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July 3, 2013

Chairwoman Anne M. Gobi  
Joint Committee on Environment, Natural Resources and Agriculture  
State House, Room 473F, Boston, MA 02133

Chairman Marc R. Pacheco  
Joint Committee on Environment, Natural Resources and Agriculture  
State House, Room 312B, Boston, MA 02133

**Testimony re: S.374, Resolve providing for an investigation and study by the Executive Office of Energy and Environmental Affairs relative to a statewide single-stream recycling program**

*Attachments:*

- *A Common Theme, Is single-stream recycling service the salvation of all recycling programs, Susan Collins, Container Recycling Institute, Resource Recycling Magazine, Feb 2012*
- *Understanding the Economic and Environmental Impacts of Single-Stream Collection Systems; Container Recycling Institute, Dec 2009.*

Dear Chairwoman Gobi, Chairman Pacheco, and Honorable Members of the Committee:

Thank you for the opportunity to offer our comments on S.374. This proposal calls for a study of single stream recycling vs. dual stream systems.

A comprehensive and objective study on this subject is absolutely necessary, as communities are in the process of adopting single stream without objective data. As this bill is written, which doesn't include a full analysis of the entire process including the usability and value of the diverted material, as well as the higher costs of cleaning and processing these materials, the Sierra Club opposes this proposal.

If a study goes forward, the scope should be expanded to include the problems associated with single stream and the negative impact of single stream on industries in Massachusetts and elsewhere, which have had problems caused by the poor quality of single stream material or cannot use it at all.

The Sierra Club is the oldest and largest grassroots non-profit and non-partisan environmental organization in the country, with over 1.4 million members and supporters nationwide. Its chapter in Massachusetts has over 22,000 members throughout the state and a history of protecting the environment that spans more than forty years. We work to create healthy, vibrant communities through support of clean air and water; clean energy; recycling and waste-elimination; and the preservation of the Commonwealth's most treasured forests, parks and open spaces.

Although some industry-supplied data extols the ability of single stream systems to reduce program costs and retrieve more recyclable materials, other studies show that traditional dual stream recycling yields more recycled material and does so at a lower net cost.<sup>1</sup>

Single stream materials are collected by trucks that compact the paper and containers. Paper co-mingled with containers becomes contaminated by broken glass; the metal, plastic, and glass are contaminated by paper. Contamination poses expensive problems for the processors and end-users, including wear and tear on equipment and increased costs of disposal. Also, these recyclable “contaminants” are sent to landfills and incinerators, rather than recycled.

Paper collected in a single stream system is marketed to low-value uses like paperboard, much of which goes to overseas mills, rather than high quality uses. This is having an adverse impact on domestic mills, and making it harder for those who want to purchase recycled paper to find it.

The glass container stream is being contaminated with paper. This means that glass processors, for example, now have to process more material to send the same amount of glass to be turned into containers. It also means that much of the glass goes to low value uses, and that the paper—in this case a contaminant--which should be recycled at paper mills, is sent to a disposal facility instead. As a result, much of the glass that’s gathered through single stream is actually being sent to landfills.

A true evaluation of a recycling program accounts for what is actually recycled by end-users. This necessitates subtracting the percentage of rejected material at sorting facilities, processors and manufacturing plants, from the initial collection figure.

If communities want to ensure that the materials that residents separate for recycling are actually recycled, and that the recycling programs that they have worked to implement are stable and bring in the highest revenue possible, then single stream collection may not be the best choice. Also note that studies have shown that it is the larger collection bins associated with single stream that leads to higher collection rates, not necessarily the convenience of commingling materials. It is possible to achieve equally high recycling rates with source separation by offering a larger recycling bin and a smaller trash bin, or collecting recyclables and discarded food more frequently than trash.

The Container Recycling Institute, in 2009, concluded that:<sup>2</sup>

*Recent analysis demonstrates that single-stream systems, on average, actually cost more in total system costs (collection, processing and recycling) compared with dual-stream programs (separate fiber and container collection). In addition, the evidence indicating that single-stream systems actually divert more material than other collection methods is anecdotal. To date, little research has been done that considers actual recycling rates that factor in yield rates from the end-user.*

We therefore urge this committee consider amending this proposal as noted or to report it unfavorably.

*Portions of this report were written by Lynne Pledger.*

Respectfully,



Phillip Sego  
Massachusetts Sierra Club

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<sup>1</sup> Single Stream Recycling: Case Studies Prove Major Flaws, Vangel Paper, [www.vangelinc.com/recycling/single-stream-recycling-case-studies-prove-major-flaws](http://www.vangelinc.com/recycling/single-stream-recycling-case-studies-prove-major-flaws), retrieved May 2013.

<sup>2</sup> Understanding the economic and environmental impacts of single-stream collection systems, Clarissa Morawski. Container Recycling Institute, <http://www.container-recycling.org/assets/pdfs/reports/2009-SingleStream.pdf>, January 2010