

# **Testimony from the Vermont Public Interest Research Group (VPIRG) in Support of H.175**

**March 16, 2022**

## **Introduction**

For the record, my name is Marcie Gallagher, and I'm the Environmental Advocate of the Vermont Public Interest Research Group (VPIRG). VPIRG is Vermont's largest consumer and environmental advocacy organization with approximately 50,000 members and supporters across the state. Thank you for your invitation to testify this morning in support of H.175.

I believe the members of this committee are familiar with VPIRG's long history of engagement on policy related to the Bottle Bill. H.175 passed the House last April with 99 votes, and it proposes to expand the scope of the program to cover virtually all carbonated and uncarbonated beverages - with a couple narrow exceptions - and raise the handling fee for non-commingled products.

We stand with the 83 percent of Vermonters that would like to see the Bottle Bill expanded, as well as the 10,000 Vermonters who signed a petition in support of H.175.

We also support additional amendments to improve the bill including an automatic increase in deposit if the redemption rate drops for two consecutive years and various adjustments to improve consumer convenience through reverse vending machines.

Though our Bottle Bill has consistently produced recycling rates of 75 percent or greater for its nearly 50-year existence, it has fallen behind nearly every other state with a deposit program, and it's time to modernize it.

Our current law covers approximately 46 percent of beverage containers sold in Vermont each year. That includes beer, carbonated soft drinks and mineral water, wine coolers and liquor. And since it was passed in 1972, the Bottle Bill has been responsible for recycling over 10 billion cans and bottles in Vermont.

But, importantly, 54 percent of beverage containers are still not covered by the program. By contrast, Maine's Bottle Bill program covers 91 percent of beverages sold there.

Beverages, like bottled water, energy/sports drinks, iced tea and coffee, etc. were virtually unheard of when Vermont's Bottle Bill was enacted, but they now make up over half of Vermont's beverage market, including over 210,000,000 water bottles sold each year.

Of the ten states with Bottle Bills, all cover more beverages than Vermont, except Massachusetts, where a proposal has advanced through the Senate this year. In June 2021, Connecticut successfully modernized its Bottle Bill by expanding the scope, increasing the deposit to 10 cents, and adding a few important provisions that I will detail later.

Beyond the ten U.S. states that have bottle return programs, 600 million people worldwide live in areas covered by Bottle Bills. That number has doubled in the last five years. I want to stress that beverage redemption programs are increasingly popular around the world, especially as governments try to grapple with the growing problem of plastic waste.

## **Improved recycling**

The Bottle Bill improves and increases recycling. If we were to modernize the Bottle Bill, these benefits would continue to grow in impact. Modernizing the Bottle Bill could result in as much as 200 million additional containers recycled.

Bottle Bill materials are much cleaner and therefore of a higher financial value than curbside materials collected in single stream systems. Therefore, those products can be sold for more and turned into new bottles and food-grade materials, rather than downcycled into products that are difficult or impossible to recycle again.

For example, Casella wrote last year that their PET is sent to markets to be made into T-shirts and other fibers. CSWD testified to the House Natural Resources Committee last year that their PET is turned into flooring. The majority of Bottle Bill PET, on the other hand, is turned into new plastic bottles.

Why is recycling a PET bottle into a new PET bottle a good thing? If the Bottle Bill were expanded to cover noncarbonated PET beverages, it would save

- Nearly 98,00 mBTUs of energy; the equivalent of powering over 1,000 US' households
- Over 3,500 metric tons of CO2 equivalent, the emissions of almost 800 cars.

PET bottles are also part of a well-established, closed-loop recycling system, where they can be efficiently recycled at least 10 times. When we downcycle it, we are moving from a circular to a linear system where those products will not be recycled – especially when PET is used to make low-quality, fast-fashion garments which are often discarded after only a few uses.

Expanding the Bottle Bill means more containers being used and remade into new containers again. This is what most people think of when they see that chasing arrows symbol, and it is what is known as circular recycling.

## **Why do we care about circular recycling?**

Glass is another good example. Worldwide, glass manufacturing produces at least 86 million tons of CO2 every year from melting raw materials. Most of these emissions are released from melting down raw materials to create new glass products. When those raw materials are replaced with recycled glass, no CO2 is released and the melting process requires less energy, making the entire process more efficient.

