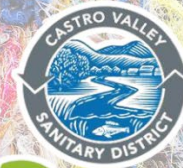




CPSC
California Product
Stewardship Councilsm



CVSan

Textile Waste Audit Report

Introduction

Textile waste poses serious environmental challenges, including slow decomposition, greenhouse gas emissions, and water pollution when improperly disposed of. Collecting textiles from their residents allows Castro Valley Sanitary District a unique opportunity to foster a more sustainable future for the city while enhancing the economic value of their waste management operations.

The California Product Stewardship Council (CPSC), sponsor of textile legislation in California, visited the ACI facility in San Leandro on October 7th, 2024, for a textile audit.



Figure 1. CPSC team conducting audit

Summary of Findings

Castro Valley Sanitary District collected 11,750 lbs. of textiles from residents of Castro Valley during the second week of their bi-annual curbside collection. CPSC audited 700 lbs. of the textiles collected.

Details of Methodology and Analysis

- Castro Valley Sanitary District collected a total of 11,750 lbs. of textiles from residents the second week of their bi-annual curbside collection.
- Two CPSC staff and one volunteer sorted textiles into four categories based on their fiber type (Cotton, Cotton-Polyester, Polyester, Mixed/ Misc.).
- The team scanned the garments with a Near Infrared (NIR) device (a TrinamiX) which automatically stored the data in the cloud. The team also completed a google form for each item sampled to document characterization data.

