REPORT OF THE

State Water Commission

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

HOUSE DOCUMENT NO. 59

COMMONWEALTH OF VIRGINIA
RICHMOND
1992

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REPORT OF THE STATE WATER COMMISSION

To

The Governor and the General Assembly of Virginia
Richmond, Virginia
1992

TO: The Honorable L. Douglas Wilder, Governor,
and
the General Assembly of Virginia

I. Authority for Study

The State Water Commission is directed by statute to:

1. Study all aspects of water supply and allocation problems in the Commonwealth, whether these problems are of a quantitative or qualitative nature;

2. Coordinate the legislative recommendations of all other state entities having responsibilities with respect to water supply and allocation issues; and

3. Report annually its findings and recommendations to the Governor and General Assembly. (Va. Code § 9-145.8.)

To meet the legislative mandates and to continue its formulation of a comprehensive water policy, the Commission held four meetings during 1991: one in Newport News; one in Roanoke; and two in Richmond.

During its investigations, the Commission analyzed federal law pertaining to Virginia's water regulations, heard testimony from the State Water Control Board and the Department of Health regarding their study pursuant to House Joint Resolution 460 (1991), and reviewed Virginia's Ground Water Act and the Texas program for alleviating water supply problems.

The Commission had a change in membership at the close of 1991. Four members who served the Commission ably for several years will not be returning. The Commission appreciates the work of Delegate McClanan, Senators Anderson and Macfarlane, and Mr. Watts.

II. House Joint Resolution 460: Water and Wastewater Treatment Regulations

House Joint Resolution 460 (see Appendix A), approved by the 1991 Session of the General Assembly, requests the State Water Control Board (SWCB) and the State Board of Health to examine the application and enforcement of regulations for water and wastewater treatment. The study includes several important regulatory programs:

- the toxicity program of the SWCB;
- the definition of minimum in-stream standards of the SWCB;
- staffing requirements of the Virginia Health Department;
- sludge handling requirements of the Virginia Health Department;
- monitoring and testing requirements of both the SWCB and the Department of Health; and
- the degree of treatment required for water quality standards for the drinking water and waterways of the Commonwealth.

The findings and recommendations of the Board and the Department will be made to the State Water Commission for its review and comment. Findings and recommendations will be made in a report to the 1993 Session of the General Assembly. As an interim report the Commission received testimony from representatives of the Health Department and the SWCB regarding implementation of the regulations.

In 1977, Congress enacted the Clean Water Act, which built on the pollution control regulation of the Federal Water Pollution Control Act by adding regulation of toxic water pollutants. The act has five main elements: a permit program, a system of minimum national efficient standards for each industry, water quality standards, provisions for special problems such as toxic chemicals and oil spills, and a construction grant program for publicly-owned treatment works (POTWs). States are granted authority to implement the federal law on the state level if the state program is at least as stringent as the federal law and the EPA has approved the program. The EPA, therefore, routinely monitors the state's implementation and enforcement of the federal law. Because of federal oversight and mandates, there is little discretion left to the states for program administration.

In 1987, when amending the Clean Water Act, Congress directed the EPA to address toxics control, sludge management and stormwater management. Because those 1987 amendments are comprehensive, Virginia has only begun to meet the requirements on toxics control. Moreover, because the EPA has not yet set the standards for the 126 priority pollutants (toxics), the Commonwealth has been forced to develop its own standards. Research on acceptable risk levels is needed for the 126 toxics to ensure that the standards adopted are legally defensible. In December 1990 the State Water Control Board prepared to adopt standards for 61 toxic pollutants but received notice that EPA would not approve the standards as drafted. Mr. Burton described the major issue as whether all metals limits be expressed in terms of "total recoverable metals" or dissolved or acid-soluble metals. The EPA's regulation requires the use of "total recoverable metals," which Mr. Burton stated could create overly restrictive permit limits and legal challenges by permit holders.

The 1987 amendments also require establishment of a stormwater discharge permit. Currently there are about 4,000 National Pollutant Discharge Elimination System (NPDES) permits and a stormwater discharge program may require that as many as 10,000 facilities be permitted, including many facilities served by central sewer systems, as well as cities and counties with populations of 100,000 or more. Mr. Richard Burton of the SWCB testified that the impact of establishing a stormwater discharge permit program on the Department's resources is "staggering."

Mr. Burton stated that Virginia is "better served almost always by taking primacy or taking delegation of programs and operating them at the state level." He said the SWCB is working toward incorporating the stormwater program and has begun assessing the program's impact on SWCB resources. During the 1990-91 fiscal year, two FTEs were authorized but were lost in budget reductions. Six others were approved for 1991-92, positions Mr. Burton hopes will be preserved.

Regulation of municipal sewage sludge treatment and disposal in Virginia is administered jointly by the State Health Department and the State Water Control Board. All sludge management operation are permitted either by the Virginia Pollutant Discharge Elimination System (VPDES) permit or a Virginia Pollution Abatement (VPA) permit. A permit applicant must submit a sludge management plan for review and approval. The Health Department reviews the proposals for sewage treatment and sludge management. The Division of Wastewater Engineering of the Department of Health is responsible for the technical oversight of the design and operation of central sewage sludge collection and treatment facilities. Forty-two positions are authorized and 38 of those are funded, which will be streamlined to 35 when three positions are transferred to another division. The Division is also responsible for the review of sludge treatment, handling and management plans.

III. The Cost of Primacy

Continuing the efforts begun last year, the Commission again considered the issues surrounding the most appropriate means of financing Virginia's drinking water supply. In 1990, Chairman Parker appointed a twelve-member task force to consider how best to meet the cost of retaining primacy in Virginia. However, the Commission, while acknowledging that the needs of both public and investor-owned systems exceeded the available source of funding, took no position on a specific funding mechanism. This year, the Commission again received testimony on the cost of retaining primacy.

A. Issues

The federal Safe Drinking Water Act (SDWA) was passed by Congress in 1974. The Act is intended to assure safe drinking water supplies, protect particularly valuable aquifers, and protect drinking water sources from pollution from underground injection of contaminants. Under the Act,

the Environmental Protection Agency (EPA) is responsible for establishing regulations defining safe drinking water quality for public water systems and ensuring that all public water systems provide water to consumers which meets the definition of "safe." The provisions of the SDWA apply only to water which is provided to consumers by public water systems (waterworks), i.e., those systems which regularly supply water to 15 or more connections or to 25 or more individuals at least 60 days a year. Currently, the Health Department regulates 2,350 waterworks in Virginia. The Act contemplates that the primary responsibility for enforcement resides with the states. To assume such enforcement responsibility (primacy), the state must adopt its own drinking water regulations which are at least as stringent as those of the federal government.

The Health Department, through its Division of Water Supply Engineering, is the state agency authorized to implement the SDWA program in Virginia. The Division's mission is to "promote and to protect the public health and welfare by planning and directing activities to insure that adequate water quality and quantity are provided to users by public water systems located in the Commonwealth." This is accomplished through surveillance and sanitary surveys of waterworks, technical reviews of engineering plans and specifications, monitoring of drinking water quality, training of waterworks owners and operators, and emergency assistance.

The Virginia Department of Health accepted primacy for the drinking water program in 1977. Once a state accepts primacy, there is little flexibility in the administration of the program, the only option being relinquishing it to the EPA. States with primary enforcement authority must notify the EPA upon granting a variance or exemption and must submit an annual status report on all public water systems within the state. The Department of Health receives "limited" federal support for its efforts in the form of a Public Water Supply Supervision Grant. While the amount of the grant has increased over the last 15 years, the increase has not kept pace with the costs of regulatory and reporting requirements established under the 1986 amendments to the Safe Drinking Water Act. In addition to enforcing regulations, the Department of Health provides technical assistance and training to waterworks operators.

To comply with the federal law, as amended in 1986, most municipal and privately owned waterworks will have to make four major types of construction upgrades:

- modification of disinfection systems to reduce the by-products of chlorination.
- aeration to reduce radiological contaminants.
- corrosion control to reduce lead and copper.
- filtration for all surface water systems.

The cost of increased services by the Department as required by the amendments has been estimated by the Department to exceed $4.6 million.

The 1986 amendments are extensive and require the promulgation of nine major sets of regulations that include: volatile organic chemicals, revised public notification, a total coliform rule, a surface water treatment rule, synthetic organic chemicals, lead and copper, contaminants, radionuclides, and disinfectants and disinfectant by-products. Of these topics the EPA has promulgated rules on the first six. The amendments increased the number of contaminants regulated from 22 to 83 contaminants, and will add 25 contaminants every three years. Additional funding at the state level has been provided for the implementation of the first two rules, and only these two rules have been incorporated in the waterworks regulations. The 1990 Session of the General Assembly provided funding for 19 additional full-time employees and a general fund increase of $600,000 for both fiscal year 1991 and 1992. Forty-five more full-time employees were authorized for 1992, but the positions were not funded.

