

September 14, 2016

Stakeholder Workshop Notes

MEETING FACILITATOR: Shirley Willd-Wagner / Howard Levenson

Stakeholder Workshop Future of Electronic Waste Management in California

Attendance:

Stakeholders

Melissa Plamondon, LA Sanitation District
Derrick Thomas, SHJRA
Teresa Bui, Californians Against Waste
Roxanne Gould, Dell
Rita Hypnarowski, DTSC
Jeffrey Harding, Recycle San Diego
Debbie Allen, Silicon Salvage
Dennis Kazarian, e-Recycling of CA
Doug Kobold, Sacramento County
Joh G. Capito, General Electric
Jaime Minor, Niemela Pappas & Associates
Myron Eng, Walmart Global Ethics and Compliance
Roy Dann, Cal Micro
Janice Oldemeyer, Onsite Electronics
Kevin Dillon, ERI
Matt McCarron, DTSC
Larry Sweetser, Environmental Services JPA
Caitlin Sanchez, Vizio Consumer Electronics

Dan Moyer, Consumer Technology Association
Stacy Miner, Walmart Global Ethics and Compliance
Chuck Hulse, Silicon Salvage
Aaron Blum, ERI
Paul Gao, CEAR
Brennan Ko-Madden, DTSC
Teresa Rizzardo, DTSC

CalRecycle

Jeff Hunts
Howard Levenson
Shirley Willd-Wagner
Jason Smyth
Andrew Hurst
Cynthia Dunn
Allyson Williams
Emily Wang
Elliot Block
Meagan Wilson
CEW Program Staff

AGENDA REVIEW AND INTRODUCTION

Workshop presentations are posted on the Public Notices webpage:

<http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=1854&aiid=1682>

BACKGROUND AND OVERVIEW

 Jeff Hunts:

The purpose of this workshop is to engage stakeholders in an initial discussion concerning the future of electronic waste collection and management in California. CalRecycle is embarking on long-term initiative to examine current conditions and future options for electronic waste management in California. Drawing from over a dozen years of program operational experience since the signing of the Electronic Waste Recycling Act of 2003, as well as the knowledge gained by the many states that administer electronic waste management programs of their own, CalRecycle seeks to identify the strengths and weaknesses of current and alternative program approaches. The ultimate goal will be the formulation of policy recommendations aimed at bolstering the effective management of the electronic waste stream and the resources it contains.

The format for this initial workshop will feature a CalRecycle staff overview and initial analysis of the recent survey sent to more than 3,300 recipients of the electronic waste listserv. The workshop will

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also feature a panel of stakeholders representing a range of California perspectives who will present their views and engage in dialog with each other and attendees. A series of breakout sessions will be held for small group discussions to help identify those essential elements that are vital to any future program model success.

Jeff provided data indicating that the volume of non-CRT Covered Electronic Waste is increasing and now comprises more than 5% of the claim volume. Non-CRT waste may have lower value and cost more to recycle than CRTs. CalRecycle must also consider non-covered electronic waste and its potential impact on the collection and recycling system as we look to the future. (See power point presentation.)

<http://www.calrecycle.ca.gov/Actions/Document.ashx?id=7224>

INITIAL SURVEY RESULTS:

Shirley presented a summary of the responses to the survey sent to all stakeholders on July 28, 2016. (See Power Point presentation.) We had an excellent response rate including about 2/3 of our active recyclers and 30 local jurisdictions. Not surprisingly, many varied and strong opinions expressed. The survey was by no means a scientific analysis; rather, it was an indication of where we should go with this project.

One of the primary purposes of the survey was to identify which potential models or approaches to e-waste collection and management should be examined further. Based on the survey results, we have designed this afternoon's breakout discussions to focus on the following three models: 1) Fee and Payment model; 2) Extended Producer Responsibility (EPR) model; and 3) Take-Back/Hybrid model.

