LEGISLATIVE COMMITTEE MINUTES

SB309

Bill as Introduced

SB 309-FN - AS INTRODUCED

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

ANALYSIS

This bill:

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

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Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

18-2838
08/10

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

Perfluorochemicals

485:16-e Perfluorochemicals. The commissioner shall, in consultation with the commissioner of the department of health and human services and stakeholders, within 120 days from the effective date of this section, initiate rulemaking to adopt a maximum contaminant limit (MCL) for perfluorooctanesulfonate (PFOS) and perfluorooctanoic acid (PFOA) for public water systems regulated by this chapter. The commissioner shall consider the standards of other states, including the science considered by states with standards lower than those contained in health advisories from the United States Environmental Protection Agency. The commissioner shall adopt MCLs that reasonably protect public health, particularly prenatal and early childhood health, and that are reasonably supported by peer reviewed science and independent or government agency studies, provided no MCL shall exceed that contained in any MCL promulgated by the United States Environmental Protection Agency. The commissioner shall annually review the newest peer reviewed science and independent or government agency studies and undertake rulemaking in order to comply with this paragraph, if necessary.

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

IV. The commissioner shall, in consultation with the commissioner of the department of health and human services and stakeholders, within 120 days from the effective date of this paragraph, determine whether to revise the ambient groundwater quality standards for perfluorooctanesulfonate (PFOS) and perfluorooctanoic acid (PFOA) established in rule in order to comply with this paragraph and shall make public his or her determination. The commissioner shall consider the standards of other states, including the science considered by states with standards lower than those contained in the lifetime health advisory promulgated by the United States Environmental Protection Agency. The commissioner shall adopt standards that reasonably protect public health, particularly prenatal and early childhood health, and that are reasonably supported by peer reviewed science and independent or government agency studies, provided no standard shall exceed that contained in any standard promulgated by the United States Environmental Protection Agency. If the commissioner determines that the standard should be

changed, the commissioner shall initiate rulemaking within 60 days of making the determination. The commissioner shall annually review the newest peer reviewed science and independent or government agency studies and undertake rulemaking in order to comply with this paragraph, if necessary.

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

II-b. The commissioner shall, in consultation with stakeholders, within 120 days from the effective date of this paragraph, establish a surface water quality standard for perfluorooctanesulfonate (PFOS) and perfluorooctanoic acid (PFOA) in Class A and Class B waters. The commissioner shall consider the standards of other states. The commissioner shall adopt standards that reasonably protect public health, particularly prenatal and early childhood health, and that are reasonably supported by peer-reviewed science and independent or government agency studies, provided no standard shall exceed that contained in any standard promulgated by the United States Environmental Protection Agency. If the commissioner determines that the standard should be changed, the commissioner shall initiate rulemaking within 60 days of making the determination. The commissioner shall annually review the newest peer-reviewed science and independent or government agency studies and undertake rulemaking in order to comply with this paragraph, if necessary.

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

LBAO
18-2838
12/19/17

SB 309-FN- FISCAL NOTE
AS INTRODUCED

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

FISCAL IMPACT: **[X] State** **[X] County** **[X] 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
Funding Source:	[X] General	[ ] Education	[ ] Highway	[ ] 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
Total:	**$124,820**	**$117,400**	**$118,799**	**$123,958**

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

SB 309-FN - AS AMENDED BY THE SENATE

03/08/2018 0973s

2018 SESSION

18-2838
08/10

SENATE BILL ***309-FN***

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COMMITTEE: Energy and Natural Resources OTP/A 5-0

ANALYSIS

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LBAO
18-2838
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AGENCIES CONTACTED:

Department of Environmental Services

Amendments

Sen. Innis, Dist 24
March 5, 2018
2018-0935s
08/03

Amendment to SB 309-FN

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

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

Perfluorochemicals

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

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

Energy and Natural Resources
March 6, 2018
2018-0973s
08/03

Amendment to SB 309-FN

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

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Perfluorochemicals

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

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Committee Minutes

Senate Energy and Natural Resources Committee

Griffin Roberge 271-2878

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

Hearing Date: January 23, 2018.

Time Opened: 11:54 a.m. **Time Closed:** 12:25 p.m.

Members of the Committee Present: Senators Avard, Bradley, Innis, Fuller Clark and Feltes.

Members of the Committee Absent: None.

Bill 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.

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	

Who supports the bill: Senator Dan Innis (District 24), Senator Sharon Carson (District 14), Senator Kevin Avard (District 12), Senator Regina Birdsell (District 19), Senator Ruth Ward (District 8), Representative Jim McConnell (Cheshire - District 12), Representative Marjorie Shepardson (Cheshire - District 10), Representative Suzanne Smith (Grafton - District 8), Representative Mindi Messmer (Rockingham - District 24), Patricia Martin, Tom Irwin (Conservation Law Foundation).

Who opposes the bill: Sarah Pillsbury (DES), Stefanie Lamb (BIA), Barbara Reid (NH Municipal Association).

Who is neutral on the bill: None.