Mr. Tom Gray, Assistant Chief, Technical Services, Division of Water Supply Engineering of the Virginia Department of Health, testified that primacy must be retained by the Commonwealth in order to maintain control, enforcement flexibility and discretion in administering the drinking water program. The technical assistance provided by the Division of Water Supply Engineering to owners and operators of waterworks to ensure regulatory compliance would be curtailed with the loss of primacy. Mr. Gray concluded that increased funding to the Department of Health is necessary to implement the safe drinking water program, and additional funding is also needed at the Division of Consolidated Laboratory Services and the Office of the Attorney General. He encouraged the Commission to support primacy and increased funding.

Maintaining primary administration and enforcement of the Safe Drinking Water Act will result in additional costs to the Commonwealth. The 1990 task force appointed by Chairman Parker considered ways to finance future water needs of the Commonwealth. The report recommended that the general administration and enforcement of the SDWA continue to be funded through a general fund appropriation. Because of budget constraints in 1991, however, no recommendation was made regarding a specific funding mechanism to finance primacy. The Commission considered testimony on an annual operational permit fee and the needs of different waterworks. Additional technical assistance is needed by the operators of waterworks in order to ensure compliance with the amendments to the SWDA. Because providing technical assistance to the waterworks' operators presents substantial costs to the Health Department, and because water systems derive the benefit of the technical assistance, as opposed to the general public, testimony supported an annual fee for each public water supply permittee.

Governor Wilder's recommendation for the 1990-92 biennium included resources for implementation of the SDWA requirements in phases. For fiscal year 1991, funding recommendations included 19 full-time employees and a general fund appropriation of $559,963; funding recommendations for 1992 included 64 full-time employees and an appropriation of $1,652,496. As mentioned previously, the 1990 Session

funded the initiative for the biennium and provided $564,449 to support 19 full-time employees in the second year, leaving 45 of the 64 recommended positions unfunded in fiscal year 1992.

According to the Department of Health, in addition to a staffing increase of 45 positions beginning in November 1992 necessary to ensure compliance with the 1986 amendments to the SDWA, the Department also needs an additional 13 full-time employees in fiscal year 1994. The estimated annual expenditures for 1994 will total $2.8 million. Funding for the total 58 positions is estimated to be $4,247,031.

B. Findings and Recommendations

The Commission found, based on the testimony it received, that the Virginia Department of Health should retain primacy for the drinking water program. Because the regulatory burden will increase for both the Department and waterworks operators as regulations are promulgated to implement the amendments to the SWDA, the Commission found that additional funding is necessary to meet the funding needs of the Department for personnel to implement the regulations and meet the needs of the operators for technical assistance. Therefore, the Commission recommended legislation establishing an operation fee, paid by the owners of waterworks, to be used to ensure that adequate resources are available to assist waterworks operators in complying with the requirements. House Bill No. 236, the recommended legislation (see Appendix B), establishes an operation fee which is based on the size and classification of the waterworks and is capped at $160,000 per year. Revenues from the fees will be used exclusively to provide technical assistance, e.g., training for operator certification, engineering evaluation and advice, sample collection for laboratory analysis, and educational seminars. This technical assistance will ensure that waterworks are operated in compliance with the regulations which are increasingly complex, thereby ensuring that Virginians receive safe drinking water.

The legislation as proposed by the Commission allows general fund moneys to be partially replaced with special fund revenue earned from the proposed fee. Meeting the budgetary needs will allow the state to retain primacy and one million dollars in EPA grant money. Loss of primacy would mean a further funding deficit for state activities under the SDWA. The one million dollars represents one-third of the Department of Health's budget for overseeing the quality of state drinking water supplies.

IV. Revisions to the Ground Water Act of 1973

A. Issues

In the 1950s, initial concerns regarding ground water in Virginia's coastal plain focused on unrestricted flowing artesian wells. In 1956, the legislature acted to require that all flowing artesian wells be equipped with a valve assembly so that flow could be controlled and ground water not be

wasted. In the 1960s industrial usage increased, which resulted in the lowering of water levels in confined aquifers in the coastal plain. The lowered water levels resulted in flow cessation of artesian wells, which in turn led to renewed concern about ground water availability and ultimately to the passage of the Ground Water Act of 1973. The Ground Water Act of 1973 required permitting of industrial and commercial users withdrawing more than 50,000 gallons per day in designated ground water management areas. A ground water management area can be established when there is reason to believe that ground water levels in the area are declining, there is substantial well interference, that the aquifer may be depleted or that the ground water may be polluted. After an area is established, all existing users are eligible to file a statement documenting their continuing right to withdraw and are issued a Certificate of Ground Water Right. These certificated rights may be limited upon a finding that the unrestricted uses of ground water contribute to shortage or pollution of ground water. Permits are required (i) withdrawals above the quantity established in the certificate and (ii) by any subsequent users.

Because of concerns about significant withdrawals and the management of the resource, the Act was amended in 1986 to include municipal withdrawals and to reduce the threshold for permitting from 50,000 gallons per day to 300,000 gallons per month. Withdrawals for agricultural purposes remained exempt.

In 1989 it became apparent that additional ground water modeling was needed. A modeling project completed by the United States Geological Survey (U.S.G.S.) demonstrated that a withdrawal of 88 million gallons per day created the potential for salt water intrusion. A modeled withdrawal of 167 million gallons per day predicted several negative impacts: declines in ground water levels, increased potential for salt water intrusion and dewatering of confined aquifers in the western coastal plain. (See Figure 1.)

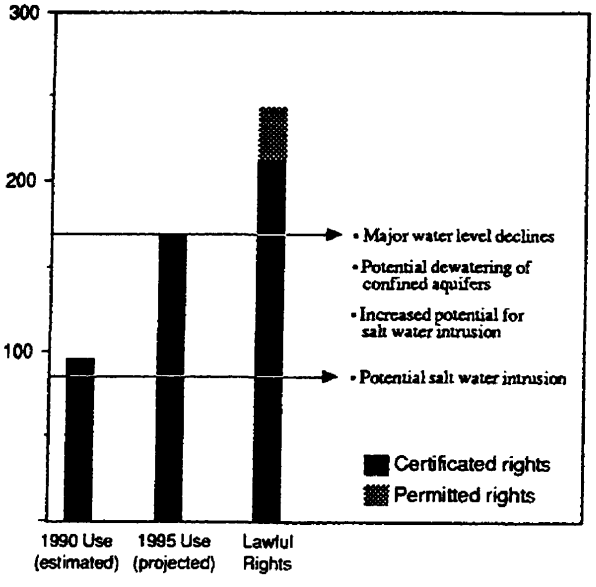

Figure 1. Ground water withdrawal rights (in million gallons per day).

Presently, there are certificated rights of 212 million gallons per day, with additional permits for 31 million gallons per day, for a total possible withdrawal of 243 million gallons per day. While current actual use is estimated to be 95 million gallons per day, the total authorized withdrawal is a 45 percent increase over the largest daily withdrawal evaluated by the U.S.G.S. At the time the Act was passed, individuals obtained withdrawal rights which exceeded actual need. If all users were to exercise their authorized withdrawals, (i) the aquifer would be stressed and the possibility would exist for salt water intrusion; and (ii) further development would be hindered. The aquifer system in this management area may not be able to support existing permitted ground water withdrawal rights. The Board's current ability to issue new permits is curtailed because new permitted withdrawals would deprive existing permit holders of their permitted ground water.

The Commission received public comment on the restructuring of the Act. Most of the critics focused on the methods for re-establishing water rights in the Commonwealth's two ground water management areas. Representatives of several localities testified that any restrictions on groundwater withdrawals would threaten economic growth and property rights. Representatives asked that municipal governments be exempted from the law. Municipalities were exempt until 1986, when the state determined that attempts to manage the resource were ineffective unless municipalities were regulated. Similarly, the Commission proposed to remove an exemption for major agricultural ground water withdrawals. The Virginia Farm Bureau Federation opposed such regulation.

After drafting an initial proposal, the Commission received comment. Several questions were raised and subsequently addressed in recommended legislation including:

- How long should the time frame be for calculating actual use?
- Should conservation measures be considered when determining the amount permitted?
- Should withdrawal rates be monthly or annual?
- What should the duration of a ground water permit be?
- How should intermittent uses be addressed?

After hearing testimony from municipalities, permit holders, farmers and the State Water Control Board, the Commission made several recommendations for a legislative proposal.

