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Annual Survey of Virginia Law: Environmental Law

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ENVIRONMENTAL LAW

Eric A. DeGroff *

I. INTRODUCTION

This article summarizes federal and state environmental developments occurring in, or potentially affecting, the Commonwealth of Virginia during the period of June 1998 to June 2000. Legislative, regulatory, and judicial developments are included.

II. WATER

A. Wastewater

1. Legislative and Regulatory Developments

a. Concentrated Animal Feeding Operations

Wastewater discharge from concentrated animal feeding operations has received increasing attention over the past two years, both nationally and in Virginia. Reassessment at the national level began in February 1998, when President Clinton released the Clean Water Action Plan.1 The Action Plan noted that, while pollution from municipal wastewater treatment plants and indus-

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1. See U.S. ENVIRONMENTAL PROTECTION AGENCY & U.S. DEPARTMENT OF AGRICULTURE, CLEAN WATER ACTION PLAN: RESTORING AND PROTECTING AMERICA'S WATERS (1998) [hereinafter ACTION PLAN]. The ACTION PLAN represented a broad-brush assessment of the Nation's progress toward improving water quality and a blueprint for further action. The ACTION PLAN found that significant progress had been made in the last twenty-five years in the handling of sewage treatment and industrial waste, but noted that serious water quality problems persist. Id. States reported that about forty percent of the waters they assessed fell short of accepted water quality standards, and that half of the Nation's watersheds had serious to moderate water quality problems. Id.
trial sources has been significantly reduced during the past quarter of a century, runoff from city streets, agricultural operations (including animal feeding operations ("AFOs")) and other sources continues to be a concern. Contamination from AFOs is addressed nationally through the National Pollutant Discharge Elimination System ("NPDES") permit program.

AFOs may contribute significantly to groundwater and surface water pollution due to the high levels of nitrates, phosphorous, organic matter, and other contaminants found in manure, urine, and other wastes. Wastes must be stored prior to disposal and typically are kept in open-air tanks or lagoons. Disposal of such

2. Animal Feeding Operation is defined by EPA as any facility at which:
   (i) Animals . . . have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and
   (ii) Crops, vegetation forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility. 40 C.F.R. § 122.23(b)(1) (1999).
wastes is often accomplished by land application. Although land application is generally safe, manure applied to the land has been known to "pollute sources of drinking water by moving into surface water after being applied to land, or by leaching into groundwater." During periods of heavy precipitation, manure management systems such as lagoons or ponds may overflow and discharge wastewater into nearby rivers, lakes or streams. Concentrated animal feeding operations ("CAFOs") pose special risks to nearby water bodies because of the large quantities of waste they generate. They are, therefore, regulated as point sources and must secure NPDES permits.

Although Virginia is not entirely free from CAFO-related water quality concerns, the Commonwealth addresses the issue in a unique way. Rather than permit CAFOs as point sources under the Virginia Pollutant Discharge Elimination System ("VPDES"), the Commonwealth’s equivalent to the NPDES program—the Department of Environmental Quality ("DEQ")—requires animal feeding operations to obtain no-discharge permits under the Virginia Pollution Abatement ("VPA") Program. CAFOs in Virginia are prohibited from intentionally discharging into any receiving water and must develop waste management programs sufficient to preclude inadvertent discharge “except in the case of a storm

7. Id. at 515-16.
8. Id. at 516; see also Unified National AFO Strategy, supra note 3, at 1.
10. CAFOs are defined as animal feeding operations at which: (1) more than 1000 animal units (the equivalent of 1000 beef cattle) are confined on-site; or (2) between 301 and 1000 animal units are confined on-site and the facility discharges pollutants into waters of the United States; or (3) EPA has determined, on a case-by-case basis, that the facility is a significant potential source of pollution. 40 C.F.R. § 122.23(a)(3), app. B, pt. 122 (1999).

Even relatively small feeding operations may be regulated as CAFOs based upon certain risk factors listed in the regulation. Id. § 122.23(c)(1) (1999). These smaller, but potentially risky, operations also require NPDES permits. Id. The factors used to determine whether a "small" operation will be classified as a CAFO include the size of the operation, its location, the means of disposal of animal wastes and process waste waters, and the likelihood or frequency of discharges to waters of the United States. Id.

A trend toward increased concentration of livestock has been observed both nationally and in Virginia. See, e.g., October 1999 Testimony, supra note 3, at 13; see also E. Albion Armfield, Commercial Hog Farming in Virginia: A Survey of Environmental Issues and Impacts, EnvTL. L. News (Va. St. B. Envtl. L. Sec., Richmond, Va.), Winter 1998-99, at 14.

11. State water quality programs must adopt permit requirements for CAFOs that conform to EPA regulations. See 40 C.F.R. § 123.25 (1999).
event greater than the 25-year, 24-hour storm." DEQ considers its VPA permit requirements to be functionally equivalent to EPA's NPDES permit program for CAFOs in light of the "25-year, 24-hour" waste management provision, and it has been suggested that VPA-permitted feeding operations are excluded from NPDES regulations.

Effective July 1998, the Virginia State Water Control Law was revised to enhance DEQ oversight of CAFOs. While inspections are required only once every five years for most VPA-permitted facilities, CAFOs must now be inspected annually. The amendment also provides that owners and operators of new CAFOs seeking coverage under the general VPA permit must submit, with their registration statement, a copy of their approved nutrient management plan and a certification that all owners or residents of property adjoining the proposed operation have been notified about the facility. Owners and operators must maintain a plan for waste utilization in the event the operation is discontinued. The owner or operator of a proposed facility must notify DEQ at least fourteen days prior to placing animals on-site. Operators under the general permit must also complete specific training requirements. After July 1, 2000, no one may operate a CAFO with 300 or more "animal units" using a liquid manure collection and storage system without submitting a registration statement as provided in the Act or obtaining an individual VPA permit.

16. VA. CODE ANN. § 62.1-44.15(5a) (Repl. Vol. 1998). DEQ personnel who conduct CAFO inspections must be certified under the voluntary nutrient management training and certification program established in Virginia Code section 10.1-104.2. Id.
21. Id. § 62.1-44.17:1(D) (Cum. Supp. 2000). The term "animal unit" is used by the EPA to measure the size of an AFO, using a 1000-pound steer as the standard unit. Equivalents for other types of livestock and poultry are set forth in 40 C.F.R. Part 122, Appendix B. See also U.S. ENVIRONMENTAL PROTECTION AGENCY, PUB. NO. EPA 305-F-98-
1998, implementing a new VPA general permit for CAFOs. In a related action, the Virginia legislature amended the State Water Control Law, effective July 1999, to require development and implementation of a new VPA general permit for confined poultry feeding operations. The permit must include provisions governing the storage, treatment, and management of poultry waste, including dry litter. Any person owning or operating a confined poultry feeding operation must implement a nutrient management plan, track, and account for generated waste and ensure proper waste storage. The new law also establishes specific requirements for commercial poultry processors in Virginia. On or before January 1, 2000 (for poultry processing facilities already in operation), or before commencing operations at new facilities, a commercial poultry processor must file, with the State Water Control Board, a plan to: (1) provide technical assistance to the poultry growers with whom it contracts on proper management and storage of waste; (2) provide education programs for its poultry growers on waste nutrient management; (3) establish a toll-free hotline and advertising program to assist poultry growers in handling excess wastes; and (4) participate in developing a poultry waste transportation and alternative use matching grant program. DEQ is now developing the new general permit and a companion regulation in compliance with the statute. The regulation will apply only to concentrated animal feeding operations with 200 or more animal units of poultry. DEQ expected to finalize the new permit and regulation by October 1, 2000.

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28. VA. CODE ANN. § 62.1-44.17.1. 1(A) (Cum. Supp. 2000). Under federal regulations, 200 "animal units" of poultry would consist of 11,000 turkeys, 20,000 laying hens or broilers (if the facility has continuous overflow watering), 6000 laying hens or broilers (if the facility has a liquid manure system), or 1000 ducks. See 40 C.F.R. app. B, pt. 123 (1999).

b. Other New or Revised Federal Effluent Limitations, Pretreatment Standards and New Source Performance Standards

The EPA has issued, or is planning to issue, new regulations establishing effluent limitations and standards that will affect a variety of Virginia facilities. First, in January 2000, EPA published its final rule governing effluent limitations, pretreatment standards and new source performance standards for landfills. The regulation became effective February 18, 2000, and establishes technology-based effluent limitations for wastewater discharges associated with hazardous and non-hazardous landfill facilities, both new and existing, that are regulated under Subtitles C and D of the Resource Conservation and Recovery Act ("RCRA"). The rule does not establish pretreatment standards for pollutants introduced into publicly owned treatment works ("POTWs") by RCRA-regulated landfills, but applies only to facilities that discharge directly into receiving waters. Most "captive" landfills—those that are directly associated with specific industrial or commercial operations and receive wastes generated only from those or similar operations—are also excluded from coverage under the new rule.

EPA has proposed a new regulation concerning effluent limitations and pretreatment standards for centralized waste treatment facilities. The proposed rule would establish technology-based standards for facilities that receive hazardous and non-hazardous industrial wastes, wastewater or used material from off-site sources for treatment or materials recovery. It would apply only

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31. Id. Although RCRA establishes disposal criteria and siting, design, and operation requirements for landfills, it does not address the discharge of wastewater from landfills to surface waters or to POTWs. With this regulation, EPA is setting effluent guidelines for landfills under the Clean Water Act to limit discharges into the Nation's waters.
32. Id.
33. Id. The kinds of facilities with which landfills are generally associated (e.g., organic chemical manufacturing facilities, pulp, and paper mills or oil refineries) are already regulated by effluent guidelines applicable to these industries.
35. Id.
to facilities that treat or recover metal-bearing, oily or organic wastes. \textsuperscript{36} Final action on the proposed rule was expected by August 2000. \textsuperscript{37} EPA has also proposed new effluent limitations, pretreatment standards and new source performance standards for certain facilities that clean transportation equipment. \textsuperscript{38} The rule would apply to facilities that "generate wastewater from cleaning the interior of tank trucks, closed-top hopper trucks, rail tank cars, closed-top hopper rail cars, intermodal tank containers, inland tank barges, closed-top hopper barges, ocean/sea tankers, and other similar tanks" that are "used to transport materials or cargos that come into direct contact with the tank or container interior." \textsuperscript{39} Facilities that do not clean the interior of tanks would be excluded from the regulation. \textsuperscript{40} Wastewater covered by the new rule would include all contact washwaters that come into direct contact with the tank or container interior—including pre-rinse solutions, chemical cleaning solutions and final rinse solutions—as well as wastewater generated in cleaning vehicle exteriors, equipment and floor washings. \textsuperscript{41} The proposed regulation does not include effluent guidelines or pretreatment standards for facilities cleaning petroleum-transporting trucks or rail cars. Neither does the proposal include pretreatment standards for facilities cleaning trucks, rail cars or barges hauling food, because pollutants generated by this kind of equipment have been found amenable to treatment by POTWs. \textsuperscript{42} EPA promulgated the final regulation August 14, 2000. \textsuperscript{43}

EPA has proposed two significant regulatory amendments respecting the development and revision of state water quality standards. Section 303(d) of the Clean Water Act ("CWA") requires every state to establish a list of impaired waters within its

\textsuperscript{36} Id.
\textsuperscript{37} Unified Agenda, Environmental Protection Agency, 64 Fed. Reg. 65,012, 65,146 (Nov. 22, 1999) [hereinafter Unified Agenda].
\textsuperscript{39} Id.
\textsuperscript{40} Id.
\textsuperscript{41} Id.
\textsuperscript{42} Id.
jurisdiction (the "303(d) list") and determine a total maximum daily load ("TMDL") for selected pollutants for each impaired water body.\textsuperscript{45} After calculating the TMDL, the state must then allocate that quantity of pollutant among all sources that contribute to contamination of the listed water body. The TMDLs thus "serve as planning tools for the states to develop specific controls needed by point and nonpoint sources" to achieve the water quality necessary for the water body's designated use.\textsuperscript{46}

States are required by law to submit their 303(d) lists to EPA "from time to time" for review and approval.\textsuperscript{47} The EPA has interpreted this provision to require that states update and submit their lists every two years, with an initial due date of October 22, 1992, and subsequent deadlines on April 1 of every even-numbered year thereafter.\textsuperscript{48} All states have submitted the listings due April 1, 1998, and "[a]s of January 2000, EPA had approved the vast majority" of them.\textsuperscript{49} Dissatisfied with the pace of this process, however, citizen groups initiated legal actions against EPA several years ago seeking more timely compliance.\textsuperscript{50} At least eighteen of these cases have been resolved by court order, consent decree, or settlement agreement, and EPA is attempting to meet the deadlines thus imposed.\textsuperscript{51}

Meanwhile, in August 1999, EPA proposed comprehensive revisions to its listing regulation. The revisions are intended to

\textsuperscript{44} A TMDL is the total amount of a selected pollutant a water body can receive without violating the applicable water quality standard. U.S. Environmental Protection Agency, \textit{Total Maximum Daily Load} at http://www.epa.gov/reg3wapd/tmdl/index.htm (last modified Aug. 31, 1999).

