

Statement of Michael Belliveau, Member
Governor's Task Force on the Threats of PFAS Contamination to Public Health and the
Environment; and Executive Director, Environmental Health Strategy Center

before the Joint Standing Committee on Environment and Natural Resources
Maine State Legislature

regarding "Managing PFAS in Maine: Final Report from the Maine PFAS Task Force"

6 February 2020

Maine faces a growing problem from widespread pollution from the 'forever chemicals' (also known as PFAS or per- and polyfluoroalkyl substances). We applaud the Governor's foresight in establishing a Task Force through one of the first Executive Orders issued.

State agencies have done a remarkable job in their early response to this chemical crisis. I especially want to call out the Maine Department of Environmental Protection (DEP), who under Commissioner Reid has mounted an impressive effort on PFAS with extremely limited resources. Special recognition also goes to Dr. Andrew Smith, state toxicologist at Maine Center for Disease Control and Prevention (CDC). Facing the second-highest PFAS levels in milk ever reported in the world at Stoneridge Farm, Dr. Smith was the first in the nation to determine what constitutes 'adulteration,' which help stopped consumer exposure. Dr. Smith also worked with DEP to develop the first-ever screening standards for PFAS in sewage sludge and compost, which we soon learned were widely being violated.

The work of the Governor's PFAS Task Force can be simply summed up. The Task Force recommendations are strong on clean up and prevention, but weaker on health protection and investigation of farmlands where sludge was past spread in the past. Further, available resources are not commensurate with the scale of this environmental public health threat.

On the strong side, the Task Force united around clear policy recommendations to:

- Authorize the State to clean up and hold responsible parties accountable for uncontrolled sites of PFAS contamination, such as at Stoneridge Farm;
- Require the take-back of old stocks of PFAS-containing fire-fighting foam (Maine should adopt New Hampshire law [Chapter 337, 2019] to address this issue;
- Expand first-time testing of public drinking water for PFAS to include all towns, cities, schools and daycare centers, and notify the public of test results; and
- Find and substitute ongoing uses of PFAS in consumer and commercial products with safer alternatives, building on the food packaging law you passed last year;

While celebrating such clarity of focus, policy makers should be mindful of the need to compensate for three major weaknesses in the Task Force report. These three policy priorities include:

1. DRINKING WATER STANDARDS – Today, some Maine families are drinking water that’s unsafe to serve to the public in New Hampshire, Vermont and Massachusetts because Maine lacks its own standard for PFAS and instead relies on an outdated health advisory from the U.S. Environmental Protection Agency (USEPA).
2. CONTAMINATED FARMLANDS – About 500 sites have been identified in Maine where paper mill sludge and/or sewage sludge was spread as fertilizer in the last forty years, just like at Stoneridge Farm, but no plan exists yet to systematically test and investigate those sites to discover potentially high-level PFAS contamination.
3. FAIRNESS IN CLEAN-UP ACTIONS – Current Maine law requires people like Fred and Laura Stone to initiate legal action within six years of the *occurrence* of PFAS pollution on their farm (which happened to them 35 years ago!), rather than within six years of *discovery* of pollution – the statute of limitations that applies to Maine Department of Environmental Protection in actions against responsible parties.

Why Should We Care about PFAS?

Among the historic legacy of toxic environmental contaminants, PFAS pollution combines the extremely potent toxicity and environmental persistence of dioxins, a hot topic in the 1990’s, with the extreme mobility and widespread groundwater contamination similar to MTBE, a major public concern issue in the 2000’s.

PFAS pose a triple-threat as PMTs (persistent, mobile and toxic chemicals). Many PFAS are extremely persistent or long-lived in the environment, posing hazards for hundreds of years. PFAS continue to be widely used for their stain-proof, grease resistant, and water repellent properties in firefighting foams, food packaging, carpet and rugs, furniture, textiles, waxes and cleaners, personal care products, and other uses. PFAS readily escape from these products during use and disposal, and move rapidly through the air, ground water, and food supply causing widespread local, regional and global contamination.

Similar to dioxin, many PFAS are toxic to human health and wildlife at extremely low doses, raising human health concerns when drinking water and food contain low parts-per-trillion (ppt) levels, and when human tissues and soils contain low parts-per-billion (ppb) levels of some PFAS compounds.

The documented health effects of some PFAS in both human and animal studies include:

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| ✓ Testicular cancer | ✓ Kidney cancer |
| ✓ Thyroid disease | ✓ Ulcerative colitis |
| ✓ Pregnancy-induced hypertension | ✓ Elevated cholesterol |
| ✓ Compromised immune systems | ✓ Reduced fertility |

To make matters worse, PFAS is a large class of structurally related chemicals that includes some 600 commercial products and upwards of 4,700 individual chemical compounds. Only 29 chemical compounds that are PFAS can currently be measured in drinking water

by commercial laboratories. More than half of the PFAS in the environment are unknown fluorinated compounds that have not been even chemically identified yet.

Further, most PFAS have not been adequately tested for health and safety, but our broken federal chemical safety system still allows them to be introduced into commerce, despite indications of similar hazardous properties. Many of the PFAS of serious known concern are actually degradation products of different PFAS chemicals, including polymers (or plastics) that break down in the environment.

Given these facts, and the detection of more and more PFAS everywhere examined, the PFAS pollution issue will continue to grow in scope and require serious, long-term attention from government, industry and the public.

