Listening to Local Governments: A Discussion of Product Stewardship and the Electronic Waste Crisis

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Evergreen State College

Presentation Summaries and Notes

***Background*:** This Westside Recycling Coordinator's meeting* brought together **69** government representatives from Washington State to achieve the following four goals:

- To understand product stewardship
- Share lessons learned regarding local programs
- Explain NEPSI and State/Federal initiatives
- Document local government perspectives on NEPSI and related issues

Recent legislation moved forward by California** and the increasing awareness of the electronic waste problem in Washington State demonstrates this meeting was a timely event for the participants. State and local legislation for electronic waste disposal is also on the immediate horizon for governments and was a clear impetus for people to attend.

A recent poll conducted by Washington Citizens for Resource Conservation found overwhelming support for producer responsibility. The telephone survey, prepared by PRR, Inc. and the Northwest Research Group, Inc., "...found that Seattle area residents overwhelmingly believe that electronics manufacturers should be responsible for designing easily recyclable, less toxic products, and for providing a safe and convenient way to recycle those products." The study also found that "...when faced with a 'pre-paid' recycling fee added to the cost of the product, residents are highly unlikely to adjust their buying habits." In addition, the study found that "... [consumers] would prefer to have the recycling fee included in the overall price of the product, rather than presented as a separate fee." The full report can be viewed by visiting: http://www.prrbiz.com/WCRC_Report2.pdf

Key Outcomes:

The agenda brought together a wide variety of speakers from the Northwest Product Stewardship Council (NWPSC) and from local governments.
Presentations can be viewed by visiting the NWPSC website at:
http://www.productstewardship.net/productsElectronicsStateLocalPrograms.html.

The dialogue generated from question and answer sessions was an important outcome of the meeting.

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*Semi-regular meetings planned by the Washington State Department of Ecology to share information between local government representatives in the field of waste reduction, recycling, and other sustainability efforts. This meeting was planned largely with the help of the Northwest Product Stewardship Council, a government-led steering committee working on electronics and other product stewardship initiatives.

**A $10 advance disposal fee per computer and TV monitor was recently approved by the California Legislature and sent to Gov. Gray Davis (D). The bill, SB 1523, is designed to support a statewide recycling program for cathode ray tubes (CRTs), which contain lead, mercury, and other pollutants.

Introductions

Shelly McClure, Department of Ecology, Introduced panel of speakers, NEPSI, reviewed agenda.

After introductions, Shelly asked the audience:

How many of you have done or are currently involved in electronics collections?
Thurston, Snohomish, Seattle, King County, Tacoma

How many of you are planning to do electronics collections in the future?
Kitsap, Douglas, Whatcom, Richland?

How many have involved manufacturers and retailers in these collections?
Some are trying. (Tacoma)

How many of you are facing a commercial and residential ban for CRTs?
Snohomish, Douglas, Seattle, Kitsap

The Hazards of Electronic Waste

Sego Jackson, Principle Planner, Snohomish County, provided a brief introduction of Basel Action Network video: "Exporting Harm."

Sego Jackson introduced the film, "Exporting Harm: The High-Tech Trashing of Asia," as a very effective tool to use with businesses and government groups. The video documents the unregulated dismantling of computers and peripherals overseas and the significant impact on human health and the local environment. He showed it to a group of charities on Sept. 4 and it helped to put everyone on the same page. It also can help to bring about legislation. For instance, the images of California government property tags were very embarrassing for the state. Just this last week legislation passed in California due to impact of film. This film, with a running time of 23 minutes, can be obtained from the Basel Action Network on their website www.ban.org.

Sego asked Craig Lorch of Total Reclaim, who was featured in the film, what he felt the impact of the film was for him. He said the phone rings more often. Chris Luboff said that one of the negative impacts was that people perceive that recycling is more dangerous than putting them in the landfill. She said we need to have response to this concern.

Craig Lorch talked more about his operations and the need for export. He said that glass was not really the problem right now (it is sent to Pennsylvania and made into new monitor glass). However, if those companies change their practices, they will become reliant on lead smelters to process this material. Since there are no copper smelters in this country, this metal is destined to leave the country anyway.

