



Recharging the planet. Recycling your batteries.™

May 1, 2013

Shannon Lotthammer, Director
Minnesota Pollution Control Agency (MPCA)
Environmental Analysis and Outcomes Division
520 Lafayette Road North
St. Paul, MN 55155-4194

RE: 2013 Rechargeable Battery Collection Report

Dear Ms. Lotthammer:

On behalf of its 200+ supporting member companies, Call2Recycle, Inc. is pleased to provide its 2013 Minnesota rechargeable battery collection report for 2011 and 2012, in accordance with *Minnesota Statute 115A.9155, Disposal of Certain Dry Cell Batteries and Minnesota Statute 115A.9157, Rechargeable Batteries and Products*.

As a non-profit, public service organization, Call2Recycle, Inc. serves as the battery collection and recycling solution for hundreds of voluntary collection locations throughout Minnesota. Through our program, Call2Recycle®, we successfully diverted 326,970 pounds of rechargeable batteries from Minnesota landfills in 2011 and 2012. The enclosed report provides a summary of our efforts in the state for the past two years, in addition to a detailed review of battery collections, including by material type, by chemistry type, by collection channel, and the total number of locations participating in our program.

In addition to the collection results, we have also included an estimated amount (in pounds) of rechargeable batteries sold in the state, a collection rate for each year, and the list of responsible manufacturers who participate in our program through financial support.

Call2Recycle remains committed to the battery collection and recycling efforts in Minnesota and we look forward to working with you in the future to expand opportunities to increase battery collections throughout the state.

Upon review of the enclosed report, if you have any questions or would like additional information, please feel free to contact us at 678-419-9990.

Best regards,

A handwritten signature in black ink that reads "Carl E. Smith".

Carl E. Smith
CEO/President
Call2Recycle, Inc.



2013 MINNESOTA RECHARGEABLE BATTERY RECYCLING REPORT

REPORTING YEARS: 2011 AND 2012

Prepared for:

Minnesota Pollution Control Agency (MPCA)
Environmental Analysis and Outcomes Division
520 Lafayette Road North
St. Paul, MN 55155-4194

Submitted by:

Call2Recycle, Inc.
1000 Parkwood Circle, Suite 200
Atlanta, GA 30339
678-419-9990 | call2recycle.org

May 1, 2013

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MINNESOTA REPORT SUMMARY

BATTERY COLLECTION RESULTS

Over the past two years, rechargeable batteries collected by Call2Recycle® in Minnesota have stayed relatively steady. In 2011, Call2Recycle collected 169,677 lbs. of batteries and cellphones in Minnesota. In 2012, that number increased to 172,915 lbs. – a 2% increase. Primary batteries and cellphones both grew at 75% and 11%, respectively, while rechargeable batteries remained almost flat from 164,128 lbs. in 2011 to 162,842 lbs. in 2012 – a slight 0.2% decrease.

In 2012, Call2Recycle witnessed a significant surge in primary battery collections – growing 75% from 4,555 lbs. in 2011 to 7,979 lbs. in 2012 – with 57% of primary volume coming from retail and 29% from government, both of which serve as public drop-off locations. While alkaline batteries comprise a small percentage of Call2Recycle’s collections in the state (2.7% in 2011, 4.6% in 2012), Call2Recycle believes that this trend will continue, especially with legislation for primary batteries pending.

Although rechargeable battery collections in Minnesota were just about flat between 2011 and 2012, the municipal sector (part of government channel) grew total program collections by almost 30% or just over 14,000 lbs. This can be attributed to increased participation from various cities/counties, such as Olmsted County, Washington County, Hennepin County, and Western Lake Superior Sanitary District. Furthermore, municipal collections across the top three metropolitan areas are growing strong: Minneapolis-St.Paul-Bloomington MN-WI (+10%), Rochester MN (+260%) and Duluth MN-WI (+54%).

While Call2Recycle had more collection locations enrolled in 2012 than it did in 2011, the number of collection locations actually participating (sending in at least one receipt per year) decreased by 7% from 697 sites in 2011 to 648 sites in 2012. The retail channel continues to make up a significant portion of these collection locations; however, their participation and volume collected continues to decline. For example, in 2012 the retail channel was responsible for 51,119 lbs., which was down 2% from 2011.

