E-Cycle Wisconsin Stakeholder Meeting Summary

May 7, 2014, Pyle Center, Madison

Welcome and introductions

The day was kicked off by an opening address from Ann Coakley, the DNR Waste and Materials Management bureau director. Everyone in the room was then invited to introduce him/herself.

E-Cycle Wisconsin: our perspective

Sarah Murray, E-Cycle Wisconsin program coordinator, gave an update and overview of the program, including legislative recommendations that were in the 2013 legislative report.

Handouts and links

- Presentation: http://dnr.wi.gov/topic/ecycle/documents/StakeholderMeetingMurray.pdf
- 2013 legislative report one-page summary: http://dnr.wi.gov/topic/ecycle/documents/2013ReportSummary.pdf
- Map of program year 4 registered collection sites: http://dnr.wi.gov/topic/Ecycle/documents/CollectionSitesMap.pdf
- Full set of E-Cycle Wisconsin program evaluations and survey summaries: http://dnr.wi.gov/topic/Ecycle/Wisconsin.html#tabx2

Electronics recycling: a national perspective on challenges and successes

To gain a national perspective on challenges and successes, Neil Peters-Michaud of Cascade Asset Management reviewed the development and future outlook of the electronics recycling industry. This presentation described current issues such as management of CRT glass, and proper handling of mercury lamps.

Presentation: http://dnr.wi.gov/topic/ecycle/documents/StakeholderMeetingPeters-Michaud.pdf

Networking activity

Following the presentations, attendees were asked to respond to two questions by writing a response on a sticky note and attaching it to a designated space on the wall. The questions were:

- 1) If you could change one thing about the E-Cycle Wisconsin program, what would it be?
- 2) How has E-Cycle Wisconsin improved electronics recycling, from your perspective?

Responses varied, but there were several themes. In response to changing one thing about the program, recurring responses included removing the rural incentive, making manufacturer targets available earlier, and requiring or encouraging manufacturers to work with smaller recyclers. A major theme for the second question was that the program has improved public awareness of ecycling, resulting in more business for the industry and helping to keep electronics out of ditches and landfills. See all responses and some DNR comments in the attachment to this summary.

Collector panel: collector perspective on the E-Cycle Wisconsin program

Panelists: Pennie Pierce (Hilltopper Refuse & Recycling), George Hayducsko (Dunn County), Rick Meyers (City of Milwaukee), Tim Dunn (Best Buy)—moderated by Joe Van Rossum, SHWEC

Main themes of the collector panel discussion included logistics and costs, and the challenge of making recycling convenient for consumers while running an efficient and low-cost collection program. A summary of some of the main discussion points follows.

Overview

- Best Buy sees the highest collection volume from its MN and WI stores. For them, a big
 challenge is storing electronics that are dropped off—their stores/warehouses do not have
 space to store much, so they have to have frequent pickups and can't take very large TVs instore. They do take large TVs through their haul-away program.
- At Hilltopper's rural sites, it's a challenge to make sure electronics are handled and stored properly since an attendant can't always monitor people putting their electronics in a roll-off container. They are trying to put tarps over the roll-off to protect the electronics and make sure people aren't throwing them over the top. They have found that a newsletter mailed to all residents in La Crosse County, customized by community, is very effective for communicating recycling information.
- Dunn County's collection efforts ramped up significantly after the law passed, and they were able to offer it to residents for free. Initially, they were getting paid by their recycler, then it scaled back to no payments, and now they are looking at possibly needing to change how they run the program (e.g., having fewer sites) to reduce costs.
- Milwaukee would have stopped collecting electronics without the law, but because of it was
 able to start taking TVs and has seen volumes grow exponentially. They are also challenged by
 the fact that recyclers are no longer offering collectors money and they may need to start
 paying something for recycling again.

Relationship with recycler

- For choosing a responsible recycler, all agreed visiting the recycling facility (if possible), looking
 for certifications and developing a personal relationship are important. The third-party
 certifications are often used as a gateway, but no one sees them as a guarantee of responsible
 recycling.
- Having good service—especially timely pickups—is key.
- Any help recyclers provide with logistics would be great—save time and money and make the program more efficient.
- It would help collectors if recyclers would be more transparent about the state of their manufacturer contracts, so that collectors aren't cut off/surprised.

Big time and money costs

- For Milwaukee, nuisance enforcement is a big effort—dealing with TVs on the curb and electronics in vacant lots.
- Transportation logistics. In particular for sites like Best Buy and Milwaukee, receiving high volumes and having limited storage capacity is a logistics challenge, especially scheduling pickups with hauler.
 - Best Buy has worked on using backhauling and concentrating loads.
 - o George wonders if using pods (storage containers) at rural sites could be more efficient.
 - More rural collectors might need to find ways to consolidate material for pickup, or make efficient "milk run" routes.
- Moving material around for proper storage and sorting/separating into different categories, if required by recycler.
- Training employees.
- For Best Buy as a manufacturer, tracking sales restrictions on unregistered brands is a big time commitment.
- Choosing a recycler (and continued monitoring of them) can take significant time.

