



June 16, 2014

Ms. Carol Mortensen, Director  
Department of Resources Recycling and Recovery  
1001 I Street, MS 25A  
Sacramento, CA 95814

Dear Ms. Mortensen:

**Management Letter—Covered Electronic Waste Recycling Program, Net Cost Reports Review**

The Department of Resources Recycling and Recovery (CalRecycle) requested the Department of Finance, Office of State Audits and Evaluations (Finance), to review the Covered Electronic Waste (CEW) Recycling Program Net Cost Reports for the period January 1, 2013 through December 31, 2013. This letter summarizes the review results.

**Background**

The California Electronic Recycling Act of 2003 is intended to provide free and convenient recycling services for CEW. The program is funded by a fee of \$3 to \$5 for specified electronic devices, and is collected at the time of sale by the retailer. CEW includes the following types of discarded products with a viewable screen size greater than four inches:

- Cathode ray tube devices including televisions and computer monitors
- Liquid crystal display desktop monitors, laptop computers, and televisions
- Plasma televisions

The program includes collectors and recyclers who receive funding from CalRecycle to process CEW. Specifically, the collectors recover CEW from residences, individuals, commercial businesses, institutions, government, and nonprofit entities. The recyclers dismantle the CEW into materials (plastics, glass, metals, etc.) for final disposal or sale. Dual entities are authorized to recover and recycle CEW.

During 2013, CalRecycle paid the recyclers 39 cents per pound for dismantling CEW. Of this amount, CalRecycle requires the recyclers to pay approved collectors a standard recovery rate of 16 cents per pound for CEW transferred to the recyclers. However, recyclers often pay the collectors more than the standard recovery rate to be competitive within the industry.

## Scope and Methodology

The review included a validation of the information reported on the Annual CEW Net Cost Report (Form 220) and related Net Cost Worksheets for Collectors and Recyclers (Forms 220A and 220B) for the period January 1, 2013 through December 31, 2013.

To evaluate the reliability of the self-reported data on the Net Cost Reports and related worksheets, we visited 12 approved collectors, of which 6 also operate as recyclers (dual entities). At each site, we performed the following procedures:

- Interviewed key staff to obtain an understanding of the operations and preparation of the Net Cost Report and related worksheets.
- Toured the facilities.
- Reviewed a sample of supporting documents and records used to prepare the Net Cost Reports and related worksheets.
- Determined whether the CEW revenues, costs, and pounds of CEW recovered were supported by financial records and accurately reported in the Net Cost Reports and related worksheets.

To compile the results, the Net Cost Report and related worksheet information was ranked in the following three categories:

1. Reported revenue, costs, or pounds of CEW recovered are supported and reasonably accurate.
2. Reported revenue, costs, or pounds of CEW recovered are supported, but may be higher or lower than actual.
3. Reported revenue, costs, or pounds of CEW recovered cannot be supported because necessary documents are not available.

This review was not considered an audit, the objective of which would be to provide an opinion on the material correctness of the Net Cost Reports and supporting worksheets. Therefore, we are not expressing such an opinion. Further, the review included only the data reported on the Net Cost Reports and supporting worksheets and did not include the collector's or recycler's entire business enterprise.

## Results

As reported in previous years, the Net Cost Reports and supporting worksheets are generally supported, but in many cases are not accurate due to the following:

- *Cost Allocation*—Of the 12 entities reviewed, 9 reported costs that may be inaccurate. Specifically, the entities either did not use an allocation methodology supported with verifiable data, or the allocation was erroneously applied when calculating the CEW versus non-CEW costs. Dual entities experienced additional difficulties allocating expenses between collector and recycler activities. The cost allocations significantly impact the accuracy of the Net Cost Reports and related worksheets because most entities process other types of waste materials in addition to CEW, and dual entities perform both recovery and recycling activities, all of which need to be accounted for separately.

