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SPEAKING IN SUPPORT OF L.D. 226
AN ACT TO LIMIT THE USE OF HYDROFLUOROCARBONS TO FIGHT CLIMATE
CHANGE

SPONSORED BY REP. TUCKER

BEFORE THE JOINT STANDING COMMITTEE
ON
ENVIRONMENT AND NATURAL RESOURCES

DATE OF HEARING:

MARCH 15, 2021

Senator Brenner, Representative Tucker, and members of the Committee, I am Jeffrey Crawford, Director of the Bureau of Air Quality at the Maine Department of Environmental Protection, speaking in support of L.D. 226.

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Hydrofluorocarbons, or HFCs, are a category of gases used primarily as refrigerants in a variety of commercial and industrial applications. HFCs are identified as greenhouse gases by both the U.S. Environmental Protection Agency and the Department of Environmental Protection as a result of their capacity to trap heat in the Earth's atmosphere. The heat-trapping ability of greenhouse gases such as HFCs is known as their global warming potential, and is measured relative to the warming effect of an identical volume of carbon dioxide, typically over a 100-year timeframe. The HFCs addressed by this bill are among the most potent greenhouse gases, with global warming potentials ranging from 1030 to 9810, which is to say that their ability to trap heat is between 1,030 and 9,810 times greater than that of carbon dioxide.

In 1987, the United States and other members of the United Nations committed to phase out the use of certain ozone-depleting substances. Soon thereafter, Congress amended the Clean Air Act to provide authority for the United States Environmental Protection Agency (EPA) to restrict the use of ozone-depleting substances, and to require manufacturers to use non-ozone depleting substitutes, such as HFCs. Subsequently, the HFCs and HFC blends that were introduced as substitutes for ozone-depleting substances such as chlorofluorocarbons were discovered to be potent greenhouse gases, and in 2015 EPA promulgated new regulations that prohibited certain HFCs and other substitutes for ozone-depleting substances, or restricted their use to specific circumstances. The products and end-uses covered by EPA's 2015 regulations included aerosol propellants, motor vehicle air conditioning systems, retail food refrigeration, vending machines, and foams and foam-blowing agents.

Regrettably, in 2017 the District of Columbia Circuit Court of Appeals vacated the portion of EPA's 2015 regulations that applied to HFCs, on the basis that the EPA had exceeded its statutory authority under the Clean Air Act. In order to fill this void, Maine began coordinating with Massachusetts, Rhode Island, Vermont and other members of the U.S. Climate Alliance to phase out the use of the most damaging HFCs. Last year,

as a result of that effort, LD 2112 was introduced in this committee to address the issue. After the public hearing, discussion among the members of the Committee resulted in a Committee Amendment that was unanimously voted “ought to pass” on March 11, 2020. Unfortunately, before the bill could be considered by the full Legislature, the COVID-19 pandemic forced the Legislature to shut down. Over the past year, Maine continued to participate in Climate Alliance discussions to make sure that states’ efforts to reduce HFC emissions remained consistent and did not place undue burdens on industry.

Since the bill was heard last year, there have been positive developments at the federal level. On December 27, 2020, the federal government enacted the American Innovation in Manufacturing (AIM) Act, which requires EPA to promulgate rules gradually reducing the amounts of HFCs allowed for various end use categories by 85% over the next 15 years through a cap-and-trade program. While the AIM Act and EPA’s rules will ultimately provide significant reductions in HFC emissions, many of these reductions will not occur until 2029 or later. Fortunately, with only a few exceptions, the AIM Act does not preclude states from taking earlier or more stringent actions.

The Amendment offered today by Representative Tucker is a slightly modified version of last year’s Committee Amendment. Changes include clarification of some of the definitions, updates to the effective date of some of the prohibitions, and accommodation of limited-time federal exemptions required under the AIM Act. The Amendment requires the Department to promulgate rules that prohibit the selling, leasing, renting, installing, use or entering into commerce of any new or retrofit product or equipment that uses a substance that is a hydrofluorocarbon with high global warming potential in any air conditioning, refrigeration, foam or aerosol propellant end-use in Maine.

Enactment of the amended LD 226 will achieve reductions much sooner than the federal AIM Act, and will require much less monitoring of manufacturers and distributors

of affected products. The Amendment respects the federal exemptions mentioned earlier, and regulates the affected end uses once the federal exemption expires.

The Amendment establishes end-use prohibitions for many hydrofluorocarbons, helping to facilitate the transition for these end-uses to cost-effective alternatives that have lower global warming potentials. Examples of these prohibitions include:

- New household refrigerators and freezers – more than 25 HFCs are prohibited as of January 1, 2022;
- Retrofitted supermarket systems – nine HFCs are prohibited as of January 1, 2022;
- New Vending machines – more than 20 HFCs are prohibited beginning January 1, 2022; and
- New cold storage warehouses – 20 HFCs are prohibited beginning January 1, 2024

In addition to phasing in the end-use prohibitions, this bill also provides exemptions and extended compliance deadlines for critical users, such as the military and aerospace industries, a variety of specialized users lacking alternatives with global warming potentials, and heat pumps.

Heat pumps are specifically exempted from regulation under this bill, because even when considering HFC leakage from these units, the CO₂ emissions avoided by substituting heat pumps for burning fossil fuels would be ten times as damaging to the climate. Given Maine's high dependency on fossil fuels for heating, the potential for emissions avoidance through the use of heat pumps is very high.

I appreciate the opportunity to provide you with our comments, and I will be happy to answer any questions you may have on this bill.