

# Committee Report

**REGULAR CALENDAR**

**April 3, 2018**

**HOUSE OF REPRESENTATIVES**

**REPORT OF COMMITTEE**

**The Majority of the Committee on Resources, Recreation  
and Development to which was referred SB 309-FN,**

**AN ACT relative to standards for perfluorochemicals in  
drinking water, ambient groundwater, and surface  
water. Having considered the same, report the same  
with the following amendment, and the recommendation  
that the bill OUGHT TO PASS WITH AMENDMENT.**

**Rep. Andrew Renzullo**

**FOR THE MAJORITY OF THE COMMITTEE**

**MAJORITY  
COMMITTEE REPORT**

Committee:	<b>Resources, Recreation and Development</b>
Bill Number:	<b>SB 309-FN</b>
Title:	<b>relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.</b>
Date:	<b>April 3, 2018</b>
Consent Calendar:	<b>REGULAR</b>
Recommendation:	<b>OUGHT TO PASS WITH AMENDMENT 2018-1310h</b>

**STATEMENT OF INTENT**

This bill directs the Department of Environmental Services (DES) to establish water quality standards for drinking water and ambient ground water quality standards (AGQS) with regard to perfluorochemicals (PFCs). It also directs DES to establish surface water standards for PFCs. The amendment modifies the language on drinking water and AGQS, but not the intent, to make it consistent with HB 1101, which the House has already passed. Establishing surface water standards is a major undertaking and there is not a lot of previous work for guidance. Believing that resources are not currently sufficient for such an undertaking, the bill directs DES, using current resources, to layout a plan, including resources needed and a timeline, to establish surface water standards. The plan is to be submitted to the House Resources, Recreation and Development Committee and the Senate Energy and Natural Resource Committee. The expectation is that any needed resources will be incorporated into a future DES operating budget.

Vote 12-1.

Rep. Andrew Renzullo  
FOR THE MAJORITY

Original: House Clerk  
Cc: Committee Bill File

## REGULAR CALENDAR

Resources, Recreation and Development

**SB 309-FN**, relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water. **MAJORITY: OUGHT TO PASS WITH AMENDMENT. MINORITY: INEXPEDIENT TO LEGISLATE.**

Rep. Andrew Renzullo for the **Majority** of Resources, Recreation and Development. This bill directs the Department of Environmental Services (DES) to establish water quality standards for drinking water and ambient ground water quality standards (AGQS) with regard to perfluorochemicals (PFCs). It also directs DES to establish surface water standards for PFCs. The amendment modifies the language on drinking water and AGQS, but not the intent, to make it consistent with HB 1101, which the House has already passed. Establishing surface water standards is a major undertaking and there is not a lot of previous work for guidance. Believing that resources are not currently sufficient for such an undertaking, the bill directs DES, using current resources, to layout a plan, including resources needed and a timeline, to establish surface water standards. The plan is to be submitted to the House Resources, Recreation and Development Committee and the Senate Energy and Natural Resource Committee. The expectation is that any needed resources will be incorporated into a future DES operating budget. **Vote 12-1.**

Original: House Clerk

Cc: Committee Bill File



Amendment to SB 309-FN

1 Amend the title of the bill by replacing it with the following:

2

3 AN ACT relative to standards for perfluorochemicals in drinking water, ambient groundwater,  
4 and surface water.

5

6 Amend the bill by replacing all after the enacting clause with the following:

7

8 1 New Subparagraph; Statement of Purpose. Amend RSA 485:1, II by inserting after  
9 paragraph (h) the following new subparagraph:

10 (i) Adopt primary drinking water standards by establishing maximum contaminant  
11 limits or treatment techniques.

12 2 Drinking Water Rules. Amend RSA 485:3, I(b) to read as follows:

13 (b) *After consideration of the extent to which the contaminant is found in New*  
14 *Hampshire, the ability to detect the contaminant in public water systems, the ability to*  
15 *remove the contaminant from drinking water, and the costs to government entities that*  
16 *will result from establishing the standard, a specification for each contaminant of either:*

17 (1) A maximum contaminant level that is acceptable in water for human  
18 consumption~~[- if it is feasible to ascertain the level of such contaminant in water in public water~~  
19 ~~systems]; or~~

20 (2) One or more treatment techniques or methods which lead to a reduction of the  
21 level of such contaminant sufficient to protect the public health, if it is not feasible to ascertain the  
22 level of such contaminant in water in the public water system; and

23 3 New Subdivision; Perfluorochemicals. Amend 485 by inserting after section 16-d the  
24 following new subdivision:

25

Perfluorochemicals

26 485:16-e Perfluorochemicals. By January 1, 2019, the commissioner shall, in consultation with  
27 the commissioner of the department of health and human services and other interested parties,  
28 initiate rulemaking in accordance with RSA 541-A to adopt a maximum contaminant limit for  
29 perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), perfluorononanoic acid (PFNA),  
30 and perfluorohexanesulfonic acid (PFHxS).

31 4 Ambient Groundwater Quality Standards. Amend RSA 485-C:6 to read as follows:

32 485-C:6 Ambient Groundwater Quality Standards.

33 I. The commissioner shall establish and adopt ambient groundwater quality standards for  
34 regulated contaminants which adversely affect human health or the environment. Ambient



1 groundwater standards shall apply to all regulated contaminants which result from human  
2 operations or activities, but do not apply to naturally occurring contaminants. *Where state*  
3 *maximum contaminant levels have been adopted under RSA 485:3, I(b), ambient*  
4 *groundwater quality standards shall be equivalent to such standards.* Where federal  
5 maximum contaminant level or health advisories have been promulgated under the Federal Safe  
6 Drinking Water Act or rules relevant to such act, ambient groundwater quality standards shall be  
7 [~~equivalent to~~] *no less stringent than* such standards. *The commissioner may adopt*  
8 *standards more stringent than federal maximum contaminant levels or health advisories*  
9 *if, accounting for an adequate margin of safety to protect human health at all life stages,*  
10 *including but not limited to pre-natal development, the commissioner determines federal*  
11 *standards are insufficient for protection of human health.* Where such standards are  
12 *established* based upon *health advisories that address* cancer risks, the ambient groundwater  
13 quality standards shall be equivalent to that exposure which causes a lifetime exposure risk of one  
14 cancer in 1,000,000 exposed population. Where no federal *or state* maximum contaminant level or  
15 health advisory has been issued, the commissioner may adopt ambient groundwater quality  
16 standards on a basis which provides for an adequate margin of safety to protect human health and  
17 safety.

18 II. *Health advisories that are adopted as ambient groundwater quality standards*  
19 *shall be reviewed by the department at least every 5 years to determine if new research*  
20 *warrants revising the current ambient groundwater quality standard. If the department*  
21 *finds a revision is necessary it shall conduct rulemaking to adopt the revised standard.*

22 III. Ambient groundwater quality standards shall be the water quality basis for issuance of  
23 groundwater discharge permits under RSA 485-A: 13.

24 [~~III.~~] IV. Except for discharges of domestic wastewater regulated under RSA 485-A:13 and  
25 RSA 485-A:29, no person shall violate ambient groundwater quality standards.

26 V. *By January 1, 2019, the commissioner shall, in consultation with the*  
27 *commissioner of the department of health and human services and interested parties,*  
28 *initiate rulemaking to adopt ambient groundwater quality standards for*  
29 *perfluorononanoic acid (PFNA) and perfluorohexanesulfonic acid (PFHxS).*

30 VI. *By January 1, 2019, the commissioner shall, in consultation with the*  
31 *commissioner of the department of health and human services and interested parties,*  
32 *conduct a review to determine whether current research warrants revising the existing*  
33 *ambient groundwater quality standards for perfluorooctanoic acid (PFOA) and*  
34 *perfluorooctanesulfonic acid (PFOS).*

35 5 Department of Environmental Services; Positions Established; Appropriation. There is  
36 established within the department of environmental services one classified toxicologist position and  
37 one classified human health risk assessor for the purposes of monitoring groundwater under RSA



1 485-C. The sum necessary to pay the salary, benefits, and other costs related to the positions  
2 established in this section is hereby appropriated to the department of environmental services for  
3 the biennium ending June 30, 2019. This appropriation shall be in addition to any other  
4 appropriations made to the department in the biennium. The governor is authorized to draw a  
5 warrant for said sum out of any money in treasury not otherwise appropriated.

6 6 Department of Environmental Services; Surface Water Quality Standards. The commissioner  
7 of environmental services shall, in consultation with stakeholders, develop a plan, including a  
8 schedule and cost estimates, to establish surface water quality standards for  
9 perfluorooctanesulfonate (PFOS), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA),  
10 and perfluorohexanesulfonic acid (PFHxS) in class A and class B waters for all designated uses.  
11 The commissioner shall submit the plan upon its completion, but no later than January 1, 2020, to  
12 the house resources, recreation, and development committee and the senate energy and natural  
13 resources committee.

14 7 Effective Date. This act shall take effect upon its passage.



2018-1310h

AMENDED ANALYSIS

I. Directs the department to evaluate the ambient ground water quality standards for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) and set ambient groundwater quality standards for perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid (PFHxS).

II. Establishes the criteria for setting maximum contaminant limits for public drinking water and directs the department to set maximum contaminant limits for perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid (PFHxS).

III. Establishes a toxicologist position and a human health risk assessor position in the department of environmental services and makes an appropriation to fund the positions.

IV. Requires the commissioner of environmental services to develop a plan for establishing surface water quality standards for perfluorooctanesulfonate (PFOS), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid (PFHxS) in class A and class B waters.



