



*Environmental Assistance
and Customer Service*
ENVIRONMENTAL QUALITY

CHINA, RECYCLING MARKETS & CONTAMINATION

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MARKETS & CONTAMINATION

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- **Carolina Recycling Association 2018 Conference March 19-22**
 - 20 excellent recycling sessions and workshops
 - And 1 really bad one..mine

What is the recycling industry saying about China, markets and contamination?





MARKETS & CONTAMINATION

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You're going to get
all the super hits on
one presentation!

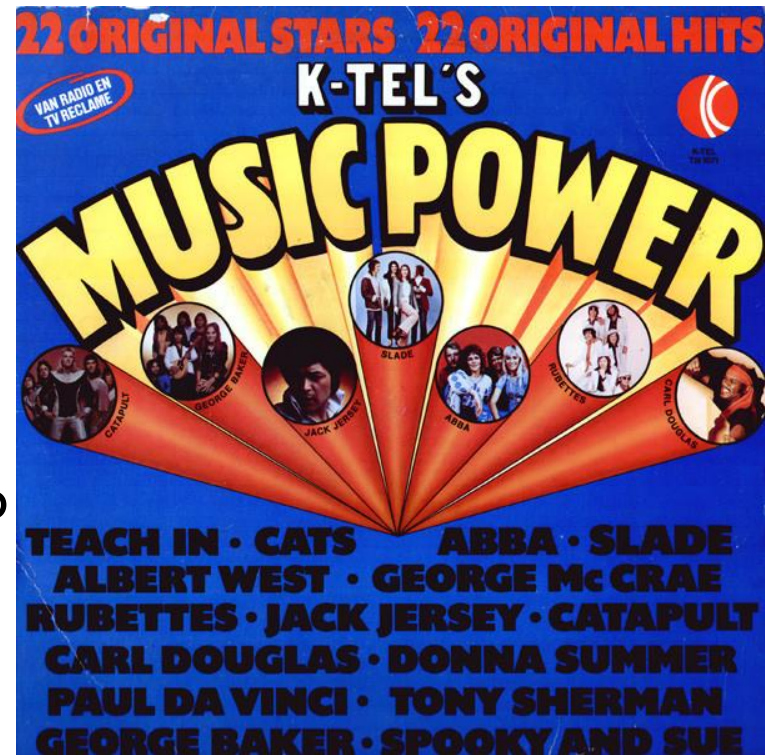




MARKET CHALLENGES-WHAT'S THE SAME? (LAST YEAR'S HITS)

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- You will likely need more than one recycling vendor
- Truckload quantities
 - Storage
 - Aim for mixed loads
- Communication and Time Challenges
 - Recycling may not be your only job
 - Vendors may have a million questions **or**,
 - Vendors can be unresponsive





MARKET CHALLENGES-WHAT'S THE SAME? (LAST YEAR'S HITS)

