



VIRGINIA ASSOCIATION OF MUNICIPAL WASTEWATER AGENCIES, INC.

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RK&K
Short Elliot Hendrickson (SEH)
Stantec
Timmons Group
TRC
Whitman, Requardt & Associates
Wiley|Wilson
WW Associates

LEGAL COUNSEL

AquaLaw PLC

February 5, 2026

The Honorable Alfonso Lopez
House of Delegates
General Assembly Building, Room 1014
North 9th Street
Richmond, VA 23219

The Honorable Richard Stuart
Senate of Virginia
General Assembly Building, Room 510
201 North 9th Street
Richmond, VA 23219

Re: Recommendations on 2026 PFAS Legislation

Dear Chairman Lopez and Senator Stuart:

On behalf of the Virginia Association of Municipal Wastewater Agencies (VAMWA), thank you for your consistently strong leadership on water quality protection and in particular for your efforts to reduce PFAS chemicals in the environment. As an association of clean water utility owners dedicated to protecting water quality by cost-effectively treating pollution to high standards, VAMWA applauds your leadership and is always grateful for the opportunity to work with you in pursuit of clean water.

Unfortunately, Virginians are regularly exposed to PFAS directly from various industrial and commercial activities and products. This includes sources ranging from manufacturing and use of consumer goods (e.g., non-stick cookware, food paper packaging, cosmetics, fabrics and textiles, and cleaning products) to other products like fire-fighting foams, lithium-ion batteries, and even medical devices.

To help reduce PFAS exposure, VAMWA has contributed technical expertise and policy support to recent legislation to wisely focus efforts on priority human health needs, specifically the landmark 2024 and 2025 legislation to protect drinking water resources as the top priority, as well as other measures to help reduce PFAS from various activities and products.

This year there are several bills concerning trace amounts of PFAS in biosolids from municipal wastewater treatment plant operations. Biosolids are a cake-like solid residual for which there are three primary management methods – land application, land disposal (landfilling), and incineration. In Virginia, approximately two-thirds of all biosolids are land applied as a soil amendment in agriculture, forestry, and land reclamation due to their beneficial macro- and micronutrient content and soil-conditioning properties. Approximately one-third is incinerated or landfilled.

With respect to landfilling as an alternative, a 2025 engineering study determined that Virginia lacks the landfill capacity to shift significant quantities of biosolids land application to landfills. That leaves the construction of new incineration capacity, which would require planning, design, site selection and approvals, public comment, financing, and construction timelines.

Recognizing the need for good data to make good decisions, VAMWA volunteered in testimony before the State Water Commission last summer to support the development of a statewide monitoring program, which will also address public interest in understanding PFAS levels in biosolids.

The 2024 and 2025 drinking water legislation prioritized monitoring and PFAS reductions based on exceedances of EPA numeric standards for drinking water. There are no similar values to use for biosolids land application. Given the clear interest in moving forward on this issue, VAMWA recommends the following tiered, concentration-based approach designed to distinguish any “industrially-impacted” biosolids, i.e., significantly higher concentrations than normal levels for domestic wastewater, for priority diversion to available landfill capacity.

Hopefully, further monitoring data will show that the extent of industrial impacts is limited. VAMWA notes that costs for ratepayers in a community with industrially-impacted biosolids or those with concentrations above a certain tier would significantly increase given higher costs for disposal. The Commonwealth should consider funding the added costs to the community for the unexpected transition costs as a means of mitigating discrete cost impacts in isolated communities due to these new requirements.

HB 1443 & SB 386 RECOMMENDATIONS

Factoring the above information into current legislative opportunities for a prompt start-up of Virginia’s first-ever program for monitoring and regulating PFAS levels in biosolids, VAMWA believes the following approach to a revised (substitute) HB 1443 and SB 386 best balances the need for practicality, effectiveness, and responsiveness to the needs and interests of various stakeholders:

