# 2013 PRODUCT STEWARDSHIP ANNUAL REPORT

INTERSTATE BATTERY SYSTEM OF CANADA • BRITISH COLUMBIA





# INTERSTATE BATTERIES OF CANADA ANNUAL STEWARDSHIP REPORT FOR BRITISH COLUMBIA

**January 1, 2013 – December 31, 2013** 

Interstate Battery System of Canada, Inc. (IBSC) is a wholly-owned subsidiary of Interstate Battery System International, Inc. which is headquartered in Dallas, Texas. This annual report will cover scrap lead acid battery recycling activity in British Columbia for the calendar year of 2013.

The IBSC Stewardship Plan for the recovery of scrap lead acid batteries was approved by the British Columbia Ministry of Environment on August 17, 2011. The Minister's letter asked IBSC to provide non-financial information according to The Environmental Management Act Recycling Regulation (BC Reg 449/2004) which would include information from the following Sections:

- BC Reg 449/2004, Section 8 (2) (b) asks us to identify location of collection facilities, and any changes in the number and location of collection facilities from our previous report.
- BC Reg 449/2004, Section 8, (2) (e) asks IBSC to provide the total amount of the producer's product sold and collected and our recovery rate.
- BC Reg 449/2004, Section 8, (2) (b) & (e) ask us to report on the performance for the year in relation to targets in the approved Stewardship Plan.

#### EDUCATIONAL MATERIALS AND STRATEGIES

Pursuant to BC reg. 449/2004, the Environmental Management Act Recycling Regulation, Section 8 (2), each of our three whole in the Province of British Columbia made efforts to educate the general public and let our customers know about our scrap battery recycling program.

# **Daily Recycling activities**



Daily, Interstate receives spent lead-acid batteries both at our warehouses and by picking them up at our network of retail dealers across the province of British Columbia. The image above is of one of our Route trucks used for delivering new batteries and recovering scrap batteries, so it acts as a moving bill board showing the Interstate Brand across the province.

#### **Special Recycling Events**

Interstate Battery of Coastal British Columbia in Vancouver, BC again sponsored "Spring Clean-up Day" in the town of Collwood where residents could drop their batteries off for free at the Public Works Yard. All spent lead-acid batteries received in Collwood were recycled. Area residents already know that Interstate collects scrap batteries daily at our retail dealer and gets them properly recycled.

Interstate Battery of Coastal British Columbia continues to offer a fundraising program to area schools and their sports teams to be paid for scrap lead acid batteries brought to the Interstate warehouse.

# Training in Handling and Preparation for shipping of spent batteries:

Intestate employees train our retail battery dealers about the proper handling of spent lead-acid batteries.

## Signs and Print Advertising:

Interstate of Eastern British Columbia posts signs in the front windows of both the Kelowna warehouse. Signs are also provided to the landfills that recycle batteries through Interstate. At all of the Bottle Recycling Depots there are signs so that when residents bring in their bottles and cans for recycling they can also bring in their scrap SLA batteries to be recycled. Additionally, advertising is purchased in all the various Yellow Pages in the region.

At Interstate Batteries in Langley, our distributor provides metal signs at our warehouse to promote the recovery of scrap lead-acid batteries. Ads are published in the Yellow Pages and on the radio about battery recycling. There is information about proper battery recycling on the Interstate Batteries website which is www.interstatebatteries.com. This year, Interstate Batteries advertised on Craig's List in an effort to encourage people to take scrap batteries to the Interstate Batteries warehouse distributorship for proper recycling.

Residents of British Columbia interested in learning more about lead-acid battery recycling can also go to the Ministry of the Environment's web-page to find out more about Interstate's program. The web address is <a href="http://www.env.gov.bc.ca/epd/recycling/batt/index.htm">http://www.env.gov.bc.ca/epd/recycling/batt/index.htm</a>

#### **BATTERY COLLECTION**

In order to comply with Section 46 of the British Columbia Hazardous Waste Regulations, Interstate Batteries' policy is to <u>not</u> accept any spent lead-acid batteries in a quantity greater than 1,000 kg that are shipped to any of our three warehouses in BC <u>unless</u> it is accompanied by a British Columbia-issued Waste Manifest. Further, our policy includes not accepting any spent lead-acid batteries which are not delivered by a Licensed Transporter of Hazardous Waste per Section 45 of the British Columbia Hazardous Waste Regulations.

(Non-financial Information Requirement: BC Reg 449/2004, Section B (2) (b): the location of its collection facilities and any changes in the number of collection facilities from the previous report)

Interstate Batteries of Canada continues to operate three collection facilities in British Columbia.