- *Net Cost Report Categories*—Entities continue to inaccurately report revenues and costs as follows:
  - Incorrect Categories (7 of 12 entities)
  - Underreported Costs (6 of 12 entities)
  - Inaccurate Revenues (3 of 12 entities)
  - Unsupported costs (1 of 12 entities)

The results are summarized in Tables 1 and 2. The detailed rankings for each collector and recycler by revenue and expenditure category are provided in Attachments A and B.

**Table 1: Average Rating for Collectors**

<b>Form 220</b>	<b>2013 Average Rating</b>
Line 13: Total Revenues for CEW Recovery	1.4
Line 14: Total Costs for CEW Recovery	1.5
<b>Line 15: Net Costs</b>	<b>1.5</b>
Line 16: Total CEW Pounds Recovered	1.0
<b>Line 17: Net Cost Per Pound</b>	<b>1.3</b>

**Table 2: Average Rating for Recyclers**

<b>Form 220</b>	<b>2013 Average Rating</b>
Line 13: Total Revenues for CEW Recycling	1.3
Line 14: Total Costs for CEW Recycling	1.5
<b>Line 15: Net Costs</b>	<b>1.4</b>
Line 16: Total CEW Pounds Recycled	1.2
<b>Line 17: Net Cost Per Pound</b>	<b>1.3</b>

## Recommendations

To improve the accuracy of the information reported on the Net Cost Reports and related worksheets, we recommend the following:

1. Update the CalRecycle Covered Electronic Waste Payment System Net Cost Report Information (Guide) to include:
  - a. Examples of allocation methodologies including sample calculations and types of documentation to support CEW, collector, and recycler costs. The Guide could indicate that entities retain the flexibility to use any reasonable and supported allocation methodology, even if it is not one of the methods provided.
  - b. Examples of costs for each line item on Forms 220A and 220B to prevent entities from reporting costs in incorrect categories.
2. Provide training and assistance to the entities regarding accurate preparation and adequate support for Net Cost Report and related worksheets preparation.

This letter will be placed on our website. If you have any questions regarding this letter, please contact Kimberly Tarvin, Manager, or Rick Cervantes, Supervisor, at (916) 322-2985.

Sincerely,

Original signed by:

Richard R. Sierra, CPA  
Chief, Office of State Audits and Evaluations

Attachments

cc: Mr. Jeff Hunts, Manager, Electronic Waste Recycling Program, Department of Resources  
Recycling and Recovery  
Ms. Audrey Traina, Chief, Audits Office, Department of Resources Recycling and Recovery  
Mr. Kevin Campbell, Senior Management Auditor, Audits Office, Department of Resources  
Recycling and Recovery