- Monitoring of Biosolids at WWTPs
 - Begin ASAP (1/1/2027).
 - Increase monitoring frequency from quarterly to monthly for the first year (triples the expense but provides helpful data) to support larger data set for calculation of annual geometric mean on rolling 12-month basis (all concentrations below refer to this calculation).
 - Quarterly monitoring frequency thereafter (same as existing drinking water PFAS statutes).
 - Require testing for all biosolids land applied in Virginia regardless of place of origin.
- Concentration Limits for Land Application of Biosolids
 - Adopt tiered structured with a one-year transition as shown in attachment, then beginning in second year (1/1/2028) as follows:
 - Prohibit applications when PFOS or PFOA ≥ 50 ug/kg.
 - Restrict applications when PFOS or PFOA ≥ 25 ug/kg but < 50 ug/kg to a rate of 3 dry tons/acre.
 - Continue with no additional restrictions if PFOS and PFOA both < 25 ug/kg.
 - Calculate annual geometric mean on rolling 12-month basis to characterize the biosolids and manage normal variability in results from sensitive EPA lab test method (1633A).

- Above concentrations must also be met when biosolids from two or more WWTPs are blended by properly weighting the concentrations and amounts of biosolids from each.
- Distribution of monitoring data to landowner receiving biosolids.
- VPDES and VPA Permit Modifications
 - DEQ to modify permits ASAP to add requirements consistent with above.
 - DEQ may use the abbreviated administrative process for “minor” modifications.
- DEQ Work Group on Occurrence of PFAS in Land Applied Biosolids – Make recommendations:
 - Sampling program for industrial residuals and industrial by-products.
 - Source reduction strategies for non-domestic dischargers to sewer system when PFOS or PFOA ≥ 50 ug/kg.
 - Opportunities to expand biosolids management and disposal options in Virginia.
 - Additional studies on PFAS in soils.
 - Concentration-based biosolids management tiers.
 - Implementation dates for any recommended programs or actions.

Specific recommendations on each of the above elements are as shown in the attached draft substitute bill respectfully submitted for consideration.

RECOMMENDATIONS ON OTHER PFAS LEGISLATION

VAMWA *supports* the main concepts embodied in the following legislation:

- HB 122 (Keys-Gamarra) Reducing PFAS in products such as cosmetics – SUPPORT
- HB 864 (Cousins) Reducing PFAS in products such as cosmetics – SUPPORT
- SB 293 (Aird) Reducing use of PFAS-containing firefighting foams – SUPPORT
- HB 938 (Clark) – Expanding disclosure of PFAS manufacturing or use – SUPPORT
- SB 138 (McPike) – Monitoring by industrial dischargers of PFAS into sewers – SUPPORT

HB 880 (Kent)

At the January 30th HB 1443 stakeholders meeting hosted by Chairman Lopez, it was determined that HB 880 (Kent) would be rolled into HB 1443. That Section 1 bill addressed monitoring issues that are covered similarly or more comprehensively in HB 1443.

HB 1072 (Lauffer)

VAMWA recommends that a similar action (rolling into HB 1443) be taken as to HB 1072 for similar reasons. This bill focuses on re-testing of biosolids in the field after transportation from the WWTP. The

direct monitoring of PFAS in biosolids at the point of generation (the WWTP) as required by HB 1443 should better characterize PFAS levels with more reliability. By contrast, field re-testing, by various part-time local monitors rather than trained WWTP technical staff, using the highly-sensitive EPA laboratory test method, would be subject to cross-contamination and likely produce conflicting lab results. DEQ's required reimbursement of this costly field effort (sample collection labor costs and laboratory testing fees) would deplete funds currently used by DEQ to maintain its robust oversight program. For all these reasons, VAMWA respectfully submits that the robust testing approach focused on the point of generation is the best place to focus and start the new testing program.

PFAS Disposal Alternatives Analysis (Budget Amendment Item 368 #8s and #10h)

Lastly, VAMWA supports these amendments to conduct a statewide PFAS disposal alternatives analysis, including consideration and estimates, as appropriate, of available landfill capacity, future landfill or monofill capacity, incineration or other available and innovative PFAS destruction technology, environmental impacts of alternatives, costs estimated at the state, locality or utility, and household levels, and loss of biosolids land application benefits to farmers.

