



China Sword **STAKEHOLDERS MEETING**

May 2018



Current Status of Recycling Industry





Current Status of Recycling Industry

- **Early 2013** **Green Fence goes up**
- **2014** **Port slow down**
- **November 2016** **Plastic China released**
- **February 2017** **National Sword announced**

Focus

China puts up a green wall to US trash

US recyclers are nervous about losing their large market as China enforces new environmental laws this year.

By Peter Ford, Staff Writer | JUNE 19, 2013

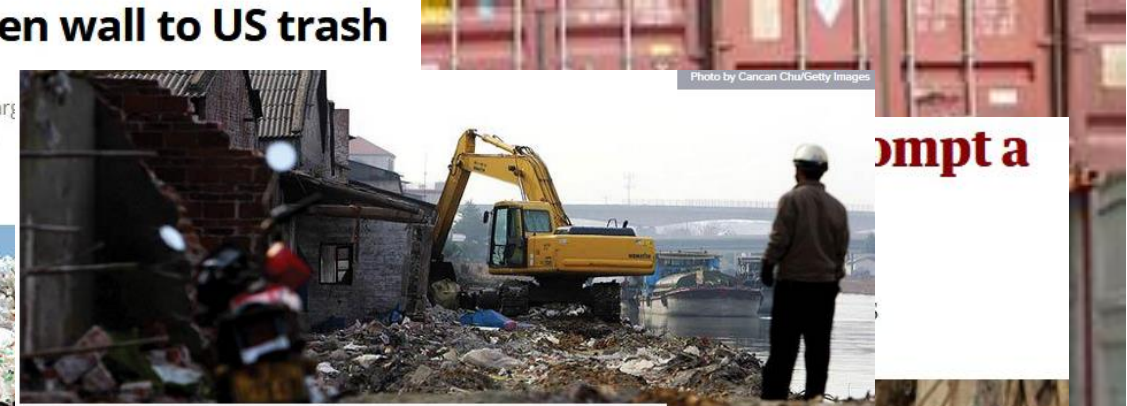


Photo by Cancan Chu/Getty Images

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RECYCLING > PLASTICS

China Enacts "National Sword 2017" Crackdown on Waste Imports

Some regard this campaign as the second Green Fence.





Current Status of Recycling Industry

March 2017

Enforcement on illegal activity (smuggling) is heightened

July 2017

China says it will ban certain recovered material imports

Posted on July 19, 2017

by [Colin Staub](#)





Current Status of Recycling Industry

Late 2017

Oh, Scrap: China, the Biggest Buyer of America's Trash, Wants No More

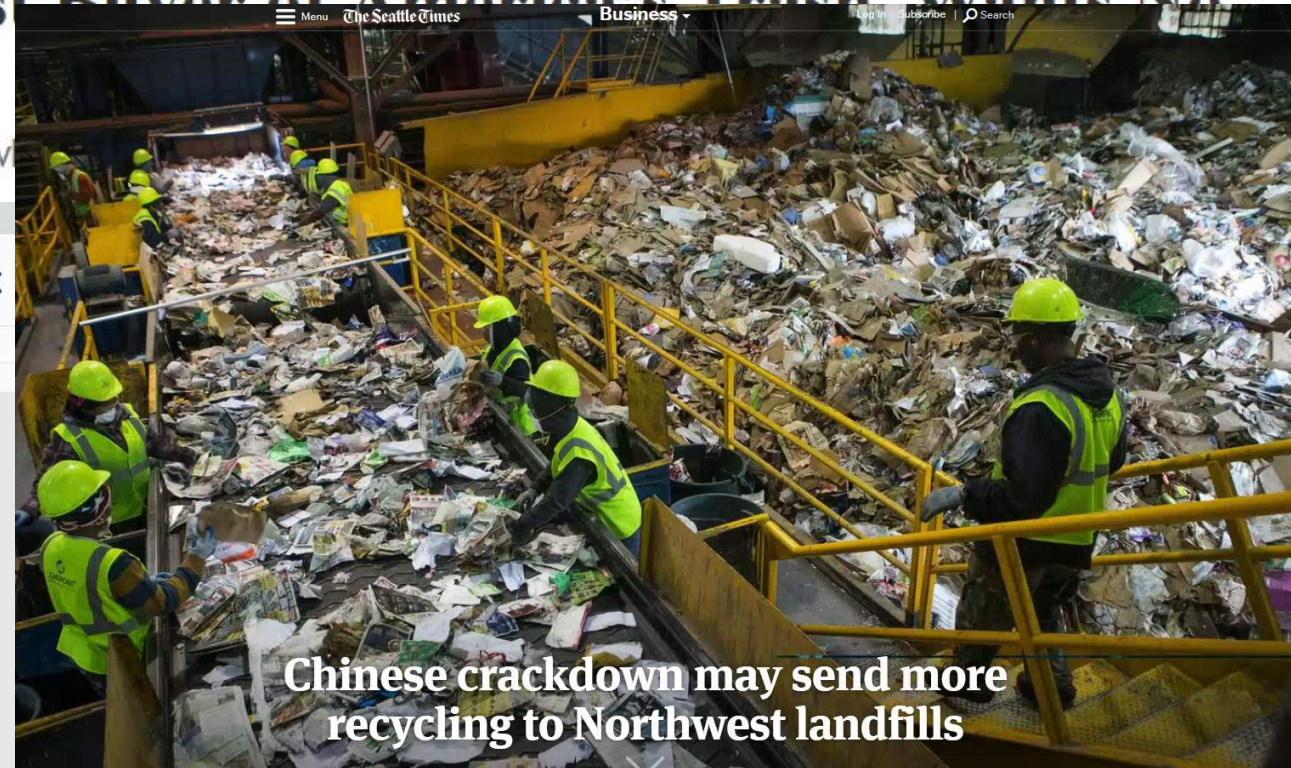
With enough of its own, China doesn't want U.S. scrap, w

