



Solutions for a
Toxic-Free Tomorrow

Testimony of Sarah Woodbury, Director of Advocacy, Defend Our Health
In Support of LD 226, “An Act To Limit the Use of Hydrofluorocarbons To Fight Climate Change”
Before the Environment and Natural Resources Committee
March 15, 2021

Good morning, Senator Brenner, Representative Tucker and members of the Environment and Natural Resources Committee: My name is Sarah Woodbury. I am the director of advocacy for Defend Our Health, formerly known as the Environmental Health Strategy Center. Defend Our Health’s mission is to make sure that everyone has equal access to safe food and drinking water, healthy homes and products that are toxic-free and climate friendly. I am here to testify in support of LD 226 “An Act To Limit the Use of Hydrofluorocarbons To Fight Climate Change,” provided critical amendments are made to it.

Maine continues to lead when it comes to fighting climate change. Prohibiting the use hydrofluorocarbons (HFCs) is another important step. HFCs are a climate “super-pollutant”: greenhouse gases with hundreds to thousands of times the heat-trapping power of carbon dioxide (CO₂). They are used in air conditioning systems, aerosol propellants, foam blowing agents, solvents, and flame retardants. This bill would reduce the use of these pollutants, allowing an orderly transition away from HFCs. It also aligns Maine with rules being developed by other US Climate Alliance states, creating consistency for manufacturers and businesses.

It is important to ban the use of HFCs but, in the process of doing so, we should make sure to avoid regrettable substitutions when looking for alternatives. This has been a huge problem with refrigerants. As industry moves away from HFCs, chemical companies such as Chemours have been pushing hard to replace HFCs with HFOs – hydrofluoroolefins. It is true that HFOs have lower global warming potentials than the currently used HFCs. However, they may actually be more toxic to manufacture and dispose of. Some HFOs form trifluoroacetic acid when they breakdown, which is persistent in the environment and hard to filter out of water.¹ Many HFOs also use carbon tetrachloride (CTC) as a feedstock chemical. CTC is classified as a carcinogen and can cause liver, kidney and central nervous system damage.² Rat studies show that long-term exposure to CTC can cause decreased fertility. CTC was supposed to be phased out of production in accordance to the Montreal Protocol due to its role in ozone depletion, but its production is now increasing due to its use in manufacturing HFOs. This potent carcinogen is already omnipresent in the environment, we should not be increasing production of it and

¹ Lerner, Sharon. “How a DuPont Spinoff Lobbied the EPA to Stave Off the Use of Environmentally Friendly Coolants.” *The Intercept*. August 25, 2018. Available at:

<https://theintercept.com/2018/08/25/chemours-epa-coolant-refrigerant-dupont/>

² “Toxic Substances Portal - Carbon Tetrachloride.” *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, Aug. 2005, www.atsdr.cdc.gov/phs/phs.asp?id=194&tid=35.

leaking it out into the world when most refrigeration uses can be done with less harmful substances such as ammonia or carbon dioxide.

Considering the possible impact of these chemicals on human health, language should be added to this bill that would require those impacts be considered when looking at substitutes for HFCs. The bill's current language only allows global warming potentials to be considered when prohibiting the use of HFCs. While global warming impacts are important, we believe that it is just as important to consider the effects toxic chemicals have on human health. It is important to move away from use of these chemicals but we cannot allow substitutions to be used that have a detrimental effect on human health. The bill as it is currently drafted would allow regrettable substitutions, like HFOs, that are harmful to humans. This actually makes Maine an outlier amongst other states with similar legislation who have all allowed the consideration of both human health and the environment when considering replacements. Washington³, Vermont⁴ and New Jersey⁵, have all included language in their legislation to require impacts on human health to be taken into consideration when looking at substitutions to HFCs. Additionally, Oregon⁶ is currently considering similar legislation that also has language requiring that impacts on human health be taken into consideration.

We urge the committee to consider amended language to the bill that would help prevent regrettable substitutions that may impact human health by allowing DEP to consider additional risk factors to health and the environment, rather than just global warming potential. Impacts to human health are just as important as environmental impacts and we must take both into account when looking at alternatives. We have suggested language that is included at the end of my testimony.

We urge you to unanimously vote "ought to pass" with the suggested amendments on LD 226.

Thank you for your time

Proposed amended language

Section 1. Definitions

Add

SS. "Substitute" means a chemical, product substitute, or alternative manufacturing process, whether existing or new, that is used to perform a function previously performed by a class I substance or class II substance and any substitute subsequently adopted to perform that function, including, but not limited to hydrofluorocarbons.

Section 6: Rulemaking section should be amended with the following language

A. The department may by rule:

³ <http://lawfilesexternal.wa.gov/biennium/2019-20/Pdf/Bills/House%20Passed%20Legislature/1112-S2.PL.pdf?q=20210304113153>

⁴ <https://legislature.vermont.gov/Documents/2020/Docs/ACTS/ACT065/ACT065%20As%20Enacted.pdf>

⁵ https://www.njleg.state.nj.us/2018/Bills/AL19/507_.PDF

⁶ <https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/HB3027/Introduced>

- (1) Modify the effective date of a prohibition established in section 2 of this Act if the department determines that the rule reduces the overall risk to human health or the environment and reflects the earliest date that a substitute is currently or potentially available;
- (2) Prohibit the use of a substitute if the department determines that the prohibition reduces the overall risk to human health or the environment and that a lower risk substitute is currently or potentially available;
- (3) (i) Adopt a list of approved substitutes, use conditions, or use limits, if any; and
(ii) add or remove substitutes, use conditions, or use limits to or from the list of approved substitutes if the department determines that doing so would reduce the overall risk to human health and the environment.