Questions from Paul Burns, Executive Director, VPIRG, October 1, 2022

Responses from Sarah Reeves, Executive Director, Chittenden Solid Waste District, October 4, 2022

1. Legislation updating Vermont's current beverage container redemption program (Bottle Bill) could include beverages such as wine, iced tea, sports drinks, hard cider, and others that are frequently bottled in glass. What is CSWD's position on diverting such glass containers from curbside collection to the Bottle Bill program? Generally speaking, what are some of the costs or benefits of removing a substantial quantity of glass from curbside collection? What impact would this have on the financial viability of the proposed new MRF?

1A:

CSWD is supportive of any system that will divert glass from the landfill and from Vermont's Materials Recovery Facilities. Glass is a hard to manage material with limited local markets, and Vermont should explore the wider variety of industry best practices to capture glass for reuse and recycling. Such programs include reusing glass bottles and jars as refillable containers, Extended Producer Responsibility programs for all glass bottles and jars used to contain food and beverages, expanding recycling stations across the state that would support color-separating glass bottles and jars at the source (i.e., multiple glass containers at transfer stations), and expanding the bottle bill to include products such as wine bottles.

Speaking for the CSWD Materials Recovery Facility in Williston, removing significant quantities of glass from processing would have several effects:

-Less wear and tear on the MRF equipment, saving equipment repair and replacement costs;

- Fewer tons in the door reduces both tipping fees paid to CSWD AND processing fees paid to Casella. At the current tip fee, CSWD wouldn't receive the \$80/ton for glass that isn't processed at the MRF but this would be offset by saving \$45/ton per ton on processing fees (CSWD pays Casella Waste Systems a per-ton processing fee on each inbound ton);

-Fewer glass tons processed means fewer tons needing transport to market. Currently, there is no positive revenue associated with our final glass products. Fewer tons produced reduces the costs of transporting the products to Quebec, Massachusetts, or North Carolina during the months we're not able to keep the product local. Keeping material local costs \$15/ton to transport, shipping out of state costs approximately \$135/ton.

Glass currently represents negative revenue to the MRF (i.e., pure cost). Over the course of a fiscal year, it costs CSWD more to manage glass than is received in tip fees. The new MRF will have equipment added to the existing glass processing system (which will be reinstalled in the new facility) that will add air flow to the process to keep potential contaminants out of the mix. We are designing the new MRF so that all glass processed through the facility will be managed indoors which will allow CSWD to produce high-quality sand borrow equivalent throughout the year. This product may have local value as a sand replacement and could potentially generate positive revenue.

Loss of additional glass bottles will not impact the financial viability of the new MRF. Again, CSWD supports any system that will keep glass out of the blue bin program including expansion of the bottle bill to include more glass such as wine bottles. An even more favorable scenario would be to add glass

jars to the bottle bill as well – pickle jars, honey jars, maple syrup bottles, mustard jars (all empty and rinsed, of course).

We will always need to have a glass processing and separation system in the MRF, because there will never be a time when we aren't processing some glass. The only scenario where this would occur is if the State of Vermont bans glass containers entirely for food and beverages.

2. An updated Bottle Bill that includes water bottles, juices, and hard cider, among other items, would divert some additional PET and aluminum material away from the MRF to the redemption program.

Would the diversion of these materials have a significant effect on the financial viability of the proposed new MRF?

2A:

No, because nearly 75% of material processed at the Williston MRF is paper and cardboard. The paper and carboard markets (fiber markets) have adapted to the changes brought by the elimination of China as an outlet by improving domestic paper mill processing capacity. In order to be able to fully participate in the newly improved domestic markets, Vermont must improve the quality of its recycled fiber. This is the focus of the CSWD Materials Recovery Facility project. However, as we currently experience, the MRFs will continue to receive bottle bill material because consumers may elect to continue to place bottles and cans in their blue bins. Additionally, other food and beverage products are packaged in plastic, glass and metal making it necessary to have improved sorting capabilities for this material in the new MRF. Containers processed by Vermont's MRFs include bottle bill material, and also include steel tin cans, plastic tubs and jugs and other plastic packaging such as trays and clamshells.

All containers, not including glass, constitute approximately 18% of materials sorted at the Williston MRF. Plastic containers, including tubs and jugs, constitute approximately 6% of all inbound recycling. PET plastic containers, which is the primary type of plastic that plastic beverage containers are made of, constitutes approximately 3% of all inbound recycling. PET that is currently covered under the bottle bill constitutes approximately 6% of all PET and approximately 50% of the PET that we receive is made up of beverage containers currently not covered under the bottle bill but would be under an expansion. Aluminum makes up less than 1% of the inbound recycling and is mostly beverage containers. While we appreciate the revenue associated with these materials and believe that MRFs that are designed properly do an excellent job sorting bottles and cans, beverage containers are a small fraction of what we process with the vast majority of the material sorted in the Williston MRF being fiber.

3. Is the viability of the proposed new CSWD MRF in any way predicated on materials that could be included in an expanded Bottle Bill program? Assume for the sake of this question that such an expanded program would cover "all drinks in liquid form and intended for human consumption, except for milk, dairy products, plant-based beverages, infant formula, meal replacement drinks, or nonalcoholic cider."

3A:

The viability of the new MRF has been modeled using multiple scenarios, several of which analyzed significantly fewer tons than are currently processed. This was done to demonstrate a point of non-

viability and not specific to an expanded bottle bill. The number of tons being discussed as potentially additionally diverted bottle bill tons were represented as part of an overall diminishment of inbound tons used in the analyses. It was determined that fewer tons could still be managed in a new, but smaller, facility equipped with modern technology and not be a burden to CSWD's member communities.