\textsuperscript{45} 33 U.S.C. § 1313(d) (1994). "Impaired waters" are those that fail to meet applicable water quality standards despite the implementation of the effluent limitations required by U.S. Code sections 1311(b)(1)(A) and (B). \textit{Id}.


\textsuperscript{48} 40 C.F.R. § 130.7(d)(1) (1999).


\textsuperscript{50} October 1999 Testimony, supra note 3, at 6. Suits were initiated in 25 states, including Maryland, Pennsylvania, West Virginia, Delaware, and the District of Columbia, but not Virginia. Kinney & Wortzel, supra note 46, at 1217 n.2.

\textsuperscript{51} October 1999 Testimony, supra note 3, at 6.
clarify the procedures to be used to establish the section 303(d) lists, ensure public participation in the process, and promote consistency among the states in calculating TMDLs. When proposing the revised listing procedures, EPA suggested that state resources would be better spent producing the lists due on April 1, 2002, under the improved procedures instead of generating lists for the April 2000 deadline under the current procedures. Accordingly, EPA has proposed that the April 1, 2000 deadline be deleted from the listing regulation. Although EPA would retain the April 1, 2000 deadline for states covered under the settlements mentioned above, the April 1, 2000 deadline would be waived for Virginia. The next deadline for submitting Virginia’s 303(d) list would be April 1, 2002, and that list would be generated in accordance with EPA’s revised procedures.

EPA has also proposed a revision to the process by which water quality standards become effective under the CWA. Section 303 of the CWA provides procedures for the development, revision, review and approval of state water quality standards. States must hold public hearings at least once every three years to review and, if necessary, revise their standards. Any new or revised water quality standard must be submitted to EPA for review. If EPA determines that the new or revised standard meets the requirements of the Act, section 303(c)(3) provides that the new standard “shall thereafter” be the water quality standard for the applicable water bodies in that state. The CWA does not,
however, say when the new state standard becomes effective.\textsuperscript{62}

The process set forth in CWA section 303 was intended to ensure that there would always be a complete set of enforceable water quality standards in every jurisdiction that met the requirements of the Act.\textsuperscript{63} EPA has historically held that water quality standards that are duly adopted by the states become effective immediately and remain in effect, even if disapproved by EPA, until the states revise the standard or EPA promulgates a rule that supersedes the state water quality standard.\textsuperscript{64} This position was challenged in 1993 by a coalition of citizen's groups that claimed that CWA section 303(c)(3) precluded implementation of new or revised state water quality standards until approved by EPA.\textsuperscript{65} Following a holding for the plaintiffs by the United States District Court for the Western District of Washington,\textsuperscript{66} EPA entered into a settlement agreement under which it agreed to revise its regulations in accordance with the court's decision.\textsuperscript{67} The proposed regulatory amendment would not affect the way in which state water quality standards are developed or adopted, but would provide that any new or revised standards would not become effective for CWA purposes until approved by EPA.\textsuperscript{68} EPA expects to promulgate the final rule by August 2000.\textsuperscript{69} Even under the new rule, a state water quality standard not approved by EPA may be enforced by the state if the standard is no less stringent than EPA's standard.\textsuperscript{70}

c. Other State Legislative and Regulatory Developments

The 1998 Virginia General Assembly enacted a measure, effective July 1, 1998, providing that any general permit issued by the State Water Control Board for discharges of storm water and pro-

\begin{itemize}
\item \textsuperscript{62} See id. § 1313.
\item \textsuperscript{63} See EPA Review and Approval of State and Tribal Water Quality Standards, 64 Fed. Reg. 37,072, 37,073 (proposed July 9, 1999) (to be codified at 40 C.F.R. pt. 131).
\item \textsuperscript{64} 40 C.F.R. § 131.21(c) (1999).
\item \textsuperscript{66} Id. at *2-4.
\item \textsuperscript{67} See EPA Review and Approval of State and Tribal Water Quality Standards, 64 Fed. Reg. at 37,074.
\item \textsuperscript{68} Id. at 37,079-80.
\item \textsuperscript{69} Id. at 37,073.
\item \textsuperscript{70} Id. at 37,080.
\end{itemize}
cess wastewater from the manufacture of ready-mix concrete would apply to both permanent and portable plants.\textsuperscript{71} Any settling basin for the treatment and control of process wastewater and commingled storm water constructed at such a facility on or after February 2, 1998, must be lined with concrete or other impermeable materials.\textsuperscript{72} Any settling basin constructed on or before February 1, 1998, may also be required to have an impermeable liner.\textsuperscript{73} Effective October 1, 1998, DEQ adopted a general permit regulation to implement this statute.\textsuperscript{74}

The General Assembly also enacted legislation requiring coal loading facilities not regulated under the Virginia Coal Surface Mining Control and Reclamation Act of 1979 to obtain VPDES discharge certificates as provided in Virginia Code section 62.1-44.16.\textsuperscript{75} Applications from such facilities must include “pertinent plans, specifications, maps, and such other relevant information as may be required, in scope and details satisfactory to the [State Water Control] Board.”\textsuperscript{76}

The 1999 Virginia General Assembly amended the law pertaining to Surface Water Management Areas to require the State Water Control Board to hold a public hearing before approving a voluntary agreement among persons withdrawing surface water within a management area.\textsuperscript{77} Under the law as amended, the Board must become a party to the agreement.\textsuperscript{78} The legislature also amended the Virginia Water Quality Improvement Act of 1997\textsuperscript{79} to establish minimum public participation requirements for the development of guidelines for eligibility requirements as well as priorities and criteria for grants from the Virginia Water Quality Improvement Fund.\textsuperscript{80}

The 2000 Virginia General Assembly enacted a number of provisions designed to enhance water quality testing and usage.

\begin{itemize}
\item \textsuperscript{71} VA. CODE ANN. § 62.1-44.15:5.2 (Repl. Vol. 1998).
\item \textsuperscript{72} Id.
\item \textsuperscript{73} Id.
\item \textsuperscript{74} 9 VA. ADMIN. CODE 25-193-10 to -80 (Cum. Supp. 2000).
\item \textsuperscript{76} VA. CODE ANN. § 62.1-44.16(1) (Repl. Vol. 1998).
\item \textsuperscript{77} See id. § 62.1-245 (Cum. Supp. 2000).
\item \textsuperscript{78} Id.
\item \textsuperscript{79} See id. §§ 10.1-2117, -2128 to -2132 (Cum. Supp. 2000).
\item \textsuperscript{80} See id. § 10.1-2129 (Cum. Supp. 2000).
\end{itemize}
House Bill 404 increased requirements for the State Water Control Board and DEQ to monitor and report toxic substances in state waters. In its annual report to the General Assembly, the State Water Control Board must include a description of water body segments for which there has been a commitment to increased monitoring. House Bill 625 requires that permits for surface water impoundments used primarily to provide cooling water for power generators must include a "lake level contingency plan." The contingency plan will allow specific reductions in the flow released from the impoundment when drought conditions cause the water level above the dam to drop below a designated level. This provision does not apply to facilities that address release and flow requirements during drought conditions in a Virginia Water Protection Permit.

Effective January 1, 1999, the State Water Control Board adopted regulations establishing requirements for issuing groundwater withdrawal permits to agricultural users. To preserve any claim to withdrawal based on historic use, agricultural users were to have filed an application with a letter of explanation to the Board by January 1, 1999.

2. Case Law

Recent litigation in the Eastern District of Virginia has prompted the establishment of a compliance schedule under which DEQ must develop and submit TMDLs for waters listed in Virginia's section 303(d) submission. Regulations promulgated by EPA under section 303(d) require that states identify specific pollutants causing, or expected to cause, violations of water quality standards for the water bodies included in the states' section 303(d) lists. States must also develop specific TMDLs for tar-

82. Id.
84. Id.
85. Id.
89. 40 C.F.R. § 130.7(b)(4) (1999).
geted waters.\textsuperscript{90} By law, EPA must approve or disapprove the states’ TMDLs within thirty days following their submission.\textsuperscript{91} If a TMDL is disapproved, EPA must develop an alternative standard for the state within thirty days.\textsuperscript{92}

In the twenty years since the initial deadline for developing TMDLs, Virginia had never submitted a TMDL for any of its waters, and EPA had never established a TMDL of its own for the Commonwealth.\textsuperscript{93} Two nonprofit organizations—the American Canoe Society and the American Littoral Society—charged that EPA had failed to perform the duties imposed on it under CWA section 303(d).\textsuperscript{94} The United States District Court for the Eastern District of Virginia granted in part, denied in part, and deferred in part EPA’s motion to dismiss.\textsuperscript{95} The parties thereafter negotiated a consent decree providing “an eleven-year schedule for the establishment of TMDLs for several hundred enumerated waters in Virginia.”\textsuperscript{96} Under the terms of the decree, the schedule for submission is “divided into four parts, with separate schedules for the creation of TMDLs for each of four categories of Virginia waters.”\textsuperscript{97} Virginia must develop and submit TMDLs for each specified water or provide data demonstrating that TMDLs are unnecessary.\textsuperscript{98} Should the Commonwealth fail to meet the deadlines imposed in the decree, EPA will be required to establish TMDLs.\textsuperscript{99} By November 1, 2000, EPA must review Virginia’s continuing planning process, provide notice to the public and allow the public an opportunity to comment on the EPA’s review.\textsuperscript{100}

\textsuperscript{90} Id. § 130.7(c)(1).
\textsuperscript{92} Id.
\textsuperscript{93} Am. Canoe, 30 F. Supp. 2d at 913. In a later proceeding the court stated that although Virginia had not provided anything approaching a complete TMDL submission, the parties disagreed as to whether the Commonwealth had, at one time, submitted a single TMDL for an “Unnamed Tributary to Fawn Creek,” a stream reportedly less than half a mile in length. Am. Canoe Ass’n v. EPA, 54 F. Supp. 2d 621, 624 n.8 (E.D. Va. 1999).
\textsuperscript{94} See Am. Canoe, 30 F. Supp. 2d at 911. Plaintiffs also asserted that Virginia had failed to identify all impaired waters within its borders, thus submitting incomplete sections 303(d) lists, and that the Commonwealth had submitted both its 1996 and 1998 sections 303(d) lists to EPA several months late. Id. at 913.
\textsuperscript{95} Id. at 927.
\textsuperscript{96} Am. Canoe, 54 F. Supp. 2d at 624.
\textsuperscript{97} Id.
\textsuperscript{98} Id.
\textsuperscript{99} Id.
\textsuperscript{100} Id. at 624 n.10.
The 1998 Environmental Law Update discussed in depth the district court decision in *United States v. Smithfield Foods, Inc.* Therein, the district court had granted summary judgment to the United States, finding Smithfield liable for multiple CWA violations. Smithfield appealed the decision and the Fourth Circuit rendered its opinion in September 1999. The Fourth Circuit affirmed the district court’s grant of summary judgment as to Smithfield’s liability, finding that: (1) the State Water Control Board’s Orders were not incorporated into, and did not alter the terms of, Smithfield’s 1992 NPDES permit; (2) Virginia’s enforcement scheme under the State Water Control Law was not sufficiently comparable to CWA § 309(g) to preclude EPA enforcement; and (3) neither the United States Supreme Court’s decision in *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Foundation* nor CWA section 510 prohibited an enforcement action by EPA. As to the penalty assessment, the Fourth Circuit agreed with the district court’s assessment of separate penalties for violation of both the daily maximum and monthly average loading limits. It also concluded that the district court’s method of calculating economic benefit was appropriate, but noted that the trial court had failed to correct an admitted error in determining the present value of delayed compliance costs. The circuit court therefore remanded the penalty determination for recalculation.

