



**Arkansas General Assembly
City, County and Local Affairs – House Planning Committee
Presentation on Electronic Waste
Regional Recycling & Waste Reduction District in Pulaski County
January 6, 2020**

Mission

The Regional Recycling & Waste Reduction District in Pulaski County, a regional solid waste management district, exists to accomplish a mission of helping protect the public health and the quality of our shared environment. The District pursues this state-mandated mission, in part, through encouraging residential-customer recycling of marketable solid waste, with the express objective of diverting appropriate materials from area landfills. The District implements these activities through the management, oversight and administration of private-sector contracts, and the public promotion of information and education programs.

Category Under Study

One such activity mandated to the District is the collection, transporting and processing of electronic waste (e-waste).

Committee's Questions

1. How is e-waste collected?

E-waste is currently collected by the District in three ways: First, via the management and operation of public drop-off centers, called Green Stations. The District's five Green Stations are located throughout Pulaski County, with specific days and hours of operation. The second way e-waste is collected is through two, county-wide residential and business collection events. The public collection events are held at the Simmons (nee Alltel and Verizon) Arena parking lot in the spring and fall of each calendar year. The third way e-waste is collected is through a joint annual promotion with Recycle Saline, the Saline County Regional Solid Waste Management District, focusing exclusively on cathode ray tube (CRT) televisions, other TVs and monitors. This joint annual promotion and collection event is marketed to the public through the application

and award of the Department of Environmental Quality's Competitive E-Waste Grant Program.

2. Who receives the material?

The material is received three ways, consistent with the above collection scenario description. First, by Green Station personnel at the Green Station public drop-off centers, then transported and processed by eSCO Recycling and Processing. Second by District and eSCO personnel, also transported and processed by eSCO. And third, by Recycle Saline, District and eSCO personnel, also transported and processed by eSCO.

3. Is there a charge for dropping off the material?

There is no charge by the District to the general public or to businesses for dropping off the material in either of the three collection scenarios. The District is charged by eSCO for CRT televisions collected and processed.

4. How much of the current grant funds go toward the intended program and where do the remaining funds go?

The July 1, 2018-June 30, 2019, electronic grant to the District was \$250,961. (The current and final electronic grant for the current fiscal year is \$250,961.) The District was also awarded \$12,500 from the Department of Environmental Quality's Competitive E-Waste Grant Program.

The expenditures in the most recent full fiscal year, July 1, 2018-June 30, 2019, by the District using grant funds and grant-fund carryover was as follows:

eSCO Processing:	\$ 27,819
Green Station Personnel:	\$ 11,694
Verizon Arena Fees and Collection Operations:	\$ 22,229
Public Education and Promotion:	\$ 93,653
Equipment Repair (collection trailers):	\$ 2,471
Management and Administration of Collections and Processing:	\$ 25,096

District Board-Approved Disbursements to District Jurisdictions For Recycling Contamination Reduction:	\$250,758
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TOTAL	\$433,722*
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**\$170,261 from previous years' carryover; \$12,500 from competitive grant*

5. How much money do you collect on a monthly basis?

Separate from DEQ grant funds, no additional funds are collected.



**Testimony to the Interim Study Group
Committee on City, County and Local Affairs
January 6, 2020**

Who We Are

The Regional Recycling & Waste Reduction District in Pulaski County is one of 19 Arkansas regional solid waste management districts (RSWMD). RSWMDs were established by then-Governor Clinton's Administration and the Arkansas General Assembly in 1991, with rules and regulations first promulgated in 1992.

The District exists to accomplish a mission of helping protect the public health and the quality of our shared environment. The District pursues this state-mandated mission, in part, through encouraging residential-customer recycling of marketable solid waste, with the express objective of diverting appropriate materials from area landfills. The District implements these activities through the management, oversight and administration of private-sector contracts, and the public promotion of information and education programs.

Pulaski County's Values

The District conducts its public business activities in an open, transparent manner, while engaging stakeholders in the continuing improvement of reduction, reuse, and recycling strategies. We and our board believe recycling's mission can best be accomplished by seeking qualified, public-minded private enterprise consistent with helping protect the public health and the quality of our shared environment, while at the same time enhancing economic development and creating private-sector jobs in the communities we serve.

E-Waste

One of the state-mandated responsibilities delegated to the District is the collection, transporting and processing of electronic waste (e-waste). Why electronic waste?

- Each year since 2015, Americans discarded or threw away electronics, including TVs, computers, miscellaneous office equipment (printers, scanners, fax machines) mice, keyboards, and cell phones totaling over 9 million tons.

- An estimated 6,000 tons of e-waste in 2018 were collected and processed in Arkansas.
- The amount of worldwide e-waste generation in 2018 exceeded 50 million tons. The annual growth rate has been measured at approximately 5%.
- E-waste represents 2% of America's trash in landfills, but it equals 70% of overall toxic waste.
- A large number of what is labeled e-waste is actually not waste at all, but rather whole electronic equipment or component parts that are readily marketable for reuse or can be recycled for materials recovery.
- Only 12.5% of e-waste is currently recycled.
- Electronic items contain hazardous waste that should not be deposited in landfills. Those items include, but are not limited to: televisions and computer monitors that contain a cathode ray tube or CRT that contains over four pounds of lead each, LCD desktop monitors, LCD televisions, plasma televisions, portable DVD players with LCD screens, LCD televisions, portable DVD players with LCD screen, desktops, laptops, notebooks, and tablets.
- Hazardous waste contained in electronics includes lead, mercury and cadmium.*

**Lead can accumulate in individual organisms and enter the food chain. Its impact on humans includes kidney and brain damage, and an increase in blood pressure, birth defects and reproductive damage. Mercury poisoning affects the central nervous and cardiovascular systems, and can result in tremors, headaches, cognitive loss, and death. Cadmium is a metal known to cause cancer and targets the body's cardiovascular, renal, gastrointestinal, neurological, reproductive, and respiratory systems.*

E-Waste Collection Increases

The District's Green Station weekly collections of e-waste continues to grow. The overall growth of e-waste, according to the EPA, the fastest-growing segment of the waste stream, can best be measured by the District's twice-annually special public and business electronics collections. Here are the facts in net tons, with CRT in numbers of units collected as part of the total.

