

1 Introduced by Senator Bray

2 Referred to Committee on

3 Date:

4 Subject: Conservation and development; environmental health; water supply;
5 water quality; polyfluoroalkyl substances

6 Statement of purpose of bill as introduced: This bill proposes to adopt a
7 maximum contaminant level for polyfluoroalkyl substances under the Agency
8 of Natural Resources’s Water Supply Rule. The bill would require the
9 Secretary of Natural Resources to amend the Vermont Quality Standards to
10 include criteria or effluent limitations for polyfluoroalkyl substances. The bill
11 would also require landfills to treat leachate for polyfluoroalkyl substances
12 prior to delivery to a wastewater treatment facility or other facility where the
13 leachate would be discharged to the waters of the State.

14 An act relating to the regulation of polyfluoroalkyl substances in drinking
15 and surface waters

1 It is hereby enacted by the General Assembly of the State of Vermont:

2 Sec. 1. FINDINGS

3 The General Assembly finds that:

4 (1) Perfluoroalkyl, polyfluoroalkyl substances (PFAS), and other
5 perfluorochemicals are a large group of human-made chemicals that have been
6 used in industry and consumer products worldwide since the 1950s.

7 (2) PFAS may enter the environment when emitted during a
8 manufacturing process, from the disposal of goods containing PFAS, or from
9 leachate from landfills;

10 (3) Many PFAS do not break down and persist in the environment for a
11 very long time, especially in water, and, consequently, PFAS can be found in
12 many bodies of water and in the blood of humans and wildlife;

13 (4) More research is needed to determine the health effects to humans
14 from exposure to low levels of environmental exposure to PFAS, but some
15 studies in people have shown that certain PFAS may affect infant weight,
16 affect human growth, affect the learning and behavior of babies and older
17 children, lower a woman's chance of getting pregnant, interfere with the
18 body's natural hormones, increase cholesterol levels, affect the immune
19 system, and increase the risk of cancer;

20 (5) The Vermont Department of Health has adopted a health advisory
21 level for certain PFAS of 20 parts per trillion;

1 (6) The Vermont Water Supply Rule provides that the Secretary of
2 Natural Resources may adopt a Vermont Department of Health advisory level
3 as a maximum contaminant level for a substance;

4 (7) The Agency of Natural Resources (ANR) has adopted the 20 parts
5 per trillion level as part of ANR’s Remediation of Contaminated Properties
6 Rule and Groundwater Protection Rule and Strategy, but not as part of the
7 Vermont Water Supply Rule or the Vermont Water Quality Standards;

8 (8) To adopt a precautionary approach to the regulation of PFAS, to
9 prevent further contamination of State water, and to reduce the potential
10 harmful effects of PFAS on human health and the environment, the State of
11 Vermont should adopt:

12 (A) a maximum contaminant level for PFAS under the Vermont
13 Water Supply Rule;

14 (B) water quality criteria or effluent limitations for PFAS under the
15 Vermont Water Quality Standards that protect human health and aquatic biota;
16 and

17 (C) standards for the treatment of landfill leachate prior to treatment
18 in a wastewater treatment facility or other facility where the leachate would be
19 discharged to State waters.

1 Sec. 2. DEPARTMENT OF ENVIRONMENTAL CONSERVATION
2 WATER SUPPLY RULE; MAXIMUM CONTAMINANT LEVEL
3 (MCL) FOR POLYFLUOROALKYL SUBSTANCES

4 Subchapter 21-6, Section 6.12, Table 6-1 of the Department of
5 Environmental Conservation Water Supply Rule is amended to read:

6 CONTAMINANT	STANDARD MCL	MCLG or	Initial
	or MRDL as noted	MRDLG	Source
	(mg/l unless	(as noted)	Testing
	otherwise noted)*		Required

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11 9. Polyfluoroalkyl
12 substances