Recycling is in trouble — and it might be your fault

Paul Singer, USA TODAY Published 2:22 p.m. ET April 20, 2017 | Updated 2:34 p.m. ET April 28, 2017



The cost of recycling is increasing due to contamination by items that can't be recycled. USA TODAY



Chinese crackdown may send more recycling to Northwest landfills



Current Status of Recycling Industry

November 2017

EUWID | RECYCLING AND WASTE MANAGEMENT

News Markets Archive E-Paper Print e

Good evening dear user!

IMPACT

China No Longer Wants Your Trash. Here's Why That's Potentially Disastrous.

The country has been the "world's wastebasket" for decades. But starting Jan. 1, China has said "no more."

By Dominique Mosbergen
01/24/2018 10:47 am ET | Updated Jan 24, 2018

POLICY

China sets 0.5 per cent contaminant limits for waste paper and plastics

17.11.2017 – The Chinese government notified the World Trade Organization (WTO) of new contaminant limits for wastes imported as raw materials on 15 November. According to the submitted documents, the new regulations are to go into effect on 1 March 2018. WTO members have until 15 December to comment.



Shifting shi

Early 2018



Current Status of Recycling Industry

March 2018

RESOURCE
RECYCLING

Your trusted source for recycling news and analysis

fills as

China's ban hits additional materials

Posted on April 24, 2018

by [Colin Staub](#)

Chinese authorities plan to halt imports of more scrap categories by the end of the year, including post-industrial scrap plastic and a variety of scrap metals. The country also announced a list of even more imports it will ban by the end of 2019.

The Chinese Ministry of Ecology and Environment (MEE) [announced](#) April 19 that it is set to reclassify post-industrial PE, PET, PS, PVC and other scrap plastic as materials banned from import by the end of 2018, according to an [English translation](#) of the announcement provided by the Institute of Scrap Recycling Industries (ISRI).



Scrap News ▾ Conferences ▾

with Blue Sky 2018





Current Status of Recycling Industry

April 2018

Newsroom

Natural Resources and Parks
Public Affairs

King County forms task force to seek solutions to China recycling import restrictions

