

**REPORT OF THE
SENATE AGRICULTURE, CONSERVATION,
AND NATURAL RESOURCES COMMITTEE
OF THE VIRGINIA GENERAL ASSEMBLY
ON THE EFFECTIVENESS OF FLOW-THROUGH
MARINE SANITATION DEVICES**

TO

THE SENATE OF VIRGINIA



SENATE DOCUMENT NO. 19

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF PURCHASES AND SUPPLY
RICHMOND
1978**

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NATURAL RESOURCES COMMITTEE
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OF FLOW-THROUGH MARINE SANITATION DEVICES**

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**Report of the
Senate Agriculture, Conservation,
and Natural Resources Committee
of the Virginia General Assembly
on the Effectiveness of Flow-Through
Marine Sanitation Devices
To
The Senate of Virginia**

Richmond, Virginia

October, 1977

To: The Senate of Virginia

I. PREFACE

The State Water Control Board's Regulation No. 5 requires a sewage retention device on all boats or vessels which are equipped with an installed toilet and which are regularly moored, berthed, or docked within state waters designated as shellfish growing areas (see Appendix 2). The State Health Department has required, as part of its regulations since 1969, that all marinas and other places where boats are moored shall have means of pumping or removing sewage from boats. The purpose of these regulations is to provide maximum protection for shellfish growing areas from human boat wastes containing high concentrations of bacteria and viruses, many of which are pathogenic to humans. There has been for some time a tacit understanding among the two agencies and the General Assembly that neither regulation will be enforced until the ramifications of enforcement have been more fully considered by the General Assembly.

Conflicting testimony presented during legislative hearings in 1977 questioned the need for boat holding tanks, the kind of treatment given boat sewage by Coast Guard certified flow-through devices, and whether flow-through devices achieve the degree of treatment necessary to keep shellfish beds open and to protect the health of the general public.

It is the position of the Virginia State Health Department that the discharge of human sewage into shellfish waters by boats equipped with marine toilets should be prohibited. The Health Department maintains that regulations requiring holding tanks on boats as a means of curtailing sewage discharges is the only acceptable method of assuring that such pollution will not continue to degrade State waters and prevent serious potential public health hazards through the consumption of shellfish by the people of the Commonwealth. The Health Department points to the experience of other states such as Michigan who have stringent boat pollution laws which are successful.

The Health Department feels that sanitary shellfish growing areas are of vital concern to all Virginians and that the treatment afforded human waste by flow-through treatment devices is unacceptable from a public health viewpoint. The Health Department contends that such devices present reliability and maintenance problems and, even when working at peak efficiency, only afford partial treatment. It was argued that the most advanced flow-through device was still in a developmental stage.

Virginia is a participant in the National Shellfish Sanitation Program, a cooperative program established in 1925 for the purpose of restoring public confidence in the consumption of shellfish after serious typhoid fever epidemics in New York and Chicago as the result of contaminated shellfish. The U. S. Food and Drug Administration is the federal partner in the program and through evaluations of a state's shellfish control program, determines whether or not to endorse interstate shipments from a particular state. Non-endorsement is extremely drastic and completely destroys a state's shellfish industry. Accordingly, the Health Department maintains that it is essential for a state to maintain FDA endorsement of its shellfish sanitary control program. One of the major factors in retaining such endorsement is through the proper classification of all shellfish growing areas in the state. This means that in order to classify growing areas as approved, they have to be protected from all raw sewage discharges (regardless of how small), industrial wastes, radioactive wastes, and must meet a Fecal Coliform Standard of 14 per 100 milliliters. When growing areas fail to meet these requirements, they must be closed. In 1972, the FDA required Virginia to close approximately 17,000 acres of oyster growing areas because of human, industrial and animal pollution.