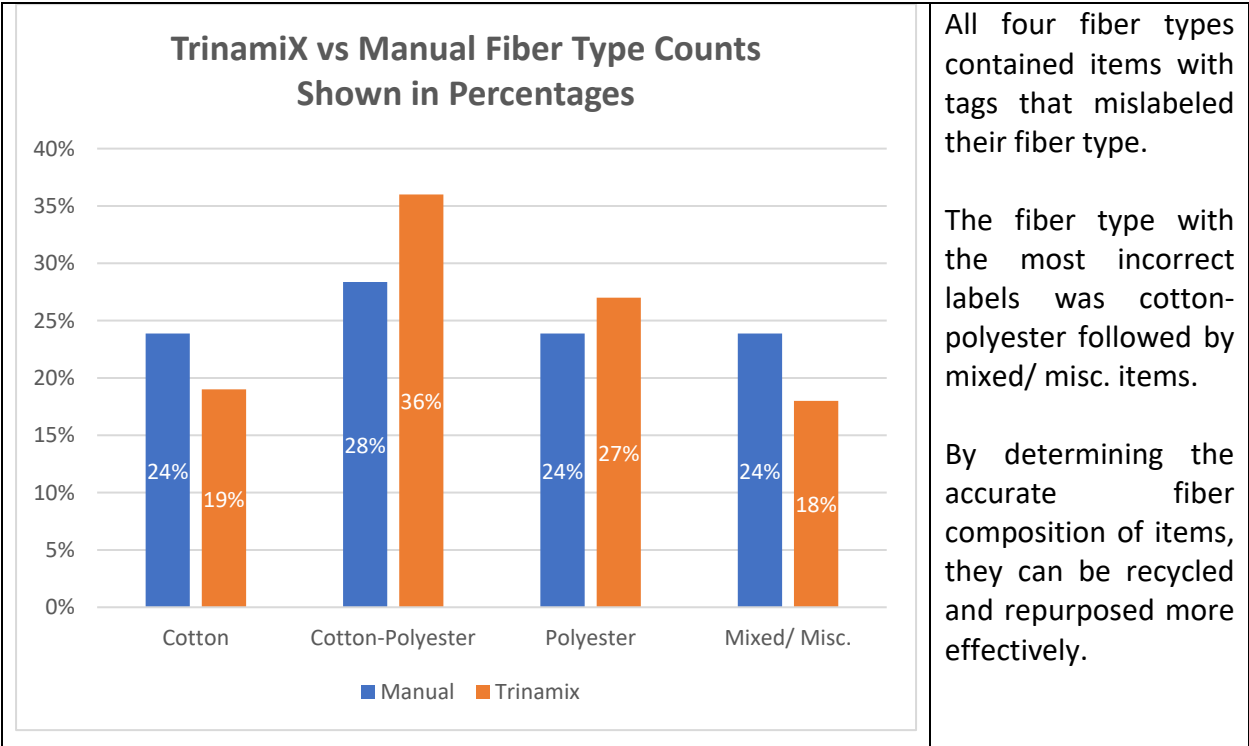
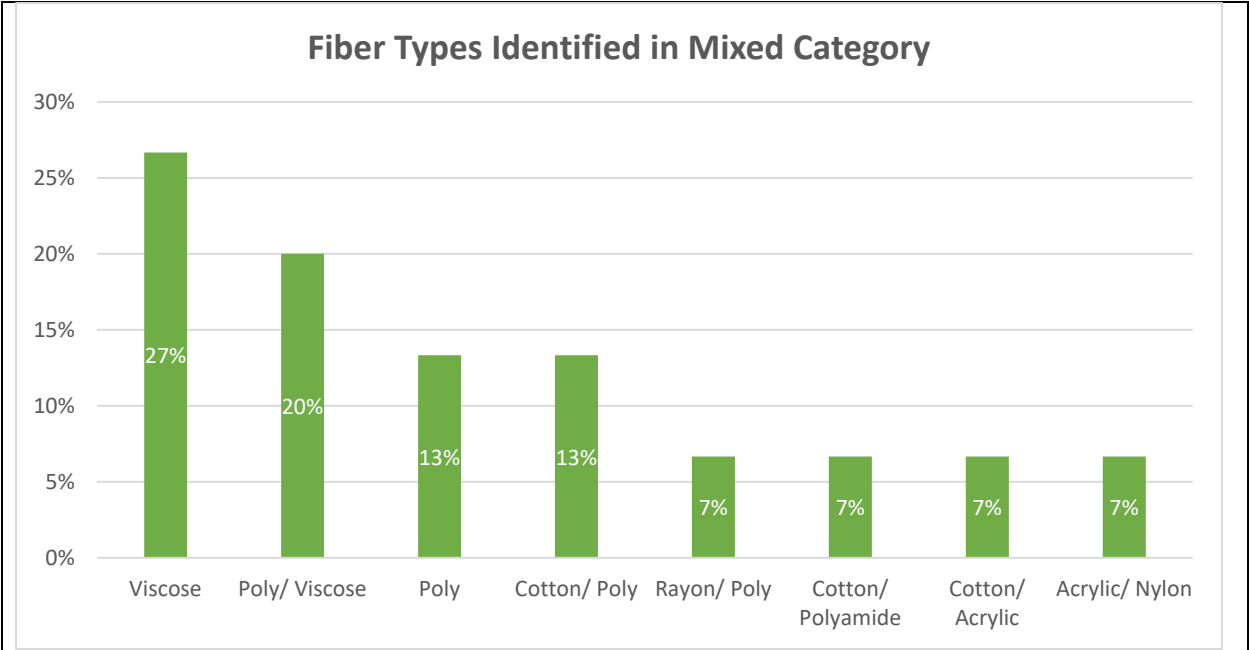


Figure 3. Discrepancy Between TrinamiX Fiber Data and Fiber Contents on Tag



Viscose items made up the largest percentage of items categorized as Mixed/ Misc. during the audit. 53% of items in this category were made of a blend that had polyester.

Figure 4. Fiber Type by Percentage of Total Items Scanned as Mixed/ Misc.

