Indiana E-Cycle 2015 Report

August 1, 2015

Indiana Department of Environmental Management
Office of Pollution Prevention & Technical Assistance

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Summary

The Indiana E-Waste Law (IC 13-20.5) created an extended producer responsibility (EPR) program, known as Indiana E-Cycle, under which manufacturers of video display devices (VDDs) are required to collect and recycle e-waste from covered entities (households, small businesses, and public schools in Indiana). The Indiana Department of Environmental Management (IDEM) manages the program. The law requires that manufacturers of VDDs that offer their products for sale to Indiana households annually register with and report to IDEM. Each year these manufacturers are required to collect and recycle 60 percent by weight equivalent of the total weight of VDDs they sold to Indiana households during the previous twelve months. They can collect and recycle a broader range of products of any brand, known as covered electronic devices (CEDs), to fulfill their obligation.

All collectors and recyclers that collect and/or recycle CEDs on behalf of a registered manufacturer must also register with and report to IDEM annually. If collectors and/or recyclers do not register with the program, CEDs collected and recycled cannot be credited toward a manufacturer’s recycling obligation.

The law also contains a disposal prohibition which, as of January 1, 2011, prohibits covered entities from disposing of CEDs with trash that is intended for disposal at a landfill or for disposal by burning or incineration.

2015 is the sixth year of Indiana E-Cycle. This report summarizes the first five years of the program. In Program Year 5 (PY5), manufacturers collectively funded the recycling of 19,314,398 pounds of covered electronic devices, again exceeding their recycling obligation before the addition of incentives. The vast majority of the weight recycled as part of the program continues to be collected from metropolitan counties in the state. 78% of manufacturers registered for PY5 submitted annual reports and 61% of recyclers registered for PY5 submitted annual reports.

Implementation Report

This report fulfills the requirements contained in IC 13-20.5-7-4. IDEM is to submit a report concerning the implementation of the Indiana E-Waste Law to the general assembly, the governor, the Interim Study Committee on Environmental Affairs, and the Indiana Recycling Market Development Board before August 1.

Required content:

- A summary of information in the annual reports submitted by manufacturers and recyclers.
- Information regarding the total weight of CEDs recycled.
- The various collection programs used by manufacturers to collect CEDs.
- Information regarding CEDs that are being collected by persons other than registered manufacturers, collectors, and recyclers.
- Information about CEDs, if any, being disposed of in landfills in Indiana.
- A description of enforcement actions under the Indiana E-Waste Law.

Summary of Information in the Annual Reports Submitted by Manufacturers and Recyclers (Including Total Weight of CEDs Recycled)

A 50% incentive is earned for collecting CEDs from non-metropolitan counties in the State and a 10% incentive is earned for recycling CEDs at a registered facility in Indiana. These incentives can be combined- each pound of CED collected from a non-metropolitan county and recycled at an in-state recycling facility is counted as 1.6 pounds recycled. Figures 1 and 2 show how many pounds of CEDs were recycled by manufacturers registered in PY5 and the previous program years that submitted annual reports.
reports. Program Year 5 annual reports were not received from 20 of the 93 manufacturers that were registered in 2014.

**Figure 1: Covered Electronic Devices Recycled by Registered Manufacturers (lbs)**

<table>
<thead>
<tr>
<th></th>
<th>PY1</th>
<th>PY2</th>
<th>PY3</th>
<th>PY4</th>
<th>PY5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Recycling Goal</td>
<td>22,952,810</td>
<td>22,042,343</td>
<td>21,934,388</td>
<td>19,159,446</td>
<td>16,799,361</td>
</tr>
<tr>
<td>Total Actual Pounds Recycled</td>
<td>21,703,033</td>
<td>24,508,551</td>
<td>20,439,183</td>
<td>20,475,727</td>
<td>19,314,398</td>
</tr>
<tr>
<td>Total Pounds Recycled Including Incentives</td>
<td>23,112,133</td>
<td>26,690,731</td>
<td>22,821,544</td>
<td>22,777,243</td>
<td>21,840,809</td>
</tr>
</tbody>
</table>