The video can also help bridge geographical divides. At a recent Policy forum in eastern Washington, the comment was made that it doesn't really matter which side of the state you're on, this is unacceptable for all of us.

Lisa Sepanski added that the video was an important tool in working with the King County SWAC. Members of the SWAC started making connections between manufacturing choices and the legacy of toxic disposal.

Regulations for the Disposal of Electronic Waste

Chipper Hervieux, Dept of Ecology and Ann Bayley, Kitsap County, provided an overview of Washington State Department of Ecology's Interim Enforcement Policy and the regulatory differences at the local level.

Chipper stated that 57 million TVs and computers are sold every year. She also mentioned the upcoming bulge of HDTV purchases that will inflate this number. Computers and TVs compose approximately 5% of solid waste stream. This percentage equals the amount of plastic packaging thrown away every year. Electronic waste is both a volume AND a content issue.

In Chipper's slides, she used the term 'small businesses', when in fact it is technically Small Quantity Generators. Small businesses are not necessarily Small Quantity Generators. Reuse is also an acceptable substitution for disposal and exempts them from dangerous waste rules. The policy also permits CRTs to go to an intermediary company where they dismantle the product, similar to universal waste rules.

Anne Bayley presented an overview of local electronics disposal regulations

Anne discussed the different levels of regulations facing counties. King and Pierce have SQG bans. Thurston County is currently working with SQGs to divert their CRTs from the landfill. Other jurisdictions are facing Household Hazardous Waste bans (Kitsap County, Snohomish County, City of Tacoma, City of Seattle). In the City of Tacoma, a judge ruled that there will be a total ban on CRTs because their landfill is currently a superfund site.

Audience Question: "How problematic are CRTs and heavy metals in landfills?"
Sego's response: "That question comes up all the time. If you follow the RCRA rules, these materials need to be banned."
Discussion continued about this issue. Lead is not showing up per se in leachate at this time. However, a Florida study showed (Chipper Hervieux has information on this study) failed TCLP testing. The test tried to simulate conditions at a landfill. Even when they did not perform a crush test, (where whole monitors went straight into barrels), it was found that the material was leaching.

People raised the question about distinction between TVs and computer monitors. The biggest difference is the size of television compared to monitors. If the TV is an older model, they are harder to deal with because they have consuls, cardboard, and occasionally more toxic elements. The point is that there is the same problem with TVs as with computer monitors.

Audience Question: "How do programs go about screening for CRTs and HHW?" The City of Tacoma responded that they do random spot checks of commercial vehicles, track zip codes, go out to businesses.

Chipper Hervieux was asked whether Ecology is going to get into certification process. Chipper responded that she can't imagine their program getting into this, because they don't even certify labs for their hazardous materials testing.

Shirli Axelrod asked Scott Klag what was going on in Oregon. Scott said that there was a similar interim rule in place. There were some local situations where there were enforcement issues. At one point no recyclers wanted to take monitors at all due to the fear. There aren't any local governments with HHW landfill bans.

Craig Lorch was asked "What is the cost to you to recycle a PC?" He said that it costs them about $2 to get leaded glass to Pennsylvania, but most of the other materials he can get rid of for free. The highest cost in recycling is labor costs. He charges $10 per monitor (and has since he started accepting monitors), which he feels is roughly equivalent to his costs.

Local government concerns

Sego Jackson, Snohomish County, presented a perspective from local governments and asks the questions: Why is local government responsibility not an appropriate or adequate solution? What are local government's goals (and roles?) in the electronics waste debate?

Sego stated that Snohomish transfer stations don't have the capacity for additional self haulers of this material because they are already overcrowded. If people are told to take their monitors to HHW facilities, manufacturers should be concerned about perceptions of personal monitors as being dangerous during their operation. Governments absolutely need to be charging for collection of electronic materials. There include new security issues for handling money collected from e-waste drop off sites. This is another reason that transfer stations or recycling facilities may not be appropriate (staff).

E-waste is a new waste stream, composed of multiple materials, and it is not realistic to treat it like other recyclables. Governments and recyclers should not and cannot be expected to handle new toxins ad infinitum. If we provide a solution to recycling this material, there is no motivation for manufactures and designers to change materials they are using. A different type of system needed.