**REGULAR CALENDAR**

**April 3, 2018**

**HOUSE OF REPRESENTATIVES**

**REPORT OF COMMITTEE**

**The Minority of the Committee on Resources, Recreation and Development to which was referred SB 309-FN,**

**AN ACT relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water. Having considered the same, and being unable to agree with the Majority, report with the following resolution: RESOLVED, that it is INEXPEDIENT TO LEGISLATE.**

**Rep. James McConnell**

**FOR THE MINORITY OF THE COMMITTEE**

**MINORITY  
COMMITTEE REPORT**

Committee:	Resources, Recreation and Development
Bill Number:	SB 309-FN
Title:	relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.
Date:	April 3, 2018
Consent Calendar:	REGULAR
Recommendation:	INEXPEDIENT TO LEGISLATE

**STATEMENT OF INTENT**

The minority believes that the NH Department of Environmental Services already has the authority to recognize the work done in other states and their resulting reductions in allowed maximum contaminant levels for perfluorochemicals to protect public health, yet has chosen not to bother following suit. Requesting instead of requiring a more pro-active approach will prove to be a pointless exercise.

Rep. James McConnell  
FOR THE MINORITY

Original: House Clerk  
Cc: Committee Bill File

## REGULAR CALENDAR

Resources, Recreation and Development

**SB 309-FN**, relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water. **INEXPEDIENT TO LEGISLATE**.

Rep. James McConnell for the **Minority** of Resources, Recreation and Development. The minority believes that the NH Department of Environmental Services already has the authority to recognize the work done in other states and their resulting reductions in allowed maximum contaminant levels for perfluorochemicals to protect public health, yet has chosen not to bother following suit. Requesting instead of requiring a more pro-active approach will prove to be a pointless exercise.



# Voting Sheets

HOUSE COMMITTEE ON RESOURCES, RECREATION AND DEVELOPMENT

EXECUTIVE SESSION on SB 309-FN

**BILL TITLE:** (New Title) relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

**DATE:** April 3, 2018

**LOB ROOM:** 305

**MOTIONS: OUGHT TO PASS WITH AMENDMENT**

Moved by Rep. Renzullo                      Seconded by Rep. Farnham                      AM Vote: 12-1

Amendment # 2018-1310h

Moved by Rep. Renzullo                      Seconded by Rep. Farnham                      Vote: 12-1

**CONSENT CALENDAR: NO**

**Statement of Intent:**                      Refer to Committee Report

Respectfully submitted,

*Rep. Linda Gould, Clerk*

Rep Linda Gould, Clerk

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Amendment to SB 309-FN

- Page 3 -

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2018-1310h

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STATE OF NEW HAMPSHIRE  
OFFICE OF THE HOUSE CLERK

1/5/2018 10:31:42 AM  
Roll Call Committee Registers  
Report

2018 SESSION

RR&D

Bill #: 309 Title: rel to standards for PFC's in drinking water etc

PH Date: 3, 27, 18 Exec Session Date: 4, 3, 2018

Motion: OTPA Amendment #: 1310

MEMBER	YEAS	NAYS
Christensen, Chris Chariman	✓	
Mullen, John A. Vice Chairman		
Renzullo, Andrew	✓	
Gould, Linda Clerk	✓	
McConnell, James W.		✓
Christie, Rick	✓	
Schleien, Eric I.		
Zaricki, Nick		
Horgan, James E. <u>Vose</u>	✓	
Johnson, Tiffany		
Rimol, Bob	✓	
Smith, Suzanne J.	✓	
Spang, Judith F.		
Parkhurst, Henry A. L.	✓	
Thomas, Yvonne D.	✓	
Gottling, Suzanne H.		
Maes, Kevin G. <u>Nothing, A</u>	✓	
Grassie, Chuck		
Farnham, Betsey M.	✓	
Lisle, David	✓	
TOTAL VOTE:	12	1



STATE OF NEW HAMPSHIRE  
OFFICE OF THE HOUSE CLERK

1/5/2018 10:31:42 AM  
Roll Call Committee Registers  
Report

2018 SESSION

RR&D

Bill #: 309 Title: rel. to standards for PFC in drinking water, ambient & surface water  
PH Date: 3, 27, 18 Exec Session Date: 4, 3, 2018  
Motion: (6 TDA) Amendment Amendment #: 1310

MEMBER	YEAS	NAYS
Christensen, Chris Chariman	✓	
Mullen, John A. Vice Chairman <i>A</i>		
Renzullo, Andrew	✓	
Gould, Linda Clerk	✓	
McConnell, James W.		✓
Christie, Rick	✓	
Schleien, Eric I.		
Zaricki, Nick		
Horgan, James F. <i>Vose</i>	✓	
Johnson, Tiffany	✓	
Rimol, Bob		
Smith, Suzanne J.	✓	
Spang, Judith T.		
Parkhurst, Henry A. L.	✓	
Thomas, Yvonne D.	✓	
Gottling, Suzanne H.		
Maes, Kevin G. <i>Cl. Mitting</i>	✓	
Grassie, Chuck		
Farnham, Betsey M.	✓	
Lisle, David	✓	
TOTAL VOTE:	<i>12</i>	<i>1</i>

HOUSE COMMITTEE ON RESOURCES, RECREATION AND DEVELOPMENT

EXECUTIVE SESSION on ~~SB 309-FN~~ ~~529-FN~~ SB 309-FN

BILL TITLE: relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

DATE: 4/3/2018

LOB ROOM: 305

MOTION: (Please check one box)

- OTP
- ITL
- Retain (1<sup>st</sup> year)
- Adoption of Amendment # 1310 (if offered)
- Interim Study (2nd year)

Moved by Rep. Renzullo Seconded by Rep. Farnham Vote: 12-1

MOTION: (Please check one box)

- OTP
- OTP/A
- ITL
- Retain (1<sup>st</sup> year)
- Adoption of Amendment # \_\_\_\_\_ (if offered)
- Interim Study (2nd year)

Moved by Rep. Renzullo Seconded by Rep. Farnham Vote: 12-1

MOTION: (Please check one box)

- OTP
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- ITL
- Retain (1<sup>st</sup> year)
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- Interim Study (2nd year)

Moved by Rep. \_\_\_\_\_ Seconded by Rep. \_\_\_\_\_ Vote: \_\_\_\_\_

MOTION: (Please check one box)

- OTP
- OTP/A
- ITL
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- Adoption of Amendment # \_\_\_\_\_ (if offered)
- Interim Study (2nd year)

Moved by Rep. \_\_\_\_\_ Seconded by Rep. \_\_\_\_\_ Vote: \_\_\_\_\_

CONSENT CALENDAR: \_\_\_\_\_ YES  NO

Minority Report?  Yes \_\_\_\_\_ No If yes, author, Rep: McConnell Motion OTP/A

Respectfully submitted: Rep. Linda Gould, Clerk  
Rep Linda Gould, Clerk

# Hearing Minutes

HOUSE COMMITTEE ON RESOURCES, RECREATION AND DEVELOPMENT

PUBLIC HEARING ON SB 309-FN

**BILL TITLE:** (New Title) relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

**DATE:** March 27, 2018

**LOB ROOM:** 305

**Time Public Hearing Called to Order:** 10:08 a.m.

**Time Adjourned:** 10:25 a.m.

**Committee Members:** Reps. Christensen, Mullen, Gould, Renzullo, McConnell, Christie, Vose, T. Johnson, Parkhurst, Y. Thomas, Gottling, Maes, Grassie, Farnham and Lisle, Baldasaro, Hill, Cahill

**Bill Sponsors:**

Sen. Innis

Sen. Bradley

Sen. Avard

Sen. Fuller Clark

Sen. Gannon

Sen. Ward

Sen. Carson

Sen. Birdsell

Sen. Feltes

Rep. Messmer

Rep. H. Marsh

Rep. Emerick

Rep. Bean

Rep. Murray

TESTIMONY

\* Use asterisk if written testimony and/or amendments are submitted.

**Sen. Innis**, prime sponsor. Supports bill. PFCS are all around us. Tells DES to be sure we have correct standards to protect public health. Word "reasonable" is in bill. DES should review current date and information from other sates. Amendment adds 2 other chemicals. Do this annually.

\***Sarah Pillsbury**, NH DES. Opposes bill. How to establish MTL's - amend bill to do this as it did in HB. DES wants it to match HB 1101. (See handout.)

**Stephanie Lamb**, BIA. Opposes bill. Concerns with as written on surface water - delete that. More work needs to be done on that. So do that in a separate bill.

**Melissa Paly**, Conservation Law Foundation. Supports bill. Concerned with these issues, so supports bill. Also HB 1101. This is only one that mentions surface water.

Bill will go to sub committee.

Respectfully submitted,



Rep. Linda Gould,  
Clerk

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PUBLIC HEARING ON SB 309-FN

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**DATE:** March 27, 2018

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DATE: March 27, 2018

ROOM: 305

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Time Adjourned: ~~10:05~~ 10:25

(please circle if present)

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\* Use asterisk if written testimony and/or amendments are submitted.

Sen Innis - PFCs are all around us - tells DES to be sure we have correct standards to protect public health. Word "reasonable" is in bill. DES should review current data & information from other states. Amendment adds 2 other chemicals. Do this annually

\* Sarah Pillsbury - DES. How to est. MTL's - amend bill to do this as it did in HB. DES wants it to match HB 1101

George
Stephanie Lamb - BIA - opposes concerns with as written on surface water - delete That

- more work needs to be done on that. So do that in a separate bill

- Melissa Paly - Conservation Law Foundation -  
concerned with these issues so supports bill + also  
H B 1101 - this is only one that ~~even~~ mentions surface water.

