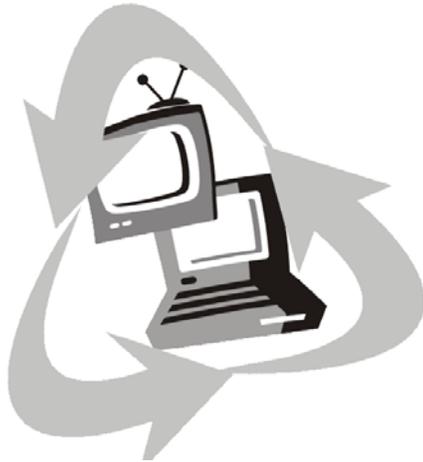


Everything you wanted to know about

Electronics Recycling



Snohomish County Public Works
Solid Waste Management

October 2003

To non-County recipients of this internal staff manual:

This manual was created for the internal use of SWMD operations staff that provide face-to-face service to our customers at our drop-boxes and transfer stations.

The Snohomish County E-waste program has multiple components:

- We are working locally, regionally and nationally to bring about a front-end financed, product stewardship system for managing E-waste where customers pay no end-of-life fee at the time of recycling.

- Until such a system exists, end-of-life fees are charged through two programs:

—The Take it Back Network is a network of private businesses that have partnered with the County to provide electronic product recycling options.

—E-waste Recycling Services at several SWMD facilities. As back-up to this private sector system, we also provide collection service at several of our transfer stations. This manual pertains only to the transfer station program.

This manual represents one year of program refinement and the consolidation of dozens of policy memos and procedures. It is provided to you so that those establishing programs can benefit from and adapt our work. Some parties that do not provide services on the local level have stated that it should be no problem for local governments to simply provide collection services, whether or not a fee is charged. This manual demonstrates some of the issues and challenges in establishing E-waste collection drop-off at solid waste facilities.

For additional information contact:

- Sejo Jackson:
sejo.jackson@co.snohomish.wa.us
(Snohomish County's overall E-waste-program)
- Polagaya Fine:
polagaya.fine@co.snohomish.wa.us
(E-Waste Collection at SWMD Facilities)
- Deanna Seaman:
deanna.seaman@co.snohomish.wa.us
(Take it Back Network).

September, 2003

Hello,

Welcome to the Solid Waste Management Division's (SWMD) Electronic-Waste recycling program manual. The SWMD E-Waste program is still new and the regulations covering E-Waste are still evolving, as are our methods of handling material. This manual provides complete, easy to use, and up-to-date information on how the Division's E-Waste program works.

Site attendants and tipping floor staff will find complete handling and packing instructions, emergency handling instructions, information on how to charge customers, copies of handouts available for customers, a section on frequently asked questions and answers, and the new hauler policy. The location of this information is clearly identified in the table of contents.

This manual will be updated several times a year to reflect new policies and answers to new questions.

Please call me with any suggestions, corrections, or changes that would improve this manual.

Thanks for all your help on the E-Waste program. It wouldn't happen without your hard work.

Polagaya Fine
425-388-6492

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Who to call . . .

Program questions or problems: Polagaya Fine, 425-388-6492

Computer/billing transactions: Charles Brady, 425-388-3392

Hazardous waste
emergencies or questions: MRW Facility, 425-388-6050

What's Happening

We no longer accept computers, monitors, and televisions for disposal due to the hazardous nature of some of the components. Testing has shown these materials to designate as hazardous waste and therefore federal, state and local rules prohibit their disposal by landfilling.

We do provide recycling services at the North County Recycling and Transfer Station and at the Temporary Recycling and Transfer Station for a fee. When the new Airport Road facility opens, we will also provide recycling services there.



There are private businesses in the county that also provide recycling services for a fee. (Refer to the "Take It Back" brochure for alternative locations)

Orange post-it "receipt" that customers attach to each item they pay for and recycle.