B. Findings and Recommendations

The Commission recommended legislation introduced as HB 488. The recommended legislation provides generally that ground water users must obtain permits for withdrawals based on actual and present, rather than potential or future, withdrawals. House Bill 488 and its summary are included as Appendix C. By tying permitted amounts to actual use, the Board will be able to issue permits to new industries and other users that otherwise may have been prevented from withdrawing ground water in a ground water management area.

The legislation eliminates the exemption for agricultural withdrawals and thereby gives the Board greater oversight over the management of the resource. All permits will have a 10-year term; currently, certificates and permits have an indefinite duration. It is intended that limiting their term will help the Board manage the use of the resource.

The amount of a ground water withdrawal to be allowed under a permit will depend on actual withdrawals in any year in the previous five years (or in the previous 10 years for agricultural users), savings through water conservation, and such factors as the nature of the beneficial use, the use of alternate or innovative approaches, and economic and climatic cycles. Requiring the Board to review this information will promote the rational management of the resource. If the Board is required to allocate water among competing applicants, the bill preserves the preference contained in the 1973 Act for human consumption over other beneficial uses.

V. Water Planning: The Texas Strategy

Continuing its work from the last several years, the Commission received a briefing on the Texas legislation which ameliorated many of that state's water problems.

In 1985, the Texas state legislature passed what has been hailed as an effective comprehensive water plan. At the time Texas did not have a single statewide water problem, but many, including frequent droughts, flooding, pollution and subsidence. In one area, a shrinking water table threatened agricultural production. In another area, funds were insufficient to replace antiquated water distribution and treatment systems. In all areas, population growth demanded that the problems be addressed in a comprehensive form. Texas' response has been proclaimed as "highly innovative." The measures passed focused on regionalization, alternative funding, and conservation.

The most innovative aspect of the water plan was a provision for state participation in the cost of major water resource facilities. Four hundred million dollars in bond funds was made available for state investments in the oversize capacity of reservoirs, wastewater projects and flood-control facilities which exceed short-term local or regional requirements.

For example, the state could provide a major share of the up-front funding for a reservoir designed to meet the water supply needs of a region for 50 years, but for which local governmental units can only afford to construct a 25-year facility. Later, as the region develops and its financial base expands, participating localities would gradually buy back the state's portion of the project.

The state "buy-in" component of the 1985 water plan has been highly beneficial to cities. By providing up-front financing, this new mechanism significantly alleviated the cost to local governments of constructing large reservoirs and other water-related facilities. Also, by strengthening the ability of localities to establish regional water resource systems, it discourages the further proliferation of the small, inefficient water and wastewater units that have become so commonplace throughout the state because of limited fiscal resources and lack of intergovernmental cooperation.

Another provision in the legislative package authorized the issuance of $580 million in bonds to be used for state loans to cities and other localities for water resource projects. Of the total amount, $190 million was allocated for water supply facilities and $190 million for wastewater projects. The balance of $200 million was made available for state loans on behalf of flood control facilities, which were made eligible for state financial assistance for the first time.

Under previous water plans enacted in Texas, state funding for water resource projects was generally limited to hardship cases, i.e., localities which, because of financial problems, had trouble selling their water or sewer bonds on the open market. Therefore, as a practical matter the main function of the state's previous financial assistance programs was to provide modest loans to small cities for community sewage treatment plants, elevated water storage tanks and the like. The emphasis of this approach thus limited its usefulness as a vehicle for solving the state's broader water resource problems.

Under the enabling legislation for the 1985 laws, two significant exemptions were created from the hardship standard. The first was designed to foster the development of areawide water facilities; the second was designed to encourage changeovers from underground to surface water supplies.

With respect to the first exception, the legislation does not require the demonstration of hardship for any water supply, sewage or flood control system which serves an area other than a single county, city or special district. The hardship standard also is subject to waiver for systems operated by individual cities if the plan is to reduce the number of local service providers by absorbing them into an areawide facility.

The purpose of this change was to encourage regionalization. Under the best of circumstances, regional water facilities are difficult to plan because they involve extensive cooperation between local governments. The laws offer substantial financial benefits to localities willing to involve themselves in regional efforts.

The second exception is for cities which convert from ground water to surface water supplies. Many cities relied on inexpensive ground water supplies that would eventually become unreliable because of depletion, contamination or land subsidence. State financial assistance will provide an incentive for localities to shift to surface water supplies in time to avoid emergencies.

The enabling legislation required each applicant for state financial assistance to adopt a water conservation program. The Texas Water Development Board was then authorized to mandate that cities and other applicants enact a variety of conservation alternatives, including plumbing code standards requiring water-efficient devices, universal water metering, conservation-oriented water rate structures, drought contingency plans and community education programs.

Conservation planning was also incorporated into the state's water permitting procedures. Before granting a water use permit, the Texas Water Commission must first determine that the applicant has provided evidence that he will utilize the requested allocation efficiently.

The legislative package also appealed to environmentalists. The patron of the bill included extensive provisions for the protection of Texas' coastal bays and estuaries. Before a reservoir can be constructed within 200 miles of the Gulf Coast, it must meet requirements established for the protection of the bay or estuary system. Also, five percent of the water in reservoirs must be available for release to maintain the well-being of estuary and bay habitats downstream.

Texas' plan was characterized as comprehensive because it incorporated new funding mechanisms, enabled the funding of a broader range of programs, and required more conservation measures for each state-funded project. Virginia legislation enacted over several years also addresses those issues to some degree. The conservation measures and stream-flow and habitat protections in Texas' law are similar to provisions in the in-stream flow requirements, the water protection permit procedures and the Surface Water Management Act in Virginia law. Two major components of Texas' water policy, (i) the state as owner/participant in water supply projects and (ii) financial incentives to encourage regionalization, were issues on which the Commission has received testimony. Texas enacted that package of laws because local water users and taxpayers in Texas footed a major portion of the bill for water supply, sewage treatment and flood control facilities. New funding sources were needed. Also, water supply issues had been marked by regional decisiveness and antagonism. The state needed to play a greater role and to encourage cooperation.

The Commission will continue its work toward a comprehensive water plan during 1992 with the benefit of having received public comment and having examined another state's approach to similar problems.

Respectfully submitted,

Lewis W. Parker, Jr., *Chairman*
Watkins M. Abbitt, Jr.
James H. Dillard II
William P. Robinson, Jr.
Clifton A. Woodrum
J. Granger Macfarlane
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APPENDIX A

1991 SESSION

LD7150553

HOUSE JOINT RESOLUTION NO. 460

Offered January 22, 1991

Requesting the State Water Control Board and the State Board of Health to examine the application and enforcement of regulations for water and wastewater treatment.

Patrons—Reynolds; Senator: Goode

Referred to the Committee on Rules

WHEREAS, all citizens of the Commonwealth are rightfully entitled to clear, pure drinking water; and

WHEREAS, all citizens of the Commonwealth rightfully expect the several waterways of the Commonwealth to be clean and appropriately maintained for their health, protection, and pleasure; and

WHEREAS, numerous strictly enforced regulations of the Commonwealth and the nation guarantee the purity of the drinking water in the Commonwealth and the cleanliness of its rivers, streams, bays, and indeed, all of its waterways; and

WHEREAS, while vigilant adherence to these standards is commendable, such stringent mandates subsequently hinder localities, in their partnership with the Commonwealth, to effect the execution of these regulations; and

WHEREAS, the current fiscal condition of the Commonwealth stresses localities in their obligatory delivery of all services, including water and wastewater treatment; and

WHEREAS, the current fiscal condition of the Commonwealth demands the greatest efficacy of available moneys; and

WHEREAS, the current fiscal condition of the Commonwealth additionally demands that all regulatory agencies and local governing bodies be particularly circumspect and prudent in their decisions on provision and delivery of service; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the State Water Control Board and the State Board of Health be requested to examine the application and enforcement of regulations for the treatment of the Commonwealth's water and wastewater; and, be it

RESOLVED FURTHER, That this study shall include, but not be limited to,

1. The toxicity program of the State Water Control Board;

2. The staffing requirements of the Virginia Health Department,

3. The monitoring and testing requirements of the State Water Control Board and the Department of Health;

4. The sludge handling requirements of the Virginia Health Department;

5. The definition of minimum in-stream standards of the State Water Control Board; and

6. The degree of treatment required for water quality standards for the drinking water and waterways of the Commonwealth.

All agencies of the Commonwealth shall provide assistance upon request to this study as appropriate.

The Board and the Department shall complete their work in time to submit their findings and recommendations to the Governor and to the 1993 Session of the General Assembly in compliance with the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

APPENDIX B
1992 SESSION

LD0200813

HOUSE BILL NO. 236

Offered January 14, 1992

A BILL to amend and reenact §§ 32.1-170, 32.1-171, and 32.1-174 of the Code of Virginia and to amend the Code of Virginia by adding a section numbered 32.1-171.1, relating to the regulation of public water supplies.