Bottle Bill glass from Vermont is sent to a nearby facility in New York, where most is made into new bottles. These bottles allow manufacturers, who are currently facing a shortage of glass for beer and wine bottles, to make new products out of recycled materials. The shortage of recycled glass being experienced nationally is partially attributed to Bottle Bill states suspending program enforcement during the pandemic. This shortage comes despite the fact that single stream facilities, or MRFs, have actually seen glass volumes increase during this time.

As Reagan Bisonette, the Executive Director of the Northeast Resource Recovery Association (whose members include about 70% of the communities in Vermont), acknowledged, “there is plenty of MRF glass out there, but not all glass processors want MRF glass,” and at the Canadian glass plant that our Bottle Bill glass gets sent to, they “are very selective when they will take it from single-stream systems, because it requires a considerable amount more effort for them to clean that glass”.

While using glass for landfill cover, construction, and road aggregate is better than simply landfilling it, there are far better uses for high-value glass collected in a quality-controlled Bottle Bill system. There is

an urgent need for this high-quality glass right now and it's better for the environment – especially because glass is an infinitely recyclable resource – it can be recycled again and again and again. But that benefit is lost when it is landfilled. Opponents of the Bottle Bill, like certain MRF operators, have previously argued that glass should be diverted from single stream recycling to the Bottle Bill. CSWD's Michele Morris stated in a 2019 VTDigger article that "the Bottle Bill could be expanded to cover wine bottles and other types of glass jars...let's get it where it has the best likelihood of having its value retained and being made back into new glass". Casella, too, expressed support in 2019 for the inclusion of glass in New York's Bottle Bill, saying it would reduce recycling costs and improve the marketability of the glass. However, you will now likely hear from these same stakeholders that they need to retain their glass because they may be able to sell it to VTrans to be used as sand-replacement in road construction. The good news is, even with an expanded Bottle bill, there will be no shortage of low-quality recycled glass to use for aggregate.

You will remember CSWD's illegal dumping of almost 18,000 tons of glass between 2013-2018. According to the most recent information we've received, CSWD currently pays \$85/ton to crush and handle glass, \$300K/year to transport it, and \$5/ton to get rid of it- where it is then used for construction and stockpiled. Casella also recently reported using their glass for "beneficial use and aggregate mix". Meanwhile, only ten Bottle Bill states provide high quality recycled glass that is remade into bottles reliably. We need to protect and expand that resource.

Recycling old bottles into new bottles not only makes logical sense, but it is also a crucial step in ensuring the success of another environmental program – recycled content standards. California, Washington, and New Jersey have passed laws that would require beverage manufacturers to include increasing amounts of recycled content in their bottles. Beverage manufacturers like Coke and Pepsi have also already pledged to meet their own recycled content goals.

However, industry experts agree that manufacturers will not be able to meet voluntary or mandatory goals for recycled content in plastic containers without the high-quality and consistent flow of material supplied by Bottle Bills.

Even aluminum, the highest value material coming from MRFs, is cleaner coming from deposit returns. Novelis, the largest aluminum recycler in the world said "we do focus our contracts (and typically higher prices) toward deposit material. Reasons being: Consistent flow, level of cleanliness, and level of quality".

This is also because can-makers typically want just recycled cans, and not all grades of recycled aluminum, and MRFs typically don't have the technology to separate beverage cans from other containers. In fact, Mike Smaha, VP of the Can Manufacturers Institute, testified last year in Vermont's House Natural Resources Committee that up to 25% of cans are missorted at MRFs into bales of other commodities like PET bottles, mixed paper, and non-recyclables.

This past fall, the Can Manufacturers Institute, Glass Packaging Institute, and National Association for PET Container Resources published a joint statement that makes clear they all see deposits as the best way to successfully raise each of their recycling rates and increase recycled content. They state: "deposit systems lead to higher recycling rates, as well as better quality, higher value material enabling circularity."

Even more shocking shifts come from the American Beverage Association, which has been a longtime opponent of the Bottle Bill, and Keep America Beautiful, an anti-litter organization formed by beverage and packaging companies to shift focus off of their pollution.

The ABA now states that it is open to discussing and supporting deposit systems, and Keep America Beautiful released a report that estimates states without container deposits have about twice as much beverage container litter as bottle bill states.