Collection events held thus far at retail stores is a matter of convenience (location) for the customer. Due to infrequency or unpredictable events, it is not very convenient as far as timing for the consumer. At a Best Buy event, they charged $5 per carload. ($10 per monitor and $20 per TV). Customers were likely to be confused by this pricing system. Sego stressed that we need to make clear that these are *interim* programs while we work towards for full product stewardship system.

Audience Questions: There is a need for other collectors and we should be collecting where the people are. However, facilities are mostly inadequate. We need a system where charities are not being screwed. Snohomish County is starting to map charities and big box stores relation to population distribution.

What about packaging?
Sego responded that this was a topic that came up in the NEPSI process. A decision was made to remove packaging from their focus in order to get process moving. Some non-profits went down to Dell to look at their environmental practices, but all they showed them was how they were incorporating recycling into packaging. Packaging and its environmental impact is a lesser concern compared to the toxics in the product itself.

What about establishing a front end fee?
NEPSI is trying to do this. Negotiators rejected deposit systems, where you get money when you bring the product back. While this helps to get the product back into the system, it doesn't provide money for end of life disposal.

A member of the audience mentioned that low labor costs can be achieved in the US with the use of prison labor or people with community service time. She argued that they spend $50 a day to house prisoner. Wouldn't it be better to use this system instead of foreign labor?
Sego responded that this proposal hasn't had very much rigorous thought by policy makers, but needs to be considered heavily. There is substantial controversy over the idea. There are potential human rights questions, but beyond that there are significant problems in its effects on contracting and competitive bidding. If local contract bidding is being out bidding by people using this labor, it does little to develop local infrastructure for recycling (which is a desired goal).

The Case for Product Stewardship

David Stitzhal, NWPSC, explained the basics of "product stewardship" and life-cycle design.

David wanted us to examine the presentation as both a philosophy lesson and as a tool to talk about product stewardship. Product stewardship is a way to get 'light bulb' to go off in constituent's minds. Most products are manufactured globally, and this is especially true for electronics. As Sego mentioned, this is not a homogenous material stream. There is no vertical integration in electronic components. The one lynch pin, if any, is the manufacturer. *They* choose labor, materials, etc. Manufacturers lack an economic incentive to take recycling into account, since the end of life disposal is paid by local government. This is basically an unfunded mandate. If the public pays, there is no equity in cost allocation.

David responded to industry's rebuttal that government should handle electronics like they handle other hazardous waste. However, many governments don't advertise HHW collections because they don't want to bust their budgets. Maybe we should try product stewardship approaches with pesticides and paints too?

Many claim that there needs to be a profit motive for environmental protection. If a Take-it-Back program were in place, manufacturers would have a physical responsibility. They also need a fiscal responsibility. With two layers of responsibility, we may start to see a closed loop of design. The designer needs to talk to manufacturer on one end and the recycler on the other. Ultimately, there should be an internalization of disposal cost.

David's last comments were that we don't pay an extra charge for safety in items like cribs, so why should there be an extra charge for protection of environmental health? Who else should pay beside those who benefit from the product? The fee that goes to government for a really nice collection event is not product stewardship because it does not create fiscal or physical responsibility on the manufacturer's end.

Examining Local Government Options for Electronics Product Stewardship

Bill Smith, City of Tacoma. Incorporating Product Stewardship in Collection Events

Bill said that he attempted to get vendors involved in his collections, but very few were interested in de-manufacturing or collection. Phillips Services and Onyx showed some interest. Their program prohibited export of entire unit (though parts could be shipped for export). Most manufacturers did not respond to their letter of inquiry, except for Panasonic, Intel, and Sharp.

One of the major barriers in Tacoma is that they have a very, very low tipping fee. Up until recently, disposal was free for self haulers. Then they changed the prices to be free for the first 400 lbs free. Currently it is $40 bucks for the first 400 lbs. Due to such low tipping fees, they realized that there was no way that they could charge over $5 for a collection event. Since Pierce County residents pay $84 a ton, the majority of people who attended event were from outside the city. Significant range of potential costs for collection also made it very difficult to plan collection.

Their goal was to divert material, but don't want to collect too much, similar to the HHW model. They collected all types of electronics. They got about 10% of the collection's total costs from charging a fee to consumers.