On behalf of VAMWA, thank you for the opportunity to participate in all aspects of the legislative process with you and for your consideration. Please contact me as VAMWA's representative at chris@AquaLaw.com or (804) 874-1028 at any time regarding any aspect of this issue.

Sincerely,



Christopher D. Pomeroy
VAMWA General Counsel

Encl.: Recommended Form of HB 1443 Substitute

c: The Honorable David L. Bulova, SNHR
The Honorable Adrienne Kotula Deputy SNHR
Mr. Michael Rolband, P.E., DEQ
VAMWA Board of Directors
VAMWA Members

RECOMMENDED SUBSTITUTE: HB 1443 (LOPEZ) & SB 386 (STUART)
MONITORING PFAS IN LAND APPLIED BIOSOLIDS

T. Beginning January 1, 2027, any owner of a sewage treatment works land applying, marketing, or distributing sewage sludge in the Commonwealth shall collect representative samples of the finished sewage sludge product and have such samples analyzed by an accredited laboratory for PFAS, as that term is defined in § [62.1-44.34:29](#), using U.S. Environmental Protection Agency Method 1633 or such other method approved by U.S. Environmental Protection Agency that may be allowed by the Department. The minimum frequency of such monitoring shall be monthly for the initial monitoring period from January 1, 2027 through December 31, 2027, and thereafter may be reduced to not less than quarterly upon the approval of the Department. The owner shall provide PFOS and PFOA concentration results from the analysis to the Department and any person land applying sewage sludge from the sewage treatment works within 10 days of receipt.

U. Before January 1, 2028, if the analysis required by subsection T finds:

1. A PFOS or PFOA, as those terms are defined in § [62.1-44.34:29](#), concentration in the sewage sludge of greater than or equal to 100 micrograms per kilogram annual geometric mean on a rolling 12-month basis, such sewage sludge shall not be land applied. The owner of the sewage treatment works shall arrange for alternative treatment, use, or disposal of such sewage sludge until such time as a subsequent sample result demonstrates a concentration of less than 100 micrograms per kilogram;

2. A PFOS or PFOA concentration in the sewage sludge of greater than or equal to 50 but less than 100 micrograms per kilogram annual geometric mean on a rolling 12-month basis, the permit holder shall reduce the application rate to 1.5 dry tons per acre, but not to exceed the application rate required by the nutrient management plan, or submit to the Department for approval an alternative risk management strategy at least two weeks prior to land application in lieu of the reduced land application rate, which shall control until such time as a subsequent sample result demonstrates a concentration of less than 50 micrograms per kilogram. The permit holder shall send the concentrations by email or mail to the landowner at every property at which the owner or land applier intends to land apply such sewage sludge at least two weeks prior to land application;

31 3. A PFOS or PFOA concentration in the sewage sludge of greater than or equal to 25 but
32 less than 50 micrograms per kilogram annual geometric mean on a rolling 12-month basis,
33 the permit holder shall reduce the application rate to 3 dry tons per acre, but not to exceed the
34 application rate required by the nutrient management plan, or submit to the Department for
35 approval an alternative risk management strategy at least two weeks prior to land application in
36 lieu of the reduced land application rate, which shall control until such time as a subsequent
37 sample result demonstrates a concentration of less than 25 micrograms per kilogram. The permit
38 holder shall send the concentrations by email or mail to the landowner at every property at which
39 the permit holder intends to land apply such sewage sludge at least two weeks prior to land
40 application; or

41 4. PFOS and PFOA concentrations in the sewage sludge of less than 25 micrograms per
42 kilogram annual geometric mean on a rolling 12-month basis, the permit holder may land apply
43 such sewage sludge in accordance with its permit with no additional requirements. The permit
44 holder shall send the concentrations by email or mail to the landowner at every property at which
45 the owner intends to land apply such sewage sludge at least two weeks prior to land application.

46 5. When sewage sludge from two or more sewage treatment works are blended prior to
47 land application, the requirements of paragraphs 1 through 4 of this subsection shall be applied
48 to the blended sewage sludge taking into account the concentrations and amounts of sewage sludge
49 contributed by each treatment works.