Patrons—Parker, Councill, Dillard, Reynolds and Woodrum

Referred to the Committee on Health, Welfare and Institutions

Be it enacted by the General Assembly of Virginia:

1. That §§ 32.1-170, 32.1-171, and 32.1-174 of the Code of Virginia are amended and reenacted and that the Code of Virginia is amended by adding a section numbered 32.1-171.1 as follows:

§ 32.1-170. Regulations.—The regulations of the Board governing waterworks, water supplies , and pure water shall be designed to protect the public health and promote the public welfare and shall include criteria and procedures to accomplish these purposes.

The regulations may include, without limitation:

1. Requirements and procedures for the issuance of permits required by this article;

2. Minimum health and aesthetic standards for pure water;

3. Minimum standards for the quality of water which may be taken into a waterworks;

4. Criteria for the siting, design , and construction of water supplies and waterworks;

5. Requirements for inspections, examinations , and testing of raw or finished water;

6. A requirement that owners submit ~~(1)~~ *(i)* regular samples of water for bacteriological, chemical, radiological, physical , or other tests ; or ~~(2)~~ *(ii)* the results of such tests from such laboratory as may be acceptable to the Commissioner;

7. Requirements for record keeping and reporting; ~~and~~

8. *Methodology for determining the waterworks operation fee authorized by § 32.1-171.1; and*

9. Such other provisions as may be necessary to guarantee a supply of pure water.

§ 32.1-171. Technical assistance as to sources and purity.—The Commissioner shall, upon request and without charge, provide technical assistance to owners regarding the most appropriate source of water supply and the best method of assuring pure water, but the Commissioner shall not prepare plans, specifications or detailed estimates for such owners. *The technical assistance provided by this section shall be exclusive of the Waterworks Technical Assistance Program required by § 32.1-171.1.*

§ 32.1-171.1. Waterworks operation fee required; special fund established; certain technical assistance program to be provided.—A. Every owner of a waterworks shall pay to the Department a waterworks operation fee of no more than $160,000 per year. Based on the size and classification of the waterworks, the Board shall, pursuant to its regulations, establish the fee to be charged each such owner and may exempt sizes and classes from the required fee. Any fee in excess of $10,000 shall be payable quarterly. The Board shall adjust the fee schedule so that the revenues from such fees cover the costs necessary to operate the Waterworks Technical Assistance Program required by this section.

B. In order to assist waterworks owners in complying with the requirements of the Safe Drinking Water Act (42 U.S.C. § 300 et seq.) and associated state regulations, there is hereby established in the state treasury a special fund to be known as the Waterworks Technical Assistance Fund, hereinafter referred to as the Fund. The fees required by this section shall be transmitted to the Comptroller to be deposited in the Fund. The income and principal of the Fund shall be used only and exclusively for the technical assistance required by this section. The State Treasurer shall be custodian of the moneys deposited in the Fund. No part of the Fund, either principal or interest earned thereon, shall revert to

C. Moneys in the Fund shall be used by the Department to conduct the Waterworks Technical Assistance Program, which shall include, but need not be limited to: (i) training for operator certification, (ii) engineering evaluation and advice, (iii) sample collection for laboratory analysis, and (iv) educational seminars.

§ 32.1-174. Revocation of permits.—The Commissioner may revoke any permit issued pursuant to this article whenever he determines that:

1. The waterworks can no longer be depended upon to furnish pure water; ~~or~~

2. The capacity of the waterworks is inadequate for the purpose of furnishing pure water; ~~or~~

3. The owner has failed to abide by an order issued by the Commissioner; ~~or~~

4. The owner has abandoned the waterworks and discontinued supplying pure water ~~.~~ ; *or*

5. The owner has failed to pay the waterworks operation fee required by § 32.1-171.1.

Official Use By Clerks	
Passed By	
The House of Delegates	**Passed By The Senate**
without amendment ☐	without amendment ☐
with amendment ☐	with amendment ☐
substitute ☐	substitute ☐
substitute w/amdt ☐	substitute w/amdt ☐
Date: _____	Date: _____
Clerk of the House of Delegates	Clerk of the Senate

APPENDIX C
1992 SESSION

LD1325392

HOUSE BILL NO. 488

Offered January 20, 1992

A BILL to amend and reenact §§ 10.1-2500, 15.1-489, 45.1-361.1, 54.1-1100 and 62.1-242 of the Code of Virginia, to amend the Code of Virginia by adding in Title 62.1 a chapter numbered 25, consisting of sections numbered 62.1-254 through 62.1-270, and to repeal Chapter 3.4, consisting of §§ 62.1-44.83 through 62.1-44.107 of Title 62.1 of the Code of Virginia, relating to management of groundwater; penalties.

Patrons—Parker, Robinson, Thomas and Woodrum; Senator: Russell

Referred to the Committee on Conservation and Natural Resources

Be it enacted by the General Assembly of Virginia:

1. That §§ 10.1-2500, 15.1-489, 45.1-361.1, 54.1-1100, and 62.1-242 of the Code of Virginia are amended and reenacted, and that the Code of Virginia is amended by adding in Title 62.1 a chapter numbered 25, consisting of sections numbered 62.1-254 through 62.1-270, as follows:

§ 10.1-2500. Virginia Environmental Emergency Response Fund established.—A. There is hereby established the Virginia Environmental Emergency Response Fund, hereafter referred to as the Fund, to be used for the purpose of emergency response to environmental pollution incidents and for the development and implementation of corrective actions for pollution incidents, other than pollution incidents addressed through the Virginia Underground Petroleum Storage Tank Fund, as described in § 62.1-44.34:11 of the State Water Control Law.

B. The Fund shall be a nonlapsing revolving fund consisting of grants, general funds, and other such moneys as appropriated by the General Assembly, and moneys received by the State Treasurer for:

1. Noncompliance penalties assessed pursuant to § 10.1-1311, civil penalties assessed pursuant to subsection B of § 10.1-1316 and civil charges assessed pursuant to subsection C of § 10.1-1316.

2. Civil penalties assessed pursuant to subsection C of § 10.1-1418.1, civil penalties assessed pursuant to subsections A and E of § 10.1-1455 and civil charges assessed pursuant to subsection F of § 10.1-1455.

3. Civil charges assessed pursuant to subdivision 8d of § 62.1-44.15 and civil penalties assessed pursuant to subsection (a) of § 62.1-44.32, excluding assessments made for violations of Article 9 (§ 62.1-44.34:8 et seq.) or 10 (§ 62.1-44.34:10 et seq.), Chapter 3.1 of Title 62.1, or a regulation, administrative or judicial order, or term or condition of approval relating to or issued under those articles.

4. Civil penalties and civil charges assessed pursuant to § 62.1-270.

4 *5* . Civil penalties assessed pursuant to subsection A of § 62.1-252 and civil charges assessed pursuant to subsection B of § 62.1-252.

§ 15.1-489. Purpose of zoning ordinances.—Zoning ordinances shall be for the general purpose of promoting the health, safety or general welfare of the public and of further accomplishing the objectives of § 15.1-427. To these ends, such ordinances shall be designed to give reasonable consideration to each of the following purposes, where applicable: (1) to provide for adequate light, air, convenience of access, and safety from fire, flood and other dangers; (2) to reduce or prevent congestion in the public streets; (3) to facilitate the creation of a convenient, attractive and harmonious community; (4) to facilitate the provision of adequate police and fire protection, disaster evacuation, civil defense, transportation, water, sewerage, flood protection, schools, parks, forests, playgrounds, recreational facilities, airports and other public requirements; (5) to protect against destruction of or encroachment upon historic areas; (6) to protect against one or more of the following: overcrowding of land, undue density of population in relation to the community facilities existing or available, obstruction of light and air, danger and

congestion in travel and transportation, or loss of life, health, or property from fire, flood, panic or other dangers; (7) to encourage economic development activities that provide desirable employment and enlarge the tax base; (8) to provide for the preservation of agricultural and forestal lands and other lands of significance for the protection of the natural environment; (9) to protect approach slopes and other safety areas of licensed airports, including United States government and military air facilities; and (10) to promote affordable housing. Such ordinance may also include reasonable provisions, not inconsistent with applicable state water quality standards, to protect surface water and groundwater as defined in § ~~62.1-44.85~~ ~~(8)~~ *62.1-255* .

§ 45.~~1-361~~.1. Definitions.—As used in this chapter, unless the context clearly indicates otherwise:

"Abandonment of a well" or "cessation of well operations" means the time at which (i) a gas or oil operator has ceased operation of a well and has not properly plugged the well and reclaimed the site as required by this chapter, (ii) the time at which a gas or oil operator has allowed the well to become incapable of production or conversion to another well type, or (iii) the time at which the Director revokes a permit or forfeits a bond covering a gas or oil operation.

