

**ELECTRONIC DEVICE RECYCLING TASK FORCE
MEETING MINUTES
July 23, 2009**

Representative Randy Fischer called the meeting to order at 9:10am at EPA Region 8, 1595 Wynkoop St., Denver, Colorado.

Task Force Members Present:

- Dag Adamson, Lifespan Technology Recycling (Colorado-based E-waste Recycler); Present
- Laura Bishop, Best Buy (Electronic Device Retailer): Present by Proxy Timothy Dunn
- Bill Carlson, Town of Vail (Rural Local Government); Present
- Meggan Ehret, Thomson Inc. (Electronic Device Manufacturer – TV); Present by Phone
- Rep. Randy Fischer, House District 53 (Colorado General Assembly); Present
- Sen. Dan Gibbs, Senate District 16 (Colorado General Assembly); Absent
- Charles Johnson, CDPHE (Dept. of Public Health and Environment); Present by Proxy Joe Schieffelin
- Rep. Jim Kerr, House District 28 (Colorado General Assembly); Present
- Jeffrey Kuypers, Hewlett Packard (Electronic Device Manufacturer – Computer); Present
- Dan Matsch, Eco-Cycle (Nonprofit Organization); Present
- Anne Peters, CAFR (Nonprofit Organization); Present
- Lisa Skumatz, Town of Superior (Urban Local Government); Present by Phone
- Sen. Pat Steadman, Senate District 31 (Colorado General Assembly); Present
- Karn Stiegelmeier, Summit County (County That Owns or Operates Landfill); Present
- Tom Williams, AT&T (Electronic Device Manufacturer – Small Device): Present by Proxy Bill Soards
- Mike Wright, Metech (Colorado-based E-waste Recycler); Present

CAFR Administrative Assistant Amy Randell and facilitator Herb Dreo were in attendance.

Witnesses: Kim Bartels, EPA Region 8; Juri Freeman, SERA; Patrick Hamel, CDPHE; Doug Hoff, legislative aide to Rep. Randy Fischer; Annmarie Jensen, Jensen Public Affairs; Elizabeth Jones, Waste Management; Larry King, Sims Recycling; Wolf Kray, CDPHE; Frank Morella, Sharp (By Phone); Peggi O'Keefe, Axiom; Dianna Orf, Hawthorne Group; Kristyn Rankin, Dell; Charles Sheffield, Colorado Retail Council.

Agenda Review

No changes. Agenda adopted.

Approval of June 25 Meeting Minutes

Rep. Jim Kerr made a motion to approve the minutes from the June 25 meeting. Dag Adamson seconded the motion. **Motion passed unanimously.**

Senator Pat Steadman joined the meeting.

Rep. Randy Fischer said it may be beneficial for the public if meeting minutes were adopted within a week of each meeting. Fischer said he didn't want to communicate by e-mail but it might expedite publication of the minutes. Fischer asked if the task force members approved of being allowed to comment on the minutes and then have them posted before being formally adopted. Lisa Skumatz said so long as they were clearly marked "draft" or "not yet adopted." Fischer said the members would be solicited for comments on the minutes and then they would be posted online, labeled as

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draft, and formally adopted at the next meeting. The minutes will be posted on the Colorado Association for Recycling's (CAFR) Web site: www.cafr.org/legislation.

Karn Stiegelmeier joined the meeting.

Herb Dreio said ideas that come up during discussion could be written on the flip charts at the front of the room; flip charts in the back of the room listed the purpose and intent of the task force. Anne Peters and Dan Matsch volunteered as scribes to write down any ideas.

Dag Adamson asked about protocol, how the task force will confirm the meeting schedule and the next steps are after that. Rep. Fischer said a decision on the August 24 meeting location was scheduled for later in the agenda.