The Health Department insists that sanitary shellfish growing areas are necessary in order to have a viable shellfish industry, and without the implementation of a holding tank regulation, hundreds of acres of prime shellfish growing areas would have to be condemned. Testimony was received by the Subcommittee stating that over 9,000 acres of shellfish growing areas have been condemned solely because of boat pollution, and that 50,000 more acres were condemned at least partially due to boat pollution. Such closures are very detrimental to the State economy. The Health Department asserts that many presently condemned shellfish grounds around marinas might be reopened if holding tanks were required.

The Health Department repeatedly emphasized that the greatest threat to shellfish contamination exists with boats operating in shallow tidal rivers and tributaries where the productive shellfish beds exist rather than in the Chesapeake Bay and Hampton Roads areas where there is more room for dilution and assimilation. It was pointed out that boat traffic is continually increasing in such shallow waters. The Health Department also suggests that there is an insufficient number of enforcement personnel to insure that flow-through devices are operating properly.

Conversely, opponents of the Health Department position and holding tank regulations offer a variety of reasons for allowing flow-through treatment devices in lieu of or in addition to holding tanks. Opponents maintain that the use of flow-through sewage treatment devices will have

no discernable effect on shellfish sanitation and that pollution caused by boaters is but a tiny percentage of the overall pollution problem in Virginia waters. Authorizing the use of such devices will have no measurable impact on the State's economy. It is argued that holding tanks are not required by the Food and Drug Administration and that there are no reported cases of typhoid fever or hepatitis due to boat contamination of shellfish in Virginia. It is contended that flow-through treatment devices easily destroy disease causing bacteria and viruses in human waste.

Opponents also maintain that the enforcement of holding tank regulations would discriminate against Virginia boatowners since the regulation will have no effect upon foreign boats entering and docking in Virginia waters. Neighboring states have no such regulation.

Enforcement problems will exist if holding tanks are required. Opponents contend that ways exist to evade complying with holding tank regulations such as the installation of "cheater pumps". In fact, it is asserted that the implementation of holding tank regulations might result in a worse pollution problem than by allowing flow-through treatment devices, due to the existence of the "cheater pumps" which would pour completely untreated sewage over shellfish beds.

Opponents also insist that holding tank regulations would cause great expense not only to boatowners but also to marina operators who would be required to install pump-out facilities. Testimony was received by the Subcommittee that only 7 out of 280 marinas in this State presently have pump-out facilities. Also, in order to receive a "no discharge" designation from the Environmental Protection Agency, adequate pump-out facilities must already exist.

Opponents cited other problems such as long waiting lines at marinas to pump-out, exorbitant pump-out fees for boaters, runovers from septic systems, increased maintenance difficulties, and problems with the seaworthiness of boats having holding tanks. The potential for fires, ruptures and explosions due to the release of methane gas within a holding tank was also observed to be a potential problem. It is further suggested that holding tank chemicals are non-biodegradable and could cause serious problems at sewage treatment plants.

Many of Virginia's busiest recreational boating areas are found in productive shellfish growing areas. Estuarine waters favorable for shellfish growth also are accessible by land and are suitable for development of marina facilities to support recreational boating. The concentration of high-density population areas near these waters and the accessibility of the waters by highway not only has stimulated growth and development, but has generated competitive pressures between the shellfish industry and recreation boating enthusiasts regarding the use of the waters. Projected population growth and a more affluent society in population centers are likely to increase these pressures in the future, barring such factors as an energy "crunch" which would curtail both travel to marinas and boat use. Both the present situation and prospects for the future underscore the need for a policy to guide future actions which adequately consider the needs

and preferences of the concerned public.

II. INTRODUCTION

The Constitution of Virginia has specifically singled out oyster beds for special protection over other natural resources in the Commonwealth. Also, much legislation has been passed to preserve and strengthen the shellfish industry in Virginia. The Marine Resources Commission was established for the purpose of conserving and protecting the seafood and marine resources of Virginia. The Virginia Institute of Marine Science (VIMS) is deeply involved in research on fisheries and marine resources.