**Review of Net Cost Reports  
Summary of Rankings  
Collectors**

Company Name	A.S.I. Cyber Concepts	California Electronic Asset Recovery (CEAR)	Cedarwood-Young Company (dba Allan Company (Baldwin Park))	Clean Harbors Environmental Services, Inc.	ECS Refining, LLC - Stockton	Electronic Recyclers International (ERI)	e-Recycling of California (Paramount)	eWaste Center, Inc.	Goodwill Industries of San Joaquin Valley	Recology San Francisco (FKA-SF Recycling & Disposal, Inc.)	Ruuhwa Dann and Associates (dba Cal Mirco Recycling)	Sonoma County Waste Management Agency	Average Rating for All Collectors
<b>Covered Electronic Waste (CEW) ID Number</b>	<b>101322</b>	<b>100194</b>	<b>102265</b>	<b>100241</b>	<b>113109</b>	<b>114247</b>	<b>100376</b>	<b>102174</b>	<b>101878</b>	<b>102447</b>	<b>110527</b>	<b>103005</b>	
<b>Type</b>	<b>Collector</b>	<b>Dual</b>	<b>Collector</b>	<b>Collector</b>	<b>Dual</b>	<b>Dual</b>	<b>Dual</b>	<b>Dual</b>	<b>Collector</b>	<b>Collector</b>	<b>Dual</b>	<b>Collector</b>	
<b>Form 220</b>													
L13 Total Revenues for CEW Recovery	1.0	2.0	1.0	1.0	1.0	n/a	2.0	2.0	2.0	1.0	n/a	1.0	1.4
L14 Total Costs for CEW Recovery	1.4	1.3	1.9	1.7	1.0	1.5	2.0	1.9	1.5	1.2	1.3	1.1	1.5
<b>L15 Net Costs</b>	<b>1.2</b>	<b>1.7</b>	<b>1.5</b>	<b>1.4</b>	<b>1.0</b>	<b>1.5</b>	<b>2.0</b>	<b>2.0</b>	<b>1.8</b>	<b>1.1</b>	<b>1.3</b>	<b>1.1</b>	<b>1.5</b>
L16 Total Pounds of CEW Recovered	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<b>L17 Net Cost Per Pound</b>	<b>1.1</b>	<b>1.4</b>	<b>1.3</b>	<b>1.2</b>	<b>1.0</b>	<b>1.3</b>	<b>1.5</b>	<b>1.5</b>	<b>1.4</b>	<b>1.1</b>	<b>1.2</b>	<b>1.1</b>	<b>1.3</b>
<b>Form 220A</b>													
<b>REVENUE FROM CEW RECOVERY ACTIVITIES</b>													
L1 Revenue from Recyclers (in excess of Payment Rate: \$0.16)	1.0	n/a	1.0	1.0	n/a	n/a	n/a	2.0	2.0	1.0	n/a	1.0	1.3
L2 Revenue from Recovery Services (e.g. fees charged)	n/a	2.0	n/a	n/a	1.0	n/a	2.0	n/a	n/a	n/a	n/a	n/a	1.7
L3 Other Allowable Revenues	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>L4 Total Revenue from Recovery Activities</b>	<b>1.0</b>	<b>2.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>n/a</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>1.0</b>	<b>n/a</b>	<b>1.0</b>	<b>1.4</b>