Presentation and Discussion – Overview of Electronic Device Recycling Issues and Solutions

Presented by Anne Peters, Gracestone, Inc. and EDRTF Member, and Kristyn Rankin, Dell Computers. ([Link to Presentation](#))

Anne Peters said her presentation was compiled from reports from many states; paper copies of the reports were available to look through at the meeting

Comments / questions during or after the presentation:

- Link to 60 Minutes expose on recycling:
<http://www.cbsnews.com/stories/2008/11/06/60minutes/main4579229.shtml>.
- Rep. Jim Kerr asked where the 275 tons of electronic scraps were stored from the Denver electronics collection event in 2003. Peters said it was all put onto pallets, shrink-wrapped, put onto trucks and shipped to Dell's contracted recycler in Texas.
- Peters said it may be a good exercise to add locations/services of recycling options to the map in her presentation.
- In states with take-back laws, recycling is typically free for residents.
- Peters said potential legislation should be sensitive to the different business models for recycling.
- Kristyn Rankin said the administrative cost of running a point-of-sale or advanced recovery fee program can be heavy.
- Sen. Pat Steadman asked what type of devices advanced recovery fees were collected for. Peters said originally monitors and laptops; Rankin said all video display devices, fees vary based on size of screen.
- Rankin said the data for Pounds Per Person Collected in State Programs for Washington and Oregon in Year 1 were for the first quarter only.

Presentation and Discussion – Overview of Federal Programs and Regulations on Recycling and Disposal of Electronic Devices

Presented by Kim Bartels, EPA Region 8 Pollution Prevention Programs Coordinator. ([Link to Presentation](#))

Comments / questions during or after the presentation:

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- Bill Carlson asked about funding for implementing recycling programs in Colorado. Bartels said there are some funds available: solid waste Resource Conservation Challenge funds, pollution prevention funds (cover green purchasing and maintenance and education aspects), funds for innovative approaches for recycling from national interagency working group.
- The Electronic Device Recycling Research and Development Act, sponsored by U.S. senators from Minnesota and New York, has been introduced in the U.S. Senate.

Presentation and Discussion – State of Colorado Programs and Regulatory Framework for Electronics Recycling and Disposal

Presented by Joe Schieffelin, Solid Waste Division, CDPHE and EDRTF Member. ([Link to Presentation](#))

Comments / questions during or after the presentation:

- Mike Wright said there is a loop hole in the current regulations that will allow certain grades of circuit boards to be shipped elsewhere rather than sent to a smelter.
- Rep. Fischer asked if equipment returned to Dell for recycling is kept in Colorado for recycling. Rankin said Dell has a portfolio of 22 reuse/recycle partners in the Americas; all programs feed to one of those 22 regional processors.
- Rep. Fischer said he would like to discuss how manufacturers or retailers use Colorado-based recyclers as vendors. Rankin said Dell does not now have a partner in Colorado, material is typically routed to California or Texas depending on the program. Peggy O’Keefe said it would be helpful for manufacturers to talk about the selection process for recyclers.
- Anne Peters asked if states with current electronics recycling legislation have required manufacturers to use state recyclers. Larry King said that violates the U.S. commerce clause; some states assess lower registration fees for OEMs using local recyclers.
- Peters said the task force needs to answer how to make sure existing recycling capacity will be used and local jobs will be kept.
- Dag Adamson asked about the statistic of 23 percent of e-waste coming from residential sources and 75 percent coming from commercial sources. Peters said those are just computers, e-waste includes televisions, which is more residential; the numbers tend to average out to 50/50. Mike Wright said as a processor, the material he collects is counted as commercial even if his business client collected it from consumers.
- Rankin said the age of commercial e-waste tends to be younger, typically two to four years old; residential e-waste is five to eight years old. More reuse and recovery opportunities for processors of commercial e-waste; a small portion of consumer e-waste has life left in it. Dag Adamson agreed and said consequently there is a higher propensity to go after commercial material than residential, there is less incentive to recycle/reuse residential equipment.
- Rep. Fischer asked if CDPHE or other agency is looking at ways to incent residents to recycle. Schieffelin said CDPHE has information on the Web about recycling, a bulletin on e-waste, Web site devoted to recycling materials by location, some outreach and awareness occurring, but there is nothing specific planned to incentivize residents.

