

FOAM RECYCLING



**A COLLABORATION & VISION WITH
GILFORD DEPARTMENT OF PUBLIC WORKS
& NORTHERN NEW ENGLAND ROTARY CLUBS**

**BY MEGHAN THERIAULT, P.E.
GILFORD DIRECTOR OF PUBLIC WORKS**



**98%
AIR**















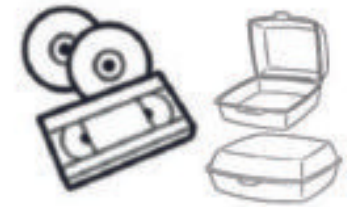

**FOAM AKA
"STYROFOAM"**

**PS (EPS) =
POLYSTYRENE
(EXPANDED)**

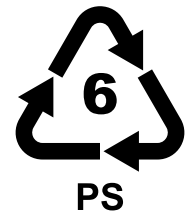


**2%
PLASTIC**

RECYCLING BASICS

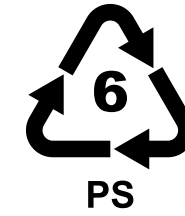
						
PET Polyethylene terephthalate	HDPE High-density polyethylene	PVC Polyvinyl chloride	LDPE Low density polyethylene	PP Polypropylene	PS Polystyrene	OTHER Other types of plastics
<p>PET is commonly used in commercially sold water bottles, soft drink bottles, sports drink bottles and condiment bottles.</p> 	<p>HDPE is commonly used in milk and juice bottles, detergent bottles, shampoo bottles, grocery bags and cereal box liners.</p> 	<p>PVC can be flexible or rigid, and is used for plumbing pipes, clear food packaging, shrink wrap, plastic children's toys, tablecloths, vinyl flooring and blister packs.</p> 	<p>LDPE is used for dry cleaning bags, bread bags, newspaper bags, produce bags, "paper" milk cartons and hot/cold beverage cups.</p> 	<p>PP is used to make yogurt containers, deli food containers, furniture, luggage and winter clothing insulation.</p> 	<p>PS is used for toys, rigid packaging, refrigerator trays and CD cases. Also used to form Expanded Polystyrene EPS used for take out containers, cups/plates and packing chips.</p> 	<p>Any plastic item not made from 1-6 plastics is lumped together as a number 7 plastic and is used for things like CD's, baby bottles and headlight lens.</p> 

EXCITING INITIATIVE & PARTNERSHIP



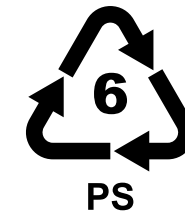
NH NETWORK PLASTICS WORK GROUP

Statewide volunteer group focused on impact and initiatives related to plastics waste reduction and the petrochemical industry.