Final thoughts

- A challenge for municipal sites is that when retailers and other collection locations restrict what they accept, municipalities get all the least valuable/most costly items, like console TVs. It would be nice if there were a way to compensate sites that accept without restrictions.
- Collectors should try to make recycling as easy as buying electronics.

Recycler panel: issues and challenges facing electronics recyclers in Wisconsin

Panelists: Katie Reilly (ERI), Miles Harter (Dynamic), Steve Pfeiffer (URT) – moderated by Joe Van Rossum, SHWEC

Recyclers described challenges they face with timing regarding collection and meeting manufacturer targets. With the current program model and the way manufacturers handle their targets, it is difficult to plan for the future. There was also a theme that the law and program are designed for shared responsibility among all parties, including recyclers, manufacturers, collectors, retailers, administrators and the public. The transparency and open communication in Wisconsin's program are helpful. A more detailed summary of the main discussion points follows.

Collector relationship and best practices

- Recyclers recognize that what is ideal for them may not be what is possible/ideal for a particular collector, so it's a negotiation.
- One of the biggest issues/costs is transportation. So it's better when collectors are geographically close to a recycler or collectors/consumers deliver material to a recycler's facility.
- Having full loads as much as possible to reduce transportation costs. Frequent pickups of small loads is the least desirable situation.
- Sorting material at the collection site helps recyclers.
- Avoiding stripped/dismantled electronics is important—either not having the collector do this, or having the collector police what comes in to its site.
- Having a good collector-recycler working relationship to address issues and improve processes is important.

Recycler challenges that affect collectors

- Emphasis on shared responsibility within program—manufacturers, recyclers, collectors, consumers all play a role and are affected by market changes, etc.
- Recyclers recognize that it doesn't make customers (collectors) happy when they suddenly have
 to start charging or reduce what they are taking, but this is driven in part by not knowing
 manufacturer obligations until the last minute, having short-term manufacturer contracts,
 and/or collectors receiving higher than expected volume.
- The economics of the program are out of whack (more being collected than necessary to meet manufacturer targets), which puts pressure on recyclers. They have to worry about having end markets for all the material and covering costs.

- Recyclers need to work on planning and not overcommit on the collection sites they can serve
 and the pounds they can take, but this is s challenge when they may not have manufacturer
 contracts locked in for more than a year or not know manufacturer targets until late in a
 program year. With rising costs and reductions in manufacturer payments, recyclers might ask
 collectors to change how sites are set up, or may need to drop sites.
- No recycler has fully mastered the art of balancing commitments to collectors with commitments from manufacturers. Recyclers are constantly monitoring the weights coming in and comparing with what they expected and need.
- Long-term relationships among all parties would help stabilize the system and allow for efficiencies/innovations.
- Recyclers can try to price in risk when they offer contracts to collectors, but it's difficult.
- Many of these issues will persist until the program moves away from a sales weight-based model for manufacturer targets.

Assistance recyclers can provide to collectors

- Communicate what they'd like to see in a collection site. Make it clear what is acceptable and what is not. Many recyclers would be willing to come on site to help set things up.
- Provide packaging guidelines.
- Provide information on what happens to materials during/after recycling.
- Recyclers may run collection events with their own staff; having written procedures and checklists helps a lot.

Do recyclers prefer to respond to a bid or RFP?

- They will do either, though RFP allows them to emphasize aspects other than cost (customer service, etc.). RFP is a longer, more challenging process, however.
- RFP allows for some questions and back and forth. However, if a recycler can't visit a collection site, it limits what they can offer in an RFP.
- Long-term commitments help planning, but it may be difficult for recyclers to commit to cost structures for long periods because of uncertainty with market prices and manufacturer contracts.

Serving rural areas

 Rural incentive (1.25 pounds credit per pound collected) does not necessarily benefit the recycler, unless the manufacturer offers a financial incentive.

Recycling process

• All three recyclers on the panel break electronics down to the commodity level. They work hard to do due diligence/auditing on downstream vendors.

Future directions, program improvements: "World Café."

The last session of the day was a dynamic group discussion of future directions and potential measures to improve the program. This session was designed for attendees to meet new people and discuss common challenges and potential solutions that would work for all stakeholders.

Challenges identified based on this and other discussions throughout the day included a variety of logistical and operational challenges with physically handling electronics and dealing with unpredictable volumes and markets; the need for long-term relationships and planning among stakeholders to ensure the most efficient and cost-effective programs possible; and understanding the challenges and shared responsibilities of all stakeholders in the program.