Call2Recycle believes participation and collections could continue to be affected as a result of the volatility of the retail channel. With declining sales and shoppers purchasing more online than in stores, some of America’s largest retailers (such as Best Buy, RadioShack, and Sears) will be forced to close a significant amount of stores. Fewer shoppers coming into fewer stores negatively impacts Call2Recycle’s program accessibility for consumers and ultimately, its collection rate. Through dedicated outbound call campaigns to individual stores, public education efforts, and store communication coordinated through retail corporate offices, Call2Recycle is working to halt this trend.

MINNESOTA REPORT SUMMARY CONTINUED

The dominant rechargeable battery chemistry collected in Minnesota in 2011 and 2012 through the Call2Recycle program continues to be Nickel Cadmium (Ni-Cd), which grew by 7%. Small Sealed Lead Acid (SSLA/Pb) collections also increased by 5%, while both Lithium Ion (Li-Ion) and Nickel Metal Hydride (Ni-MH) collections both decreased, 17% and 7%, correspondingly.

MANUFACTURER SUPPORT & SALES

The Call2Recycle program is funded by over 200 battery and product manufacturers committed to the responsible recycling of their products. Based on Frost & Sullivan research, it is estimated that these manufacturers, plus others not supporting the Call2Recycle program, are responsible for rechargeable battery sales into Minnesota of 2,182,950 lbs. in 2011 and 2,209,146 lbs. in 2012 – an increase of 1.2%.

Based on the Frost & Sullivan research, Call2Recycle collection data and Minnesota state population, Call2Recycle calculated its rechargeable battery collection rate in Minnesota to be 7.5% in 2011 and 7.4% in 2012. These rates do not include batteries collected through other recycling programs, nor do they take into account the batteries that may be part of an electronic product recycled through other take-back programs (i.e. eWaste). According to a recent report, when looking at the pounds of rechargeable batteries collected by Call2Recycle in 2010 (per 100,000 people), Minnesota had the highest collection rate of all states with mandatory EPR programs*.

As eWaste regulations and associated collection programs become more prominent, Call2Recycle believes that rechargeable batteries, specifically Lithium Ion batteries found in laptop computers, are remaining with the products and are being managed through a different waste stream thus contributing to the gap between battery sales and the collection rate. Given the residual value some battery chemistries contain and the labor involved in separating the product from the battery, some eWaste companies remain reluctant to implement a battery management program, such as Call2Recycle. Nevertheless, Call2Recycle continues to diligently work to expand its collection network to eWaste recyclers to ensure rechargeable batteries are not only accounted for in its collection data, but are also properly managed through recycling.

REMAINDER OF REPORT

The remainder of this report provides specifics associated with battery collections, including types of materials collected and the volumes received by participating collection channels. Additionally, we encourage you to download the Call2Recycle, Inc. Annual Report for both [2011](#) and [2012](#), which provides specifics on our public education efforts, as well as audited financial reports.

*[Source: *Extended Producer Responsibility in the United States: Full Speed Ahead?*, Journal of Industrial Ecology April 2013, [Volume 17, Issue 2](#), pages 175–185, Authors: Jennifer Nash and Christopher Bosso]

2011 AND 2012 COLLECTION STATISTICS

Call2Recycle® Collection Summary for Minnesota: 2011 and 2012

Rechargeable Battery Collection Summary

	Rechargeable Collections (Pounds)		
	2012	2011	% Change
Rechargeable Battery Collections	163,842	164,138	-0.2%
Rechargeable Pounds Per 1,000 persons	30.5	30.8	-1%

Program Collections by Material Type

	Collections (Pounds)		
	2012	2011	% Change
Total Collections	172,915	169,677	2%
Rechargeable Battery	163,842	164,138	0%
Primary Battery	7,979	4,555	75%
Cellphone	1,095	984	11%