Summary of testimony presented in support:

Senator Dan Innis
Senate District 24

- SB 309-FN is a reintroduction of HB 463 (2017), which failed in a committee of conference because it did not have a fiscal note.
- SB 309-FN requires the DES to set a MCL on PFOA and PFOS in public water supplies. It requires the DES to review what other states have done and to use peer-reviewed science to create to a standard.
- The bill provides for an annual review of the standard, allowing the standard to change. For example, the EPA once had an MCL of 700 parts per trillion (ppt) that is now 70 ppt.
- The fiscal note states that it costs $180-$400 per test per source in the state. There are 4,200 sites in the state. The overall cost may be high, but the cost to communities per well is low.
- Senator Fuller Clark asked if SB 309-FN is an important companion bill to her bill, SB 454. Senator Innis argued that one cannot be done without the other. There needs to be an appropriate standard and a continued monitoring of the growing science on the standard.
- Senator Fuller Clark said a main component of SB 309-FN is the annual review of current science on the issue of PFCs. SB 454 places a longer time line for DES to make a standard and initiate rulemaking. She asked if Senator Innis would have an opinion on adding other PFCs. Senator Innis said he did not have an opinion on that and would leave it to other testimony to address that issue.

Representative Mindi Messmer - provided written testimony
Rockingham - District 24

- Other states have sought to create more strict standards on PFCs.
- SB 309 would have DES initiate rulemaking to create standard for drinking water, surface water, and ambient groundwater.
- SB 309 should be amended to include the PFCs (PFNA and PFHxS) outlined in SB 454.
- In regards to opposing testimony, Vermont has set a lower standard and was challenged in court by Saint-Gobain. The state should not be getting concerned so much with legal proceedings. It should be focused on the public health. Coming to some agreement on a standard for a set of PFCs would be a great step. There is a cancer cluster in the Seacoast area where PFCs levels are high.
- Senator Fuller Clark said the EPA has set standards for drinking water, but no standards for surface water. She asked Representative Messmer to comment. Representative Messmer said water in the state is mostly derived from bedrock wells, which comes from surface water. Surface water is interconnected to drinking water. Many people on the Seacoast have bedrock wells. Looking at surface water in the state makes sense.

Tom Irwin
Director, New Hampshire Conservation Law Foundation

- Recommends bringing PFNA and PFHxS from SB 454 to SB 309. Many of the objections to SB 454 is that the MCL would be set in statute, removing it from DES's jurisdiction. The process in SB 309 makes sense and provides important guidance to DES.
- There should be a public comment period within the process of DES reviewing the standards.
- With respect to surface water quality, there have been samples in the Great Bay that record high levels of PFCs. DES has notified local legislators to inform them that the Coakley Landfill is a primary cause of these PFCs. However, in meetings with DES, DES states that they do not have a regulatory tool to set a surface water quality standard. SB 309 will offer policy guidance to the DES to set such a standard.
    - Senator Avard noted DES testimony where it was stated that DES cannot use a standard that is less protective of the EPA's standard. Thus, if the EPA does not have a surface water standard, DES cannot get any less protective.
    - Mr. Irwin argued DES can get more protective than the EPA, but DES cannot get less protective than the EPA. Taking the step to get more protective than the EPA on

surface water would not jeopardize the state's role under the Clean Water Act.

- There is a role for the legislature to play in giving the DES some guidance in setting up standards for drinking water, surface water, and ambient groundwater.

Summary of testimony presented in opposition:

Stefanie Lamb
Vice President of Public Policy, Business & Industry Association (BIA)

- There is language in SB 309 that raises concern with the phrase "reasonably protect" and "reasonably supported." This language is broad on how to define "reasonable."
- The water quality standard should be based on sound science and methodology. DES does not currently have a criteria for setting up a standard.

Barbara Reid - provided written testimony
Government Finance Advisor, NH Municipal Association

- DES is the appropriate body to set a standard on water quality for PFCs. However, there is great financial uncertainty with SB 309. A fiscal note prepared by DES states the additional costs to municipalities, while indeterminate, could be "significant" and cost "millions of dollars." There should be a risk-benefit analysis.
- Limited local resources may not be able to keep up with these proposed standards. There is a prohibition of unfunded mandates in the state constitution.
- Senator Fuller Clark asked about NHMA's concerns of health care costs going forward if a standard is not created. Ms. Reid stated that the NHMA is concerned about societal costs as well. Other options should be explored to address water quality. She referenced the NH Drinking Water and Groundwater Trust Fund that can address water issues in the state.

Sarah Pillsbury - provided written testimony
Drinking Water and Groundwater Bureau Administrator, DES

- While appreciative of SB 309's intent, DES is supportive of HB 485 and HB 1101. These bills accomplish the same goals for AGQSs and MCLs as SB 309. The HBs set and/or revise MCLs and AGQSs for PFOA and PFOS, as well as PFNA and PFHxS, by the end of 2018.
    - HB 485 and HB 1101 will allow DES to review CDC studies on the PFCs.
    - Two new positions will be established to perform analysis of the science and the NH Safe Drinking Water Act would be amended to specify the other important considerations that are needed to set MCLs using methodology that is consistent with other states and the EPA.
- SB 309 also goes further in looking to establish a standard for surface water. If SB 309 passed, NH would be the first state to have its own surface water quality standard and would need approval from the EPA. The EPA does not have its own standard for surface water.
    - HB 1590 has a similar objective. Significant research would be required to identify if the science and studies exist to set surface water standards. Due to the Clean Water Act, NH must closely abide by EPA standards and get their approval for any changes.
- SB 309 does not contain all the components needed to establish the surface water, drinking water, and ambient groundwater standards (AGQSs), such as: the use of the best peer-reviewed science available to establish health based criteria, a full understanding of the impact and practicality of setting the standards, and the resources and time for needed analysis.
- SB 309 also fails to align the process for setting a maximum contaminant limit (MCL) with other states and the EPA.
- Senator Avard asked if a new standard could be challenged in court. Ms. Pillsbury said it could. That is a reason why the standard should be set in accordance with federal and state laws.
- Senator Avard said surface water can also be contaminated from the air. Ms. Pillsbury said many cities emit pollutants that can carry all the way to NH.