Presentation and Discussion – Perspective of a Large Urban Government

Presented by Charlotte Pitt, City and County of Denver (Invited). ([Link to Presentation](#))

Comments / questions during or after the presentation:

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- Bill Carlson asked if curbside service had a variable rate or PAYT incentives. Pitt said recycling is provided through the city's general fund, there is no direct fee to residents nor a line item on a property tax bill, the service is perceived of as free to residents. Pitt said participation in the singlestream recycling program continues to increase; no other motivators to participate in the opt-in program other than the "right thing to do."
- Pitt said concerns about handling e-waste include the safety of trash collectors and community.
- Pitt said there is no formal e-waste program for the City of Denver and the city does not track independent collection events.
- Pitt was asked if the 2003 collection event was so successful, why was there never another similar event. Pitt said the event was part of a bigger campaign from Dell, other cities were involved. Kristyn Rankin said collection events are not a cost-effective method; Dell has found that having more permanent recycling opportunities is a more sustainable and cost-effective way to recover electronics.
- Karn Stiegelmeier asked if there was any other income for the recycling program other than the general fund and grants. Pitt said some revenue from the sale of recyclables is put back into the general fund.
- Rep. Jim Kerr asked how the budget shortfall is affecting the current program. Pitt said cuts to staff would affect the recycling program first; recycling is an extra thing staff works on because there is demand for it and it is the right thing to do, there is no formal program.
- Pitt said by ordinance trash must be taken to the Denver/Arapahoe disposal facility owned by the city and operated by Waste Management.
- Pitt said there is a general sense that the public will hold on to electronics, knowing they shouldn't put such items in the trash, which is why free collection events are often overwhelmed.
- Rep. Fischer asked if the city has considered moving to a PAYT system and charging directly based on the amount of trash generated to get a handle on illegal commercial dumping. Pitt said it is a political decision; staff would like to see a PAYT system and get rid of the alley dumpsters for residents.
- Bill Carlson asked how multiuse properties were addressed. Pitt said the program is limited to seven or less units; however, special programs like drop-offs are not limited.

Presentation and Discussion – Overview of the Current Electronic Device Recycling Industry in Colorado

Presented by Mike Wright, Dag Adamson, and Dan Matsch, Colorado Electronic Recyclers and EDRTF Members. ([Link to Presentation](#))

Comments / questions during or after the presentation:

- Rep. Fischer asked for a snapshot of the business model of each presenter.
- Mike Wright said GRX/Metech is strictly end-of-life recycling, no reuse/refurbish. The company will tear apart equipment with the goal of making sure the material is separated in a safe, efficient manner and that it is properly handled downstream; the raw material is then ready for remanufacture. There are eight Metech locations across the county, each operating the same way: materials are manually disassembled (some processing equipment/shredders), which provides cleaner separation resulting in a higher-grade reuse material.

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- Mike Wright said some processed materials go overseas, like plastic; circuit boards are sent overseas to countries with Organization of Economic Cooperative Development (OECD) agreements in place, which assumes their standards at least meet the standards of the U.S.
- Bill Carlson asked if Wright had any suggestions for legislation. Wright said legislation should empower and fund CDPHE to have some regulation over what happens to material, i.e. require that wherever material is sent meet certain standards with proof of audit or certification; include standards in the legislation or, preferably, allow CDPHE to develop the standards and/or certification or audit to prove companies are meeting those standards.
- Carlson asked if there was any self-regulation of the industry after the [60 minutes expose](#). Wright said no.
- Karn Stiegelmeier asked if there were any holes in addressing the safety of workers. Wright said several OSHA standards already exist, some are required by law others are voluntary. Wright said legislation should mention that CDPHE will set up standards for worker safety as well as environmental standards.
- Dag Adamson said there needs to be a funding mechanism for any legislation and that manufacturers should not be discouraged from continuing their successful programs.
- Annemarie Jensen asked if mail-back programs affect Colorado recyclers. Adamson said from a sustainable perspective, those programs alone won't work, i.e. Dell is not taking back TVs (since they are not Dell products). Wright said the equipment returned to Dell is going through their partner processors. Rankin agreed and said it is a portfolio of programs, it is not one-size-fits-all, and convenience is defined differently by different people.
- Adamson said the task force should look at legislation and programs already in place (WA, OR, CT, ME) to see what has worked and hasn't worked for different stakeholders; keep in mind that there could be a state program and private programs.
- Rep. Fischer asked for specific pieces of state regulations or legislation that are detrimental to the recycling industry. Adamson said quotas for the amount of tons collected could be detrimental. Minnesota set quotas for the amount of TVs collected; percentage of payment for recycling collected TVs was divided among TV companies plus an orphan group. Three-fourths through the year the quotas were met, but public perception was that recycling was free and they kept turning in TVs. Waste Management, the collector, was left with millions of pounds of e-waste with no additional funds for recycling because the quotas had already been met.
- Anne Peters said she has spoken with recyclers in Oregon and Washington that are losing business because manufacturers have contracted with other companies; their volume of input is down dramatically.
- Peters said landfill operators like collecting fees from residents returning electronics because it educates residents that electronics are a waste and not something that should be dumped; the benefits of education spread over into other waste streams and environmental issues.
- Adamson said there has been debate about transportation costs between the advanced recovery fee and produce responsibility models; the middle ground is shared responsibility.
- Adamson said relatively new programs on the Western Slope include Mesa County, which charges citizens to recycle at two municipal-run facilities; Garfield County funds their recycling program, it's free to consumers; Pitkin County probably charges residents.
- Adamson said another way to encourage diversion is to emphasize the data-protection component; data privacy is a huge issue. Most recycling companies have insurance to protect against liability of data exposure.