"Associated facilities" means any facility utilized for gas or oil operations in the Commonwealth, other than a well or a well site.

"Barrel" means forty-two U.S. gallons of liquids, including slurries, at a temperature of sixty degrees Fahrenheit.

"Board" means the Virginia Gas and Oil Board.

"Coalbed methane gas" means occluded natural gas produced from coalbeds and rock strata associated therewith.

"Coalbed methane gas well" means a well capable of producing coalbed methane gas.

"Coalbed methane gas well operator" means any person who has been designated to operate or does operate a coalbed methane gas well.

"Coal operator" means any person who has the right to operate or does operate a coal mine.

"Coal owner" means any person who owns, leases, mines and produces, or has the right to mine and produce, a coal seam.

"Coal seam" means any stratum of coal twenty inches or more in thickness, unless a stratum of less thickness is being commercially worked, or can in the judgment of the Department foreseeably be commercially worked and will require protection if wells are drilled through it.

"Correlative rights" means the right of each gas or oil owner having an interest in a single pool to have a fair and reasonable opportunity to obtain and produce his just and equitable share of production of the gas or oil in such pool or its equivalent without being required to drill unnecessary wells or incur other unnecessary expenses to recover or receive the gas or oil or its equivalent.

"Cubic foot of gas" means the volume of gas contained in one cubic foot of space at a standard pressure base of 14.73 pounds per square foot and a standard temperature base of sixty degrees Fahrenheit.

"Disposal well" means any well drilled or converted for the disposal of drilling fluids, produced waters, or other wastes associated with gas or oil operations.

"Drilling unit" means the acreage on which one gas or oil well may be drilled.

"Enhanced recovery" means (i) any activity involving injection of any air, gas, water or other fluid into the productive strata, (ii) the application of pressure, heat or other means for the reduction of viscosity of the hydrocarbons, or (iii) the supplying of additional motive force other than normal pumping to increase the production of gas or oil from any well, wells or pool.

"Exploratory well" means any well drilled (i) to find and produce gas or oil in an unproven area, (ii) to find a new reservoir in a field previously found to be productive of gas or oil in another reservoir, or (iii) to extend the limits of a known gas or oil reservoir.

"Field rules" means rules established by order of the Virginia Gas and Oil Board that define a pool, drilling units, production allowables, or other requirements for gas or oil operations within an identifiable area.

"First point of sale" means, for oil, the point at which the oil is sold, exchanged or transferred for value from one person to another person, or when the original owner of the oil uses the oil, the point at which the oil is transported off the permitted site and delivered to another facility for use by the original owner; and for gas, the point at which the gas is sold, exchanged or transferred for value to any interstate or intrastate pipeline, any local distribution company, any person for use by such person, or when the gas is used by the owner of the gas for a purpose other than the production or transportation of the gas, the point at which the gas is delivered to a facility for use.

"Fund" means the Gas and Oil Plugging and Restoration Fund.

"Gas" or "natural gas" means all natural gas whether hydrocarbon or nonhydrocarbon or any combination or mixture thereof, including hydrocarbons, hydrogen sulfide, helium, carbon dioxide, nitrogen, hydrogen, casing head gas, and all other fluids not defined as oil pursuant to this section.

"Gas or oil operations" means any activity relating to drilling, redrilling, deepening, stimulating, production, enhanced recovery, converting from one type of a well to another, combining or physically changing to allow the migration of fluid from one formation to another, plugging or replugging any well, ground disturbing activity relating to the development, construction, operation and abandonment of a gathering pipeline, the development, operation, maintenance, and restoration of any site involved with gas or oil operations, or any work undertaken at a facility used for gas or oil operations. The term embraces all of the land or property that is used for or which contributes directly or indirectly to a gas or oil operation, including all roads.

"Gas or oil operator" means any person who has been designated to operate or does operate any gas or oil well or gathering pipeline.

"Gas or oil owner" means any person who owns, leases, has an interest in, or who has the right to explore for, drill or operate a gas or oil well as principal or as lessee. In the event that the gas is owned separately from the oil, the definitions contained herein shall apply separately to the gas owner or oil owner.

"Gathering pipeline" means (i) a pipeline which is used or intended for use in the transportation of gas or oil from the well to a transmission pipeline or other pipeline regulated by the Federal Energy Regulatory Commission or the State Corporation Commission or (ii) a pipeline which is used or intended for use in the transportation of gas or oil from the well to an off-site storage, marketing, or other facility where the gas or oil is sold.

"Geophysical operator" means a person who has the right to explore for gas or oil using ground disturbing geophysical exploration.

"Gob" means the de-stressed zone associated with any full-seam extraction of coal that extends above and below the mined-out coal seam.

"Ground disturbing" means any changing of land which may result in soil erosion from water or wind and the movement of sediments into state waters, including, but not limited to, clearing, grading, excavating, drilling, and transporting and filling of land.

"Ground disturbing geophysical exploration" or "geophysical operation" means any activity in search of gas or oil that breaks or disturbs the surface of the earth, including but not limited to road construction or core drilling. The term shall not include the conduct of gravity, magnetic, radiometric and similar geophysical surveys, and vibroseis or other similar seismic surveys.

"Injection well" means any well used to inject or otherwise place any substance associated with gas or oil operations into the earth or underground strata for disposal, storage or enhanced recovery.

"Inspector" means the Virginia Gas and Oil Inspector, appointed by the Director pursuant to § 45.1-361.4, or such other public officer, employee or other authority as may

in emergencies be acting in the stead, or by law be assigned the duties of, the Virginia Gas and Oil Inspector.

"Log" means the written record progressively describing all strata, water, oil or gas encountered in drilling, depth and thickness of each bed or seam of coal drilled through, quantity of oil, volume of gas, pressures, rate of fill-up, fresh and salt water-bearing horizons and depths, cavings strata, casing records and such other information as is usually recorded in the normal procedure of drilling. The term shall also include electrical survey records or electrical survey logs.

"Mine" means an underground or surface excavation or development with or without shafts, slopes, drifts or tunnels for the extraction of coal, minerals or nonmetallic materials, commonly designated as mineral resources, and the hoisting or haulage equipment or appliances, if any, for the extraction of the mineral resources. The term embraces all of the land or property of the mining plant, including both the surface and subsurface, that is used or contributes directly or indirectly to the mining, concentration or handling of the mineral resources, including all roads.

"Mineral" shall have the same meaning as ascribed to it in § 45.1-180.

"Mineral operator" means any person who has the right to or does operate a mineral mine.

"Mineral owner" means any person who owns, leases, mines and produces, or who has the right to mine and produce minerals and to appropriate such minerals that he produces therefrom, either for himself or for himself and others.

"Nonparticipating operator" means a gas or oil owner of a tract included in a drilling unit who elects to share in the operation of the well on a carried basis by agreeing to have his proportionate share of the costs allocable to his interest charged against his share of production from the well.

"Offsite disturbance" means any soil erosion, water pollution, or escape of gas, oil, or waste from gas, oil, or geophysical operations off a permitted site which results from activity conducted on a permitted site.

"Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods and which are not the result of condensation of gas after it leaves the underground reservoir.

"Orphaned well" means any well abandoned prior to July 1, 1950, or for which no records exist concerning its drilling, plugging or abandonment.

"Participating operator" means a gas or oil owner who elects to bear a share of the risks and costs of drilling, completing, equipping, operating, plugging and abandoning a well on a drilling unit and to receive a share of production from the well equal to the proportion which the acreage in the drilling unit he owns or holds under lease bears to the total acreage of the drilling unit.

"Permittee" means any gas, oil, or geophysical operator holding a permit for gas, oil, or geophysical operations issued under authority of this chapter.

"Person under a disability" shall have the same meaning as ascribed to it in § 8.01-2.

"Pipeline" means any pipe above or below the ground used or to be used to transport gas or oil.

"Plat" or "map" means a map, drawing or print showing the location of a well or wells, mine, quarry, or other information required under this chapter.

"Pool" means an underground accumulation of gas or oil in a single and separate natural reservoir. It is characterized by a single natural pressure system so that production of gas or oil from one part of the pool tends to or does affect the reservoir pressure throughout its extent. A pool is bounded by geologic barriers in all directions, such as geologic structural conditions, impermeable strata, or water in the formation, so that it is effectively separated from any other pool which may be present in the same geologic structure. A coalbed methane pool means an area which is underlain or appears to be underlain by at least one coalbed capable of producing coalbed methane gas.

"Project area" means the well, gathering pipeline, associated facilities, roads, and any

other disturbed area, all of which are permitted as part of a gas, oil, or geophysical operation.