B. Storm Water

In 1987, Congress amended the CWA to require implementation of a comprehensive national program for addressing problematic non-agricultural sources of storm water discharges.

101. See Kinney & Wortzel, supra note 46.
103. Id. at 769.
106. Smithfield Foods, 191 F.3d at 526.
107. Id. at 527-28.
108. Id. at 528-31.
109. Id. The miscalculation resulted in an apparent overcharge against Smithfield of $100,000 to $200,000 out of a total penalty of $12.6 million. Id.
EPA originally envisioned implementing the storm water permit program in two phases. EPA originally envisioned implementing the storm water permit program in two phases. Phase I, implemented in 1990, required NPDES permits for storm water discharges associated with the most likely sources of wet weather pollution: (1) "medium" and "large" separate storm sewer systems, and (2) each of eleven specific categories of industrial activity, excluding construction activity that disturbed less than five acres of land. Operators of construction sites disturbing less than five acres were required to obtain a permit only if their activity was part of a "larger common plan of development or sale." The Phase I regulations provided a conditional exclusion for facilities at which there was no exposure of industrial activities or materials to storm water. Any facility meeting the requirements for a "no exposure" exclusion was fully exempt from the NPDES permit requirement and from all other Phase I provisions. The Phase I rule also extended a moratorium, originally imposed under the Intermodal Surface Transportation Efficiency Act ("ISTEA"), which postponed the permit deadline and other regulatory requirements for all categories of industrial activity operated by municipalities with populations of less than 100,000. In the Phase I rule, the permit deadline was extended to August 7, 2001, for all municipally operated industrial activities except those "which the Director determines [contribute] to a violation of a water quality standard or is a significant contributor of pollutants to the waters of the United States."
Final regulations for Phase II of the storm water program were promulgated on December 22, 1999. The new rule requires NPDES permits for storm water discharges from: (1) operators of "small" separate storm sewer systems in "urbanized areas" not already covered under Phase I, and (2) operators of construction activities that disturb at least one, but less than five, acres of land. The permit requirement may be waived for a small storm sewer system if it is established that the system does not cause, nor have the potential to cause, water quality impairment. The permitting authority, however, must review any such waiver, at least once every five years, to ensure that no material changes have occurred. The permit application deadline for Phase II facilities is March 10, 2003, unless an earlier date is set by the permitting authority.

The Phase II final rule revises the "no exposure" provision included in the 1990 regulations for Phase I. Under the final

123. Id. at 68,734. An “urbanized area comprises a place and the adjacent densely settled surrounding territory that together have a minimum population of 50,000 people.” Id. at 68,751.
124. Id. at 68,734. EPA expects permitting authorities to use their existing Phase I general permit for large construction as a guide for preparing a Phase II general permit for small construction activity. Id. at 68,777.
125. Id. at 68,736. Two potential waiver options are available to operators of small separate storm sewer systems. The first applies where: (1) the jurisdiction served by the system is comprised of fewer than 1000 people; (2) the system is "not contributing substantially to the pollutant loadings of a physically interconnected" regulated storm sewer system; and (3) "if discharging to an impaired water body, storm water controls not needed based on a TMDL that addresses the pollutants of concern." Id. at 68,735. The second waiver applies where: (1) the jurisdiction served by the system is comprised of fewer than 10,000 people; (2) "permitting authority has evaluated all waters that received a discharge" from the system; (3) "storm water controls are not needed based on a TMDL for those waters;" and (4) future discharges are evaluated. Id.
"Pollutants of concern" include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (for example, total suspended solids, turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment in any water body to which the storm sewer system discharges. Id. at 68,746.
126. Id. at 68,851.
127. Id. at 68,840. DEQ has established March 10, 2003, as the application deadline for Virginia entities, with the possible exception of small construction sites discharging under authority of a general permit. Telephone Interview with Burt Tuxford, Storm Water Coordinator, Virginia Department of Environmental Quality (May 3, 2000). DEQ is considering the possibility of adopting an earlier deadline for small construction sites if the general permit for such sites can be developed before the statutory deadline. Id.
128. National Pollutant Discharge Elimination System—Regulations for Revisions of the Water Pollution Control Program Addressing Storm Water Discharges, 64 Fed. Reg. at
Phase II rule, a conditional no exposure exclusion is available to all categories of industrial activity regulated under Phase I if the facility can certify that all industrial materials and activities are protected by a storm resistant shelter that prevents exposure to rain, snow, snowmelt or runoff. To obtain the no exposure exclusion, written certification must be submitted to DEQ. The Phase II rule also further extends the ISTEA moratorium for municipally operated industrial activities to March 10, 2003.

In addition to the recent changes at the federal level, the State Water Control Board has revised Virginia's storm water permit provisions for heavy manufacturing facilities. Effective June 30, 1999, the general storm water permit for such facilities expired. Dischargers previously authorized under that permit who wished to continue to discharge under a general permit were required to apply for coverage under the industrial storm water general permit during the ninety-day period before the expiration of their old permit.

C. Drinking Water

The Safe Drinking Water Act ("SDWA") gives EPA the responsibility to establish national drinking water standards to protect the health of the 250,000,000 people who receive water from public water systems. Since 1974, EPA has set national safety standards for over eighty contaminants. Although EPA and state governments can set and enforce the standards, local governments and private well suppliers have direct responsibility for the quality of water consumed by their users. Public water systems test and treat their water, maintain the distribution systems that deliver water to consumers and report on their water quality.

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68,840. The "no exposure" provision was remanded to EPA for further rulemaking and has now been included in revised form in the Phase II rule. Id.
129. Id. at 68,840-41.
130. Id. at 68,841.
131. Id. at 68,840.
133. Id. at 25-151-60.A.6.
quality to the state.\textsuperscript{137} States and the EPA provide technical assistance to water suppliers and can take legal action against any regulated system that fails to meet the standards.\textsuperscript{138} The SDWA Amendments of 1996 required states to develop and implement Source Water Assessment Programs ("SWAP") to analyze the existence of, or potential threats to, the quality of public drinking water throughout each state.\textsuperscript{139} Every state was required to submit a program to EPA by February 1999, and to have completed all assessments no later than three and a half years after EPA approved the program.\textsuperscript{140}

Three regulations have been promulgated within the past two years that affect testing and operational requirements under the SDWA. First was the Disinfection By-Product Rule, the first new drinking water standard promulgated in the last six years.\textsuperscript{141} The rule lowers the maximum contaminant level ("MCL") for total trihalomethanes ("TTHMs") to 0.08 mg/L and sets the MCL for HAA5 at 0.06 mg/L.\textsuperscript{142} It also sets the MCL for bromate at 0.01 mg/L and for chlorite at 1.0 mg/L and requires that laboratories be certified to perform these analyses.\textsuperscript{143} The rule becomes effective for large surface water systems in December 2001, and for ground water systems and small surface water systems in December 2003.\textsuperscript{144}

The Unregulated Contaminant Monitoring Rule was promulgated in September 1999, and will take effect in 2001.\textsuperscript{145} It involves all large utilities (those that serve a population of more than 10,000) and 800 selected small utilities.\textsuperscript{146} Large utilities will be responsible for monitoring their own contaminant levels, but EPA will analyze samples from small utilities, which will be

\textsuperscript{137} Id. § 300h-2.
\textsuperscript{138} Id.
\textsuperscript{139} 42 U.S.C. § 300j-13(a)(2) (Supp. 1997).
\textsuperscript{140} Id. § 300j-13(a)(3).
\textsuperscript{141} National Primary Drinking Water Regulations: Disinfectants and Disinfection Byproducts, 63 Fed. Reg. 69,390 (Dec. 16, 1998) (to be codified at 40 C.F.R. pts. 9, 141 & 142).
\textsuperscript{142} Id. at 69,408.
\textsuperscript{143} Id. at 69,410.
\textsuperscript{144} Id. at 69,463-64.
\textsuperscript{146} Id.
chosen nationally at random.\textsuperscript{147} The rule requires monitoring for all contaminants currently on the Contaminant Candidate List.\textsuperscript{148}

On December 1, 1999, EPA published a final rule approving several updated or new drinking water analytical methods for chemical and microbiological contaminants, and amending laboratory certification and sample holding time requirements.\textsuperscript{149} Except for the withdrawal of certain older methods, the effective date for these amendments was January 3, 2000.\textsuperscript{150}

In addition to the final regulations cited above, EPA has promulgated new regulations affecting public notification requirements.\textsuperscript{151} Public notification is intended to ensure that consumers know if there is a problem with their drinking water. Public water systems must notify their consumers if: (1) the level of a contaminant in their water exceeds EPA or state drinking water standards; (2) there is a waterborne disease outbreak or other situation that may pose a risk to public health; or (3) the water system fails to test its water or if the system has a variance or exemption from the applicable regulations.\textsuperscript{152} EPA’s new regulation is designed to implement requirements enacted in the 1996 SDWA Amendments.\textsuperscript{153} The revised regulation requires fewer public notices overall, but more prompt notification in emergencies.\textsuperscript{154} The intent is to more clearly communicate the potential health risks associated with drinking water violations.\textsuperscript{155}

At the state level, House Bill 909, enacted by the 2000 Virginia General Assembly, requires that, “[e]very public water supply operator shall at least quarterly test the public water supply for the presence of methyl tertiary-butyl ether (MTBE).”\textsuperscript{156} MTBE is a

\begin{itemize}
  \item \textsuperscript{147} Id. at 50,558.
  \item \textsuperscript{148} Id. at 50,560.
  \item \textsuperscript{149} National Primary and Secondary Drinking Water Regulations: Analytical Methods for Chemical and Microbiological Contaminants and Revisions to Laboratory Certification Requirements, 64 Fed. Reg. 67,449, 67,450 (Dec. 1, 1999) (to be codified at 40 C.F.R. pts 141, 143).
  \item \textsuperscript{150} Id.
  \item \textsuperscript{151} National Primary Drinking Water Regulations: Public Notification Rule, 65 Fed. Reg. 40,520 (June 30, 2000) (to be codified at 40 C.F.R. pts. 9, 141).
  \item \textsuperscript{152} Id.
  \item \textsuperscript{153} Id.
  \item \textsuperscript{154} Id.
  \item \textsuperscript{155} Id.
\end{itemize}
highly soluble gasoline additive that came into general use in the
1980s. Although its health effects appear to be less severe than
those of other gasoline components, such as benzene, toluene,
ethyl-benzene and xylenes (“BTEX”), its potential threat to hu-
man health is still a matter of debate.