<http://www.calrecycle.ca.gov/Actions/Document.ashx?id=7225>

PANEL PRESENTATIONS

- Janice Oldemeyer, Onsite Electronics Recycling
(See Power Point presentation.)
<http://www.calrecycle.ca.gov/Actions/Document.ashx?id=7226>
- Aaron Blum – Electronic Recyclers International
(See Power Point presentation.)
<http://www.calrecycle.ca.gov/Actions/Document.ashx?id=7227>
- Dennis Kazarian – e-Recycling of CA
 - Discussed the evolution of E-Waste management.
 - Thinks the California program is the most effective of all of the states he works in.

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- California cities and counties were the reason for the development of the CA program. The HHW facilities could not afford to take the (e-waste) material. Local Governments took the issue to the legislature and now we have this program. But what we didn't know was that the Recyclers were going to be getting material that they were not going to be paid for.
 - Charities started to get involved with collecting CEW. Others thought this was going to be an easy way to make money. Issues started to arise. Consumers think if they are taking a TV to a Goodwill it will be re-used but instead they just give them to the recyclers.
 - Handlers that could reasonably take in 40,000 lbs. a month of material were bringing in 400,000 lbs. Recyclers would take material from these handlers, pay them, and then find out 90 days later that the logs may be fraudulent. Likely that material came from out of state.
 - Now the volumes were not as important to the Recyclers as getting the payments for the material they took.
 - Currently the non-covered electronic material is an issue. The dynamics have changed and sometimes the recycler has to charge a fee for accepting non-covered material. It costs too much to process it.
 - Differentiated payment rates are a necessity if recyclers are to continue be able to be successful.
 - Future may be better if we pay the Recyclers and Collectors separately.
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- Caitlin Sanchez – VIZIO Consumer Electronics
(See Power Point presentation.)
<http://www.calrecycle.ca.gov/Actions/Document.ashx?id=7228>
 - Melissa Plamondon – Los Angeles Sanitation District
(See Power Point presentation.)
<http://www.calrecycle.ca.gov/Actions/Document.ashx?id=7229>
 - Teresa Bui – Californians Against Waste
 - Presented the history of e-waste law.
 - California makes good efforts for downstream accountability, enforcement and auditing. Much better than other states.
 - There is concern over the non-CEWs and what is happening to the residual material.
 - CAW wants to pursue changes to address these issues, especially for non-CEW.
 - Covered Electronic Waste only covers about 1/3 or what is out there.
 - A tiered payment system is needed along with yearly rate adjustments.

QUESTIONS TO PANEL:

- Who would be responsible for education and proper disposal?
 - Melissa Plamondon – For LA Sanitation we do the education ourselves. Help from the state would be beneficial.

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- Caitlin Sanchez – Consumer Technology Association has helped. But more resources are needed.
- State and local entities need to work together to create something.
- We all need to educate together. We need public ads, radio, flyers, etc. It can't be just recyclers, it has to be manufactures, collectors, retailers, recyclers, local government, state.

- Manufactures are reluctant to endorse the EPR model, but we have more data now and we may be able to make it work. Recyclers have invested significantly in their facilities but is EPR something we need to think about now?

- Approved Recyclers and Collectors are bounty hunters. There are many fly by night operations and collection logs are issues, but many collectors use technology and maintain good logs. Philosophical and political question; why is Vizio (for example), responsible for material that they did not produce? Consumers should be responsible.

- Idea: Collectors could pay a registration fee, a fee for different types of collections, some of which would need permits, and potentially background checks.
 - Caitlin Sanchez - In other states the manufacturer has to pay a registration fee. That might be an option. Don't want to push some of the good players out though. I would encourage extra oversight on Collectors.

- CA is a good deal for manufacturers. Consumers AND manufactures should be paying for legacy material. Flat screens take longer to process. They are lighter but it doesn't pay to process them. And what do you do with the residuals?

- EPR would put some onus on the manufacturers. We still have legacy material. If the consumer fee is higher, it becomes an unfair back end cost. EPR needs to be a part of the program so manufacturers will have more incentive to change the product for easier deconstruction and to be more environmentally friendly.
 - Caitlin Sanchez – The CA manufacturers do have some responsibility. Our incentives are to make products that are better for the environment. We are working on reducing hazardous chemicals as well.