Customer Transactions

- Ask customers if they have any computers, monitors, or televisions.
- You may explain that Federal, State, and Health District rules regarding the hazardous nature of these electronics is what created the change/restriction.
- You may also explain that the County must pay special rates to vendors who take the waste from us for recycling, and so we must charge to cover these costs.
- If there are additional questions about costs, give the customer the handout, "The Cost of Recycling Electronics."
- If a customer has electronics to recycle **at NCRTS and TRTS (and later ARTS):**
 - Ask customers to separate televisions, monitors, and computers from their other garbage or recyclables,
 - They may take items to one of the recycling options provided on the handouts or...
 - They may pay to recycle their electronics right then.
 - Process transaction as explained in training.
 - Ask customer to attach the orange post-it "receipt" on each item they pay for. Instruct them to take their electronics to the electronics recycling area. (Note! These "receipts" are valuable; do not use them for any other purpose. Please keep track of your supply.)
 - Call operators to let them know electronics are on the way.
 - Operators, handle items as explained in training and O&M manual.
 - See attached page of Frequently Asked Questions with questions and answers on possible scenarios regarding electronic waste.
- If a customer has electronics to recycle **at other SWMD sites:**
 - Ask customers to separate televisions, monitors, and computers from their other garbage or recyclables,
 - They may take items to one of the electronics recycling service options listed on the handouts.
 - See attached page of Frequently Asked Questions with questions and answers on possible scenarios regarding electronic waste.

Fees for Recycling CRTs and Computers

These items MUST be recycled and are NOT accepted as garbage. Recycling fees:

- \$10 Computers (CPUs-desktop and tower), laptops
- \$14 Monitors and other devices with cathode ray tubes (CRTs) (Any computer monitor and machines such as the Mac SE where the computer and the monitor are together in one piece.)
- \$20 Standard TVs
- \$27 Console and big screen TVs, separated picture tubes/CRTs. (Televisions with screens larger than 27". Any size picture tubes with no casing or housing around them.)
- N/C Circuit boards

These items CAN be recycled or are currently accepted as garbage at regular garbage rates. Recycling fees:

- \$10 Other desktop electronics: printers*, scanners*, copiers, fax machines VCRs, stereos, and DVD players (*no charge if paying for computer or computer monitor).
- N/C Cell phones, PDAs, and desktop computer peripherals (mouse, keyboard, cables, speakers)

Limit 3 of each recycling item per load.



Price List for Multiple Quantities

- \$10 1 computer
- \$20 2 computer
- \$30 3 computer
- \$14 1 monitor
- \$28 2 monitors
- \$42 3 monitors
- \$20 1 standard tv
- \$40 2 standard tvs
- \$60 3 standard tvs
- \$27 1 console tv
- \$54 2 console tvs
- \$81 3 console tvs

- \$24 1 computer and 1 monitor
- \$44 1 computer, 1 monitor, and 1 standard tv
- \$38 1 computer and 2 monitors
- \$30 1 computer and 1 standard tv
- \$50 1 computer and 2 standard tvs
- \$37 1 computer and 1 console tv
- \$34 2 computers and 1 monitor
- \$54 2 computers, 1 monitor, and 1 standard tv
- \$48 2 computers and 2 monitors
- \$68 2 computers, 2 monitors, and 1 standard tv
- \$44 3 computers and 1 monitor
- \$58 3 computers and 2 monitors
- \$78 3 computers, 2 monitors, and 1 standard tv
- \$72 3 computers and 3 monitors
- \$34 1 monitor and 1 standard tv
- \$48 2 monitors and 1 standard tv
- \$55 2 monitors and 1 console tv
- \$47 1 standard tv and 1 console tv
- \$67 2 standard tvs and 1 console tv

\$10 Computers and other electronics
 \$14 Monitors
 \$20 Standard TVs
 \$27 Console TVs; separated CRTs

1 Go to Console 2 (outbound screen).

- Ctrl >Alt>2 (all at the same time).

2 Log on – Should be same SA as for the inbound.

- Both logins will of course require using the inbound cash drawer.
- Ensure this Console 2 is configured for 'Two Way.'
 - Go to System Configuration Menu
 - Choose Workstation Parameter
 - Enter on the highlighted NODE.
 - Using the space bar toggle / choose 'Two Way', enter down the screen and SAVE.
- **** Ensure Scale Instrument is set to 'down.'

3 Choose Menu Item 1. Vehicle Processing.

A. In the Veh Lic Field ----- Key 'ER' and enter.

SCREEN PROMPT	KEY/ENTER
■ "Is this a commercial transaction?" -----	Key 'N' and enter.
■ "Is this information correct?" -----	Key 'Y' and enter if Acct. is 2000.
■ "Veh Type" -----	Key '10' and enter.
■ "Material Type" -----	Key '31' and enter.
■ "Units" -----	Enter
■ "Quantity" -----	Enter
■ "Is this information correct?" -----	Enter
■ "Payment Type Cash" -----	Enter
■ "Fee _____" -----	Referencing the Electronic Recycling Charge List, calculate the total amount (always no tax), and Key in the \$ / dollar amount and enter.
■ "Collected \$ / amount" -----	Enter if amount displayed equals amount collected.
■ "Is this information correct?" -----	Enter
■ "Balance" -----	Key '0' and enter.
■ "Is this information correct?" -----	Enter if correct. Ticket receipt will automatically print.