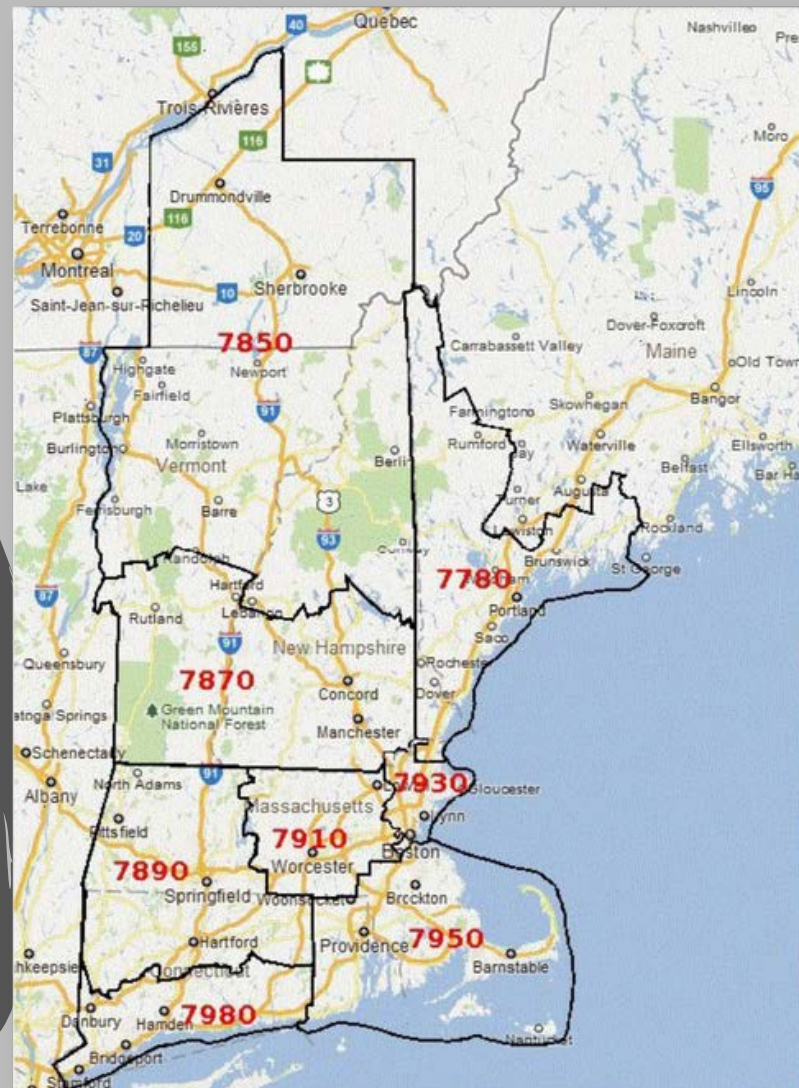
FOAM CYCLE, LLC

Company with patented foam densifier unit out of NJ.



NORTHERN NE ROTARY

Past District Governors #7850 Mike Carrier, #7870 John Siemienowicz and #7780 Dick Hall & others rotary members.