<b>COSTS OF CEW RECOVERY ACTIVITIES</b>													
<b>Labor Costs</b>													
L5 Direct Labor	1.0	2.0	2.0	2.0	1.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0	1.4
<b>Transportation Costs (e.g., fuel, registration, insurance, maintenance, and repair)</b>													
L6 Transporting CEW to Collection Facility	2.0	2.0	n/a	n/a	1.0	1.0	2.0	1.0	2.0	1.0	1.0	1.0	1.4
L7 Transporting CEW from Collection Facility to Recycler	1.0	n/a	n/a	2.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.5
<b>Other Costs (exclude any transportation costs)</b>													
L8 Advertising, Marketing, and Public Education	1.0	1.0	2.0	n/a	1.0	2.0	2.0	1.0	n/a	1.0	1.0	1.0	1.3
L9 Supplies Used in Recovery Activities	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	1.0	1.0	2.0	1.0	1.3
L10 Payments Made in Exchange for CEW	1.0	1.0	n/a	1.0	n/a	n/a	2.0	1.0	n/a	n/a	1.0	n/a	1.2
L11 Fees Charged by Recyclers	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Overhead</b>													
L12 Depreciation	n/a	1.0	2.0	n/a	1.0	n/a	2.0	2.0	n/a	1.0	1.0	1.0	1.4
L13 Insurance (non-transportation)	1.0	1.0	2.0	n/a	1.0	2.0	2.0	2.0	n/a	1.0	1.0	1.0	1.4
L14 Debt Service	n/a	1.0	n/a	n/a	1.0	1.0	2.0	2.0	n/a	n/a	2.0	1.0	1.4
L15 Maintenance	1.0	1.0	2.0	n/a	1.0	2.0	2.0	2.0	n/a	1.0	1.0	n/a	1.4
L16 Fuel (non-transportation)	1.0	1.0	2.0	2.0	1.0	n/a	2.0	n/a	n/a	2.0	2.0	n/a	1.6
L17 Property Taxes	n/a	1.0	2.0	n/a	1.0	2.0	2.0	3.0	n/a	2.0	1.0	n/a	1.8
L18 Utilities	3.0	1.0	2.0	n/a	1.0	n/a	2.0	2.0	n/a	1.0	1.0	1.0	1.6
L19 Facilities and Equipment Rent or Lease	1.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	n/a	1.0	1.0	n/a	1.6
L20 Security	1.0	1.0	2.0	n/a	1.0	1.0	n/a	2.0	n/a	2.0	1.0	1.0	1.3
L21 Indirect Labor	3.0	2.0	2.0	n/a	1.0	2.0	2.0	2.0	2.0	1.0	2.0	1.0	1.8
L22 Other Overhead (related to CEW recovery)	2.0	1.0	2.0	n/a	1.0	1.0	2.0	2.0	n/a	n/a	2.0	2.0	1.7
L23 Additional Cost	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>L24 Total Cost of CEW Recovery Activities</b>	<b>1.4</b>	<b>1.3</b>	<b>1.9</b>	<b>1.7</b>	<b>1.0</b>	<b>1.5</b>	<b>2.0</b>	<b>1.9</b>	<b>1.5</b>	<b>1.2</b>	<b>1.3</b>	<b>1.1</b>	<b>1.5</b>