Battery Collections by Chemistry

	Collections (Pounds)		
	2012	2011	% Change
Rechargeable Battery	163,842	164,138	-0.2%
Nickel Cadmium (Ni-Cd)	88,287	82,685	7%
Lithium Ion (Li-Ion)	27,955	33,666	-17%
Small Sealed Lead Acid (SSLA/Pb)	26,839	25,569	5%
Nickel Metal Hydride (Ni-MH)	20,761	22,219	-7%
Primary Battery	7,979	4,555	75%
Alkaline	7,127	2,793	155%
Lithium	851	1,762	-52%
Mercury	1		0%
Zinc Carbon(mercury)	0		0%
Cellphone	1,095	984	11%
Cellphone	874	830	5%
Cellphone Accessories	221	154	44%

2011 AND 2012 COLLECTION STATISTICS CONTINUED

Call2Recycle® Collection Summary for Minnesota: 2011 and 2012

Rechargeable Battery Collections by Channel

	Rechargeable Battery Collections (Pounds)		
	2012	2011	% Change
Government	64,010	51,302	25%
Retail	51,119	52,270	-2%
Business Services	40,488	47,923	-16%
Manufacturing	8,225	12,643	-35%

	Participation		
	2012	2011	% Change
# of Collection Locations*	648	697	-7%

* Collection locations sending in receipts into the Call2Recycle Program

2011 AND 2012 ESTIMATED BATTERY SALES

Estimated Battery Sales and Collection Rate

	2011	2012
Sales: Rechargeable Batteries	2,182,950 lbs.	2,209,146 lbs.
Collection Rate	7.5%	7.4%

CALL2RECYCLE® SUPPORTING COMPANIES

The following 213 companies support Call2Recycle and are committed to responsible battery recycling.

- 3M COMPANY - OH&ES DIVISION
- ACCESS BATTERY & POWER SYSTEMS
- ACER SERVICES CORP
- ADVANCED BATTERY SYSTEMS, INC.
- ADVANCED ELECTRONICS ENERGY LIMITED
- AGILENT TECHNOLOGIES
- AIR STRUCTURES INTERNATIONAL, UK
- ALEXANDER TECHNOLOGIES EUROPE, LTD
- ALLIED INTERNATIONAL/ALLIED TOOLS
- ALLTRADE TOOLS LLC
- AMBIENT CORP.
- AMERICAN LAWNMOWER COMPANY
- AMERICAN TOPPOWER INC.
- AMPERGEN
- ANTON/BAUER INC.
- APPLE, INC.
- APPLIED POWER INC.
- ARROW FASTENER CO., LLC
- AVED GENERATIONS ELECTRONICS
- AVEX ELECTRONICS CORPORATION
- BATTERY SPECIALTIES
- BISSELL HOMECARE, INC.
- BLACK & DECKER CORPORATION
- BLOUNT, INC.
- BMR GROUP INC.
- BOREN ELECTRONICS CO., LTD.
- BOSE CORPORATION
- BRAUN, A DIVISION OF P&G
- BROTHER INTERNATIONAL CORPORATION
- BYD BATTERY (USA) CO.
- CANADIAN SATELLITE RADIO
- CANADIAN TIRE
- CANON U.S.A., INC.
- CAR-GO BATTERY CO.
- CASIO AMERICA, INC.
- CELL-CON INC.
- CENTURY OPTRONIC, INC.
- CHERVON NORTH AMERICA/MASTERCRAFT MAXIMUM
- CISCO SYSTEMS, INC.
- COLEMAN COMPANY, INC
- COLUMBIA SPORTSWEAR COMPANY, INC
- CONAIR CORPORATION
- COVIDIEN
- DANTONA INDUSTRIES
- DELL INC.
- DIGI-KEY CORPORATION
- DONGGUAN GOLDEN CEL BATTERY CO.
- DOUGLAS QUICKUT
- DR. BATTERY
- DURACELL a Division of P & G
- DURACELL CANADA INC.
- EASTMAN KODAK COMPANY
- ECHELON, INC.
- ELECTROLUX HOME CARE PRODUCTS
- ENERCO GROUP, INC.
- ENERGY SALES, INC.
- ENERSYS DELAWARE INC.
- EPSON AMERICA, INC.
- ESI CASES & ACCESSORIES
- ETICA BATTERY INC.
- EVEREADY BATTERY COMPANY, INC. (ENERGIZER)
- EXACT BATTERY
- EXCELL BATTERY COMPANY
- FDK AMERICA, INC.
- FEDCO ELECTRONICS
- FEIN POWER TOOLS, INC
- FESTOOL
- FINISH THOMPSON INC.
- FLYING DRAGON DEVELOPMENT LTD.
- FREIGHT SECURITY NET
- FRESHBATTERY.COM
- FRONTROW
- FUJIFILM HOLDINGS AMERICA CORP.
- FUNAI CORPORATION
- GARMIN INTERNATIONAL, INC.
- GENERAL DYNAMICS ITRONIX
- GERBING'S HEATED CLOTHING
- GIANT TIGER STORES LIMITED
- GILLETTE, A DIVISION OF P&G
- GLOBAL TECHNOLOGY SYSTEMS, INC.
- GOLD PEAK INDUSTRIES
- GOLDEN CEL BATTERY CO. LTD.
- GREATBATCH, LTD.
- GREEN SMOKE, INC.

