

Testimony in Favor of LD1111, 4/14/25, submitted by Nathan Saunders

Representative

Senator

~~Senator~~ Doudera, distinguished chair, ~~Representative~~ Templer, distinguished Chair, and distinguished members of the ENR committee, my name is Nathan Saunders, and I live on the Howe Road in Fairfield, Maine. Before retiring a few months ago, I worked for the State of Maine as an Environmental Engineer for 22 years, close to 20 of those years working for the Maine Drinking Water Program. With the help of Representative Shelley Rudnicki and Senator Scott Cyrway, I requested this bill that is before the committee. In support of this Bill, I'd like to share with you compelling information describing the extent of PFAS contamination in Fairfield and 15 other communities in central Maine. Over the last few years, the Maine DEP and the Kennebec Sanitary Treatment District (KSTD) have been very helpful to me by providing, on my request, publicly available data on the historical land spreading of wastewater treatment sludge from the KSTD. From 1980 to 1996, 40,027 cu yards of KSTD sludge was spread within ¼ mile of the Howe Rd. Considering an average sized dump truck of 14 cu yards, 40,027 cu yards is equivalent to 2,800 dump truck loads of wastewater treatment sludge spread near my home. As of January 2025, the DEP had tested 2835 drinking water wells in Maine for PFAS. Of the highest 20 PFAS6 measurements in the entire State, 10 of those 20 highest measurements are for wells on or next to the Howe Road in Fairfield; the Howe Road is the most PFAS contaminated road in Maine. In 2023, for 21 wells on or next to the Howe Road, the average PFAS6 level was 12,851 parts per trillion (ppt). That is 642 times Maine's allowable drinking water PFAS level of 20 ppt. Let's move on beyond the Howe Road. How much PFAS contamination is in the Town of Fairfield as a whole? What if we knew how much PFAS was on the ground in Fairfield? To determine this, the DEP provided me with records of the total amount of KSTD sludge that was land-spread in Fairfield from 1980 until 2003, when land spreading of KSTD sludge stopped. It should be noted that the Kennebec Sanitary Treatment District started operating in 1976, and DEP sludge spreading records only go back as far as 1980 for the KSTD. This means that the numbers that I am using for the amount of KSTD sludge spread are conservative, not including the disposal of any sludge generated from 1976 to 1980. In the Town of Fairfield as a whole, there were 149,934 cu yards of KSTD wastewater treatment sludge land-spread between 1980 and 2003. That's 10,700 average sized dump truck loads of sludge spread in the Town of Fairfield alone. From KSTD historical records, we know the density of the sludge in pounds per cu yard, needed for calculation purposes. In the last few years, the DEP tested all fields in Maine spread with KSTD sludge and determined the concentrations of PFOS and PFOA in those soils. Note that the soil tests for PFAS were taken after the fields were exposed to the weather for 20 years. With this data, I calculated that the total amount of PFOS and PFOA on Fairfield soil is 53.4 pounds. That doesn't seem like much, until you consider how much PFOS or PFOA it takes to contaminate one gallon of water. Using the Federally adopted Maximum Contaminant Level

(MCL) of 4 ppt for both PFOS and PFOA in drinking water, it takes only 37 trillionths of a pound of either PFOS or PFOA to contaminate one gallon of drinking water. That's .000,000,000,037 pounds. In other words, the 53.4 pounds of PFOS and PFOA on the ground in Fairfield Maine can contaminate 1.4 trillion gallons of water beyond the federal MCL of 4 ppt. To give some perspective, Moosehead Lake holds 1.37 trillion gallons of water. So, the amount of PFAS on the ground in Fairfield can contaminate enough water to fill Moosehead Lake and then some. If you were to contain 1.4 trillion gallons of water on top of the Town of Fairfield, which is approximately 55 square miles in size, that water would be 125 feet deep. Think of it, 1.4 trillion gallons of PFAS contaminated water, 125 feet deep, sitting on top of Fairfield, slowly draining into the aquifer below ground... it's happening as I speak. Another example... one gallon of water fits in a cube with 6-inch sides. If you line up 1.4 trillion 6-inch cubes of water (or 1.4 trillion gallons of contaminated water), the line will circumnavigate the earth not one time, not a few times, but 5,500 times. And for those of you who like to think in terms of Olympic sized swimming pools, the amount of PFOS and PFOA currently on the ground in Fairfield has the capacity to contaminate enough water to fill 2,121,000 Olympic sized swimming pools. If you lined up those pools, filled with contaminated water, they would circumnavigate the globe 2.6 times. Can you imagine it? All from the PFAS that is laying on the ground in Fairfield today.