**Rating Definitions:**

- 1 = Supported & Reasonably Accurate
- 2 = Supported high/low
- 3 = Unsupported
- n/a=Entity reported zero in this category

**Review of Net Cost Reports  
Summary of Rankings  
Recyclers**

Company Name	California Electronic Asset Recovery (CEAR)	ECS Refining, LLC - Stockton	Electronic Recyclers (ERA, LLC) (II)	e-Recycling of California (Paramount)	eWaste Center, Inc.	Ruhwa Dann and Associates (dba Cal Mirco Recycling)	Average Rating for All Recyclers
<b>Covered Electronic Waste (CEW) ID Number</b>	<b>100194</b>	<b>113109</b>	<b>114247</b>	<b>100376</b>	<b>102174</b>	<b>110527</b>	
<b>Type</b>	<b>Dual</b>	<b>Dual</b>	<b>Dual</b>	<b>Dual</b>	<b>Dual</b>	<b>Dual</b>	
<b>Form 220</b>							
L13 Total Revenues for CEW Recycling	2.0	1.0	1.0	1.5	1.0	1.0	1.3
L14 Total Costs for CEW Recycling	1.2	1.0	1.6	1.9	1.9	1.3	1.5
<b>L15 Net Costs</b>	<b>1.6</b>	<b>1.0</b>	<b>1.3</b>	<b>1.7</b>	<b>1.5</b>	<b>1.2</b>	<b>1.4</b>
L16 Total Pounds of CEW Recycled	1.0	1.0	1.0	2.0	1.0	1.0	1.2
<b>L17 Net Cost Per Pound</b>	<b>1.3</b>	<b>1.0</b>	<b>1.2</b>	<b>1.9</b>	<b>1.3</b>	<b>1.1</b>	<b>1.3</b>
<b>Form 220B</b>							
<b>REVENUE FROM CEW RECYCLING ACTIVITIES</b>							
L1 Revenue from the Sale of CEW Residual Commodities	2.0	1.0	1.0	1.0	1.0	1.0	1.2
L2 Revenue from the Sale of CEW Components	n/a	n/a	n/a	n/a	n/a	n/a	n/a
L3 Revenue from Fees Charged	2.0	n/a	n/a	2.0	n/a	n/a	2.0
L4 Other Allowable Revenues	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>L5 Total Revenue from Recycling Activities</b>	<b>2.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.5</b>	<b>1.0</b>	<b>1.0</b>	<b>1.3</b>
<b>COSTS FROM CEW RECYCLING ACTIVITIES</b>							
<b>Labor Costs</b>							
L6 Direct Labor	1.0	1.0	1.0	2.0	2.0	1.0	1.3
<b>Transportation Costs (e.g., fuel, registration, insurance, maintenance, and repair)</b>							
L7 Transporting CEW from Collector to Recycler	2.0	1.0	1.0	2.0	n/a	1.0	1.4
L8 Transporting Residuals to Market/Disposal Facility	2.0	1.0	n/a	n/a	1.0	n/a	1.3
L9 Other Allowable Transportation	1.0	n/a	n/a	n/a	n/a	n/a	1.0
<b>Other Costs (exclude any transportation costs)</b>							
L10 Advertising, Marketing, and Public Education	1.0	1.0	2.0	2.0	1.0	1.0	1.3
L11 Supplies Used in Recycling Activities	1.0	1.0	2.0	2.0	2.0	2.0	1.7
L12 CRT Glass Management	1.0	1.0	1.0	1.0	2.0	1.0	1.2
<b>Overhead</b>							
L13 Depreciation	2.0	1.0	1.0	2.0	2.0	1.0	1.5
L14 Insurance (non-transportation)	1.0	1.0	2.0	2.0	2.0	1.0	1.5
L15 Debt Service	1.0	1.0	1.0	2.0	2.0	2.0	1.5
L16 Maintenance	1.0	1.0	2.0	2.0	2.0	1.0	1.5
L17 Fuel (non-transportation)	1.0	1.0	2.0	2.0	2.0	2.0	1.7
L18 Property Taxes	1.0	1.0	1.0	2.0	3.0	1.0	1.5
L19 Utilities	1.0	1.0	2.0	2.0	2.0	1.0	1.5
L20 Facilities and Equipment Rent or Lease	1.0	1.0	2.0	2.0	2.0	1.0	1.5
L21 Security	1.0	1.0	1.0	n/a	2.0	1.0	1.2
L22 Indirect Labor	1.0	1.0	2.0	2.0	2.0	2.0	1.7
L23 Other Overhead (related to CEW Recycling)	1.0	1.0	2.0	2.0	2.0	2.0	1.7
L24 Additional Cost	1.0	n/a	n/a	n/a	2.0	1.0	1.3
L25 Cost to Purchase CEWs in excess of Recovery Rate	1.0	1.0	2.0	1.0	1.0	1.0	1.2
<b>L26 Total Cost of CEW Recycling Activity</b>	<b>1.2</b>	<b>1.0</b>	<b>1.6</b>	<b>1.9</b>	<b>1.9</b>	<b>1.3</b>	<b>1.5</b>

**Rating Definitions:**

- 1 = Supported & Reasonably Accurate
- 2 = Supported high/low
- 3 = Unsupported
- n/a=Entity reported zero in this category





## DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

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P.O. BOX 4025, SACRAMENTO, CALIFORNIA 95812

June 16, 2014

Richard R. Sierra, CPA  
Chief, Office of State Audits and Evaluations  
Department of Finance  
915 L Street  
Sacramento, CA 95814-3706

Re: Management Letter -- Covered Electronic Waste Recycling Program Net Cost Reports Review

Dear Mr. Sierra:

As Director of the California Department of Resources Recycling and Recovery (CalRecycle), I appreciate the opportunity to respond to the Department of Finance (DOF) Management Letter dated May 23, 2014, regarding the review of selected Net Cost Reports submitted by participants in the Covered Electronic Waste (CEW) Recycling Program for reporting year 2013. CalRecycle accepts the conclusions of the review summarized in the Management Letter and takes the included recommendations under advisement.

For several years, CalRecycle has retained the services of DOF to assess the validity of cost and revenue information contained in the Net Cost Reports. This information is a key aspect of CalRecycle's biennial consideration of payment rates in the CEW recycling payment system. This year's review by DOF was especially timely, as CalRecycle must make a determination on payments rates by July 1, 2014.

