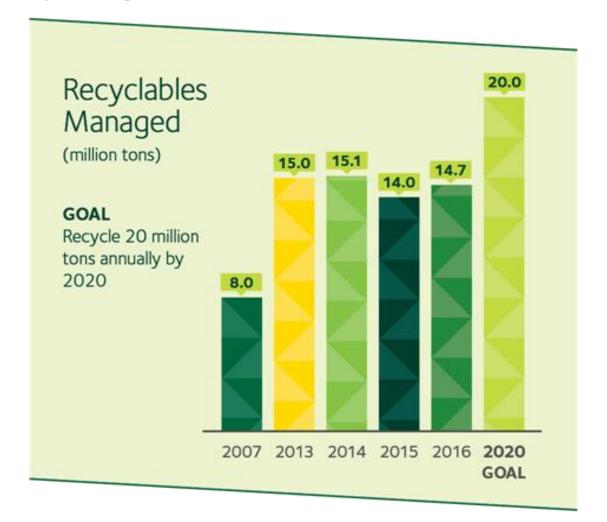


## WM Recycling





### Overview: Changes to China's import policies

#### **Ban of all Mixed Paper and Mixed Plastics**

The Ministry of Environmental Protection of the People's Republic of China (MEP) informed the <u>World Trade Organization</u> (WTO) on July 18, 2017 of its intention to ban the import of 24 recyclable commodities, including "unsorted mixed paper" and "mixed plastics" effective January 1, 2018.

#### **Reduction of Contamination Threshold to .5%**

On January 11, 2018, China finalized its contamination standard limiting contamination for ANY material imported into the country to less than 0.5%.

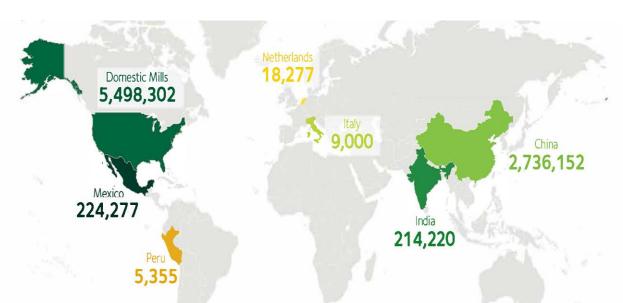
#### Suspension of all New License Approvals

The Chinese Ministry of the Environment (MEP) began limiting the flow of material last May by restricting the issuance of required import licenses to mills. We expect ongoing volatility in the approval of import licenses in 2018.



### Global impacts

- China is largest importer of recyclables in the world. These measures by the
  Chinese Government have implications to all countries with recycling
  programs. The European Union exports over 95% of its plastic to China, and the
  US and the EU are the largest importers of paper grades into China.
- China is the single largest consumer of recyclable materials generated in North America. One-third of all scrap material collected in the U.S. is shipped overseas, with the large majority of this material going to China. In 2016, the US exported \$5.6 billion in scrap commodities to China (Institute for Scrap Recycling Industries).





WM shipped 30% of its paper to markets around the world

### **Trends**

- Uncertainty and volatility are the name of the game and are expected to continue throughout 2018
- China continues to limit inbound material:
  - √ The Chinese government recently issued some licenses to mill buyers needing to purchase material.
  - ✓ We expect reduced quotas for 2018.
- WM continues to move most commodities, although at much lower prices and to a broad variety of customers across the globe:
  - ✓ Our primary goal is to move material avoiding landfilling and warehousing
  - ✓ Plastic is moving to domestic buyers
  - ✓ Paper is moving to domestic mills, and to India, Vietnam, Malaysia, and S. Korea.



