

Single Stream Recycling

What it Means and Doesn't Mean for Winnebago Co Communities
Winnebago County Board of Supervisors, January 6, 2009



What is Single Stream Recycling?

At the curb:

place all recyclables
including paper fiber &
food-beverage containers
together for collection
(normally in a cart or bin)

Background

- Prior to 2002, Brown, Outagamie and Winnebago (BOW) Counties each independently operated its own Landfill and Recycling Facilities.
- The counties partnered on solid waste and recycling services in 2002 with a 25-year solid waste agreement and a 12-year recycling agreement, saving the three counties an estimated \$43 million.
- Under the recycling agreement, Winnebago Co. became a transfer station, transferring paper to Outagamie Co. for processing and commingled containers to Brown Co. for processing.

Background (cont.)

- In 2004, BOW began investigating and researching single stream recycling.
- Existing processing equipment was aging and significant investment would be needed.
- BOW needed to determine whether this investment would be made in replacing/repairing dual stream processing equipment or if investment would be made in updated single stream processing equipment.
- BOW services over 60 communities in 3 counties.

Moving to Single Stream Recycling

- BOW made the decision in Dec. '07 to invest in single stream recycling processing capability.
- In 2008, BOW extended the recycling agreement through Dec. 31, 2024.
- The BOW jointly owned and operated facility will be located at an expanded Outagamie Co. Recycling Facility in Appleton.
- All BOW communities have the ability, opportunity and option to begin single stream recycling collection as of 7/1/09.

Two Parts of Recycling

- Curbside Recycling Consists of Two Separate & Distinct Activities:
COLLECTION & PROCESSING
- In Winnebago County, each community is the Responsible Unit (RU), responsible for COLLECTION, determining how material is picked up, the frequency and by whom (municipal crews or private contractor).
- Winnebago County is responsible for PROCESSING the recyclables and marketing the recyclables to buyers/end users.

BOW Single Stream Processing

- Consolidate recycling facilities from 2 to 1
(3 in 1993 > 2 in 2003 > 1 in 2009)
- Capital cost \$9.9 million
 - Avoid spending \$2 million on old technology
 - Incremental \$7.9 million will provide modern equipment with strategic value
 - Cost shared between 3 Counties
- Single stream processing estimated cost same as or less than dual stream
- Invest in future with new technology

Single Stream Processing (cont.)

- Winnebago Co.'s portion of capital (~\$2.5 million) will be paid for as an annual depreciated expense by the Solid Waste Management Board, not by our communities or funds on County tax levy.
- Winnebago Co. will continue to operate a transfer station and transfer recyclables to new BOW Single Stream Facility in Appleton.
- Brown Co. will begin to transfer recyclables to new Single Stream Facility.
- Facility will only process loose recyclables (no plastic bags accepted); all Brown & Outagamie communities already do not use plastic bags.

Single Stream Processing (cont.)

- The fundamental technology that is employed by single stream processing is the ‘disc screen.’
- Disc screens mechanically separate paper fiber from commingled containers.
- Plastic bags wrap around disc screens, causing screens to work ineffectively and causing facility downtime to clear screens.
- Disc screens have been used in municipal recycling applications for over a decade.

Why Did BOW Move to Single Stream Recycling?

- Because of the benefits single stream is the nationwide trend, including in Wisconsin.
- Some local municipalities have been requesting single stream; Ashwaubeon and DePere in Brown Co. choose to utilize a private contractor because BOW could not offer single stream processing.
- Local and national preference for and the trend toward single stream could not be ignored.
- If BOW did not offer single stream processing, add'l. communities, tonnages and revenues would be lost.

Why Single Stream?
Other Benefits

Keep Tri-County Partnership
strong for over 60 municipalities

Keep municipality costs down

Allows for maximum collection
flexibility



Why Single Stream?

Other Benefits

Increased recycling
(save natural resources)
(10-30% is common)



Decreased landfilling
(save landfill space)
(avoid landfill tip fees)



Single or Dual Stream Collection

- Each Winnebago Co. community can choose the collection method best suited for them.
- Winnebago Co. is not requiring communities to switch to single stream recycling.
- Dual stream materials delivered to Winnebago Co. will be mixed with single stream materials and all recyclable materials shipped together as single stream to the processing facility.
- Some communities are choosing to use the switch to single stream recycling as an opportunity to also switch to automated collection of recyclables.

What is Automated Collection?

- Automated collection enlists trucks with hydraulic arms to lift carts of materials into route trucks.
- Automated collection and the use of carts is not a requirement of single stream.
- Single stream can be collected manually.
- Single stream is not necessary for automation.
- Programs like the City of Menasha and Appleton presently collect trash with automated trucks and carts.
- Single stream does not require automation; automation does not require single stream. These activities can be done together or completely separate.

Clarifications

- Winnebago County is not requiring communities to switch to single stream recycling or automated collection; Winnebago County will simply not keep paper recyclables separate from container recyclables once they are delivered to our facility after July 1, 2009.
- The only collection change Winnebago County seeks from communities is the elimination of blue plastic bags for commingled container (can/bottle) recyclables.

Eliminating Blue Bags: Cut Costs and Reduce Waste

- Residents save money in not having to buy one time use bags
- County saves money in not having to employ inmate labor to de-bag material, provide safety supplies to inmates, maintain de-bag line, transport bags to Landfill and Landfill tip fees
- These cost savings passed to municipalities via reduced recycling tip fees (estimated to be approx. \$2.50/ton)
- Increases space at Transfer Station for other materials (electronic rcy, trash when landfill closes)
- Bags cannot be recycled (waste)
- Bags incompatible with single stream processing



Eliminating Blue Bags

- Winnebago County's request to eliminate blue bags does not require a switch to single stream or automation with carts.
- The most commonly used alternative is a recycling bin, either a uniform container (i.e. Town of Menasha) or of the resident's choosing within specified parameters (i.e. Outagamie County).
- Bins can be used for single stream or dual stream recycling collection.

Financing Bins or Carts

- In eliminating blue bags, communities will determine the collection method/container.
- A container of the resident's choosing (within specified parameters) is the least expensive option, from \$0 (if reusing a container the homeowner already owns) to \$5-\$10 for a suitable 'Rubbermaid' type container.
- Carts are more costly, but can be financed in a number of ways including a one time charge on tax bill, charge split over 2 or more years, general property taxes, hauler including price in monthly household service charge, etc.

Summary

- Winnebago County is not requiring any community to switch to single stream recycling or automation.
- Single stream recycling and automated collection are independent activities, which may be done together.
- Communities choosing to go to single stream or automated collection may choose the collection container (cart or bin) and payment method.
- Winnebago County will seek eventual elimination of blue plastic bags; communities still using plastic bags will be charged additional fees for extra cost of continued debugging operations.

Project Schedule

- Building construction presently underway at Outagamie Co. to expand and remodel Recycling Facility.
- Building construction to conclude and single stream equipment to be delivered by Mar. 2009.
- During 1st quarter of 2009, Winnebago Co. will assist those communities desiring carts/bins w/ purchase pricing & single stream education.
- During 2nd quarter, installation, start-up, testing and training on single stream equipment occurs.
- July 1, 2009 Single Stream Facility begins full-scale operations.

Questions?

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