

ELECTRONICS RECYCLING CASE STUDY: The Lancaster County – Covanta Story



Lancaster County Solid Waste Management Authority (LCSWMA) Service to the Community

Managing just under 900,000 tons of waste annually, LCSWMA employs a multi-faceted approach that focuses on recycling and household hazardous waste to minimize the volume and toxicity of waste; then processes the remaining materials using its four primary disposal assets: Transfer Station Complex, two waste-to-energy facilities and a landfill.

In addition to environmentally responsible waste management, LCSWMA has developed a robust renewable energy portfolio, including waste-to-energy, landfill gas, solar and wind that power approximately 45,000+ homes and businesses in the region. LCSWMA also invests considerable time, energy and financial resources to improve the livability of the local community.

Developing a Full-Service HHW Facility

LCSWMA believes in the benefits of recycling and the importance of offering residents the tools and resources needed to properly dispose of waste, especially household hazardous waste (HHW) materials. This is one reason LCSWMA has offered free collection of HHW since 1990.

With a growing population and the introduction of more consumer items considered HHW, LCSWMA built a permanent, drive-through facility in 2006, designed with accessibility and visibility in mind. Since opening the facility, LCSWMA has seen exponential growth of residents dropping off their HHW materials—72,075 visits in 2014 alone!

The growing demand for proper recycling of electronic waste, or “e-waste”, led LCSWMA to pursue a vendor partnership to ensure these materials are recycled and/or properly disposed of in a way that protects the environment. This is especially important considering the fact that toxic compounds, such as mercury and lead, can be found in many household items like Cathode Ray Tube (CRT) televisions, DVD players, VCRs, cassette decks, CD players, cell phones, etc.

Today, 77 percent of all waste collected at LCSWMA’s HHW Facility is electronic waste, of which 70 percent is in the form of Cathode Ray Tube (CRT) televisions. In 2010, electronic waste regulations and laws were amended amid increasing environmental concerns. Specifically,

“LCSWMA’s Household Hazardous Waste Facility is one of a kind in Pennsylvania, and helps to supplement our already-thriving waste management programs,” says Barbara Baker, Recycling Manager for LCSWMA.



Pennsylvania established a Manufacturing Responsibility Law, requiring manufacturers to provide an outlet for proper disposal and recycling of electronic devices. Called the Covered Device Recycling Act (CDRA), this law prohibits the disposal of devices including desktop computers, laptops, televisions and peripherals (keyboards, printers, speakers, etc.), redefining them as recyclable materials.

An Expanded Solution

With these CDRA regulations firmly in place and a rapidly expanding market for e-waste recycling underway, LCSWMA looked to a verified third-party organization for assistance. LCSWMA contracted with Covanta to provide an expanded solution for LCSWMA's e-waste recycling and processing needs.

Covanta offered LCSWMA more than a proposal that simply fit well within their budgetary guidelines; it also provided a synergistic relationship, with Covanta providing an important, valued service.

"The working relationship between our two organizations has been a harmonious and beneficial one. We've been able to assist LCSWMA in maximizing their recycling efforts for electronic waste in Lancaster County, while they provide us with more credibility by being a well-respected leader in the industry," noted John Moffitt, General Manager – Electronic Waste Recycling for Covanta.

"Our relationship with Covanta is a collaborative, in that we work together to develop proper, environmentally responsible methods to manage the e-waste delivered to our HHW Facility, thus diverting that material from the waste stream" says Baker.

As a result of the continued popularity of LCSWMA's HHW Facility and Covanta's strong service offering, the program has seen impressive numbers for material collected. In 2014, local residents delivered 2,498,391 pounds of e-waste, which is equivalent to 108 truckloads—that's a 13% increase over 2013.

Secure and Sustainable Process

During the e-waste recycling process a combination of manual disassembly and an automated shredding system to separate materials into commodities is used for proper recycling. This process helps eliminate risks for data theft by completely sanitizing hard drives and/or other storage media prior to manual disassembly and/or shredding. "That's the long term key to sustainability," Nelson concludes. "It's become an actual working economy that produces financial benefit instead of just being a drain. Covanta is playing a very important part for us by offering a truly sustainable way to manage what we cannot recycle. We already were doing well, but they helped us take our sustainability efforts to a whole new level."

Sustainable Material Management Solutions

Covanta's electronic scrap recycling division, ECOvanta, consists of specialists dedicated to the safe, secure recycling of e-waste. Responsible Recycling (R2), e-Stewards and ISO 14001:2004 certifications have been obtained after a comprehensive, accredited third-party auditing process.

Let's Get Started!

To learn more about how Covanta can work with you to manage your waste streams more sustainably, call us at 800-950-8749.