D. Chesapeake Bay and Coastal Zone Programs

1. Legislative and Regulatory Developments

The Chesapeake Bay is the largest estuarine system in North
America and represents a critical resource for Virginia and the
other “Bay States.” The physical and demographic characteris-
tics of the Bay and its watershed, however, have made environ-
mental preservation extremely challenging. Recognizing the
need for a coordinated approach to address the growing pollution
problem in the Bay, the legislatures of Virginia and Maryland en-
tered into an alliance in 1980—called the Chesapeake Bay Com-
mission (the “Commission”)—to promote a uniform legislative re-
sponse. Just three years later, the Commission joined with
leaders of the State of Maryland, the Commonwealths of Virginia

157. For further information about MTBE contamination in Virginia, see VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY, ISSUES BRIEF: MTBE CONTAMINATION IN
VIRGINIA GROUNDWATER (n.d.).
158. Id.
159. William Eichbaum, The Chesapeake Bay: Major Research Program Leads to Inno-
160. Id. at 10,258. The Chesapeake Bay estuarine system extends over 64,000 miles
from New York to Virginia. See generally Marshall Groom, The Chesapeake Bay Preserva-
field, Saving the Chesapeake, NAT’L J., May 21, 1988, at 68). The jurisdictions that his-
torically have cooperated in their efforts to clean and preserve the Bay are the State of
Maryland, the Commonwealths of Virginia and Pennsylvania, and the District of Colum-
bia. For a general discussion of environmental challenges facing the Bay and the develop-
ment of a cooperative cleanup strategy by the Bay States and other concerned parties, see
Harry R. Hughes and Thomas W. Burke, Jr., The Cleanup of the Chesapeake Bay: A Test of
161. Hughes and Burke, supra note 160, at 30-31 (noting the high population density
in jurisdictions surrounding and upstream of the Bay, the unusually high ratio of water-
shed land to water in the Chesapeake Bay watershed, and the fact that pollutants enter-
ing the Bay tend to remain there rather than “drain” into the Atlantic).
162. Paul D. Barker, Jr., The Chesapeake Bay Preservation Act: The Problem with State
Land Regulation of Interstate Resources, 31 WM. & MARY L. REV. 735, 744 (1990). The
Commission now includes the legislature of the Commonwealth of Pennsylvania. See
and Pennsylvania, the District of Columbia, and EPA in adopting the first Chesapeake Bay Agreement (the "1983 Agreement").163 The 1983 Agreement created, for the first time, an "organized structure dedicated to the systematic and scientific analysis of the Bay's problems and the refinement of a science-based, consensus-driven plan for the Chesapeake's cleanup."164 In 1987, the same parties signed a second Agreement, which they later amended in 1992, reaffirming their original commitment and setting more specific goals and objectives.165

One of the direct results of the 1983 Agreement was the creation of the Chesapeake Bay Program ("Bay Program"), a "unique regional partnership" that includes the state of Maryland, the Commonwealths of Virginia and Pennsylvania, the District of Columbia, the Chesapeake Bay Commission, the EPA, and a number of citizen advisory groups.166 The Bay Program is a cooperative resource management effort designed to help restore and protect the waters of the Bay and the Bay's living resources.167 Funding for the Bay Program is authorized under the CWA section 117.168 The Bay Program is currently drafting a third Chesapeake Bay Agreement to be formally adopted in the year 2000.169 The Chesapeake Executive Council released the first public draft of the new agreement—called "Chesapeake 2000"—in December 1999.170 The draft reaffirms the commitment of the original six signatories and updates the goals and action steps expected to

164. Id.
165. Id. at 30-31.
166. Id. at 31.
167. See U.S. ENVIRONMENTAL PROTECTION AGENCY, CITIZENS GUIDE TO THE CHESAPEAKE BAY PROGRAM (n.d.).
168. 33 U.S.C. § 1287(b) (as amended) (1994). The Bay Program is subject to periodic reauthorization, and Congress and the Administration have recently considered measures that would increase annual funding for the Bay Program from $13 million to as much as $30 million. Testimony of J. Charles Fox, Assistant Adm't, Office of Water, U.S. E.P.A. Before the Sen. Comm. On Envt' and Pub. Works—106th Cong. (July 22, 1999), http://www.epa.gov/ocirpage/testimony/07299cf.htm. President Clinton's fiscal year 2000 budget proposal reportedly would have increased funding to $19 million, while S. 492 would authorize funding at $30 million. Id.
169. Chesapeake 2000, supra note 162. Chesapeake 2000 was ultimately signed, as anticipated, on June 28, 2000. Telephone Interview with Peter Marx, Associate Director for Communications, Environmental Protection Agency, Chesapeake Bay Program (Sept. 19, 2000).
170. Chesapeake 2000, supra note 162.
guide the partnership.\(^\text{171}\) As drafted, the Agreement would commit the parties to a series of goals including: (1) a tenfold increase in oysters in the Bay based upon a 1994 baseline; (2) no-net loss of wetlands acreage and function through regulatory programs; (3) a net resource gain by restoring 25,000 acres of tidal and non-tidal wetlands by 2010; (4) expansion and linkage of contiguous forests through conservation easements; (5) continued reduction of the nutrient load of the Chesapeake Bay and the tidal portions of its tributaries; (6) establishment of no-discharge zones in the Bay and its tributaries for human waste from boats; and (7) a thirty-percent reduction, by 2010, in the rate of conversion of forest and agricultural lands to development.\(^\text{172}\)

The Chesapeake Bay Agreement is not the only coastal program undergoing change. In October 1998, EPA and the National Oceans and Atmospheric Administration ("NOAA") jointly announced a series of administrative changes to the Coastal Nonpoint Pollution Control Program under section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990.\(^\text{173}\) EPA and NOAA had first published a series of guidance documents for the development of state coastal nonpoint pollution control programs beginning in January 1993.\(^\text{174}\) Recognizing that the goals and deadlines reflected in their initial guidance were overly ambitious, the agencies adopted administrative changes in 1998 to provide affected states greater flexibility.\(^\text{175}\) Under the revised guidance, states may now focus their resources on preventing and controlling the most significant impacts of nonpoint source pollution in coastal areas, while integrating those efforts with "other programs and water quality initiatives, e.g., state § 319 nonpoint source programs, the development of Total Maximum Daily Loads (TMDL) under § 303(d) of the Clean Water Act, the Environmental Quality Incentives Program under the 1996 Farm Bill, the

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171. Id.
172. Id.
174. Id. The guidance included two approved guidance documents issued in 1993 (Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters, and Program Development and Approval Guidance), along with a letter dated January 6, 1995, and a March 16, 1995, document entitled Flexibility for State Coastal Nonpoint Programs. Id.
175. Id.
The revised guidance provides that “[i]n establishing priorities, states will address both pollution prevention and water quality improvement goals.” Under the revised guidelines, NOAA and EPA are committed to approving program elements based on voluntary or incentive-based compliance, if the agency: (1) has enforcement authority to prevent nonpoint source pollution and require management measures if necessary; (2) provides a description of the voluntary or incentive-based programs, including methods for tracking and evaluating those programs; and (3) establishes a commitment to use existing enforcement authority where appropriate. The timeframes for conditional approval of state programs remain the same as under the March 16, 1995 Flexibility Guidance, but the revised guidance recognizes the need for a more iterative planning and development process. Each state must develop both a five-year implementation plan and a fifteen-year program strategy, specifying when and how program implementation will occur.

2. Case Law

The Supreme Court of Virginia recently considered whether a regulatory restriction under the Coastal Primary Sand Dune and Beaches Protection Act (the “Dune Act”)

constituted an inverse condemnation.” Two lots located seaward of the primary coastal dune on Virginia Beach’s Chesapeake Bay shore were purchased by Seawall Enterprises, Inc., in 1979. Richardson Bell, the owner of fifty percent of Seawall’s stock, intended to develop residential houses on the lots, but the City disapproved the corporation’s initial plan in 1979. In 1980, the Virginia General Assembly enacted the Dune Act, and “the City passed an ordinance requiring developers who wished to ‘use or alter any coastal pri-

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176. Id.
177. Id.
178. Id.
179. Id.
180. Id.
181. Id.
184. Id. at 398, 498 S.E.2d at 415.
185. Id.
mary sand dune within this city' to obtain a permit from the Virginia Beach Wetlands Board.\textsuperscript{186}

Seawall dissolved in 1982, and Bell and his wife obtained title to the lots.\textsuperscript{187} On several occasions thereafter, Bell submitted plans to the City for residential development of the lots.\textsuperscript{188} His final plan, submitted in 1992, was denied initially by the Wetlands Board and denied again on appeal.\textsuperscript{189} Bell then sued the City, alleging that the permit denial deprived him of all economically beneficial use of his property and constituted a compensable regulatory taking under Article I, § 11 of the Virginia Constitution.\textsuperscript{190}

The jury awarded Bell $110,000, plus interest, and the trial court entered judgment accordingly.\textsuperscript{191} On appeal, however, the Supreme Court of Virginia reversed, holding that the ordinance in question predated Bell's ownership of the property, and that Bell's title did not, therefore, include the right to unregulated development.\textsuperscript{192} While acknowledging that the corporation of which Bell was a significant stockholder had acquired the land before passage of either the Dune Act or the Virginia Beach ordinance, the court traced Bell's interest to the property to his receipt of the title from Seawall in 1982.\textsuperscript{193} The court justified its holding as follows: "Bell, who accepted the benefits of corporate ownership, cannot avoid its disadvantages.... Any rights that Seawall acquired... belonged solely to Seawall as Seawall was an entity distinct and separate from Bell."\textsuperscript{194}

E. Other Developments

The 1999 Virginia General Assembly enacted legislation man-
dating the Department of Health ("DOH") and DEQ to "promote the use of rainwater and reuse of gray water as means to reduce fresh water consumption, ease demands on public treatment works and water supply systems, and promote conservation." In compliance with the statute, DOH has now developed general guidelines for the use of gray water. The guidelines identify specific categories of wastewater appropriate for reuse, outline applicable permit requirements, and describe appropriate installation and operational considerations. The state legislature further commissioned DEQ to study a range of issues involved in land application, reclamation, and reuse of treated wastewater. Assisted by an advisory group consisting of personnel from DOH, the Department of Conservation and Recreation, academics, representatives of engineering firms and other interested parties, DEQ submitted a detailed report to the Governor and General Assembly early this year. Following up on this report, the 2000 General Assembly enacted another measure calling on the State Water Control Board to encourage and establish requirements for the reclamation and reuse of wastewater as an alternative to discharging pollutants into waters of the state.

III. AIR

In the past two years, significant changes have occurred in the federal regulations and case law governing Clean Air Act ("CAA") implementation in Virginia. Key developments affecting Virginia (and the Eastern Region of the United States in general) are ad-

196. OFFICE OF ENVTL. HEALTH SERVS. VA. DEPT HEALTH, GRAYWATER GUIDELINES (n.d.). The guidelines describe "gray water" as untreated wastewater from certain plumbing fixtures and drains, which constitutes "sewage," but which is not highly contaminated with toxic chemicals, organic matter, suspended solids or pathogenic microorganisms. Id. It includes wastewater from bath tubs, showers, lavatory fixtures and clothes washing; it does not include industrial waste or wastewater from toilets, urinals, kitchen sinks, dishwashers or laundry water exposed to soiled diapers. Id. According to DOH guidelines, where gray water is currently reused, it typically is collected and stored for irrigation through subsurface piping, but may be treated for use in above ground irrigation or in toilet flushing. Id.
197. Id.
dressed below. A number of these developments are interrelated, and the ultimate outcome for some of them is uncertain due to ongoing litigation.