GOALS OF FOAM RECYCLING IN NORTHERN NEW ENGLAND



**REDUCE FOAM WASTE
IN LANDFILLS**



**SAVE MONEY ON TRASH
DISPOSAL COSTS**



**GENERATE REVENUE
THRU RECYCLING**



**REDUCE PLASTIC
POLLUTION**

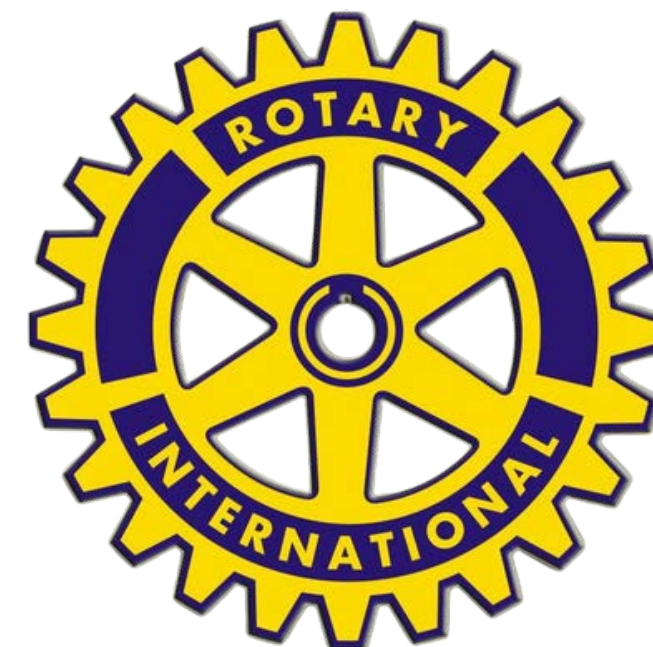
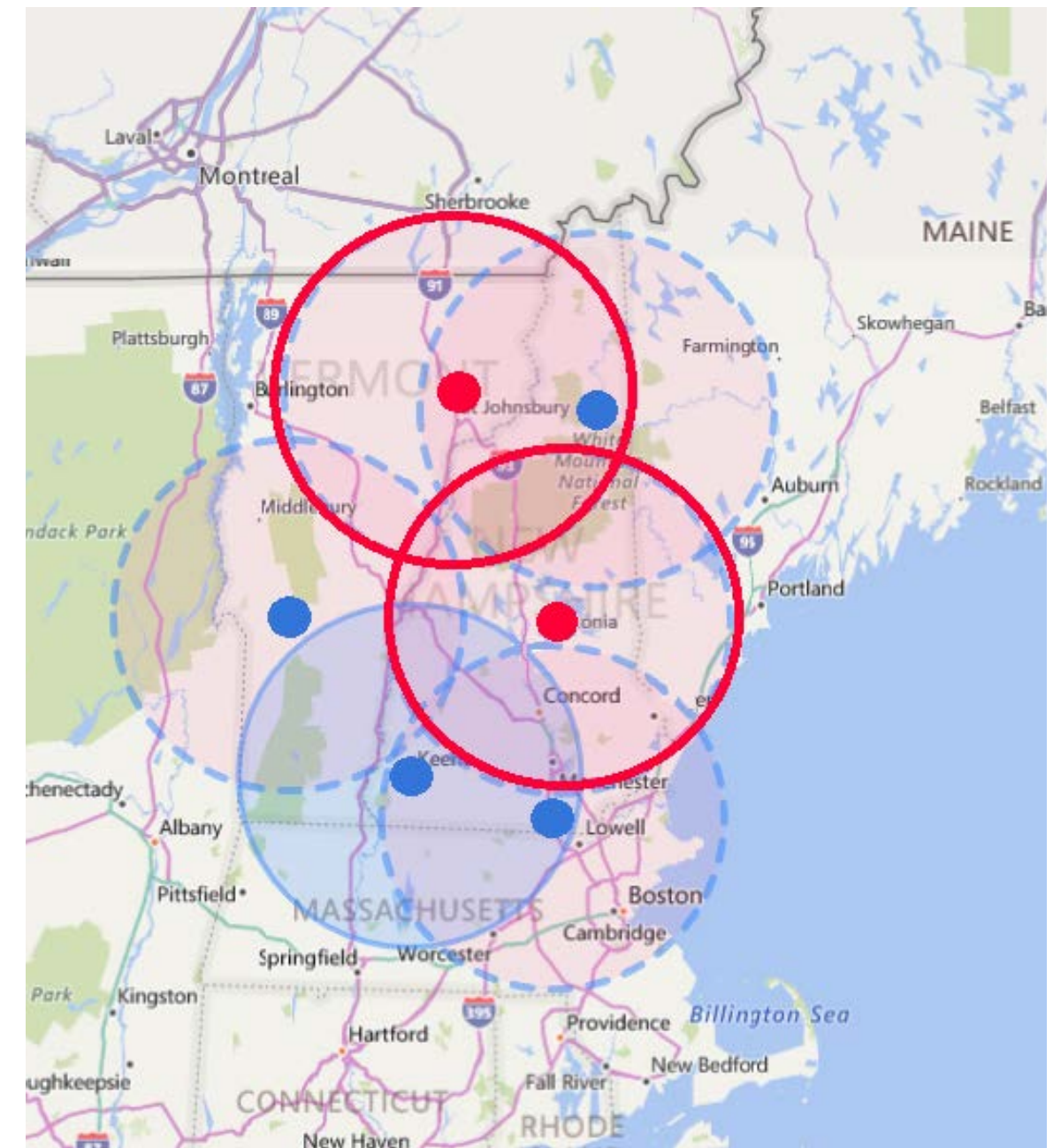
HUB AND SPOKE CONCEPT

HUB SITE - Location for foam drop off and foam densification unit, such as a municipality, private business or regional solid waste center.

SPOKE SITES - Location for loose foam collection via organized events, mobile units or collection containers and managed by Rotary Clubs.

SPOKE sites would deliver loose foam to nearest HUB Location.

**GILFORD DPW NOW IST NH HUB LOCATION
NEK WASTE MGMNT DISTRICT - LYNDON, VT**



SPOKE #1 COLLECTION EVENTS

ORGANIZED BY ROTARY CLUBS

- Hold regional or individual community event

FLEXIBLE

- Hold as few or as many events as desired (monthly/quarterly/annually)

COMMUNITY BUILDING

- Educate community on recycling right
- Collaborate with DPW, Town Committees or other interested groups.

CONS

- Requires large volunteer effort
- Need trailer(s) for collections





SPOKE #2 COLLECTION BINS

PROS

- Reasonable price < \$3,000
- Locate permanently or move around community.
- Lightweight bags ~ 20lbs easy to transport to HUB.