B. Collect the cash or check and give the customer the receipt.

C. End of Procedure.

New Policy for Commercial Haulers Effective 8/1/03

Intent

Due to local, State and Federal regulation, computers, monitors and televisions are not accepted for disposal as solid waste at any County solid waste facility. Current SWMD policy provides that self-haul customers trying to dispose of these items on-site will be charged for recycling, or they will be given private sector alternatives. Self-haul customers found dumping electronics as garbage will be charged the same electronics fee as if for recycling.

The Division seeks a fair and equitable approach to dealing with the same electronic items when they are

brought into the station mixed with garbage in hauler loads. While some components of this policy provide no charge for electronics incidentally dumped as garbage, the intent of the policy is that NO banned electronics be disposed of as garbage. Options below are not meant to provide allowable limits or options, but rather are meant to determine when a charge will be made for the rare and incidental inclusion of a banned electronic item in loads of garbage. The Division and haulers will need to work together to ensure that illicit disposal is a rare occurrence and not a regular practice.

Hauler Policy

- Computers, monitors and televisions are not accepted for disposal as solid waste.
- Haulers may use and pay for electronics recycling at the stations.
- Units found in packer truck and front-end loaded truck loads will be removed from the garbage, as practical, and will be recycled. At this time, haulers will not be charged for these units. SWMD will document the hauler, quantity, type of load and other pertinent information for future analysis.
- Units found in drop box loads will be removed from the garbage, as practical, and will be recycled. Haulers will be charged regular e-waste recycling rates for these materials. SWMD staff will identify the load, hauler, truck number, time, and other pertinent information, so that the hauler may pass the cost back to its customer.
- If illicit material is found dumped from a drop box, but the hauler and specific drop box cannot be identified, the material will be recycled and no charge will be made to the hauler. SWMD staff will document these instances.

Program Evaluation

- Between now and March 2004, SWMD will quantify the problem to determine if the policy is working or if changes need to be made to the way haulers are charged for electronic waste. In making this determination, the following will be considered:
 - Degree of the problem. If dumping is rare, there is nothing to be gained by charging haulers for incidental units. If dumping is prevalent, haulers will need to do more to stop the illicit dumping.
 - Demonstration by the haulers of reasonable effort to curtail illicit dumping, such as use of billing inserts and taglines, information on phone trees and information hotlines, use of tags, procedure for inspecting cans, etc.
 - Consistency of number of units dumped with amount dumped by other haulers, based upon market share (i.e. if one company is dumping a disproportionate number compared to its market share, there is a problem.)
- The Solid Waste Division will work with the haulers to provide education to the hauler's customers.
- If there is evidence of abuse of the program, the program will be re-evaluated and changes will be made sooner.

Tracking Procedures

- SWMD will count and document the number of units dumped by each hauler, to the degree practical. When one or more units are observed to be dumped from a load the following will be done:
 - SWMD station staff will fill out the Hauler Tracking Form. They will ask the driver where the materials came from and note it on the form.
 - One copy will be given to the hauler, one copy to the site attendant, and one copy will be sent to the Wall Street office.
 - SWMD Wall Street staff will collate reports showing the number of units, by hauler, by generator type.
 - SWMD Wall Street staff will coordinate contacting the commercial generator of the e-waste with the hauler, if desired by the hauler.

Procedures Regarding Hauler E-Waste Recycling at Stations

- As with other customers, haulers can bring up to three units of each item at a time into NCRTS, TRTS or ARTS (when it opens) for recycling, paying the published rates.
- Haulers can bring in larger quantities and pay the published rates, with prior authorization from the Wall Street office or transfer station personnel. Authorization may include a specific time larger quantities can be brought in and may require that the hauler contact the station in advance to ensure that capacity and staff are available to handle the larger quantity.