~~Q - Ans -~~

There will go to sub committee

# Testimony



The State of New Hampshire  
**Department of Environmental Services**



**Robert R. Scott, Commissioner**

March 27, 2018

The Honorable Chris Christensen, Chair  
House Resources, Recreation and Development Committee  
Legislative Office Building, Room 305  
Concord, NH 03301

**RE: SB 309**, *AN ACT relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.*

Dear Chairman Christensen and Members of the Committee:

Thank you for the opportunity to comment on SB 309. This bill would require the New Hampshire Department of Environmental Services (NHDES) to review the current ambient groundwater quality standards (AGQS) for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) and set an AGQS for perfluorononanoic acid (PFNA) and perfluorohexanesulfonic acid (PFHxS) by January 1, 2019. It also requires NHDES to set drinking water maximum contaminant levels (MCLs) for all four of these chemicals by January 1, 2019 and to set surface water standards for them by January 1, 2020. While NHDES has supported setting these standards in accordance with nationwide practices, provided there is sound science to base them on and there are the resources to do so, we are concerned that this bill, unlike HB 1101, does not include all these important considerations. Unless these considerations are addressed, NHDES cannot support this bill.

Specific recommendations that the committee may want to consider include:

- 1) NHDES has been reluctant to set MCLs for perfluorochemicals to date as we do not believe it is appropriate to set such standards using a different methodology than any other state or the USEPA. Our statute is silent on the considerations that should go into establishing an MCL, which include occurrence data, ability to reliably detect the contaminant, ability to remove the chemical from drinking water, and costs to affected entities that will result from establishing the standard. We recommend that the language from HB 1101 on how MCLs should be established be added to this bill so that MCLs are set in accordance with the balanced and scientifically based methodology used by all other states and USEPA. With such language in place, NHDES would be well positioned to determine and propose appropriate MCLs for PFOA, PFOS, PFNA and PFHxS as well as future contaminants.

- 2) SB 309 would require NHDES to establish surface water quality standards for PFOA, PFOS, PFNA, and PFHxS. These compounds have been detected in NH waters, and it would be helpful to have surface water standards for them. However, there is significant complexity to a state independently setting surface water standards. The process includes determining the appropriate protective value(s), which requires specialized experience in federal Clean Water Act and aquatic life risk analysis; obtaining necessary federal approvals for incorporation into USEPA permits; and analyzing the impact to affected activities such as wastewater disposal. NHDES has never set a surface water standard. Attached is a set of frequently asked questions that provide additional information on this topic. Also, we believe it was the intent of the sponsor to provide January 1, 2020 as the date to initiate rulemaking and not the date for the standard to be adopted.
  
- 3) Finally, unlike HB 1101, this bill does not specify the resources that must be available to NHDES to perform the tasks the bill requires. Specifically, NHDES will need to hire a toxicologist and health risk assessor to develop and review the drinking water and groundwater standards. In addition, funding for a contract consultant would be needed to establish the surface water standards. As discussed above, this work requires specialized knowledge and experience, and NHDES does not have this capability in-house.

Thank you again for the opportunity to comment on this proposed legislation. If you have questions or need additional information, please contact Sarah Pillsbury, Drinking Water and Groundwater Bureau Administrator ([Sarah.Pillsbury@des.nh.gov](mailto:Sarah.Pillsbury@des.nh.gov) or 271-1168).

Sincerely,



Robert R. Scott  
Commissioner

cc: Senators Innis, Bradley, Avard, Fuller Clark, Gannon, Ward, Carson, Birdsell and Feltes  
Representatives Messmer, Marsh, Emerick, Bean, Murray

## State Water Quality Standards and PFAS – Q&A

3/27/2018

**What are surface water quality standards and criteria?** Water quality *standards* are provisions of state law approved by EPA that describe the desired condition of a waterbody and how that condition will be determined for such waters. The purpose of these standards is to restore waters that don't allow the desired uses of that water and to protect waters from becoming contaminated. Water quality *criteria* are specific measures (eg., a number) that are used to determine if a desired use (eg., swimming) can occur. Water quality standards include three components 1) designated uses, 2) criteria, and 3) anti-degradation provisions, all of which are found in Env-Wq 1700.

**How are water quality standards used?** There are four primary purposes for water quality standards. These include,

1. Assessment-- Every two years, the state assesses the water quality of all 17,000 miles of rivers, 1000 ponds and lakes, and tidal waters. This includes comparing existing data to the water quality standards. If a waterbody fails to meet standards, a cleanup plan is needed.
2. Planning -- the standards help local organizations plan for cleaning up their waters. The development of watershed-based plans revolves around needed actions to meet standards.
3. Permits – EPA writes surface water effluent permits for NH (NPDES permits). Water quality standards must be met by those standards. In many cases, the standard drives the technology needed to treat pollutants.
4. Enforcement – it is against the law to knowingly violate water quality standards. If a standard is violated, and a specific polluter can be identified, then NHDES has enforcement authority to compel compliance with those standards.

**How are water quality criteria determined?** A great deal of scientific research goes into setting water quality criteria. The EPA provides guidance, called 304(a) guidance, that helps the states. These 304(a) guidance documents are the result of multidisciplinary task groups, public input, and peer review. They are well-vetted by the scientific and regulated communities. The states are particularly reliant on EPA guidance for setting toxic criteria, given the complexity of the science and analysis. NHDES has never created a toxic criterion from scratch. Presently, there is no 304(a) guidance from EPA on PFAS compounds.

**What is the process for setting a standard?** In New Hampshire, setting a water quality standard typically starts by consulting the Water Quality Standards Advisory Committee (WQSAC), which is made up of experts in water quality and includes a diverse group of stakeholders. This group advises NHDES on the type of data needed to evaluate criteria and what impacts any changes might have on the regulated community. The process of changing a standard is normally a multi-year effort including a rigorous evaluation of data, informal discussion of criteria, public input and a formal administrative rule-

making. EPA must approve proposed criteria for them to be used in federal permits and actions. The entire process usually takes a number of years from start to finish.

**Why not use another state's standards?** A number of states are looking into surface water quality standards for PFAS. Only one state, Michigan, has actually promulgated water quality criteria. While it is very helpful that other states have dedicated resources to this issue, it is not clear that any state has gone through the rigorous vetting process that would normally occur to develop EPA 304(a) guidance. This is problematic, because NHDES would have to defend any challenges. NHDES would need to ensure that the criteria were developed with the latest science, addressing impacts to NH-specific uses and conditions (eg., the fish species that actually live here), and with the proper assumptions.

**What resources would be needed to create a state standard?** NHDES has a number of water quality standards that are under some stage of update. Existing staff are fully engaged on those standards, each of which has a constituency demanding action. NHDES also lacks some of the necessary professional expertise. Additional resources and expertise would be needed. NHDES estimates that hiring a consultant to conduct the research and outreach necessary to develop a standard would cost about \$100,000 and take about 18 months to complete (much of that time for robust public engagement). It is not feasible for NHDES to develop a defensible standard without additional resources.

Voting Members:

**David Packard**  
Chair  
NH Lakes Assn.

**Michael Hodder**  
Vice Chair  
Planning Boards

**Bruce Allen**  
Conservation  
Commissions

**Mark Borrin**  
Tourism Industry

**Shane Bradt**  
Scientific Community

**Linda Brownson**  
State Conservation  
Committee

**Frederick Clews**  
NH Fish & Game  
Commission

**Edmund Crawford**  
Marine Trades  
Association

**Tiffany Grade**  
Conservation  
Community

**Kimberly Hallquist**  
Municipal Official

**Frank Lemay**  
NH Business and Industry  
Association

**Richard Smith**  
Fishing Interests

**Mary Truell**  
NH Association of  
Realtors

Non-Voting Members:

**Capt. Tim Dunleavy**  
NH Dept. of Safety

**Eric Feldbaum**  
NH Dept. of Resources  
and Econ. Dev.

**Jennifer Gilbert**  
NH Office of Energy  
& Planning

**Garret Graaskamp**  
NH Fish & Game Dept.

**Mark Hemmerlein**  
NH Dept. of Trans.

**David Rousseau/  
Bob Wolff**  
NH Dept. of  
Ag, Markets & Food

Staff:

**Tracie Sales**  
Rivers & Lakes Programs  
Manager, NHDES

**Kathy Black**  
Rivers & Lakes Programs  
Assistant, NHDES

N.H. Lakes Management and Protection Program

## N.H. Lakes Management Advisory Committee

March 27, 2018

The Honorable Chris Christensen  
Chair, House Resources, Recreation and Development Committee  
Legislative Office Building, Room 305  
Concord, NH 03301

RE: **SB 309** *An act relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.*

Dear Chair Christensen and Members of the Committee:

The Lakes Management Advisory Committee (LMAC) appreciates the opportunity to comment on Senate Bill 309, which seeks to set or update drinking water, groundwater, and surface water standards for four poly- and perfluoroalkyl substances (PFAS). The LMAC opposes the deadlines imposed by this bill.

As a committee charged with overseeing the management of lakes for their recreational, scenic, water quality and wildlife habitat characteristics, the LMAC is primarily concerned with the portions of this bill that propose to set a state standard for PFAS in surface water and revise the standard for groundwater. The LMAC agrees that it is important to regulate PFAS in the state's surface waters and groundwater given the contamination that has been discovered in several locations throughout New Hampshire in the last two years. The committee also supports the legislation's aim of utilizing peer-reviewed science and government studies to set standards for PFAS that will protect the health of humans, fish, and wildlife. Given the magnitude and importance of this work, however, the LMAC suggests that both funding and additional time will be required to research the health risks, for both people and wildlife, associated with drinking and contacting water with various levels of PFAS in a rigorous and effective manner while also allowing time for public and stakeholder input into the process.