MCLG

13 <u>Perfluorooctanoic</u>	<u>20 parts per trillion—</u>	<u>---</u>	<u>Yes</u>
14 <u>acid</u>	<u>sum of all five PFAS</u>		
15 <u>Perfluorooctanesulfonic</u>	<u>20 parts per trillion—</u>	<u>---</u>	<u>Yes</u>
16 <u>acid</u>	<u>sum of all five PFAS</u>		
17 <u>Perfluorohexane sulfonic</u>	<u>20 parts per trillion—</u>		
18 <u>acid</u>	<u>sum of all five PFAS</u>	<u>---</u>	<u>Yes</u>
19 <u>Perfluoroheptanoic</u>	<u>20 parts per trillion—</u>	<u>---</u>	<u>Yes</u>
20 <u>acid</u>	<u>sum of all five PFAS</u>		

1 Perfluorononanoic 20 parts per trillion— --- Yes
2 acid sum of all five PFAS

3 Sec. 3. DEPARTMENT OF ENVIRONMENTAL CONSERVATION
4 WATER SUPPLY RULE; MONITORING FOR
5 POLYFLUOROALKYL SUBSTANCES

6 Section 6.10a of Subchapter 21-6 of the Department of Environmental
7 Conservation Water Supply Rule is added to read:

8 § 6.10a. Polyfluoroalkyl Substances (PFAS) Monitoring Requirements

9 All public water systems shall conduct PFAS monitoring annually.

10 Sec. 4. VERMONT WATER QUALITY STANDARDS; WATER
11 QUALITY CRITERIA; POLYFLUOROALKYL SUBSTANCES

12 On or before July 1, 2020, the Secretary of Natural Resources shall amend
13 the Vermont Water Quality Standards to include water quality criteria or
14 effluent limitations for the discharge of polyfluoroalkyl substances (PFAS) to
15 the surface waters of the State. The amendment to the Vermont Water Quality
16 Standards shall, at a minimum, include criteria or effluent limitations for the
17 following PFAS individually and in combination: perfluorooctanoic acid,
18 perfluorooctanesulfonic acid, perfluorohexane sulfonic acid,
19 perfluoroheptanoic acid, and perfluorononanoic acid. The amendment to the
20 rule may address additional PFAS.

1 Sec. 5. 10 V.S.A. § 6605(d) is amended to read:

2 (d)(1) New landfills placed in operation after July 1987 shall be lined and
3 shall collect and treat leachate. Except as provided in section 6614 of this title,
4 or if, pursuant to information obtained through the pilot projects completed
5 under subsection 6604(b) of this title or from other sources, the Secretary
6 identifies particular waste components that will not be the source of leachate
7 harmful to health or the environment, the Secretary may waive the
8 requirements for liners in landfills or portions of landfills designated solely to
9 receive these wastes. Solid waste shall be included among these waste
10 components that will not be the source of harmful leachate, in situations where
11 all of the following apply:

12 ~~(1)~~(A) material to be landfilled has been subjected to a hazardous waste
13 collection, diversion, and inspection program that removes at least 90 percent
14 of the hazardous and toxic waste, including that classified as hazardous
15 household waste and including that generated by small quantity generators;

16 ~~(2)~~(B) material to be landfilled has had at least 90 percent of the
17 compostable material and marketable recyclables removed by source
18 separation or by a combination of source separation and mechanical
19 separation;

20 ~~(3)~~(C) the municipality in which the landfill or any portion of the
21 landfill exists has permission of the facility operator to monitor landfill

1 operations during operating hours, by means of a person appointed or hired by
2 town officials or elected by the voters of the municipality.

3 (2) On an after January 1, 2020, a landfill shall treat collected leachate
4 for polyfluoroalkyl substances on-site or at an Agency-approved, off-site
5 facility prior to delivery to a wastewater treatment facility or other facility
6 from which the leachate would be discharged to waters of the State. As used
7 in this subdivision, “wastewater treatment facility” has the same meaning as in
8 section 1295 of this title.

9 Sec. 6. EFFECTIVE DATE

10 (a) This section and Secs. 1 (findings), 2 (MCL for polyfluoroalkyl
11 substances), and 3 (monitoring of MCL for polyfluoroalkyl substances) shall
12 take effect on passage.

13 (b) The remaining sections shall take effect on July 1, 2019.