Recycling Quality Control - The Battle Against Contamination

Collaborating & educating to keep recycling sustainable

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Biography

Troy Hanson - Market Area General Manager, WI/MN Area

• 14 years with Waste Management
  ✓ INK area, WI/MN area, MI/OH/IN area & Corporate
  ✓ Recycling Operations
  ✓ Collection & Transfer Operations
  ✓ Sales & Marketing

• 11 years with Pepsi-Cola (Sales, Business Development & Operations experience)

• B.S. - Upper Iowa University
What has changed in our world?
Global Market Changes Are Impacting Recycling

2017: Over 25% of world’s recyclables were imported by China, including >50% of paper & plastics

China’s new import policies banning materials & limiting contamination have global impacts on recycling programs in communities across US

Operation Blue Sky = screening effort at China’s ports to inspect loads, enforce material bans & 0.5% contamination limit

Situation not likely to improve - China appears to be on path to eliminate imports of all post-consumer recyclables by 2021

The reduction of China’s markets resulted in oversupply of commodities & depressed commodity pricing. Supply is high & commodity pricing is very low
The Evolution of Recycling

- Introduced Single Stream recycling - it is simple & convenient. The focus was on increasing volume & participation
- We worked together to educate residents & businesses about the importance of recycling to raise diversion rates - “recycle often”
- Our current focus is on “recycling right” as global markets changed.
- What hasn’t changed:
  - People still want to recycle & do the right thing
  - Recycling is still an effective way to reduce pollution and conserve natural resources
  - States & local government have established recycling bans, goals & mandates
- What has changed:
  - Markets for Mixed Paper and Plastics are limited
  - Quality requirements are strict
  - Operating costs have increased
  - Recycling to provide feedstock for new products has devolved to aspirational, “wish-cycling”

1 in 4 items placed in a recycling cart is not recyclable!

0.5% Contamination Enforced by China

>25% National Avg. Contamination %, Customer Contamination
Recycling Supply and Demand

- Recycling programs have a fundamental economic supply/demand problem
- Even though demand has significantly declined, inelastic supply continues to flow in at high rates
- With inelastic supply and limited international demand, domestic markets are at full capacity

The “Right Thing” must be reframed - not all materials can be recycled
What does this mean for recycling?
It’s time to re-write the recycling playbook

• It is time to **rethink/reset** recycling programs.
• Which materials offer the best bang for the buck?
• As the cost of recycling increases, should we be looking more closely at the benefits of waste reduction?
• This is the new normal for recycling, we all need to acknowledge that fact and educate the public about the true cost of recycling
• Environmental benefits are our goal

**WHY do we recycle and WHAT should we recycle?**
Start with the basics:

- Recycling conserves resources by creating secondary feedstocks for industry
- Conserving virgin resources makes recycling environmentally good thing to do
- Recycling makes business sense
Collection is not recycling

- Recycling doesn’t happen until a material displaces virgin resources
- Unless materials becomes a feedstock for a new product, it increases cost and environmental burden.
The Battle Against Contamination?
One Bad Apple Can Spoil the Bunch
And the same is true for recycling, where one non-recyclable item can spoil an entire batch of otherwise good materials

Polystyrene foam and plastic “to-go” containers and cups cannot be collected curbside.

Soiled and wet paper should be placed in the trash.

Food scraps and liquids may seem harmless, but they could turn a whole load of recycling to trash.

Tanglers like hoses, cords, and holiday lights wrap around equipment and shut down entire recycling centers!

Flexible packaging like chip bags and juice or soup pouches cannot be recycled in curbside programs.

Items like textiles and clothing don’t belong in the recycling. Check local take back programs.
Think Outside the Plastic Bag
One of the biggest culprits of contamination is plastic bags

Plastic bags and bagged recyclables are NOT recyclable in curbside and business recycling containers!

• Plastic bags pose a huge safety threat to our employees. They wrap around screens, clog up equipment and shut down the system. Staff must stop work multiple times each day to carefully climb into machinery and cut plastic bags out of gears and screens.

• Materials must be clean and dry to be recycled. Plastic bags pick up dirt and moisture in your containers and in trucks. By the time they get to the recycling facility - even a bag that was clean to start with is too dirty and wet to be recycled. There is simply NO market for wet, dirty plastic film and bags, so they end up in the trash.
What Can We Do?
Commit to getting back to the basics of good recycling

1. Recycle all empty bottles, cans, paper and cardboard.
2. Keep food and liquids out of the recycling.
3. Keep plastic bags out of the recycling bin.
   NO BAGGED RECYCLABLES.

Visit RecycleOftenRecycleRight.com to download free tools and learn more about recycling right, including the ‘Free Your Recyclables’ and ‘Think Outside the Plastic Bag’ campaign materials (coming soon).
Free Your Recyclables

Don’t bag your recyclables! We need to help individuals change their behavior and place recyclable materials directly into containers - no plastic bags! It’s safer for workers and better for the environment.

Reduce and reuse: Avoid plastic bags all together by taking reusable bags with you the next time you go shopping. Save leftover plastic bags to use as trash liners (never recycling) around your home.

Recycle clean and dry plastic bags at local retailers. The bags that are collected in these programs are kept separate so they stay clean and dry. Visit plasticfilmrecycling.org to find a take back location near you.

Collaborate! Join us in the battle against recycling contamination. It takes all of us working together to educate consumers to the new realities of recycling.
What we are doing and how can you help?
How can “we” change consumer behaviors?

• Collectively we need to educate consumers on the “new normal” for recycling

  WM actions:
  ✓ RORR - commit to getting back to the basics of recycling
  ✓ Continuous customer reminders via written and verbal messaging
  ✓ Battle Against Contamination - grading of material
  ✓ Getting the message out through media, stakeholder groups and customer conversations

  How you can help?
  ✓ Emphasis the fact that recycling has a “new normal” with all stakeholders
  ✓ Educate, educate, educate, we appreciate your support
Thank you!