- ERI – We work in 24 EPR states. EPR is not better. CA is only state where residuals are *really* recycled and oversight is strong. Costs increase, commodities decrease. We need flexibility. Recycler is currently financing the entire program. The onus does not have to be on the manufacturer. We need to improve our current system.

- We need a hybrid approach.

- Is there a large quantity of CA glass sitting in Arizona?
 - Aaron – Manufacturers can be held responsible for end use in some states.
 - Caitlin – Contracts are different in every state for every manufacturer.

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OVERVIEW EXTENDED PRODUCER RESPONSIBILITY: Cynthia Dunn

Cynthia's presentation is an overview of how CalRecycle defines EPR including essential components of a comprehensive program. CalRecycle defines ERP as the extension of the responsibility of producers, and all entities in the product chain, to reduce the cradle-to-cradle impacts of a product and its packaging; (See power point presentation.)

<http://www.calrecycle.ca.gov/Actions/Document.ashx?id=7230>

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BREAKOUT DISCUSSIONS – TAKE BACK/HYBRID

Take Back/Hybrid

Facilitator: Jason Smyth

Take Back Group - Breakout #1

Convenient facilities. Some of the group says take back where you purchased. Others say that doesn't work; too many people want a one stop shop for all end-of-life electronics; retailers are focused on selling, not collecting, or dealing with hazardous waste; retailers don't have room for collecting. Could lead to stockpiling which is a bigger problem.

Take Back should cover everything else that the CRT program doesn't pay for. Anything that plugs in or has a battery. A flexible model.

What constitutes take back? Is it manufacturers, recyclers, retailers? Comment – It should include everyone. More retailers doing a take back program could be an issue when trying to collect. May not be very efficient.

Some manufacturers partner with retailers for their take back program. Manufacturer may pay retailer for their brands. All states have different programs. Manufacturers often take back their products because they want to provide a service to their customers.

If all take back costs were covered for Sacramento County, I would be ok with that. I think other local governments would embrace it too. (E.g. Local governments have costs covered for the mattress program.) Right now I can take on the other non-covered material because I get paid enough to take the CRTs.

We need a better recycling infrastructure. There are a lot of holes, orphan material, bad players. Maybe a mail-back service for those with limited mobility.

We need more re-use of residuals. We need to take care of our resources now.

What is the cost for infrastructure? Comment – It could cost a billion dollars to build a smelter.

We don't manufacture in U.S. We just provide the feed stock.

We need multiple methods to collect and that is a big cost. Consumers want convenience but they really don't know where to look until they need the service.

More education and outreach.

Group #1 Report Out Summary

- Convenient facilities
- One location for multiple item types

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- Non-CEW included
- Better infrastructure
- Central locations for take back
- Multiple methods of collection
- Retailers don't have space for take back

Take Back Group - Breakout #2

Jason – Funding is very important. Who would have financial responsibility?

Need a consumer fee administered by State. Establish environmental fees for a list of products.

California program is successful. Manufacturers need to take more responsibility. Like the hybrid idea for CRT program.

Add other non-covered electronic wastes to current system and an upfront consumer fee with manufacturer's assistance. Everyone chipping in.

If the manufacturer has to pay anything the cost will go directly to the consumer.

CEWs have different values and different costs to recycle; need a list of device-specific costs that is transparent to consumers with different fees. Differential fees would be just a point of sale system for large retailers but it may be harder for the smaller businesses.

Add anything with a plug or battery. Would be a graduated fee. All electronics should be included.

Jason - Fee level. How would we evaluate list of covered devices yearly?

We would need to keep it simple and clear. Current fee based model with manufacturer help identifying product categories. Shouldn't have too many categories. Record keeping requirements should be minimized while ensuring accountability. We don't want to change the infrastructure too much.

Retailers don't have room for take back. Many are truck to shelf and no room in between. If there was a way to bring in a full truck of merchandise and then be able to ship out that same truck with a load of recycling that would be great but it could be a logistical nightmare and not practical for small retailers.

Jason - What about education and outreach?