Neutral Information Presented: None.

Future Action: Pending.

GJR
Date Hearing Report completed: January 23, 2018.

Speakers

Senate Energy & Natural Resources Committee
SIGN-IN SHEET

Date: Tuesday, January 23rd, 2018 **Time:** 10:00 a.m.

SB 309-FN AN ACT relative to standards for perfluorochemicals in drinking water, ambient groundwater, and surface water.

Name/Representing *(please print neatly)*

SENATOR SHARON CARSON SD #14	Support ☒	Oppose ☐	Speaking?	Yes ☐	No ☒
Sen Kevin Avard SD #12	Support ☑	Oppose ☐	Speaking?	Yes ☑	No ☒ Opp.
Sen Regina Birdsell SD #19	Support ☑	Oppose ☐	Speaking?	Yes ☐	No ☑
Sen Russ Ward SD #8	Support ☑	Oppose ☐	Speaking?	Yes ☐	No ☐
Rep. Jim McConnell Chesterfield	Support ☒	Oppose ☐	Speaking?	Yes ☐	No ☒
Senator Dan Innis	Support ☑	Oppose ☐	Speaking?	Yes ☑	No ☐
Rep. Marge Shepardson	Support ☑	Oppose ☐	Speaking?	Yes ☐	No ☑
Rep Suzanne Smith	Support ☒	Oppose ☐	Speaking?	Yes ☐	No ☐
Rep Mindi Messmer Rock 24	Support ☒	Oppose ☐	Speaking?	Yes ☒	No ☐
Patricia Martin self	Support ☒	Oppose ☐	Speaking?	Yes ☐	No ☒
STEFANIE LAMB BUSINESS + Industry Assoc	Support ☐	Oppose ☒	Speaking?	Yes ☒	No ☐
Tom Irwin, Conservation Law Foundation	Support ☑	Oppose ☐	Speaking?	Yes ☑	No ☐
Sarah Pillsbury, NHDES	Support ☐	Oppose ☑	Speaking?	Yes ☑	No ☐
Russell Reid NHMA	Support ☐	Oppose ☒	Speaking?	Yes ☒	No ☐
	Support ☐	Oppose ☐	Speaking?	Yes ☐	No ☐
	Support ☐	Oppose ☐	Speaking?	Yes ☐	No ☐
	Support ☐	Oppose ☐	Speaking?	Yes ☐	No ☐
	Support ☐	Oppose ☐	Speaking?	Yes ☐	No ☐
	Support ☐	Oppose ☐	Speaking?	Yes ☐	No ☐
	Support ☐	Oppose ☐	Speaking?	Yes ☐	No ☐

Testimony

NHMA
NEW HAMPSHIRE MUNICIPAL ASSOCIATION
EST. 1941

January 23, 2018

Senate Energy and Natural Resources Committee
State House Room 103
Concord, New Hampshire 03301

Re: SB 309

Dear Senator Avard and Committee Members:

I am writing on behalf of the New Hampshire Municipal Association (NHMA) to convey our concerns regarding SB 309. As you know, there are a plethora of bills this session which seek to delegate rulemaking authority to the Department of Environmental Services (DES) concerning the subject of drinking water and groundwater quality standards.

While we are aware that this committee deals with policy matters and not financial matters, it is clear that the policy choices and recommendations you make will have a fiscal impact that must be considered during your deliberations and decision-making. The risk-benefit analysis undertaken when considering a directive to DES to conduct rulemaking, which will impose new and likely more stringent standards on many, including municipalities, must start at the policy level.

We are very concerned with the financial uncertainty associated with SB 309. As stated in the fiscal note prepared by DES, the additional costs to municipalities while indeterminable, could be "significant" and "millions of dollars".

NHMA members support a clean and healthy environment for the State of New Hampshire, but local resources are not unlimited. NHMA members also support the prohibition against unfunded mandates found in Part I, Article 28-a of the New Hampshire Constitution. New, expanded, or modified programs or responsibilities that necessitate additional local expenditures by the municipality cannot be imposed—either by legislation or by rulemaking—unless the cost is fully funded by the state or the municipality has a choice in funding the cost. Part I, Article 28-a, New Hampshire Constitution, RSA 541-A:25-27.

Thank you for your consideration and please do not hesitate to contact us if you have any questions.

Sincerely,

Barbara T. Reid
NHMA Government Finance Advisor

NEW HAMPSHIRE MUNICIPAL ASSOCIATION
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NHMAinfo@nhmunicipal.org • governmentaffairs@nhmunicipal.org • legalinquiries@nhmunicipal.org
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The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

January 23, 2018

The Honorable Kevin Avard
Chair, Senate Energy and Natural Resources Committee
State House, Room 100
Concord, NH 03301

RE: SB 309-F, An Act relative to standards for perfluorinated chemicals in drinking water, ambient groundwater and surface water.

