



MINNESOTA BATTERY STEWARDSHIP REPORT

REPORTING PERIOD: 2015 & 2016

Prepared for:

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MINNESOTA RECHARGEABLE BATTERY STEWARDSHIP REPORT – 2015 & 2016

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Battery Recycling Collections

Over the past 12 months, batteries and cell phones collected by Call2Recycle, Inc. in Minnesota increased compared to 2015. In 2015, Call2Recycle collected 162,796 lbs. of cell phones and batteries. In 2016, that number increased to 327,540 lbs. – an increase of 101%. Below please find the specific recycling collection data by battery chemistry (Figure 1) and by industry sector (Figure 2):

FIGURE 1

Statewide Battery & Cellphone Collections				
Material Type	Material Name	2015	2016	% Chg
Rechargeable	Nickel Cadmium (Ni-Cd)	69,153	79,767	15%
Rechargeable	Small Sealed Lead Acid (SSLA/Pb)	30,105	36,784	22%
Rechargeable	Lithium Ion (Li-Ion)	36,751	32,247	-12%
Rechargeable	Nickel Metal Hydride (Ni-MH)	10,131	12,903	27%
Primary	Alkaline	12,288	162,867	1225%
Primary	Lithium	3,501	2,397	-32%
Cell Phone	Cell Phone	824	556	-33%
Cell Phone	Cell Phone Accessories	43	19	-56%
Total Battery & Cell Phones		162,796	327,540	101%
Total Rechargeable Battery		146,140	161,701	11%

FIGURE 2

Battery Collections by Industry Sectors			
Industry	2015	2016	% Chg
Retail/Wholesale	48,580	44,598	-8%
Municipality	47,767	254,843	434%
Manufacturing	16,289	11,796	-13%
Business	29,658	4,837	-84%
Public Agency	19,643	17,064	-13%

Also, below please find the estimated number of pounds of ALL rechargeable batteries sold (includes Call2Recycle, Inc. Stewards and Non-Stewards) into the State (Figure 3). These estimates were part of a May 2016 document released by Call2Recycle, Inc. called, “US Consumer Battery Sales & Available for Collection - 2014-2020.”

FIGURE 3

Estimated Rechargeable Batteries Sold into State & Pounds Recovered		
Industry	2015	2016
Estimated Pounds of ALL Rechargeable Batteries Sold into the State	3,095,000	3,165,000

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Battery Recycling “Downstream”

Batteries collected from Minnesota residents are transported to sorting facilities where they are separated by battery chemistry and then sent to the appropriate specialty processors. These processors extract material to be used in the manufacturing of new products. Below please find the “physical flow” (Figure 4) of where batteries go after they are dropped off at a Call2Recycle participating collection site.