Education needs to be expanded. Retailers have constant turnover and the training process is lengthy. Maybe establish a fund that goes to local governments to help with education. There is a big gap in California residents' knowledge of recycling. It costs a lot for designing ads for each jurisdiction and many jurisdictions have different needs (rural, density,

Los Angeles has SAFE facilities (satellite collection areas), black bins, blue bins, retailer take back, etc. It would be nice to have one stop recycling opportunities for residents.

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Education, convenience, and one stop would be ideal. Ads via social media don't work. The most effective so far is the mailers (individual, not with a utility bill).

Consider dedicating a portion of the consumer fee to outreach and education?

Some want a statewide general message; others think this wouldn't be effective. Maybe directing consumers to Earth 911 or something similar?

Group #2 Report Out Summary

- Consumer fee to funds take back
- Other electronics should have point of sale recycle fee
- Device specific fee
- Include manufacturers
- Expand education – statewide and local

Take Back Group - Breakout #3

Some group agreement that manufacturer take back should not be mandatory. Some do it voluntarily. It is flexible. Each manufacturer has their own model that works for them.

But what if the manufacturer goes away? Comment – that is why the current system works in CA. If a manufacturer goes away we won't be able to take back so the CEW system handles it.

Take back is hard for retailers. Many have revolving door employees, illegal disposal, and constant training to deal with hazardous waste. Might work for larger retailers but not all are alike. Don't force this on retailers or manufacturers.

Some other states give coupons towards new purchase for taking back old one to a retailer.

We need one stop collection centers. Best Buy pulled out of the program recently. It was not cost effective. Municipalities need to step up and help out; establish collection opportunities. Local governments could have collection facilities (like SAFE centers in Los Angeles). Maybe expand funding for those facilities?

Reports that show how many CRTs are going into the landfill via load check. Funding could be directed to those facilities to help.

If a lot of material is showing up via load checking, then we need more public education. Some great PSA publications exist already. Could build on existing; have everyone work together on one publication design that can lead public to a central website location like greenergadget.org.

What about take back by non-profits? Comment – non-profits want things they can re-sell.

Group #3 Report Out Summary

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- Don't mandate take back for manufacturer or recycler
- Some manufacturers and retailers operate voluntary take back programs
- Take back at local retailers is not the best idea; space, staff turnover, hazardous waste management
- Expanding local government facilities (like SAFE) that take everything
- Convenience is key

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BREAKOUT DISCUSSIONS – EPR

EPR

Facilitator: Allyson Williams and Cynthia Dunn

EPR - Breakout #1

The group felt the EPR flowchart presented at the beginning of the workshop was extremely helpful. Having the money being based for the program only - liked the idea of more policing in regards to the collection logs, and only contracting with good collectors to eliminate these problems with the logs.

Financial audits – some said open your books completely to everyone - recyclers, service providers – basically everyone across the board. Some believed it to be overly broad to open all your books.

Even with EPR, payment should be triggered when you prove what is recycled. In order to have a successful recycling program it might cost more. Must verify what is collected, how much and where it goes.

There was a consensus that more products should be added printers, CPUs, lower value products. Need a hybrid solution.

People who have money are spending more money on electronics. More money should be charged at the retail consumer end with different fee for different products; it's doable, but complex. Manufacturers report on their product makeup (e.g. hazardous materials contained in product) and use those factors to determine what the price should be. Also factor in the life-cycle cost of the product. Fees should cover the true costs of recycling.

Can upgrade computers to extend the life; not as easy for other electronics.

Problem in EPR states with collection goals that are met before end of year; manufacturers stop paying for recycling.

If the consumer pays at the point of purchase what are the financial obligations of manufacturer? Discussed how it works in Hawaii. Some companies will take it back whether it is their device or another. Need public disclosure.

Group #1 Report Out Summary

Most agreed with shared responsibility. If more products are in the system, there needs to be verification and audit of all processors and pieces of the system; proof of items being recycled. Split opinions of whether the state or private entity (stewardship organization) should manage the funds.

EPR - Breakout #2

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Would put most of the responsibility on the manufactures. Generally manufacturers determine contracts. Local governments lose flexibility to select their preferred contractor.