In 1966, the Virginia General Assembly directed the Marine Resources Study Commission to report on the state of Virginia's marine resources. That Commission concluded that Virginia's marine resources needed protection, especially at marinas where boats congregated. As a result, the General Assembly in 1968 passed laws relating to the control of boat pollution: one directed the State Water Control Board to promulgate regulations controlling discharges from boats into State water; the other directed the Board of Health to promulgate regulations establishing minimum requirements for the adequacy of sewerage facilities at marinas (see Appendix 1). Regulations promulgated by the Health Department in 1969 were met with considerable objection by boatowners and marina operators.

Pursuant to § 62.1-44.33, the State Water Control Board adopted Regulation No. 5 on January 30, 1973 (See Appendix 2). However, for various reasons, the regulation was not implemented. In 1976, after a series of public hearings, the Board amended Regulation No. 5 and stipulated that the regulation would not become enforceable until one year after receiving "no discharge certification" from the Environmental Protection Agency. The State has not applied for and cannot receive such certification until such time as a reasonable number of marinas in the designated area install shoreside pump-out facilities.

§ 62.1-44.33 directed the State Water Control Board to adopt regulations to control the discharge of sewage from boats. In 1975, the General Assembly restricted this authority by amending the statute (See Appendix 3). In 1977, legislation was introduced which would have amended § 62.1-44.33 to prohibit regulations requiring holding tanks (See Appendix 4). Although this passed the House of Delegates, due to conflicting testimony as to the effectiveness of flow-through marine sanitation devices, the Senate tabled the measure and through Senate Resolution No. 34, directed the Senate Committee on Agriculture, Conservation and Natural Resources to study the problems and report back to the Senate by October 1, 1977.

SENATE RESOLUTION NO. 34

Requesting the Senate Committee on Agriculture, Conservation and Natural Resources to work with the State Department of Health to study the

effectiveness of flow-through marine sanitation devices.

WHEREAS, the Bureau of Shellfish Sanitation of the Department of Health has advised the Senate committee on Agriculture, Conservation and Natural Resources that the Federal Food and Drug Administration agrees with the Department's position that the Coast Guard-approved, flow-through marine sanitation devices (mascerator chlorinators) are not effective for the protection of shellfish growing waters; and

WHEREAS, the Senate Committee on Agriculture, Conservation and Natural Resources has heard testimony which appears to conflict in this respect with the position taken by the Bureau of Shellfish Sanitation of the Department of Health that would indicate that flow-through marine sanitation devices achieve a high level of treatment and may be safe for use in shellfish waters; now, therefore, be it

RESOLVED by the Senate, That the Senate Committee on Agriculture, Conservation and Natural Resources, through an appropriate subcommittee, work with the State Department of Health and appropriate House Committees or Subcommittees to study the effectiveness of the flow-through marine sanitation devices and other relevant matters, and to seek clarification of the position of the Federal Food and Drug Administration as to the effectiveness of such devices in shellfish growing waters; and be it

RESOLVED FURTHER, that the Committee on Agriculture, Conservation and Natural Resources report the results of its study to the Senate no later than October one, nineteen hundred seventy-seven.

Pursuant to the Resolution's direction, the following persons were appointed to the Subcommittee; Howard P. Anderson, Senator from Halifax; Warren E. Barry, Delegate from Springfield; Elmo G. Cross, Jr., Senator from Hanover; Joseph T. Fitzpatrick, Senator from Norfolk; George H. Heilig, Jr., Delegate from Norfolk; Joseph A. Leafe, Delegate from Norfolk; Thomas W. Moss, Delegate from Norfolk; J. Lewis Rawls, Jr., Senator from Suffolk; Calvin G. Sanford, Delegate from Hague; and A. Victor Thomas, Delegate from Roanoke. Clive L. DuVal, 2d, Senator from Arlington and patron of Senate Resolution No. 34 was elected Chairman of the Subcommittee. Bragdon R. Bowling, Jr. and Sieglinde F. Nix of the Division of Legislative Services provided counsel, research and secretarial assistance to the Subcommittee.