April 19, 2018

May 2018

China trash ban is a global recycling wake up call

by Ivana Kottasová @ivanakottasova

April 20, 2018: 11:08 AM ET

Recommend 1.9K



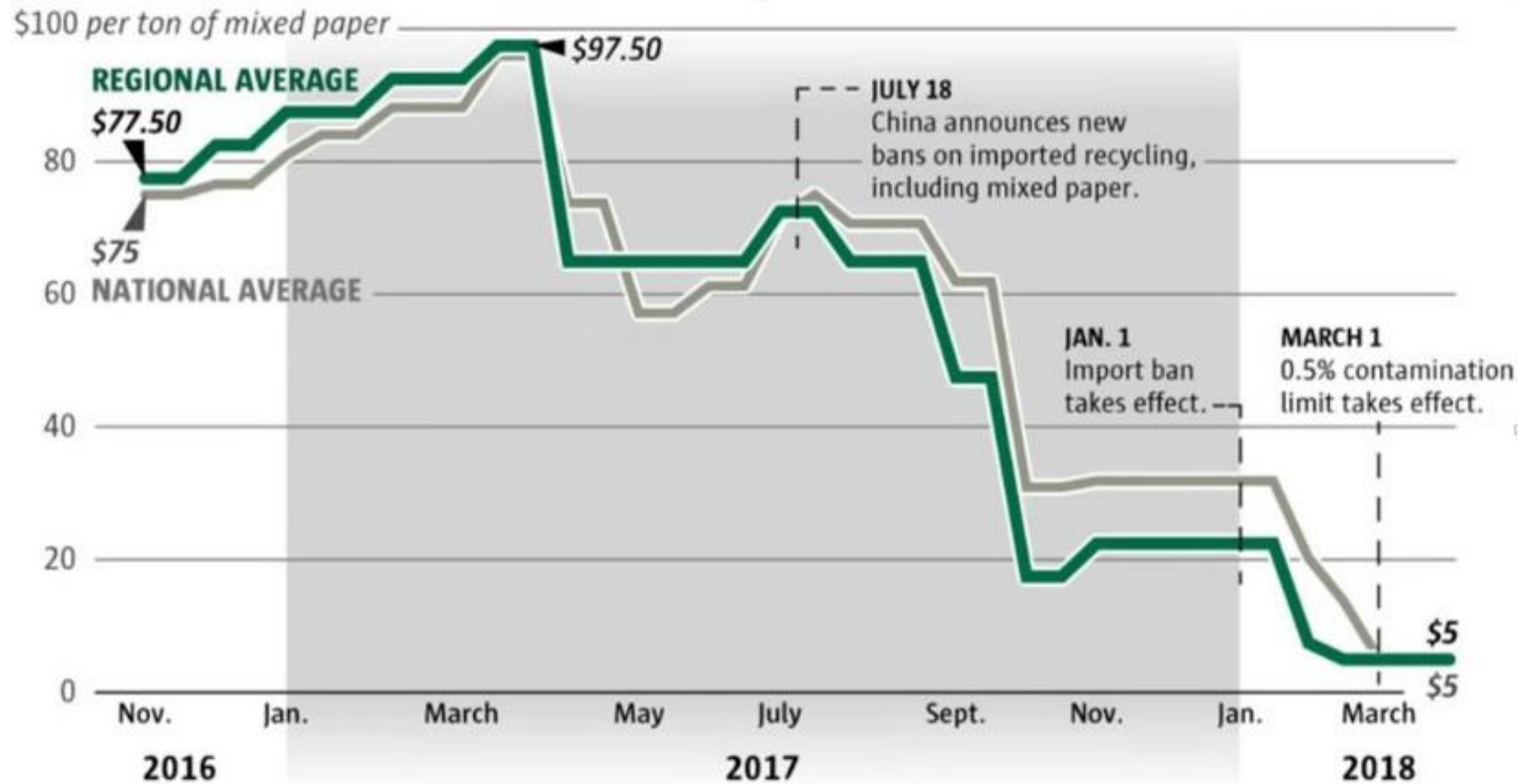
OAKLAND, CA, May 4, 2018 (PPI Pulp & Paper Week) - A dramatic announcement by the government of China instantly halted new bookings for US recovered paper late this week and effectively left market players portending that market prices would plummet.