A. Federal Initiatives

1. Air Quality Standards

In July 1997, EPA published a new national ambient air quality standard ("NAAQS") for ground-level ozone that was designed to provide greater protection for at-risk populations.201 The new eight-hour NAAQS, with a level of 0.08 parts per million (ppm), was intended to replace the previous one-hour, 0.12 ppm standard.202 EPA planned to phase in the new rule as areas came into compliance with the previous standard.203 The agency therefore announced that, while the one-hour standard would remain effective for nonattainment areas, it would be revoked for areas in which it had been achieved for three consecutive years.204 The phase-out of the one-hour standard was codified, and final rules were issued eliminating that standard for areas found to be in attainment.205

201. National Ambient Air Quality Standards for Ozone, 62 Fed. Reg. 38,856 (July 18, 1997) (codified at 40 C.F.R. pt. 50) [hereinafter Final Ozone Rule]. For a brief analysis of both the revised ozone standard and a proposed revision to the NAAQS for particulate matter, see Kinney & Wortzel, supra note 46, at 1233-34.

202. Final Ozone Rule, supra note 201, at 38,858. The new 8-hour standard differs conceptually from the previous standard in that it is designed as a concentration-based, rather than expected exceedance, limit. Id. The revised standard is attained "when the 3-year average of the annual third-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm." Id. at 38,859. The current one-hour standard is met "when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is equal to or less than 1, averaged over 3 years." Id. at 38,857-59.


204. The phase-in approach was intended to provide continuity during the transition to the revised standard. Ozone Fact Sheet, supra note 203. The prospect of piecemeal implementation, however, raised immediate concerns for industry. Kathryn Williams Smith, Legal Challenges to the New NAAQS, 16 PACE ENVTL. L. REV. 87, 89 (1998).

205. Identification of Ozone Areas Attaining the 1-Hour Standard and to Which the 1-Hour Standard is No Longer Applicable, 63 Fed. Reg. 31,014 (June 5, 1998) (to be codified at 40 C.F.R. pt. 81) [hereinafter Ozone Recission Rule]; Identification of Additional Ozone Areas Attaining the 1-Hour Standard and to Which the 1-Hour Standard is No Longer Applicable, 63 Fed. Reg. 39,432 (July 22, 1998) (to be codified at 40 C.F.R. pt. 81); Identification of Additional Ozone Areas Attaining the 1-Hour Standard and to Which the 1-Hour
The phase-out of the one-hour standard was premised upon its replacement by the more stringent eight-hour NAAQS. The new standard, however, was immediately challenged. In May 1999, the District of Columbia Circuit Court remanded the eight-hour standard to EPA, finding that the construction of the CAA upon which EPA had relied in revising the NAAQS was unconstitutional as applied. While curtailing EPA's authority to enforce the new NAAQS, however, the court held that the agency could proceed with the re-designation of areas as attainment or nonattainment for a new ozone standard.

EPA has appealed the court's decision, and the United States Supreme Court has granted certiorari. Sources expect the Supreme Court to hear the appeal in the fall of 2000 and to render a decision in the Spring of 2001. If the court overturns the D.C. Circuit or remands the case for further review, it may not be clear until the year 2002 whether the eight-hour standard will ever be implemented. In the meantime, EPA has indicated that it intends to designate areas as attainment or nonattainment under the proposed eight-hour standard by July 2000 in case the new standard is upheld.

The net effect, for Virginia, of the circuit court's remand of the
eight-hour standard and EPA's rescission of the one-hour standard, is that the one-hour ozone NAAQS now applies only to northern Virginia, which historically has been a nonattainment area.214 The rest of the Commonwealth currently has no enforceable federal ozone standard.215 Like most states, however, Virginia has adopted its own one-hour standard identical to EPA's.216 Moreover, EPA has now proposed to reinstate the one-hour standard in areas where it was previously rescinded pending the final outcome of the NAAQS litigation.217 Reinstatement is expected to be effective by the start of the year 2000 ozone season.218

Reinstatement of the one-hour standard is expected to have little impact on Virginia.219 Northern Virginia remains a nonattainment area, so the standard has remained in effect there without interruption.220 Areas that had attained the one-hour standard before EPA's rescission, and have remained in compliance, will face no new requirements.221 Areas classified as attainment that have subsequently exceeded the one-hour standard, including Henrico and Charles City Counties,222 may be required to implement certain maintenance measures. EPA, however, reportedly does not plan to redesignate the Richmond area as nonattainment despite the area's recent exceedances.223

2. NOx SIP Call

One of the most intractable challenges faced by EPA in addressing the ozone problem in the Northeastern and Middle Atlantic regions of the United States is the problem of interstate transport. Among the strategies EPA has recently pursued is a

214. Ozone Recission Rule, supra note 205, at 31,086-89.
215. For a brief, but informative, analysis of the effect of EPA's rulemaking on Virginia, see Thomas E. Knauer, How Will Reinstating the One-Hour Ozone Standard Affect Virginia?, VA. ENVTL. COMPLIANCE UPDATE (Williams, Mullen, Clark & Dobbins), Nov. 1999, at 1-2.
216. Id.
217. Rescinding Findings Rule, supra note 206, at 57,425 (acknowledging that, because EPA can not presently enforce the 8-hour standard, "it is not appropriate to leave in place the determinations that the 1-hour ozone standard no longer applies").
218. Daniel, supra note 211.
220. Supra note 214 and accompanying text.
221. Knauer, supra note 215, at 1.
222. Daniel, supra note 211.
call for revised state implementation plans ("SIPs") to reduce emissions of nitrogen oxides ("NOx"), a precursor of ozone. EPA's SIP Call initially encompassed twenty-one states in the Northeast, the Middle Atlantic and the Midwest, plus the District of Columbia.\(^{224}\) It calls upon each jurisdiction to ensure the reduction of NOx emissions to a level that will not prevent attainment of the NAAQS for ozone in downwind states.\(^{225}\) During the public comment period on the proposed SIP Call Rule, thirteen states, including Virginia, submitted an alternative proposal to EPA.\(^{226}\) EPA rejected that proposal, however, and published a final rule requiring submission of revised SIPs by September 30, 1999.\(^{227}\)

Virginia and other states, together with utility industry representatives, petitioned the District of Columbia Circuit Court, seeking an expedited judicial review of the regulation and a stay of the September 1999 deadline.\(^{228}\) In May 1999, the court granted a stay for six months or until a decision might be rendered on the merits of the petition.\(^{229}\) On March 3, 2000, the court decided in EPA's favor.\(^{230}\) On April 20, however, Virginia and

\(^{224}\) Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone, 63 Fed. Reg. 57,356 (Oct. 27, 1998) (codified at 40 C.F.R. pts. 51, 72, 75 & 96) [hereinafter SIP Call Rule]. The 21 states initially required to submit SIP revisions consisted of Alabama, Connecticut, Delaware, Georgia, Illinois, Kentucky, Massachusetts, Maryland, Michigan, Missouri, North Carolina, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, West Virginia and Wisconsin. Id. at 57,493 (to be codified at 40 C.F.R. § 51.121(c)). Even after a state's implementation plan is approved, EPA may require revisions if the agency finds that the plan is "inadequate to maintain the relevant [NAAQS]." 42 U.S.C. § 7410(k)(5) (1994).

\(^{225}\) For a brief synopsis of the initial rulemaking, see Kinney & Wortzel, supra note 46, at 1235. For a more detailed discussion of the issues, see Jamie Larmann, Note, Comparing Apples to Oranges? EPA Faces Difficulties in Bringing to Fruition an Emissions Trading Program for NOx, 6 ENVTL. LAW. 603, 606-17 (2000), and John Daniel, Virginia State Bar Environmental Law Section: 2000 Environmental Update (unpublished manuscript on file with the Virginia State Bar, Environmental Law Section) (Mar. 30, 2000).


\(^{227}\) SIP Call Rule, supra note 224, at 57,362 (calling for submission of revised SIPs within twelve months of the final SIP Call).

\(^{228}\) See Daniel, supra note 225, at 6-7.

\(^{229}\) Id. at 7.

other states petitioned the court for an en banc hearing. The petition for rehearing will further stay the deadline for SIP submittals.

If EPA ultimately prevails in the NOx SIP Call litigation, the agency will likely require controls on utilities and large industrial boilers by May 1, 2003. To achieve the desired controls, EPA could impose federal implementation plans ("FIPs") on the areas remaining in the NOx SIP Call unless acceptable SIPs have been submitted by the states. The FIPs would likely be implemented in the form of provisions added to the sources' Title V permits. Once imposed, the FIPs would remain in effect until the states themselves submitted SIPs and EPA approved them. Because of prior inconsistencies in EPA's proposed emissions budgets and individual source numbers, DEQ expects that there will be some negotiation with sources over the final emission limits.

In the meantime, DEQ is drafting a state-wide NOx trading regulation to help meet whatever NAAQS is finally set for ozone. The 1999 General Assembly enacted a measure authorizing the Air Quality Control Board to establish an emissions trading program "to achieve and maintain the [NAAQS] established by [EPA]." The regulation now being developed under this provision will likely be considered by the Board at its fall 2000 meeting, prior to dissemination for public comment. DEQ expects to publish the final regulation in the summer or fall of 2001. Sources are hopeful that implementation of a trading program will satisfy federal requirements for NOx reduction and facilitate EPA's approval of Virginia's revised SIP. DEQ is also

231. Telephone Interview with John M. Daniel, Jr., Director, Division of Air Programs, Virginia Department of Environmental Quality (June 2000).
233. Id. (noting that Wisconsin and parts of Georgia and Missouri have now been excluded from the SIP Call).
234. Id.
235. Id.
238. Telephone Interview with John M. Daniel, Jr., Director, Division of Air Programs, Virginia Department of Environmental Quality (May 17, 2000).
240. Memorandum from Virginia Bar Association to Members of the Virginia Bar Association Environmental Law Section on 1999 Legislative Information 14 (Mar. 1999) (on file
initiating the ad hoc process for a second regulation that would significantly reduce NOx emissions state-wide, but would be less stringent than EPA’s proposal. The new regulation will likely track the proposal that was rejected by EPA during the comment period on the proposed SIP Call. It would require system wide reduction of NOx emissions by electric utilities to at least sixty-five percent or .25 lb/MMBtu (whichever is less stringent) from 1990 levels. The regulation would also call for substantial reductions in emissions from major industry sources with industrial boilers.

3. Section 126 Petitions

In an unrelated action—but one designed to achieve the same goal as EPA’s NOx SIP Call—eight Northeastern states filed petitions in October 1998 under CAA section 126. The petitions requested EPA to make a finding that emissions from upwind sources significantly contributed to ozone nonattainment problems in the petitioning, downwind states. CAA section 126 permits a state to petition EPA for a finding “that any major source or group of stationary sources” outside the state contributes to the petitioner’s inability to meet federal air quality standards. If EPA finds that sources outside the petitioning state “significantly contribute to levels of air pollution [in the petitioning (downwind) state] in excess of the [NAAQS],” the agency may regulate those sources directly, with “no involvement” by envi-

with Virginia Bar Association).

241. Daniel, supra note 231.
242. Assuming the proposal is implemented as originally conceived, the reductions would be in place by April 2004. See Technical Support Document, supra note 226, at 3.
243. Id.
245. Id. Virginia sources named in the petitions include Virginia Power, AEP, Pepco, Cogentrix, Commonwealth Atlantic, Gordonsville Energy, Mecklenburg Cogen, Hopewell Cogen, LG&E, Stone Container, Delmarva P&L, James River Cogen, International Paper, Dan River, St. Laurent, Allied, Westvaco, Georgia Pacific, Celanese and Amoco. See Daniel, supra note 211.
246. 42 U.S.C. § 7426(b) (1994). A SIP must contain provisions adequate to “prohibit...any source... [from] contribut[ing] significantly to nonattainment in...any other State...” Id. § 7410(a)(2)(D)(i). See also Larmann, supra note 225, at 611-14.
ronmental agencies in the upwind state.  

