



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Kerrie Romanow

**SUBJECT:** CHINA RECYCLING  
WASTE BAN

**DATE:** December 4, 2017

Approved

D. P. SyL

Date

12/5/17

## INFORMATION

This memorandum provides information on the status of recycling markets and the impacts to San José's residential and commercial recycling contractors.

### China Waste Ban

In San José and throughout the United States (US), the majority of recyclables collected curbside are processed locally, then sold and shipped internationally where new recycled content goods are manufactured. China is the largest consumer of these recycled commodities, importing approximately 13 million tons of paper and 776,000 tons of plastic from the US annually. According to the Solid Waste Association of North America (SWANA), the sale of these recyclables results in annual revenues of nearly \$2.3 billion to the US recycling industry.

In 2013, China implemented a customs program called "Operation Green Fence" which aimed to reduce environmental pollution by reducing the import of contaminated recyclable commodities and increasing inspections of recyclable commodity imports. The operation resulted in backups at various shipping ports. While it produced marginally cleaner material with less contamination, overall it did not meet the goals China had for restricting waste imports.

In July 2017, China announced a revision to the Green Fence requirements under a new name, "National Sword." Their filing with the World Trade Organization (WTO) notified banning the import of 24 recyclable commodities by January 2018, increasing enforcement, and limiting contamination to 0.3 percent for plastic and mixed paper (more stringent than previous levels of three to five percent for these commodities). In November 2017, China filed revised standards (including 0.5 percent for plastics and paper) and revised the effective date to March 1, 2018. China's rationale for this measure is to protect human health from large amounts of hazardous wastes being mixed in the recycling commodities.

Two of the most impactful import restrictions under the National Sword affect paper and low-grade plastics. Paper categories include cardboard, newspaper, curbside mixed paper, and other commercial and industrial paper products. Mixed paper is a broader category that includes items

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such as discarded mail, telephone books, paperboard, magazines, and catalogs. China has also been a key market for lower-grade post-consumer plastics, such as film and packaging. Higher grade plastics, such as beverage containers, milk jugs, and detergent bottles, are sold to domestic markets, and as such these commodities are not expected to be impacted by the import ban.

China also revised laws determining how import licenses are distributed and used. With the revised regulations, only larger factories will be allowed to import material; effectively excluding the smaller factories in China, which reportedly emit more pollutants.

Organizations such as SWANA, the Institute of Scrap Recycling Industries (ISRI), the National Waste & Recycling Association, and the National Recycling Coalition have reacted in various ways, including responding to the WTO with their concerns.

### **Impact on Western States**

The new restrictions of the National Sword policy will impact cities and recycling exporters on the West Coast the most. In California, more than 60 percent of the collected recyclables are typically exported to China. Inspections have already increased, slowing exports to China. In Oregon, some recycling programs have been paused and jurisdictions are petitioning the state to allow landfilling of some recyclable commodities they have been unable to sell. Seattle is encouraging customers to focus on recycling correctly.

Much of the rest of the country is anticipating less of an impact from this ban, with the most likely reason being their closer proximity to domestic markets. Over the past 20 years, West Coast processing capacity has diminished as overseas markets offered better recycling prices than domestic markets, in part due to more lenient environmental regulations overseas than West Coast regulations.

Exporters will need to seek alternative markets, resulting in an increased supply and reduced prices. Vietnam and India have increased their processing capacity in recent years and may help meet the expected demand. Chinese processing companies have also indicated possible relocation to avert the new regulations.

### **Impact on San José**

The Environmental Services Department (ESD) supports solid waste collection, processing and disposal for commercial, City facility and residential operations via franchises or agreements. ESD has been discussing the National Sword with the contracted processors to understand how the ban may impact their operations and the steps the City might take to mitigate these impacts. ESD is also assessing any regulatory challenges the processors may face related to storing and stockpiling affected recyclable commodities, in the event markets for these materials slow down or disappear. It is unknown at this time how the ban may impact contractor diversion requirements.

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The residential and commercial processors report that inspections of commodities have increased, and some commodities which previously sold at higher prices are now being sold at very low to no profit. This shift comes following a slow but steady increase in prices for the past two to three years. Figure 1 illustrates fluctuations in revenue from commodity sales by the residential recycling contractors. Revenue for 2017 is projected to be higher than 2016; however, it is unknown how the ban will impact contractor revenues in 2018 and beyond.

The solid waste contracts require processing of recyclable materials to market specifications, including industry standards set by ISRI. The City does not share in the profit or loss from contractor sales of recycled commodities.

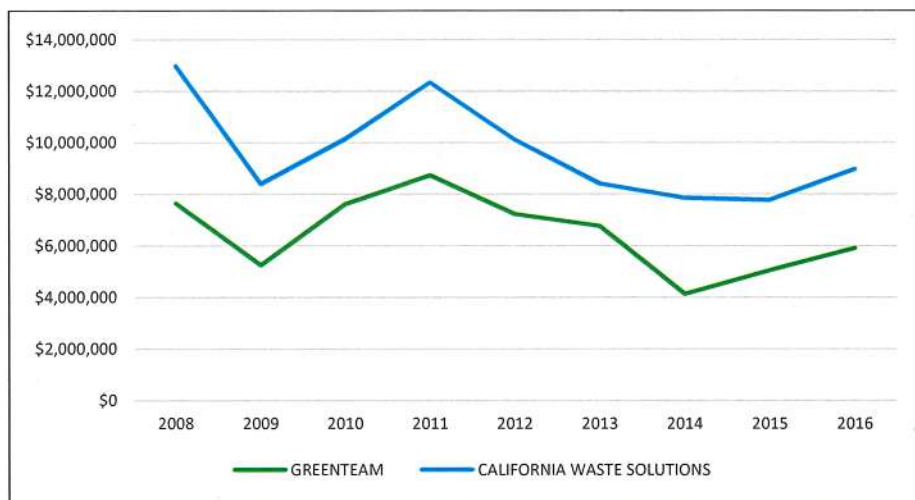


Figure 1. Residential contractor commodity sales revenue from 2008 through 2016.

### Next Steps

Per City Council direction on March 28, 2017 (Item 7.2), ESD is negotiating with the four residential solid waste contractors for new agreements that would replace the existing agreements. As part of these discussions, ESD will evaluate whether the financial uncertainty of shifting markets should be addressed through revised contract terms (e.g. customer rate structures, program design) or performance metrics (e.g. diversion rate, outreach requirements). A Recycle Plus negotiations status report to the City Council is anticipated in early 2018.

ESD is also exploring methods to encourage residents and businesses to produce less waste. For example, a renewed outreach campaign to reduce junk mail could help reduce the volume of mixed paper. ESD has also made positive steps with the Bring Your Own Bag Ordinance (2012) and the Foam Food Ware (Styrofoam) Ordinance (2014 for large restaurants; 2015 for all restaurants), which reduces waste and contamination of other recyclable materials. ESD will be presenting the report “Strategies to Produce Less Waste” to the Transportation & Environment Committee on December 4, 2017.

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The Technical Advisory Committee (TAC) of the Santa Clara County Recycling and Waste Reduction Commission (RWRC) is following local developments related to the ban and will be reporting out as necessary. TAC has also allocated \$100,000 toward a two-year Sustainable Materials Management consultant to focus on projects that will reduce waste Countywide.

At the State level, ESD is engaged in the current CalRecycle discussion around developing a statewide policy for packaging materials management, which would reduce the amount of packaging entering the waste stream.

/s/

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