Foam PS Drop-off Recycling

Spotlight: Uniek Inc. & City of Madison, WI

RECYCLING FOAM PS WORKS

—Madison, WI has recycled expanded polystyrene (foam PS) since 2012. The program is a successful partnership with a local manufacturer, Uniek Inc., that uses the foam PS as a raw material.

The City operates two drop-off sites where residents can bring clean foam packaging, coolers, and foodservice items. Residents simply toss their plastic bags full of clean foam into the foam PS recycling bins. When the City has a full trailer, they drive the bagged, loose foam PS to Uniek where it is recycled into new products. —

To watch foam PS being recycled into new products, check out this video with Todd Sutton, also known as the Waste Sleuth, where he investigates foam polystyrene recycling.

<https://vimeo.com/160473626>

Drop-off Foam PS Recycling Best Practices

Like all recyclables, drop-off sites want to collect clean foam PS. Ask residents to wipe or rinse free of food, liquids, dirt, etc. prior to recycling.

Steps for a successful drop-off recycling operation:

• Sites should have clear and easy to understand signage to reduce contamination and increase the value of the recyclables collected.

• Building material foam and packing peanuts are generally not included in drop-off collection programs. Reuse drop-off locations for peanuts are found online at www.LooseFillPackaging.com.

• Staffed facilities are best. Having on-duty personnel can reduce contamination and help educate participants. Staffing can improve multi-material program economics beyond the cost of personnel.

• Loose foam can be transported up to 50 miles, longer if backhauled. If there are no local recyclers of loose foam PS, then the best option is densification, which increases the value of the material and greatly improves the economics of shipping.

• Allocate sufficient storage space for collected foam PS to ensure the ability to generate full trailer loads.

• Cover collected material to keep clean, dry, and prevent photo-degradation. If your buyer can accept it, consider asking residents to provide material bagged to avoid wind-blow material.
HOW THEY DO IT

—Sometimes keeping it simple is the perfect approach to getting the job done right. After shifting some recyclables from drop-off to curbside, the City of Madison had extra space at their two recycling drop-off sites. It was the perfect time to add a new material to their recycling program: expanded polystyrene (foam PS). They contacted a local picture frame manufacturer that recycles foam PS—Uniek Inc.—and set to work on the logistics.

There was no budget for a densifier, so Uniek agreed to accept bagged foam.

Large 53’ trailers are staged at each drop-off site. To collect the foam PS, large cardboard boxes (called gaylords) are lined with huge reusable plastic bags. Citizens put their bagged foam PS into the gaylords; bagging helps avoid windblown litter. When the gaylord is full, staff loads the large bags of foam PS into the trailers. The City delivers full trailer loads of bags to Uniek.

Uniek recycles the foam PS into picture frames and home decor accents. They accept the foam at no charge. The City’s incentive to deliver the foam PS to Uniek is to reap the avoided disposal cost, support a local business, and enjoy all the public and environmental benefits of recycling.

Uniek’s loose-load program is very successful and continues to grow. On average, Uniek receives two to three 53’ trailers per day loaded with bags of foam PS collected in regional residential, commercial, and industrial recycling programs.

The City of Madison has a successful foam PS recycling program based on an easy to use drop-off program, one that other communities near a foam PS recycler or densification facility, can replicate.—

“\textit{In the years since we began taking foam PS from the City of Madison, we have expanded our loose-load take-back program to include several other municipalities, local waste haulers, and the general public.}”

— Brian Duzan, Plant Manager, Uniek Inc., Waunakee, WI

Frames made from recycled foam PS

**FOAM PS RECYCLING RESOURCES:**

- **www.PlasticFoodserviceFacts.com**
  Facts, news, public policy issues and recycling resources on foam PS foodservice products.
  \textbf{American Chemistry Council, Plastic Foodservice Packaging Group}

- **www.RecycleFoam.org**
  Information on foam PS recycling process, equipment and system manufacturers.
  \textbf{Foodservice Packaging Institute, Foam Recycling Coalition}

- **www.HomeForFoam.com**
  Information for government, homes, businesses, and schools on how and where to recycle foam PS.
  \textbf{DART Container Corp.}

- **www.EPSpackaging.org**
  Recycling tools and resources for original equipment manufacturers. Offers a foam PS Sustainability Toolkit.
  \textbf{EPS Industry Alliance Packaging}

- **www.EPSrecycling.org**
  Thirty-one countries connected via Global Recycling Access network.
  \textbf{International EPS Alliance: Asia, Europe, and North America}

- **www.FoamFacts.com**
  Foam PS recycling facts, links to articles and videos.
  \textbf{DART Container Corp.}

- **www.Plastics.Ca**
  Canadian focused information, articles, news, program highlights, markets, videos.
  \textbf{Canadian Plastics Industry Assoc.}

- **www.PlasticsRecycling.org**
  Recycling information, webinars and videos. \textbf{Association of Postconsumer Plastic Recyclers}