The LMAC is a legislatively created body charged to work with the New Hampshire Department of Environmental Services (NHDES) to administer RSA 483-A, the Lakes Management and Protection Program. The Governor and Council appointed Committee is comprised of 19 members representing academia, business, conservation organizations, lake associations, tourism, fish and game commission, marine trades, realtors, municipal government as well as several state agencies. Among its other



responsibilities, the LMAC reviews legislation relevant to the Program and the state's lakes and ponds, and advises the NHDES Commissioner on the merits of such legislation.

In conclusion, the LMAC opposes the timelines imposed by Senate Bill 309 due to the limited amount of information available on the impacts of PFAS and the short deadlines proposed in the bill in which to collect, synthesize, and report this information to New Hampshire's residents.

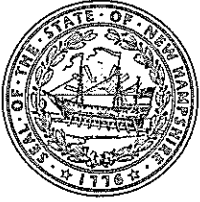
Should you have further questions about this testimony, please feel free to contact me at (603) 634-2299 or [david.packard@graniteshorepower.com](mailto:david.packard@graniteshorepower.com).

Sincerely,



David Packard  
Chair

cc: Sen. Daniel Innis  
Sen. Kevin Avar  
Sen. Regina Birdsell  
Sen. Jeb Bradley  
Sen. Sharon Carson  
Sen. Dan Feltes  
Sen. William Gannon  
Sen. Martha Fuller Clark  
Sen. Ruth Ward  
Rep. Philip Bean  
Rep. J. Tracy Emerick  
Rep. Henry Marsh  
Rep. Mindi Messmer  
Rep. Kate Murray  
LMAC Representatives  
Governor Chris Sununu  
Robert R. Scott, Commissioner, NHDES  
Eugene Forbes, Director, Water Division, NHDES  
Ted Diers, Administrator, Watershed Mgmt. Bur., NHDES  
Tracie Sales, Rivers and Lakes Programs Manager, NHDES



STATE OF NEW HAMPSHIRE  
OFFICE OF THE GOVERNOR

CHRISTOPHER T. SUNUNU  
Governor

April 3, 2018

Chair Christensen and Honorable Representatives  
Resources, Recreation, and Development Committee  
New Hampshire House of Representatives  
Statehouse  
Concord, NH, 03310

Dear Chair Christensen and Members of the Committee,

Senate Bill 309 (SB309) requires the Department of Environmental Services (DES) to establish statewide drinking water, ambient groundwater quality, and surface water quality standards for perfluorochemicals (PFCs). PFCs are a class of man-made chemicals that have long been used in consumer products for their water repellent qualities. PFCs have been found in water bodies across the country, including here in New Hampshire. Scientists consider PFCs to be emerging contaminants, and human health implications of elevated exposure to PFCs have yet to be determined.

My administration is committed to ensuring that our pristine natural environment, that is so critical to our quality of life and public health, is conserved and enhanced for the next generation. We are striving to ensure that the water and air quality in New Hampshire meet the high standard that Granite Staters demand. It is a priority of my administration to ensure that every Granite Stater has access to clean safe drinking water. I often say it, but it will always ring true: when you turn on your faucet and pour your child a glass of water, you are really trusting that the government did its job. SB309 is a powerful tool enabling DES to establish the standards necessary, to ensure that the water coming out of our faucets is clean and safe and that the state government is doing its job.

More science is needed in order to determine the true health implication of these emerging contaminants – New Hampshire will be at the forefront of doing that science. Please get SB309 to my desk and I will proudly sign it into law.

Sincerely,

A handwritten signature in black ink that reads "Christopher T. Sununu".

Christopher T. Sununu  
Governor



# **Fiscal Note**

**SB 309-FN- FISCAL NOTE  
AS INTRODUCED**

AN ACT relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

FISCAL IMPACT:  State  County  Local  None

STATE:	Estimated Increase / (Decrease)			
	FY 2019	FY 2020	FY 2021	FY 2022
Appropriation	\$0	\$0	\$0	\$0
Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase
<i>Funding Source:</i>	<input checked="" type="checkbox"/> General	<input type="checkbox"/> Education	<input type="checkbox"/> Highway	<input type="checkbox"/> Other

**COUNTY:**

Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase

**LOCAL:**

Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase

**METHODOLOGY:**

This bill requires the commissioner of the Department of Environmental Services to adopt a state drinking water standard relative to perfluorochemicals (PFCs); establish ambient groundwater quality standards relative to PFCs; and establish surface water quality standards relative to PFCs.

Regarding section 1 of the bill, the Department of Environmental Services indicates there are approximately 4,200 active sources of water for public water systems that will need to be sampled routinely if a Maximum Contaminant Level (MCL) is adopted. The frequency of sampling would be increased or decreased based on previous monitoring results from a given source. Laboratory costs for perfluorinated compounds ranges from \$180 to \$400 per sample. Therefore a single round of sampling for locals, counties and other entities that own or operate public water systems would range from \$756,000 to \$1,680,000 or higher depending on how low the standard is set. The impact on expenditures cannot be determined because the frequency of sampling and the number of water sources exceeding the MCL cannot be determined in

advance. The cost to the Department associated with administering compliance are indeterminable for the same reasons.

Regarding section 2, the Department would need to independently review available research and analyze whether that research warrants revision of ambient groundwater quality standards (AGQS) on an annual basis for perfluorooctanesulfate (PFOS) and perfluorooctanic acid (PFOA). The Department assumes an additional Toxicologist IV, labor grade 29, step 4 position would be necessary, starting on July 1, 2018 with the following estimated costs:

	FY 2019	FY 2020	FY 2021	FY 2022
Salary	\$66,905	\$69,791	\$69,791	\$72,911
Benefits	\$31,484	\$33,289	\$34,614	\$36,573
Total Salary & Benefits:	\$98,389	\$103,080	\$104,405	\$109,484
Other Expenses:				
Current Expenses	\$5,200	\$5,200	\$5,200	\$5,200
Equipment	\$3,926	\$500	\$500	\$500
Office Space	\$3,693	\$3,806	\$3,880	\$3,960
Travel	\$4,500	\$2,750	\$2,750	\$2,750
DoIT Charges, Training and Telecommunications	\$9,112	\$2,064	\$2,064	\$2,064
Total Other Expenses:	\$26,431	\$14,320	\$14,394	\$14,474
<b>Total:</b>	<b>\$124,820</b>	<b>\$117,400</b>	<b>\$118,799</b>	<b>\$123,958</b>

In addition, a potential reduction in the current AGQS for PFOA and PFOS may result in additional indeterminable costs to local and county government entities that hold groundwater discharge or management permits such as those associated with landfills.

Regarding section 3, in order to establish surface water quality standards for PFCs, the Department would need funds to hire a contractor, experienced in PFCs and the EPA's methodologies for developing aquatic life and human health surface water quality criteria. The contractor would review existing literature, including criteria and assumptions used in other states, and develop a report with defensible aquatic life and human health surface water criteria and supporting documentation consistent with EPA methodologies. To accomplish this within 120 days, as required, the Department assumes the cost would exceed \$100,000. For surface water quality standards, the cost to the municipalities could be significant, but indeterminable. Many municipalities operate waste water treatment facilities that discharge treated water to local groundwater or surface waters. Should those surface waters fail to meet surface water quality standards, treatment technologies or industrial pretreatment programs, may need to be developed. For larger facilities, the expense of that treatment could be millions of dollars. In addition, some municipalities have firefighting or fire training facilities which have the potential to cause surface water impairments, the remediation cost for these facilities could be high. For counties, the cost is likely to be lower unless contamination is found to originate from a county facility.

The total costs to the Department and other entities are indeterminable, however at least one general funded position and funds for a contractor would be necessary as outlined above. In addition, potential costs to local and county governments for treatment, mitigation, and remediation in order to comply with a new MCL, ambient groundwater standard, and surface water quality standard could be significant, but are also indeterminable.

**AGENCIES CONTACTED:**

Department of Environmental Services

Bill as  
Introduced



SB 309-FN - AS AMENDED BY THE SENATE

03/08/2018 0973s

2018 SESSION

18-2838

08/10

SENATE BILL

***309-FN***

AN ACT

relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

SPONSORS:

Sen. Innis, Dist 24; Sen. Bradley, Dist 3; Sen. Avard, Dist 12; Sen. Fuller Clark, Dist 21; Sen. Gannon, Dist 23; Sen. Ward, Dist 8; Sen. Carson, Dist 14; Sen. Birdsell, Dist 19; Sen. Feltes, Dist 15; Rep. Messmer, Rock. 24; Rep. H. Marsh, Rock. 22; Rep. Emerick, Rock. 21; Rep. Bean, Rock. 21; Rep. Murray, Rock. 24

COMMITTEE:

Energy and Natural Resources

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ANALYSIS

This bill:

I. Requires the commissioner of the department of environmental services to adopt a state drinking water standard relative to perfluorochemicals.

II. Requires the commissioner of the department of environmental services to establish ambient groundwater quality standards relative to perfluorochemicals.

III. Requires the commissioner of the department of environmental services to establish surface water quality standards relative to perfluorochemicals.

-----  
Explanation:

Matter added to current law appears in ***bold italics***.

Matter removed from current law appears [~~in brackets and struck through~~].

Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

STATE OF NEW HAMPSHIRE

*In the Year of Our Lord Two Thousand Eighteen*

AN ACT relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

*Be it Enacted by the Senate and House of Representatives in General Court convened:*

1 1 New Subdivision; Contaminants in Drinking Water. Amend RSA 485 by inserting after  
2 section 16-d the following new subdivision:

3 Perfluorochemicals

4 485:16-e Perfluorochemicals. The commissioner shall, in consultation with the commissioner of  
5 the department of health and human services and stakeholders, and no later than January 1, 2019,  
6 initiate rulemaking to adopt a maximum contaminant limit (MCL) for perfluorooctanesulfonate  
7 (PFOS), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), and  
8 perfluorohexanesulfonic acid (PFHxS) for public water systems regulated by this chapter. The  
9 commissioner shall consider the standards of other states, including the science considered by states  
10 with standards lower than those contained in health advisories from the United States  
11 Environmental Protection Agency. The commissioner shall adopt MCLs that reasonably protect  
12 public health, particularly prenatal and early childhood health, and that are reasonably supported  
13 by peer reviewed science and independent or government agency studies, provided no MCL shall  
14 exceed that contained in any MCL promulgated by the United States Environmental Protection  
15 Agency. The commissioner shall annually review the newest peer reviewed science and  
16 independent or government agency studies and undertake rulemaking in order to comply with this  
17 paragraph, if necessary.

18 2 New Paragraph; Ambient Groundwater Quality Standards. Amend RSA 485-C:6 by inserting  
19 after paragraph III the following new paragraph:

20 IV. The commissioner shall, in consultation with the commissioner of the department of  
21 health and human services and stakeholders, and no later than January 1, 2019, determine  
22 whether to revise the ambient groundwater quality standards for perfluorooctanesulfonate (PFOS),  
23 perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid  
24 (PFHxS) established in rule in order to comply with this paragraph and shall make public his or her  
25 determination. The commissioner shall consider the standards of other states, including the science  
26 considered by states with standards lower than those contained in the lifetime health advisory  
27 promulgated by the United States Environmental Protection Agency. The commissioner shall adopt  
28 standards that reasonably protect public health, particularly prenatal and early childhood health,  
29 and that are reasonably supported by peer reviewed science and independent or government agency  
30 studies, provided no standard shall exceed that contained in any standard promulgated by the

1 United States Environmental Protection Agency. If the commissioner determines that the standard  
2 should be changed, the commissioner shall initiate rulemaking within 60 days of making the  
3 determination. The commissioner shall annually review the newest peer reviewed science and  
4 independent or government agency studies and undertake rulemaking in order to comply with this  
5 paragraph, if necessary.

6 3 New Paragraph; Surface Water Quality Standards. Amend RSA 485-A:8 by inserting after  
7 paragraph II-a the following new paragraph:

8 II-b. The commissioner shall, in consultation with stakeholders, and no later than January  
9 1, 2020, establish a surface water quality standard for perfluorooctanesulfonate (PFOS),  
10 perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid  
11 (PFHxS) in Class A and Class B waters, if scientifically feasible. The commissioner shall consider  
12 the standards of other states. The commissioner shall adopt standards that reasonably protect  
13 public health, particularly prenatal and early childhood health, and that are reasonably supported  
14 by peer-reviewed science and independent or government agency studies, provided no standard  
15 shall exceed that contained in any standard promulgated by the United States Environmental  
16 Protection Agency. If the commissioner determines that the standard should be changed, the  
17 commissioner shall initiate rulemaking within 60 days of making the determination. The  
18 commissioner shall annually review the newest peer-reviewed science and independent or  
19 government agency studies and undertake rulemaking in order to comply with this paragraph, if  
20 necessary.

21 4 Effective Date. This act shall take effect 60 days after its passage.

22

**SB 309-FN- FISCAL NOTE  
AS INTRODUCED**

AN ACT relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

FISCAL IMPACT:  State  County  Local  None

STATE:	Estimated Increase / (Decrease)			
	FY 2019	FY 2020	FY 2021	FY 2022
Appropriation	\$0	\$0	\$0	\$0
Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase
<i>Funding Source:</i>	<input checked="" type="checkbox"/> General	<input type="checkbox"/> Education	<input type="checkbox"/> Highway	<input type="checkbox"/> Other

**COUNTY:**

Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase

**LOCAL:**

Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase

**METHODOLOGY:**

This bill requires the commissioner of the Department of Environmental Services to adopt a state drinking water standard relative to perfluorochemicals (PFCs); establish ambient groundwater quality standards relative to PFCs; and establish surface water quality standards relative to PFCs.

Regarding section 1 of the bill, the Department of Environmental Services indicates there are approximately 4,200 active sources of water for public water systems that will need to be sampled routinely if a Maximum Contaminant Level (MCL) is adopted. The frequency of sampling would be increased or decreased based on previous monitoring results from a given source. Laboratory costs for perfluorinated compounds ranges from \$180 to \$400 per sample. Therefore a single round of sampling for locals, counties and other entities that own or operate public water systems would range from \$756,000 to \$1,680,000 or higher depending on how low the standard is set. The impact on expenditures cannot be determined because the frequency of sampling and the number of water sources exceeding the MCL cannot be determined in

# Committee Report

**REGULAR CALENDAR**

**April 18, 2018**

**HOUSE OF REPRESENTATIVES**

**REPORT OF COMMITTEE**

**The Committee on Finance to which was referred SB  
309-FN,**

**AN ACT (New Title) relative to standards for  
perfluorochemicals in drinking water, ambient  
groundwater, and surface water. Having considered the  
same, report the same with the following amendment,  
and the recommendation that the bill OUGHT TO PASS  
WITH AMENDMENT.**

**Rep. Lynne Ober**

**FOR THE COMMITTEE**

## COMMITTEE REPORT

Committee:	<b>Finance</b>
Bill Number:	<b>SB 309-FN</b>
Title:	<b>(New Title) relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.</b>
Date:	<b>April 18, 2018</b>
Consent Calendar:	<b>REGULAR</b>
Recommendation:	<b>OUGHT TO PASS WITH AMENDMENT 2018-1580h</b>

### STATEMENT OF INTENT

This bill, as amended, includes the policy previously passed by a voice vote in the House. It allows the Department of Environmental Services (DES) to regulate the air emissions of perfluorinated compounds (PFCs) or their precursors in circumstances where they cause or contribute to or have the potential to cause or contribute to exceeding a groundwater or surface water standard through the deposit of such pollutants from the air. It clarifies the basis for and requires periodic review of ambient groundwater quality standards and directs the department to evaluate the ambient groundwater quality standards for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) and to set ambient groundwater quality standards for perfluorononanoic acid (PFNA) and perfluorohexanesulfonic acid (PFHxS). It establishes criteria for setting maximum contaminant limits for public drinking water systems and directs the department to set maximum contaminant limits for PFOA, PFOS, PFNA, and PFHxS. It includes a provision that requires DES to establish a plan for determining ambient groundwater standards in order to protect groundwater and drinking water. Finally, it adds and funds two positions to undertake the required work.

Vote 26-0.

Rep. Lynne Ober  
FOR THE COMMITTEE

Original: House Clerk  
Cc: Committee Bill File

## REGULAR CALENDAR

### Finance

**SB 309-FN**, (New Title) relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water. **OUGHT TO PASS WITH AMENDMENT.**

Rep. Lynne Ober for Finance. This bill, as amended, includes the policy previously passed by a voice vote in the House. It allows the Department of Environmental Services (DES) to regulate the air emissions of perfluorinated compounds (PFCs) or their precursors in circumstances where they cause or contribute to or have the potential to cause or contribute to exceeding a groundwater or surface water standard through the deposit of such pollutants from the air. It clarifies the basis for and requires periodic review of ambient groundwater quality standards and directs the department to evaluate the ambient groundwater quality standards for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) and to set ambient groundwater quality standards for perfluorononanoic acid (PFNA) and perfluorohexanesulfonic acid (PFHxS). It establishes criteria for setting maximum contaminant limits for public drinking water systems and directs the department to set maximum contaminant limits for PFOA, PFOS, PFNA, and PFHxS. It includes a provision that requires DES to establish a plan for determining ambient groundwater standards in order to protect groundwater and drinking water. Finally, it adds and funds two positions to undertake the required work.

**Vote 26-0.**



**SB 309-FN**

**OTP/A**

**(1580h)**

**26-0 Regular**

**Ober**

---

This bill, as amended, includes the policy previously passed by a voice vote in the House. It allows the Department of Environmental Services (DES) to regulate the air emissions of perfluorinated compounds (PFCs) or their precursors in circumstances where they cause or contribute to or have the potential to cause or contribute to exceeding a groundwater or surface water standard through the deposit of such pollutants from the air. It clarifies the basis for and requires periodic review of ambient groundwater quality standards and directs the department to evaluate the ambient groundwater quality standards for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) and to set ambient groundwater quality standards for perfluorononanoic acid (PFNA) and perfluorohexanesulfonic acid (PFHxS). It establishes criteria for setting maximum contaminant limits for public drinking water systems and directs the department to set maximum contaminant limits for PFOA, PFOS, PFNA, and PFHxS. It includes a provision that requires DES to establish a plan for determining ambient groundwater standards in order to protect groundwater and drinking water. Finally, it adds and funds two positions to undertake the required work.

# Voting Sheets



HOUSE COMMITTEE ON FINANCE

EXECUTIVE SESSION on SB 309-FN

BILL TITLE: (New Title) relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

DATE: 4/18/18

LOB ROOM: 210-211

MOTION: (Please check one box)

OTP  ITL  Retain (1st year)  Adoption of Amendment # 1580 (if offered)  Interim Study (2nd year)
Moved by Rep. Ober Secoded by Rep. Emerick Vote: .