EPR needs accountability. Not enough money being paid to recyclers to offset costs in other EPR states. Frequent mishandling of materials by service providers.

EPR may lead to less hazardous material, therefore fewer challenges on the back end.

Some of the group stated that the funds collected should come to CalRecycle, pay the collector first, then the recycler. Require more out of the manufacturers, including funding.

Model after Canadian programs rather than other US states. Manufacturers work with the retailers. Put some of the control in states and local governments.

Need to include all electronic devices. All covered entities in and outside of the state should be able to utilize program.

Move to a national product stewardship model. Makes it much more difficult for manufacturers when all states have different types of programs.

Need to broaden the EPR model as implemented in other states. Need to improve recyclability and address issues missing in other states. EPR has not lead to better product design.

Group #2 Report Out Summary

Retail/consumer level – more products brought in, but not sure how would work. Would still want fee at point of sale. Need overall accountability that recycling actually takes place and that fee covers recyclers' costs. Need to have a greener/more recyclable design.

EPR - Breakout #3

Expand devices. If we go to an EPR model goal should be to expand the infrastructure not displace existing. If you disperse too much there will be more options and convenience, but less functional.

Should primarily be the manufacturers' responsibility. State involved with oversight via audits, inspections, and as manager of the funds. Would want to avoid single oversight entity; encourage multiple stakeholder group input. Stewardship organization may work; group of manufacturers assemble, handle stewardship of their product. Perhaps an advisory committee of recyclers and manufacturers.

Point of sale fee/consumer responsibility and add other products. Consumer fee provides greatest transparency but flexibility is key. Fees should be different based on the product. Easy at the retail level because we are already doing it for CEW.

Need metrics based on both collection and recycling, but avoid quotas. Quotas on collection and recycling impose artificial limits on collection and local jurisdictions are stuck with overflow product.

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Collection goals based on consumer convenience; processing goals must ensure appropriate recycling that can be validated. Group feels that quotas and lack of accountability are the biggest reasons that the EPR model is failing in other states.

While adding other products into the program, consider their recyclability. Goal 100% recyclable. Currently no outlet for different product streams.

EPR model can ensure across board manufacturing is tied to downstream options. How to improve accountability – maybe use and identification system; (example: key in their driver's license and track.) The State or local government would be in charge of managing and tracking the system.

Group #3 Report Out Summary

Need to add products. Point of sale fee based on product type. State should be involved in all aspects – oversight through audits, inspections and as manager of the funds. More than one entity involved to prevent monopoly on collection and processing. Generally think there is good infrastructure in place.

BREAKOUT DISCUSSIONS – FEE & PAYMENT MODEL

Fee & Payment Model

Facilitator: Andrew Hurst

Fee & Payment Model - Breakout #1

Retailers challenged by dealing with new e-waste and hazardous wastes.

Consider hybrid devices and eliminating current carve-outs for devices such as video displays in cars.

Issue of handling anything with a cord (e.g. household appliances). Where the onus should lie? Group says the generator, not the retailer.

ERI could run tests on certain items to determine a price for disposal based on levels of hazardous wastes versus the intrinsic value of the device. (Prioritizing those items that need to be covered, mice keyboards printers; those with little or no value).

Regarding adding new devices, cannot possibly add every device but need flexibility. Public comment period allows for stakeholder input and reaction. Must be a legislative effort to create flexibility in determinations (specifically Appendix X).

For cancellation: look for overall mass balance on the product and proportional commodities/residuals.

Differentiated payments: consider higher rate for more labor intensive activities. Issue of non-CRTs labor vs commodity value.

Manufacturer – looking at Canadian models, many differentiated fees can create administrative nightmare for all parties involved. Too burdensome. Establish broader categories based on toxicity, labor involved, intrinsic value.

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Must divert administrative cost from local governments.

Fee & Payment Model - Breakout #2

Add devices. Consider value of device; if it is not worth much, labor intensive to recycle, add a fee. (Printer toner is worth more than the device.)