50 V. After January 1, 2028, if the analysis required by subsection T finds:

51 1. A PFOS or PFOA concentration in the sewage sludge of greater than or equal
52 to 50 micrograms per kilogram annual geometric mean on a rolling 12-month basis, such sewage
53 sludge shall not be land applied. The owner of the sewage treatment works shall arrange for
54 alternative treatment, use, or disposal of such sewage sludge until such time as a subsequent
55 sample result demonstrates a concentration of less than 50 micrograms per kilogram;

56 2. A PFOS or PFOA concentration in the sewage sludge of greater than or equal to 25 but
57 less than 50 micrograms per kilogram annual geometric mean on a rolling 12-month basis,
58 the permit holder shall reduce the application rate to 3 dry tons per acre, but not to exceed the
59 application rate required by the nutrient management plan, or submit to the Department for
60 approval an alternative risk management strategy at least two weeks prior to land application in
61 lieu of the reduced land application rate, which shall control until such time as a subsequent

62 *sample result demonstrates a concentration of less than 25 micrograms per kilogram. The permit*
63 *holder shall send the concentrations by email or mail to the landowner at every property at which*
64 *the owner or land applier intends to land apply such sewage sludge at least two weeks prior to*
65 *land application;*

66 *3. PFOS and PFOA concentrations in the sewage sludge of less than 25 micrograms per*
67 *kilogram annual geometric mean on a rolling 12-month basis, the permit holder may land apply*
68 *such sewage sludge in accordance with its permit with no additional requirements. The permit*
69 *holder shall send the concentrations by email or mail to the landowner at every property at which*
70 *the owner intends to land apply such sewage sludge at least two weeks prior to land application.*

71 *4. When sewage sludge from two or more sewage treatment works are blended prior to*
72 *land application, the requirements of paragraphs 1 through 3 of this subsection shall be applied*
73 *to the blended sewage sludge taking into account the concentrations and amounts of sewage sludge*
74 *contributed by each treatment works.*

75 **2. That the Department of Environmental Quality shall modify all Virginia Pollution**
76 **Abatement permits for the land application of sewage sludge and Virginia Pollutant**
77 **Discharge Elimination System permits for sewage treatment works that include sewage**
78 **sludge prepared for land application, distribution, or marketing, as soon as practicable,**
79 **consistent with the provisions of § [62.1-44.19:3](#) of the Code of Virginia, as amended by this**
80 **act. Notwithstanding the provisions of Virginia Pollutant Discharge Elimination System**
81 **(VPDES) Permit Regulation, 9VAC25-31, and Virginia Pollution Abatement (VPA) Permit**
82 **Regulation, 9VAC25-32, such modification shall be deemed a minor modification and**
83 **processed consistent with the procedures for minor modifications.**

84 **3. That the Department of Environmental Quality (the Department) shall convene a work**
85 **group to study the occurrence of perfluoroalkyl and polyfluoroalkyl substances (PFAS) in**
86 **sewage sludge intended for land application within the Commonwealth. Such work group**
87 **shall consist of owners of sewage sludge treatment works, private companies that land apply,**
88 **market, or distribute sewage sludge, relevant nonprofit organizations, and any other**
89 **stakeholder the Department deems appropriate. The work group shall develop**
90 **recommendations for (i) a PFAS sampling program for industrial residuals and industrial**
91 **by-products that are land applied; (ii) a source reduction strategy for non-domestic**
92 **dischargers when sewage sludge is found to contain PFOS or PFOA in excess of 50**

93 micrograms per kilogram; (iii) opportunities to expand biosolids management and disposal
94 options in the Commonwealth; (iv) additional studies regarding PFAS in soils; and (v) any
95 appropriate revisions to the concentration-based biosolids management tiers established by
96 this act. Such recommendations shall include the anticipated implementation date for any
97 proposed program or action listed in clauses (i) through (v). The Department shall report the
98 recommendations of the work group to the Governor and the Chairmen of the Senate
99 Committee on Agriculture, Conservation and Natural Resources and House Committee on
100 Agriculture, Chesapeake and Natural Resources by November 1, 2027.

101 4. That the provisions of the first enactment of this act shall become effective January 1,
102 2027.