Dear Chair Avard and Members of the Committee:

Thank you for the opportunity to testify on SB 309-FN. Within 180 days of the bill's passage, the NH Department of Environmental Services (NHDES) would be required to:

1. Review the current Ambient Ground Water Standards (AGQSs) for perfluorooctanoic acid (PFOA), perfluoroctanesulfonic acid (PFOS)and, if warranted, initiate rulemaking to revise the AGQSs within 60 days;
2. Initiate rulemaking to establish new public drinking water standard (i.e. maximum contaminant levels or MCLs) for PFOA and PFOS;
3. Establish new surface water quality standards for PFOA and PFOS; and
4. Consider the appropriateness of all three standards annually.

NHDES appreciates the intent of this bill which is to protect public health and is supportive of related bills (HB 485 and HB 1101). However, we cannot support SB 309 because we do not believe it contains all of the components needed to establish these standards. Namely, the use of the best peer-reviewed science available to establish health based criteria, a full understanding of the impact and practicality of setting the standard, and the resources and time for needed analysis. SB 309 also fails to align the process for setting maximum contaminant limits for public drinking water systems with that of other states and the United States Environmental Protection Agency (USEPA). A further explanation for each type of standard follows:

Ambient Ground Water Quality Standards (AGQSs): This type of standard is generally used for contaminated site remediation and to set appropriate permit limits for groundwater discharges. In 2016, NHDES adopted a combined standard of 70 ppt for PFOA and PFOS based on a health advisory set by the USEPA. It did so after review of other states' standards. NHDES has continued to review any new science or analysis related to these chemicals. By summer of 2018, the Centers for Disease Control and Prevention (CDC) will release Toxicological Profiles that will establish Minimal Risk Levels for PFOA and PFOS, as well as PFNA and PFHxS, all of which have been found in New Hampshire's water. This will greatly

inform what the AGQS should be for all of these chemicals. NHDES believes that the review and possible revision of the current standard should wait for this research.

MCLs for Public Drinking Water Systems: MCLs are set for over 100 contaminants that may occur in public drinking water which can negatively affect health. These chemicals are then required to be periodically sampled for and treatment is required, if necessary, to achieve compliance with this standard. It is important to understand that, unlike AGQSs, where the costs are generally paid by people responsible for contamination, it is largely municipal government and rate payers that bear the cost burden of compliance with MCLs.

NHDES has been reluctant to set MCLs for PFAS chemicals to date as we do not believe it is appropriate to set such standards using 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 government entities and rate payers that will result from establishing the standard. This silence is due to the fact that NH, like most states, has historically relied on USEPA to establish MCLs which the state then adopts. In the case of PFOA and PFOS, NHDES believes that once the CDC Toxicological Profiles have been released, qualified staff would have enough information to make recommendations for well-balanced, health-based public drinking water standards for these compounds. We note that HB 485 and an amendment to HB1101 would provide NHDES with a toxicologist and a risk assessor, both of which are needed for NHDES to set and review health-based standards. In addition, HB 1101 would add language to NH's Safe Drinking Water Act 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 and PFOS and future contaminants.

Surface Water Quality Standards: Surface water quality standards are used to set permit limits for all discharges to surface water and to make determinations on the health and need for restoration of New Hampshire's wetlands, lakes and rivers. Like MCLs, NHDES relies on EPA to create its standards and would need significant resources to do otherwise. This would be the first state based surface water quality standard and would need approval by USEPA. HB 1590 is another bill this session that also requires NHDES to set standards for PFAS chemicals. The NHDES letter of testimony on HB 1590 is attached which provides details in setting surface water standards. In general, significant research would be required to identify if the science and studies exist to set surface water standards and the consequences of this action would need to be fully examined.

In summary, while NHDES does not support SB 309, we are in support of two related bills: HB 485 and what we believe will be an amendment to HB 1101. These bills together accomplish the same goals for AGQSs and MCLs for PFOA and PFOS as SB 309. Specifically, NHDES will set and/or revise drinking water and ambient groundwater standards for PFOA and PFOS (and PFNA and PFHxS) by the end of 2018. This will allow the new CDC toxicological profiles to be

reviewed. Also, two new positions at NHDES would be established to perform analysis of the science and the NH Safe Drinking Water Act would be amended to specify the other important considerations that are needed to set MCLs using methodology consistent with other states and USEPA. Finally, while NHDES understands the desire for NH surface water standards for PFOA and PFOS, it will take significant resources and time to create the first NH-derived surface water standard.

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 or 271-1168).

Sincerely,

Robert R. Scott
Commissioner

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

The State of New Hampshire
Department of Environmental Services

NHDES

Robert R. Scott, Commissioner

January 11, 2018

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

RE: HB 1590, *AN ACT relative to standards for perfluorinated chemicals in surface water*

Dear Chair Christensen and Members of the Committee:

Thank you for the opportunity to comment on HB 1590. This bill would require the New Hampshire Department of Environmental Services (NHDES) to initiate rulemaking within 120 days to adopt surface water quality standards for four [perflourinated] poly- and perfluoroalkyl substances [chemicals] (PFAS). NHDES agrees that such standards would be desirable because unregulated discharges of PFAS to surface water are occurring in New Hampshire near some landfills, stormwater associated with contaminated sites, and at most municipal wastewater treatment facilities. However, resource constraints would make it impossible to carry out the requirement within the required timeframe proposed in the bill and without additional resources.