The Subcommittee met extensively and conducted public hearings in Norfolk and Richmond where a variety of suggestions and opinions were aired. It was very apparent to the Subcommittee that it would be difficult to assess independently the conflicting testimony and masses of materials which were presented. It was agreed that the Virginia Water Resources Research Center at Virginia Polytechnic Institute and State University would gather and study all pertinent literature relating to this study, analyze the confusing federal positions regarding retention devices and shellfish sanitation, analyze economic impacts, attempt to determine the effectiveness of flow-through treatment devices and holding tanks, and

generally address the issues which had been previously raised. The report of the Water Resources Research Center was presented to the Subcommittee in September, 1977, and aided greatly in helping the Subcommittee comprehend the many problems and issues involved in this study.

The Committee hereby expresses its gratitude to those persons who presented testimony or submitted materials to aid the Subcommittee in its work. The Committee especially expresses its gratitude to the personnel of the Bureau of Shellfish Sanitation of the State Health Department, State Water Control Board, and the Virginia Water Resources Research Center for their invaluable assistance in conducting this study.

III. TIMETABLE OF FEDERAL STANDARDS

The Environmental Protection Agency is responsible for the issuance of regulations for federal standards of performance for marine sanitation devices. Marine sanitation devices include any equipment for installation on board a vessel which is designed to receive, retain, treat or discharge sewage and any process which treats such sewage. These regulations are effective after January 30, 1977 for new vessels and January 30, 1980 for existing vessels; however boat owners may comply earlier. After the effective date of the regulations (or date of compliance for those vessels which comply early), vessels are exempt from state and local regulation of marine sanitation devices, with one exception. A state may completely prohibit the discharge from all vessels of any sewage, whether treated or not, into some or all of the waters within such state by making a written application to the Administrator of the Environmental Protection Agency, and by receiving the Administrator's affirmative determination that adequate facilities for the safe and sanitary removal and treatment of sewage from all vessels are reasonably available for such waters to which the prohibition would apply. In such waters, flow-through devices must be secured to prevent any discharge to the receiving waters.

There are two varieties of marine sanitation equipment. One variety treats the waste and then discharges it into the water (Type I and Type II). Type I devices are certified to 1000 fecal coliform per 100 milliliters and have no visible floating solids. Type II devices are certified to 200 fecal coliform per 100 milliliters and have suspended solids not greater than 150 milligrams per liter. The second variety of marine sanitation equipment retains the waste onboard or treats it in a manner which does not result in any discharge into the water (Type III). Type III devices provide for no discharge into waters and include holding tanks, recirculators and incinerators. There are two types of no-discharge areas: Federal, and state or local. Federal regulations prohibiting discharges apply either to a class of waters or to specific waters. It is illegal to pump the contents of a holding tank overboard in U. S. waters.

The following timetables apply to the installation of Type I, II, and III devices:

A. New Vessels (includes those vessels whose keel was laid on or after January 30, 1975).

1. Type I, II or III marine sanitation devices must be installed on or after January 30, 1977. After January 30, 1980, new installations must be either Type II or III marine sanitation devices. However, if a Type I device is installed in a new vessel at any time up to January 30, 1980, then it may be used for the life of the device.

B. Existing vessels (includes those vessels whose keel was laid before January 30, 1975).

1. Type II or III devices must be installed on or after January 30, 1980. However, if a Type I device is installed in a new vessel at any time up to January 30, 1980, then it may be used for the life of the device.

IV. RECOMMENDATIONS

1. The Committee recognizes the importance of clean water to all Virginians, the benefits of which include a strong and viable shellfish industry. The 1972 amendments to the Federal Water Pollution Control Act allow states to petition the Environmental Protection Agency (EPA) for a regulation to completely prohibit the discharge of treated or untreated sewage into specified state waters for the protection and enhancement of the quality of those waters. Before the EPA grants such authority, adequate shore facilities at marinas for the removal and treatment of sewage from vessels must first of all be available. As a practical matter, until this is accomplished, the installation of retention systems aboard vessels for collecting and holding sewerage could not be of much effect in protecting the State's waters from pollution, because of the difficulties of properly disposing of the sewage so collected and held aboard vessels. It is the recommendation of the Committee that Virginia should seek to obtain "no discharge certification" for its shellfish waters and at once take such steps as are deemed necessary to provide for adequate pump-out facilities at designated marinas based upon the size, impact and location of such marinas, prior to receiving such "no discharge certification".