"Restoration" means all activity required to return a permitted site to other use after gas, oil, or geophysical operations have ended, as approved in the operations plan for the permitted site.

"Royalty owner" means any owner of gas or oil in place, or owner of gas or oil rights, who is eligible to receive payment based on the production of gas or oil.

"State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction and which affect the public welfare.

"Stimulate" means any action taken by a gas or oil operator to increase the inherent productivity of a gas or oil well, including, but not limited to, fracturing, shooting or acidizing, but excluding (i) cleaning out, bailing or workover operations and (ii) the use of surface-tension reducing agents, emulsion breakers, paraffin solvents, and other agents which affect the gas or oil being produced, as distinguished from the producing formation.

"Storage well" means any well used for the underground storage of gas.

"Surface owner" means any person who is the owner of record of the surface of the land.

"Waste from gas, oil, or geophysical operations" means any substance other than gas or oil which is (i) produced or generated during or results from the development, drilling and completion of wells and associated facilities or the development and construction of gathering pipelines or (ii) produced or generated during or results from well, pipeline and associated facilities' operations, including, but not limited to, brines and produced fluids other than gas or oil. In addition, this term shall include all rubbish and debris, including all material generated during or resulting from well plugging, site restoration, or the removal and abandonment of gathering pipelines and associated facilities.

"Waste" or "escape of resources" means (i) physical waste, as that term is generally understood in the gas and oil industry; (ii) the inefficient, excessive, improper use, or unnecessary dissipation of reservoir energy; (iii) the inefficient storing of gas or oil; (iv) the locating, drilling, equipping, operating, or producing of any gas or oil well in a manner that causes, or tends to cause, a reduction in the quantity of gas or oil ultimately recoverable from a pool under prudent and proper operations, or that causes or tends to cause unnecessary or excessive surface loss or destruction of gas or oil; (v) the production of gas or oil in excess of transportation or marketing facilities; (vi) the amount reasonably required to be produced in the proper drilling, completing, or testing of the well from which it is produced, except gas produced from an oil well or condensate well pending the time when with reasonable diligence the gas can be sold or otherwise usefully utilized on terms and conditions that are just and reasonable; or (vii) underground or above ground waste in the production or storage of gas, oil, or condensate, however caused. The term "waste" does not include gas vented from methane drainage boreholes or coalbed methane gas wells, where necessary for safety reasons or for the efficient testing and operation of coalbed methane gas wells; nor does it include the plugging of coalbed methane gas wells for the recovery of the coal estate.

"Water well" means any well as defined in § ~~62.1-44.85~~ *62.1-255* .

"Well" means any shaft or hole sunk, drilled, bored or dug into the earth or into underground strata for the extraction, injection or placement of any gaseous or liquid substance, or any shaft or hole sunk or used in conjunction with such extraction, injection or placement. The term shall not include any shaft or hole sunk, drilled, bored or dug into the earth for the sole purpose of pumping or extracting therefrom potable, fresh or usable water for household, domestic, industrial, agricultural, or public use and shall not include water boreholes, methane drainage boreholes where the methane is vented or flared rather than produced and saved, subsurface boreholes drilled from the mine face of an underground coal mine, any other boreholes necessary or convenient for the extraction of coal or drilled pursuant to a uranium exploratory program carried out pursuant to the laws

of this Commonwealth, or any coal or non-fuel mineral core hole or borehole for the purpose of exploration.

§ 54.1-1100. Definitions.—As used in this chapter, unless the context requires a different meaning:

"Board" means the Board for Contractors.

"Class A contractors" perform or manage construction, removal, repair, or improvements when (i) the total value referred to in a single contract or project is $40,000 or more, or (ii) the total value of all such construction, removal, repair, or improvements undertaken by such person within any twelve-month period is $300,000 or more.

"Class B contractors" perform or manage construction, removal, repair, or improvements when (i) the total value referred to in a single contract or project is less than $40,000, and more than $1,500, or (ii) when the work is for the purpose of constructing a water well to reach groundwater as defined in § ~~62.1-44.85~~ ~~(8)~~ *62.1-255* regardless of contract or project amount.

"Contractor" means any person, firm, association, or corporation that for a fixed price, commission, fee, or percentage undertakes to bid upon, or accepts, or offers to accept, orders or contracts for performing, managing, or superintending in whole or in part, the construction, removal, repair or improvement of any building or structure permanently annexed to real property owned, controlled, or leased by another person or any other improvements to such real property.

"Department" means the Department of Commerce.

"Designated employee" means the contractor's full-time employee who is at least eighteen years of age and who has successfully completed the oral or written examination required by the Board on behalf of the contractor.

"Director" means the Director of the Department of Commerce.

"Person" means any individual, firm, corporation, association, partnership, joint venture, or other legal entity.

"Value" means fair market value. When improvements are performed or supervised by a contractor, the contract price shall be prima facie evidence of value.

§ 62.1-242. Definitions.—As used in this chapter, unless the context requires otherwise:

"Beneficial use" means both instream and offstream uses. Instream beneficial uses include but are not limited to protection of fish and wildlife habitat, maintenance of waste assimilation, recreation, navigation, and cultural and aesthetic values. Offstream beneficial uses include but are not limited to domestic (including public water supply), agricultural, electric power generation, commercial, and industrial uses. Domestic and other existing beneficial uses shall be considered the highest priority beneficial uses.

"Board" means the State Water Control Board.

"Nonconsumptive use" means the use of water withdrawn from a stream in such a manner that it is returned to the stream without substantial diminution in quantity at or near the point from which it was taken and would not result in or exacerbate low flow conditions.

"Surface water withdrawal permit" means a document issued by the Board evidencing the right to withdraw surface water.

"Surface water management area" means a geographically defined surface water area in which the Board has deemed the levels or supply of surface water to be potentially adverse to public welfare, health and safety.

"Surface water" means any water in the Commonwealth, except groundwater, as defined in § ~~62.1-44.85~~ *62.1-255* .

CHAPTER 25.

GROUNDWATER MANAGEMENT ACT OF 1992.

§ 62.1-254. Purpose.—It is the purpose of this Act to recognize and declare that the right to reasonable control of all groundwater resources within this Commonwealth belongs to the public and that in order to conserve, protect and beneficially utilize the groundwater of this Commonwealth and to ensure the public welfare, safety and health,

provision for management and control of groundwater resources is essential.

§ 62.1-255. Definitions.—As used in this chapter, unless the context requires otherwise:

"Beneficial use" includes, but is not limited to, domestic (including public water supply), agricultural, commercial, and industrial uses.

"Board" means the State Water Control Board.

"Groundwater" means any water, except capillary moisture, beneath the land surface in the zone of saturation or beneath the bed of any stream, lake, reservoir or other body of surface water wholly or partially within the boundaries of this Commonwealth, whatever the subsurface geologic structure in which such water stands, flows, percolates or otherwise occurs.

"Groundwater withdrawal permit" means a certificate issued by the Board permitting the withdrawal of a specified quantity of groundwater in a groundwater management area.

"Person" means any and all persons, including individuals, firms, partnerships, associations, public or private institutions, municipalities or political subdivisions, governmental agencies, or private or public corporations organized under the law of this Commonwealth or any other state or country.

"Well" means any artificial opening or artificially altered natural opening, or system of openings, however made, by which groundwater is sought or through which groundwater flows under natural pressure or is intended to be artificially drawn. This definition shall not include wells drilled for the purpose of exploration or production of oil or gas, for building foundation investigation and construction, elevator shafts, grounding of electrical apparatus, or for geophysical investigation.

§ 62.1-256. Duties of Board.—The Board shall have the following duties and powers:

1. To issue groundwater withdrawal permits in accordance with regulations adopted by the Board;

2. To issue special orders as provided in § 62.1-268;

3. To study, investigate and assess groundwater resources and all problems concerned with the quality and quantity of groundwater located wholly or partially in the Commonwealth, and to make such reports and recommendations as may be necessary to carry out the provisions of this chapter;

4. To require any person withdrawing groundwater for any purpose anywhere in the Commonwealth, whether or not declared to be a groundwater management area, to furnish to the Board such information with regard to such groundwater withdrawal and the use thereof as may be necessary to carry out the provisions of this chapter;

5. To prescribe and enforce requirements that naturally flowing wells be plugged or destroyed, or be capped or equipped with valves so that flow of groundwater may be completely stopped when said ground water is not currently being applied to a beneficial use;

6. To enter at reasonable times and under reasonable circumstances, any establishment or upon any property, public or private, for the purposes of obtaining information, conducting surveys or inspections, or inspecting wells and springs, and to duly authorize agents to do the same, to ensure compliance with any permits, standards, policies, rules, regulations, rulings and special orders which it may adopt, issue or establish to carry out the provisions of this chapter;

7. To issue special exceptions pursuant to § 62.1-267;

8. To adopt such regulations as it deesm necessary to administer and enforce the provisions of this chapter; and

9. To delegate to its Executive Director any of the powers and duties invested in it to administer and enforce the provisions of this chapter except the adoption and promulgation of rules, standards or regulations; the revocation of permits; and the issuance, modification, or revocation of orders except in case of emergency as provided in subsection B of § 62.1-268.