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- Dan Matsch said Eco-Cycle business model is a nonprofit private organization with a zero-waste mission, service area is limited to Boulder and Broomfield counties; e-cycling is a small part of the business.
- Matsch said Eco-Cycle has not been able to participate in take-back programs; it comes down to price manufacturer is willing to pay to collect. Generally the price is ¼ of the total costs, which isn't sufficient.
- Matsch said the profit from fees for recycling e-waste goes back into education and outreach, which should be a critical piece of any legislation.
- Matsch said, as a recycling collector, it would be difficult to sort by brand or model, which is required by other state programs using a product stewardship model.
- Peters said she would like to see the recommendations from the presentation inserted into the ten purpose and intent items. Rep. Fischer asked all of the presenters to fit their recommendations into the purpose/intent list.

Presentation and Discussion – Perspectives of Electronic Device Retailers

Presented by Timothy Dunn, Best Buy. ([Link to Presentation](#))

Comments / questions during or after the presentation:

- Best Buy utilizes its national existing network to recycle: retail store collection, delivery and distribution centers. Five recyclers service 14 locations.
- Best Buy would support a Producer Responsibility-market-share approach because this provides the greatest level of shared responsibility (retail, manufacturer, government, and consumer). Best Buy does not support retail reporting requirements because of experiences in other states.
- There are issues with adequate space for retailers collecting large volumes of recyclables. Because of issues such as this Retail collection sites should be voluntary and in partnership with manufacturers, not mandated by the e-waste regulations.
- Dunn said Best Buy would like to keep recycling fees, though they are being required to abandon fees in some states.
- Dan Matsch asked at what volume is it a problem to collect items, is a pallet a day a problem? Dunn said they would like to see one pallet (Gaylord) filled per day and it removed as soon as filled.
- Mike Wright said the efficiency of hauling recyclables isn't good if you have to pick up from each store every day only to get a small quantity. Dunn said Best Buy manages that two ways: reverse logistics, where delivered product is replaced with recycled equipment, and third-party transport regionally. It is a big environmental challenge, Dunn said, Best Buy is looking to utilize more reverse logistics and less third-party transport.
- Dunn said they saw no real volume difference between free recycling and gift card exchange.
- Dunn said the gift card exchange was developed as a tracking tool, to measure which store collected how much volume of recyclables.
- Karn Stiegelmeier asked if Best Buy had criteria for choosing recyclers. Dunn said the list of standards for contracts is posted online. Recyclers can't ship non-working whole units and non-working parts overseas. All equipment / parts bench-tested for functionality. Recyclers make determination on repair and re-sale capability, not Best Buy employees. Best Buy conducts bi-annual onsite and self audits.

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- Larry King asked if Best Buy informs their customers the units may be re-sold. Dunn said yes, stated in online information.
- Dunn said Best Buy plays a role in education, employees know how to talk to customers. Dunn said legislation should provide flexibility for any retail education piece. Some legislation says manufacturers must provide own educational material, which the retailers must then provide; this is difficult to work within the Best Buy system.