### **Impact on Public Health**

There is also a public health benefit from bottle-to-bottle recycling through the Bottle Bill. This is because some recyclable material, like PET spray bottles, may contain toxic chemicals. Take for example a bottle of the pesticide roundup that has been tossed in the recycling bin. Studies show that plastics can absorb this contamination through direct contact, and through the absorption of volatile compounds – which means other plastics in the blue bin might become contaminated as well.

The US FDA says “The possibility that chemical contaminants in plastic materials intended for recycling may remain in the recycled material and could migrate into the food the material contacts is one of the major considerations for the safe use of recycled plastics for food-contact applications.”

Recognizing that it is not possible to prevent consumers from putting packaging containing toxic compounds in curbside recycling bins, it is also not possible to prevent contamination of single-stream recycled plastic. That is why public health experts are now recommending that recycled content in plastic bottles only be sourced from materials recycled through the Bottle Bill.

Furthermore, though there are some environmental benefits to using single-stream MRF glass for construction and road aggregate, it also poses a health risk. This is because this contaminated glass mixed with plastics and other non-glass materials mix with and contaminate stormwater run-off. A now defunct recycling company in New Jersey is currently being sued for jeopardizing environmental and public health for stockpiling glass for this exact reason.

### **Impact on MRFs**

Some opponents of the Bottle Bill have argued in the past that an expanded program might put MRFs at an economic disadvantage. However, the markets for recycled material have improved dramatically since China closed its doors to most U.S. recyclables in 2018. For instance:

- The price for recycled fibers like paper and cardboard, which made up 78% of the recyclables at CSWD by ton in 2019, has recently hit its highest prices since before China’s National Sword – at least 4 years.
- The Northeast Resource Recovery Association reports that recyclables have jumped 115% in value in the last year.
- CSWD reported selling recycled paper at a loss, -\$31/ton in 2019. This Fall the average Northeast price rose to +\$160/ton. This is a difference of nearly \$3.5 million.
- As the price of fibers is expected to remain strong, MRFs will continue to make more revenue from recyclables with or without an expanded Bottle Bill.

It’s important to understand and follow these market trends as recycling is ultimately a business and not an environmental movement. Of course, that’s not to say that recycling doesn’t have environmental benefits. But when there are shifts in recycling markets, recycling businesses like MRFs will react to preserve their bottom line – even if the consequences are environmentally detrimental.

This is what we saw with the dumping of the equivalent of 33 million wine bottles by CSWD. The recycling industry depends on a steady flow of single use products to profit and survive. This is particularly true of Casella, who just finished what they called “arguably the best year in the company’s history,” where they estimated almost \$1 billion in revenues for 2022, much of which comes from increased trash going to their landfills, not from recycling or composting.

Expanding the Bottle Bill will also provide some benefits to MRFs. Broken glass is a contaminant in other material bales, such as plastic bottles and household paper. Contamination lowers the value of each ton collected and compromises the function and lifespan of processing equipment due to increased wear and tear.

### **Cost**

Claims that the Bottle Bill system costs consumers more are factually incorrect. Not only is the Bottle Bill a free recycling system for consumers who redeem—unlike curbside recycling which is paid directly or through taxes—but the Bottle Bill also makes curbside waste pickup less expensive for consumers.

This is because recycling hauling companies pay to dispose of recyclables by weight-- called a tipping fee; the price of the tipping fee is a factor that may determine how much haulers charge customers. If the markets are poor, glass and PET will be more costly to pick up and haul than they are to sell. This is especially true for glass, which makes up 73% of the weight of beverage containers being recycled.

Several reports, including the Eunomia report published last year and the ReLoop report published March 15 2022, reveal that a modernized Bottle Bill would actually save costs throughout the system. This is partially because as containers will be removed from the trash stream, haulers will be collecting less trash, therefore sending less to landfill, saving on landfill tipping fees.

Just because the Bottle Bill will allow haulers to save money does not mean consumers will see that passed down through a rate decrease. H.175 would, however, likely stave off any increase in fees charged by these haulers to consumers.

The expansion of the Bottle Bill also poses no additional costs to consumers. It is one of the earliest forms of extended producer responsibility. Deposits are returned to consumers once containers are redeemed and any other costs are borne by the producers. This is unlike curbside recycling where costs are paid by consumers, directly or through taxes.

Extending the deposit to non-carbonated beverages will shift costs, appropriately, from taxpayers to beverage producers.