- Any material that you get on the first collection is usually has a poor reuse value.
- Get on the Government channel, because it is amazing how many people watch.
- What people say they are willing to pay (in this case $5), isn't the same as what people will pay.

The question remains: What are we going to do now? City of Tacoma is blessed with a good recycling facility where they could actually collect on an ongoing basis at this facility. They have hesitations to do this because it does not encourage the product stewardship model. Bill wants to get retailers involved.

Lisa Sepanski, King County Department of Natural Resources and Parks. Developing a Network for Change with the Computer Recovery Project

The King County program started when people started calling because they felt it wasn't right to throw away such an expensive item. King County realized that the local infrastructure was lacking. They started to write letters to manufacturers, but got no response or a complete runaround. Ultimately, they decided to work with computer recycler and reuse companies and develop a network for collection and recycling. About 80 retailers were publicized. Everybody was playing the game *except* manufacturers. In the end most charities didn't want to participate because they couldn't collect money from people who would drop-off at their site, but continued to get dumped on. Though charities had started with a 60%-40% ratio of working units to broken units, by the end they received about 90% broken, unusable units. King County lawyers required that members of the Computer Recovery Project have General Liability insurance of $ 1,000,000 Per Occurrence and $2,000,000 Aggregate which separated out the more "serious" organizations from those that were operating out of their garage. The CRT Interim Policy from Ecology helped to emphasize the seriousness of the electronics recycling business because it required reporting and tracking of export. http://dnr.metrokc.gov/swd/default.shtml

Audience Question: Is there any validity to the manufacturers' claim that they recycle? For instance, Dell has a mail back program where you pay $29.95 to recycle your computer. Is this a domestic Recycling program?

Response: Manufacturers advertise interesting stuff. For instance, Gateway told consumers to take to their computers to Goodwill, where they could get receipt and then receive rebate for new Gateway product. However, they failed to inform Goodwills of this advertising and many Goodwill stores do not accept computer monitors any more.

Deanna Seaman, Snohomish County Public Works Solid Waste Division
Building a Multi-Targeted, Environmentally Responsible Program for Electronic Waste

Snohomish County is under scrutiny as study area for NEPSI. It is important to convey that it is not a part of HHW program. It is not a government funded program. Snohomish looked at their solid waste system and decided that there was one transfer station that could viably accept electronics for a fee.

Charities are expressing a lot of concern because it is really easy to chuck a computer over the fence, unlike white goods. If the computer is on their property and they can't track it, they are responsible for its disposal.

The County designed a flexible logo (Take it Back) that can shift to product stewardship efforts in the area of paint, pesticides, etc. They also designed a pledge program for businesses participating in the network. The Risk Management had to be coaxed into accepting the pledge program for electronics recycling. By selling it as similar to EnviroStars, they understood the concept and accepted it.

Snohomish identified about 6,000 businesses that have something to do with electronics. They are hoping that the kick-off meeting for the network will create peer pressure to participate in the pledge.

Deanna heard from people that they didn't want to participate in a program or project because it sounded too governmental. Planners needed to make the Pledge occur within network (and with each other). Additionally, they learned (from King County) that the recycling fee should not be handled in government. Rather it should be handled within the network.

Businesses actually have to do cost analysis with electronics when it occurs outside of government, they can't just bill for their services. Small businesses key to the network. Snohomish is very interested in sharing their program with other local governments. A unified message is powerful on this level of negotiations with the OEMs.

Lunch/Question and Answer

David Stitzhal, NWPSC, led a discussion and Q/A period. In a perfect world, what would local government roles in product stewardship look like? (What is the role for purchasing, especially in-house, in this conversation?). Hand out "Consideration Document" for review.

Summary of comments that we heard:

Recovering collection costs:

"The costs of collecting the monitors far exceeded the money we collected."

"California household hazardous waste programs were overwhelmed by cost, space issues, and staff time to do research for electronic waste."

"There is a balance in charging people actual costs versus reduced costs for doing the right thing. There needs to be a shared responsibility in distributing these costs."

Diversity and complexity of the electronic waste stream:

"We need to educate citizens better. The people answering phones don't know what to tell callers. Mostly people don't understand the differences in electronic products. Need to figure out this at a local level. As a consumer, I would say if you are going to charge me, charge me in the beginning and develop the infrastructure. Don't charge me at the end."

