

Spring 2018

Plastics

Regional impacts of China's National Sword Policy

The Chinese government implemented new restrictions in January 2018 that severely limit the importation of low-grade mixed plastics and mixed paper for remanufacturing. The focus is on reducing the amount of contamination in materials imported to China and to improve upon their domestic collection and recycling system.

Materials impacted are "mixed" bales including mixed waste paper, which often includes packaging, cardboard, plastic films and junk mail and "mixed" plastics which are bales of low-grade plastics with resin codes numbered 3 – 7. These plastics include clamshell containers, plant pots, shampoo bottles, aspirin containers, cooking oil containers, etc.

Material recovery facilities (MRFs) are now looking for other outlets for the mixed plastics including Thailand, Vietnam and Malaysia. However, none of these markets can handle the volumes that used to go to China and often have less stringent environmental and worker safety standards than those in the US.

One solution is to domestically sort and process these lower grade plastics into marketable commodities and, at the same time, work on creating demand for these materials. This will require investment in infrastructure but the costs may equal out when considering the expense of transporting these low value materials around the globe.

China's National Sword

2018 import restrictions are impacting global recycling markets.



Domestic processing of mixed plastics meeting

In the immediate wake of strict recycling import rules put in place by China, King County Solid Waste Division and Seattle Public Utilities convened a meeting on Jan. 30 to discuss the new limitations and potential solutions for mixed plastic materials no longer accepted by China.

Conversation during the meeting explored the immediate and longer-term capabilities for increased sorting and processing of mixed plastics domestically, with over 60 leaders and recycling industry representatives from the region and greater West Coast attending the half day meeting. Management from the [Emterra Group](#), a Canadian collecting and processing company with facilities across Canada, also attended the meeting.

The [meeting summary](#) and [findings](#) are available on [LinkUp's website](#).

Since the January meeting, the King County Solid Waste Advisory Committee and the Metropolitan Solid Waste Advisory Committee has formed the [Responsible Recycling Task Force](#), comprised of city representatives, solid waste haulers, processors, and other thought-leaders, that will continue to seek solutions for paper and mixed plastics and other materials included in the recycling restriction.



Stakeholders learn about the China Sword policy and discuss ways to advance domestic and regional processing of #3 – 7 plastics.

Textiles



Facilitadores de Reciclaje

Threadcycle continues partnership with Recicla más to provide recycling education to the Spanish-speaking community in 2018

In 2018, [King County](#) and [Seattle Public Utilities'](#) will focus their [Threadcycle](#) campaign efforts on reaching Spanish-speaking communities in King County. The Threadcycle campaign aims to decrease the amount of textiles disposed of in landfills by educating residents that all clothes, shoes and linens can be given for reuse or recycling, in any condition as long as they're not wet, mildewed or contaminated with hazardous materials.

To reach the Spanish-speaking community, Threadcycle has developed a partnership with [Recicla más](#), a program that provides recycling education to the Spanish-speaking community in King County through community advocates called the Facilitadores de Reciclaje.

The Facilitadores reach the community through outreach events such as resources fairs and cultural festivals, and through one-on-one outreach in their personal networks. In 2017, the Facilitadores informed 1,306 community members on the topic of textiles. In 2018, Threadcycle and Recicla más will continue to partner and teach the community about recycling textiles.

Through this partnership, Threadcycle learned that community members want more information about textile collection sites and dropboxes, and Threadcycle will work with the Facilitadores to update the Spanish-language program brochure to include details the community finds relevant and important.

Mattresses

Update: Mattress product stewardship in California, Connecticut, and Rhode Island

[Bye Bye Mattress](#), the stewardship program run by the Mattress Recycling Council (MRC) in Connecticut, California, and Rhode Island, has recycled 3 million mattresses containing over 46 million pounds of recyclable steel. [The Record \(Stockton, CA\) has a thorough article](#), with video and photos, on long time California mattress recycler DR3, the MRC California stewardship program and its illegal dumping incentive, and jobs.

In states without mattress product stewardship laws, most unwanted mattresses are landfilled.



Mattress recycling in King County

King County is currently piloting mattress collection and recycling at its Bow Lake Recycling & Transfer Station, and will extend permanent service to additional stations between 2019 and 2021, a few years later than originally planned. Washington currently has [three mattress recyclers](#)—NW Furniture Bank (aka Spring Back), Arlington Recycle Warehouse, and DTG Enterprises, Inc.—but no disposal bans or statewide recycling program.