CALL2RECYCLE® SUPPORTING COMPANIES CONTINUED

- GREENRON ENERGY LIMITED
- GS BATTERY (USA) INC.
- HENAN HUANYU POWER SOURCE CO., LTD.
- HEWLETT-PACKARD COMPANY
- HILTI (CANADA) CORPORATION
- HILTI, INC.
- HITACHI - KOKI U.S.A. LTD.
- HITACHI-KOKI CANADA CO.
- HOBBICO - HOBBY CORPORATION OF AMERICA
- HONG KONG HIGHPOWER TECHNOLOGY CO., LTD
- HOOVER COMPANY (TTI FLOOR CARE NORTH AMERICA)
- HOT-SHOT PRODUCTS CO., INC.
- HOUSE OF BATTERIES
- HTC CORPORATION
- ICOM AMERICA, INC.
- IDX SYSTEM TECHNOLOGY
- ILLINOIS TOOL WORKS
- INDUSTRIAL BATTERY SERVICE, INC.
- INDUSTRIAL SCIENTIFIC CORPORATION
- INSPIRED ENERGY, LLC
- INTEC INDUSTRIES CO. LTD.
- INVOX HARDWARE LIMITED
- IOTTIE
- ITECH "INTELLEAGENT TECHNOLOGIES"
- ITO CO., LTD.
- JEAN COUTU GROUP INC.
- JIANGSU HIGHSTAR BATTERY MANUFACTURING CO., LTD
- JLG INDUSTRIES, INC.
- JVC AMERICAS CORP.
- KENSINGTON COMPUTER PRODUCTS GROUP, A DIVISION OF ACCO BRANDS USA LLC
- KENWOOD AMERICAS CORPORATION
- KING OF FANS
- L'MAGE HOME PRODUCTS INC.
- LEICA CAMERA, INC.
- LENMAR BATTERY SOLUTIONS
- LENOVO (UNITED STATES) INC.
- LEXEL BATTERY (SHENZHEN) CO., LTD.
- LG ELECTRONICS, INC.
- LOBLAW INC
- MAG INSTRUMENT, INC.
- MAKITA CANADA INC.
- MAKITA U.S.A., INC.
- MAX CO., LTD.
- MAXELL CORPORATION OF AMERICA
- MCNAIR TECHNOLOGY CO., LTD.
- MEASUREMENT LTD., INC.
- MEDTRONIC PHYSIO-CONTROL CORP.
- MERITool LLC
- MILWAUKEE ELECTRIC TOOL CORPORATION
- MOTOROLA, INC.
- NEC CASIO HITACHI MOBILE
- NEPTUNE TECHNOLOGY GROUP, INC.
- NIKON CANADA INC.
- NOKIA
- NORELCO CONSUMER PRODUCTS CO.
- NORMARK INNOVATIONS
- NOVATEL WIRELESS
- NYLUBE PRODUCTS COMPANY, LLC
- OKI DATA AMERICAS, INC.
- OLYMPUS AMERICA, INC.
- ONLIVE, INC.
- OOMA, INC.
- OPTEX, INC.
- ORAL-B, A DIVISION OF P&G
- PALLADIUM ENERGY
- PANASONIC CORPORATION OF NORTH AMERICA
- PANTECH CO. LTD.
- PASLODE
- PERSONAL COMMUNICATION DEVICES, LLC (PCD)
- PHILIPS CONSUMER ELECTRONICS
- PHOTO CONTROL CORPORATION
- PHYSIO-CONTROL CORPORATION
- PORTACELL USA LLC
- POSITEC TOOL CORPORATION
- POWER PRODUCTS
- POWERGENIX
- PRO TEAM THE VACUUM COMPANY
- PROCTER & GAMBLE
- PROFESSIONAL TOOL PRODUCTS, LLC
- PROGRESSIVE TECHNOLOGIES, INC.
- PROMARK ELECTRONICS
- QUANTUM INSTRUMENTS INC.
- QUICKIE MANUFACTURING CORPORATION
- RADIOSHACK
- RAYOVAC CORPORATION, A DIVISION OF SPECTRUM BRANDS