"All products need to have the full-cost of lifecycle understood, products that we use all the time. Maybe we're not ready to deal with it at all right now. But if we just address CRTs, we may not be done with our message."

"This waste stream is a 'Periodic table of elements' in every box."

Developing an infrastructure for electronic waste:

"This is a different commodity: it is not safe to transport nor easily recyclable. The entire infrastructure has to be built."

Product stewardship initiatives:

"The concept that the citizen should pay may not be the best way to package this message for a city council. The notion that 'Its only fair that the person benefiting from and using electronics should pay for their end-of-life handling when they buy the product,' will not sell well with folks who argue that everyone benefits from society's use of computers " (The way everyone benefits from roads, even the ones you don't travel on.) "Thus, the cost of disposing of, or recycling, computers should perhaps fall to a broader base." [This discussion touched on the type of public policy issues that come up vis-à-vis the equity of user fees for parks, and libraries, etc. in a state where there is no income tax.]

"The attitude that the user should pay (that *only* the user should pay) and that there shouldn't be costs to common public is concerning to some audiences. Others benefit from a computer even though they aren't the direct consumer. The business community may not listen to the argument that there should not be a public cost. Other arguments are likely to sound better to this group, such as we don't have the necessary infrastructure or the government doesn't have the resources to pay for the environmental costs of all products…"

"We've started using consumer pays versus taxpayer/ratepayer. We need to be careful that this doesn't move toward a product stewardship dialogue that emphasizes a solely "manufacturer pays" argument. If the environmental costs are in the price of the product, the consumer is going to be the one who will pay, not the manufacturer, even if the fee isn't visible. This distinction will be made by the business community, so we might as well get ready for it."

"If the consumer shares in cost, it supports their understanding of paying lifetime costs up front."

"We need to recognize that Multi-National Corporations live with these (take-back) models internationally but they continue to give a big fight in America."

The NEPSI (National Electronics Product Stewardship Initiative) Process

Sego Jackson, Snohomish County, provided an overview of the NEPSI process, specifically, what the key issues are, infrastructure assessments, the need for local government input/ feedback, what to know about the Politics surrounding NEPSI, next Steps (legislation, participation, etc.) followed by time for questions.

NEPSI began as the desire to avoid legislation in the US. The intention was to develop an agreement between industry and government. While there are specific representatives at the table, there are numerous levels of relationships between these manufacturers (example of Dell). Other players that they didn't really account for included retailers like Wal-Mart.

In March, NEPSI reached a high point in reaching an agreement to work towards a front-end financed system. However, this fell apart recently because the Electronics Industry Alliance reneged on front-end financing. The NEPSI negotiations are back to a very rocky situation.

The manufacturer, not the retailer, needs to be paying into the front-end financing fund. *Note: ARF stands for Advanced Recovery Fee*.

Industry maintains that government should pay for collection. Industry is also using involvement in NEPSI to fight off state legislation. The original agreement between negotiators was that involvement

with NEPSI would not be used as a tool, which is not the case today. Governments are getting letters from industry that says legislation will mess up national solution. Industry then turns around and says that a national solution cannot meet the needs of states or local governments. State legislation is very necessary in solving NEPSI difficulties. One strategy is to encourage local businesses and retailers to push back up from the bottom for product stewardship.

Snohomish and other local governments are trying to collect data to do an infrastructure assessment to aid their negotiations. The Seattle Assessment is gathering information on who collects electronics (and who can), how much of the stuff is there, how much will it cost, what are the transportation needs, etc. Ensuring correct modeling is very tricky, especially for future collection scenarios.

Audience Questions: What do you mean by we should fully implement a ban?
Sego: Don't have to create ban, just fully need to implement it.
But exactly how? I don't really know if they are accepting this material at the transfer station.
Response: Maybe we need to talk to the people at transfer station and *tell* them that it is illegal to dispose of them.

It is important to realize that NEPSI is real hardcore negotiations. If any local government representative doesn't necessarily agree with the NEPSI government position please speak with the local government before going to industry.

What happens if NEPSI agreement says that local governments *will* provide collections?
NEPSI agreement can't REQUIRE that you do collection, but can strongly imply.