Another **very important** point is that **of** the total amount of KSTD sludge that was land-spread, only 51% was spread in Fairfield, and the remaining 49% was spread in 15 other central Maine towns. This means that the PFAS contamination in these 15 communities other than Fairfield has the same potential to contaminate **another** roughly 1.4 trillion gallons of water in Central Maine.

So, where is the PFAS going that is currently on the ground in these communities? The rain comes down and mixes with the PFAS in the fields of these 16 central Maine communities to contaminate the rainwater, and whatever contaminated rainwater does not evaporate or drain into a stream or river, seeps down into the underground drinking water aquifers of these towns.

Here is even another perspective on how contaminated many KSTD sludge spread fields are in Fairfield. It appears to me, based on the EPA criteria for identifying "Superfund" sites, that 41 fields in Fairfield have **exceeded the Federal screening-level-threshold for further investigation as potential** superfund sites. This does not mean that these fields have been, or will be, identified as superfund sites, because decisions on superfund site evaluation and designation in Maine are complex and are made only by the Maine DEP and EPA. Take note though, that one of the criteria for being identified as a superfund site is whether or not the site affects drinking water, and it is very clear that drinking water wells on the Howe Road near

these fields have been highly contaminated with PFAS, and will likely remain contaminated for many years.

As of February 5th of 2025, 203 wells in Fairfield tested greater than 20 ppt PFAS6. Of all towns in Maine, Fairfield has the highest number of wells that exceed Maine's drinking water Maximum Contaminant Level for PFAS, the next highest town being Unity, with 49 wells exceeding. The DEP has done a great job installing hundreds of filtration systems in private homes to remove PFAS contamination in drinking water. However, these hundreds of filtration systems installed in individual homes are a temporary stop gap; each will have to be regularly tested and maintained for 50 to 100 years to deal with the contamination caused by these forever-chemicals. The only viable long-term solution for Fairfield, the most highly PFAS-contaminated town in the state of Maine, for the sake of long-term public health, is providing municipal water to as many affected homes as possible.

About two years ago, an expansion of the Kennebec Water District in Fairfield was proposed to resolve PFAS contamination in drinking water wells and was estimated to cost about 45 million dollars, to be funded by some combination of loans and grants. This bill is asking for 10 million dollars to begin a first phase of extending municipal water in Fairfield to resolve the PFAS contamination of as many highly contaminated drinking water wells as possible with these funds. In addition to the 10 million dollars provided by this bill, an additional 2 M\$ of grant funds may be applied for by the Kennebec Water District, offered by the 2026 Emerging Contaminates Fund administered by the Maine Drinking Water Program. Maine is thankful for the 60 M\$ set aside to address many serious PFAS issues in Maine. However, zero dollars have gone to Fairfield to provide municipal water to address more than 200 highly PFAS-contaminated drinking water wells in the town.

Lastly, and importantly, in a letter dated May, 22, 2024 from the Maine DEP to the Town Council of Fairfield, the Department anticipated that the available funding related to PFAs treatment systems would be depleted in about 2 to 2.5 years. Then was written... "When the funding is depleted, residents will become responsible for all future costs for maintenance of their treatment systems." In response to this, it is my view that no residential homeowner should have to pay **a cent** to resolve the PFAS chemical contamination of their drinking water well. It is important that funds provided by this bill, if awarded, are not only used to pay for water infrastructure, but also to eliminate **ALL** cost to the homeowner with a contaminated well for having municipal water served to their home. Thank you for the opportunity to share this testimony with you, and I welcome any questions.