In May 1999, EPA published a final ruling on the eight section 126 petitions, finding portions of six of the petitions technically meritorious. EPA did not make any dispositive findings at that time, however, electing instead to delay a final decision to coincide with the effective dates of the NOx SIP Call proceeding. The agency explained its plan to delay a final decision as follows:

Because EPA believed that compliance by states with the NOx SIP Call could potentially eliminate the grounds for a finding that sources within the relevant upwind states were violating the requirements of section 126, the Agency concluded that the two actions were related and the findings for the petitions should be coordinated with the NOx SIP Call schedule.

Virginia and other states, as well as industry petitioners, have filed suit challenging EPA’s action on the section 126 petitions. A decision on the states’ challenge is not expected until the fall of 2000 at the earliest.

4. New Source Reviews and EPA Enforcement Initiatives

In addition to the regulatory and judicial developments related to the federal air quality standards for ozone, EPA has devoted considerable effort during the past two years to revision and enforcement of the New Source Review (“NSR”) program. The NSR regulations specify what, if any, new technology must be implemented at an existing facility that undergoes modification. “New” or “modified” sources must meet new source performance

249. Larmann, supra note 225, at 613.
250. Id. at 613-14 (citing Interim Final Stay of Action on Section 126 Petitions for Purposes of Reducing Interstate Ozone Transport, 64 Fed. Reg. 33,956 (June 24, 1999) (to be codified at 40 C.F.R. pt. 52)).
252. Id.
standards ("NSPS"), install the "best available control technology" ("BACT") or controls sufficient to achieve the "lowest achievable emission rate" ("LAER"), and undergo preconstruction review to determine their potential impact on ambient air quality. Modification of an old plant can create a new source for regulatory purposes and subject the facility to requirements for costly, state-of-the-art emission controls.

Initially, increased emissions due to routine maintenance, repair or replacement by like-kind equipment, changing fuels, or increasing hours of operation to meet increased product demand, were not considered modifications and therefore did not trigger NSR requirements. In July 1996, however, EPA proposed major revisions to the regulation for determining the applicability of NSR requirements that would substantially broaden the circumstances under which NSR would be triggered. In July 1998, EPA reopened the comment period on the proposed regulatory amendment and, at the same time, proposed additional revisions. Under the rule as currently drafted, many activities not previously covered by the regulations would trigger NSR—possibly including non-routine maintenance, like-kind replacement of damaged or worn out equipment, or increases in production rates due to enhanced market demand or improved productivity. It has been suggested that the proposed regulation "misrepresents current law," violates the Seventh Circuit's WEPCo decision, is "directly contrary to the view that EPA took in its 1992 WEPCo Rule," and would "turn topsy turvy over twenty years of EPA practice on new source review." EPA nonetheless continues to pursue the regulatory amendment.

254. Id. at 2. See also HUNTON & WILLIAMS, CLEAN AIR HANDBOOK 85-102 (2d ed. 1993).
259. Brownell & Harlow, supra note 253, at 3-6.
261. Brownell & Harlow, supra note 253, at 3-4; see also Daniel, supra note 211.
262. Stuart T. Leeth, Current Legal Issues, Presentation to Air & Waste Management
Not only is EPA overhauling its regulatory approach, the agency has also been aggressively pursuing enforcement actions based upon alleged past violations. EPA’s enforcement investigations began in 1997, with section 114 information requests seeking detailed historical data from regulated sources. Apparent targets of EPA’s enforcement initiative include coal-fired utilities, refineries, paper mills, and chemical manufacturers.

On November 3, 1999, the United States Department of Justice filed suit against seven electric utility companies alleging violations at seventeen plants. At the same time, EPA issued an administrative order to the Tennessee Valley Authority with respect to seven plants, and an additional eight notices of violation to a variety of other facilities—primarily utilities. EPA Administrator Carol Browner has reportedly referred to the current enforcement efforts as merely the “first round” of “one of the largest enforcement investigations in EPA history.”

5. New Source Performance Standards for Utility and Industrial Boilers

In September 1998, EPA revised the new source performance standards for NOx emissions from utility and industrial boilers. The regulation reduced the NOx new source performance standard to .15 lb/MMBtu for utility boilers and .20 lb/MMBtu for industrial boilers. The lower standard reflected the level of NOx emissions EPA determined to be achievable with the “best demonstrated system” of emissions reduction—the use of selective catalytic reduction (“SCR”) combined with combustion control
technology. The standard was challenged by affected industries, which charged that EPA’s selection of SCR as the basis for the standard did not properly consider the factors required under CAA section 111. In December 1999, the District of Columbia Circuit Court denied the industries’ petitions for review and upheld the new standard.

6. Air Toxics Initiative

In July 1999, EPA announced the development of a new, integrated urban strategy to reduce air toxics. Under the authority of various provisions of the Clean Air Act, the strategy focuses on thirty-three hazardous air pollutants considered to be the greatest threat to public health in urban areas, and addresses all sources of toxic air pollutants, including major industrial sources, smaller stationary sources and mobile sources such as cars and trucks. Full implementation of the strategy is not expected until the year 2012. In the meantime, EPA and the states are working together to develop a 1999 toxics inventory list and a toxics monitoring network.

B. Other Legislative, Regulatory and Judicial Developments

The State Air Pollution Control Board has recently proposed amendments to its Regulation for the Control and Abatement of Air Pollution. Among other changes, the proposal would incorporate EPA’s 1997 “ACE Rule,” which provides for the use of “any credible evidence” to determine compliance with applicable emis-

271. Id. at 49,444.
272. Id. EPA must consider the cost of achieving emission reduction, as well as “any nonair quality health and environmental impact and energy requirements.” 42 U.S.C. § 7411(a)(1) (1994).
275. Integrated Strategy, supra note 274.
276. Daniel, supra note 211.
277. Id.
sion standards. Before EPA adopted the ACE Rule in February 1997, it was generally understood that conformance with the agency's air pollution standards could be determined only through the use of performance or reference tests specified in the regulations for the particular standard. The ACE Rule removes restrictions on the nature of the evidence the agency may use to establish violations.

Industry trade associations challenged EPA's rulemaking as having been done without statutory authority or adherence to proper procedures. In what some commentators have characterized as a victory for EPA, the court dismissed petitioners' suit as unripe. Following dismissal of the suit, EPA reportedly began "telling state permitting agencies to include equivalent ACE provisions in their state air regulations." The amendments currently proposed by the State Air Pollution Control Board would incorporate the ACE Rule into Virginia regulations.

The same state regulatory amendment also contains a revised definition of what is federally enforceable. The new provision would clarify that "every term in Virginia minor and major new

279. Id. at 151 (codified at 9 VA. ADMIN. CODE 5-40-20(J)). The new provision reads, in relevant part, as follows: "For the purpose of . . . establishing whether or not a person has violated or is in violation of any standard in this chapter, nothing in this chapter shall preclude the use, including the exclusive use, of any credible evidence or information. . . ."
Id.


281. Id. at 8315.


284. Clean Air Implementation Project, 150 F.3d at 1208.


287. Id. at 142 (codified at 9 VA. ADMIN. CODE 5-10-20).
source review... permits is "federally enforceable," and thus enforceable by EPA or by citizens under the CAA. Sources have suggested that this amendment would require that Virginia's odor and state air toxics requirements be included in facilities' Title V permits, even though the odor and state air toxics rules do not implement the federal CAA and are enforceable under Virginia, rather than federal law. Although the public comment period on the proposed regulation closed initially on December 10, 1999, the Board later suspended the effective date of the regulation and extended the comment period to July 21, 2000.

In other regulatory actions, effective April 1999, the Air Pollution Control Board promulgated a final regulation incorporating: (1) the federal new source performance standards for hospital/medical/infectious waste incinerators, and (2) national emission standards for hazardous air pollutants for sources in the pulp and paper industry and for primary aluminum reduction plants. The Board also published a proposed regulation that would establish a general permit for nonmetallic mineral processing facilities.

IV. SOLID AND HAZARDOUS WASTE

A. Importation of Out-of-State Waste

During the 1998 and 1999 sessions, the General Assembly actively addressed a growing concern over the importation of out-of-state solid waste. Virginia is the second leading importer of out-of-state waste in the nation. Much of that waste comes from

288. Knauer, supra note 283.
289. Id.
291. 15 Va. Regs. Reg. 1918 (Mar. 15, 1999) (to be codified at 9 Va. ADMIN. CODE 5-5-410(Ec) and 9 Va. ADMIN. CODE 5-60-100(S), (LL)).
293. The 1998 legislation was briefly addressed in the 1998 Environmental Law Update. See Kinney & Wortzel, supra note 46, at 1246-47.
New York, being transported to Virginia by truck, barge and rail and disposed of primarily at privately owned landfills in Amelia, Charles City, Gloucester and Sussex Counties. Measures passed by the General Assembly were targeted at restraining the importation of solid waste and at protecting the waters of the Commonwealth from contamination. The ultimate impact of this legislation is not yet clear, however, because of ongoing litigation over various provisions.

In 1998, the Virginia legislature enacted a bill requiring the Waste Management Board to develop regulations governing the transport, loading and off-loading of nonhazardous solid waste and regulated medical waste by ship, barge or other vessel on the navigable waters of the Commonwealth. The bill also required the Board to establish a permitting process for facilities receiving such waste. The regulations were to include provisions governing, among other things, the shipment and handling of waste, financial responsibility for regulated facilities, spill reporting requirements and administrative fees.

In 1999, the General Assembly revisited the issue of imported waste and passed a series of additional bills to: (1) provide further direction to the Waste Management Board in developing regulations for the transport of waste by water, including a provision that containers holding such waste be stacked on barges no more than two high; (2) prohibit, to the extent permissible under the United States Constitution, the commercial transportation of solid waste or regulated medical waste by ship, barge or other

295. Storin, supra note 294. The Commonwealth is expected to import more than five million tons of waste in 2000 and more than seven million tons in 2001, of which more than 3600 tons per day will likely come from New York City.


297. Id.

298. Id.

299. Id. § 10.1-1454(A)-(C) (Cum. Supp. 1999). The stacking provision was an apparent attempt to discourage the transport of waste by barge, given that the barges and containers used to transport the waste are designed for stacking five high. The statute also forbids Virginia facilities from receiving such wastes by ship, barge or other vessel before the effective date of the regulations, but the Act contained no deadline for promulgating those regulations. For judicial analysis of what could be viewed as an analogous state statute, see Nat'l Solid Waste Mgmt. Ass'n v. Alabama Dep't of Envtl. Mgmt., 910 F.2d 713, 724-25 (11th Cir. 1990) (finding unconstitutional a regulation that required state approval before disposing of hazardous waste in commercial facilities because the regulation set no time limit on how long the state could delay its decision to approve).
vessel on the Rappahannock, James and York Rivers;\textsuperscript{300} (3) mandate the development of regulations governing the commercial transport of nonhazardous municipal solid waste and regulated medical waste by truck;\textsuperscript{301} and (4) cap the amount of waste that any landfill can accept at either 2000 tons per day or the average amount actually accepted by the landfill in 1998, whichever is greater.\textsuperscript{302}

Owners and operators of several large regional landfills, at which the bulk of out-of-state solid waste is disposed, brought suit in the United States District Court for the Eastern District of Virginia challenging the constitutionality of the landfill cap, the stacking provision and the prohibition of shipment on the James, Rappahannock, and York Rivers.\textsuperscript{303} In February 2000, the court granted a motion by the plaintiffs for summary judgment, holding that each of the three provisions violated the Commerce Clause of the United States Constitution.\textsuperscript{304} The constitutional challenge was not unexpected.\textsuperscript{305} The Commerce Clause forbids the states "unjustifiably to discriminate against or burden the free flow of commerce across state lines,"\textsuperscript{306} and the interstate movement of solid waste is well recognized as "commerce" within the meaning of the Commerce Clause.\textsuperscript{307} The Commonwealth, however, has appealed the decision, and the court will likely hear oral arguments this fall.\textsuperscript{308} In the meantime, the District Court has

\textsuperscript{300} VA. CODE ANN. § 10.1-1454.2 (Cum. Supp. 1999) (excluding from the prohibition the transportation of scrap metal, dredged material and source-separated recyclables).