Hauler Tracking Form (3 part NCR)

HAULER LOADS Electronics Tracking Form



Date: _____

Time: _____

County Facility: _____

Site Employee: _____

Hauler: _____

Truck Number: _____

Truck Type: _____

Driver: _____

Comments: _____

Route: _____

Customer(s): _____

Item(s): List quantity and type of items
(e.g., 2 TVs, 3 computers)

White/Site Attendant **Yellow**/Hauler
Pink-Control Copy/SW Wall St. Office, MS 607

☞☞☞ Snohomish County, 425-388-3425

7/03

Handling Instructions

Proper Handling of CRTs

CRTs (picture tubes) in monitors and televisions contain various hazardous materials including lead. The lead in CRTs is bound into the glass matrix and is in the seal (frit) holding the glass face of the unit to the tube. It doesn't present a hazard as long as picture tubes (CRTs) are intact.

Handle all units carefully so as to minimize breakage of picture tubes (CRTs). Units are not excessively fragile but can be broken if dropped onto concrete or if hit with heavy equipment. Because picture tubes (CRTs) contain up to 320 psi of vacuum, if units are broken, in addition to hazardous waste issues, imploding glass can present a serious danger. Broken units may also present a shock hazard. Handle units carefully when unloading from customer, loading into gaylord boxes, and loading into trailer. Broken units can present safety hazards and must be handled according to the "Special Handling Instructions" on page 9.

Computer Handling

Computers contain lead, in the form of solder, and cadmium and other heavy metals in batteries. Computers also contain capacitors that may contain small quantities of unknown hazardous materials. While computers should be handled to minimize breakage of units, broken computers are not hazardous to handle. Minimize handling of circuit boards so that capacitors are not broken. Computers will be placed into gaylords by site staff.

Processing

Televisions, monitors, computers, and printed circuit boards must be recycled and are not permitted to be disposed as garbage. Site Attendants will identify units by asking customers if they have electronic devices in their loads. Customers with electronic devices will be directed to the recycling area. Site attendants will charge customers the appropriate recycling fee for computers, monitors, or televisions. Peripherals such as a mouse, printer, keyboard, or joystick may be recycled at no extra charge, when brought in with a computer. If customers wish to separately recycle desktop printers, scanners, fax machines, VCRs, stereos, or DVD players, customers may choose to pay the recycling rate and recycle them with computers. However, at this time,

these other electronics are not banned from disposal as ordinary garbage.

CRTs (monitors/televisions) cost us more to recycle than computers. They are priced separately and need to be collected separately from computers, printed circuit boards, and peripherals.

The Electronics Recycling Area is signed and located in the covered area near the tip floor or in the recycling area. Staff will direct customers to the Electronics Recycling Area. Staff will assist customers with unloading. Staff will gently load whole CRTs, including televisions and monitors, into labeled gaylord boxes provided. Staff will gently load computers, printed circuit boards, and peripherals in separate labeled gaylord boxes provided.

Very large TVs, including consoles and floor models, will be placed on pallets. TVs with screens over 42 inches are considered very large. To minimize breakage, TVs with screen size over 36 inches may also be placed onto pallets if they are heavy or awkward to handle. Items on the pallet will be stretch-wrapped or banded in place.

Units with cracked or broken plastic housing do not present a hazard and can be handled as described above. TVs and monitors with shattered picture tubes (CRTs) may present a lead hazard and will require special handling. See "Special Handling Instructions".

Staff will label gaylords and pallets containing televisions and monitors (CRTs) with the following label: "RQ" Environmentally Hazardous Substance, Solid, N.O.S. (Lead) 9, UN 3077, III. Staff will label gaylords collecting computers and other electronics with the following label: "Materials Not Regulated By DOT". Preprinted labels will be provided by the MRW Facility. Staff will write the "Accumulation" start date on the label on the day the first piece is loaded into the gaylord or on the pallet.

If customers arrive at the disposal area with TVs, monitors, or computers, staff will instruct the customer regarding recycling of these units and direct the customer to the recycling area. A gaylord and pallet will be placed near the tipping floor for abandoned units. If units are left on the tipping floor, staff will palletize or load units into gaylords. If customers abandoning units can be identified, staff will fill out a two part ticket

totaling the number of items dropped off and include the customer's license number. Staff will give this ticket to the site attendant at day's end to check against copies of the tickets collected from the customers. The site attendant will send the second copy as a "drive out" slip to the Wall Street office if the customer has not paid for the abandoned unit(s) on their way out.