FIGURE 4



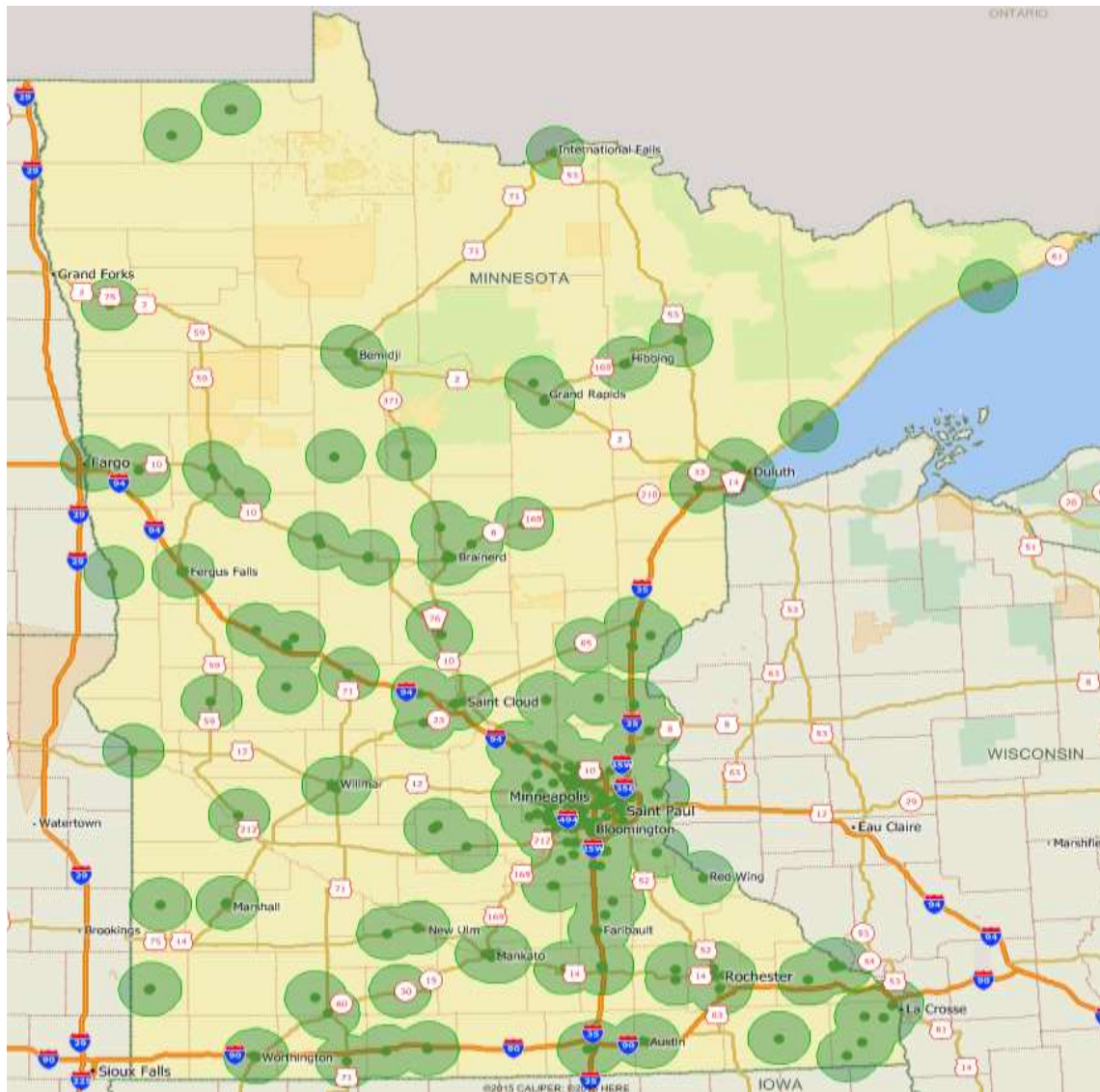
Waste products are responsibly and safely disposed of according to Responsible Recycling (R2) and Basel Action Network (BAN) standards. Cellphones are either refurbished and resold or recycled, with the proceeds used to fund the cellphone collection program and educational outreach.

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Public Recycling Site Accessibility

To optimize the percentage of the U.S. population that has access to battery and cell phone recycling through the Call2Recycle, Inc. collection site network, Call2Recycle, Inc. has developed an standard for measuring public recycling accessibility, specifically for batteries and cellphones. This accessibility rate measure the percent of a state’s population that lives within a 10-mile radius of an available Call2Recycle, Inc. drop off location. By year’s end, Call2Recycle, Inc. achieved a 85% accessibility rate in Minnesota. Please see the adjacent map (Figure 5) for specific details.

FIGURE 5



Collection Network	
Site Type	# of Sites
# of Active Public Sites	301
# of Active Private Sites	278
Public Accessibility Rate	85%

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Web Site Statistics

Call2Recycle's outreach efforts focus on driving consumers to our interactive web site (Figure 6) that not only serves as an educational tool to encourage consumers to recycle batteries but also provides local sites where they can conveniently recycle batteries.

One of the most viewed sections of the web site is the public drop off site locator tool (Figure 7). This tool allows Minnesota residents to enter their City/Town or zip code to find the nearest Call2Recycle participating site to recycle their used rechargeable batteries.

In 2016, the locator tool was used 34,888 times by Minnesota residents to find a Call2Recycle drop-off location.

