Testimony – Casella Waste Systems February 28, 2020

My name is Sam Nicolai, and I am Vice President of Engineering & Compliance for Casella Waste Systems. I am also a licensed Professional Engineer, and have more than twenty years of experience in environmental engineering for solid waste and industrial facilities. I am submitting this testimony in reference to Senate Bill S.295, An Act Relating to Restrictions on Perfluoroalkyl and Polyfluoroalkyl Substances and Other Chemicals of Concern in Consumer Products.

In October 2019, Casella prepared and submitted a PFAS Waste Source Testing Report to the Vermont Agency of Natural Resources. That report was reviewed by ANR, and was subsequently included in the February 2020 compilation of PFAS reports released by ANR, and posted on their website. The report included the results of a PFAS testing program on various solid wastes generated by Vermont businesses and residences, and managed at Casella solid waste management facilities. Although the full report contains a significant level of information about the test protocols and results, I would like to share a few of the relevant high-level conclusions:

- Approximately 95% of the tested waste materials contained detections of PFAS;
- By both concentrations and overall mass, the highest levels of PFAS were detected in consumer products, primarily bulky items (furniture), textiles, and carpets;
- In comparison, the PFAS mass in sludges and industrial wastes was estimated to be roughly 5% of the total PFAS stream;

These conclusions have some important implications to how our society will manage PFAS-containing wastes over the next few decades. As you are likely aware, US manufacturers entered into a voluntary agreement to stop the manufacturer of PFOA and PFOS in the early 2000s. However, these two compounds represent only a small subset of the PFAS class of compounds, and the voluntary agreements have no effect on foreign manufacturers. In addition, Vermont businesses and residents will be disposing of PFAS-containing furniture, fabrics, and carpets for many more years as these existing products reach their useful lives. Given the breadth of products containing PFAS, there are no simple waste bans or extended producer responsibility programs that will remove these products from our waste streams. We need to use traditional waste management solutions --- encouraging the Reduce, Reuse, and Recycle strategies, and then managing sustainable waste disposal.

Casella has been actively working to ensure that we are providing these sustainable waste management solutions for Vermonters. In 2018, we voluntarily ceased accepting certain PFAS-containing wastes at the NEWS-VT landfill, including PFAS cleanup wastes, fire-fighting foam wastes, and similar special waste materials suspected to contain moderate to high levels of PFAS. Our solid waste management facilities, including both the transfer stations and the landfill, are designed to provide sustainable, long-term solutions for managing Vermont's wastes: test results demonstrate that greater than 90% of the PFAS-mass in incoming waste materials is successfully sequestered within the landfill. In working to provide these solutions, it is clear to us that the most important actions we need to take are to work to remove these PFAS compounds from our stream of commerce as quickly as possible.

For these reasons, we support the efforts in S.295 to restrict the manufacture, sale, and distribution of PFAS-containing products. Both solid waste management facilities and wastewater treatment facilities

are tasked with managing the solid and liquid waste streams that are directed to them. These facilities are not producers of PFAS – they are receivers. Restricting the use of PFAS by the upstream manufacturers, and encouraging the development of safe, effective alternatives to these compounds should be among our highest priorities and most effective solutions.