NEPSI Q & A, and feedback from local governments on NEPSI process and Future activities

Dialogue about NEPSI generated the following questions and answers:

What are the problems you see with an end-of-life fee system as ultimate system?

- There is a pick-up truck full of computer monitors sitting on Hwy 3 right now.
- Illegal dumping!!!
- Different staff at solid waste facilities needs to handle this money.
- Implies that there is a choice between end-of-life and front-end fee
- A set flat fee will not be adequate to cover costs.
- Need to negotiate on basis of front-end and end-of-life simultaneously.
- The junk dealer taking monitors for $10 a piece instead of $15.
- End-of-life fee will encourage stockpiling.
- Will we have to justify to retailers and manufacturers that we are accountable.
- End of life, flat fees lacks incentive for redesign.
- Front-end fees enable design changes.
- Person who pays might be the 2nd or 3rd user, and may be the least able to pay.

Is it important that the system cover historical products or just new products?

- YES!
- Could use two-tier pricing, for instance charge a certain price in the first 5 or 6 years, then $ + x…

Is it important that we set up diversity of collectors?

- Agreement is almost unanimous.
- Recognize that government is part of the system, not solely *the* system.
- We need to keep the option that government might not be part of the system at all.

Do retailers have role?

- Reverse distribution. (Take-it-back)
- Education about what to do with product
- Shouldn't rely on manufacturer for infrastructure because you won't be able to get to manufacturer

- Artificial distinction between manufacturer and retailer
- Need to make sure that the retailer is being responsible when charged with recycling these materials. Not just throwing it away or shipping it for export.

Does the manufacturer have a role?

- Anyone who handles it or makes a profit is a stakeholder, and assumes a level of responsibility.
- Fund the system!
- If the manufacturer is not involved, they have no incentive to change.
- Design the system so the manufacturer bears the cost so they make it the most *efficient* system.
- Incentive for design changes
- Use recycled content when available.
- Design for recyclability and reuse.

Price per pound for collection costs:
(Drop off not curbside)
Does this sound ok?

- Number has to be based in reality, for cost per pound (handling, etc.)
- Should be typical costs. For instance, union vs. non-union workers may skew price per pound.
- Seems like slippery slope, retail space in one community versus another, gets icky quick.
- There is the example of the burn ban in Mason County. Once the ban was implemented, businesses found a way to make a profit from the organic material. Companies will find a way if it has to be done. Incentive will happen if *ban* is in place.
- Population concentration in Eastern Washington will affect costs.
- Transportation will skew costs, for example Seattle traffic.

Is it acceptable that industry pays for transport and recycling, but costs of collection, etc. are left to government?

- We don't want to be the collector or the manager of collection. Government is willing to educate, promote.
- Majority (2/3) raised hands to voice that it is not acceptable.
- We might be foolish to turn our backs on getting industry to pay for 2/3 of cost. If we can get them to accept some financial accountability we might have some victory.
- Industry is just playing off of local governments. If they can use NEPSI to get out of some costs, they will.
- There is a critical mass where something has to happen. More grassroots efforts will push local legislation. Industry is manipulating you to get what they can get. We've seen it with clamshells, bottle bills, etc. We need to stand hard and fast.
- Without collection costs covered, charities or small retailers do not want to get involved.
- Troubled by the notion that 2/3 of cost equals transportation and recycling. (may be more or less)
- This is exactly what they are doing with RBRC, but they are only getting 20% of the material back.
- Don't understand that there is any motivation for business to do this, especially without legislation. Business has to cover their costs. Why is there any negotiation taking place at all?

Based on the Electronics Product Stewardship meeting, the immediate next steps include:

- Need to find a way to continue dialogue and action about this topic. Possible ideas include: website, newsletter, list serve, face to face meeting, conference call, increased participation from local government in the NWPSC…etc.
- Plan similar meeting for Eastern Washington.
- Ecology 'library' for videos? Get tools into the hands of people who are working on this issue.

- Ab Stevels of Phillips Services is offering an eco-design workshop about electronics design, October 9th and 10th. http://www.zerowaste.org/events.htm
  * Online Registration: <http://www.pdc.pdx.edu/>