### **Emissions**

As illustrated above, Bottle Bill programs are the most effective way to create closed-loop recycling that sees glass, plastic, and aluminum containers recycled into new containers. Making new beverage containers from recycled content requires significantly less energy and fossil fuel use than using virgin materials: recycled aluminum uses 95% less energy, recycled plastic uses 30% less energy, and recycled glass uses 35% less energy.

### **Amendments**

I mentioned VPIRG's support for several amendments to improve the bill. The most significant of these would be to ensure the continued success of the program by adding a trigger mechanism to update the deposit as necessary.

A. Bottle Bills work by incentivizing the public to return containers through a deposit. If the power of this incentive declines, redemption rates will drop too. If the deposit is increased, redemption rates improve immediately and significantly. Bottle Bills with a 10 cent or higher deposit achieve redemption rates around 90%.

Vermont's five-cent deposit has gone unchanged since 1972. If the deposit had risen with inflation, it would be more than 30 cents today. As it was introduced in the House, H.175 included an increase in deposit to 10 cents. However, as Vermont currently achieves a 77% redemption rate for containers with a five-cent deposit, lawmakers decided an immediate increase in deposit was not necessary.

However, it would be an unfortunate and unintended consequence if, with an increase in scope, the redemption rate was to fall.

Oregon used a trigger mechanism approach in 2011 when lawmakers there set an 80% redemption rate threshold. After two consecutive years of the redemption rate dropping below 80%, Oregon automatically increased its deposit value from a nickel to a dime. In three years, the redemption rate went from 64% to 86%.

We believe a trigger redemption rate of 70% would serve as a reasonable "check" on preventing Vermont's program from declining continually, and recommend the Committee add language into the bill that would increase the deposit to ten cents if our redemption rate drops below 70% for two consecutive years.

There should also be a two-year grace period before the redemption rate is monitored in respect to triggering an increase in deposit. This is because the redemption rate will almost certainly drop in the first year or two as public education catches up with the change in law.

B. Size limit: Because certain large containers cannot fit into Reverse Vending Machines, which will collect an increasing number of containers with expansion, we recommend a size limit for container redemption, as Connecticut and Oregon have recently done.

We recommend a 2.5 liter maximum for non-carbonated containers and 3 liters maximum for carbonated. The sizes are different due to the shape of certain juice containers in particular. This eliminates containers of concern while still adding a deposit to 99% of containers in the eligible beverage categories.

While liquor miniatures or 'nips' are too small to be processed in RVMs this is less of a concern because they take up less storage space and are a significant litter issue. Therefore, we are not recommending a size-minimum for alcoholic containers.

C. Product registration: If a beverage distributor does not include a barcode on their container and does not share container details with RVM system operators, consumers cannot get their deposit money back, and retailers and redemption centers are not paid their handling fee. This is a free-riding loophole in the current law.

We recommend requiring product registration.

D. While all retailers are required to repay deposits on deposit containers, in reality, some stores will not advertise their services or not redeem at all. To remedy this VT should adopt what Connecticut and New York have done, which is to require chain stores over a certain square footage to provide convenient access to RVMS. This would cover big stores like CVS, Walmart, and Walgreens.

Requiring these chain stores to have reverse vending machines will add an important level of convenience to the consumer's ability to redeem their containers.

E. Grant program for redemption centers: Some of the most populous areas of the state, including downtown Burlington and Montpelier, are not served by a redemption center. Particularly in Burlington, this is an environmental justice and economic equity concern. Many residents of Burlington are low income, car-less, and/or New American residents. Without convenient access to redemption, the deposit is functionally a tax.

Because redemption centers rely on the handling fee for their sole source of income and the handling fee hasn't been raised in 15 years – in which time the minimum wage in VT has risen nearly \$5/hour – it is not a profitable business model and it is unlikely a startup redemption business would make enough money to be profitable while paying rent in Burlington or Montpelier. Grant funding to assist redemption centers starting up in these areas is likely to be the only solution for providing a large portion of the state with a convenient redemption location. Connecticut allocated \$5 million to go towards a grant program of this type in their 2021 modernization.

### **Conclusion**

Nearly 9 out of 10 Vermonters support the Bottle Bill. This was true in a poll released over 10 years ago, and it is true today. This proposal has more support than any single environmental program, politician, or maybe even ice cream brand in Vermont. The opportunity to make these crucial updates to the bill does not come around often – I urge you to support it and allow Vermont to take one step closer to a circular economy.

Thank you for the opportunity to testify in favor of this bill today.