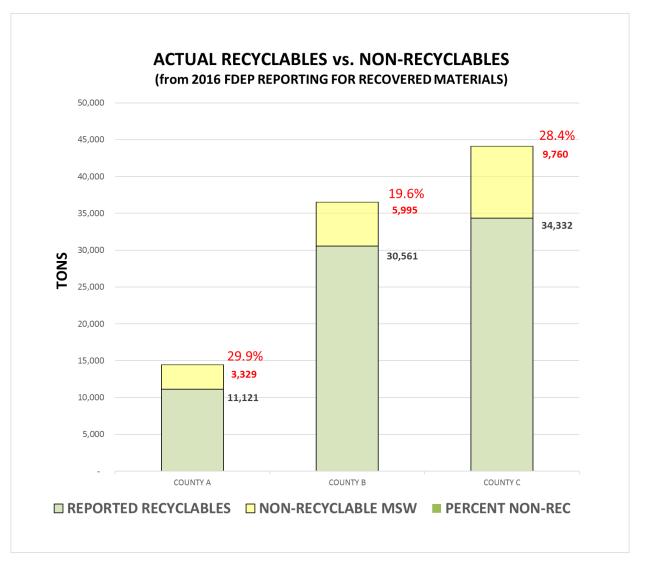
### **Trends**

#### Quality rules

- On January 11, 2018, China finalized its contamination standard limiting contamination for any material imported into the country to less than 0.5%.
- With supply exceeding demand, all buyers will demand the highest quality.
- Inbound quality affects outbound quality.
- We are working to improve inbound quality from our residential and commercial customers to keep their costs low and ensure recycling remains environmentally and economically sustainable.