FIGURE 6

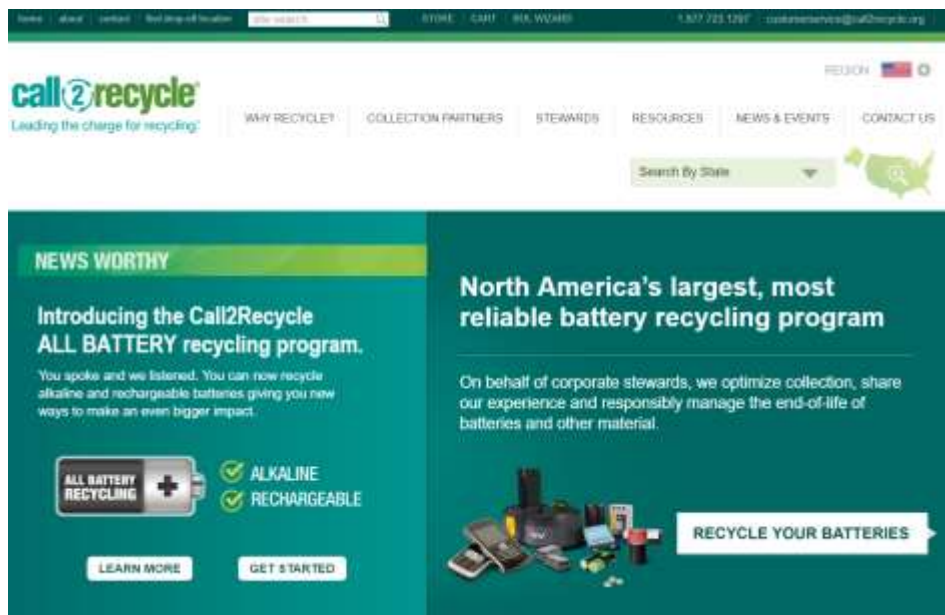
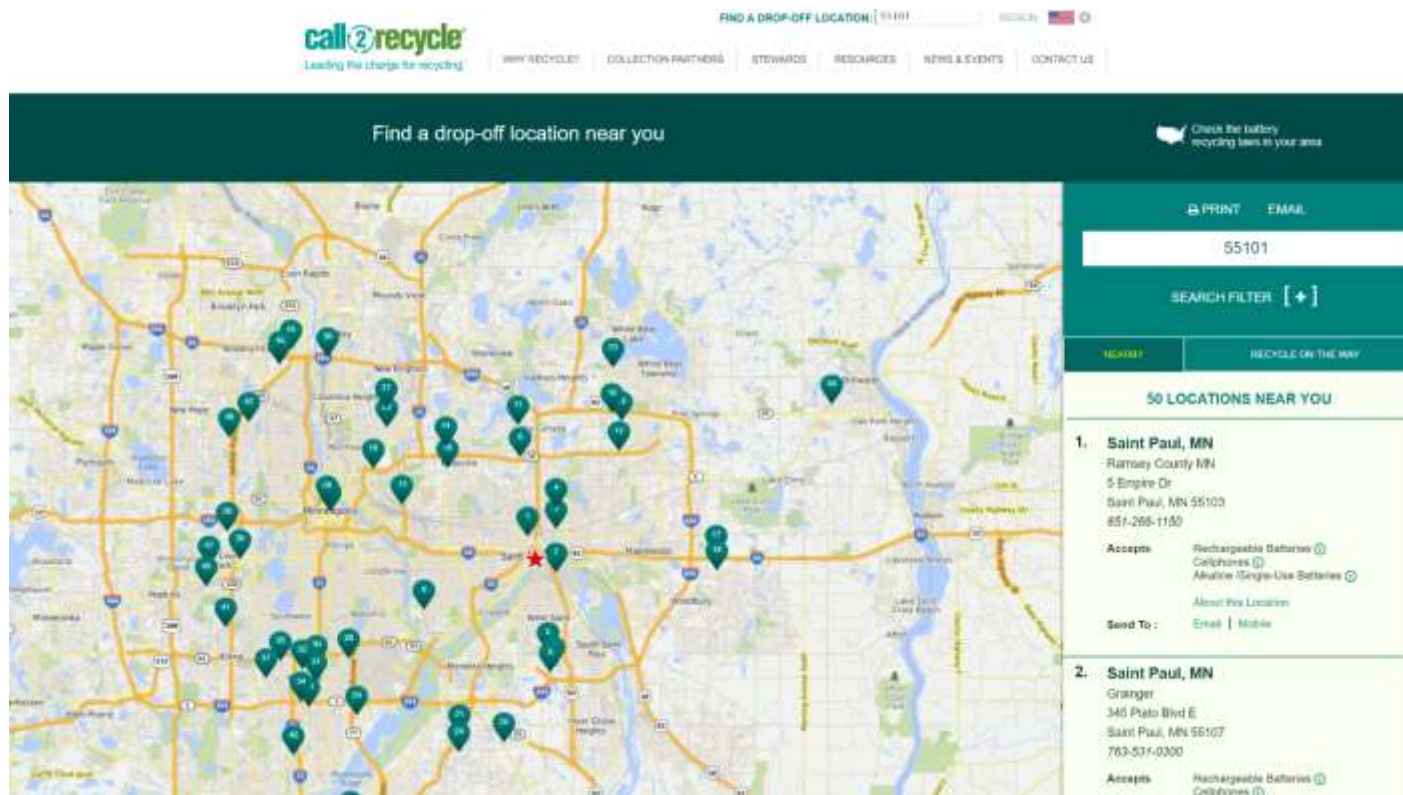