ng
market issues finally come into focus



Market Update



Source: RecyclingMarkets.net

EMILY M. ENG / THE SEATTLE TIMES

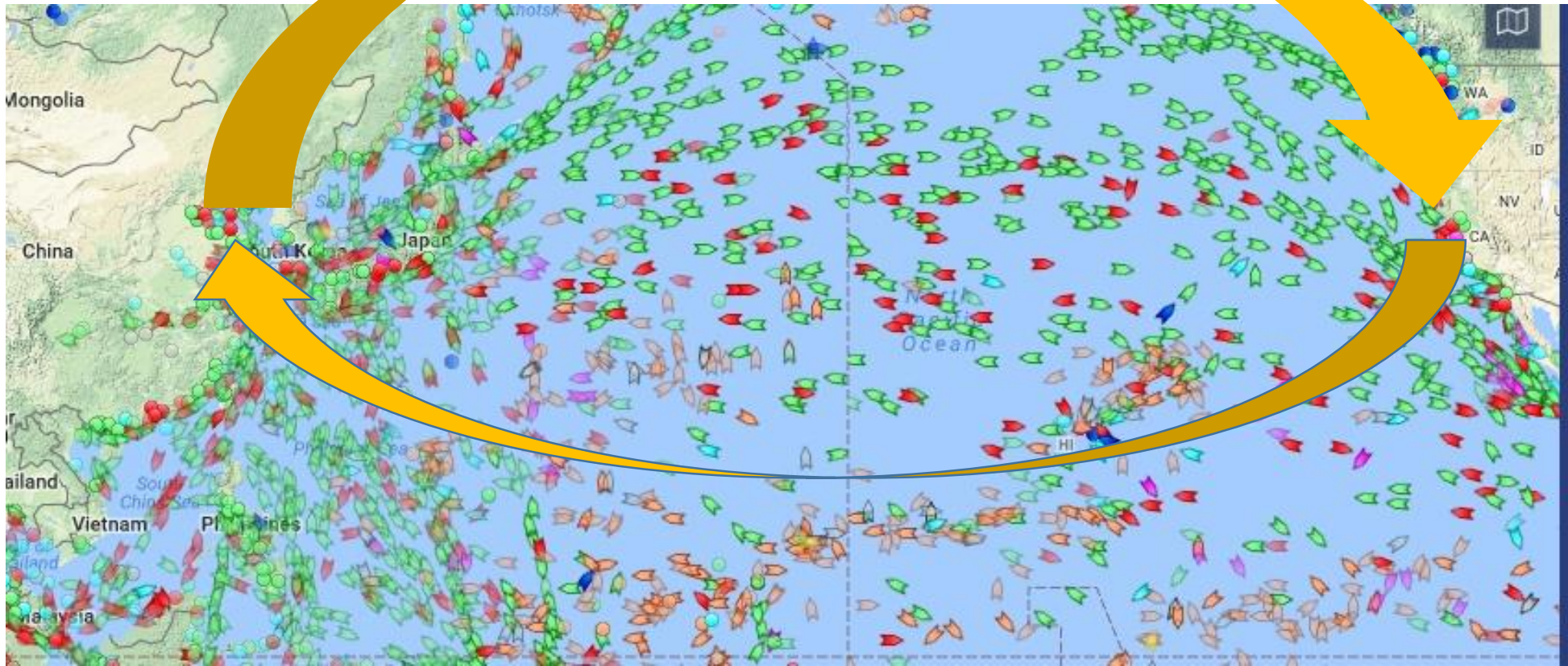
Market Update

- ✓ OCC
 - ✓ #12 OCC
 - ✓ #11 OCC
- ✓ Mixed paper
- ✓ There's a market for everything, but at the right price/quality





Trade Deficit





FIBRE TRADE INC.

- Direct Mill buyer
 - Established in 1987
- Packer
 - Shred Works packs OCC, Office Pack
- Broker
 - OCC & Various grades of paper
- ISO: 9001

DISCUSSION POINTS

1. Current Market update
 - China Environment and Control
 - CCIC Issues
2. Alternative Markets
 - South East Asia
 - Domestic Market
 - Other
3. Issues at Port and Transportation Costs
4. Specification Standards of Alternative Markets
 - OCC
 - Mix Paper

MIXED PAPER MARKETS

Mixed Paper	Q1 2017	Q1 2018	% Growth
India	90,143	279,482	210%
Indonesia	23,296	88,189	279%
Canada	19,784	56,943	188%
Vietnam	4,005	36,127	802%
Taiwan	5,554	14,247	157%
Colombia	516	7,406	1335%
United Arab Emirates	332	6,531	1867%
Ecuador	403	5,345	1226%
Malaysia	392	4,602	1074%
Significant Comparison Markets			
China	579,487	25,720	-96%
Mexico	32,321	32,130	-1%