The Committee recognizes and emphasizes that the State Water Control Board cannot enforce Regulation No. 5 directly or indirectly until one year after receiving "no discharge certification". It is also clear that a "no discharge certification" cannot be obtained unless adequate shore facilities for the safe and sanitary removal and treatment of sewage from all vessels are reasonably available.

2. The Committee recommends that the study be continued for an additional year (See Appendix 5 for Resolution) and report back to the Governor and General Assembly immediately prior to the 1979 Session. By continuing the study for an additional year, the General Assembly will be able to monitor the direction in which the Federal government and private industry are heading and the progress made in installing pump-out facilities at marinas. The Committee finds there is a trend in the direction of total

containment (Type III devices) due to the inability of private industry to perfect adequate Type II devices and the necessity for more stringent water quality safeguards. It is also recognized that under U.S. Coast Guard regulations as of January 30, 1980, both new and existing boats must have either a Type II or Type III device installed on them (with certain exceptions). Presently, only one Type II device is certified by the Coast Guard.

The continuance of this study for an additional year would provide both the General Assembly and the Health Department with an opportunity to observe progress made in the direction of installing pump-out facilities at designated marinas and the effects thereof (See Recommendation No. 1). It would also give Virginia a chance to cooperate and work more closely with neighboring states to develop mutually satisfactory regulations concerning boat wastes.

3. The Committee takes notice that the discharge of waste into any water is detrimental to water quality. With this in mind, the Committee urges all Virginia boaters to install authorized pollution control equipment on their boats. It is realized that such equipment can be expensive, and the Committee reminds boat owners installing such equipment to take advantage of the tax savings afforded to them by § 56-16.3 of the Code of Virginia (See Appendix 6). The Subcommittee urges the local governing bodies of this State to exempt such equipment, either partially or totally, from local taxation.

Respectfully submitted,

Clive L. DuVal, 2d, Chairman

Howard P. Anderson

Warren E. Barry

Elmo G. Cross, Jr.

Joseph T. Fitzpatrick

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Calvin G. Sanford

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APPENDIX 1

62.1-44.33. Board to make rules and regulations.—The State Water Control Board is empowered and directed to adopt and promulgate all necessary rules and regulations for the purpose of controlling the discharge of sewage and other wastes from both documented and undocumented boats and vessels on all navigable and nonnavigable waters within the State.

In formulating such rules and regulations, the Board shall consult with the State Department of Health, the Commission of Game and Inland Fisheries and the Marine Resources Commission for the purpose of coordinating such rules and regulations with the activities of such agencies.

Violation of such rules and regulations shall, upon conviction, be a misdemeanor. Every law enforcement officer of this State and its subdivisions shall have the authority to enforce the rules and regulations adopted and promulgated under the provisions of this section.

62-63.1. Marinas.—The State Board of Health is empowered and directed to adopt and promulgate all necessary rules and regulations establishing minimum requirements as to the adequacy of sewerage facilities at marinas, and other places where boats are moored, to serve the number of boat slips and persons such marinas and places are designed to accommodate. The provisions of this section shall be applicable to every such marina and place regardless of whether such establishment serve food.

The State Department of Health shall enforce the provisions of this section and rules and regulations adopted thereunder.

Failure to comply with such rules and regulations shall, upon conviction, be a misdemeanor. No such marina or place shall operate unless in accordance with this section and rules and regulations adopted and promulgated thereunder.

Whenever the State Department of Health shall have approved the plan for the sewerage facilities of a proposed marina for presentation to the Marine Resources Commission, as provided in § 62-2.1 , it shall have the power and duty to enforce compliance with such plan.