CALL2RECYCLE® SUPPORTING COMPANIES CONTINUED

- REALFLEET CO., LTD.
- REMINGTON, DIVISION OF SPECTRUM BRANDS, INC.
- RESEARCH IN MOTION LIMITED
- RESISTACAP, INC.
- RIDGE TOOL COMPANY (RIDGID)
- RKI INSTRUMENTS
- ROBERT BOSCH TOOL CORPORATION
- RRC POWER SOLUTIONS INC
- RYOBI NORTH AMERICA, INC.
- SAFT AMERICA INC.
- SAMSUNG
- SANYO ENERGY (U.S.A.) CORPORATION
- SATO AMERICA INC
- SEIKO INSTRUMENTS USA, INC.
- SENSIDYNE/GILIAN
- SHARP ELECTRONICS CORP
- SHENZHEN BOFUNENG BATTERY CO., LTD.
- SHENZHEN LTT ELECTRONICE CO., LTD.
- SHOPPERS DRUGMART INC.
- SIGMA CORPORATION
- SIRIUS XM RADIO INC.
- SNAP-ON INCORPORATED
- SONY ELECTRONICS INC
- SONY OF CANADA LTD
- SOUTHWICK TECHNOLOGIES
- SPECTRUM BRANDS, INC.
- SRAM LLC
- STAR MICRONICS CO., LTD.
- STIHL INCORPORATED
- STIHL LIMITED
- STRYKER
- SUNBEAM PRODUCTS
- SWISSVOICE
- TECHNICAL POWER SYSTEMS, INC.
- TECHTRONIC INDUSTRIES CO., LTD.
- TECHTRONIC INDUSTRIES GMBH
- TERRALUX
- TEST RITE PRODUCTS CORP.
- TEXAS INSTRUMENTS EDUCATION TECHNOLOGY
- THE FURUKAWA BATTERY CO., LTD.
- THE SOURCE
- TNR TECHNICAL INC. / THE BATTERY STORE
- TOSHIBA AMERICA, INC.
- TRAXXAS
- TREK BICYCLE CORPORATION
- TTEK ASSEMBLIES INC.
- ULTRALIFE CORPORATION
- UNIDEN AMERICA CORPORATION
- UNISYS
- UNIVERSAL POWER GROUP
- VARTA BATTERIES INC.
- VENOM POWER
- VERNIER SOFTWARE & TECHNOLOGY
- VTECH COMMUNICATIONS LTD.
- WACOM TECHNOLOGY CORP.
- WAHL CLIPPER CORP.
- WALMART CANADA CORPORATION
- WINTONIC BATTERY & MAGNET CO. LTD.
- WOHLER USA, INC.
- XPLORE TECHNOLOGIES CORP.
- YIYANG CORUN BATTERY CO., LTD.
- YUASA BATTERY INC.