OCC MARKETS

Corrugated/Board	Q1 2017	Q1 2018	% Growth
India	169,557	507,005	199%
Korea	61,074	104,716	72%
Vietnam	44,000	106,483	142%
Indonesia	41,258	108,174	162%
Taiwan	39,281	56,879	45%
Thailand	12,192	49,044	302%
Italy	8,337	36,064	333%
Germany	6,313	21,508	241%
Significant Comparison Markets			
China	1,548,974	1,277,589	-18%
Canada	72,218	63,423	-12%
Mexico	109,125	111,978	3%



Recology's Response

QUALITY





Recology's Response

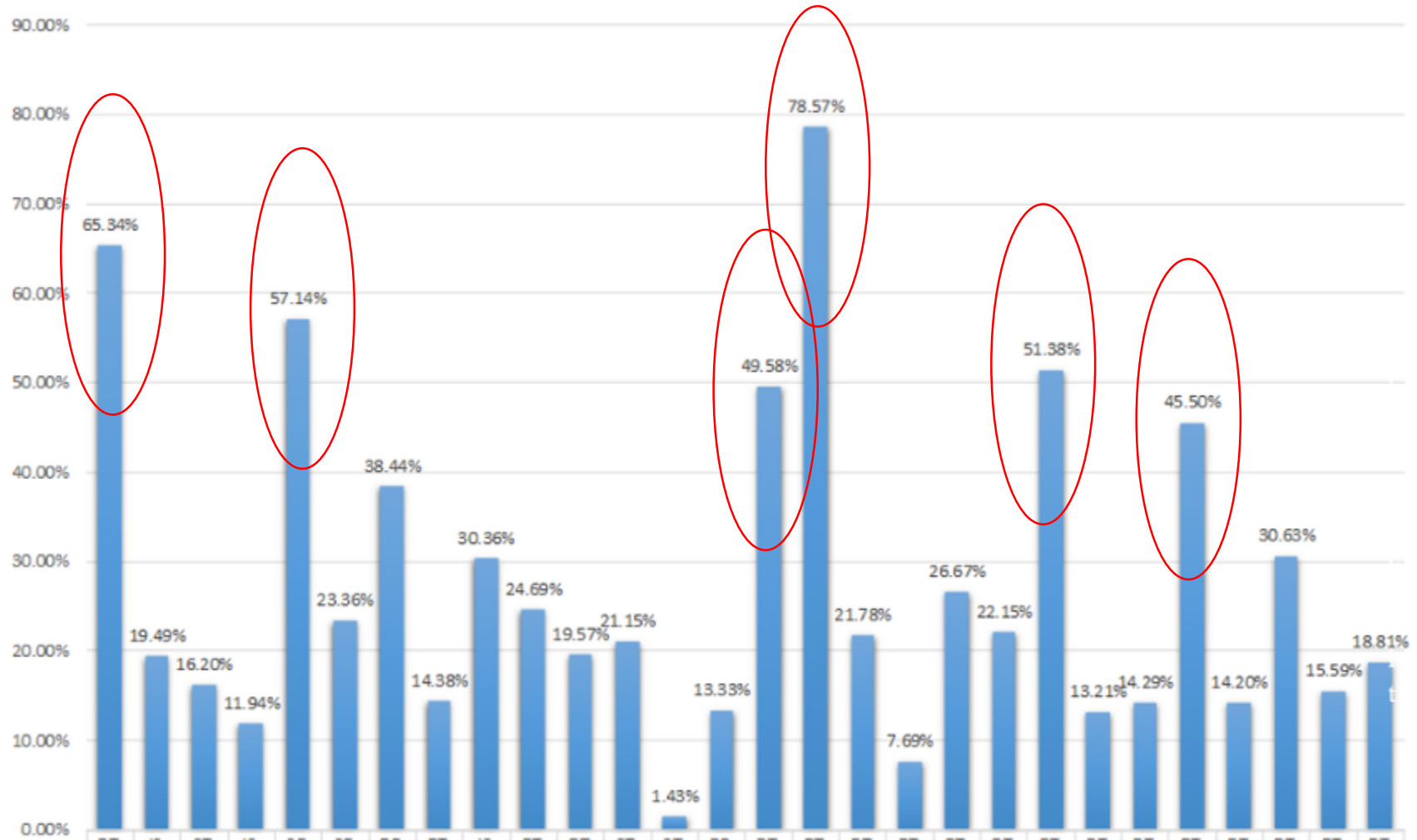
STAFFING

- ✓ Increased staffing by 15%
- ✓ Reduced belt speed by 25%
- ✓ Decreased throughput
- ✓ Increased overtime
- ✓ Reduced third party tons