The case for Maine policy action on PFAS in drinking water is summarized below.

DRINKING WATER – All Maine Families Deserve Equal Health Protection

The drinking water of more than two dozen Maine cities, towns, schools, mobile home parks, daycare centers, and neighborhoods with household wells have been contaminated with multiple PFAS. However, the majority of public drinking water systems and nearly all household wells have not yet been tested for PFAS contamination. (See attachment)

Maine has not yet adopted health-protective drinking water safety standards for PFAS. Instead, Maine continues to rely on an outdated and controversial advisory level for just two PFAS chemicals issued by the U.S. Environmental Protection Agency (USEPA) in 2016. Since then, experts at the U.S. Department of Health and Human Services have recommended a ten-fold lowering of the PFAS action level. Maine has ignored their advice.

Based on the most recent science, eight other states have adopted or formally proposed more protective drinking water standards than the USEPA advisory levels. These include a majority of states in the Northeast: New Hampshire, Vermont, Massachusetts, New York, New Jersey, Michigan, Minnesota, and California.

Today, some Maine families are drinking water that's unsafe to serve to the public in neighboring states due to PFAS contamination. (See attachment). These include:

- Several Presque Isle families with household wells near sludge spreading
- Children and staff at the Trenton elementary school
- Other families with household wells near landfills and other contamination sites

The State of Maine is lagging behind other New England and northeastern states in applying the best available science to protect public health from PFAS in drinking water. The Maine Legislature should follow Vermont's lead and adopt interim drinking water standards by statute, providing discretion to Maine CDC to revise these standards later. Vermont's new law (S.49, 2019) provides an excellent model for Maine policymakers.

Some Maine Drinking Water would be UNSAFE to Serve Today in Other States due to PFAS Contamination

NOTE: Only about 10% of Maine’s public drinking water systems have been tested for PFAS, so far. And very few of more than 50,000 household wells, which provide drinking water for the majority of Mainers, have been tested for PFAS

Location	Water System	Population Served	Number of PFAS Detected	Safety Levels Exceeded		Action Taken
				USEPA Advisory	Another State *	
Kennebunk, Wells, Kennebunkport, Arundel	Public	34,250	2	YES - max.	YES	Installed water treatment
				NO - avg.		
Houlton	Mobile homes	140		YES	YES	Bottle water provided
Arundel	Dairy farm	1 family & many cows	2	NO	YES	Installed water treatment
Sanford	Public	14,025	2	NO	YES	Well no longer used
Trenton	Elementary school	?	3	NO	YES	NONE: Water still served
Presque Isle	Household wells	Several families	6	NO	YES	NONE: Water still served
Roxbury	Household wells	1 family	10	NO	YES	?
Corinna	Household wells	?	4	NO	YES	?
Several other towns	Household wells	?	several	NO	YES	?
Lisbon, Lisbon Falls	Public	2,400	5	NO	Just below	NONE: Water still served

* More protective PFAS drinking water standards have been adopted or proposed by eight states so far, including a majority in the Northeast: in New Hampshire, Vermont, Massachusetts, New York, New Jersey, Michigan, Minnesota, and California.

State Action Levels for PFAS in Drinking Water and Ground Water

State	ACTION LEVEL, in parts per trillion (ppt)						Type	Status
	Total PFAS	PFOS	PFOA	PFHxS	PFNA	PFHpA		
NH	-	15	12	18	11	-	Enforceable Standard (MCL)	Adopted July 2019. Stayed by court pending new cost-benefit analysis
VT	20	included	included	included	included	included	Enforceable Standard (law)	Adopted May 2019 by law (S.49); MCLs must also be adopted
MA	20	included	included	included	included	included	Enforceable Standard	Adopted Dec. 2019 (ground water), proposed (as MCLs). Also includes PFDA with the other five.
NY	-	10	10	-	-	-	Enforceable Standard (MCL)	Proposed July 2019
NJ	-	13	14	-	13	-	Enforceable Standard (MCL)	Adopted Sept. 2018 (PFNA); Proposed April 2019 (PFOS, PFOA)
MI	-	16	8	51	6	-	Enforceable Standard (MCL)	Proposed Oct. 2018. Also includes MCLs for PFHxA, PFBS, and GenX
ME	-	70 (combined)		-	-	-	Advisory Level	Based on USEPA Health Advisory Level, <i>not</i> on the more protective USDHHS, ASTDR proposed levels

MCL = Maximum Contaminant Level, a drinking water standard enforceable under the Safe Drinking Water Act

Sources:

NH: <https://www.des.nh.gov/media/pr/2019/20190628-pfas-standards.htm>

VT: <https://www.natlawreview.com/article/vermont-governor-signs-law-setting-strict-pfas-limits>

MA: <https://www.bostonglobe.com/metro/2019/12/13/massachusetts-issues-new-standards-for-forever-chemicals-water-supply/dz25i9Sk92QfiDI5TeSJFL/story.html>

NY: <https://www.governor.ny.gov/news/governor-cuomo-announces-availability-350-million-water-system-upgrades-statewide-and-directs>

NJ: https://www.nj.gov/dep/newsrel/2019/19_0021.htm; <https://www.asdwa.org/2018/09/07/new-jersey-adopts-new-pfas-drinking-water-standard-for-pfna/>

MI: <https://www.michigan.gov/egle/0,9429,7-135--509830--,00.html>