Potential solutions mentioned included changes to the law, such as adjusting manufacturer targets and expanding/changing the devices covered by the law; improving enforcement of existing laws and policies; finding ways to assist/incentivize municipal collectors and small recyclers; and better communication, collaboration and planning among collectors, recyclers and manufacturers.

For a full list of the challenges and potential solutions identified during the World Café exercise, see Attachment 2.

Meeting wind-down and movie premiere

DNR staff did a brief recap of the day's goals and how the meeting would be documented. The day was designed both to allow for networking among stakeholders and to give the DNR feedback on challenges and successes with Wisconsin's electronics recycling law. The meeting served as a starting point to help the DNR gather feedback for recommendations to be included in its 2014 report to the Legislature and to help the DNR determine whether rulemaking is necessary.

The day was brought to a close with the world premiere of the new outreach video "What Happens When I E-Cycle?"

The video is available here: http://dnr.wi.gov/topic/ecycle/.

Attachment 1: Networking activity responses

Following the presentations in the morning, attendees were asked to respond to two questions by writing a response on a sticky note and attaching it to a designated space on the wall. The questions and participant responses are listed below. For the first question, we have added some DNR comments, and the responses are organized into loose categories based on the type of change required.

1. If you could change one thing about the E-Cycle Wisconsin program, what would it be?

Can be done administratively or through outreach by DNR and stakeholders

- Don't allow CRT glass to be allowed as alternative daily cover (ADC) in landfills no matter how
 it is prepared
 - DNR comment: as outlined in a guidance document to be published by early June. no CRT glass sent to a landfill, either for disposal or for use as ADC, will count toward manufacturer recycling obligations.
- Help the public with proper TV disposal
- Education of consumers on how/where to recycle
- Awareness through social media Facebook?
 - o DNR comment on the above three notes: we aren't able to use the DNR Facebook page for e-cycling at the moment, but are experimenting with other digital media and would encourage local governments, recyclers and other stakeholders to make use of social media themselves. If there is information or other things we can provide to help with this, let us know. Also, please let us know if you have ideas for other types of public education you think would be effective.
- Better policing of companies from outside of Wis operating in our state
 - DNR comment: we are working to add site visits and desktop audits for registered recyclers operating outside of Wisconsin, and are working with other states to share information about compliance issues and about the weight of electronics recyclers are reporting across states.
- Better enforcement of illegal dumping laws

o DNR comment: This is something the DNR and local governments will continue to work on, but there are resource limitations. Citizen tips are very helpful in letting the DNR know about problems, and the same is likely true for some local governments.

Would require law change or administrative rulemaking:

- Expand program to universities and other K-12 schools. However, exempt educational from manufacturer targets. In these difficult times it would lead to revenue to schools and protect environment. Double win for Wisconsin.
 - DNR comment: all schools and universities are already required to recycle their electronics, but universities and most private K-12 school weight cannot count toward manufacturer obligations.
- Allow the collection of e-waste from any source: business, multi-family, all schools, etc.
- Make the program year consistent with the recycling grant reporting year, so that we only need to tally one set of numbers Jan. thru Dec., not July thru June
- Eliminate the rural multiplier. Level the playing field for pounds in the state
- Eliminate the rural multiplier
- More opportunities to carry over weight as a recycler
- Increase targets; incentivize CRT and other problematic items recycling
- The allowance of more poundage for recyclers to accept
- Include all electronic devices and have all electronic banned from landfills

Could require law change, but might also be (partially) done administratively or voluntarily by stakeholders

- Provide OEM obligations earlier
- Can you announce OEM obligations closer to the beginning of the program year or earlier?
- Could manufacturer registration be before the program year so manufacturers know their targets before year starts? Might help with recycler and collector planning. Now program year starts 7/1, but manufacturer target issued after manufacturers submit registration report on 9/1.
 - ODNR comment on above three bullets: Individual manufacturers would be able to know their targets before a program year begins, because they are based on sales for the July to June time period ending a year before the start of each program year. So, for the program year beginning July 2014, obligations are based on sales between July 2012 and June 2013. However, the DNR does not receive this information until manufacturers submit their annual registration. We can try to provide these as close to the Sept. 1

manufacturer reporting deadline as possible, and collectors and recyclers can always ask us to see if we have partial information earlier.