NHDES presently has numeric surface water quality criteria for a multitude of conditions and contaminants, from dissolved oxygen to toxic chemicals. These numeric criteria, as described in Env-Wq 1700, are one aspect of the surface water quality standards. The other two components are designated uses (e.g., protection of aquatic life, swimming, fishing), and antidegradation. This bill would require NHDES to set new surface water quality criteria for PFAS. This represents a significant challenge in a number of ways. First, there currently exists no EPA guidance for establishing PFAS criteria in surface waters. NHDES has never adopted a toxic standard that was not thoroughly vetted through the EPA Clean Water Act Section 304(a) guidance process.

Second, the bill specifically calls on NHDES to "consider the standards of other states, including the science considered by states which have adopted surface water contaminant standards." Given the rapid advancement of science on the issue of PFAS contamination, NHDES should use all the scientific research that is currently available. Some states, such as Michigan, developed their standards 10 years ago, without the advantage of new research. In addition, it is not clear that underlying water quality

conditions in other states are similar to those in New Hampshire. This is especially important relative to standards for aquatic life use because basic water chemistry (pH, alkalinity, hardness, etc.) may strongly influence the bioavailability and toxic effects of a contaminant. Additionally, the sensitive organisms in one part of the country may be quite different than those in the northeast.

Next, NHDES does not have the resources to develop new criteria. As noted above, NHDES has never created a toxic criterion from scratch. An example of the complexity of such an endeavor is the most recent 304(a) guidance for cadmium which includes documented effects on 101 freshwater species and 94 saltwater species. In order to create surface water quality standards for PFAS, the department would require funds to hire a contractor who is experienced in EPA 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 then develop a report with defensible aquatic life and human health surface water criteria and supporting documentation that are consistent with EPA methodologies and regulations. It may also be beneficial to conduct local studies to corroborate work from elsewhere. The cost of such an effort is likely to be in excess of $100,000. Further, even if funds were made available, a competitive procurement process and the necessary work could not be completed within 120 days.

The timeframe in the bill is also too rapid for adequate public input. It has been the practice of NHDES to vet all proposed rulemaking of this type through the Water Quality Standards Advisory Committee (WQSAC), which is made up of experts in water quality and includes a diverse group of stakeholders. Typically, an informal discussion phase precedes formal rulemaking. We have found that the WQSAC is extremely useful in both ensuring the quality of science as well as considering the ramifications of proposed changes. It is important to understand the ramifications of a new standard. The cost to municipalities and other stakeholders could be large, in the event that treatment technologies, industrial pretreatment programs, or remediation efforts may be required.

Finally, given the need for resources to develop surface water quality standards and the potential financial impact on both the state and municipalities, NHDES believes that this bill should include a fiscal note.

Thank you again for the opportunity to comment on this proposed legislation. If you have questions or need additional information, please contact me, at 271-3449 or

robert.scott@des.nh.gov, or Ted Diers, Watershed Management Bureau Administrator at ted.diers@des.nh.gov or 271-3289.

Sincerely,

Robert R. Scott
Commissioner

cc: Representatives Messmer, Cushing, Edgar, McConnell, Smith, Le and Senator Fuller-Clark

Perfluorochemicals (PFCs) and Health

Also referred to as Perfluoroalkyl Substances (PFAS)

PFCs are a family of manmade chemicals used for decades to make products that resist heat, oil, stains, grease and water. PFCs are extremely stable and do not breakdown in the environment. Common uses include 1) nonstick cookware; 2) stain-resistant carpets and fabrics; 3) coatings on some food packaging (especially microwave popcorn bags and fast food wrappers); 4) components of fire-fighting foam; and 5) many industrial applications.

Our understanding of and ability to detect PFCs in the environment has evolved since Minnesota Pollution Control Agency (MPCA) and Minnesota Department of Health (MDH) began investigating them in 2002. Laboratories at that time could not detect very low concentrations of PFCs and the science suggested that exposure to very small amounts of PFCs was not a health concern. We now are able to measure PFCs in extremely small amounts (parts per trillion in water) and newer studies suggest long-term exposure in this range might affect the health of the most vulnerable members of the population.

What do we know about PFCs in the environment?

In the environment: PFCs have been released to the environment through spills and disposal. Because PFCs are so stable, they may be found in soil, sediments, water or other places. Some PFCs travel through soil and easily enter groundwater where they may move long distances. Some experts suggest PFCs can also travel long distances in air. For information about where PFCs have been found in Minnesota, see the MPCA webpage: Perfluorochemicals (https://www.pca.state.mn.us/waste/perfluorochemicals-pfcs).

In wildlife: PFCs have been found in wildlife around the world, including fish, bald eagles and mink in the mid-western United States. One PFC (PFOS) can accumulate to levels of concern in fish. Most fish have low levels of PFOS. However, fish in some lakes have levels of PFOS that require restrictive fish consumption advice of only one meal of fish per month. For information about PFOS and fish consumption guidelines, visit the MDH Fish Consumption Guidance webpage: Site-Specific Meal Advice (http://www.health.state.mn.us/divs/eh/fish/eating/sitespecific.html)

In Minnesota lakes and rivers: PFCs may be present in lakes and rivers at very low levels. Exposure through swimming is not of concern. PFCs are poorly absorbed through skin and incidental ingestion of surface water while swimming will not result in a significant exposure. Breathing them in while swimming or bathing is not a health concern because there is very little evaporation of PFCs from water into the air.<

In people: Studies show nearly all people have some PFCs in their blood, regardless of their age. The PFCs most commonly found in blood are PFOS, PFOA, and PFHxS. People are exposed through food, water, dust or from using consumer products. Some PFCs can build up and stay in the body for many years, but they can slowly decline if the exposure source is removed. For information about studies by MDH that measured PFCs in the blood of East Metro residents, visit the MDH webpage: East Metro PFC Biomonitoring Follow-up Project (http://www.health.state.mn.us/tracking/biomonitoring/projects/eastmetropfc.html).