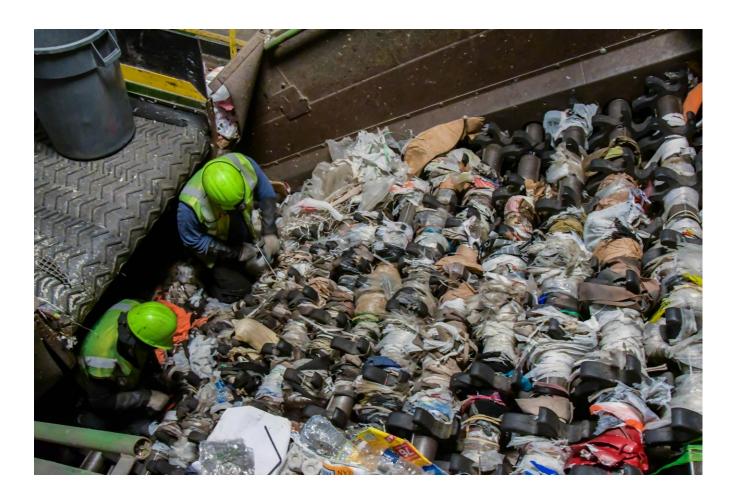


# Challenge of Contamination in Florida





# Contamination in Florida



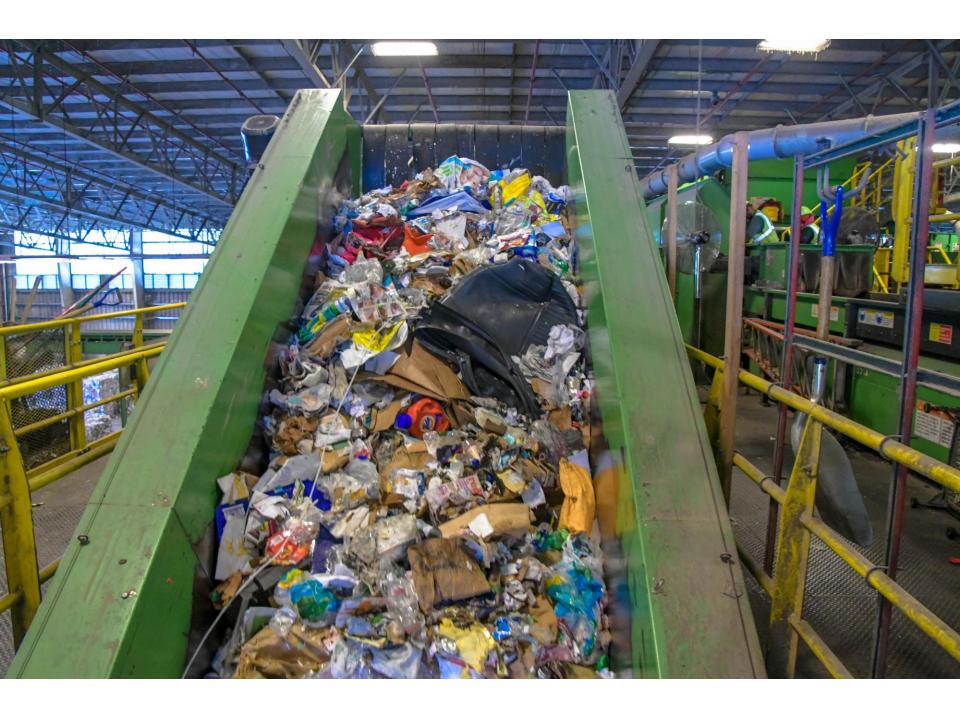


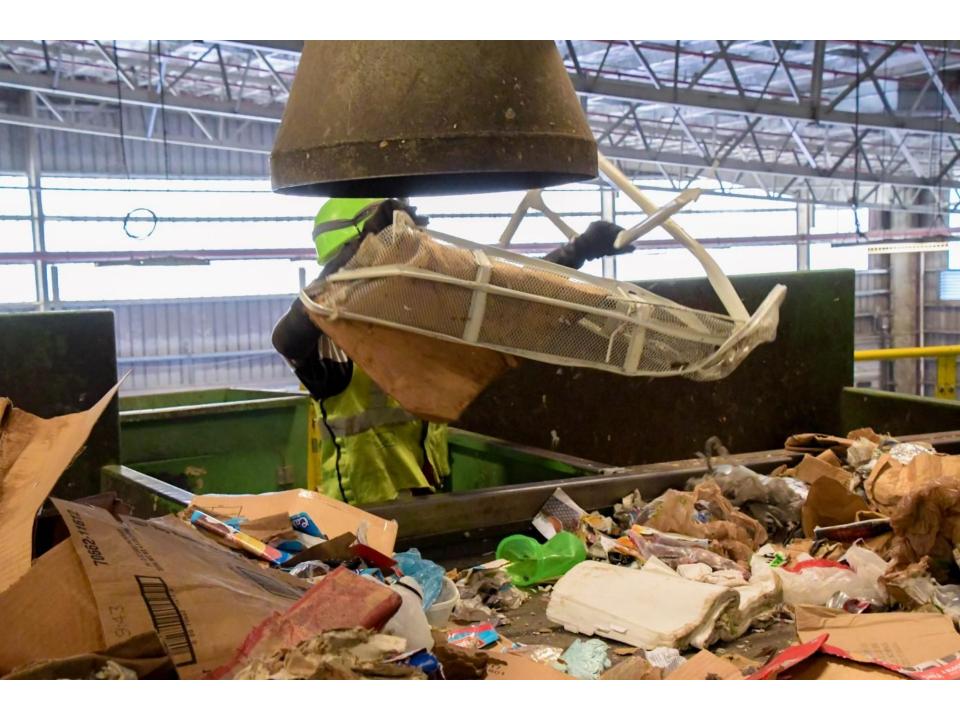




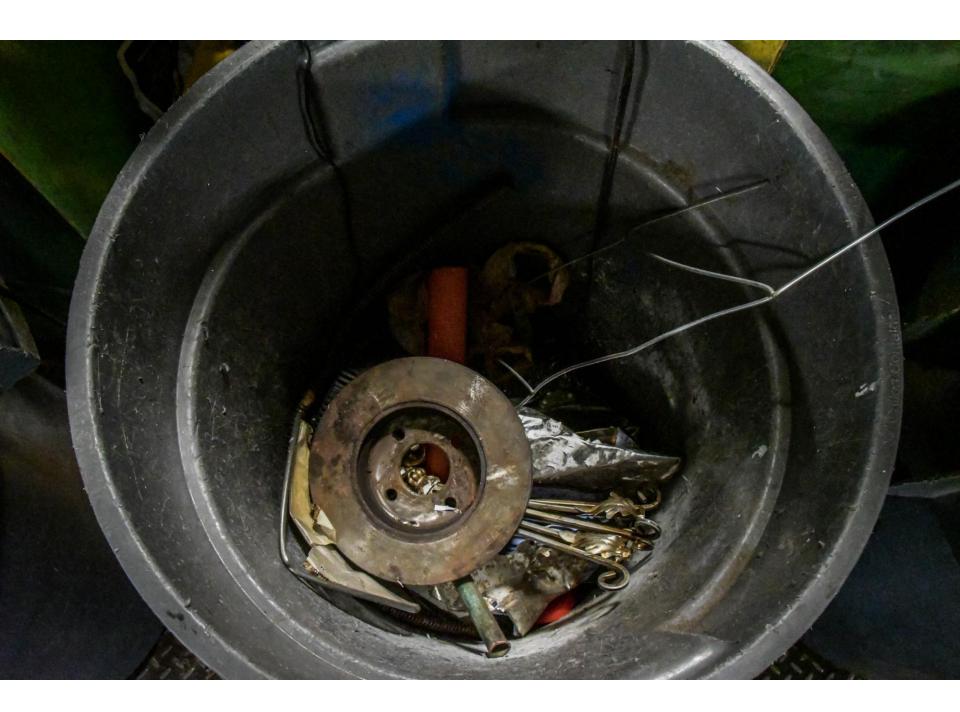




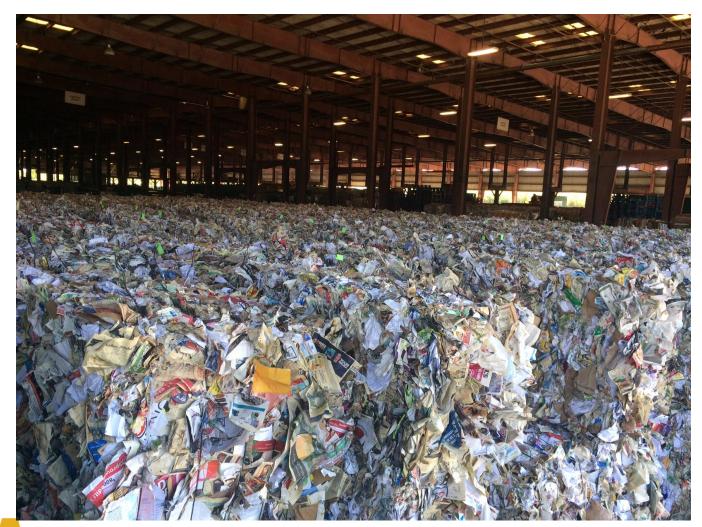








# Mixed Paper Bales – Reuter Recycling



### Contamination: Education



- FDEP and MRF Operators: WM, Waste Connections, Marpan and Single-Stream Recyclers, LLC
- Focus on the basics: Paper/cardboard; Plastic bottles/jugs;
   Aluminum/steel cans
- FDEP Press Conference Launched on November 15 America Recycles Day in Tallahassee
- Social Media Toolkit pushed out to all 67 counties









Floridians are contaminating curbside recycling bins with materials that are not meant to be there — mainly plastic bags; tanglers, like cords and hoses; and clothing.

Let's **RETHINK** what we recycle and **RESET** our behavior to focus on recycling the *basics* at curbside.

### SB 1308/HB 1149

Counties and municipalities shall address the contamination of recyclable material in contracts for the collection, transportation, and processing of residential recyclable material based upon the following:

- (a) A residential recycling collector may not be required to collect or transport contaminated recyclable material. As used in this subsection, "residential recycling collector" means a for-profit business entity that collects and transports residential recyclable material on behalf of a county or municipality.
- (b) A materials recovery facility may not be required to process contaminated recyclable material.



- (c) Each contract between a residential recycling collector and a county or municipality for the collection or transport of residential recyclable material, and each request for proposal for residential recyclable material, must define the term "contaminated recyclable material" in a manner that is appropriate for the local community, based on the available markets for recyclable material. The contract and request for proposal must include:
- 1. The respective strategies and obligations of the county or municipality and the collector to reduce the amount of contaminated recyclable material being collected;
- 2. The procedures for identifying, documenting, managing, and rejecting residential recycling containers, carts, or bins that contain contaminated recyclable material;
- 3. The remedies that will be used if a container, cart, or bin contains contaminated recyclable material; and
- 4. The education and enforcement measures that will be used to reduce the amount of contaminated recyclable material.

#### Quality, quality, quality

- Pricing and markets are likely to continue to be extremely volatile in 2018.
   Quality will impact pricing and movement. Quality, quality, quality is important.
- WM has not dropped material from its curbside recycling programs, although we are offering pricing with and without glass in many markets, including Florida. There are pockets of the country where some counties/cities have dropped glass and mixed plastics from their programs.

We will continue to work in partnership with our county and city customers to improve quality at the curb.