MOTION: (Please check one box)

OTP  OTP/A  ITL  Retain (1st year)  Adoption of Amendment # (if offered)  Interim Study (2nd year)
Moved by Rep. Ober Secoded by Rep. Emerick Vote: 26-0

MOTION: (Please check one box)

OTP  OTP/A  ITL  Retain (1st year)  Adoption of Amendment # (if offered)  Interim Study (2nd year)
Moved by Rep. Secoded by Rep. Vote:

MOTION: (Please check one box)

OTP  OTP/A  ITL  Retain (1st year)  Adoption of Amendment # (if offered)  Interim Study (2nd year)
Moved by Rep. Secoded by Rep. Vote:

CONSENT CALENDAR: YES NO

Minority Report? Yes No If yes, author, Rep: Motion

Respectfully submitted: Kenneth Weyler
Rep Kenneth Weyler, Clerk



STATE OF NEW HAMPSHIRE  
OFFICE OF THE HOUSE CLERK

1/5/2018 10:28:56 AM  
Roll Call Committee Registers  
Report

2018 SESSION

FINANCE

Bill #: SB 309 Title: \_\_\_\_\_

PH Date: 1/1/18 Exec Session Date: 1/18/18

Motion: OTP-A Amendment #: 1580

MEMBER	YEAS	NAYS
Kurk, Neal M. Chariman	26	
Ober, Lynne M. Vice Chairman	1	
Weyler, Kenneth L. Clerk	2	
Allen, Mary M.	3	
Umberger, Karen C.	4	
Twombly, Timothy L. <i>McCarthy</i>	5	
Byron, Frank A.	6	
Danielson, David J.	7	
Emerick, J. Tracy	8	
Spanos, Peter J.	9	
Renzullo, Andrew	10	
Theberge, Robert L.	11	
Bates, David M.	12	
Hennessey, Erin T.	13	
Griffin, Gerald	14	
Wallner, Mary Jane	15	
Nordgren, Sharon	16	
Eaton, Daniel A.	17	
Smith, Marjorie K.	18	
Rosenwald, Cindy	19	
Leishman, Peter R.	20	
Buco, Thomas L.	21	
Hatch, William A.	22	
Rogers, Katherine D.	23	
Walsh, Robert M. <i>O'Brien</i>	24	
Lovejoy, Patricia T.	25	
<b>TOTAL VOTE:</b>	<b>26</b>	<b>0</b>

# Work Session Minutes

HOUSE COMMITTEE ON Finance

DIVISION I WORK SESSION ON SB 309-FN

**BILL TITLE:** (Second New Title) regulating groundwater pollution caused by polluting emissions in the air and relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

**DATE:** April 17, 2018

**ROOM:** 210-211

Time Work Session Called to Order: 1:20

Time Adjourned: 1:30

(please circle if present)

**Committee Members:** L. Ober, Emerick, Leishman, Spanos, G. Griffin, Hatch and Lovejoy, McCarthy (for Twombly)

**Bill Sponsors:**

Sen. Innis  
Sen. Fuller Clark  
Sen. Carson  
Rep. Messmer  
Rep. Bean

Sen. Bradley  
Sen. Gannon  
Sen. Birdsell  
Rep. H. Marsh  
Rep. Murray

Sen. Avard  
Sen. Ward  
Sen. Feltes  
Rep. Emerick

TESTIMONY

OTP/A #2018-1580

Motion: Ober  
Seconded: Emerick

Vote: 8-0

Respectfully Submitted,

Rep Peter Leishman  
Clerk, Division I



STATE OF NEW HAMPSHIRE  
OFFICE OF THE HOUSE CLERK

1/5/2018 10:29:06 AM  
Roll Call Committee Registers  
Report

2018 SESSION

FIN-DIV1

Bill #: SB 309-FN Title: \_\_\_\_\_

PH Date: 4/17/18 Exec Session Date: 1/1/18

Motion: OTP/A Amendment #: 2018-1580

MEMBER YEAS NAYS

MEMBER	YEAS	NAYS
Ober, Lynne M. Chariman	8	
Emerick, J. Tracy Vice Chairman	1	
Leishman, Peter R. Clerk	2	
Kurk, Neal M.		
Twombly, Timothy L. <i>McCarthy</i>	3	
Spanos, Peter J.	4	
Griffin, Gerald	5	
Hatch, William A.	6	
Walsh, Robert M.		
Lovejoy, Patricia T.	7	
TOTAL VOTE:		

*Ober/Emerick/  
OTP/A*

*8-0*



HOUSE COMMITTEE ON Finance

DIVISION I WORK SESSION ON SB 309-FN

**BILL TITLE:** (New Title) relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

**DATE:** April 17, 2018

**ROOM:** 212

Time Work Session Called to Order: 1:20

Time Adjourned: 1:30

(please circle if present)

Committee Members: L. Ober, Emerick, Leishman, Kurk, Twombly, Spanos, G. Griffin, Hatch, B. Walsh and Lovejoy

McCarthy

Bill Sponsors:

Sen. Innis  
Sen. Fuller Clark  
Sen. Carson  
Rep. Messmer  
Rep. Bean

Sen. Bradley  
Sen. Gannon  
Sen. Birdsell  
Rep. H. Marsh  
Rep. Murray

Sen. Avard  
Sen. Ward  
Sen. Feltes  
Rep. Emerick

TESTIMONY

\* Use asterisk if written testimony and/or amendments are submitted.

Ober / Emerick S-O OTP/A

# 2018-1580



File 4/17/18

Amendment to SB 309-FN

1 Amend the title of the bill by replacing it with the following:

2

3 AN ACT regulating groundwater pollution caused by polluting emissions in the air and relative  
4 to standards for perfluorochemicals in drinking water, ambient groundwater, and  
5 surface water.  
6

7 Amend the bill by replacing all after the enacting clause with the following:

8

9 1 New Subparagraph; Rulemaking; Air Contaminant Impacts on Soil and Water. Amend RSA  
10 125-C:4, I by inserting after subparagraph (s) the following new subparagraph:

11 (t) The determination of air contaminants subject to regulation, applicability thresholds,  
12 determination of best available control technology, and procedures to determine potential impacts of  
13 the deposit of such contaminants from the air on soils or water resources to implement RSA 125-  
14 C:10-e.

15 2 New Section; Requirements for Air Emissions of Perflourinated Compounds Impacting Soil  
16 and Water. Amend RSA 125-C by inserting after section 10-d the following new section:

17 125-C:10-e Requirements for Air Emissions of Perfluorinated Compounds Impacting Soil and  
18 Water.

19 I. For the purposes of this section:

20 (a) "Best available control technology" means "best available control technology" as  
21 defined in RSA 125-C:10-b, I(a).

22 (b) "Ambient groundwater quality standard" means "ambient groundwater quality  
23 standard" as defined in RSA 485-C:2, I.

24 (c) "Surface water quality standard" means "surface water quality standard" established  
25 in or pursuant to RSA 485-A.

26 (d) "Perfluorinated Compounds" or "PFCs" means the list of compounds identified in  
27 paragraph 1.1 of Environmental Protection Agency Document#: EPA/600/R-08/092 Method 537.  
28 "Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction  
29 and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)", Version 1.1 (September  
30 2009).

31 (e) "Precursor" means any substance that has been shown by sound science to be  
32 transformed into a PFC under ambient conditions reasonably expected to occur in New Hampshire.

33 II. A device that emits to the air any PFCs or precursors that have caused or contributed to



1 an exceedance of an ambient groundwater quality standard or surface water quality standard as a  
2 result of the deposition of any such PFCs or precursors from the air, shall be subject to the  
3 determination and application of best available control technology. Within 6 months of the  
4 department determining that the device is subject to such control technology, the owner of the  
5 device shall submit to the department an application for a permit. Within 12 months of permit  
6 issuance, the applicant shall complete construction and installation of controls consistent with the  
7 permit. Operation of the source may continue through the permitting, construction, and  
8 installation time period. A source which can demonstrate to the department that its device no  
9 longer contributes to an exceedance of an ambient groundwater quality standard or surface water  
10 quality standard shall be exempt from this section.

11 III. The construction, installation, or modification of any device that has the potential,  
12 based on an applicability threshold adopted by the department, to cause or contribute to an  
13 exceedance of an ambient groundwater quality standard or surface water quality standard as a  
14 result of the deposition of any PFCs or precursors from the air, shall be prohibited without first  
15 applying for and obtaining a permit from the department that establishes emission limitations for  
16 such device based on best available control technology.

17 IV. Part of the initial application for a permit under this section shall include an analysis of  
18 best available control technology for controlling emissions. Any permit issued shall contain  
19 inspection, testing, and reporting requirements, as applicable, to ensure the conditions of the permit  
20 are met.

21 V. Any determination of best available control technology under this section shall be subject  
22 to the following:

23 (a) In no event shall application of best available control technology result in:

24 (1) Emission of any air contaminant that would exceed the emissions allowed by any  
25 applicable standard under RSA 125-C or RSA 125-I or rules adopted pursuant to either chapter.

26 (2) Emission of any air contaminant subject to this section in an amount  
27 disproportionate to the emissions of such air contaminant from other similar air pollution control  
28 devices for that air contaminant at facilities using similar technology.

29 (3) Emission of any air contaminant subject to this section which causes or  
30 contributes to or has the potential to cause or contribute to an exceedance of an ambient  
31 groundwater quality standard or surface water quality standard, as a result of the deposition of the  
32 contaminant from the air.