Are PFCs harmful to people?

Scientists are still studying whether PFCs cause health problems. Researchers have found links between PFCs and some human health outcomes. In some studies, higher levels of PFCs in a person's body were associated with higher cholesterol, changes to liver function, reduced immune response, thyroid disease, and kidney and testicular cancer. However, more work needs to be done to determine if PFCs cause health outcomes or if they are due to other factors. Studies of workers exposed to PFCs on the job have not found consistent evidence that these chemicals cause health problems.

In laboratory animal studies, effects of PFC exposure included developmental changes such as delayed bone growth, delayed mammary gland development, and accelerated male sexual development. Other effects of exposure included decreased body weight, increased kidney weight, changes to the liver, reduced immune response, and decreased thyroid hormone levels.

Recent studies indicate exposure to PFOA and PFOS could present a possible risk for developing fetuses and infants. Long-term exposure to PFOA and PFOS leads to accumulation of these chemicals in people. Accumulation in women of child-bearing age can result in exposure to the fetus and to breastfed infants. Breastfeeding is important for the short and long-term health of both a mother and infant. MDH recommends that women currently breastfeeding, and pregnant women who plan to breastfeed, continue to do so.

Bottle-fed infants are also of concern because they drink more water for their body weight compared to older children and adults.

How does MDH protect Minnesotan's drinking water?

MDH is responsible for ensuring safe drinking water for all Minnesotans. One way MDH does this is through regular testing of public water supplies for contaminants. MDH also works with the MPCA to investigate situations where groundwater contaminants may affect private wells.

In addition, MDH develops health-based guidance for drinking water contaminants. The guidance can be in the form of Health-Based Values (HBVs) or Health Risk Limits (HRLs). Visit the MDH webpage for information about Guidance Values and Standards for Contaminants in Drinking Water (http://www.health.state.mn.us/divs/eh/risk/guidance/gw/). MDH provides guidance for evaluating the safety of a mixture of chemicals that are found in groundwater. For more information, visit the MDH webpage: Evaluating Concurrent Exposures to Multiple Chemicals (http://www.health.state.mn.us/divs/eh/risk/guidance/gw/additivity.html).

Minnesota's public water systems can use MDH health-based guidance as goals, benchmarks, or indicators of potential concern. Some public water suppliers may strive to meet health-based guidance for contaminants for which it is possible and cost effective.

MDH continues to monitor the growing body of science about PFCs and will adjust our health advice if further evidence suggests additional protection is needed in the future.

What levels of PFCs are safe to drink?

Because PFCs are known to be in the environment in Minnesota, MDH has developed drinking water guidance values for several PFCs to represent levels of chemicals in drinking water that MDH considers safe for people, including sensitive populations. The table below provides basic information about these values. More information for each PFC is on the MDH webpage: Human Health-Based Water Guidance Table (http://www.health.state.mn.us/divs/eh/risk/guidance/gw/table.html).

In May 2017, MDH released revised guidance values for PFOA and PFOS. The guidance values apply to short periods of time (i.e., weeks to months) during pregnancy and breastfeeding, as well as over a lifetime of exposure. The revision is based on the understanding that PFOA and PFOS stay in the human body for years and can increase with additional exposures, and can cross the placenta and are secreted in breastmilk.

FCs Detected in Minnesota	Drinking Water Guidance Value parts per billion (ppb or µg/L)	Year Value Established
perfluorooctane sulfonate (PFOS) (PDF) (http://www.health.state.mn.us/divs/eh/risk/guidance/gw/pfos.pdf)	0.027 ppb (27 parts per trillion [ppt])	2017[1]
perfluorooctanoic acid (PFOA) (PDF) (http://www.health.state.mn.us/divs/eh/risk/guidance/gw/pfoa.pdf)	0.035 ppb (35 parts per trillion [ppt])	2017[1]
perfluorobutane sulfonate (PFBS) (PDF) (http://www.health.state.mn.us/divs/eh/risk/guidance/gw/pfbs.pdf)	7 ppb	2011
perfluorobutanoic acid (PFBA) (PDF) (http://www.health.state.mn.us/divs/eh/risk/guidance/gw/pfba.pdf)	7 ppb	2011
perfluorohexane sulfonate (PFHxS) (PDF) (http://www.health.state.mn.us/divs/eh/risk/guidance/gw/pfhxs.pdf)	Not established[2]	NA
erfluorohexanoic acid (PFHxA)	Not established[3]	NA
perfluoropentanoic acid (PFPeA)	Not established[3]	NA

1 Previous MDH guidance for PFOS and PFOA were established in 2009.
2 MDH recommends using the health based value for PFOS (27 ppt) as a surrogate for PFHxS until more toxicological research on PFHxS is available. PFHxS remains in the body longer than PFOS and appears to be similar in toxicity.
3 Due to limited toxicological research, there is not enough scientific information to develop a guidance value.

Water with PFC levels above MDH guidance values is safe for bathing, showering or washing clothes and cleaning. To protect infants and young children who could be exposed in utero and early in life, water should not be used for drinking or cooking.