\textsuperscript{301} Id. § 10.1-1454.3 (excluding from regulation the transport of scrap metal and source-separated recyclables).

\textsuperscript{302} Id. § 10.1-1408.3. This "cap provision" authorized the Board to grant exceptions after considering specified health and environmental concerns and holding public hearings in the locality where the landfill requesting the exception was located.


\textsuperscript{304} Id. at 545.

\textsuperscript{305} See, e.g., Storin, supra note 294, at 3-5 (discussing Commerce Clause issues raised by the Virginia legislation, and noting that "critics quickly identified the ban on barges as an easy target for a court challenge").


\textsuperscript{308} The appeal was filed on April 19, 2000, and appellants' brief was due June 5,
granted a temporary restraining order enjoining the Commonwealth from enforcing the legislation.309

The Commerce Clause, however, represents not only a restraint on the power of states, but a grant of authority to Congress.310 The 1999 Virginia General Assembly therefore petitioned the United States Congress to enact federal legislation providing authority for local governments to adopt flow control ordinances to govern the movement of solid waste generated within their jurisdictions, and to enable states and localities to control the importation of waste into their jurisdictions.311 On March 4, 1999, Senators Robb and Warner introduced federal legislation that would amend Subtitle D of the Solid Waste Disposal Act312 by: (1) authorizing states that import more than one million tons of municipal solid waste to freeze the quantity of future imports of out-of-state waste; and (2) under some circumstances, permitting states to prohibit the import of out-of-state wastes from "super exporting states."313 The Robb/Warner bill was referred to the Senate Environment and Public Works Committee on June 17, 1999, and hearings were held.314 At this point, however, whether the bill will ever be reported out of committee is uncertain.315 Similar bills have been introduced by other congressional sponsors, but none have fared any better.316

2000. No specific date has yet been set for oral arguments. Telephone Interviews with the Clerks of Court, United States District Court, Eastern District of Virginia, and Fourth Circuit Court of Appeals (May 22, 2000).

310. Article I, section 8 of the United States Constitution states, in relevant part: “The Congress shall have Power... To regulate Commerce ... among the several States....” U.S. CONST. art. I, § 8.
315. Telephone Interview with Meredith Moseley, staff assistant to Senator John W. Warner (May 23, 2000).
B. Other Virginia Legislative Developments

The 1999 General Assembly enacted several statutory amendments designed to provide greater control over the development and siting of solid waste landfills. First, the legislature amended the Virginia Waste Management Act to prohibit the issuance of permits for the siting or expansion of municipal solid waste landfills in wetlands. The statute also requires ground water monitoring at least quarterly by the owner or operator of any existing solid waste management landfill accepting municipal solid waste, that: (1) was constructed on a wetland; (2) has a potential hydrologic connection to such a wetland in the event of leakage from the facility; or (3) is sited within a mile of a wetland. The amendments do not apply to landfills that impact less than 1.25 acres of nontidal wetlands, and the prohibition against expansion does not apply to expansion into the Great Dismal Swamp by the Southeastern Public Service Authority.

The General Assembly also enacted legislation that would enhance DEQ control over the expansion of non-wetland related landfill capacity. Besides containing a provision that would cap the amount of municipal solid waste disposed of at any given landfill at 2000 tons per day, or the actual amount disposed of in 1998, the statute requires a review by DEQ of potential health and environmental impacts before issuing any solid waste permit amendment either expanding or increasing the capacity of a facility. The statute also prohibits the issuance of a new permit for any nonhazardous industrial solid waste management facility owned or operated by the generator of the waste managed at the facility, absent an evaluation by DEQ of the present or potential danger posed by the facility.

The 1999 Virginia legislature adopted a third statute making

318. Id. § 10.1-1408.5(B) (Cum. Supp. 1999).
320. Id. § 10.1-1408.3(A) (Cum. Supp. 1999). The "cap provision" is at issue in the Waste Management Holdings litigation. See supra notes 293-316 and accompanying text.
numerous changes to the permit requirements for solid waste landfills. Applications for new municipal solid waste landfills or expansion of existing landfills now require additional information and assurances from both the applicant and the host locality. The Act also prohibits construction of new landfills in specified types of environmentally sensitive areas, requires development of regulations for truck transport of municipal solid waste, requires certification by waste transporters that waste is suitable for disposal at a facility, and requires DEQ to extend post-closure monitoring and maintenance and financial assurance requirements when necessary. The statute also created the Virginia Landfill Clean-up and Closure Fund, to be used by local governments and political subdivisions to assist with final closure of landfills that are owned by the local government or political subdivision or are abandoned in violation of the Virginia Waste Management Act.

The Virginia Waste Management Act contains a provision exempting certain persons from liability for cleanup, or from the requirement to reimburse the Virginia Environmental Emergency Response Fund for the cost of cleanup, necessitated by the improper management of solid or hazardous wastes or other hazardous substances. The exemption parallels section 107(b) of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA" or "Superfund"), exempting those who can establish by a preponderance of the evidence that any damage was caused solely by an act of God, an act of war, the act or omission of an unrelated third party, or any combination of the three. The 1999 Virginia General Assembly added to this provision an authorization for the Virginia Waste Management Board to "expedite... determination[s] to limit the liability of innocent

333. Id. § 9607(b).
landowners, de minimis contributors or others who have grounds to claim limited responsibility for a containment or cleanup.”

C. Case Law

In January 1999, the U.S. District Court for the Eastern District of Virginia found a Virginia entity, Domestic Industries of Virginia, Inc. ("DIVI"), guilty of violating numerous RCRA provisions related to the sale of used oil under government and commercial contracts. DIVI had contracts with the U.S. Department of Defense and other federal customers to supply Number Five fuel oil for several facilities including the Yorktown Naval Weapons Station. DIVI obtained used oil at less than market price from various sources, which it resold to its federal customers for a substantial profit. Upon discovering the inferior quality of the oil supplied by DIVI, the United States brought suit, alleging violations of both the False Claims Act and RCRA. The court found that DIVI was a “marketer” as defined in the RCRA regulations, and that the oil sold under the contracts in question was “used” despite the fact that it was mixed with larger quantities of new oil prior to sale. The court rejected DIVI’s lack of knowledge defense, holding that RCRA “provides for strict liability” and that “whether DIVI knew of the alleged illegal RCRA activities occurring at its facilities [was] immaterial.” The court also found that used oil stored by DIVI, because of its impurities, was a hazardous waste, and that DIVI was liable for the storage of hazardous waste without a permit. As with the used-oil provision, the court found that “there is no explicit knowledge requirement for liability” for such a violation. The court noted that RCRA authorizes civil penalties of up to $25,000

336. Id. 858.
337. Id. 858-60.
341. Id. at 866.
342. Id. at 867-68.
343. Id. at 868.
344. Id.
per day per violation, but deferred the assessment of specific penalties pending resolution of additional claims.\textsuperscript{346}

The 2000 General Assembly enacted a number of minor amendments to the Virginia Code pertaining to the operation of solid waste facilities. In an effort to further encourage recycling, the legislature passed House Bills 681\textsuperscript{346} and 792.\textsuperscript{347} House Bill 681 authorizes localities to grant incentives to encourage recycling.\textsuperscript{348} House Bill 792 excludes from regulation as public utilities companies that sell or deliver landfill gas or electricity generated from landfill gas that is derived from a permitted solid waste management facility.\textsuperscript{349} The exclusion applies only if the facility sells or delivers to: (1) no more than one commercial or industrial purchaser or (2) to a natural gas or electric utility, municipal corporation or county.\textsuperscript{350}

The General Assembly passed two measures concerning financial responsibility requirements for solid waste management facilities. House Bill 1022\textsuperscript{351} prohibits the owner or operator of a solid waste facility from relying upon “captive” insurers, approved surplus line insurers or risk retention groups to establish financial responsibility.\textsuperscript{352} Any commercial insurance or surety obtained in the voluntary market must be written by an insurer approved to do business in Virginia.\textsuperscript{353} House Bill 1023 requires the Virginia Waste Management Board to include transfer stations that receive solid waste from a ship, barge or other vessel in regulations governing financial assurance for solid waste man-

\begin{footnotesize}
\textsuperscript{345} Id. For a thorough synopsis of case law related to both RCRA and CERCLA, see David O. Ledbetter et al., \textit{Outline of RCRA/CERCLA Enforcement Issues and Holdings}, CHEM. WASTE LITIG. REP., Oct. 1998. An updated edition of the Outline is due for publication in the fall of 2000.


\textsuperscript{348} Va. H.B. 681.

\textsuperscript{349} Va. H.B. 792.


\textsuperscript{352} Memorandum from Virginia Bar Association to Members of the Virginia Bar Association Environmental Law Section on 2000 Legislative Information 8 (Apr. 2000) (on file with the author).

\end{footnotesize}
Finally, House Bill 1228 forbids municipal solid waste landfills from accepting waste after the year 2020 for any disposal area not equipped with a liner and leachate control system approved by DEQ pursuant to a permit issued after October 9, 1993.

V. UNDERGROUND AND ABOVEGROUND STORAGE TANKS

A. Legislative and Regulatory Developments

As reported in the 1998 Environmental Law Update, the Virginia Petroleum Storage Tank program was substantially revised beginning in 1997 in an effort to qualify for EPA authorization. The State Water Control Board initially sought EPA approval for its Underground Storage Tank ("UST") program in 1990. Numerous administrative and regulatory changes ensued, and the Board submitted an amended application in July 1998. Upon concluding that Virginia's program met all of the relevant statutory and regulatory requirements, EPA granted final authorization effective October 28, 1998. The receipt of EPA approval means that owners and operators of regulated USTs may now use the Virginia Petroleum Storage Tank Fund to help meet federal financial responsibility requirements. EPA approval also gives

357. Id. at 1261-63.
359. Among the administrative changes that occurred following the Commonwealth's initial application was the creation of DEQ in 1994 and the merging of staff from the old State Water Control Board, Air Pollution Control Board and Department of Waste Management. Id. at 3.
360. To receive EPA authorization to operate the state UST program in lieu of the federal program, a state must demonstrate that its program meets all statutory and regulatory requirements established by RCRA Subtitle I and 40 C.F.R. Part 281.
362. For a brief description of, and update on, the Fund, see infra notes 380-94 and accompanying text.
Virginia the primary enforcement authority over regulated USTs within the Commonwealth, although EPA retains oversight jurisdiction.364

The technical and financial requirements applicable to USTs are found in the UST Technical Standards and Corrective Action Requirements Regulation ("Technical Standards")365 and the Petroleum UST Financial Requirements Regulation ("Financial Requirements Regulation").366 The Technical Standards imposed a December 22, 1998, deadline for upgrade or closure of regulated USTs.367 To upgrade an existing system properly, the Technical Standards require the installation of: (1) a spill bucket at the fill pipe; (2) an overfill device or alarm to prevent overfilling; and (3) cathodic protection or tank lining.368 UST systems that did not meet these requirements were to be closed on or before the December 28 deadline, either by removal or by closure in place.369 DEQ inspectors have confirmed a compliance rate of approximately sixty to seventy percent with the 1998 deadline.370 Thus far, DEQ has taken a measured response in addressing UST systems that are out of compliance with the deadline.371 Typically, if DEQ believes a facility can comply within ninety days of a detected violation, the facility is given a warning letter and a proposed letter of agreement.372 However, the warning letter may be foregone in favor of immediate enforcement if: (1) the facility has a history of noncompliance; (2) it appears the facility could not

