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DRAFT LEGISLATION
TO ESTABLISH ADDITIONAL OVERSIGHT MECHANISMS FOR THE
HRSD SWIFT GROUNDWATER REPLENISHMENT PROJECT

BILL NO. ____

A BILL to amend the Code of Virginia by adding section adding sections numbered 23.1-2005, 23.1-2643, 32.1-175.1, amending section 62.1-44.15, adding Chapter 26 to Title 62.1, and adding sections 62.1-271, -272, -273, and -274, relating to the establishment of Potomac Aquifer Recharge Monitoring Program for the Hampton Roads Sanitation District's Sustainable Water Initiative for Tomorrow (SWIFT) Project.

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia [is amended as follows]:

§ 23.1-2005 [ODU]. Potomac Aquifer Recharge Monitoring Lab.

A. Purpose. The Potomac Aquifer Recharge Monitoring Lab is established as a component of the monitoring program for the Hampton Roads Sanitation District's Sustainable Water Initiative for Tomorrow (SWIFT) Project, which is designed to achieve multiple public benefits including groundwater supply replenishment, land subsidence mitigation, saltwater intrusion reduction, and Chesapeake Bay watershed nutrient load reduction. The purpose of the overall monitoring program is to provide independent monitoring and oversight of the SWIFT Project and specifically its effects on the Potomac Aquifer. Within the broader monitoring program, the specific responsibilities of the Potomac Aquifer Recharge Monitoring Lab are as established in this section.

B. The Potomac Aquifer Recharge Monitoring Lab shall be located at Old Dominion University and shall be a unit thereof. The principal administrative officer of the monitoring lab shall be the monitoring lab administrative director, who shall be a faculty member of the University with appropriate technical and scientific knowledge and who shall also serve as co-director for technical services. The monitoring lab administrative director shall be appointed by the president of the University with the concurrence of the Director of the Virginia Department of Environmental Quality and the State Health Commissioner. The monitoring lab administrative director shall carry out the duties imposed upon him by law and other specific duties imposed upon him by the president of the University. The monitoring lab administrative director shall be under the general supervision of the president of the University and, with respect to the duties listed below, the direction of the Potomac Aquifer Recharge Oversight Committee established under § 62.1-271.

C. Duties and Functions. The monitoring lab shall be responsible for performing the following functions:

1. Monitoring the impact of the SWIFT Project on the Potomac Aquifer by reviewing and synthesizing relevant water quality data;
2. Identifying needs and recommending options for filling gaps, such as recommending changes to monitoring locations and protocols;
3. Conducting sampling and analysis of SWIFT Project water and groundwater on a local scale near SWIFT Project injections to verify monitoring data reported by HRSD;
4. Generating, assimilating, interpreting, managing and consolidating data to help inform decision making related to the impact of the SWIFT Project on the Potomac Aquifer, which may include creating a clearinghouse for aquifer and SWIFT Project data and synthesizing

47 and disseminating information to various audiences including the public and scientific
48 community; and

49 5. Advancing understanding of the Potomac Aquifer, aquifer science, managed aquifer
50 recharge, water reuse treatment technology, and advanced water treatment, through research,
51 analysis, or modeling.

52 D. The monitoring lab administrative director may apply for, accept and expend grants,
53 gifts, donations and appropriated funds from public or private sources, employ personnel and
54 enter into contracts, to carry out the purposes of this section, subject to the approval of the
55 Potomac Aquifer Recharge Oversight Committee established under § 62.1-271.

56 E. The function of the monitoring lab shall initially be focused on meeting the
57 demonstration phase needs of the SWIFT Project; however, development of the monitoring lab
58 shall be planned in a manner to support its timely and cost-effective expansion to meet increased
59 needs associated with the phased full-scale implementation of the SWIFT Project.