**Figure 2: Covered Electronic Devices Recycled by Registered Manufacturers: Details (lbs)**

<table>
<thead>
<tr>
<th></th>
<th>PY1</th>
<th>PY2</th>
<th>PY3</th>
<th>PY4</th>
<th>PY5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro Pounds Recycled</td>
<td>20,108,187</td>
<td>21,774,474</td>
<td>17,853,995</td>
<td>18,358,599</td>
<td>17,476,431</td>
</tr>
<tr>
<td>Non-Metro Pounds Recycled</td>
<td>1,594,846</td>
<td>2,734,077</td>
<td>2,585,188</td>
<td>2,117,128</td>
<td>1,854,791</td>
</tr>
<tr>
<td>Pounds Processed at IN Recycling Facilities</td>
<td>6,116,767</td>
<td>8,151,414</td>
<td>10,897,666</td>
<td>9,154,172</td>
<td>7,901,493</td>
</tr>
<tr>
<td>Pounds Processed at Non-IN Recycling Facilities</td>
<td>15,586,266</td>
<td>16,357,137</td>
<td>9,541,313</td>
<td>11,321,555</td>
<td>11,412,905</td>
</tr>
</tbody>
</table>
Figures 3 and 4 show how many pounds of CEDs were recycled by recyclers registered in PY5 and the previous program years that submitted annual reports. There continues to be more e-waste being recycled than registered manufacturers are responsible for recycling. This does not include the weight from the 28 recyclers that did not report for PY5 or the e-waste that is being recycled outside of Indiana E-Cycle.

**Figure 3: Covered Electronic Devices Recycled by Registered Recyclers (lbs)**

**Figure 4: Covered Electronic Devices Recycle by Registered Recyclers: Details (lbs)**
It is anticipated that the demand for CED recycling in Indiana will continue to significantly exceed the amount of CEDs that manufacturers are responsible for recycling given that new VDDs are becoming lighter than older CEDs; that the list of items that meet the definition of CED is much more extensive than the list of items that are defined as VDDs; and that manufacturers’ recycling obligations are based solely on their sales of VDDs to households, while CEDs collected to meet their recycling obligations can come from households, small businesses, and public schools.

The results of Indiana E-Cycle in terms of pounds of e-waste recycled per resident are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Lbs/Capita (Actual Pounds)</th>
<th>Lbs/Capita (Including Incentives)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PY1</td>
<td>3.35</td>
<td>3.56</td>
</tr>
<tr>
<td>PY2</td>
<td>3.78</td>
<td>4.12</td>
</tr>
<tr>
<td>PY3</td>
<td>3.13</td>
<td>3.49</td>
</tr>
<tr>
<td>PY4</td>
<td>3.12</td>
<td>3.47</td>
</tr>
<tr>
<td>PY5</td>
<td>2.93</td>
<td>3.31</td>
</tr>
</tbody>
</table>

If a manufacturer exceeds their recycling obligation, 25% of the excess pounds are converted to recycling credits that can be used by the manufacturer in any of the three immediately following program years or sold to another manufacturer. Credits details are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Credits Earned</th>
<th>Credits Bought/Sold</th>
<th>Credits Used</th>
<th>Credits Expired</th>
<th>Credits Retained</th>
<th>Manufacturers Holding Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PY1</td>
<td>1,074,733</td>
<td>0</td>
<td>n/a</td>
<td>n/a</td>
<td>1,074,733</td>
<td>18</td>
</tr>
<tr>
<td>PY2</td>
<td>1,623,705</td>
<td>0</td>
<td>19,253</td>
<td>n/a</td>
<td>2,653,837</td>
<td>23</td>
</tr>
<tr>
<td>PY3</td>
<td>555,630</td>
<td>0</td>
<td>116,758</td>
<td>n/a</td>
<td>3,090,762</td>
<td>26</td>
</tr>
<tr>
<td>PY4</td>
<td>967,292</td>
<td>87,256</td>
<td>104,592</td>
<td>809,875</td>
<td>3,039,188</td>
<td>37</td>
</tr>
<tr>
<td>PY5</td>
<td>1,174,168</td>
<td>246,957</td>
<td>808,867</td>
<td>586,136</td>
<td>2,579,219</td>
<td>29</td>
</tr>
</tbody>
</table>

**Various Collection Programs Used by Manufacturers to Collect CEDs**

Manufacturers registered with Indiana E-Cycle utilize three types of collection programs to fulfill their recycling obligations:

1. permanent collection sites,
2. temporary/special collection events, and

3. manufacturer take-back programs.