How can I reduce my exposures to PFCs?

PFCs are in people and animals all over the world. They are found in some food products and in the environment (air, water, soil, etc.). Completely stopping exposure to PFCs is unlikely. You can take the following steps to reduce your exposure to PFCs:

If you live near sources of drinking water contaminated with PFCs

everse osmosis and activated carbon filter treatment systems can reduce the levels of PFCs in drinking water. MDH nas information about inexpensive and easy to use systems you can install in your home to reduce your exposure to PFCs through drinking water. You may choose to use bottled water for drinking and cooking for a short time, but long-

term bottled water use will be more expensive than installing a treatment system. Information can be found on the following MDH webpages:

- Water Treatment Using Carbon Filters: GAC Filter Information (http://www.health.state.mn.us/divs/eh/hazardous/topics/gac.html)
- Home Water Treatment Units: Point-of-Use Devices (http://www.health.state.mn.us/divs/eh/water/factsheet/com/pou.html)
- Evaluation of Perfluorochemical Removal by a Small, Point-of-Use Filter (PDF) (http://www.health.state.mn.us/divs/eh/hazardous/topics/pfcs/poueval.pdf)

Breastfeeding is important for the short and long-term health of both a mother and infant. MDH recommends that women currently breastfeeding, and pregnant women who plan to breastfeed, continue to do so.

- If your drinking water comes from a private well, and you are breastfeeding or preparing infant formula, you may want to consider using filtered tap water or bottled water until a treatment systems is installed. More information about faucet filters and treatment systems can be found on the MDH webpage: Perfluorochemicals (PFCs) and Home Treatment (http://www.health.state.mn.us/divs/eh/hazardous/topics/pfcs/wateranalysis.html).
- If your drinking water comes from a public drinking water system, tap water can be used for cooking or drinking or preparation of infant formula. All affected community public drinking water systems have put in place interim measures that will provide drinking water at or below the new MDH health-based guidance.
- More information about breastfeeding is found on the MDH webpage: Breastfeeding (http://www.health.state.mn.us/divs/fh/wic/bf/index.html)

You can be exposed to PFCs through the food you eat.

For example, PFOS and PFOA can be present on crops due to environmental contamination and some food packaging may transfer PFOS to food items. PFOS may also be present in the fish people catch and eat. Fish Consumption Guidance for fish caught in areas affected by PFOS can be found on the MDH webpage: Site-Specific Meal Advice (http://www.health.state.mn.us/divs/eh/fish/eating/sitespecific.html).

House Dust and PFCs

Interior sources of PFCs (e.g., consumer products) contribute most to PFCs in house dust. Ingestion of PFC-containing household dust can be a significant route of exposure, especially for infants and young children. Keeping floors and other surfaces free of dust will limit exposure. For more information, see the MDH webpage: Perfluorochemicals in Homes and Gardens Study Summary (PDF).
(http://www.health.state.mn.us/divs/eh/hazardous/topics/pfcs/pihgssumm.pdf)

Printable Information Sheet

Perfluorochemicals (PFCs) and Health (PDF)
(http://www.health.state.mn.us/divs/eh/hazardous/topics/pfcshealth.pdf)

Contact MDH

Minnesota Department of Health
Site Assessment and Consultation Unit PO Box 64975,
St. Paul, MN (zip) 55164-0975
(phone) 651-201-4897 or toll-free 1-800-657-3908
health.hazard@state.mn.us
www.health.state.mn.us (http://www.health.state.mn.us/)

Updated Thursday, June 29, 2017 at 01:54PM

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nebra
North East Biosolids & Residuals Association
Cooperatively promoting the environmentally sound recycling of biosolids and other residuals

Energy and Natural Resources Committee
NH Senate
Concord, NH 03301

January 30, 2018

Re: Senate Bill 309

Dear Chairman Avard, Senator Bradley, and Members of the Committee,

Thank you for the opportunity to comment on this bill and matters related to poly- and perfluorinated substances (PFAS) in New Hampshire waters. PFAS are a significant concern, and those of us in the water quality profession are taking proactive measures to address them using the best available science. However, looked at objectively, PFAS is not the greatest threat to public health facing New Hampshire, despite the sheer number of PFAS bills the Legislature is considering.

With regards to the PFAS bills, including SB 309, which push DES and water management systems to adopt and meet certain standards, we note the following facts:

- There is much uncertainty and limited data for risk assessments to establish standards for all PFAS, although there is getting to be ample data on the fate and transport of PFOA and PFOS, the two chemicals of most concern.
- For example, there is no EPA-approve or consensus method for analyzing PFAS in any matrix other than drinking water! Thus, while past and current testing for PFAS is useful for screening purposes and advancing understanding, the results are not defensible and cannot be used for regulatory compliance. How can DES establish standards for which compliance cannot be demonstrated?
- PFOA and PFOS have been mostly phased out in the U. S., the EU, and Canada. Already, over the past 15 years, PFOA and PFOS levels in human blood have declined 60% (CDC NHANES, 2015). In other words, U.S. human exposure is already way down. That alone is improving public health protection dramatically.
- Most other states are not jumping ahead on setting standards; very few have done so. All are working appropriately to address high-contamination sites.
- These bills distract from DES's ongoing good work addressing the hotspots of PFOA and PFOS contamination (industrial, military, and landfill sites).
- DES is using the 70 ppt as a groundwater standard and a *de facto* standard for other waters now, already. That is working. Let them continue their ongoing efforts.
- We all have many other exposures to PFAS chemicals. Are those exposures being addressed?
- The cost implications to localities of setting additional standards are significant and need to be considered. How much will spending money on this improve public health? *We have no idea.* In contrast, we do know spending money on some other public health threats will have large impacts.
- If the Legislature is so concerned about various PFAS, why is no one talking about banning their use? That would be the only way to ensure they are kept out of the environment.