<u>Year</u>	<u>Net Weight in Tons</u>	<u>Number of CRTs (as part of net weight)</u>
2016	177,001 tons	1,067
2017	199,646 tons	1,373
2018	303,042 tons	1,469
2019	307,895 tons	1,093*

**The District held in February 2019 a joint collection of CRTs with Recycle Saline. The joint collection netted over 500 units or 16 tons of CRTs and other video monitors.*

Possible New E-Waste Approach

The State of Arkansas, through the Department of Energy and Environment's Department of Environmental Quality will begin in fiscal year 2020-2021 no longer provide grant funding for e-

waste programs conducted by the 19 RSWMDs. However, the problem of e-waste and the need for effective and efficient collection and processing continues to grow.

We believe this seeming problem could rather be an opportunity to create a more effective system of e-waste capture, recycling or other processing, and re-marketing. Further, a more effective system could provide new products useful to public institutions at a reduced cost.

A new approach to e-waste could encompass the following steps:

1. Objective is to establish a statewide program for the effective and efficient collection and processing of electronic waste (e-waste).
2. The program could be developed in conjunction with a private-sector vendor, specifically identifying and providing an RFP or RFQ for selection of the private-sector vendor for implementation of the program.
3. Private-sector vendors would be required to have the capabilities and financial means to collect, transport, refurbish, reuse and recycle computer and computer-related equipment; private-sector vendors would also be required to have sales and marketing capabilities for refurbished products, including packaging, pricing, promotion and distribution.
4. Initial e-waste efforts could be limited to regional or super regional areas of the state with the requisite population centers including residential consumers, businesses and institutions with prospective e-waste inventories and volumes.
5. Regionality could be based on multiple RSWMDs comprising a region, or separately designated regions designed exclusively for the e-waste program.
6. Initial e-waste efforts could also be limited to computer and computer-related equipment (CRT televisions could be covered in a separate plan).
7. If limited, definitions could include computer and computer-related equipment such as peripherals (mouse, keyboard, free-standing hard drives); computers would include desktop, laptop and notebooks and tablets.
8. Definitions would also include residential consumers, businesses and institutions; institutions could be identified to include K-12 public and private schools, public and private colleges and universities, hospitals, and municipal, county and state governments.
9. Definitions would also include manufacturers, licensees to manufacture, brands, importers, and/or exclusively retailers.
10. Retailers, for instance, could be included in the legislation as part of a recycling collection strategy; a licensing program could be required to offer computer equipment for sale, which would include a recycling collection plan.
11. Retailers, as an example, could be required to offer to consumers specifically designated collection points, with convenient collection days and times; collection of computers would be at no cost to consumers.

12. Businesses and institutions could be subject to a more specific collection scenario and possible collection fee to handle bulk collections with “bulk” defined.
13. Computer and computer-related equipment would be brand-specific; a comprehensive list of acceptable brands could be identified with the list maintained by the contract administrator and/or DEQ.
14. Retailers, consistent with definitions, could be required to accept for recycling all of the computer and computer-related brands they routinely carry; retailers could be required to accept for recycling all brands listed and identified as acceptable (on the comprehensive list maintained by the contract administrator and/or DEQ).
15. RSWMDs, as part of a regional or super regional collection strategy, could be included in the collection process based on standards and capabilities, as well as a contractual relationship with the selected private-sector vendor.
16. The plan would receive state start-up grant funds based on available initial savings or remaining e-waste fund balances due to the elimination of the existing grant program.
17. The plan and subsequent program would be designed, in conjunction with the private-sector vendor, to be self-sustaining after three years, or an appropriate, limited and date-specific amount of time.
18. If the plan and subsequent program were not limited to computer and computer-related equipment, such as peripherals (mouse, keyboard, free-standing hard drives,) and desktops, laptops, notebooks and tablets, then the prior-approved materials to be collected and processed could include a full inventory of electronic products, including the following:
 - a. PCs/Desktops/Laptops/Tablets
 - b. Keyboards/Mice
 - c. Television and Monitors (including those with CRTs)
 - d. Servers
 - e. Game Consoles/Accessories
 - f. MP3 and Other Digital Players
 - g. Scanners
 - h. VCR/DVD/Blue-Ray Players
 - i. Cameras
 - j. Stereos
 - k. Landline and Mobile Phones
 - l. Printers
 - m. Copiers
 - n. FAX Machines
 - o. Paper Shredders
 - p. Networking Equipment

- q. Hard Drives
- r. Watches
- s. Routers

The list of possible approved materials would be subject to periodic review and possible change due to commodity pricing and market conditions. Further, revenue generated by and for the program, based on the private-sector vendor's sales and marketing results, would be part of the periodic review of the plan and subsequent program.

Thank you for this opportunity to appear before the Committee.

Regional Recycling & Waste Reduction District in Pulaski County
Craig Douglass, Executive Director