Recology's Response

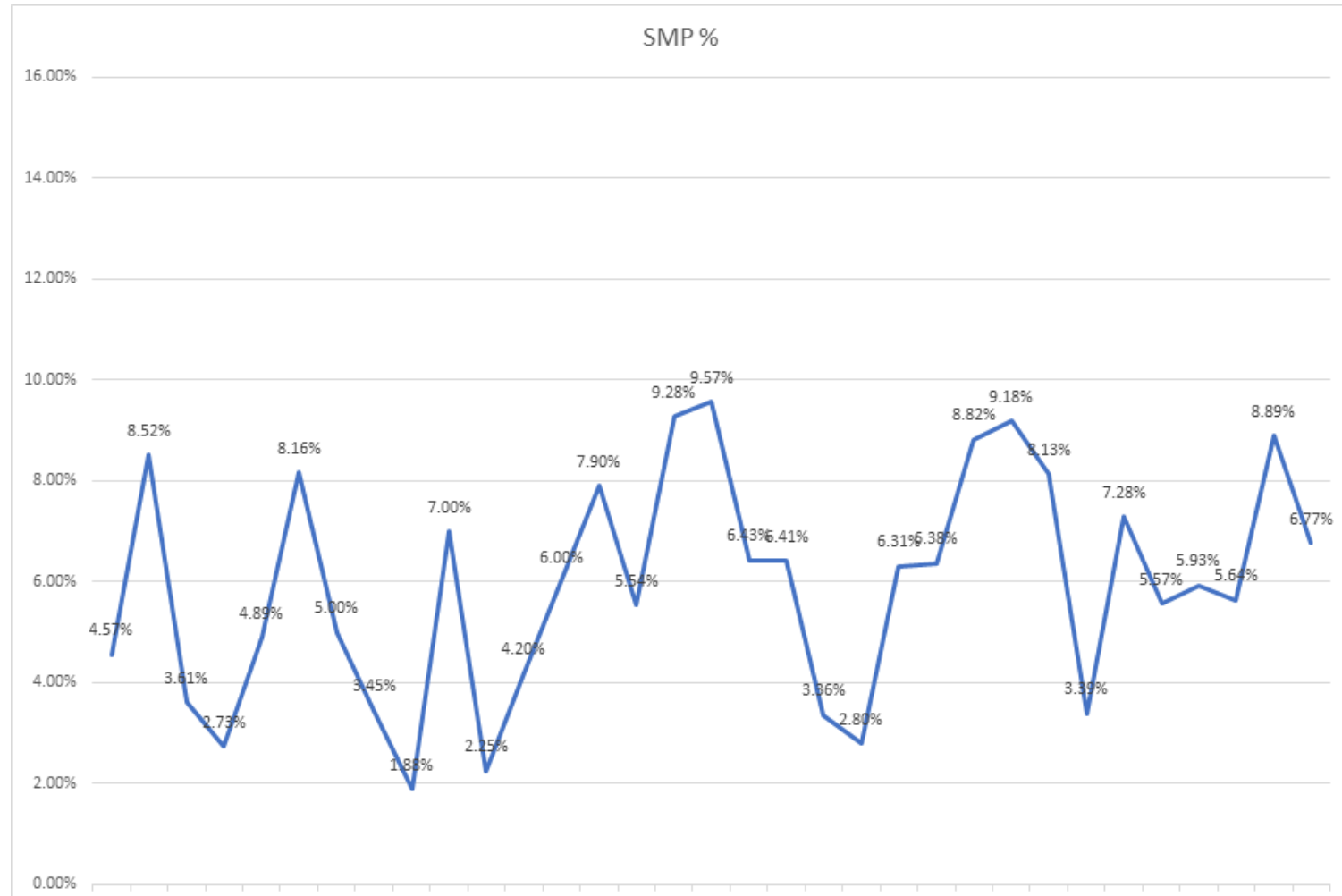
INBOUND MATERIAL AUDITS





Recology's Response

INTERNAL AUDITING





Recology's Response

UPSTREAM AUDITING



Contamination Audit

Recology CleanScapes
117 South Main St
Seattle, WA, 98119, 1-206-859-6700

No.
00021

New Date
02/21/2018

Recycling Container

Was any contamination found in the recycling?