60 **§ 23.1-2643 [VT]. Potomac Aquifer Recharge Monitoring Lab Co-Director for**
61 **Technical Services.**

62 To support the Potomac Aquifer Recharge Monitoring Lab established at Old Dominion
63 University pursuant to § 23.1-2005, a monitoring lab co-director for technical services shall be
64 appointed by the president of the University with the concurrence of the Director of the Virginia
65 Department of Environmental Quality and the State Health Commissioner. The monitoring lab
66 co-director for technical services shall be a faculty member of the University with appropriate
67 technical and scientific knowledge and shall assist the other co-director appointed pursuant to §
68 23.1-2005 in carrying out the duties of the monitoring lab. The monitoring lab co-director for
69 technical services shall be under the general supervision of the president of the University and,
70 with respect to the duties listed of the monitoring lab listed in § 23.1-2005, the direction of the
71 Potomac Aquifer Recharge Oversight Committee established under § 62.1-271. The monitoring
72 lab co-director for technical services may apply for, accept and expend grants, gifts, donations
73 and appropriated funds from public or private sources, employ personnel, and enter into
74 contracts, to carry out the purposes of this section, subject to the approval of the Potomac
75 Aquifer Recharge Oversight Committee established under § 62.1-271.

76 **§ 32.1-175.1. Potomac Aquifer Recharge.**

77 The Commissioner may issue an emergency order to the Hampton Roads Sanitation District
78 to cease injection or make necessary corrections to Sustainable Water Initiative for Tomorrow
79 Project (SWIFT) Project facilities, subject to the same standards and procedures established in §
80 32.175.

81 **§ 62.1-44.15. [Showing only proposed new subsection (19); (1) through (18) omitted]**

82 (19) To issue an order or emergency order to the Hampton Roads Sanitation District to cease
83 injection or make necessary corrections to its Sustainable Water Initiative for Tomorrow Project
84 (SWIFT) Project facilities, subject to the same standards and procedures established in § 62.1-
85 44.15 (8a) and (8b).

86 **Title 62.1, Chapter 26 Potomac Aquifer Recharge Oversight Committee.**

87 **§ 62.1-271. Oversight Committee Established.**

88 The Potomac Aquifer Recharge Oversight Committee is established as a component of the
89 monitoring program for the Hampton Roads Sanitation District's Sustainable Water Initiative for
90 Tomorrow Project (SWIFT) Project, which is designed to achieve multiple public benefits
91 including groundwater supply replenishment, land subsidence mitigation, saltwater intrusion
92 reduction, and Chesapeake Bay watershed nutrient load reduction. The purpose of the overall

93 monitoring program is to provide independent monitoring and oversight of the SWIFT Project
94 and specifically its effects on the Potomac Aquifer. The specific responsibilities of the oversight
95 committee are as established in this section.

96 **§ 62.1-272. Oversight Committee Composition.**

97 A. The oversight committee shall consist of eight voting members, including:

- 98 1. The State Health Commissioner or designee thereof who shall be a full-time
99 employee of the Virginia Department of Health;
- 100 2. The Director of the Department of Environmental Quality or designee thereof who
101 shall be a full-time employee of the department;
- 102 3. The Executive Director of the Hampton Roads Planning District Commission or
103 designee thereof who shall be a full-time employee of commission;
- 104 4. The Co-Directors for Technical Services of the Potomac Aquifer Recharge
105 Monitoring Lab;
- 106 5. The Director of the Occoquan Monitoring Lab;
- 107 6. A local government representative who shall be a full-time employee of locality or
108 water authority dependent on the Potomac Aquifer as a significant public drinking water source;
109 and
- 110 7. A licensed physician engaged in medical practice within Eastern Virginia
111 Groundwater Management Area.

112 B. The local government representative and the licensed physician shall be citizens of the
113 Commonwealth selected for merit without regard to political affiliation and shall, by character
114 and reputation, reasonably be expected to inspire the highest degree of cooperation and
115 confidence in the work of the oversight committee. Both shall be appointed by the Governor
116 subject to confirmation by the General Assembly and shall be appointed for initial terms of two
117 years ending June 30, 2020, and for terms of four years each thereafter. Vacancies other than by
118 expiration of a term shall be filled by the Governor by appointment for the unexpired term.

119 C. In addition, the oversight committee shall have two non-voting, ex officio members, as
120 follows:

- 121 1. The Regional Administrator of Region III of the U.S. Environmental Protection
122 Agency (EPA) or designee thereof who shall be a full-time employee of EPA Region III; and
- 123 2. The Director of the Virginia and West Virginia Water Science Center of the U.S.
124 Geologic Survey (USGS) or designee thereof who shall be a full-time employee of USGS.

