What Does China’s Policy on Imported Plastic Scrap Mean for Recyclers and IAPD Members?

By Drew Schwartz

The Chinese government eliminated the import of postconsumer plastic scrap from all countries, including the United States, at the beginning of 2018.

According to Sustainable Asia’s 8 Million podcast about plastic pollution, recycling and disposal, the reasons that the Chinese government is accepting no more scrap plastic imports include:

First, by refusing to take the rest of the industrialized world’s waste products, China seems to be signaling to their own people that their country is growing wealthier and more modern. Having their population generating enough waste to keep their recyclers in material may be construed as a sign of progress.

Second, the quality of plastic scrap that China had been receiving was declining. The contamination level was increasing, which was leading to higher and higher processing costs and more material that had to be discarded as unusable.

Third, the Chinese are thinking long term. Until recently there was no organized waste collection being done in most large Chinese cities, so the Chinese industries that use scrap materials for manufacturing didn’t have a way to get domestically produced scrap into their plants. They could buy scrap from the United States cheaper than they could set up waste collection systems. They have enough domestic scrap plastic to feed the needs of their domestic recycled plastic industries and they want to make sure that they continue to have a dependable supply of recycled plastic for their upcoming investments in recycled plastic production capacity.

Fourth, because they can make sure it happens. Since the Chinese government has ultimate rule-making authority, once they decide it’s necessary to have an organized waste collection system, they sent the word out to all mid- and lower-level government officials that job promotions would be hard to obtain without meeting recycling targets for the region or city for which each is responsible.

Fifth, the Chinese are interested in becoming a world leader in scrap management. They want to create the equipment and processes that the rest of the world is going to buy to manage their own closed-loop systems.

Technically, postindustrial scrap has not been outlawed for import to China. But several practical factors make it much more difficult to export postindustrial plastics there. As of March 1, 2018, there is a contamination threshold of only 0.5 percent on postindustrial plastic imports to China. Lab data paid for and presented by the scrap seller must be provided. And some Chinese importers have already gone out of business.

And then, on April 19, the Chinese Ministry of Ecology and Environment announced that the import of postindustrial plastics will be banned altogether at the end of 2018.

What does this mean for IAPD members?

In the short term, this policy means that a lot of recyclers are going to look for new markets for their scrap. Presently there is a big push underway for U.S. plastic scrap that was going to China to be sold into other Asian countries, particularly India; but also, Vietnam, Thailand and Indonesia. However, all these other Asian countries combined are not able to take all the scrap that was going to China.

According to an article in Reuters, China imported 56 percent of the world’s cross-border plastic scrap in 2016; an amount estimated at 7.3 million tons. For the United States to China and Hong Kong portion alone, this 2016 number was estimated to be close to 2 million tons of plastic scrap.

Payments for scrap that IAPD members have exported are liable to be delayed, or even never received since some of the recyclers aren’t going to survive this downcycle in plastic scrap prices. Some recyclers have reportedly already disappeared.

According to an October 10 article by Mary Esch of the Associated Press, the three largest publicly traded residential waste-hauling and recycling companies in North America — Waste Management, Republic Services and Waste Connections — reported steep drops in recycling revenues in their second-quarter financial results. Waste Management reported its average price for recyclables was down 43 percent from the previous year.

Stories are being told of large amounts of plastic and other types of scrap being delayed in their entry to ports of buyers’ countries. Early in 2018, Thailand and Vietnam were taking up the slack and had increased their imports of U.S. scrap plastics by more than 500 percent. By July, Thailand and Vietnam were full and Malaysia had taken 52.5 thousand tons of U.S. scrap plastic only to drop to 9.6 thousand tons in August and 7.5 thousand tons in September.

A recycler at IAPD member recycler United Plastics of Gurnee, IL, USA told me, “India is full; it’s going to take time for all those extra tons that were going to China to work their way into the Indian supply chain.” Another person told me that demand for recycled PET-G of all types, clean or dirty, “is gone.”

One estimate of the length of time that this new glut of plastic scrap is going to take to work its way through the system is four to five months. Others are expecting it to take a year or more.
Susan Robinson, federal public affairs director at Waste Management, says that while it may take a few years for markets to fully adjust, the shift to quality production will be beneficial in the long run. “I think the change will make for sustainable programs that really are the right environmental programs for our local communities, as well as for the market as a whole,” she said.

The Chinese ban is an opportunity for U.S. companies to invest in better sorting and cleaning and grinding technology to feed the demand that is coming for recycled content products for IAPD members’ end-user customers.

One way that U.S. recyclers are getting cleaner plastic is to sort it more slowly. According to the Wall Street Journal, Allan Co., a recycler near Los Angeles, CA, USA slowed its sorting equipment by 20 percent and hired more people to manually remove waste from conveyor lines.

Sunil Bagaria, president and co-founder of recycler GDB International, said the import bans have been a “blessing in disguise” for his company. In response to the glut of plastic created by the China import ban, GDB has installed cleaning, grinding and pelletized equipment and makes more money selling these value-added pellets in the United States.

Chinese investors are also planning scrap processing plants outside China.

The Governor’s Office in South Carolina announced on September 6, 2018, that Green Tech Solution, a subsidiary of Tianjin Sheng Xin Non-Financing Guarantee Company is building a US$75 million plant in Cherokee County, SC, USA. The plant is for a new recycling operation to collect and process a variety of materials, including plastic and is expected to create approximately 200 jobs when it comes on line in the spring of 2019.

And of course, since polymers are long chain hydrocarbons, some companies are taking mixed plastics, which are now cheap or free due to the Chinese import ban, and turning them into gasoline, diesel and other petrochemicals in oxygen-free pyrolysis reactors. In an article in the June 6, 2018 Wall Street Journal, Nina Bellucci Butler, chief executive of recycling consultancy More Recycling in North Carolina, said converting plastic to oil is profitable when oil prices rise.

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