Yes

What is the estimated percentage of overall contamination?

100

1. If yes, what are the contaminants?

Textiles, food, construction debris

Comments/ recommendations

Put a lock on container and increase size of garbage container

Photo 1



Description of photo 1

Photo 2



Description of photo 2

Photo 3



Description of photo 3

Recology CleanScapes
Published by Danielle Gambogi [?] · February 28 ·

Fully free of food residue, aluminum foil and pie trays are readily #recyclable! 🌱👍👍



Recology CleanScapes
Company [Send Message](#)

Recology CleanScapes
Published by Danielle Gambogi [?] · March 14 ·

#Plastic lids under three inches that CANNOT be screwed back onto an empty #plastic bottle should be tossed in the trash.



Recology CleanScapes
Company [Send Message](#)

Recology CleanScapes
Published by Danielle Gambogi [?] · April 2 ·

Did you know? #Recyclables should be placed loose in your blue bin. Avoid use of black or white plastic bags to contain recyclables. 🌱👍👍



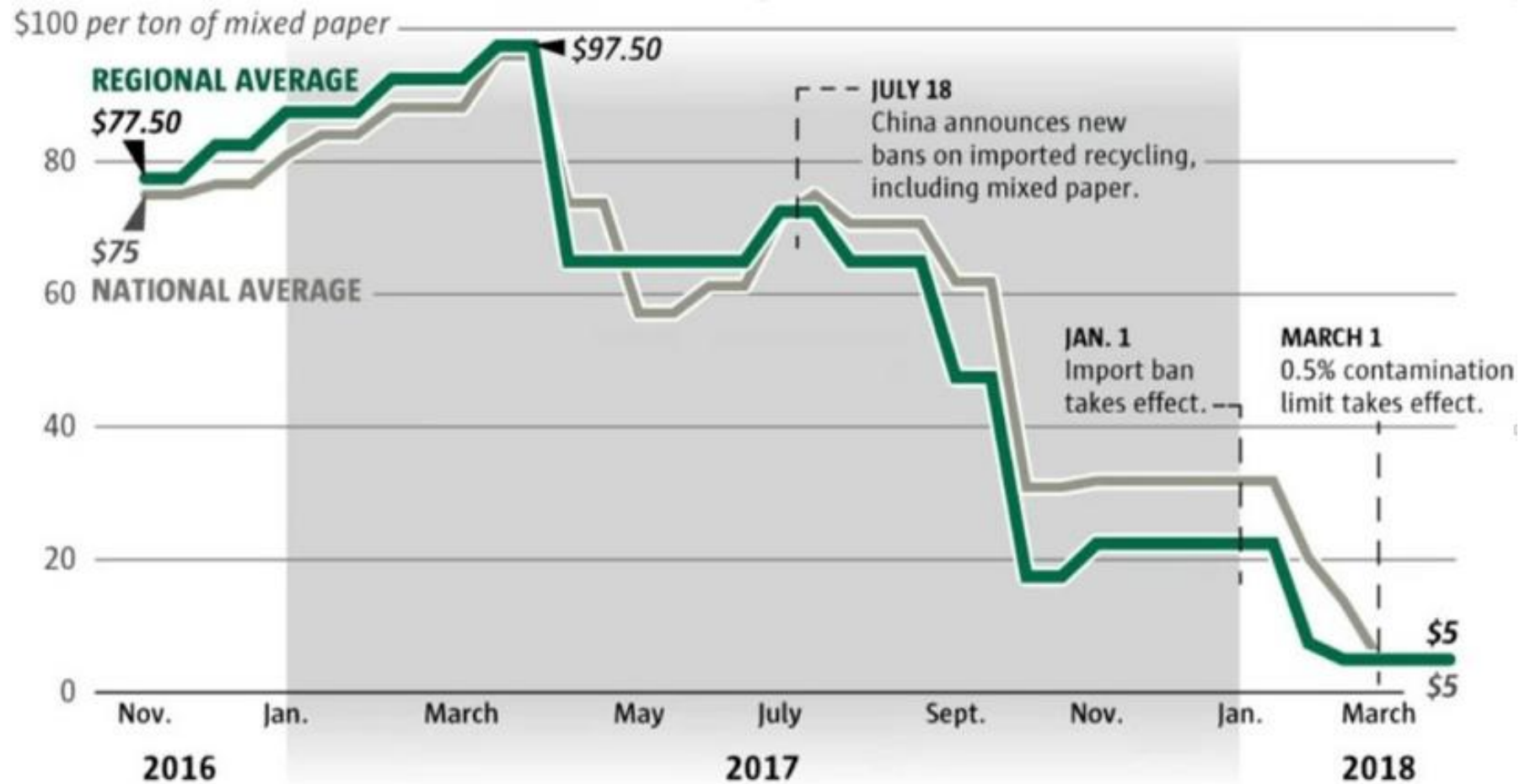
Recology CleanScapes
Company [Send Message](#)