Staff will use a forklift and pallet jack to load full gaylords and pallets into a trailer provided by Total Reclaim. Total Reclaim's trailer will be parked near the Electronics Recycling Area. Usual storage for partially filled gaylords and pallets will be under shed cover in the recycling area. If full or partially filled gaylords or pallets are set outside for any reason they will be tarped.

When trailer is nearly full, call Craig Lorch at Total Reclaim, 206-343-7443, for pick-up. Please give at least 24 hours notice. Total Reclaim does not provide week-end service. When the truck from Total Reclaim arrives, weigh it in empty and out full. Attach weight slip to bill of lading provided by Total Reclaim. Send paperwork to Polagaya Fine for processing. A report on quantities of electronic waste shipped will be sent annually to the Snohomish Health District.

In the recycling area you will find a 55-gallon drum, broom, and dustpan for cleanup of broken glass from monitors and TVs. Personal protective equipment is kept in the Operator's shack.

Ticket (2 part NCR)

Televisions & computers

cannot be disposed of as garbage



Computers, monitors, televisions, other electronics that contain CRTs (cathode ray tubes), and separated computer circuit boards contain hazardous materials such as lead, cadmium and mercury and are no longer accepted for landfill disposal in Snohomish County facilities (due to new federal, state and local rules).

These electronics are collected for reuse or recycling, but there is a charge for this service to cover the cost of collection, transport, disassembly and/or processing.

You may recycle your electronic items at the Airport Road, Arlington, and Temporary Transfer Stations, or take them to an alternate location (for list see "Take it Back Network" brochure). Businesses may charge lower rates—check with individual recyclers. Please safely store electronics prior to recycling.

These items **MUST** be recycled and are **NOT** accepted as garbage. Recycling fees:

- _____ \$10 Computers (CPUs), laptops
- _____ \$14 Computer monitors, other devices with cathode ray tubes (CRTs)
- _____ \$20 Standard televisions (27" or smaller)
- _____ \$27 Console & big screen TVs, separated CRTs
- _____ N/C Circuit boards (limit 3)

These items **CAN** be recycled or are currently accepted as garbage at regular garbage rates.

Recycling fees:

- \$10 Other desktop electronics: printers*, scanners*, copiers, fax machines VCRs, stereos, DVD players. (*no charge if paying for computer or monitor)
- N/C Cell phones, PDAs, and desktop computer peripherals (mouse, keyboard, cables, speakers)

(Limit 3 of each item per load)

License Plate #

Snohomish County, 425-388-3425

Checklist of Procedures for Handling Computers and Other Electronics, Televisions, and Monitors (CRTs)

(See O&M Manual for more detail.)

- Assist customer with unloading, to minimize break-age of units.
- Place 42 inch or larger screen televisions, very heavy televisions, and console televisions onto pallets. Band or stretch-wrap into place.
- Load full gaylords and pallets into Total Reclaim's trailer on site.
- Before loading, weigh some of the gaylords and pallets. Send weigh tickets to Polagaya Fine.
- When trailer is nearly full, call Craig Lorch at Total Reclaim, 206-343-7443, for pick-up. Give at least 24 hours notice. Total Reclaim does not provide weekend service.

Preparing and Packing Material for Recycling

Pallets

1. Separate monitors from other equipment (printers, CPUs, keyboards, mice, drives).
2. Stack monitors on pallets 3-monitors high, or stack to a height of between 4 and 5 feet. There should be approximately 25-30 monitors per pallet.
3. Stack printers, CPUs, keyboards and other non-monitor items on pallets to a height of between 4 and 5 feet.
4. Double-wrap with stretch-wrap, and ensure your stack is stable. You should be able to shove against the stack without anything shifting or coming loose.



Properly loaded pallet

Gaylord boxes

1. Separate monitors from other equipment (printers, CPUs, keyboards, mice, drives).
2. Fill Gaylord boxes as efficiently as possible with monitors, creating as little space between monitors as possible. There should be approximately 25 monitors per gaylord.
3. Use a different gaylord box for other non-monitor equipment (CPUs, printer, keyboards, etc).
4. Boxes can be open on the top, but be sure materials are contained within the box and will not fall out.



Properly loaded Gaylord box



Improperly loaded pallet



County staff loading Gaylord box

Special Handling Instructions

Televisions and monitors with shattered CRTs

- Immediately clean up broken glass.
- Use appropriate personal protective equipment such as gloves, safety glasses, and dust masks.
- Use broom and dustpan located in the Electronic Recycling area. Place broken glass and yoke in labeled 55-gallon drum.