- Tracking process of business vs. residential/K-12
 - DNR comment: if there are more specific details on information people would like, we could do some of this voluntarily, but couldn't require some information without a law change.
- Give more support (financially and education) to recyclers getting started
 - DNR comment: while we can't provide financial help without a law change, we continue to work on improving publications and other educational materials, and are happy to take suggestions on what other materials may be useful.
- Require all recyclers in WI to register and meet state requirements, not just those in the e-cycle program
 - DNR comment: we are investigating whether this could be done through existing administrative codes, but it might require new legislation or rulemaking.
- Funding passed down to collectors not just a few recyclers
- More incentive for manufacturers to work with smaller companies
- Need to be more involved in the OEM contracts side of things so more smaller companies can be involved
- Somehow cover more of municipal collectors' cost perhaps an incentive of sorts to collectors who do not restrict the size or type of EED/CED that they accept at their site

Changes broader than Wisconsin's program or dealing with industry practices

- Provide a cost effective CRT solution
- Recyclers take mixed product instead of separating
- Better info/coordination between small collector and manufacturers

Other

- Need toner ink cartridge program
- Reporting seems hit or miss

2. How has E-Cycle Wisconsin improved electronics recycling, from your perspective?

Economic and environmental benefits

- E-Cycle has improved recycling in our town by providing a collection site where many residents have access to recycling vs. only a limited number of sites
- Broader and cheaper access to electronics recycling for people
- Generated over \$40,000 to fund our programs and services last year for the communities
- Kept over 500,000 pounds out of our compacter saving us on disposal fees last year alone
- E-Cycle Wisconsin has improved electronics recycling for Jefferson County and our site by being able to keep thousands of pounds of e-waste out of landfills and creating the laws needed to accomplish these goals
- Finding no TVs in county ditches and some revenue for county recycling programs
- Increase in total amount of electronics recycled and improved awareness
- More state regulations increases donors in the donation market
- Awareness
- Increase in public awareness of the importance of recycling electronics
- Yes! Public announcement helped
- Better awareness to the public on the need to recycle
- DNR is doing a good job of public awareness
- Created awareness to consumers about the importance of recycling electronics
- Raised awareness for those outside industry with efficient correspondence
- It has made more people aware of what to do with the e-waste as our business increased volume
- Improved consumer awareness
- Educating the public
- Awareness to public
- There are a lot more people in WI now recycling who used to landfill
- Great job with public ed and one of only state's auditing recyclers good thing
- Reporting requirements hold recyclers accountable for more accurate information
- Motivated to participate
- Opened the opportunity for us to work with consumers
- No state program is better than Wisconsin's. DNR support is excellent

Attachment 2: Notes from the World Café

Prompting question: What are the challenges on the horizon for electronics recycling based on what I see at my site?

- Distinguishing between eligible and covered devices a continuing process of education by workers
- Closing gap between what is actually collected and what is compensated by manufacturers
- Managing the risk from an insurance standpoint increasing mercury vs. decreasing lead exposure
- Planning for evolution of electronics recycling
- Challenge of the laws keeping up with industry
- Collectors' inability to control volume
- Need a better system of compensating collectors. Recycler gets revenue from both collectors and manufacturers
- Growth management volume, process of material entering the waste stream (tracking), certification (process, depth)
- Long-term planning strategies hard due to commodities
- Collector challenges: Space/weight, packaging, money to collect, separation, high cost/low value items, funding, contamination, labor costs, education, more recycling/less reuse
- Recycler challenges: Logistics, packaging, weights, separation, fluctuation in end markets, changing weights due to technology, funding, contamination, labor cost, loss of valuable components, funding to collector, education
- Cost, will costs force municipalities out of the game?
- CRT vs. LCD, lead vs. mercury, generational changes (residential usage till dead)
- Downstream auditing of processors
- Overcollection and unpredictability of incoming material and commodity prices
- Health/safety issues/training, qualified staff and costs involved
- Training/educating consumers and transparency in the system—customers want to know what happens to the items
- Trade-in programs cherry picking best items
- Security/data on hard drive
- Keeping up with technology
- Transportation logistics

- Manufacturers paying for current weights instead of original weights (LCDs now, CRTs in the past); weight down = revenue down
- Manufacturers can carry over, recyclers can't
- Business weights don't count

Prompting question: How can E-Cycle Wisconsin address the challenges you see?

- There should be some sort of licensing for collectors even if they aren't part of e-cycle program. Craigslist-source of shady operators, for example, dump material unusable
- E-cycling law changes: make list of products more dynamic, change the ratio (look at rolling year average for setting manufacturer targets
- Increase of covered items
- Expanded list of covered items, EEDs
- Perhaps more challenging manufacturer targets to help compensate collectors
- Increasing manufacturer targets
- Is 80% sufficient or is there a better target mechanism like Maine, uses brand sorting state sets the price
- Raise manufacturer obligations until glut of CRTs are worked through system
- More money needs to be contributed by manufacturers (for example: Sony discontinuing TVs, product still comes in – need more equitable distribution of responsibility)
- Transfer money from pounds to items, manufacturers should pay for the true weights collected
- Consolidate pick-ups from smaller collectors
- To address challenges thinking three steps ahead (better planning)
- Could post office collection help reduce costs/
- Happy things: good partnerships