FIGURE 7



www.call2recycle.org

Outreach and Customer Service Activity

Call2Recycle's Customer Service Team fields hundreds of daily inquiries from collection sites and consumers across the United States and Canada. Some of these inquiries are from the 1,200+ private and public battery collection sites in Minnesota.

In 2016, Call2Recycle's Customer Service Team fielded the following inquiries from Minnesota –

- Customer Requests Originating from Collection Sites/Consumers – 277
- New Collection Site Enrollments – 39
- Collection Boxes sent to Collection Sites – 3,397
- Collection Boxes returned from Collection Sites – 2,895

FIGURE 8 – COLLECTION SITE POSTER

cal2recycle
Leading the charge for recycling.

Recycle Rechargeable Batteries **HERE**

Make a difference by recycling used rechargeable batteries today.

ITEMS ACCEPTED FOR RECYCLING:
Rechargeable batteries weighing 11lbs. or less each.
No wet-cell, damaged or defective batteries accepted.

- Lithium Ion
- Nickel Cadmium
- Small Sealed Lead Acid
- Nickel Metal Hydride
- Nickel Zinc
- Cellphones of any make, model or age

For more information
visit call2recycle.org or call 877.723.1297

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Active Call2Recycle, Inc. Industry Stewards

3M Automotive Aftermarket Division
3M Commercial Solutions Division (CSD)
3M Constrctn & Home Imprv
3M Personal Safety Division
Accell North America
Ace Hardware Corporation
Acer America Corporation
Advanced Battery Systems
Aero Design, Inc
Agilent Technologies
Allied Intl/Allied Tools
Alltrade Tools LLC
Alpha Source, Inc.
Amazon.com, Inc.
American Lawn Mower Co
American Toppower
Anton/Bauer
APC - Schneider Electric
Arris Group, Inc
Asus Computer International
Audio Enhancement, Inc.
Audio Video D.G. (Gestion Quemar)
Axiom Mobile Group
Baccus Global
barnesandnoble.com, LLC
Batteries Dixon inc.
Batteries Du Quebec
Batteries Illimites
Batteries St-Eustache
Battery Specialties
Bayco Products
Bayer Healthcare
Belkin International, Inc.
Best Buy Canada Ltd.
Best Buy Co., Inc.
BionX International
Bissell Homecare, Inc
BlackBerry Limited
BMW Group Canada
Bose Corporation
Brother International
Buropro Citation inc.
Bushnell, Inc.
BYD Company Limited
Canac-Marquis Grenier Ltee
Canadian Tire Corporation, Ltd
Canon Canada Inc
Canon USA Inc
Casio America, Inc.
Cell-Con Inc
Century Optronic Inc.
Changzhou Globe Tools Co. Ltd.
Chervon HK Limited
Chervon HK Limited/The Home Depot
Chervon HK Lmtd/The Home Depot Canada
Chrysler Canada Inc.
Cisco Systems Inc.
CLD/Équipements Confortek
Cleva North America/LawnMaster
Cognex Inc.
Coleman Company
Conair Corporation
Costco Wholesale Canada
Couche-Tard Inc.
CTE Energy Co., Ltd.
Cybertron International
DANTONA INDUSTRIES/ULTRALAST
Deere & Company (John Deere)
Delhaize America (Hannaford Suprmkts)
Dell Canada Inc.
Dell Inc
Deltran USA LLC
Digi-Key Corporation
Distributions Johnson Inc
DLG (Shanghai) Electronic
Do it Best Corp.
Dollar General Corporation
Dollarama L.P.
Dorcy International
Duracell Canada Inc
Duracell US Operations
Eaton Corporation
Echo Incorporated
Electro-5 Inc.
Enerco Group Inc.
Energizer Canada Inc
Energizer Holdings, LLC.
Energizer Power Systems
Energy Sales
EnerSys Delaware Inc.
Epson America, Inc.
Esselte Corporation