Note:

—55-gallon drums must be labeled with pre-printed labels supplied by the MRW facility.

—Make sure label has accumulation start date.

—Do not use hose to wash broken glass into catch basins.

- Call the MRW facility at 425-388-6050 for disposal instructions regarding 55-gallon drums and for hazardous waste emergencies or questions.

Frequently Asked Questions

How should facility staff respond to the following possible scenarios?

Q A customer shows up on the tipping floor with an item that has not been paid for.

A Arlington and TRTS (and later ARTS): Staff should inform customers that they may leave the item for recycling, but will need to pay for recycling of the item on their way out of the facility. List the items, fees and customer's license number on the two part ticket provided and give the top copy to the customer. Retain the bottom copy for follow up in case the customer does not stop on the way out. Turn the tickets in to Site Attendants to send to the Wall Street office.

Or...

At all sites: The customer may take the item out of the facility with them — offer them the "Take it Back Network" brochure.

Q A customer has buried a TV or computer in their load, but it is spotted by staff in the pit/drop box.

A Staff should inform this customer that they will need to pay for processing of the item on their way out of the facility. List the items and fees and the customer's license number on the two part ticket provided and give the top copy to the customer. Retain a copy to follow-up in case the customer does not stop on the way out. Give the slips to Site Attendants to send to the Wall Street office. Do not attempt to remove the item(s) from the pit.

Q A customer throws a monitor in the pit/drop box after being told they may not do so.

A Respond same as question above.

Q A customer at Everett, or at a drop box is "upset" when told they cannot get rid of their TV or computer, and must take it to NCRTS or TRTS (or ARTS, when open) and pay to recycle it.

A Refer the customer to nearby private sector collection sites, as well as NCRTS and TRTS. The Site Attendant has the discretionary authority to make an exception for special situations and/or a customer with unique needs, and accept the item and collect the fee (see instructions on page 1 for Customer Transactions – at Arlington). Limited storage will be available for abandoned items and for the few exceptions the Site Attendant makes.

Q A customer brings in a TV with a cracked or "starred" CRT.

A Cracked CRT's do not need special handling. Treat the item as if it were undamaged and refer this customer to a recycling site.

Q What should we do with abandoned electronics that end up at SW facilities?

A Abandoned electronics should be placed in the storage skids provided and will be collected by MRW staff. Keep the storage skid covered, as life will be simpler if customers do not know electronics are stored on site.

Q How many units can we take?

A The waste acceptance policy states that we accept three units of each item per visit for recycling. The intent of this rule is to allow limited quantities of residential and small business items, and to prevent overloading by or subsidization of large quantities of commercial material. Refer larger quantities to the private sector Take It Back Network recycling options. However, in the interests of customer service we can make exceptions to the "no more than three units per item" rule, especially for residents.

Customers can also call the Wall Street office for permission to bring in additional units. Permission will be granted based on availability of space and staff as well as availability of private sector service, and the urgency of the problem. The station operator can also authorize acceptance of more than three units per item, up to a total of 10 units per item, when circumstances warrant.

Q Suppose a business, charity, or non-profit asks about recycling more than three monitors or TVs?

A Refer customers with larger amounts to the private sector. Also provide the Wall Street office number in case they have other questions.

Q How many “free” circuit boards, cables, or peripherals can a customer bring in?

A Three of each item. See above regarding flexibility on this. If the customer has more than three each of circuit boards, cables, or peripherals, refer them to private sector or have them call the Wall Street office. We will refer them to the private sector. Our intent is that those generating larger quantities than typical residents or small businesses should utilize private services. The Division pays per pound to recycle these items. We are not able to subsidize larger generators by offering free recycling.

Q Can circuit boards be discarded as garbage?

A No. Loose circuit boards contain the same hazardous materials as computers and need to be recycled.

Q A customer wants to recycle a floor model photocopier. What do we do with it?

A We don't take large photocopiers for recycling. They are too large and heavy for the program and may contain materials that our vendor can't handle. Refer the customer to the Wall Street office or to one of the service providers listed in the “Take It Back Network” handout.

Q A customer asked about getting rid of an old X-ray machine or blue print machine.

A Refer questions about unusual large commercial electronics to the Wall Street office. Some items need to be researched to find the best disposal method.

Q How should TVs without housing or with backs removed be treated? Are they safe to handle?