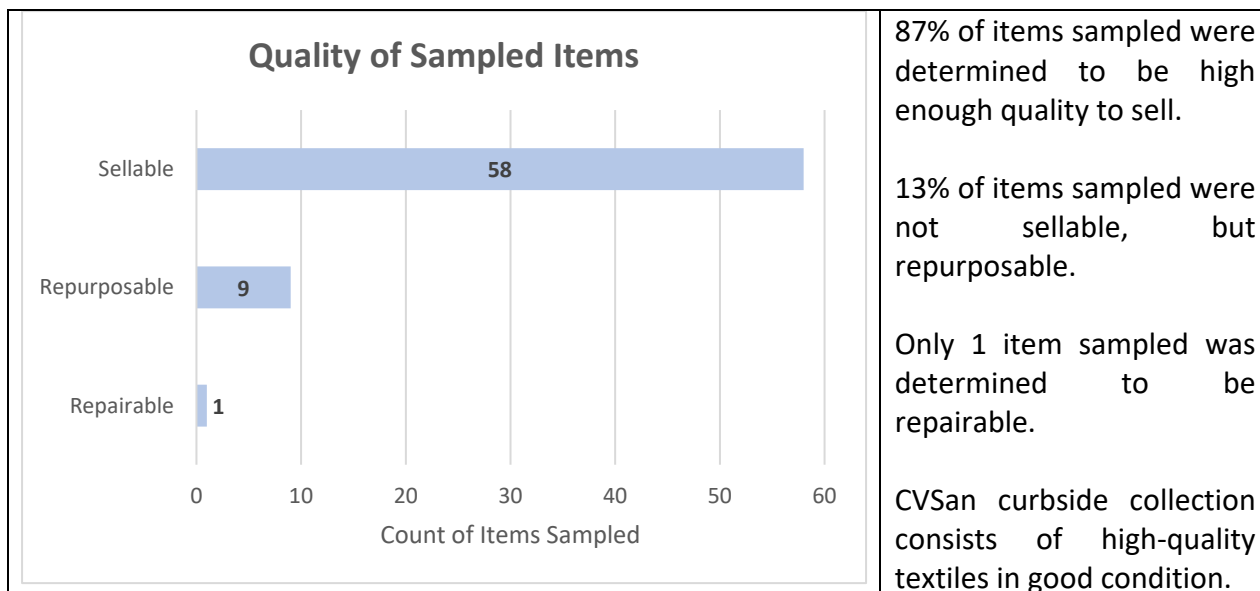


Figure 5. Quality of Textiles Sampled

Recommendations

Below are recommendations for Castro Valley Sanitary District on next steps for improving textile waste management.

- Contract CPSC to return to Castro Valley Sanitary District for a yearly audit to determine changes in the textiles collected from residents.
- Increase awareness and education on reducing textiles in the recycling stream and less textile consumption overall; engage members of the public and commercial waste generators from each zone.
- Establish partnerships with brands, recyclers, and NGOs looking to receive textiles for recycling to increase revenue from collection program.
- Support policy implementation to establish a permanent, convenient, accountable textile recovery program to combat textile waste generation.
- Recommended Next Steps:
 - Collaborate with a partner organization to prepare for the reporting requirements outlined in SB-707 (Newman). To qualify for reimbursements under SB-707, Castro Valley Sanitary District should:
 - Meet compliance with reporting requirements.
 - Demonstrate effective recycling and reuse programs.
 - Collaborate with certified organizations that facilitate recycling and reuse.
 - Conduct regular audits of collection programs.
 - Perform a second audit of the curbside collection program, focusing on diverting unusable textiles and sorting clothing by fiber type to assess feedstock compatibility with recyclers.
 - Broaden the scope of reuse audits to include additional textiles and soft goods, such as appliances and other similar items.

Appendix: Photo Record of the Audit



Ryan pulling random samples of Polyester from gaylord to scan and characterize



Textile pile from CVSan curbside collection. CPSC audited 700l lbs. of textiles from this.



Cotton and mixed/ Misc. gaylords full of clothing at the end of the audit.



Livia inputting characterization data after scanning a quilt to determine fiber type.



Livia and Connie use the TrinamiX device to scan bedding and determine the fiber type.



A gaylord containing items of miscellaneous and mixed fiber contents.