CONS

- Need to monitor and swap out once filled.
- Could get contaminated with unacceptable items when in remote unstaffed location.



SPOKE #3 COLLECTION BAGS

COORDINATE WITH LOCAL TRANSFER STATION

- Collect weekly or daily with town staff or volunteers

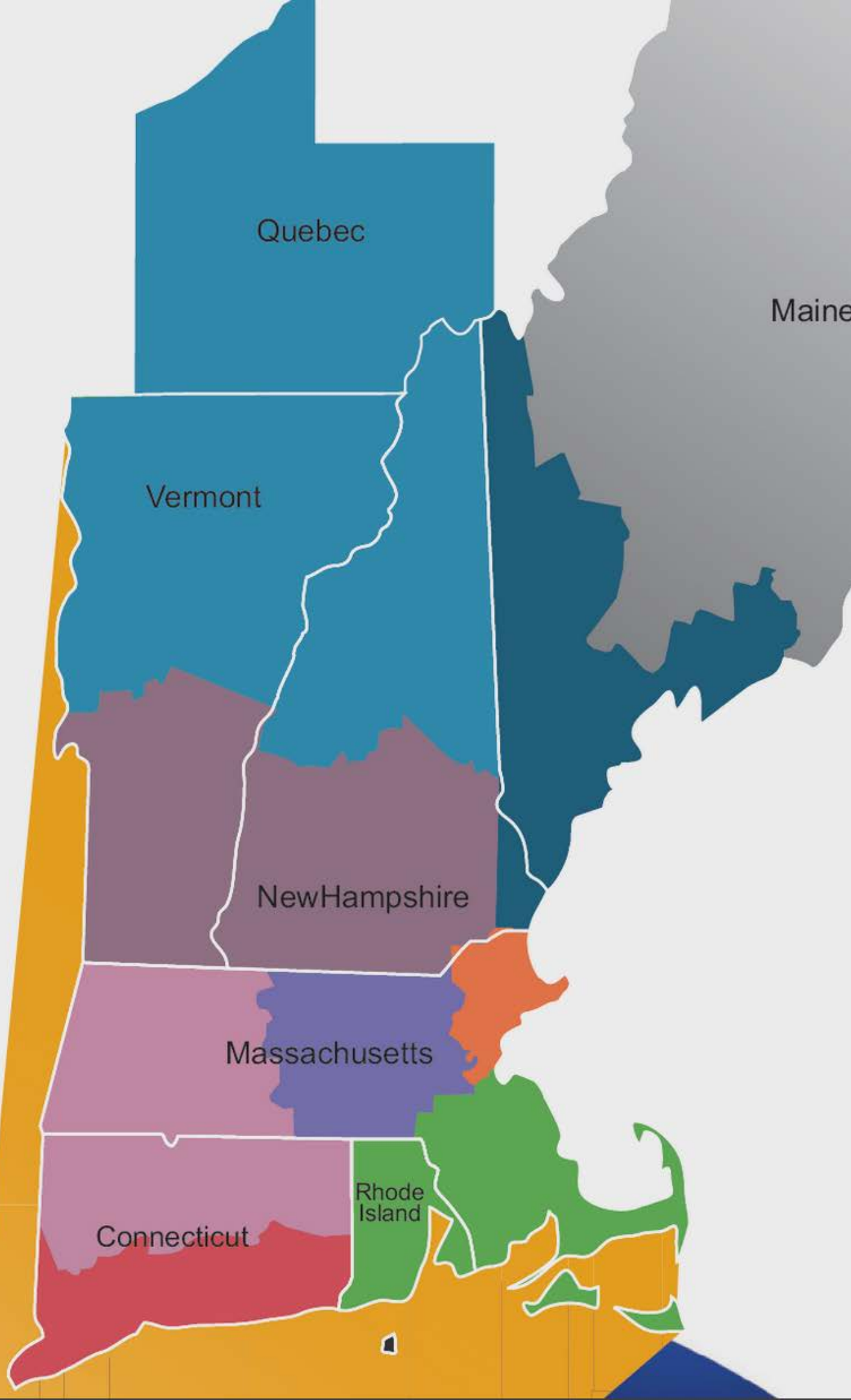
PROS

- Very inexpensive
- Easy to set up and accessible
- Minimal volunteer effort
- Smaller amounts to transport
- Monitor contamination closely

