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**TESTIMONY OF
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**SPEAKING IN SUPPORT OF L.D. 8
AN ACT TO SUPPORT COLLECTION AND PROPER DISPOSAL OF UNWANTED
DRUGS**

SPONSORED BY SEN. CARNEY

**BEFORE THE JOINT STANDING COMMITTEE
ON
ENVIRONMENT AND NATURAL RESOURCES**

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Senator Brenner, Representative Tucker, and members of the Committee, I am Brian Beneski of the Bureau of Remediation and Waste Management, Division of Materials Management at the Department of Environmental Protection, speaking in support of L.D. 8.

L.D. 8 would establish a product stewardship program for pharmaceuticals. Pharmaceuticals are a good candidate for product stewardship as gauged by the criteria set forth in the State's framework law MRS 38 §1772, and the structure of the proposed bill will likely work well for this product category. The Department supports the bill

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because of the detrimental impacts of improper disposal of pharmaceuticals on both human health and the environment.

In 2019, the Department testified in support of an earlier version of this bill (LD 1460 – An Act to Support Collection and Proper Disposal of Unwanted Drugs; sponsored by Senator Gratwick). A number of work sessions were held, and revisions were made to the bill. Ultimately, LD 1460 was passed out of Committee (ought to pass, as amended) but was not acted upon by the full Legislature due to early adjournment in response to the Covid pandemic.

The public health argument for proper disposal of pharmaceuticals is strong. A 2015 study published in the U.S. National Library of Medicine, National Institutes of Health estimates that 2 of 3 prescriptions dispensed go unused.¹ Unused medications may be left sitting in medicine cabinets, where they contribute to accidental poisonings of children² and are available to potential abusers – in 2013, 18% of Maine high school students reported having misused a prescription drug during their lifetime and more than 1 in 3 Maine parents felt their teen would be able to access prescription medications at home without parental knowledge.³

Common disposal options like sending unused medications to landfills or through wastewater treatment systems result in the release of these chemicals into the environment. A study of Seattle area seafood performed during the Spring of 2018 detected opiates, antibiotics, anti-depressants, chemotherapy drugs, and heart

¹ Law A.V., Sakharkar P., Zargarzadeh A., Tai B.W., Hess K., Hata M., Mireles R., Ha C., Park T.J. (2014, Oct 17). “Taking stock of medication wastage: Unused medications in the U.S.” U.S. National Library of Medicine, National Institutes of Health. <https://calpsc.org/mobius/cpsc-content/uploads/2015/08/Study-Taking-Stock-of-Medication-Wastage-Unused-Medicines-in-US-Households-2015.pdf>

² Centers for Disease Control and Prevention, “Protect the Ones You Love: Childhood Injuries are Preventable”, <https://www.cdc.gov/safecild/poisoning/index.html>

³Diomedee, Tim. Maine Department of Health and Human Services. “SEOW Special Report: Heroin, Opioids, and Other Drugs in Maine”. October 2015. https://www.maine.gov/dhhs/samhs/osa/data/cesn/Heroin_Opioids_and_Other_Drugs_in_Maine_SEOW_Report.pdf

medications. Because shellfish lack the ability to metabolize these chemicals, they can be passed on to humans that consume them.⁴ In addition, an Associated Press investigation found pharmaceuticals including antibiotics, anti-convulsants, mood stabilizers, and sex hormones in the drinking water supplies of at least 41 million Americans.⁵ It is known that pharmaceuticals in the environment are having toxic effects on marine animals⁶ and fish.⁷

The case for pharmaceutical takeback has been strengthened by the connection between prescription opioids and opioid abuse. In response to the opioid epidemic, a number of Maine entities have begun pharmaceutical takeback programs. Although these appear to be doing a good job and are free,⁸ money to cover the costs of education, outreach, and collection is very limited. The establishment of a product stewardship program for unwanted drugs could integrate existing collections into a more widespread network and ensure on-going funding.

Sufficient education and outreach and the availability of convenient collection are particularly important to effective implementation of product stewardship for pharmaceuticals because the environmentally detrimental disposal alternatives like landfilling and flushing are free and easy; these options have been, and to a certain extent still are, promoted as acceptable disposal methods by the FDA⁹ and others. The

⁴ NPR. "Traces of opioids found in Seattle area mussels", May 25, 2018.

⁵ Granite State Analytical Services, June 2018 Newsletter "Pharmaceuticals in Drinking Water"

⁶ Hernando M.D., Mezcuca M., Fernandez-Alba A.R., Barcelo D. (2006). "Environmental risk assessment of pharmaceutical residues in wastewater effluents, surface waters and sediments." *Talanta* 69: 334-342.

⁷ Corcoran, J., Winter, M.J. and Tyler, C.R. (2010). "Pharmaceuticals in the aquatic environment: A critical review of the evidence for health effects in fish." *Critical Reviews in Toxicology* 40,4: 287-304

⁸ In 2019 there were 59 permanent sites for collection from households available in the State. Many of the permanent collection sites are located at police offices or sheriff's stations; pharmacies participate as well. To search for collection sites see <https://apps2.deadiversion.usdoj.gov/pubdispsearch/spring/main?execution=e2s1>. Collection sites generally offer continuous collection then store pharmaceuticals until they can access free disposal provided by the USDEA National Takeback Days. Although Maine has just 0.4% of the country's population, Maine collected 4% by weight of total drugs turned in during the most recent national one-day USDEA event, including unwanted pharmaceuticals collected at 144 temporary collection sites.

⁹ <https://www.fda.gov/drugs/safe-disposal-medicines/disposal-unused-medicines-what-you-should-know>

required education and outreach in LD 8 will make consumers aware that landfilling and flushing should be avoided.

An emerging issue in other parts of the country with pharmaceutical product stewardship is the need to coordinate programs when groups of manufacturers decide to work with different stewardship organizations which result in the operation of multiple stewardship programs. In order to promote quality and fairness in operations in such cases, the Department recommends revisions to allow the allocation of costs from one program to another when a program is underperforming. This could be completed by revising the last paragraph in Section 5 - Costs, to read “When 2 or more manufacturers participate in a stewardship program or if multiple stewardship programs exist, the costs of implementing, administering, and operating the programs must be fairly and reasonably allocated between each participating manufacturer so that the share of the costs that is allocated to each manufacturer is reasonably related to the market share of covered drugs that the manufacturer sells in the State.” A requirement to report on this market share would also need to be included in Section 10 – Annual Reporting Requirements, by adding the requirement “L. An analysis of market share of covered drugs by manufacturers in the State and any other additional information required by the Department for determining appropriate cost share.” These changes, in concert with existing department rule making authority, can ensure that high functioning stewardship programs do not bear, and pass to their supporting manufacturers, a disproportionate share of collection and disposal costs.

For your reference, I have attached to my testimony a copy of this bill with the suggested changes shown with edit marks. Thank you for the opportunity to provide our comments. I will be happy to answer any questions that you might have.