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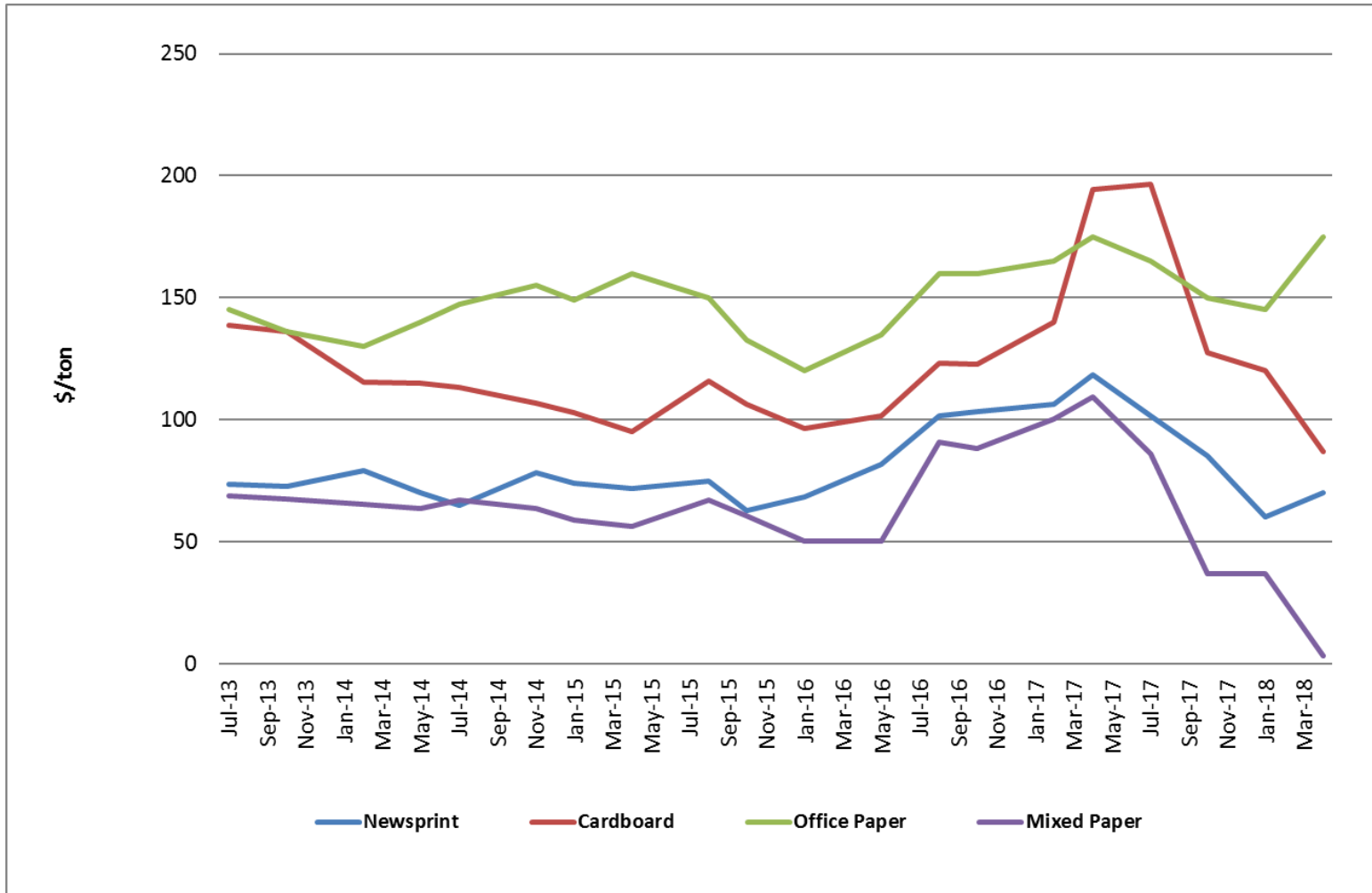
- Your problem recyclables are most likely not a high value material
 - Markets fluctuate
 - Your problem material is not worth what it may have been in the past
 - It's a “buyers market”
 - China
- Cost avoidance
 - Best case scenario is a cost neutral solution
 - You will likely have to pay to have material recycled
 - The biggest mistake the recycling industry made was promoting recycling as a free or money making option





