Assessed river/stream miles impaired for swimming in 2000	IV.2		--	6.2%	n/a		
	58	% Assessed lake acres impaired for swimming in 2000	IV.2		--	0.1%	n/a		
	59	# Watersheds in which at least 20% of the water segments have been assessed and, of those assessed, 80% or more are meeting WQS (440 total)	IV.2	600 2008	n/a	--	--		

Explanation of Column Headers:

Profile Section: For each measure, this column lists the section of the profile where the program area (including any additional data for the measure) is discussed.

National Data Sources: The information in these two columns is drawn from two types of sources:

(1) EPA-managed databases of record for the national water program, such as PCS, the National Assessment Database, and the National TMDL Tracking System. NPDES authorities are responsible for populating PCS with required data elements and for assuring the quality of the data. EPA is working to phase in full use of NAD and NTTs as national databases.

(2) Other tracking information maintained by EPA Headquarters for program areas such as CAFOs, CSOs, and storm water.

The [definitions document](#) accompanying this Management Report provides a detailed definition of each data element in the National Data Sources columns.

Additional Data: These columns provide additional data in cases where information from other data sources differs from information in the National Data Sources column for reasons such as different timing of the data "snapshot." Additional data should generally adhere to the same narrative definitions as data in the National Data Sources, and should be derived using similar processes and criteria. Our goal is to work with the States on these discrepancies to ensure consistent and accurate reporting. A State contact is available who can respond to queries. The profiles discuss each additional data element.

State Activities: Information in these columns reflects activities conducted by the State program. (Shaded cells in these columns indicate that the work may not be entirely the State's responsibility, but a breakdown of the data into EPA and State responsibilities is unavailable.)

EPA Activities: Information in these columns reflects activities conducted by the EPA Region within the State.