

Polystyrene Foodservice Foam Recycling



Metropolitan Washington Council of Governments
Recycling Committee Meeting

December 1, 2011

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Topics

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V. Summary/Questions

Who is Dart?

- Leading manufacturer and recycler of a broad range of high quality, cost-effective foam and solid polystyrene #6/other plastic disposable foodservice products
- Private, family-owned business started in 1937
- Began producing and selling foam #6 cups over 50 years ago (1960)
- Currently world's largest manufacturer of foam #6 cups in the world

- Dart supports and shares in efforts to minimize the amount of packaging that is disposed of and its effect on the environment
- 1988 - established a department specifically dedicated to environmental issues that
 - Works to provide current, well-documented, factual information on our products and the environment, and
 - Develops environmental answers and solutions for our customers and the general public
- Only major manufacturer of foam #6 foodservice to do so
- 1990 - Introduced the industry's first recycling program for foodservice foam #6 containers

Overview - Foodservice Foam Recycling – General Information

- Despite being sold and used for over half a century, a lot of misinformation/misperceptions still exist about foodservice foam #6 products
- Polystyrene foam #6 is a thermoplastic, which means that it can be completely recycled
- Foodservice foam (and non-foam) #6 products are technically easy to recycle, and can be recycled as part of an integrated solid waste management strategy....though the challenge to recycling foam is in the efficient and economical collection of clean material and transportation to a recycling facility

- Fact: post-consumer disposable foodservice foam #6 products are being recycled in select locations in North America
- At this time, they are the most recycled of all post-consumer foodservice materials today – paper or plastic
- However, due to unfavorable economics associated with contamination and transportation issues, no disposable foodservice products (e.g. paperboard, plastic, other), including post-consumer foam #6, are widely recycled currently

4 SIMPLE STEPS FOR RECYCLING FOAM



STEP 1

COLLECT FOAM



STEP 2

COMPACT THE FOAM SO IT CAN BE TRANSPORTED EFFICIENTLY

(A TRUCKLOAD OF LOOSE FOAM ONLY WEIGHS 1,000 LBS WHILE A TRUCKLOAD OF COMPACTED FOAM WEIGHS 40,000 LBS.)



STEP 3

MELT THE COMPACTED FOAM INTO PELLETS



STEP 4

MAKE NEW PRODUCTS

(IT TAKES 3.6 8 OZ CUPS TO MAKE ONE RULER. THIS ARTWORK IS DISPLAYED IN A FRAME MADE FROM RECYCLED FOAM.)

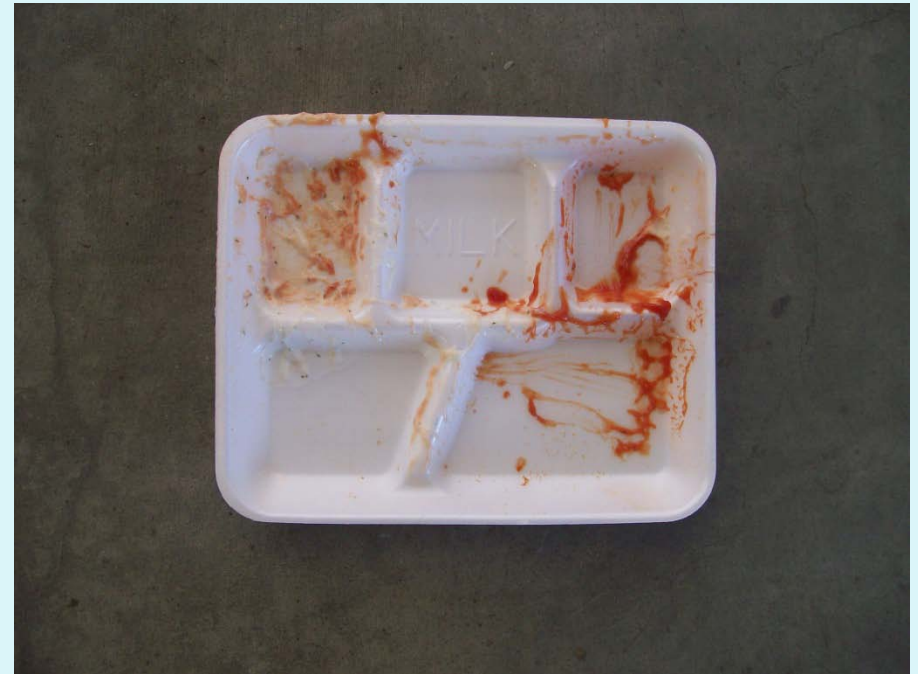
- Examples of Recyclable Foodservice Foam #6 Products



Clean is key!