CONS

- Need buy-in from town or town staff





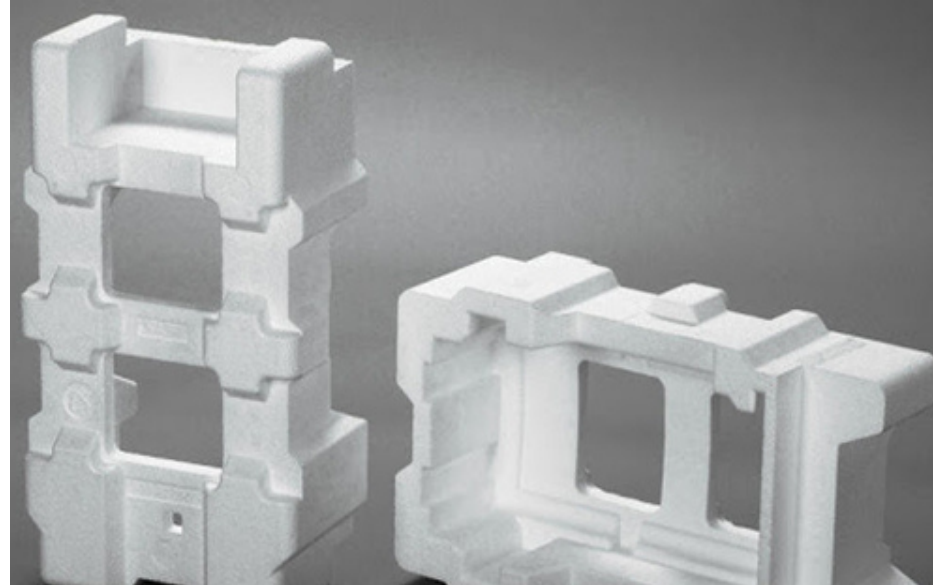
SPOKE #4 MOBILE COLLECTION

PROS

- DG interest in this model
- Added flexibility to move unit throughout district (DPW or schools)
- Share with clubs / pool funding
- Simplified transport
- Possibly less volunteer effort

CONS

- Expensive \$18,000+
- Limited collection volume

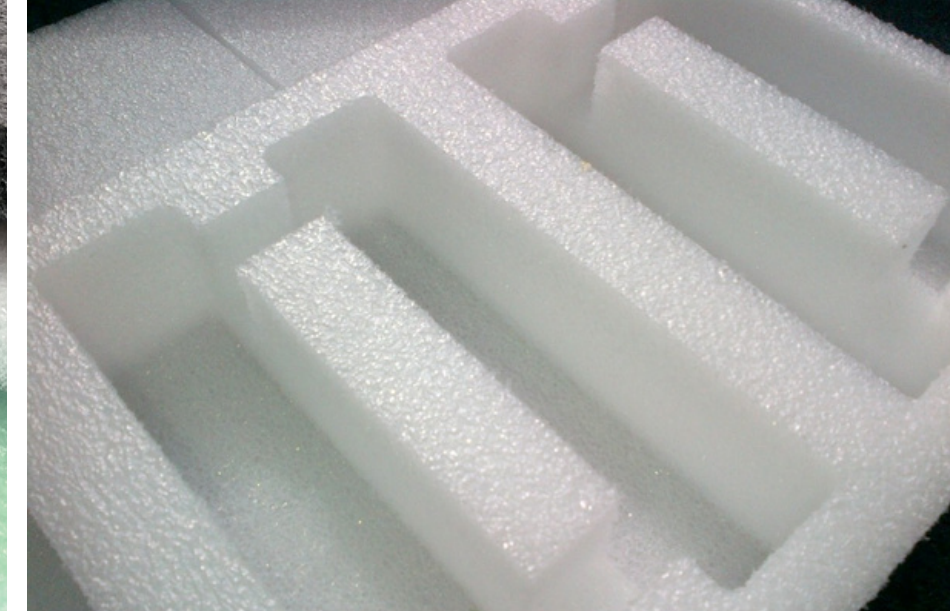


WHAT CAN BE COLLECTED?