MARKET TRENDS

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MARKET TRENDS

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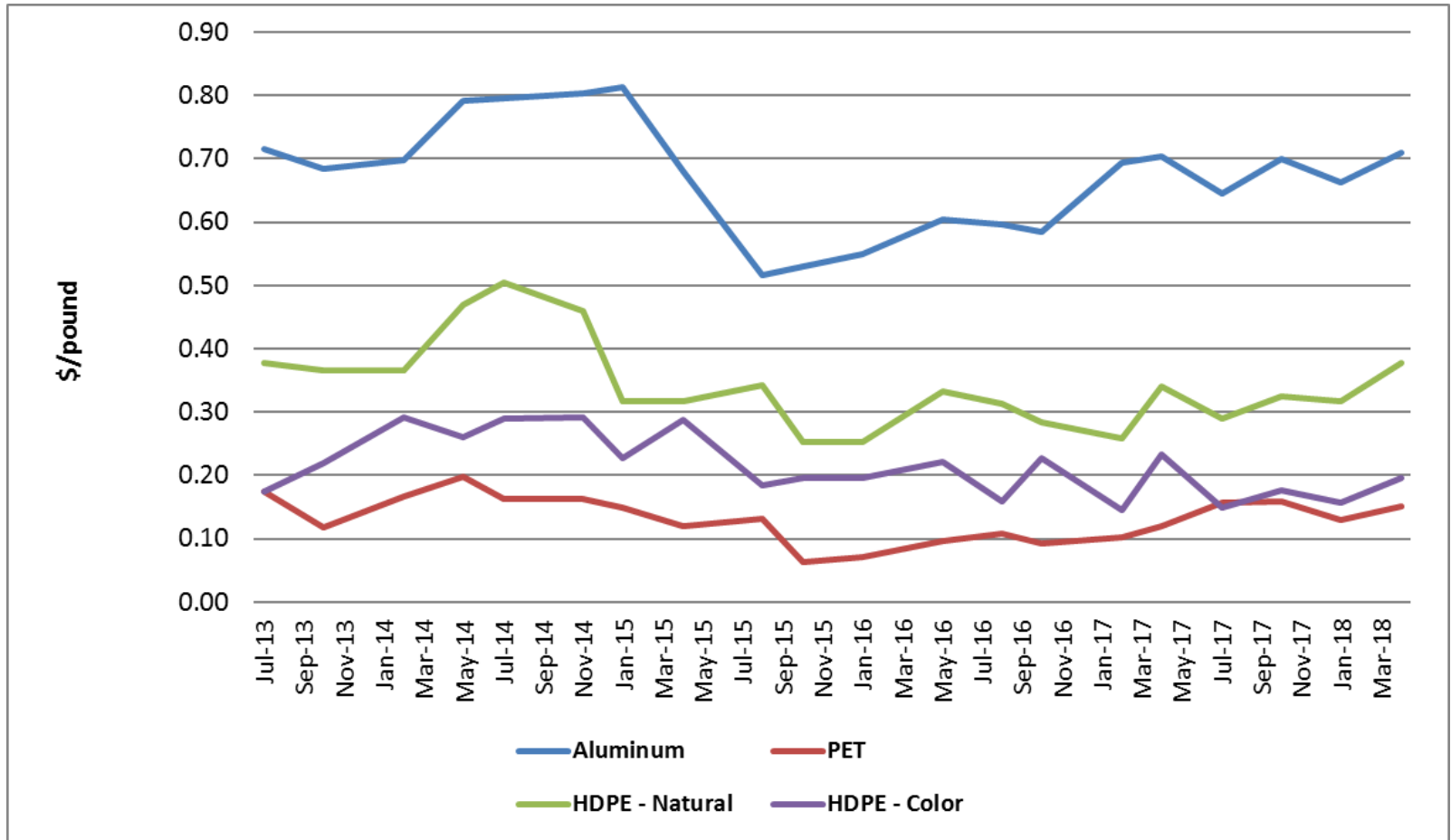
- What are we seeing?
 - Cardboard is down
 - Chinese government has said that used cardboard exported to China can only have a maximum of 0.5% of contaminants
 - The makeup of paper has changed
 - Mixed paper is no longer shipping
 - MRFs and processors switched to mix because it was cheaper to separate
 - Now they are separating again





MARKET TRENDS

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MARKET TRENDS

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- What are we seeing?
 - Plastics
 - HDPE and PET are about the same
 - No longer shipping 3-7's or Bulky Rigids
 - Shrinking export market for other plastics





CONTAMINATION

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- Contamination appears to be a way-of-life, particularly in Single Stream processing
- Contamination causes increased maintenance costs on equipment and can reduce efficiency in sorting
 - Jim Marcinko – Waste Management Recycling Operations Director





CONTAMINATION

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- Ruins good commodities - devaluation
- Adds unnecessary expense/processing costs/energy use
- Takes a much longer, costlier trip to landfill
- Distorts Recycling Rate
- China now says... "Enough is Enough"
- Ministry is environmentally protection driven, not economic
 - No longer wants our garbage – Goal to improve “local” China collections
 - We did it to ourselves
 - Shawn State - Pratt Recycling





CONTAMINATION

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Recycling Today: September 2017



- “Talking about a changing world”

- For the past 20 years, China has acted as a sponge, absorbing scrap metal, paper and plastic to help feed its growing manufacturing sector and its need for basic materials.
- While one might think China’s ability to use discarded materials to help build a manufacturing powerhouse would be admirable, (Chinese) media reports often depict it as a practice built on taking in “foreign garbage.”