APPENDIX 2

STATE WATER CONTROL BOARD

Regulation No. 5

Control of Pollution From Boats

5.01.—This regulation is established in accordance with Section 62.1-44.33 of the State Water Control Law (Chapter 3.1 of Title 62.1 of the Code of Virginia (1950), as amended). For the purposes of this regulation, the following definitions apply:

1. "The Act" means the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500) and standards and regulations promulgated thereunder.

2. "Marine sanitation device" includes any equipment for installation onboard a boat or vessel and which is designed to receive, retain, treat, or discharge sewage and any process to treat such sewage.

3. "Regularly moored, berthed, or docked" means moored, berthed, or docked in or adjacent to shellfish growing waters for 30 or more days in any calendar year.

4. "Sewage retention device" means a properly operating holding tank, self-contained toilet, incineration device, or other Coast Guard certified system designed to prevent any discharge or drainage of human excrement or other wastes therefrom into State waters.

5. "Shellfish growing water" means those State waters so designated on the maps entitled "Shellfish Growing Waters Subject to the Regulation No. 5 No-Discharge Standard," dated March 22, 1976 (exhibits 1-6).

5.02—No decayed wood, sawdust, shavings, bark, lime, garbage, refuse, ashes, offal, petroleum products, chemicals, or other substances shall be directly or indirectly cast, placed, thrown, deposited, or discharged from any documented or undocumented boat or vessel into the navigable or nonnavigable waters within this State. However, this provision shall not be construed to prevent the normal operation of marine engines, or necessary pumping bilge or ballast water pursuant to Section 5.04.

5.03—No liquid or other wastes resulting from any process of industry, manufacture, trade, or business or from the development of any natural resource shall be directly or indirectly discharged from any documented or undocumented boat or vessel into the navigable or nonnavigable waters within the State. However, this provision shall not be applicable to the harvesting of seafood and fisheries products by commercial watermen.

5.04—No bilge or ballast water containing more than 10mg/l of petroleum products shall be directly or indirectly discharged from any documented or undocumented boat or vessel into the navigable or nonnavigable waters within this State. However, this provision should not be construed to prevent bilge pumping necessary for the safe operation of the boat or vessel.

5.05—Subject to the provisions of Sections 5.06 and 5.08 therein, no human excrement shall be directly or indirectly discharged from any documented or undocumented boat or vessel into the navigable or nonnavigable waters within the State.

5.06—Every boat or vessel, whether documented or undocumented, equipped with an installed toilet and which is regularly moored, berthed, or docked within the geographic boundaries of those State waters now or hereafter designated as shellfish growing waters shall be equipped with a sewage retention device.

The foregoing notwithstanding, however, any vessel regularly moored, berthed, or docked within the geographic boundaries of those State waters now or hereafter designated as shellfish growing waters and equipped, on the date of adoption of this regulation, with a marine sanitation device which meets the requirements of Section 312 of the Act may continue to be equipped with said device so long as the device operates properly.

Every boat or vessel, whether documented or undocumented, equipped with an installed toilet and which is not regularly moored, berthed, or docked within the geographic boundaries of those State waters now or hereafter designated as shellfish growing waters shall be equipped with a marine sanitation device that meets the requirements of Section 312 of the Act. In the event such boat or vessel is relocated so that it is regularly moored, berthed, or docked within the geographic boundaries of those State waters now or hereafter designated as shellfish growing waters or if the waters on which such boat or vessel is regularly moored, berthed, or docked are redesignated by the Board so as to become shellfish growing waters, such boat or vessel shall be equipped, within a reasonable time not to exceed one year from the date of relocation or the effective date of redesignation, with a sewage retention device.

The foregoing notwithstanding, however, those vessels equipped with a marine sanitation device meeting the requirements of Section 312 of the Act on the date of relocation or the effective date of the redesignation as shellfish growing waters may continue to be equipped with said device so long as the device operates properly.