§ 62.1-257. When Board may initiate a groundwater management area study

proceeding; hearing required.—A. The Board upon its own motion or, in its discretion, upon receipt of a petition by any county, city or town within the area in question, may initiate a groundwater management area proceeding, whenever in its judgment there may be reason to believe that:

1. Groundwater levels in the area are declining or are expected to decline excessively; or

2. The wells of two or more groundwater users within the area are interfering or may be expected to interfere substantially with one another; or

3. The available groundwater supply has been or may be overdrawn; or

4. The groundwater in the area has been or may become polluted. Such pollution includes any alteration of the physical, chemical or biological properties of groundwater which has a harmful or detrimental effect on the quality or quantity of such waters.

B. If the Board finds that any one of the conditions required above exists, and further finds that the public welfare, safety and health require that regulatory efforts be initiated, the Board shall by regulation declare the area in question to be a groundwater management area. The Board shall include in its regulation a definition of the boundaries of the groundwater management area. The Board shall mail a copy of the regulation to the mayor or chairman of the governing body of each county, city or town within which any part of the area lies.

§ 62.1-258. Use of groundwater in groundwater management area.—It shall be unlawful in a groundwater management area for any person to withdraw, attempt to withdraw, or allow the withdrawal of any groundwater, other than in accordance with a groundwater withdrawal permit or as provided in § 62.1-259, subsection D of § 62.1-260, and subsection C of § 62.1-261.

§ 62.1-259. Certain withdrawals; permit not required.—No groundwater withdrawal permit shall be required for (i) withdrawals of less than 300,000 gallons a month; (ii) temporary construction dewatering; (iii) temporary withdrawals associated with a state-approved groundwater remediation; (iv) the withdrawal of groundwater for use by a groundwater heat pump where the discharge is reinjected into the aquifer from which it is withdrawn; (v) the withdrawal from a pond recharged by groundwater without mechanical assistance; (vi) the withdrawal of groundwater in any area not declared a groundwater management area; and (vii) the withdrawal of groundwater pursuant to a special exception issued by the Board.

§ 62.1-260. Permits for existing groundwater withdrawals in existing groundwater management areas.—A. Persons holding certificates of groundwater right or permits to withdraw groundwater issued prior to July 1, 1991, in the Eastern Virginia or Eastern Shore Groundwater Management Areas shall file an application for a groundwater withdrawal permit on or before December 31, 1992, in order to obtain a permit for withdrawals. The Board shall issue groundwater permits for the total amount of groundwater withdrawn during any consecutive twelve-month period between July 1, 1990, and June 30, 1992.

B. Persons holding certificates of groundwater right or permits to withdraw groundwater issued on or after July 1, 1991, and prior to July 1, 1992, in the Eastern Virginia or Eastern Shore Groundwater Management Areas shall file an application for a groundwater withdrawal permit on or before December 31, 1993, in order to obtain a permit for withdrawals. The Board shall issue permits for the total amount of groundwater withdrawn during any consecutive twelve-month period between July 1, 1991, and June 30, 1993.

C. Persons withdrawing groundwater for agricultural or livestock watering purposes in the Eastern Virginia or Eastern Shore Groundwater Management Areas on or before July 1, 1992, shall file an application for a groundwater withdrawal permit on or before December 31, 1993, in order to obtain a permit for withdrawals. The Board shall issue permits for the total amount of groundwater withdrawn during any consecutive twelve-month period between July 1, 1983 and June 30, 1993.

D. Persons withdrawing groundwater for agricultural or livestock watering purposes, or pursuant to certificates of ground water right or permits to withdraw groundwater issued prior to July 1, 1992, in the Eastern Virginia or Eastern Shore groundwater Management areas, may continue such withdrawal until the required permit application is acted on by the Board, provided that the permit application is filed prior to the appropriate deadline.

E. Persons applying for a groundwater withdrawal permit may request that they be permitted to withdraw more groundwater than the amount to which they may be entitled based on their historic usage as set forth in this section. The Board in its discretion may issue a permit for a greater amount than that which is based on historic usage, upon consideration of the factors set forth in § 62.1-263.

F. Failure by any person covered by the provisions of subsection A, B or C to file an application for a groundwater withdrawal permit prior to the expiration of the applicable period creates a presumption that any claim to withdraw groundwater based on history of usage has been abandoned. In reviewing any application for a groundwater withdrawal permit subsequently made by such a person, the Board shall consider the factors set forth in § 62.1-263.

§ 62.1-261. Permits for existing groundwater withdrawals in newly established groundwater management areas.—A. Persons withdrawing groundwater in any area declared a groundwater management area on or after July 1, 1992, shall file an application within six months after the groundwater management area has been declared, in order to obtain a permit for withdrawals. The Board shall issue permits for the total amount of groundwater withdrawn during any consecutive twelve-month period in the twenty-four calendar months preceding said declaration.

B. Persons withdrawing groundwater for agricultural or livestock watering purposes in any area declared a groundwater management area on or after July 1, 1992, shall file an application within six months after the groundwater management area has been declared in order to obtain a permit for withdrawals. The Board shall issue permits for the total amount of groundwater withdrawn during any consecutive twelve month period in the ten-year period preceding such declaration.

C. Persons withdrawing groundwater in any area declared a groundwater management area on or after July 1, 1992, may continue such withdrawal until the required permit application is acted on by the Board, provided that the permit application is filed within the six-month period following the declaration.

D. Persons applying for a groundwater withdrawal permit issued pursuant to this section may request that they be permitted to withdraw more groundwater than the amount to which they may be entitled based on their historic usage as set forth in this section. The Board in its discretion may issue a permit for a greater amount than that which is based on historic usage, upon consideration of factors set forth in § 62.1-263.

E. Failure by any person covered by the provisions of subsections A or B to file an application for a groundwater withdrawal permit within the six months following the declaration of the groundwater management area creates a presumption that any claim to withdraw groundwater based on history of usage has been abandoned. In reviewing any application for a groundwater withdrawal permit subsequently made by such a person, the Board shall consider the factors set forth in § 62.1-263.

§ 62.1-262. Permits for other groundwater withdrawals.—Any application for a groundwater withdrawal permit, except as provided in §§ 62.1-260 and 62.1-261, shall include a water conservation plan approved by the Board. A water conservation plan shall include: (i) use of water saving fixtures in new and renovated plumbing as provided under Uniform Statewide Building Code; (ii) a water loss reduction program; (iii) a water use education program; and (iv) ordinances prohibiting waste of water generally and providing for mandatory water use restrictions, with penalties, during water shortage emergencies. The Board shall approve all water conservation plans in compliance with (i) through (iv) of this section.

§ 62.1-263. Criteria for issuance of permits.—When reviewing an application for a

permit to withdraw groundwater, or an amendment to a permit, the Board may consider the nature of the proposed beneficial use, climatic cycles, economic cycles, population projections, the status of land use and other necessary approvals, and the adoption and implementation of the applicant's water conservation plan. In no case shall a permit be issued for more groundwater than can be applied to the proposed beneficial use.

When proposed uses of groundwater are in conflict or when available supplies of groundwater are insufficient for all who desire to use them, preference shall be given to uses for human consumption, over all others.

In evaluating permit applications, the Board will assure that the maximum possible safe supply of groundwater will be preserved and protected for all other beneficial uses.

§ 62.1-264. Permits for public water supplies.—To ensure that any groundwater withdrawal permit issued for a public water supply does not impact a waterworks operation permit issued pursuant to § 32.1-172, the maximum permitted daily withdrawal shall be set by the Board at a level consistent with the requirements and conditions contained in the waterworks operation permit. This section shall not limit the authority of the Board to reduce or eliminate groundwater withdrawals by a waterworks if necessary to protect human health or the environment. In promulgating regulations to implement this section, and in administering such regulations and this chapter, the Board shall consult and cooperate with the State Health Department to the end that effective, equitable management of groundwater and safeguarding of public health will be attained to the maximum extent possible.

§ 62.1-265. Drought relief wells.—A political subdivision, or an authority serving a political subdivision, which has constructed a public water supply well, including an aquifer storage and recovery project, for the purpose of providing supplemental water during drought conditions may apply for a permit to withdraw the amount of groundwater needed annually to meet human consumption needs as documented by a water conservation plan approved by the Board as provided in § 62.1-262. The Board shall issue a groundwater withdrawal permit for such wells, which permits shall be issued with the condition that withdrawals may only be made at times that mandatory water use restrictions have been implemented pursuant to the water conservation plan.