- Having the Legislature dictate which emerging contaminants should be regulated and when and how is not an appropriate approach to addressing a highly technical topic with considerable uncertainty and challenging risk analysis.

On behalf of our New Hampshire municipal members, I urge you to consult carefully with water quality professionals and DES on how best to address PFAS going forward. It's time for a thoughtful approach, not battles in hearing rooms. DES and the health department have taken important initial steps to address the most urgent public health concerns related to PFAS, and that work is ongoing. We strongly support that work. Let's consider appropriate next steps, not dictate to DES and municipalities what their priorities and actions should be. There are many perceived risks to water quality and public health, and thoughtful prioritizing of how PFAS fits into the mix is needed.

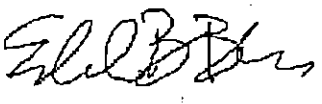
Regarding the specifics of SB 309, we support the parts that provide DES with needed tools: controls on air emissions that affect groundwater quality and establishment of toxicologist and risk assessor positions. Give DES those tools, but don't require standard-setting – especially according to the short timeline dictated by the bill. If you're going to give DES tools, give them time to use them to come up with science-based, defensible standards.

In addition, please consider the following for SB 309:

- In the bill language, provide DES with flexibility to review the full body of science and assess the levels of uncertainty to determine whether or not data is adequate to establish each standard. If data is not adequate, do not require DES to set a standard. Establishing an indefensible standard does harm, sets unrealistic expectations, and can have detrimental unintended consequences.
- Specify clearly that the timeline for considering and adopting any standard, other than one for drinking water, will only begin upon formal promulgation by U. S. EPA of an approved analytical method for PFAS in the matrix for which the state standard is being developed (e.g. groundwater or surface water).

Thank you for this opportunity to share our thoughts.

Sincerely,



Ned Beecher
Executive Director

The North East Biosolids and Residuals Association (NEBRA) is a 501(c)(3) non-profit professional association advancing the environmentally sound and publicly supported recycling of biosolids and other organic residuals in New England, New York, and eastern Canada. NEBRA membership includes the environmental professionals and organizations that produce, treat, test, consult on, and manage most of the region's biosolids and other large volume recyclable organic residuals. NEBRA is funded by membership fees, donations, and project grants. Its Board of Directors are from MA, ME, NH, VT, and Nova Scotia. NEBRA's financial statements and other information are open for public inspection during normal business hours. For more information: http://www.nebiosolids.org.

Voting Sheets

Senate Energy & Natural Resources Committee

EXECUTIVE SESSION RECORD

2018-2019 Session

Bill # SB 309-FN

Hearing date: 01/23/2018

Executive Session date: 03/06/2018

Motion of: OTP 0935s **Vote:** 5-0

Committee Member	Present	Made by	Second	Yes	No
Sen. Avard, Chair	☑	☐	☐	☑	☐
Sen. Bradley, Vice Chair	☑	☐	☐	☑	☐
Sen. Innis	☑	☑	☐	☑	☐
Sen. Fuller Clark	☑	☐	☐	☑	☐
Sen. Feltes	☑	☐	☑	☑	☐

Motion of: OTPA **Vote:** 5-0

Committee Member	Present	Made by	Second	Yes	No
Sen. Avard, Chair	☑	☐	☐	☑	☐
Sen. Bradley, Vice Chair	☑	☐	☐	☑	☐
Sen. Innis	☑	☑	☐	☑	☐
Sen. Fuller Clark	☑	☐	☑	☑	☐
Sen. Feltes	☑	☐	☐	☑	☐

Motion of: ~~Consent~~ **Vote:**

Committee Member	Present	Made by	Second	Yes	No
Sen. Avard, Chair	☐	☐	☐	☐	☐
Sen. Bradley, Vice Chair	☐	☐	☐	☐	☐
Sen. Innis	☐	☐	☐	☐	☐
Sen. Fuller Clark	☐	☐	☐	☐	☐
Sen. Feltes	☐	☐	☐	☐	☐

Reported out by: Innis

Notes:

Committee Report

STATE OF NEW HAMPSHIRE

SENATE

REPORT OF THE COMMITTEE

Tuesday, March 6, 2018

THE COMMITTEE ON Energy and Natural Resources

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, the committee recommends that the Bill

OUGHT TO PASS WITH AMENDMENT

BY A VOTE OF: 5-0

AMENDMENT # 0973s

Senator Daniel Innis
For the Committee

Griffin Roberge 271-2878

ENERGY AND NATURAL RESOURCES

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

Ought to Pass with Amendment, Vote 5-0.

Senator Daniel Innis for the committee.

STATE OF NEW HAMPSHIRE

SENATE

REPORT OF THE COMMITTEE

Monday, March 12, 2018

THE COMMITTEE ON Finance

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, the committee recommends that the Bill

OUGHT TO PASS

BY A VOTE OF: 6-0

Senator Dan Feltes
For the Committee

Deb Martone 271-4980