A Be careful handling these units. There are two potential hazards with exposed picture tubes. There is a potential shock hazard from accidental discharge of the capacitors. There is a potential explosion hazard if the back end of the funnel is broken. Here is how to minimize the danger:

- Always use gloves when handling exposed picture tubes.
- If the back is off or broken, don't put your hands inside the back.
- Wrap the unit with a couple of layers of stretch-wrap.
- Set the unit on a pallet or in the gaylord as usual.
- If there is no housing around the picture tube:
 - Have the customer carefully place the unit face down on a pallet.
 - Wrap the unit in four or five layers of stretch-wrap.
 - The tube can then be banded onto the pallet or carefully placed in the gaylord.

Q Is there a change in the charge for “loose” TV picture tubes?

A Yes. The charge for loose picture tubes is \$27, regardless of the size of the picture tube. We don't want customers removing tubes from the housing in order to save money. (This is a policy change.)

Q A customer came in with a 13" television and a 32" television. How much do I charge?

A Charge \$20 for the 13" and \$27 for the 32". We have two prices for televisions: \$27 for televisions with a screen size larger than 27", console televisions, floor model televisions, and loose picture tubes. Any other size television, even tiny ones, are \$20. This is a policy change. This new policy provides clarity for customers and more accurately allows us to recover costs. If you need to measure the screen, measure diagonally, corner to corner.

Q It's hard to get units in the gaylord boxes because the boxes stand four feet tall. Is there an easy way to load them?

A Staff can cut gaylords down to make loading easier. The sides can be stretch wrapped or taped back up in position when full. Please refer to the card with wrapping instructions, if needed.

Q How do we charge for units brought in as illegal dumping?

A If a member of the County's Environmental Cleanup Crew (Mike Root, Scott Alford, or Jamie Harrison) brings in units, bill units to whomever is paying for the cleanup. We do not have a discounted rate through the illegal dumping grant. Customers using the illegal dumping grant pay regular rates for electronic items.

Q What are you doing with the license numbers for private vehicles that leave units illegally?

A We are tracking these "drive-outs" for possible follow up. Please continue to use the tracking forms and send the information to the Wall Street office.

Q What about when a hauler brings in a load with TVs, monitors, or computers?

A There is a new policy on units brought in by haulers, effective August 1, 2003. (See page 4 and 5) It is important to track these loads. Use the three-part tracking form (sample on page 5). Ask the hauler where the items came from. Get as much information as you can. If you can get nothing else, get the hauling company and truck number. SWMD staff are contacting haulers and their customers who illegally add TVs or electronics to the load.

Q I know we handle a cracked or "starred" picture tube as if it were unbroken. But what do we do when we see tubes that are broken into shards and mixed in with garbage?

A Treat broken tubes mixed with garbage as if they were whole units that had ended up in the pit. (This is a policy revision.) Do not try to retrieve the glass, the funnel, or any other broken part. Send the load through as regular garbage. Charge the customer \$20 for the broken unit. If there is a large amount of broken material, the Operator may charge for more than one unit, as appropriate.

Q I had a business customer ask for documentation or proof of disposal for recycling computers. What do I say?

A Businesses needing special documentation should be referred to private sector vendors. We aren't set up to provide special documentation above and beyond our standard receipts. Provide the customer with a "Take It Back Network" brochure, which lists private sector alternatives for businesses. Customers can also call the MRW facility or Total Reclaim.

Samples

ELECTRONICS RECYCLING



The following electronics contain hazardous materials and are no longer accepted for disposal as garbage at Snohomish County facilities:

- Computers
- Computer monitors
- Televisions
- Separated computer circuit boards
- Other electronics that contain CRTs (cathode ray tubes)

Look inside to learn what to do with these items.



Snohomish County Public Works

Solid Waste Management
425-388-3425 (TTY: 425-388-3700)
www.co.snohomish.wa.us/takeitback



Waste Acceptance Policy

Our transfer stations are designed to accept a wide range of materials. However, there are legal, physical and safety reasons why some materials are not accepted.

This brochure lists items which are not accepted at Snohomish County's solid waste facilities. Also listed are items which are accepted at the facilities, but require special handling.

If you have a question, or would like information about recycling/disposal options, or you need to give a facility prior notice, call 425-388-3425 (press "0") weekdays between 8:00 am and 5:00 pm.



Snohomish County
Public Works

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www.co.snohomish.wa.us/publicwk/solidwaste/solidwastehome/solidwastehome.htm

Notes