Presentation and Discussion - Perspectives of Small Electronics Manufacturers

Presented by Bill Soards, AT&T and EDRTF Member. ([Link to Presentation](#))

Comments / questions during or after the presentation:

- Soards said he is not convinced legislation is the silver bullet; if there is no consensus, perhaps legislation is not the right direction.
- When cell phones are placed in the recycling drop-off in an AT&T store, they are sent to Cell Phones for Soldiers, who contract with recyclers.
- Anne Peters asked if AT&T had standards for Cell Phones for Soldiers and recycling contractors. Soards said he would look into that issue. Soards said AT&T is not in the recycling business, they provide it as a service to their customers and it is the right thing to do.
- All AT&T stores are drop-off locations, equipment (earpieces, Bluetooth, pda, cell phones) doesn't have to be purchased from AT&T.
- Juri Freeman asked, of the states with legislation, how many include cellular phones. Soards said some have exempted devices under a certain screen size. Peters said two states address cell phones: Illinois and Vermont.
- Soards said he was concerned with the definition of collector regarding rules/guidelines. AT&T is considered a collector under some definitions; would a church or Cub Scout group be considered collectors too?
- Soards said legislation could have potential unintended implications to the whole system; however, he was committed to staying engaged in the process.

Presentation and Discussion – Perspectives of a Large Computer and IT Equipment Manufacturer

Presented by Jeffery Kuypers, Hewlett Packard and EDRTF Member. ([Link to Presentation](#))

Comments / questions during or after the presentation:

- Anne Peters asked what if Colorado gave preference for competitive bid to company accepting returns of orphan brands. Kuypers said that could be part of general criteria.
- Annmarie Jensen asked if Hewlett Packard knew sales levels from year to year. Kuypers said the information is not available consistently from retailers. Kristyn Rankin agreed and said the challenge is in getting numbers for what is sold to a consumer in a specific state, distributors and sales vary by state and may overlap regionally; manufacturers have access to more regional or global sales figures. Rankin said other challenge is comparing apples to oranges, unit sales vary by retailer; aggregating such information across manufacturers is close to impossible.
- Peters asked about viability of taking national sales and applying population percentages. Rankin said there is not good data to correlate sales to recovery and, from an IT perspective,

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would focus on return share. Most manufacturers would agree national sales data is not necessarily correct but consistent in treatment of manufacturers.

- Jensen asked if Hewlett Packard had been involved in supporting recycling infrastructure and if anything was learned from the experience. Kuypers said Hewlett Packard has a very lengthy process for approving recyclers; the process could take two years, it is an expensive process to manage and HP tends to have a small number of recyclers to cover broad parts of the country. Kuypers said they work with local recyclers with some kind of presence in the state to help Hewlett Packard do collection events.
- Larry King said to get credit for recycling, EPEAT, the government procurement tool, requires an audit down to third-tier recyclers, the cost of which can force manufacturers to limit number of recyclers they use. Kuypers agreed and said even tracking first-tier recyclers requires a huge matrix and tracking hundreds of audit findings.
- Dag Adamson asked if Hewlett Packard would support a state recycling program to compete with manufacturers' programs in rural areas where there are no big-box retailers, so rural areas would at least have a basic level of service. Kuypers said logistics of that idea would have to be flushed out a bit. Adamson said OEMs want control and recyclers want to maintain infrastructure they are building, so there is competition in a way. Kuypers said when manufacturers are paying for and legislatively responsible for recycled material, they feel obligated to make sure material is managed to standards due to liability. Adamson said there is middle ground.
- Kristyn Rankin said Maryland program works because it allows for both; gets sticky if targets are thrown in. How can you place targets on joint programs? Would have to figure out who takes credit for certain pieces.
- Mike Wright said there shouldn't be any targets in a system where recyclers collect material that manufactures are paying for. Healthiest system is where motivation is placed on others to maximize the amount of material collected without an onus on the manufacturer to meet specific targets.
- Jensen asked how to make sure a manufacturer's recycling program is well-advertised and meaningful. Kuypers said in Maryland, for example, manufacturers are required to submit plans to the state agency. Rankin said there is also end-of-year collection reporting.
- Dan Matsch asked for an example of consistent criteria for adding equipment to legislation. Kuypers said such criteria would not apply just to one IT device but would be applied to any type of electronic device that met the criteria. King said California established that there was no difference between a programmable coffee maker and hair dryer, each had the same environmental impact; instead of referring to "a product," refer to the "composition" of a product.
- Mike Wright said one danger of a broad definition is that you wind up with a mix of material with an overall lower value, so everything goes into the shredder; high-level recovery is lost.

Presentation and Discussion – Perspectives of Television Manufacturers

Presented by Meggan Ehret, Thomson, Inc. and EDRTF Member. ([Link to Presentation](#))

Comments / questions during or after the presentation:

- Ehret said Thomson, Inc. is a former TV manufacturer that no longer manufactures TVs; they remain involved because their TVs are in the waste stream.