Designing recyclable mattresses and carpet

In Europe, [Dutch company DSM-Niaga](#)® (“again” written backwards) is redesigning carpet and mattresses to be “fully recyclable back into the same product.” [Auping](#), a major bed and furniture retailer, will use Niaga®’s technology to develop [fully recyclable mattresses](#), and will also become the first non-carpet company that has used Niaga®’s technology in mattresses.



Clean wood

New LinkUp focus material in 2018: clean wood

Clean wood, mostly dimensional lumber, makes up 6 percent (or 50,389 tons) of King County's waste stream, according to the [2015 Waste Characterization Study](#). In addition, in 2017, local construction and demolition recycling facilities processed almost 129,000 tons of clean wood; over 99 percent of this was processed for energy recovery, burned for fuel in paper mill boilers. This single utilization of clean wood is a low value use and bad for health and the environment. Beginning in 2018, LinkUp's focus on clean wood will include support and development of end markets for manufactured and engineered wood products.

Asphalt shingles

Recycled asphalt shingles now used in paving mix on state roads

The Washington State Department of Transportation (WSDOT) inclusion of allowances for recycled asphalt shingles in its standard specifications in 2014 supported increased use of recycled asphalt shingles (RAS) in paving in King County and throughout Washington state.

More than 2,000 tons of RAS has been used in paving mixes on state roads since WSDOT amended its Standard Specifications for Road, Bridge, and Municipal Construction, section 5-04, Hot Mix Asphalt (HMA) to include allowing RAS in mixes as standard in April 2015. To date, two paving companies have received WSDOT approval for mix designs for RAS-containing mixes (3 to 3.5 percent RAS), which have been used in paving on 10 contracted state roadway paving projects.

Eight years after first public roadway paving with shingles in Washington state, demonstration roadway is still deemed to be in excellent condition

In January 2018, King County Road Services Division (KCRSD) released a final performance and progress report on the condition of the Southeast 416th Street demonstration project roadway. When it was paved in 2009, it was the first documented use of RAS-containing HMA on a public roadway in Washington state. Since then, KCRSD has conducted periodic monitoring of the roadway's condition. In its latest and final report, KCRSD found that the entire roadway to be in excellent condition. Over 35 additional lane miles have been paved by Miles Resources using RAS mix as part of the County's overlay contracts in 2014 and 2017, representing more than 2,000 tons of asphalt shingles used in asphalt paving on county roadways.

Including recycled asphalt shingles and pavement in asphalt mix is the best way to reduce the climate impacts of paving

As King County agencies and local governments continue to strive to support the County's strategic climate action plan and emissions reduction goals, encouraging use of RAS is increasingly important. A [lifecycle assessment study](#) conducted for the U.S. EPA found that using RAS along with recycled asphalt pavement (RAP) reduced the net greenhouse gas emissions of paving mixes greater than warm mix technology or RAP on its own. Asphalt mix containing 20 percent RAP and 3 percent RAS reduced greenhouse gas emissions associated with asphalt paving by 21 percent over a baseline scenario using virgin asphalt. By comparison, asphalt mix produced using warm mix production technology and 20 percent RAP reduced emissions relative to the baseline by just 6 percent. King County LinkUp continues to promote asphalt shingles recycling and use of RAS in paving by King County agencies and throughout the region.



eNewsLink Farewell

Thank you to our eNewsLink readership!

It is with great pride and many thanks that the LinkUp team has decided to retire the eNewsLink newsletter. The newsletter, which was first released in the late 1990s, has provided over 20 years of news and information on recyclable materials and their end markets to people across the industry. Through more than 60 issues we've followed the ever-changing landscape of recyclable materials across the region—a journey that we could not have made without you, our readers.

So, with this final issue, we'd like to say thank you and farewell to our readership. Thank you for your support, curiosity, innovation, and leadership as we've followed the recycling world through so many years of progress and change.

As the recycling world continues to evolve, we encourage our readers to refer to the following recommended resources for recycling news:

- Washington State Recycling Association
 - [The Report – quarterly newsletter for members](#)
 - [Resource page](#)
 - [Facebook page](#)
- Northwest Product Stewardship Council
 - [Product specific news](#)
 - [Monthly newsletter](#)
- Washington Organic Recycling Council
 - [Legislation & News](#)
- Resource Recycling, Inc.
 - [News](#)
 - [Weekly e-news](#)



Your trusted source for recycling news and analysis

∞ **Thank You!** ∞