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Evergreen (C.P.) USA Inc
EZsmart Gutter Cleaner, LLC
Familiprix Inc
Family Dollar Stores of NY, Inc
FDK AMERICA
Fedco Electronics, Inc.
Ferno - Washington, Inc.
Finish Thompson, Inc.
Flying Dragon Development Ltd.
Ford of Canada
Fourniture de Bureau Denis
FujiFilm Holdings America Corp
Fujitsu America
GammaTech Computer Corporation
Garmin International, Inc
GE Healthcare Canada, Inc.
General Motors of Canada Limited
General Wireless Operations
Getac Inc.
Giant Tiger Stores Limited
Gibson Innovations USA, Inc.
GiiNii Tech Corporation
Global Technology Systems, Inc
Gold Peak Industries (NA), Inc
GP Batteries
GRACO, Inc.
Gradus Group
Grand & Toy
Greatbatch Inc
GreenSmoke, Inc.
Groupe Blais inc.
Groupe BMR Inc.
GS Battery (USA) Inc.
Harris Corporation
HD Supply Holdings, Inc.
Hewlett Packard Enterpris
Hilti Canada Corporation
Hilti, Inc.
Hitachi Koki Canada Co.
Hitachi Koki USA Ltd
Hobbico, Inc
Home Hardware Stores Limited
HoMedics
Honda Canada
Honeywell International Inc.
House of Batteries
HP Inc.
HTC Corporation

Huawei Device USA. Inc
Husqvarna AB
Hyundai Auto Canada Corp
IDX System Technology Inc
Illinois Tool Works
IMA TEST Customer
IMA Test Steward
Indigo Books and Music Inc
Industrial Battery Service Inc
Ingersoll Rand
Inspired Energy, LLC
Intec Industries Co. Ltd.
Intermetro Industries Corp
Interstate Batteries Inc.
Invacare Corporation
Invox Hardware Limited
iRobot Corp.
iTech
Jasco Products Company
Jiawei Technologies (USA) Ltd.
JKH Health Co., Ltd.
JLG Industries Inc
JVCKENWOOD USA Corp
KAN Battery Co., Ltd
Karcher North America
Keysight Technologies
Kia Canada Inc.
Konica Minolta
Kwonne Electrical Products, LTD
Laliberté Électronique
Le Groupe Jean Coutu
Lego Group
Leica Camera Inc
Lenmar Enterprises, Inc.
Lenovo (Canada) Inc.
Lenovo (United States) In
Les magasins Korvette
Les Variétés P. Prud'homme Inc
LEXEL BATTERY CO LTD
LG Electronics Canada, Inc.
LG Electronics MobileComm USA
L'Image Home Products Inc. (IHP)
Loblaws Inc.
Logic Technology Development
LOGITECH INC.
Mag Instrument, Inc
Magnacharge Battery Corpo
Maha Energy