Recology's Response CUSTOMER COMMUNICATION

- ✓ Social media
- ✓ Website
- ✓ Invoice Messages
- ✓ Monthly E-Newsletter



Market Update



Source: RecyclingMarkets.net

EMILY M. ENG / THE SEATTLE TIMES



Guiding Principles for Financing Recycling

Oregon Revised Statutes: "just, reasonable, and adequate"

459A.085 City, county authority to issue collection service franchises; opportunity to recycle; rates. (1) The Legislative Assembly finds that providing for collection service including but not limited to the collection of recyclable material as part of the opportunity to recycle is a matter of statewide concern.

(2) The exercise of the authority granted by this section is subject to ORS 221.735 and 459.085 (3).

(3) It is the intent of the Legislative Assembly that a city or county may displace competition with a system of regulated collection service by issuing franchises which may be exclusive if service areas are allocated. The city or county may recognize an existing collection service. A city or county may award or renew a franchise for collection service with or without bids or requests for proposals.

(4) In carrying out the authority granted by this section, a city or county acts for and on behalf of the State of Oregon to carry out:

(8) The rates established under this section shall be just and reasonable and adequate to provide necessary collection service. The rates established by the city or county shall allow the person holding the franchise to recover any additional costs of providing the opportunity to recycle at the minimum level required by ORS 459.005, 459.015, 459.035, 459.250, 459.992 (1) and (2), 459.995 and 459A.005 to 459A.665 or at a higher level of recycling required by or permitted by the city or county. The rates shall also allow the person to recover the costs of education, promotion and notice of the opportunity to recycle provided by a person holding a franchise.

(b) The opportunity to recycle may be provided by:

(A) The person holding the franchise;

(B) Another person who provides the opportunity to recycle to the franchise holder's customers; or

(C) A person who is granted a separate franchise from the city or county solely for the purpose of providing the opportunity to recycle.

(c) In determining who shall provide the opportunity to recycle, a city or county shall first give due consideration to any person lawfully providing recycling or collection service on June 1, 1983, if the person continues to provide the service until the date the determination is made and the person has not discontinued the service for a period of 90 days or more between June 1, 1983, and the date the city or county makes the determination.



Guiding Principles for Financing Recycling

Washington UTC:
“fair, just, reasonable, and sufficient”

2. WUTC RATE SETTING PROCESS

2.1 Rate Setting Process

The company must file its proposed rate changes in a revised tariff. The Commission must receive the revised tariff at least forty-five days before the proposed effective date. Commission

2.2 How we set rates

The company must prove its proposed rates are fair, just, reasonable, and sufficient. It must file detailed financial and operational data to prove the proposed rates are fair, just, reasonable, and sufficient. The company is entitled to recover appropriate expenses, and a reasonable profit.

verbal presentation, with its recommendation. The company, customers, and other interested persons can address their concerns to the Commissioners.

Very simply, the Commissioners can take only two actions. They can approve the proposed rates to become effective as scheduled or they can issue a complaint and order suspending the



Recology's Proposed Principles for Financing Recycling

- ✓ Fair
- ✓ Reasonable
- ✓ Adequate
- ✓ Resilient
- ✓ Transparent



Recology: a world without waste™