33 (b) If the department determines that the facility has more than one device that emits  
34 air contaminants subject to this section, the department shall determine best available control  
35 technology emission limitations for each such device.

36 VI. This section shall only pertain to PFCs for which at least one study has been conducted  
37 in accordance with generally accepted scientific principles that demonstrates that the PFC of



1 concern is known to cause or may reasonably be anticipated to cause acute, chronic, mutagenic,  
2 reproductive, or developmental health effects in humans as a result of exposure to such PFC. The  
3 implementation of this section shall only rely upon standards that are based on federal maximum  
4 contaminant levels, health advisories, provisional health advisories; standards that are derived  
5 from federally published toxicological data; or more restrictive New Hampshire state standards.

6 3 New Subparagraph; Statement of Purpose. Amend RSA 485:1, II by inserting after  
7 paragraph (h) the following new subparagraph:

8 (i) Adopt primary drinking water standards by establishing maximum contaminant  
9 limits or treatment techniques.

10 4 Drinking Water Rules. Amend RSA 485:3, I(b) to read as follows:

11 (b) *After consideration of the extent to which the contaminant is found in New*  
12 *Hampshire, the ability to detect the contaminant in public water systems, the ability to*  
13 *remove the contaminant from drinking water, and the costs and benefits to affected*  
14 *parties that will result from establishing the standard, a specification for each contaminant of*  
15 *either:*

16 (1) A maximum contaminant level that is acceptable in water for human  
17 consumption [~~if it is feasible to ascertain the level of such contaminant in water in public water~~  
18 ~~systems~~]; or

19 (2) One or more treatment techniques or methods which lead to a reduction of the  
20 level of such contaminant sufficient to protect the public health, if it is not feasible to ascertain the  
21 level of such contaminant in water in the public water system; and

22 5 New Subdivision; Perfluorochemicals. Amend 485 by inserting after section 16-d the  
23 following new subdivision:

24 Perfluorochemicals

25 485:16-e Perfluorochemicals. By January 1, 2019, the commissioner shall, in consultation with  
26 the commissioner of the department of health and human services and other interested parties,  
27 initiate rulemaking in accordance with RSA 541-A to adopt a maximum contaminant limit for  
28 perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), perfluorononanoic acid (PFNA),  
29 and perfluorohexanesulfonic acid (PFHxS).

30 6 Ambient Groundwater Quality Standards. Amend RSA 485-C:6 to read as follows:

31 485-C:6 Ambient Groundwater Quality Standards.

32 I. The commissioner shall establish and adopt ambient groundwater quality standards for  
33 regulated contaminants which adversely affect human health or the environment. Ambient  
34 groundwater standards shall apply to all regulated contaminants which result from human  
35 operations or activities, but do not apply to naturally occurring contaminants. *Where state*  
36 *maximum contaminant levels have been adopted under RSA 485:3, I(b), ambient*  
37 *groundwater quality standards shall be equivalent to such standards.* Where federal



1 maximum contaminant level or health advisories have been promulgated under the Federal Safe  
2 Drinking Water Act or rules relevant to such act, ambient groundwater quality standards shall be  
3 [equivalent to] *no less stringent than* such standards. *The commissioner may adopt*  
4 *standards more stringent than federal maximum contaminant levels or health advisories*  
5 *if, accounting for an adequate margin of safety to protect human health at all life stages,*  
6 *including but not limited to pre-natal development, the commissioner determines federal*  
7 *standards are insufficient for protection of human health.* Where such standards are  
8 *established* based upon *health advisories that address* cancer risks, the ambient groundwater  
9 quality standards shall be equivalent to that exposure which causes a lifetime exposure risk of one  
10 cancer in 1,000,000 exposed population. Where no federal *or state* maximum contaminant level or  
11 health advisory has been issued, the commissioner may adopt ambient groundwater quality  
12 standards on a basis which provides for an adequate margin of safety to protect human health and  
13 safety.

14 II. *Health advisories that are adopted as ambient groundwater quality standards*  
15 *shall be reviewed by the department at least every 5 years to determine if new research*  
16 *warrants revising the current ambient groundwater quality standard. If the department*  
17 *finds a revision is necessary it shall conduct rulemaking to adopt the revised standard.*

18 III. Ambient groundwater quality standards shall be the water quality basis for issuance of  
19 groundwater discharge permits under RSA 485-A: 13.

20 ~~III.~~ IV. Except for discharges of domestic wastewater regulated under RSA 485-A:13 and  
21 RSA 485-A:29, no person shall violate ambient groundwater quality standards.

22 V. *By January 1, 2019, the commissioner shall, in consultation with the*  
23 *commissioner of the department of health and human services and interested parties,*  
24 *initiate rulemaking to adopt ambient groundwater quality standards for*  
25 *perfluorononanoic acid (PFNA) and perfluorohexanesulfonic acid (PFH<sub>x</sub>S).*

26 VI. *By January 1, 2019, the commissioner shall, in consultation with the*  
27 *commissioner of the department of health and human services and interested parties,*  
28 *conduct a review to determine whether current research warrants revising the existing*  
29 *ambient groundwater quality standards for perfluorooctanoic acid (PFOA) and*  
30 *perfluorooctanesulfonic acid (PFOS).*

31 7 Department of Environmental Services; Positions Established; Appropriation. There is  
32 established within the department of environmental services one classified toxicologist position and  
33 one classified human health risk assessor for the purposes of developing appropriate standards to  
34 protect groundwater and drinking water quality under RSA 485-C. The sum necessary to pay the  
35 salary, benefits, and other costs related to the positions established in this section is hereby  
36 appropriated to the department of environmental services for the biennium ending June 30, 2019.  
37 This appropriation shall be in addition to any other appropriations made to the department in the



1 biennium. The governor is authorized to draw a warrant for said sum out of any money in treasury  
2 not otherwise appropriated.

3 8 Department of Environmental Services; Surface Water Quality Standards. The commissioner  
4 of environmental services shall develop a plan, including a schedule and cost estimates, to establish  
5 surface water quality standards for perfluorooctanesulfonate (PFOS), perfluorooctanoic acid  
6 (PFOA), perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid (PFHxS) in class A and  
7 class B waters for all designated uses. The commissioner shall submit the plan upon its completion,  
8 but no later than January 1, 2020, to the house resources, recreation, and development committee  
9 and the senate energy and natural resources committee.

10 9 Effective Date.

11 I. Sections 1 and 2 of this act shall take effect 60 days after its passage.

12 II. The remainder of this act shall take effect upon its passage.



2018-1580h

AMENDED ANALYSIS

I. Allows the department of environmental services to make rules regarding air pollution and the deposit of such pollutants on soils and water.

II. Regulates devices emitting or having the potential to emit air pollutants that may harm soil and water through the deposit of such pollutants.

III. Clarifies the basis for and requires periodic review of ambient groundwater quality standards.

IV. Directs the department to evaluate the ambient ground water quality standards for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) and set ambient groundwater quality standards for perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid (PFHxS).

V. Establishes the criteria for setting maximum contaminant limits for public drinking water and directs the department to set maximum contaminant limits for perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid (PFHxS).

VI. Establishes a toxicologist position and a human health risk assessor position in the department of environmental services and makes an appropriation to fund the positions.

VII. Directs the department to, develop a plan, including a schedule and costs estimates, for to establishing surface water quality standards for perfluorooctanesulfonate (PFOS), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid (PFHxS) in class A and class B waters.

As Amended  
by the House



SB 309-FN - AS AMENDED BY THE HOUSE

03/08/2018 0973s  
12Apr2018... 1310h

2018 SESSION

18-2838  
08/10

SENATE BILL **309-FN**

AN ACT relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

SPONSORS: Sen. Innis, Dist 24; Sen. Bradley, Dist 3; Sen. Avard, Dist 12; Sen. Fuller Clark, Dist 21; Sen. Gannon, Dist 23; Sen. Ward, Dist 8; Sen. Carson, Dist 14; Sen. Birdsell, Dist 19; Sen. Feltes, Dist 15; Rep. Messmer, Rock. 24; Rep. H. Marsh, Rock. 22; Rep. Emerick, Rock. 21; Rep. Bean, Rock. 21; Rep. Murray, Rock. 24

COMMITTEE: Energy and Natural Resources

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AMENDED ANALYSIS

I. Directs the department to evaluate the ambient ground water quality standards for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) and set ambient groundwater quality standards for perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid (PFHxS).

II. Establishes the criteria for setting maximum contaminant limits for public drinking water and directs the department to set maximum contaminant limits for perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid (PFHxS).

III. Establishes a toxicologist position and a human health risk assessor position in the department of environmental services and makes an appropriation to fund the positions.

IV. Requires the commissioner of environmental services to develop a plan for establishing surface water quality standards for perfluorooctanesulfonate (PFOS), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid (PFHxS) in class A and class B waters.

---

Explanation: Matter added to current law appears in *bold italics*.  
Matter removed from current law appears [~~in brackets and struck through.~~]  
Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

STATE OF NEW HAMPSHIRE

*In the Year of Our Lord Two Thousand Eighteen*

AN ACT relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

*Be it Enacted by the Senate and House of Representatives in General Court convened:*

1 1 New Subparagraph; Statement of Purpose. Amend RSA 485:1, II by inserting after  
2 paragraph (h) the following new subparagraph:

3 (i) Adopt primary drinking water standards by establishing maximum contaminant  
4 limits or treatment techniques.