Use waste characteristic statements made by manufacturers to quantify material components and tie to commodity prices. But must consider proprietary and confidentiality concerns of disclosing components. Insure protected confidential reporting. Charging a fee on different components would not work for all products.

Fee assessment should not be based on screen size; instead should be based on weight or components. Do a quarterly review. Differentiating fees would be a nightmare for retailers.

Establishing payment rates for different intrinsic values is better than based on weight because two heavy items can have significantly different values.

CalRecycle should create a way to consistently and proactively change payment rate. Potentially e-stewardship organization to facilitate.

Differentiated payments for collectors and recyclers based on the type of commodity. Absolutely need different fee for CRT and non-CRT.

Collection log issues with adding devices. When is it worth a log to protect E-Waste fund? How do we know this is coming from California? (E.g. Certainly don't need to log a mouse.)

Cancellation would include the dismantling into residuals and shipments downstream.

As products change, there is a need to determine what is disposable, what is toxic. Need flexibility in statute and regulations. Need more proactive engagement for DTSC on testing.

Only pay on waste recycled in U.S. and not exported, but if commodity prices go up some recyclers will export regardless and not participate.

Need modified tracking system for individual items.

Idea discussed: scanning IDs and putting additional requirements on recyclers to verify California sources. But additional requirements can be hard for collectors.

Fee & Payment Model - Breakout #3

Toxicity-based fees; create categories so don't have to deal with individual devices. Incentive to remove the toxic components.

Add copiers, printers and fax machines, maybe microwaves.

Cancellation example – removing a light bulb.

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Labor rate should determine payment rate. But product types change too much to be practical.

For payment rate, pay per pound based on average for covered products (whatever those may be) compared to net costs.

Online residential certification of recycling. (Customers log their recycling on-line rather than current collection logs for everything.)

Separation of collector and recycler payment. Collectors could be required to put up a bond or security deposit and get paid separately from recyclers. Make partial payments to keep the operation viable. Should be a zero net sum, recyclers and collectors should not be making money.

CEW recycling payments currently fund non-covered UWEDs (which come at a loss).

Establish threshold for load to require a manifest; shows where a load originates to discourage out of state dumping. How to track at border?

Discussion of allowing curbside bins where the collector picks up and invoices after the fact. But hazardous waste issue in leaving at the curb. Cost to local government and potential confusion for consumer; four bins? (recyclables, trash, organics, and now e-waste?)

Drive collections to local governments and getting rid of the collector category.

Need to increase education.

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OPEN DISCUSSION AND NEXT STEPS

Howard – Heard consensus concerning making some changes to the current system, particularly adding devices and establishing differentiated payment rates. Also heard a call for more consumer education.

Comment – Whatever we do DTSC needs to be involved. We all need to work together.

Jeff Hunts – What are your most urgent priorities; things that need to be fixed?

Comment – A single payment per pound is an issue; need differentiated payments. LCD costs more to dismantle; should be paid more.

Comment – Need approved glass destinations.

Comment – Eliminate make, model and serial number requirement for non-CRT CEW.

Comment – Need flexibility for more frequent payment rate changes. Market based.

Comment – Need to address “right to repair” issues; access to information to allow repair and reuse of devices.

Howard – Don’t limit your thinking to things we could do without a statute change; keep minds open for now and look at big picture.

Comment – Add more products to the CED list. Have more group meetings. Maybe small groups of similar stakeholders to consolidate ideas and make suggestions. What does success look like?

Jeff Hunts – As a public agency we have to be careful about having private groups.

Comment – Mixed electronics from business and residence. Cost to collector is too much.

Online ERCC as data resource.

Comment – Need due diligence by all. Who do you do business with and where will your stuff go?

NEXT STEPS

Howard – We’ll investigate more details on potential models and approaches; need to undertake some research. Everyone should track any new legislation. Go to Electronic Waste Futures webpage to keep current.

Shirley – Some of the many topics needing discussion: how to influence product design, material management flow, repair challenges, non-CRT vs CRT costs and volumes. We’ll be asking for your help in gathering data.

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Howard – We'll send listserv updates concerning future workshops and other ways to engage in this project. Thank you for your participation.