§ 62.1-266. Groundwater withdrawal permits.—A. The Board may issue any groundwater withdrawal permit upon terms, conditions and limitations necessary for the protection of the public welfare, safety and health.

B. Applications for groundwater withdrawal permits shall be in a form prescribed by the Board and shall contain such information, consistent with this chapter, as the Board deems necessary.

C. All permits issued by the Board under this chapter shall have a fixed term not to exceed ten years. The term of a permit issued by the Board shall not be extended by modification beyond the maximum duration and the permit shall expire at the end of the term unless a complete application for a new permit has been filed in a timely manner as required by the regulations of the Board and the Board is unable, through no fault of the permittee, to issue a new permit before the expiration date of the previous permit.

D. Any permit issued by the Board under this chapter may, after notice and opportunity for a hearing, be amended or revoked on any of the following grounds or for good cause as may be provided by the regulations of the Board:

1. The permittee has violated any regulation or order of the Board, any condition of a permit, any provision of this chapter, or any order of a court, where such violation presents a hazard or potential hazard to human health or the environment or is representative of a pattern of serious or repeated violations which, in the opinion of the Board, demonstrates the permittee's disregard for or inability to comply with applicable laws, regulations, or requirements; or

2. The permittee has failed to disclose fully all relevant material facts or has misrepresented a material fact in applying for a permit, or in any other report or document required under this chapter or under the regulations of the Board; or

3. The activity for which the permit was issued endangers human health or the environment and can be regulated to acceptable levels by amendment or revocation of the permit; or

4. There exists a material change in the basis on which the permit was issued that requires either a temporary or a permanent reduction or elimination of the withdrawal controlled by the permit necessary to protect human health or the environment.

§ 62.1-267. Issuance of special exceptions.—A. The Board may issue special exceptions to allow the withdrawal of groundwater in cases of unusual situations where requiring the user to obtain a groundwater withdrawal permit would be contrary to the intended purpose of the Act.

B. In renewing an application for a special exception, the Board may consider the amount and duration of the proposed withdrawal, the beneficial use intended for the groundwater, the return of the groundwater to the aquifer, and the effect of the withdrawal on human health and the environment. Any person requesting a special exception shall submit an application to the Board containing such information as the Board shall require by regulation adopted pursuant to this chapter.

C. Any special exception issued by the Board shall state the terms pursuant to which the applicant may withdraw groundwater, including the amount of groundwater that may be withdrawn in any period and the duration of the special exception. No special exception shall be issued for a term exceeding ten years.

D. A violation of any term or provision of a special exception shall subject the holder thereof to the same penalties and enforcement procedures as would apply to a violation of a groundwater withdrawal permit.

E. The Board shall have the power to amend or revoke any special exception after notice and opportunity for hearing on the grounds set forth in subsection D of § 62.1-266 for amendment of revocation of a groundwater withdrawal permit.

§ 62.1-268. Issuance of special orders.—A. The Board may issue special orders (i) requiring any person who has violated the terms and provisions of a groundwater withdrawal permit issued by the Board to comply with such terms and provisions; (ii) requiring any person who has failed to comply with a directive from the Board to comply with such directive; and (iii) requiring any person who has failed to comply with the provisions of this chapter or any decision of the Board to comply with such provision or decision.

B. Such special orders are to be issued only after a hearing with at least thirty days' notice to the affected person, of the time, place and purpose thereof, and they shall become effective not less than fifteen days after service by certified mail, sent to the last known address of such person, with the time limits counted from the date of such mailing; however, if the Board finds that any such person is grossly affecting or presents an imminent and substantial danger to (i) the public welfare, safety or health; (ii) a public water supply; or (iii) commercial, industrial, agricultural or other beneficial uses, it may issue, without advance notice or hearing, an emergency special order directing the person to cease such withdrawal immediately, and shall provide an opportunity for a hearing, after reasonable notice as to the time and place thereof to the person, to affirm, modify, amend or cancel such emergency special order. If a person who has been issued such a special order or an emergency special order is not complying with the terms thereof, the Board may proceed in accordance with § 62.1-269, and where the order is based on a finding of an imminent and substantial danger, the court shall issue an injunction compelling compliance with the emergency special order pending a hearing by the Board. If an emergency special order requires cessation of a withdrawal, the Board shall provide an opportunity for a hearing within forty-eight hours of the issuance of the injunction.

(c) The provisions of this section notwithstanding, the Board may proceed directly under § 62.1-270 for any past violation or violations of any provision of this chapter or any regulation duly promulgated hereunder.

(d) With the consent of any person who has violated or failed, neglected or refused to

obey any regulation or order of the Board, any condition of a permit or any provision of this chapter, the Board may provide, in an order issued by the Board against such person, for the payment of civil charges for past violations in specific sums not to exceed the limit specified in § 62.1-270. Such civil charges shall be instead of any appropriate civil penalty which could be imposed under subsection A of § 62.1-270 and shall not be subject to the provisions of § 2.1-127.

§ 62.1-269. Enforcement by injunction, etc.—Any person violating or failing, neglecting or refusing to obey any rule, regulation, order, standard or requirement of the Board, any provision of any groundwater withdrawal permit issued by the Board, or any provision of this chapter may be compelled in a proceeding instituted in any appropriate court by the Board to obey same and to comply therewith by injunction, mandamus or other appropriate remedy. The Board shall be entitled to an award of reasonable attorneys' fees and costs in any action brought by the Board under this section in which it substantially prevails on the merits of the case, unless special circumstances would make an award unjust.

§ 62.1-270. Penalties.—A. Any person who violates any provision of this chapter, or who fails, neglects or refuses to comply with any order of the Board, or order of a court, issued as herein provided shall be subject to a civil penalty not to exceed $25,000 for each violation within the discretion of the court. Each day of violation of each requirement shall constitute a separate offense.

Such civil penalties may, in the discretion of the court assessing them, be directed to be paid into the treasury of the county, city, or town in which the violation occurred to be used for the purpose of abating environmental pollution therein in such manner as the court may, by order, direct, except that where the person in violation is such county, city or town itself, or its agent, the court shall direct such penalty to be paid to the state treasurer for deposit into the Virginia Environmental Emergency Response Fund pursuant to Chapter 25 (§ 10.1-2500 et seq.) of Title 10.1.

With the consent of any person in violation of this chapter, the Board may provide, in an order issued by the Board against the person, for the payment of civil charges. These charges shall be in lieu of the civil penalties referred to above. Such civil charges shall be deposited by the State Treasurer into the Virginia Environmental Emergency Response Fund.

B. Any person willfully or negligently violating any provision of this chapter, any regulation or order of the Board, any condition of a certificate or any order of a court shall be guilty of a misdemeanor punishable by confinement in jail for not more than twelve months and a fine of not less than $2,500 nor more than $25,000, either or both. Any person who knowingly violates any provision of this chapter, any regulation or order of the Board, any condition of a permit or any order of a court issued as herein provided, or who knowingly makes any false statement in any form required to be submitted under this chapter shall be guilty of a felony punishable by a term of imprisonment of not less than one year nor more than three years, or in the discretion of the jury or the court trying the case without a jury, confinement in jail for not more than twelve months and a fine of not less than $5,000 nor more than $50,000 for each violation. Any defendant that is not an individual shall, upon conviction of a violation under this subsection, be sentenced to pay a fine of not less than $10,000. Each day of violation of each requirement shall constitute a separate offense.

C. Any person who knowingly violates any provision of this chapter, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily harm, shall, upon conviction, be guilty of a felony punishable by a term of imprisonment of not less than two years nor more than fifteen years and a fine of not more than $250,000, either or both. A defendant that is not an individual shall, upon conviction of a violation under this subsection, be sentenced to pay a fine not exceeding the greater of one million dollars or an amount that is three times the economic benefit realized by the defendant as a result of the offense. The maximum penalty shall be

doubled with respect to both fine and imprisonment for any subsequent conviction of the same person under this subsection.

D. Criminal prosecution under this section shall be commenced within three years of discovery of the offense, notwithstanding the limitations provided in any other statute.

2. That Chapter 3.4, consisting of §§ 62.1-44.83 through 62.1-44.107, of Title 62.1 of the Code of Virginia is repealed.

Official Use By Clerks

Passed By The House of Delegates		**Passed By The Senate**	
without amendment	☐	without amendment	☐
with amendment	☐	with amendment	☐
substitute	☐	substitute	☐
substitute w/amdt	☐	substitute w/amdt	☐
Date: _____		Date: _____	
Clerk of the House of Delegates		Clerk of the Senate	