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- Ehret said the Information Technology Industry Council (ITI) supports a market-share funding mechanism for televisions, not a return-share.
- Ehret said Thomson had a hand in drafting the model legislation offered by Hewlett Packard and that it was a good starting point.
- Ehret said the beauty of a market-share system is that the concept of “orphans” doesn’t exist. Items aren’t sorted by brand, obligation is based on pounds; it levels the playing field for existing businesses. Market-share system makes sense for TVs, not necessarily IT.
- Dan Matsch asked if more and more video display devices could be used for either TV or as a monitor. Ehret said, yes, and that is why the industry is a great group to look to for definitions, because they know their products better. See Appendix Two.
- Rep. Fischer said in such a rapidly evolving industry, the list could be obsolete in a year or two. Ehret said that is one benefit of manufacturers running their own programs. Rankin said the definitions are at least a good starting point and are agreed to by the industry.
- Charles Sheffield asked what Thomson’s current market share is. Ehret said Thomson doesn’t have a market share.
- Anne Peters asked how a market-share model incentivizes designing for the environment and end-of-life management. Frank Morella said idea of designing for environment for TVs is not existent; majority of recycled TVs are cathode ray tube analog technology and none of that is incorporated into new products. Peters said new products still have toxic elements. Morella said LED lighting will eliminate the need for a mercury lamp. Peters asked about liquid crystals. Morella said they are not hazardous substances.
- Joe Schieffelin asked how market share is calculated. Ehret said there is no perfect data; manufacturers recognize holes with the data and still prefer market share.
- Adamson asked if there were industry standards for new TVs. Ehret said a study in Florida in 2004-2005 demonstrated the life of CRT TVs, which is about 14 years on average.
- Adamson submitted a study from the national center for electronics recyclers regarding a producer responsibility program that is working and is not expensive to put in place. Morella said it is misleading: it doesn’t cost the state, the cost is put on the manufacturers.
- Rankin said all states with programs have a reporting requirement. Unfortunately, the data will be available about when the task force’s recommendations are due and so must rely on limited data.

Decision on August 24 Meeting Location

Rep. Fischer said Karn Stiegelmeier offered to hold the next meeting in Summit County, Dag Adamson suggested the meeting be held in Grand Junction, and Garfield County was also an option. Lisa Skumatz said Summit County was a good location. Adamson agreed. Charles Sheffield made a motion to hold the meeting in Summit County. Rep. Jim Kerr seconded the motion. **Motion passed unanimously.**

The members agreed that a brief history of the Summit County program and tour of the Summit County recycling facilities would be offered after the task force meeting August 24.

Public Comment

No public comments.

Purpose and Intent

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Rep. Fischer asked the task force members to pull from their presentations their recommendations about how to meet the ten items listed in the purpose and intent of the task force.

The Electronic Device Recycling Task Force meeting adjourned at 4:55pm.

Action Items

This is a summary list of tasks from the EDRTF meeting. If you are listed as an 'owner', please come prepared to the next meeting with this information. If you don't think you were assigned a particular task, indicate who you think the owner is and notify Amy Randell for updating.

Action Item or Commitment	Owner	BY WHEN	Status
Confirm location/details of August task force meeting in Summit County?	Stiegelmeier/Randell	8/24/09	Pending
Work with CCI, Peters and Skumatz to gather county program information	Stiegelmeier	8/24/09	Pending
Work with CML to get survey of municipal programs	Skumatz	8/24/09	Pending
Look into National Conference of State Legislatures for information for possible presentation	Fischer/Steadman	8/24/09	Pending
Contact NCER	Peters	8/24/09	Pending
Research grants and programs DOLA's office of local government might have for e-scrap recycling	Carlson	8/24/09	Pending
Assign recommendations from presentation to appropriate purpose and intent item (See Appendix One)	Wright, Adamson, Matsch, Soards, Dunn, Kuypers, Ehret	8/24/09	Pending
Research standards for Cell Phones for Soldiers and recyclers	Soards	8/24/09	Pending

Future Discussion Items/Topics

- Add data to map of current recycling options available in Colorado, from Anne Peters presentation.
- How do manufacturers or retailers use Colorado-based recyclers as vendors? What is the selection process?
- Examine legislation already passed by other states.
- Funding and payment models.
- Data protection laws, how do they affect recycling?