5 2 Drinking Water Rules. Amend RSA 485:3, I(b) to read as follows:

6 (b) *After consideration of the extent to which the contaminant is found in New*  
7 *Hampshire, the ability to detect the contaminant in public water systems, the ability to*  
8 *remove the contaminant from drinking water, and the costs to government entities that*  
9 *will result from establishing the standard, a specification for each contaminant of either:*

10 (1) A maximum contaminant level that is acceptable in water for human  
11 consumption~~[-if it is feasible to ascertain the level of such contaminant in water in public water~~  
12 ~~systems]; or~~

13 (2) One or more treatment techniques or methods which lead to a reduction of the  
14 level of such contaminant sufficient to protect the public health, if it is not feasible to ascertain the  
15 level of such contaminant in water in the public water system; and

16 3 New Subdivision; Perfluorochemicals. Amend 485 by inserting after section 16-d the  
17 following new subdivision:

18 Perfluorochemicals

19 485:16-e Perfluorochemicals. By January 1, 2019, the commissioner shall, in consultation with  
20 the commissioner of the department of health and human services and other interested parties,  
21 initiate rulemaking in accordance with RSA 541-A to adopt a maximum contaminant limit for  
22 perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), perfluorononanoic acid (PFNA),  
23 and perfluorohexanesulfonic acid (PFHxS).

24 4 Ambient Groundwater Quality Standards. Amend RSA 485-C:6 to read as follows:

25 485-C:6 Ambient Groundwater Quality Standards.

26 I. The commissioner shall establish and adopt ambient groundwater quality standards for  
27 regulated contaminants which adversely affect human health or the environment. Ambient  
28 groundwater standards shall apply to all regulated contaminants which result from human  
29 operations or activities, but do not apply to naturally occurring contaminants. *Where state*

1 *maximum contaminant levels have been adopted under RSA 485:3, I(b), ambient*  
2 *groundwater quality standards shall be equivalent to such standards.* Where federal  
3 maximum contaminant level or health advisories have been promulgated under the Federal Safe  
4 Drinking Water Act or rules relevant to such act, ambient groundwater quality standards shall be  
5 ~~[equivalent to]~~ *no less stringent than* such standards. *The commissioner may adopt*  
6 *standards more stringent than federal maximum contaminant levels or health advisories*  
7 *if, accounting for an adequate margin of safety to protect human health at all life stages,*  
8 *including but not limited to pre-natal development, the commissioner determines federal*  
9 *standards are insufficient for protection of human health.* Where such standards are  
10 *established* based upon *health advisories that address* cancer risks, the ambient groundwater  
11 quality standards shall be equivalent to that exposure which causes a lifetime exposure risk of one  
12 cancer in 1,000,000 exposed population. Where no federal *or state* maximum contaminant level or  
13 health advisory has been issued, the commissioner may adopt ambient groundwater quality  
14 standards on a basis which provides for an adequate margin of safety to protect human health and  
15 safety.

16 *II. Health advisories that are adopted as ambient groundwater quality standards*  
17 *shall be reviewed by the department at least every 5 years to determine if new research*  
18 *warrants revising the current ambient groundwater quality standard. If the department*  
19 *finds a revision is necessary it shall conduct rulemaking to adopt the revised standard.*

20 *III.* Ambient groundwater quality standards shall be the water quality basis for issuance of  
21 groundwater discharge permits under RSA 485-A: 13.

22 ~~[III.]~~ *IV.* Except for discharges of domestic wastewater regulated under RSA 485-A:13 and  
23 RSA 485-A:29, no person shall violate ambient groundwater quality standards.

24 *V. By January 1, 2019, the commissioner shall, in consultation with the*  
25 *commissioner of the department of health and human services and interested parties,*  
26 *initiate rulemaking to adopt ambient groundwater quality standards for*  
27 *perfluorononanoic acid (PFNA) and perfluorohexanesulfonic acid (PFHxS).*

28 *VI. By January 1, 2019, the commissioner shall, in consultation with the*  
29 *commissioner of the department of health and human services and interested parties,*  
30 *conduct a review to determine whether current research warrants revising the existing*  
31 *ambient groundwater quality standards for perfluorooctanoic acid (PFOA) and*  
32 *perfluorooctanesulfonic acid (PFOS).*

33 5 Department of Environmental Services; Positions Established; Appropriation. There is  
34 established within the department of environmental services one classified toxicologist position and  
35 one classified human health risk assessor for the purposes of monitoring groundwater under RSA  
36 485-C. The sum necessary to pay the salary, benefits, and other costs related to the positions  
37 established in this section is hereby appropriated to the department of environmental services for  
38 the biennium ending June 30, 2019. This appropriation shall be in addition to any other

SB 309-FN - AS AMENDED BY THE HOUSE

- Page 3 -

1 appropriations made to the department in the biennium. The governor is authorized to draw a  
2 warrant for said sum out of any money in treasury not otherwise appropriated.

3 6 Department of Environmental Services; Surface Water Quality Standards. The commissioner  
4 of environmental services shall, in consultation with stakeholders, develop a plan, including a  
5 schedule and cost estimates, to establish surface water quality standards for  
6 perfluorooctanesulfonate (PFOS), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA),  
7 and perfluorohexanesulfonic acid (PFHxS) in class A and class B waters for all designated uses.  
8 The commissioner shall submit the plan upon its completion, but no later than January 1, 2020, to  
9 the house resources, recreation, and development committee and the senate energy and natural  
10 resources committee.

11 7 Effective Date. This act shall take effect upon its passage.

As Amended  
by the Senate

**SB 309-FN- FISCAL NOTE**  
 AS AMENDED BY THE SENATE (AMENDMENT #2018-0973s)

AN ACT relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

FISCAL IMPACT:     State             County             Local             None

STATE:	Estimated Increase / (Decrease)			
	FY 2019	FY 2020	FY 2021	FY 2022
Appropriation	\$0	\$0	\$0	\$0
Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase
<i>Funding Source:</i>	<input checked="" type="checkbox"/> General	<input type="checkbox"/> Education	<input type="checkbox"/> Highway	<input type="checkbox"/> Other

COUNTY:

Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase

LOCAL:

Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase

**METHODOLOGY:**

This bill requires the commissioner of the Department of Environmental Services to adopt a state drinking water standard relative to perfluorochemicals (PFCs); establish ambient groundwater quality standards relative to PFCs; and establish surface water quality standards relative to PFCs.

Regarding section 1 of the bill, the Department of Environmental Services indicates there are approximately 4,200 active sources of water for public water systems that will need to be sampled routinely if a Maximum Contaminant Level (MCL) is adopted. The frequency of sampling would be increased or decreased based on previous monitoring results from a given source. Laboratory costs for perfluorinated compounds ranges from \$180 to \$400 per sample. Therefore a single round of sampling for locals, counties and other entities that own or operate public water systems would range from \$756,000 to \$1,680,000 or higher depending on how low the standard is set. The impact on expenditures cannot be determined because the frequency of sampling and the number of water sources exceeding the MCL cannot be determined in

advance. The cost to the Department associated with administering compliance are indeterminable for the same reasons.

Regarding section 2, the Department would need to independently review available research and analyze whether that research warrants revision of ambient groundwater quality standards (AGQS) on an annual basis for perfluorooctanesulfate (PFOS) and perfluorooctanic acid (PFOA). The Department assumes an additional Toxicologist IV, labor grade 29, step 4 position would be necessary, starting on July 1, 2018 with the following estimated costs:

	FY 2019	FY 2020	FY 2021	FY 2022
Salary	\$66,905	\$69,791	\$69,791	\$72,911
Benefits	\$31,484	\$33,289	\$34,614	\$36,573
Total Salary & Benefits:	\$98,389	\$103,080	\$104,405	\$109,484
Other Expenses:				
Current Expenses	\$5,200	\$5,200	\$5,200	\$5,200
Equipment	\$3,926	\$500	\$500	\$500
Office Space	\$3,693	\$3,806	\$3,880	\$3,960
Travel	\$4,500	\$2,750	\$2,750	\$2,750
DoIT Charges, Training and Telecommunications	\$9,112	\$2,064	\$2,064	\$2,064
Total Other Expenses:	\$26,431	\$14,320	\$14,394	\$14,474
<b>Total:</b>	<b>\$124,820</b>	<b>\$117,400</b>	<b>\$118,799</b>	<b>\$123,958</b>

In addition, a potential reduction in the current AGQS for PFOA and PFOS may result in additional indeterminable costs to local and county government entities that hold groundwater discharge or management permits such as those associated with landfills.

Regarding section 3, in order to establish surface water quality standards for PFCs, the Department would need funds to hire a contractor, experienced in PFCs and the EPA's methodologies for developing aquatic life and human health surface water quality criteria. The contractor would review existing literature, including criteria and assumptions used in other states, and develop a report with defensible aquatic life and human health surface water criteria and supporting documentation consistent with EPA methodologies. To accomplish this the Department estimates the cost would exceed \$100,000. For surface water quality standards, the cost to the municipalities could be significant, but indeterminable. Many municipalities operate waste water treatment facilities that discharge treated water to local groundwater or surface waters. Should those surface waters fail to meet surface water quality standards, treatment technologies or industrial pretreatment programs, may need to be developed. For larger facilities, the expense of that treatment could be millions of dollars. In addition, some municipalities have firefighting or fire training facilities which have the potential to cause surface water impairments, the remediation cost for these facilities could be high. For counties, the cost is likely to be lower unless contamination is found to originate from a county facility.

The total costs to the Department and other entities are indeterminable, however at least one

general funded position and funds for a contractor would be necessary as outlined above. In addition, potential costs to local and county governments for treatment, mitigation, and remediation in order to comply with a new MCL, ambient groundwater standard, and surface water quality standard could be significant, but are also indeterminable.

**AGENCIES CONTACTED:**

Department of Environmental Services