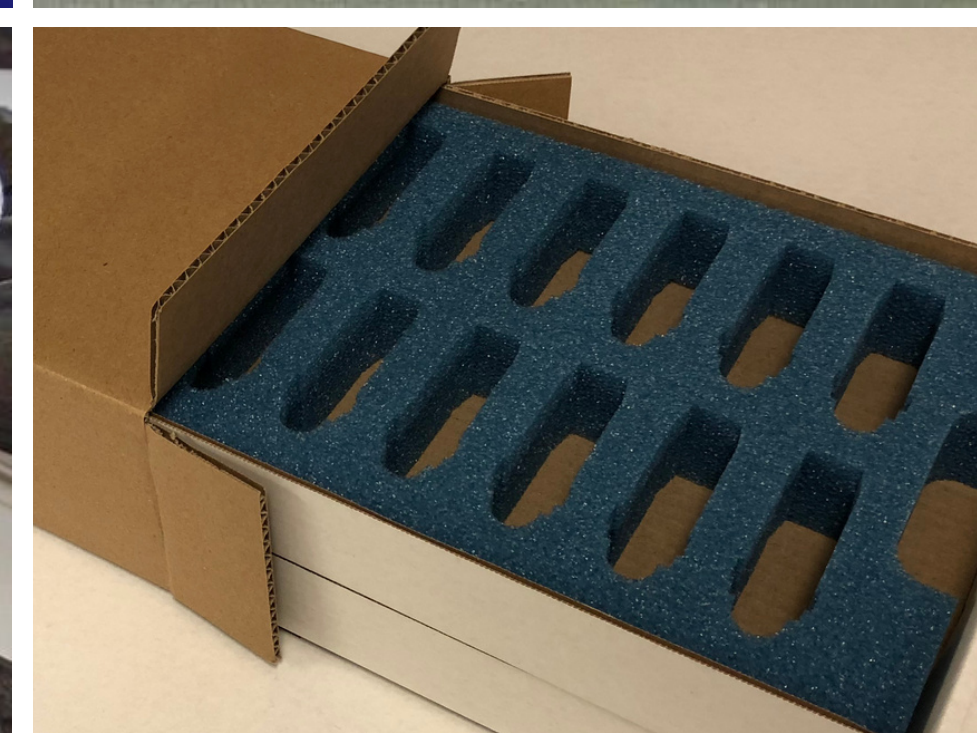
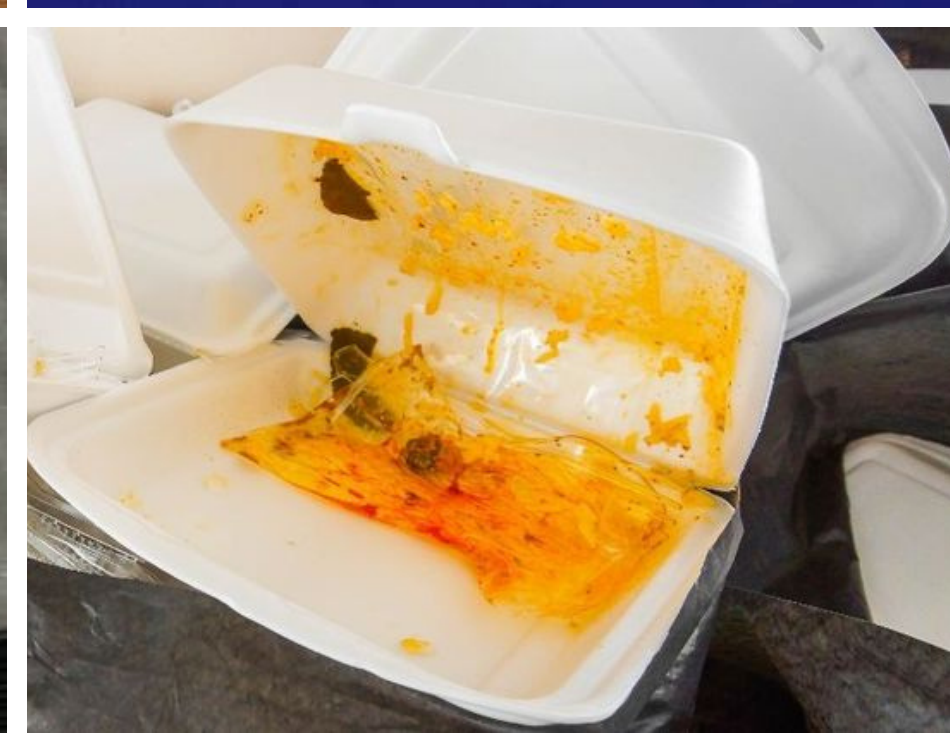