5.07—Human excrement and other wastes from holding tanks and self-contained toilets shall be pumped or carried ashore for treatment in facilities approved by the appropriate State agency or State agencies.

5.08—In the case of boats and vessels hailing from another State or having foreign registry, and which are not regularly moored, berthed, or docked within the geographic boundaries of those State waters now or hereafter

designated as shellfish growing waters, sewage disposal facilities approved by their respective governmental pollution control agency and meeting the requirements of Section 312 of the Act shall be acceptable.

5.09—Every owner of a boat or vessel, whether documented or undocumented, shall, when so requested in writing by the Board, or when making application for the registration of said boat or vessel with the Commonwealth of Virginia, Commission of Game and Inland Fisheries answer completely any and all questions appearing thereon relating to the requirements of this regulation. The Board shall design, and, based upon the information furnished by the owner, issue a decal to the owner of every boat or vessel which is regularly moored, berthed, or docked within the geographic boundaries of those State waters now or hereafter designated as shellfish growing waters and which is equipped with a sewage retention device or which complies with section 5.06 above. The Board-issued decal shall expire three years after the date of issuance or on the date of expiration of registration with the Commonwealth of Virginia, Commission of Game and Inland Fisheries, whichever event shall first occur. Application for subsequent decals shall be submitted prior to the expiration date of the last issued decal. The Board-issued decal will be evidence that any boat or vessel on which it is properly displayed is in compliance with the regulation. The Board-issued decal shall be prominently displayed on the exterior of the forward half of the boat or vessel.

5.10—Every owner or operator of a marina or other docking facility within the State shall notify every boat patron using his facilities of this regulation.

5.11—Under Virginia Law this regulation is effective 30 days after filing with the Secretary of the Commonwealth. All requirements set forth in this regulation shall be complied with one year after the date of certification by the Administrator of the U.S. Environmental Protection Agency pursuant to Section 312 (f)(3) of the Act that adequate facilities for the safe and sanitary removal and treatment of sewage from all vessels are reasonably available. Within 15 days of the date of said certification the Board shall publish notification of said certification in at least one newspaper of general circulation in the localities affected.

5.12—Section 62.1-44.33(3) of the State Water Control Law provides that violation of this regulation shall, upon conviction, be a misdemeanor. Every law enforcement officer of this State and its subdivisions shall have the authority to enforce this regulation.

APPENDIX 3

§ 62.1-44.33. Board to make rules and regulations.—The State Water Control Board is empowered and directed to adopt and promulgate all necessary rules and regulations for the purpose of controlling the discharge of sewage and other wastes from both documented and undocumented boats and vessels on all navigable and nonnavigable waters within this State. No such regulation shall impose restrictions which are more restrictive than the regulations applicable under federal law; provided, however, the Board may adopt such regulations as are reasonably necessary with respect to vessels regularly berthed in marinas or other places where vessels are moored, in order to limit or avoid the closing of shell fish grounds.

In formulating such rules and regulations, the Board shall consult with the State Department of Health, the Commission of Game and Inland Fisheries and the Marine Resources Commission for the purpose of coordinating such rules and regulations with the activities of such agencies.

Violation of such rules and regulations shall, upon conviction, be a misdemeanor. Every law-enforcement officer of this State and its subdivisions shall have the authority to enforce the rules and regulations adopted and promulgated under the provisions of this section.

APPENDIX 4

AMENDMENT IN THE NATURE OF A SUBSTITUTE

FOR HOUSE BILL NO. 626

A BILL to amend and reenact § 62.1-44.33, as amended, of the Code of Virginia, relating to rule and regulation making power of the State Water Control Board regarding pollution from boats.