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Makita Canada, Inc.
Makita USA
Mattel, Inc.
Maxell Corporation of America
McKesson Canada
McMahon Distrib Pharmaceutique
Meritool LLC
Metabo Corporation
Metro Richelieu Inc
Michaels Stores Inc.
Microsoft
Midland Radio Corporation
Miller Mfg Co
Milwaukee Electric Tool Corporation
Mitsubishi Motor Sales of Canada, Inc.
Moshi
Motorola Mobility, LLC
Motorola Solutions, Inc
MTD Products Inc
myCharge
National Battery
National Power Corp
NEC Corporation of America
Neptune Technology Group Inc.
Netgear, Inc.
Nikon Canada Inc
Nippon Primex Inc.
Nissan Canada Inc.
Noble Gift Packaging Inc
Normark Innovations Inc.
Novatel Wireless Inc
Novexco
NU MARK LLC
Nylube Products Company LLC
O2COOL, LLC
Oculus VR LLC
Olympus Corp of the Americas
OOMA INC
Oracle America, Inc.
Original Power
Palladium Energy
Panasonic Canada Inc
Panasonic Corporation
Pantech Co Ltd
Pelican Products, Inc.
Philips Consumer Electron
Philips Electronics LTD
Philips Lighting
Plantronics, Inc.
PLR IP Holdings, LLC
Polycom, Inc.
Positec Tool Corporation
POWER PRODUCTS
Powermax USA
ProTeam, Inc.
Quality One Wireless
Quebec Membre
Rapport, Inc.
Reckitt Benckiser
Resistacap
Richpower Industries, Inc.
Ridge Tool Company (RIDGID)
Rite Aid
RKI Instrument, Inc
Robert Bosch Inc (Canada)
Robert Bosch Tool Corporation
RONA Inc.
Royal Consumer Information Products, Inc.
Rozon Batteries Inc.
RRC POWER SOLUTIONS
SAIL plein-air inc.
Samsung Electronics Co
SANYO Energy (USA) Corp.
Scosche Industries
Scotts Canada Ltd.
SDI Technologies Inc
Sears Canada Inc.
Senco Products, Inc
Sensidyne LP
Sharp Electronics Corporation
Sharp Electronics of Canada
SHIMANO
Shoppers Drug Mart Inc
Sigma Corporation
Sinopower Technology (HK) Ltd
Snap-on Inc
Sobeys Quebec Inc.
Sony Electronics, Inc
Sophos Ltd
Southern Telecom, Inc.
SOUTHWICK TECHNOLOGIES INC
Southwire Company
Spectrum Brands
SRAM, LLC
Stanley Black & Decker Canada
Stanley Black & Decker, Inc.

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Staples Canada, Inc.

Stihl Incorporated

Stihl Limited

StorTronics

Strand Europe Ltd

Streamlight, Inc.

Summer Infant, Inc.

Surefire, LLC

Suzuki Canada Inc.

SY KESSLER SALES, INC

Tacony Corporation

Technical Power Systems Inc.

Techtronic Industries GmbH

Techtronic Trading Ltd

Test Rite Products Corp

Texas Instruments Inc

The Gillette Co/Braun Div

The Gillette Co/Oral-B Div

The Home Depot of Canada, Inc.

The Source (Bell) Electronics Inc.

The Toro Company

TNR Technical

TomTom Inc.

TOSHIBA AMERICA

Toshiba of Canada Limited

Toyota Canada Inc.

Toys R Us Canada, LTD

Toys R Us, Inc.

Tractor Supply Company

Transcosmos America Inc.

Traxxas L.P.

Trek Bicycle Corporation

True Value Company

TTEK ASSEMBLIES INC

TTI (Macao Comm OfSh) Ltd

UAP Inc

ULTRALIFE CORPORATION

Uniden America Corporation

Uniprix Inc

Variétés B. Desmarais 1992 Inc

VARTA Microbattery Inc.

Venom Power

Vera Bradley

Vernier Software & Technology

Vibratex, Inc.

Vizio Inc.

VTech Telecommunications Ltd

WACOM TECHNOLOGY CORP

Walmart Canada

WATER PIK, INC.

WOHLER USA

Xplore Technologies Corp.

Zebra Technologies Enterprise Corp

Zippo Manufacturing Company