HOUSE OF REPRESENTATIVES
2 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0002
(207) 287-1440
TTY: (207) 287-4469

Chad R. Perkins
POB 251
Dover-Foxcroft, ME 04426
Residence: (207) 279-0927
Fax: (207) 305-4907
Chad.Perkins@legislature.maine.gov

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MEMORANDUM FOR RECORD

SUBJECT: LD 69

Senator Tepler, Representative Doudera and distinguished members of the Joint Standing Committee On Environment and Natural Resources,

1. Thank you for allowing me to address you on LD 69 to Repeal the Law Restricting the Use of Certain Plastic, Paper and Single-use Bags.

2. The purpose of the original legislation banning single use plastic bags was to encourage consumer behaviors for an an outcome that was more environmentally and ecologically friendly, while reducing the use of natural resources. Not only did we fail to do this, we failed to do this while simultaneously imposing severe inconvenience and cost on our citizens.

3. To begin our conversation, we must dispel the myth that the plastic bags that are specifically made from high-density polyethylene plastic, and referred to as light carrier bags or single use plastic bags (SUPBs), were most often used as "single use". For many people these bags were reused as bin liners for small garbage cans, as lunch bags, as pet waste bags, as "shoe bags" and a variety of other purposes.

4. After I submitted a similar bill last session, I took informal polls at grocery lines, as several of my children worked as grocery check clerks. One of the questions I would ask was if people would traditionally use the single use plastic bags for other purposes. I found that an overwhelming majority of respondents would answer in the affirmative and a large majority indicated that they now either bought SUPBs online or replaced them with heavier and less ecologically friendly small garbage bags.

5. The validity of this practice was confirmed on a 2019 NPR 'Planet Money' program which showed the the sales of heavier, manufactured small plastic bags available by retail rose by as much as 120% in areas where single use plastic bag bans had been enacted. In one sampling, according to the UN, 61% of the population reused supermarket bags as waste bin liners. According to the United Nations 2020 report Life Cycle Initiative: Single-Use Plastic Bags and Their Alternatives, the material type and weight of a shopping bag are important characteristics for determining its environmental impacts.

6. This means we are using heavier, less ecologically friendly bags to replace the bags we banned, a point further stated in the Journal of Environmental Economics and Management (Vol 93, Jan 2019) under the article entitled 'Bag Leakage: The effect of disposable carryout bag regulations on unregulated bags'.

7. There are many indicators that the bags we use now are less ecologically friendly than the bags that we banned, as noted by the studies that I reference at the end of this testimony. When the law was enacted, consumers were offered the choice of purchasing a paper bag, receiving a reusable plastic bag or using a more durable manufactured bag. However, all of these options are contraindicative to the purpose and spirit of the original legislation and none of them is more ecologically friendly than SUPBs.

8. We must look at the total life cycle of a carrier bag when determining its ecological impact, from resource extraction, manufacture, transportation, use and disposal, to determine if it really is environmentally friendly.

9. According to the United Nations Environment Program report, the technology and material/energy use of production processes influence the impact of bags. This could not be more plainly stated than in the Danish report, Life Cycle Assessment of Grocery Carrier Bags , which stated, "In general with regards to production and disposal, LDPE carrier bags, which are the bags that are always available for purchase in Danish supermarkets, are the carriers providing the overall lowest environmental impacts for most environmental indicators.". According to a report by the Northern Ireland Assembly, it takes more than four times as much energy to manufacture a paper bag as it does to manufacture a plastic bag and paper bags generate 70% more air and 50 times more water pollutants than plastic bags. Additionally, the increase in the use of paper bags over SUPBs has significantly increased methane levels (a greenhouse gas) and landfilling is the least preferred option for cotton, paper and biodegradable bags as degradation releases methane, which has a strong impact on the climate".

10. For most SUPB alternatives, the bag needs to be reused a very high number of times to have a net positive ecological impact compared to a SUPB. While a lack of harmonization in a Life Cycle Analysis (LCA) can yield a variety of results, each of the LCA reports referenced agree that for paper bags that number is between 4 and 43 times and between 7,100 and 20,000 times for reusable cotton based bags as an equivalent number of SUPBs. These usage scenarios are far outside any realistic usage expectation from consumers.

11. Non-SUPB carrier bags have higher impacts on almost all other environmental categories Climate Change, Terrestrial Acidification, Eutrophication of Fresh Water, Ozone Depletion, Land Use, Photochemical Ozone Formation, Ionizing Radiation, Particulate Matter Waste, Ecosystem Toxicity, Water Resource Depletion, Human Toxicity (both cancerous and non-cancerous), Marine Eutrophication, and Fossil Resource Depletion.

12. In fact, the primary category that SUPBs score worse in is with "Visible Litter". This means we passed a 'feel good' law to hide a minor problem while ignoring all of the actual effects that the law would produce.

13. Then there is 'leakage', the fact that certain bags are regulated while other bags made from the same material are not which results in the increased consumption of the unregulated item. If one can easily replace the regulated item with an identical unregulated item, the benefit of the regulation is severely overstated.

14. And finally, we must consider the food safety issue of alternatives to the SUPB, specifically reusable manufactured bags. There was such a concern about the likelihood of viruses being transported in these items that the Governor suspended the rules for the use of SUPBs during the Covid State of Emergency. We know from the CDC that E. Coli and coliform bacteria can survive for some time on reusable bags. A study conducted by the University of Arizona and Loma Linda University on reusable grocery bags concluded that 51% of reusable bags contained the coliform bacteria and 8% contained E. Coli. This is not dissimilar from a 2011 study cited in the UN LCA report, which states, bags can host infectious bacteria such as E.coli. These studies show a potential risk of bacterial cross contamination is associated with use of reusable bags to carry groceries.

15. And, while not a matter of policy, the fiscal note assigned to my bill last session indicates that there would be some savings to the State in the reduction of regulatory costs.

16. I thank you for your polite consideration in this matter and look forward to discussion on any of the points I brought forward in this testimony. I respectfully urge the committee to vote Ought To Pass on LD69.

Respectfully,

Rep. Chad R. Perkins
District 31

CF:
Committee Chair Senator Tepler
Committee Chair Representative Doudera
Committee Members

REF:
UN Environment Programme report Single-Use Plastic Bags and Their Alternatives: Recommendations from Life Cycle Assessments

Ministry of Food and Environment of Denmark report: Life Cycle Assessment of Grocery Carrier Bags

UK Environment Agency report : Life Cycle Assessment of Supermarket Carrier Bags

Department of Soil, Water, and Environmental Science, University of Arizona/Loma Linda University School of Public Health, Dept. of Environmental Health study Assessment of the Potential for Cross-contamination of Food Products by Reusable Shopping Bags