Information Regarding CEDs That Are Being Collected by Persons Other Than Registered Manufacturers, Collectors, and Recyclers

This report is required to include information about CEDs that are being collected by persons other than registered manufacturers, collectors, and recyclers. This information has not been included because Indiana E-Cycle does not collect data beyond the scope of the program and this data is not currently collected elsewhere.

Information About CEDs, If Any, Being Disposed of in Landfills in Indiana

This report is required to include information about CEDs, if any, being disposed of in landfills in Indiana. This information has not been included because Indiana E-Cycle does not collect data beyond the scope of the program and this data is not currently collected elsewhere.

Description of Enforcement Actions Under the Indiana E-Waste Law

As of Program Year 4, manufacturers that do not meet their recycling obligation are subject to a shortfall fee, known as the variable recycling fee (VRF). Manufacturers that were exempt from the registration fee for the program year because they sold less than 100 units of video display devices to households during the previous year are exempt from the fee, which is calculated as follows:

- Forty cents per pound of shortfall for manufacturers that recycle less than 50 percent of their goal.
- Thirty cents per pound of shortfall for manufacturers that recycle at least 50 percent, but less than 90 percent, of their goal.
- Twenty cents per pound of shortfall for manufacturers that recycle at least 90 percent of their goal.

Three manufacturers paid a shortfall fee for PY4. Program Year 5 fee information will not be finalized until after the publication of this report.

There have not been any enforcement actions under the Indiana E-Waste Law because the law does not contain any additional penalties or consequences for failure to comply with its requirements.

Definitions

- **Collector**: a public or private entity that:
  - receives CEDs from covered entities and arranges for the delivery of the CEDs to a recycler; or,
  - collects CEDs directly from covered entities, including curbside collection.
- **Covered electronic device (CED)**: a computer, fax machine, DVD player (including gaming systems that can play DVDs), video cassette recorder, digital photo frame, digital media player, MP3 player, camcorder, camera, DVR, portable GPS navigation system, video display device, or peripheral (including keyboards, mice, external hard drives, and printers) that is sold to a covered entity by means of retail, wholesale or electronic commerce. An all-in-one printer/scanner/copier or a projector can be considered a peripheral if the item is designed exclusively for external use with a computer.
- **Covered entity**: an Indiana household, public school, or small business.
  - **Household**: occupants of a dwelling located in Indiana who use a VDD at the dwelling primarily for personal use or home office use.
  - **Small business**: a business that satisfies all of the following:
• The business is independently owned and operated.
• The principal office of the business is located in Indiana.
• The business satisfies either of the following:
  ▪ The business has not more than 100 employees and not more than average annual gross receipts of $10,000,000.
  ▪ If the business is a manufacturing business, the business does not have more than 100 employees.
  o Public school: a K-12 public school or charter school.
    ▪ A public school is a school maintained by a public school corporation established by Indiana law.
    ▪ A charter school is a public elementary school or secondary school that is nonsectarian and nonreligious and operates under a charter.

• Manufacturer: a person that:
  o Manufactures VDDs to be sold under the person’s own brand or a brand the person licenses as identified by the person’s own brand label or the brand label the person licenses;
  o Sells VDDs manufactured by others under the person’s own brand or a brand the person licenses as identified by the person’s own brand label or the brand label the person licenses; or,
  o Assumes the responsibilities and obligations of a manufacturer.

• Recycler: an individual or public entity that accepts CEDs from covered entities and collectors for the purpose of recycling.

• Registered: A manufacturer, collector, or recycler that has submitted a complete Indiana E-Cycle registration to IDEM.

• Variable recycling fee (VRF): a fee charged to manufacturers that fail to meet their recycling obligation. The fee will be charged beginning in 2014 and will be based on the results of the previous program year. The fee will be calculated as follows:
  o Forty cents per pound of shortfall for manufacturers that recycle less than 50 percent of their goal.
  o Thirty cents per pound of shortfall for manufacturers that recycle at least 50 percent, but less than 90 percent, of their goal.
  o Twenty cents per pound of shortfall for manufacturers that recycle at least 90 percent of their goal.

• Video display device (VDD): a television or computer monitor, including a laptop computer, netbook, notebook, tablet computer, or e-reader, that contains a cathode ray tube or flat panel screen with a screen size that is greater than four (4) inches measured diagonally and is marketed by a manufacturer for use by covered entities.