The Net Cost Report evaluation, which reviewed cost and revenue information submitted by a subset of CEW program participants reflecting operations conducted in 2013, indicates a slight improvement from the last assessment. However the evaluation continues to indicate that the accuracy of submitted information is, in many instances, less than optimal. Net cost data submitted by both some collectors and recyclers continues to suffer from misallocations and inconsistencies relative to supporting documentation examined in the field by DOF. This finding raises questions about the long-term utility of the Net Cost Report as a primary means of assessing industry costs, at least as currently designed.

Modifying the Net Cost Report format to facilitate the capture of additional data on the management of non-CRT devices is within the authority of CalRecycle. However, as evidenced by the difficulty of securing reasonably accurate cost data under the current limited breadth of reporting, expanding the scope of reporting may impose additional burdens on program participants and test the resources of CalRecycle.

CalRecycle will likely maintain a single set of CEW recovery and recycling payment rates, as have been used since the program's inception. Approximately 98% by weight of all CEW processed and claimed through the program in 2013 were cathode ray tube (CRT) devices. However, a small but increasing proportion of video displays based on liquid crystal or plasma technologies now entering the waste stream, each with their own set of costs and values, and so industry stakeholders are advocating for differential recycling payment rates to reflect these



varied economics. Current statute authorizes CalRecycle to set recycling payment rates sufficient "...to cover the average net cost for an electronic waste recycler to receive, process, and recycle each major category..." of CEW (PRC 42478).

With an eye towards enhancing information utility, especially in the face of increasing program complexity, all options should remain in consideration as CalRecycle prepares for subsequent reports. Near-term improvements can and will be pursued, but CalRecycle also must give serious thought to substantially altering the existing reporting approach. This could entail rulemaking and imposing additional costs on CEW system participants to improve their accounting capabilities, or could require additional resource allocations at the State level to conduct or contract for first-hand assessments of industry operating costs. CalRecycle intends to explore this and related issues with industry stakeholders over the course of the next year.

The following are CalRecycle's responses to the specific recommendations in DOF's letter report:

With regard to Recommendation 1 -- Update the CalRecycle Covered Electronic Waste Payment System Net Cost Report Information (Guide). The CEW program Net Cost Report guide is admittedly in need of revision. CalRecycle has focused its efforts on refining report worksheets to balance simplicity with an interest in extracting certain cost details. However, this results in creating information categories that do not neatly align with standard accounting structure. This is especially apparent in the challenges of cost allocation between aspects of a complex business' enterprise. Moving forward, CalRecycle may consider the merits of securing specific cost information through separate means, such as surveys, that complement more general information gained through clarified Net Cost Report worksheet categories.

With regard to Recommendation 2 -- Provide training and assistance to the entities regarding accurate preparation and adequate support for Net Cost Report and related worksheets preparation. CalRecycle will continue to reevaluate the forms and guidance used in the Net Cost Report cycle, including incorporating more reporting assistance directly into the online interface and ensuring that guidance documents are readily available online and on-demand. Incorporating reporting assistance into routine program site visits and potentially into audit field work may provide a degree of education for a segment of participants, but CalRecycle will also need to look for ways to provide report preparation assistance through large-access, lower cost avenues such as webinars.

CalRecycle is acutely aware of the need to secure reliable information upon which to consider any future program adjustments and will continue to take the necessary steps toward that goal. Continued reliance on self-calculated and self-reported information is a risk that CalRecycle must also further mitigate. We greatly appreciate DOF's continuing service in evaluating the validity of the Net Cost Report data and the prompt completion of this year's effort. If you have any questions, please feel free to contact me directly at 322-4032, or Jeff Hunts, Manager of the Electronic Waste Recycling Waste Program, at 341-6603.

Sincerely,

(Original signed by Caroll Mortensen)

Caroll Mortensen  
Director

Cc: Jeff Hunts, Manager, Electronic Waste Recycling Program, CalRecycle  
Audrey Traina, Manager, Audits Office, CalRecycle  
Kevin Campbell, Supervisor, Audits Office, CalRecycle