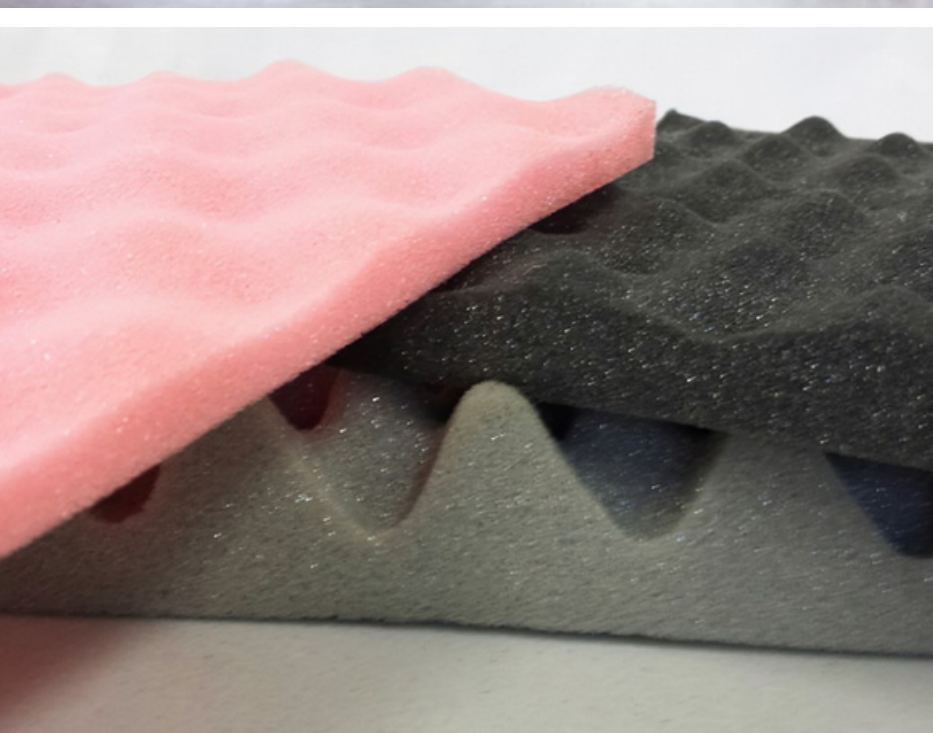