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364. Kendall, supra note 358, at 3.
366. Id. at 25-590-10 to -230.
367. Id. at 25-580-60(1).
368. Id. at 25-580-60(1)(b).
369. Id. at 25-580-60(1)(c). Closure in place requires that any remaining product be removed and that the tank be filled with an inert substance such as sand, concrete, or foam. Id. at 25-580-320(3).
370. Telephone Interview with Mary-Ellen Kendall, Financial Program Manager, Virginia Department of Environmental Quality (May 25, 2000).
372. Id.
comply within ninety days; or (3) the facility's noncompliance has created a potential threat to human health, safety or the environment.\textsuperscript{373}

The UST Financial Responsibility Regulation was substantially revised effective September 3, 1998.\textsuperscript{374} Among other things, the revisions eliminated the requirement for petroleum storage tank vendors to demonstrate financial responsibility;\textsuperscript{375} added a short form financial test for small owners and operators who do not own hazardous waste or hazardous substance USTs or underground injection control wells;\textsuperscript{376} simplified documentation requirements for reporting releases;\textsuperscript{377} clarified the requirement for owners and operators to pay the financial responsibility requirement for each occurrence, based upon a sliding scale, before qualifying for reimbursement from the Virginia Petroleum Storage Tank Fund;\textsuperscript{378} and incorporated by reference the federal lender liability exemption provisions in 40 C.F.R. sections 280.200 to 280.230.\textsuperscript{379}

The State Water Control Board maintains the Virginia Petroleum Storage Tank Fund ("Fund") as a nonlapsing revolving account to help defray the cost of cleanup for discharges from regulated USTs and aboveground storage tanks ("ASTs").\textsuperscript{380} To receive reimbursement from the Fund, an owner or operator must comply with all applicable statutes and regulations governing reporting, prevention, containment, and cleanup, and must submit a reimbursement claim to DEQ.\textsuperscript{381} DEQ reports that the volume of reimbursement claims has increased from approximately one hundred claims per month in 1995 to two hundred per month since December 1998.\textsuperscript{382} DEQ expects the receipt of claims to grow even more during the year 2000 as UST owners and operators continue to come into compliance with the December 1998 upgrade/closure requirement.\textsuperscript{383}

\begin{itemize}
\item \textsuperscript{373} Id.
\item \textsuperscript{375} Id.
\item \textsuperscript{376} Id. at 25-590-60.
\item \textsuperscript{377} Id.
\item \textsuperscript{378} Id. at 25-590-210(A)(4).
\item \textsuperscript{379} Id. at 25-590-240. For a more detailed list of revisions in the 1998 amendment, see Kendall, supra note 358, at 3-4.
\item \textsuperscript{380} See VA. CODE ANN. § 62.1-44.34:11 (Repl. Vol. 1998).
\item \textsuperscript{381} Id. § 62.1-44.34:11(A)(8) to (10) (Repl. Vol. 1998).
\item \textsuperscript{382} Kendall, supra note 363, at 2.
\item \textsuperscript{383} Id.
\end{itemize}
Another factor that will likely increase the number of claims this year is the new statutory deadline for claims filing, which was effective July 1, 1998. Although DEQ still processes most Fund reimbursement claims within ninety days, the Fund is currently “in delayed payment” because of the increased number of claims. It is likely to remain in that status “for the foreseeable future.”

The Fund is maintained, in part, by fees that fluctuate from one-fifth to three-fifths of one cent per gallon of selected fuels sold, delivered, or used in the Commonwealth. The maximum fee of three-fifths of one cent per gallon is now being charged, and the fee is expected to remain at that level as long as the Fund continues in delayed status and its balance remains low. To further ensure viability of the Fund, the 1999 Virginia legislature increased the statutorily mandated Fund balance from six million to twelve million dollars.

The regulation of aboveground storage tanks in Virginia is strictly a state matter because there is no federal statute or regulation for ASTs comparable to the law and regulations governing USTs. Statutory authority for the Virginia AST program is provided in the State Water Control Law. Before 1998, the technical standards and requirements applicable to ASTs were contained in three separate stand-alone regulations. Effective June 24, 1998, the three AST technical regulations were consolidated in order to “eliminate duplication, provide uniformity, and

384. VA. CODE ANN. § 62.1-44.34:11(A)(10) (Repl. Vol. 1998) (requiring that claims be filed by July 1, 2000, or within two years from the date the Board issues a site remediation closure letter, whichever date is later).
385. Kendall, supra note 363, at 3.
386. Id.
388. Kendall, supra note 363, at 3.
389. VA. CODE ANN. § 62.1-44.34:13(D) (Cum. Supp. 1999). By law, the Commissioner of the Department of Motor Vehicles must increase the fee to three-fifths of one cent per gallon whenever the Fund has been, or is likely in the near future to be, reduced below three million dollars. Id. The Commissioner must now maintain the fee at that level until the Fund is restored to twelve million dollars. Id.
increase program efficiency. A financial responsibility regulation for ASTs is still being developed. DEQ has submitted a draft regulation to the State Water Control Board and expects the Board to publish the draft for public comment sometime this year.

B. Case Law

The Virginia Court of Appeals has held that a denial by DEQ of a request for reimbursement from the Virginia Petroleum Storage Tank Fund is subject to judicial review under the Virginia Administrative Process Act ("VAPA"). Plaintiff sought reimbursement from the Fund for cleanup costs, but its application was denied by DEQ. Plaintiff's appeal to the circuit court was dismissed on the grounds that it "ha[d] no right of appeal." The Virginia Court of Appeals reversed, holding that the VAPA provides a Tank Fund reimbursement applicant a right of appeal to the circuit court if its request is denied by DEQ.

VI. WETLANDS

Virginia statutes and regulations historically have provided greater protection for wetlands than is afforded by section 404 of the Clean Water Act. Under the state Wetlands Act, counties and cities are authorized to adopt and enforce a prescribed Wetlands Zoning Ordinance, and the Virginia Marine Resources Commission is empowered to enforce the Act and Ordinance in localities that choose not to do so. The State Water Control Law also prohibits the discharge of wastes into state waters, which

392. Id. at 5. The consolidated regulation is now codified in the Virginia Administrative Code. See 9 VA. ADMIN. CODE 25-91-10 to -90 (2000).
396. Id. at 529, 513 S.E.2d at 881.
397. Id.
398. Id. at 600, 513 S.E.2d at 885.
may include wetlands. The 2000 General Assembly enacted a measure that will significantly broaden the scope of activities prohibited by the State Water Control Law by adding to the list of prohibitions certain dredging and draining activities otherwise permissible under CWA section 404. Effective July 1, 2000, the new measure prohibits any excavation in a wetland unless expressly authorized by a permit. Effective October 1, 2001, it will become unlawful, without a permit, to conduct any activities that "cause draining that significantly alter or degrade existing wetland acreage or functions" or activities that otherwise "cause significant alteration or degradation of existing wetland acreage or functions." The statute will require that those intending to conduct such activities obtain a Virginia Water Protection Permit from the State Water Control Board. The State Water Control Board is required to establish individual and general permits for the newly regulated activities. Permits must contain requirements for mitigation through the creation or restoration of wetlands, purchase or use of mitigation bank credits, or contribution to a fund. Between July 1, 2000 and October 1, 2001, any excavation in a wetland must be accompanied by compensatory mitigation sufficient to achieve "no net loss of existing wetland acreage and functions."

The Virginia legislature also took a variety of other, less dramatic steps during the past two years to preserve Virginia's

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401. Id. § 62.1-44.5 (Repl. Vol. 1998).
406. Id.
407. Id.
threatened wetlands. In April 1998, the General Assembly ap-
proved a measure authorizing local governments to exempt from
real property taxation wetlands and riparian buffers subject to
perpetual easements permitting inundation by water.\footnote{409} The
measure also redefined "real estate devoted to open-space use" to
include certain wetlands and riparian buffers.\footnote{410} Also, as reported
in section IV.B of this article, the 1999 legislature enacted a pro-
vision that will limit the expansion or siting of solid waste land-
fills in or near wetlands.\footnote{411}

VII. MISCELLANEOUS ISSUES

A. Citizen Standing

The Fourth Circuit Court of Appeals last year addressed citizen
standing requirements under the Clean Water Act. In \textit{Friends of
the Earth, Inc. v. Gaston Copper Recycling Corp.},\footnote{412} the court con-
sidered a claim brought by citizen groups against a copper
smelting facility near Gaston, South Carolina, for alleged viola-
tions of defendant's NPDES permit.\footnote{413} The court first determined
that plaintiffs had failed to establish the existence of an injury in
fact.\footnote{414} Although members of plaintiffs' organizations owned land
or used streams near defendant's facility and expressed concern
over suspected contamination originating from the plant, plain-
tiffs failed to provide evidence that the waterways were, in fact,
contaminated.\footnote{415} "[N]o toxicity tests, or tests or studies of any
kind," were presented by plaintiffs as evidence; rather, plaintiffs' con-
cerns were "based on mere speculation" and, therefore, did not
constitute evidence of an injury in fact.\footnote{416} Even if there had been
evidence of contamination in the water bodies used by plaintiffs' members, the court found that plaintiffs had not demonstrated the presence of any specific effluents of the type discharged by de-
fendant. 417 Thus, the additional requirement that plaintiffs' injuries be "fairly traceable" to defendant was not met. 418 Finding that plaintiffs had failed to demonstrate either the existence of an injury in fact or an injury fairly traceable to defendant's operation, the court affirmed dismissal by the district court for lack of subject matter jurisdiction. 419

Closer to home, the Virginia Court of Appeals recently held that the Mattaponi Indian Tribe had failed to establish standing to challenge the issuance of a Virginia Water Protection Permit to the City of Newport News in connection with the proposed King William Reservoir water supply project. 420 The impoundment of water for the project was to be accomplished by "the discharge of dredged or fill material," and thus required the city to obtain a construction permit from the U.S. Army Corps of Engineers. 421 The state certification required under CWA section 401 is provided in Virginia by the issuance of a Virginia Water Protection Permit ("VWPP"). 422 The court found that the Commonwealth's issuance of a VWPP did not constitute an injury or an imminent threat of injury because the Corps of Engineers (a third party not before the court) would still have to issue a section 404 permit before construction could begin. 423 Because there was no injury or threat of injury fairly traceable to the Commonwealth, the court of appeals upheld the trial court's order sustaining the Commonwealth's demurrer. 424

B. Freedom of Information

The 2000 General Assembly enacted a measure granting DEQ an exemption from Freedom of Information Act requirements for certain records pertaining to (1) active federal environmental enforcement actions, or (2) enforcement strategies. 425 Exempted rec-

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417. Id. at 114-15.
418. Id. at 115.
419. Id. at 116 (2-1 decision).
421. Id. at 475, 524 S.E.2d at 169 (citing 33 U.S.C. § 1344(a), (d) (1994)).
422. Id. (citing VA. CODE ANN. § 62.1-44.15:5(B) (Cum. Supp. 1999)).
423. Id. at 476-77, 525 S.E.2d at 169-70.
424. Id. at 477, 524 S.E.2d at 170.
ords must be disclosed, upon request, after a proposed sanction has been proposed to the director of the agency. The measure does not prohibit disclosure of records related to inspection reports, notices of violation, or actual contamination.