Dirty must be washed/dried
before being reprocessed





Overview - Foodservice Foam Recycling - Densification

- Key to viable/cost-effective transport!
- Densification compresses the foam material to remove the air and reduce the volume by 80-90 percent



- Most often creates solid, stackable bricks of foam #6 that make transportation easy and convenient



- 1,000 lbs of loose foam fills a semi truck - If densified it will fit on one pallet



The PolyMax Series

EXPANDED POLYSTYRENE DENSIFICATION SYSTEMS

- New equipment
- Small footprint
- Processes mixed foam
- Automated to reduce labor



Compact - Continuous Cycling

Easy to handle densified blocks: 4-1/2" x 4" x 6-10"

Up to 500 lbs/hour output

Efficient use of floor and ceiling space

Automatic Operation

The PolyMax Series makes recycling EPS an economical reality



Overview - Foodservice Foam Recycling – Drop Off Collection



Overview - Foodservice Foam Recycling – Curbside Collection

- Progress is being made!



- In California, 20 percent of the population has access to curbside foodservice foam #6 recycling (57 percent of the population of L.A. County)
- Los Angeles, Long Beach, Torrance, Pasadena and Thousand Oaks, CA are a few of the approximately 40 cities that collect and recycle post-consumer foodservice foam in their residential blue box collection programs
- For a list of cities in CA that offer curbside recycling, go to www.dart.biz/recycleCA
- In Ontario, Canada, approximately 90 municipalities, including the City of Toronto, representing over 50 percent of all households in the province of Ontario, have access to curbside and/or drop-off recycling programs that collect post-consumer foodservice foam #6 cups and containers

- MRF's have added foam for a number of reasons -
 - Reduce amount of "residual" to be disposed of
 - Expand their list of accepted items which will help them gain more business
 - Increase diversion
 - Generate PR
 - Invigorate their recycling programs
 - Political reasons

Overview - Foodservice Foam Recycling - Markets



Dart Programs

- Dart is a proactive and positive partner with our customers and the public in developing and promoting innovative foodservice foam #6 recycling programs
- Currently, Dart is capable of reprocessing 12 million pounds of both pre- and post-consumer foam #6 products annually
- Foam #6 material collected by Dart is reprocessed at our facilities across N. America

- Customer Programs



Recordnet.com
News worth sharing online

HOME NEWS SPORTS ENTERTAINMENT LIFESTYLE BUSINESS

Time and effort give new life to lunchtime trash

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Craig Sanders/The Record
Westwood Elementary School students grab polystyrene lunch trays Thursday. The school started recycling its plastic foam waste at Dart Container Co. in Lodi this school year.

\$ BUY PHOTO ZOOM IN PREVIOUS NEXT 1 / 4



- Municipal Programs

- Drop Off
- Curbside

**Why Foam  Should
be Recycled
and
How to Include it in
Municipal Recycling Programs**



DART CONTAINER CORPORATION

The Industry Standard of Excellence

Mason, Michigan 48854 U.S.A.

Ph: 800-248-5960 • Fax: 517-676-3883

www.dart.biz/recycle

- Drop Off Collection



FOAM COLLECTION CONTAINER

Accepting Foam Foodservice Items and Molded Foam Packaging

Please:

- Deposit foam in a clear bag
- Make sure foam has the  symbol on it
- Rinse cups/containers
- No straws, lids, tape or stickers
- No foam peanuts or insulation material

Questions? Contact: 


DART CONTAINER CORPORATION
1-800-288-CARE
www.dart.biz

Dauphin County Dept. of
Solid Waste Mgmt. & Recycling
717-982-6772



- A growing number of entities throughout the Mid-Atlantic are partnering with Dart to provide foam #6 recycling services to their residents and businesses
- Since July of this year, Dart has initiated these recycling programs with several entities throughout the Mid-Atlantic, including the state of Delaware, the cities of Philadelphia and Baltimore, Carroll County, Md., and Dauphin County, Pa., which includes the City of Harrisburg
- The container and transport of materials are provided at no charge, eliminating costs associated with this recycling program
- This also allows many businesses to reduce expenses by saving on waste disposal

- Foodservice foam #6 recycling locations information:
 - Dart website (www.dart.biz) map
 - earth911 (www.earth911.com) website – search for #6 plastic, expanded



Summary

- Post-consumer foodservice foam #6 can be and is being recycled
- Foodservice foam #6 recycling is growing!
- Dart is interested in partnering with municipalities on foam #6 drop-off programs
- Dart is interested in providing assistance with densification issues and pursuit of curbside collection of foam #6



Thank you!

Questions?

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