125 D. The initial chair of the oversight committee shall be the Director of the Department of
126 Environmental Quality, who shall serve an initial term through June 30, 2019. The oversight
127 committee shall elect a chair to serve thereafter from among any of the eight voting members.
128 The chair shall be elected to serve a one year term ending the next June 30 or until his successor
129 is elected. There shall be no limitation on the number of consecutive terms that a committee
130 member may be elected to serve as chair.

131 E. The Committee shall convene at least once per calendar year, except that the Committee
132 shall convene at least quarterly during the initial three years ending June 30, 2021.

133 **§ 62.1-273. Oversight Committee Duties and Functions.**

134 A. The committee shall be responsible for ensuring that independent monitoring of the
135 SWIFT Project and specifically its effects on the Potomac Aquifer is performed.

136 B. The Committee shall periodically and not less than every five years obtain an evaluation
137 of the work of the Potomac Aquifer Recharge Monitoring Lab by an independent panel of
138 national experts convened under the auspices of the National Water Research Institute or similar

139 organization). The evaluation shall address: (1) monitoring parameter selection procedures, (2)
140 analytical methods and screening techniques, (3) monitoring locations, frequency, results and
141 interpretation, (4) modeling activities, and (5) research activities.

142 C. Additional related activities of the oversight committee may include:

143 1. Ensuring that a monitoring program is developed and implemented for water quality,
144 geological, aquifer pressure, land subsidence and other SWIFT Project-related impacts;

145 2. Ensuring independent review of data concerning the quality of the final water
146 produced by the SWIFT Project and upstream process control testing conducted by HRSD in the
147 course of operating the SWIFT Project;

148 3. Ensuring that a continuous record of monitoring data is maintained and available;

149 4. Ensuring that projections are made of the effects of the SWIFT Project;

150 5. Ensuring that the Potomac Aquifer Recharge Monitoring Lab operations are separate,
151 distinct and independent from operations by HRSD;

152 6. Ensuring that research or modeling on aquifer science, managed aquifer recharge,
153 water reuse treatment, wastewater treatment and advanced treatment technology is conducted
154 and coordinated with the appropriate stakeholders;

155 7. Ensuring that data on the status and performance of the SWIFT Project and on any
156 changes in the condition of the aquifer due to the SWIFT Project is synthesized, reported and
157 submitted at least once a year to the relevant regulatory agencies and made available to localities,
158 water authorities, the general public and other stakeholders within the Eastern Virginia
159 Groundwater Management Area;

160 8. Serving as a liaison with stakeholders in the Eastern Virginia Groundwater
161 Management Area;

162 9. Ensuring public information material related to SWIFT Project is accurate and readily
163 available; and

164 10. Ensuring that the monitoring lab is established to fulfill the above responsibilities;
165 and

166 11. In the event that the committee finds there to be an imminent and substantial danger
167 to the public health or to a public water supply, referring such matter to the Department of
168 Environmental Quality or the Virginia Department of Health for the potential issuance of an
169 emergency order to cease injection or make necessary corrections pursuant to § 62.1-44.15 (8a)
170 and (8b) and 32.1-175, respectively

171 **§ 62.1-274. Scientific and Technical Advisory Council**

172 The Committee may seek additional scientific and technical expertise, if needed to fulfill its
173 responsibilities, including expertise in the fields of aquifer science, managed aquifer recharge,
174 wastewater treatment, advanced water treatment technology, water reuse, geology, geochemistry,
175 hydrogeology and related fields. A Science and Technical Advisory Council (Advisory Council)
176 may be appointed by and serve at the discretion of the Committee to synthesize technical
177 information for the Committee, provide recommendations related to monitoring SWIFT Project
178 impacts, and to provide other advice and support as directed and assigned by the Committee.

179 **2. That the Potomac Aquifer Recharge Oversight Committee shall develop a proposed**
180 **funding plan for the Potomac Aquifer Recharge Monitoring Program no later than June**
181 **30, 2020 for possible implementation effective July 1, 2021, it being understood that the**
182 **Hampton Roads Sanitation District intends to fund the operations of the monitoring**
183 **program during the three-year start-up period.**