



GLASS RECYCLING POLICY

Policy Statement

It is the policy of the Virginia Recycling Association (VRA) to recognize the value of glass as a recycling commodity and support the development of regional processing facilities and end markets for source-separated glass in Virginia.

Reason for Policy

Glass is 100% recyclable and can be recycled endlessly without loss in quality or purity. Approximately 10% of glass food and beverage containers in Virginia are recycled every year, which means that an estimated 315,000 tons of container glass goes to landfills¹.

According to a 2018 study² by the Glass Recycling Coalition (GRC), more than 90 percent of residents and consumers expect to be able to recycle glass and more than 50 percent of public sector respondents are actively trying to improve their glass recycling systems.

Throughout Virginia, materials recovery facilities (MRFs) and municipalities are withdrawing glass from the list of acceptable curbside recyclable materials. To date, Arlington County, Prince William County, and Fairfax County has removed glass and are encouraging residents to try to avoid buying items packaged in glass. Because of changes within the recycling industry and to cut costs of processing lower value glass from the single-stream collection.

During the curbside collection and recycling process, the glass is broken and becomes mixed with other non-glass materials (e.g., paper, metal, food waste, etc.). Through the single-stream recycling processing, glass acts as an extremely abrasive substance that damages

¹ <https://www.novaregion.org/DocumentCenter/View/12125/nvrc-policy-GLASS-final>

²(n.d.). 2018 GRC Glass Recycling Survey. Retrieved from <https://www.glassrecycles.org/research>

other recyclables, the isolation or removal of glass at early in the process is necessary to reduce equipment maintenance issues.

The resulting material can be as much as 60% non-glass and must be further processed to make it clean enough for reuse. Additional capital investment in processing equipment is required to safely remove glass at the start of the processing.

Glass beneficiation then takes the glass, sorts it by color and removes residual contaminants and items such as plastic caps, paper and other organic material. This equipment includes additional screens, optical sorters, metal detection and manual quality stations. The final product is glass cullet, which can then be sold to end markets for manufacturing. There are no such facilities in Virginia. The nearest beneficiation facilities are in North Carolina and Pennsylvania and it is not economical to ship the glass to these facilities.

The VRA sees the potential in Virginia investing in glass recycling as a commodity that provides Virginia with economic and environmental benefits. Virginia has two glass container manufacturing plants located in the state, but these facilities source materials from outside the Commonwealth.

According to the North American Insulation Manufacturers Association,³ their US members used more than 2.2 billion pounds of recycled glass in the production of fiberglass insulation. Information provided by the Container Recycling Institute⁴ suggests that recycling 1,000 tons of glass creates slightly over 8 jobs.

The Glass Packaging Institute⁵ states that over a ton of natural resources are saved for every ton of glass recycled and one ton of carbon dioxide is reduced for every six tons of recycled container glass used in the manufacturing process.

³Fitzgerald-Redd, S. (2018, November 14). 3.2 Billion Pounds of Progress! Retrieved from <http://information.insulationinstitute.org/blog/3.2-billion-pounds-of-progress>

⁴ (n.d.). Glass Facts & Statistics. Retrieved from <http://www.container-recycling.org/index.php/factsstatistics/glass>

⁵(n.d.). Glass Facts & Statistics. Retrieved from <http://www.container-recycling.org/index.php/factsstatistics/glass>

Who is/will be affected

Members, Public, Government, Suppliers, Manufacturers, Recycling and Solid Waste Industries

Definitions

Commodity

A commodity is a basic good used in commerce that is interchangeable with other commodities of the same type. Commodities are most often used as inputs in the production of other goods or services. The quality of a given commodity may differ slightly, but it is essentially uniform across producers. When they are traded on an exchange, commodities must also meet specified minimum standards, also known as a basis grade.

Recyclable Material

Raw or processed material that can be recovered from a waste stream and converted into new materials.

Recycling Contamination

Refers to the process of rendering a recyclable material unfit for use. of nonconforming materials. This occurs when incorrect items or materials are put into the collection system or when the right items are prepared incorrectly.

Beneficiation

The treatment of raw recyclable material to remove contaminants and impurities, and improve physical or chemical properties in preparation for use in the manufacturing process.