APPENDIX ONE
HB-1282 E-Waste Task Force
Purpose and Expected Outcomes
July 23, 2009

Purpose and Intent

1. Identify potentially viable means of gathering and recycling consumer electronic devices in Colorado;
2. Create a viable means of recycling electronic devices;
3. Address or eliminate environmental risks posed by landfill disposal or incineration of e-waste;
4. Identify specific technologies and practices for recycling of e-waste that are protective of human health and the environment;
5. Gather input regarding the benefits and consequences of establishing a landfill disposal ban for e-waste;
6. Investigate opportunities to increase e-waste diversion rates;
7. Investigate ways to promote new non-toxic and more readily recyclable designs for electronic devices;
8. Develop ways to create jobs and promote economic development through the recycling of e-waste;
9. Prevent the export of toxic materials to countries with insufficient environmental controls in place to recycle them safely;
10. Build on the existing infrastructure for recycling e-waste in Colorado.

Expected Outcomes

1. Establish and organize an e-waste task force consisting of 16 appointed members tasked with addressing the purposes and intent of HB09-1282;
2. Convene the first task force meeting by July 1, 2009;
3. Hold at least three public meetings, one of which shall be outside the Denver metro area;
4. Gather public input at task force meetings;
5. Develop action-oriented recommendations and compile findings;
6. Appoint a subcommittee of task force members to create a draft report summarizing the findings and the recommendations for e-waste recycling adopted by task force members;
7. Submit the final task force report summarizing the recommendations and findings to the joint Health and Human Services Committee of the General Assembly by December 15, 2009.

APPENDIX TWO ELECTRONICS RECYCLING DEFINITIONS

These definitions were developed by the Information Technology Industry's Environmental Leadership Council. The definitions were developed with electronics recycling legislation in mind. The purpose of the definitions was to have industry members properly define products, so that states do not select (seemingly) random definitions that may inadvertently capture products outside of what was intended by the definition.

"Desktop computer" means an electronic, magnetic, optical, electrochemical, or other high-speed data processing device performing logical, arithmetic, and storage functions for general purpose needs which are met through interaction with a number of software programs contained therein, which is not designed to exclusively perform a specific type of limited or specialized application. Human interface with a desktop computer is achieved through a standalone keyboard, stand-alone monitor or other display unit, and a stand-alone mouse or other pointing device, and is designed for a single user. A desktop computer has a main unit that is intended to be persistently located in a single location, often on a desk or on the floor.

"Notebook computer" means an electronic, magnetic, optical, electrochemical, or other high-speed data processing device performing logical, arithmetic, or storage functions for general purpose needs which are met through interaction with a number of software programs contained therein, which is not designed to exclusively perform a specific type of limited or specialized application. Human interface with a notebook computer is achieved through a keyboard, video display greater than 4" in size, and mouse or other pointing device, all of which are contained within the construction of the unit which comprises the Notebook Computer, and can be carried as one unit by an individual. Supplemental standalone interface devices typically can also be attached to the Notebook Computer. Notebook computers can use external, internal, or batteries for a power source. Notebook Computer does not include a portable handheld calculator, or a portable digital assistant or similar specialized device. A notebook computer is sometimes referred to as a laptop computer.

"Consumer" means any occupant of a single detached dwelling unit or a single unit of a multiple dwelling unit (a household) who has used a Covered Device primarily for personal or home business use.

"Covered Computer Device" means a desktop or notebook computer, or computer monitor, marketed and intended for use by a Consumer, but does not include a Covered Television Device.

"Covered Television Device" means any electronic device that contains a tuner that locks on to a selected carrier frequency and is capable of receiving and displaying television or video programming via broadcast, cable, or satellite, including, without limitation, any direct view or projection television with a viewable screen of 9 inches or larger whose display technology is based on cathode ray tube (CRT), plasma, liquid crystal (LCD), digital light processing (DLP), liquid crystal on silicon (LCOS), silicon crystal reflective display (SXR), light emitting diode (LED), or similar technology marketed and intended for use by a Consumer primarily for personal purposes. The term does not include a Covered Computer Device.