Be it enacted by the General Assembly of Virginia:

1. That § 62.1-44.33, as amended, of the Code of Virginia is amended and reenacted as follows:

§ 62.1-44.33. Board to make rules and regulations.—The State Water Control Board is empowered and directed to adopt and promulgate all necessary rules and regulations for the purpose of controlling the discharge of sewage and other wastes from both documented and undocumented boats and vessels on all navigable and nonnavigable waters within this State. No such regulation shall impose restrictions which are more restrictive than the regulations applicable under federal law; provided, however, the Board may adopt such regulations as are reasonably necessary with respect to vessels regularly berthed in marinas or other places where vessels are moored, in order to limit or avoid the closing of shellfish grounds; *provided further, that no such regulations shall require such vessels to have holding tanks.*

In formulating such rules and regulations, the Board shall consult with the State Department of Health, the Commission of Game and Inland Fisheries and the Marine Resources Commission for the purpose of coordinating such rules and regulations with the activities of such agencies.

Violation of such rules and regulations shall, upon conviction, be a misdemeanor. Every law-enforcement officer of this State and its subdivisions shall have the authority to enforce the rules and regulations adopted and promulgated under the provisions of this section.

APPENDIX 5

SENATE JOINT RESOLUTION NO.....

Requesting a joint subcommittee of the Senate Agriculture, Conservation and Natural Resources Committee and the House Committee on General Laws to study the effectiveness and need for flow-through marine sanitation devices and related matters.

WHEREAS, Senate Resolution No. 34 was passed by the nineteen hundred seventy-seven session of the General Assembly requesting the Senate Agriculture, Conservation and Natural Resources Committee, in conjunction with appropriate House committees, to study the effectiveness of flow-through marine sanitation devices and related matters; and

WHEREAS, as a result of the study conducted pursuant to Senate Resolution No. 34, the Committee made a variety of recommendations; and

WHEREAS, the Joint Subcommittee recognized the need to examine more closely the direction in which the federal government is turning as to requiring retention devices on pleasure boats equipped with marine toilets; and

WHEREAS, although progress was made by that joint subcommittee, much work remains to be done; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That a joint subcommittee of the Senate Committee on Agriculture, Conservation and Natural Resources and the House General Laws Committee is hereby requested to continue the study of flow-through marine sanitation devices commenced pursuant to Senate Resolution No. 34. The subcommittee is hereby directed to provide legislative advice and guidance to the State Health Department and other interested State agencies relating to problems encountered in the study. The subcommittee is also directed to monitor the efforts and progress of the Department of Health in requiring pump-out facilities at marinas and in seeking a "no discharge" designation from the Environmental Protection Agency. The subcommittee is further directed to analyze the improvements in marine sanitation technology.

The joint subcommittee shall be composed of eleven legislative members, five of whom shall be members of the Senate Agriculture, Conservation and Natural Resources Committee appointed by the Chairman thereof and six of whom shall be members of the House Committee on General Laws appointed by the Chairman thereof.

The joint subcommittee shall report its findings to each respective House and Senate Committee no later than December one, nineteen hundred seventy-eight .

APPENDIX 6

§ 58-16.3. Certified pollution control equipment and facilities. (a) Certified pollution control equipment and facilities, as defined herein, are hereby declared to be a separate class of property and shall constitute a classification for local taxation separate from other such classification of real or personal property and such property. The governing body of any county, city or town may, by ordinance, exempt or partially exempt such property from local taxation.

(b) Certified pollution control equipment and facilities, as defined herein, shall be exempt from all State taxes, including taxes upon the sale, purchase or use thereof.

(c) (1) As used in this section the term "certified pollution control equipment and facilities" shall be deemed to mean any property, including real or personal property, equipment, facilities, or devices, used primarily for the purpose of abating or preventing pollution of the atmosphere or waters of the Commonwealth and which the State certifying authority having jurisdiction with respect to such property has certified to the Department of Taxation as having been constructed, reconstructed, erected, or acquired in conformity with the State program or requirements for abatement or control of water or atmospheric pollution or contamination.

(2) As used in this section the term "State certifying authority" shall be deemed to mean Water Control Board, for water pollution, and the State Air Pollution Control Board, for air pollution, and shall include any interstate agency authorized to act in place of a certifying (authority) of the State.