ALL FOOD SERVICE FOAM MUST BE CLEAN AND FREE FROM RESIDUAL FOOD





UNACCEPTABLE FOAM ITEMS



GILFORD DPW'S ROLE AS HUB LOCATION

**POSITIVE
REGIONAL
IMPACT**

COLLECT



PROCESS



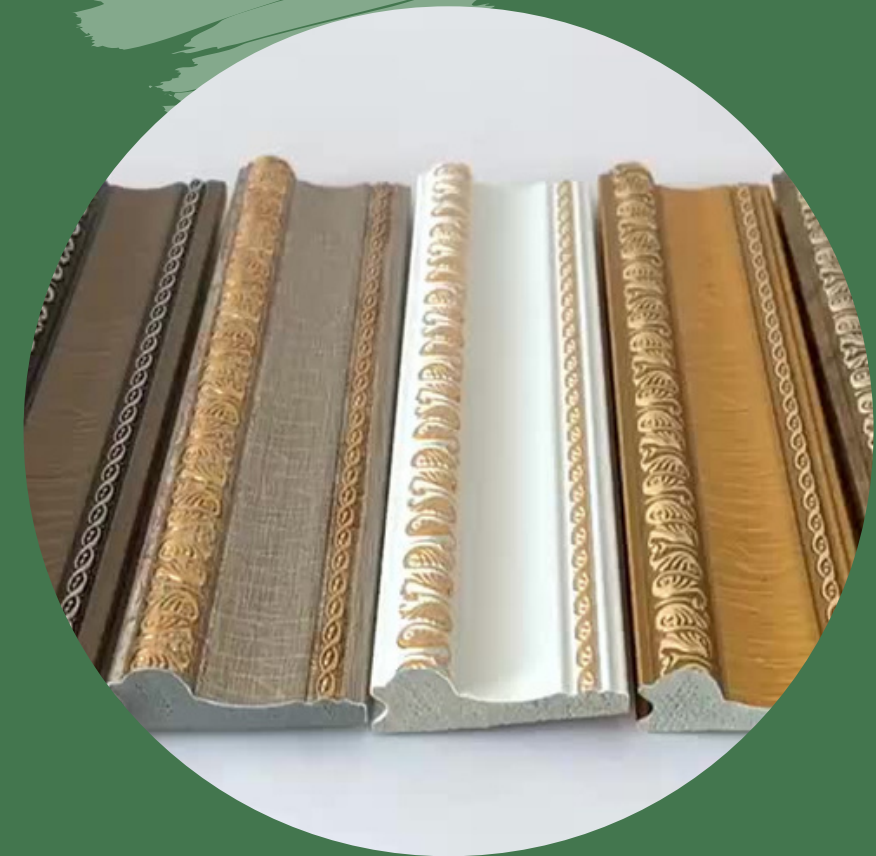
STORE



SELL



WHAT HAPPENS AFTER INGOTS ARE SOLD?





HOW YOUR COMMUNITY CAN GET INVOLVED



EDUCATION

Promote program both locally and regionally



COLLECTION

Collect at your transfer station or organize event



TRANSPORT

Offer to transport foam back to Gilford or find volunteers



FUNDING

Budget for future collection bin or consider becoming HUB

STEPS TO GET HERE...

JAN-APRIL

MAY-JUNE

JULY-SEPT

ONGOING



INTRO & GRANT

- Foam Action Group Meetings
- Research
- Find partners
- BOS approval
- FRC Grant application



LOCAL SETUP

- Site setup & electrical
- Delivery of unit & training
- Create public education campaign
- Promote to Gilford residents & Rotary Club



LAUNCH

- Start foam collection in Gilford
- Obtain NHDES permit
- Collaborate with LRPC on grant writing
- Discuss Rotary club outreach plan.



EXPAND

- Fine tune logistics on collection events and transportation
- Regional outreach to clubs & DPWs
- Fundraise / grant applications



GILFORD DATA JULY - DEC



**REMOVED EQUIVALENT
OF 400 CY FOAM FROM
MSW STREAM**

**EQUIVALENT OF 10
40 YARD CONTAINERS**



**PRODUCED 77
INGOT BRICKS**

**3,200 LBS+
GILFORD ONLY**



**SAVED \$2,500 IN
HAULING OVER 6
MONTHS**

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**ESTIMATE \$6,000
SAVINGS IN 2023**



**ACCEPTED FOAM
FROM 6
COMMUNITY
EVENTS
THROUGHOUT NH**

HOLDERNESS

TOWNS CURRENTLY PARTICIPATING

HARRISVILLE

CORNISH

HANOVER

PLYMOUTH

GILFORD

MOULTONBOROUGH

LEBANON

SANDWICH

FRANKLIN

TAMWORTH



**START
COLLECTING
FOAM IN YOUR
COMMUNITY
TODAY!**



*“WHEN YOU DO NOTHING, YOU
FEEL OVERWHELMED AND
POWERLESS.*

*BUT WHEN YOU GET INVOLVED,
YOU FEEL THE SENSE OF HOPE
AND ACCOMPLISHMENT.”*

-MAYA ANGELOU



THANKS FOR YOUR TIME!



Meghan Theriault, P.E.
Gilford Public Works Director



dpwdirector@gilfordnh.org



603-527-4783



www.gilfordnh.org/recycleright



GILFORD DPW



RECYCLE RIGHT



GILFORD DPW



FOR MORE INFO ON FOAMCYCLE:

Visit www.FOAMCYCLE.com