"Covered Devices" means a Covered Computer Device and a Covered Television Device marketed and intended for use by a Consumer. "Covered Device," "Covered Computer Device" and "Covered Television Device" do not include any of the following:

APPENDIX TWO ELECTRONICS RECYCLING DEFINITIONS

- (i) A covered device that is a part of a motor vehicle or any component part of a motor vehicle assembled by, or for, a vehicle manufacturer or franchised dealer, including replacement parts for use in a motor vehicle.
- (ii) A covered device that is functionally or physically a part of, or connected to, or integrated within equipment or a system designed and intended for use in an industrial, governmental, commercial, research and development, or medical setting, including but not limited to diagnostic, monitoring, control or medical products (as defined under the Federal Food, Drug, and Cosmetic Act), or equipment used for security, sensing, monitoring, anti-terrorism, emergency services purposes or equipment designed and intended primarily for use by professional users.
- (iii) A covered device that is contained within a clothes washer, clothes dryer, refrigerator, refrigerator and freezer, microwave oven, conventional oven or range, dishwasher, room air conditioner, dehumidifier, air purifier, or exercise equipment.
- (iv) Telephones of any type (including mobile).
- (v) A personal digital assistant (PDA).
- (vi) global positioning systems (GPS).

"Computer Manufacturer" means any existing person: (i) who manufactures or manufactured Computer Covered devices under a brand that it owns or owned or is or was licensed to use, other than a license to manufacture covered devices for delivery exclusively to or at the order of the licensor; (ii) who sells or sold covered devices manufactured by others under a brand that the seller owns or owned or is or was licensed to use, other than a license to manufacture covered devices for delivery exclusively to or at the order of the licensor; or (iii) for whose account covered devices, manufactured outside the United States, are or were imported into the United States, provided, however, if at the time such covered devices are or were imported into the United States, another person has offered to collect such covered devices under a recovery plan pursuant to subsection c of section 5, then this clause (iii) shall not apply. A "Computer Manufacturer" does not mean any existing person who both a) owns and licenses the brand appearing on the Covered Computer Device and who b) has not also manufactured or sold Covered Computer Devices.

"Market share" means a Television Manufacturer's obligation to recycle discarded televisions. A Television Manufacturer's market share is the television manufacturer's prior year's sales of Televisions (by weight) as calculated by the Department divided by all manufacturers' prior year's sales for all televisions (by weight) as calculated by the Department. Market share may be expressed as a percentage, a fraction, or a decimal fraction.

"Manufacturers" means Television Manufacturers and Computer Manufacturers.

n. "Person" means any individual, business entity, partnership, limited liability company, corporation, not-for-profit corporation, association, governmental entity, public benefit corporation or public authority.

"Television" means any electronic device that contains a tuner that locks on to a selected carrier frequency and is capable of receiving and displaying of television or video programming via broadcast, cable, or satellite, including, without limitation, any direct view or projection television with a viewable screen of 9 inches or larger whose display technology is based on cathode ray tube (CRT), plasma, liquid crystal (LCD), digital light processing (DLP), liquid crystal on silicon (LCOS), silicon crystal reflective display (SXR), light emitting diode (LED), or similar technology marketed

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and intended for use by a consumer primarily for personal purposes. The term does not include a Covered Computer Device.

"Television Manufacturer" means a person who: (i) manufactures Covered Television Devices under a brand that it licenses or owns, for sale in this state; (ii) manufactures Covered Television Devices without affixing a brand for sale in this state; (iii) resells into this state a Covered Television Device under a brand it owns or licenses produced by other suppliers, this includes retail establishments that sell Covered Television Devices under a brand the retailer owns or licenses; (iv) imports into the United States or exports from the United States a Covered Television Devices for sale in this state; (v) sells at retail a Covered Television Device acquired from an importer that is the manufacturer as described in subparagraph (iv) of this subdivision, and elects to register in lieu of the importer as the manufacturer for those products; (vi) manufactures Covered Television Devices, supplies them to any person or persons within a distribution network that includes wholesalers or retailers in this state, and benefits from the sale in this state of those Covered Television Devices through such distribution network; or (vii) assumes the responsibilities and obligations of a Television Manufacturer under this Bill. In the event the Television Manufacturer is one who manufactures, sells, or resells under a brand it licenses, the licensor or brand owner of such brand shall not be included in the definition of Television Manufacturer under subsection (i) or (iii) above.