PLASTIC CHINA

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- 2016 documentary on plastics recycling titled “Plastic China” documents the thousands of family-owned plastic sorting and shredding operations in China
 - Dangerous working conditions
 - More trash than plastic
 - Polluting the neighborhoods, air, and water
- “Recycling plastics could have been a good thing, but if it isn’t done well, it causes secondary pollution,”
 - Ma Jun, the director of the Institute of Public and Environmental Affairs
- President Xi Jinping rumored to have watched “Plastic China”. Inspired him to clean the Chinese environment

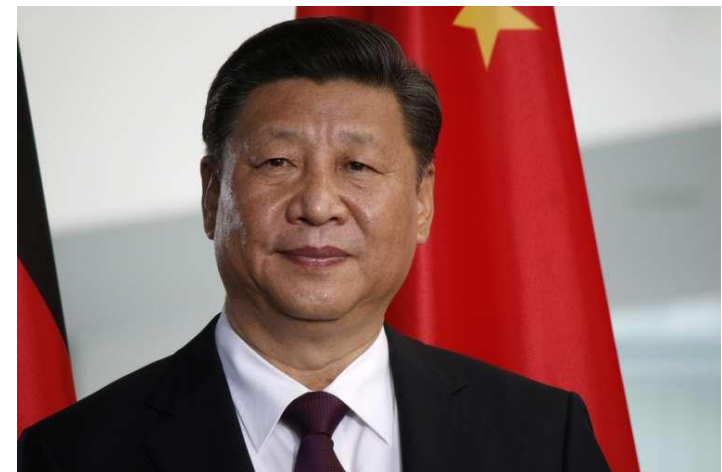




CHINESE REACTION

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- President Xi Jinping's Recent Speech “....What we now face is the contradiction between unbalanced and inadequate development and the people's ever growing needs for a better life”, Mr. Xi said. He added “improving people's lives included reducing pollution....”
 - Shawn State - Pratt Recycling
- A growing middle class demands (and deserves) clean air, clean water and a better environment for their families





CHINESE REACTION

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- But, the biggest Market Influence today is... Blue Sky 2018
- China's customs authority, the General Administration of Customs of the People's Republic of China, has announced a 10-month-long period of special actions against foreign garbage smuggling, calling it "Blue Sky 2018".
 - Shawn State - Pratt Recycling





CHINESE RESTRICTIONS

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- Effective Dec. 31, 2017 – Filed with WTO
- Some 2017 Licenses already revoked 2018 not any better
 - New import Licenses have been curtailed
- Unprocessed Plastics are BANNED
 - Processing markets are being established in other parts of Asia
- Mixed Paper is BANNED
 - Other paper with $>.5\%$ contaminants is “BANNED”
- Inspections are and will continue to be very aggressive
 - Shawn State - Pratt Recycling





ALWAYS LOOK ON THE BRIGHT SIDE OF LIFE

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- East coast was better prepared for china than west coast
- East coast has more domestic options
- Values are lower because there is more supply, but a lot can still be recycled
- Processors are investing in equipment
- Recycling companies are racing for the next big innovation





WHAT CAN WE DO?

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- Improve quality
- Plan for market swings
- Rethink recycling goals
 - Don't focus on tons and percentages –Focus on quality
 - Chaz Miller, Director Policy/Advocacy - National Waste & Recycling Association
 - Shawn State - Pratt Recycling





WHAT CAN WE DO?

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- **Recycling Programs Don't Improve By Themselves**
 - Start with a pilot project
 - Track performance
 - Recovery & contamination trends
 - Monitor & adjust
 - Move bins to optimize use
 - Refresh bins
 - Peeling decals, grungy bins discourage recycling
- **Document success**
 - Alec Cooley, Keep America Beautiful



THANK YOU AND GOODNIGHT!



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