Collection Facility	Address
Interstate Batteries of Eastern British Columbia	311 Banks Road
	Kelowna, BC V1X-6A1
Interstate Batteries of British Columbia	20148-102 <sup>nd</sup> Ave.
	Langley, BC V1M-3E5
Interstate Batteries of Coastal British Columbia	1651 Old Island Highway
	Victoria, BC V9B-1H9

#### **BATTERY MANAGEMENT**

(Non-financial Information Requirement: BC Reg 449/2004, section 8 (2) (d) – A description of how the recovered product was managed in accordance with the pollution prevention hierarchy.)

Interstate in British Columbia collects many more scrap batteries than new batteries sold or distributed. Interstate collects scrap batteries in the cities as well as in remote locations such as Gibsons, Sechelt, Powell River, Lund, Liard River, Fort Nelson, Nelson Forks, and Kitimat. Each day, Interstate delivers new lead acid batteries by truck to retail battery dealers in British Columbia. Normally, a spent lead-acid battery is traded in each time a new battery is sold. Additionally, our drivers collect, and in some cases buy, additional scrap batteries throughout the province which helps remove the scrap battery cores (hazardous material) from the environment.

Customers in urban and more populated cities and towns are serviced by our trucks every two to three weeks, while more remote locations are serviced every three to six weeks. The scrap batteries retrieved at these locations are returned to one of the Interstate warehouses in the province where they are inspected and properly packaged according to our own Green Standard and Canadian regulations. Within a week or two, the spent batteries are transported to the Cominco secondary lead smelter in Trail, BC or sent back to our manufacturer, Johnson Controls.

Interstate trucks carrying batteries will visit more than 1,000 Interstate Batteries retail dealers located throughout the province. New batteries are on consignment at businesses that sell the batteries. When a new Interstate Battery is sold, a spent battery is normally traded in so that it can be recycled. Our computer software tracks: (1) how many new batteries were sold throughout the province, (2) how many scrap batteries were picked up and (3) how many of the batteries picked up are recharged and sold as a used battery. The lead and plastic from the scrap batteries picked up are used to manufacture new batteries.

Before the majority of the scrap batteries are sent back to smelters for recycling, our trained personnel examine each battery to see if it could be recharged and sold as a used battery. BC Reg 449/2004 Section 5 (3) (d-f) suggests the product should be reused first, before it is recycled. Some recharged scrap batteries can be sold as used batteries that may last another two to four of years before eventually having to be recycled at an approved smelter. This year we are able to provide a summary of the volume of scrap batteries we recovered that were recharged and sold as used batteries at our warehouses (See Enclosures).

Being able to reuse some of the scrap batteries by recharging them and selling them as Used or "Econo" batteries keeps the batteries out of the recycling process a little longer, thus meeting BC Reg. 449/2004 Section 8 (2) (d) showing recovered product being reused before sending for recycling.

#### INTERSTATE'S ENVIRONMENTAL MANAGEMENT SYSTEM

Since Interstate Batteries was founded 64 years ago, we have viewed battery recycling as important a part of our business as the sale of new batteries.

Interstate is committed to environmental stewardship and to operating a battery recycling program which complies with all local, provincial, national, and International environmental regulations.

According to the Ministry of Environment's requirement to have a third party non-financial audit of Interstate's Stewardship Report, Interstate Batteries retained the services of BDO in British Columbia to review our records and gain assurance that the scrap batteries run through our program meet the provincial requirements. Please see the enclosures for a copy of the BDO report.

# **Training**

All employees of Interstate Batteries who touch lead-acid batteries as a part of their work responsibilities are given initial and recurrent hazardous materials training both online and on-the-job. This training includes proper transportation, battery handling, battery storage, safety, and spill cleanup methods and it is part of our EHS continuous improvement program.

### **Operations**

Interstate achieves this commitment to environmental stewardship by systematically reducing its environmental impacts through pollution prevention, regulatory compliance and continuous improvement. In order to manage this commitment, Interstate has developed a multi-faceted Environmental Management System (EMS) which we call "The Green Standard". This system encompasses every aspect of our battery operations.

This commitment is embodied by the following actions:

- Implementation of programs and procedures with intent to meet or exceed all applicable environmental laws and regulations
- Continual improvement of our environmental performance through proactive environmental management and self-assessments and/or third-party assessments
- Prevention of pollution at its source through implementation of best management practices and resource conservation measures to reuse, reclaim, and recycle materials we generate and receive
- Employees will abide by all environmental regulations and demonstrate environmental compliance in their daily work practices.

#### THE GREEN STANDARD



Interstate's Green Standard operating system for all of our battery warehouses in North America encompasses every step in the battery business from training and distribution to collection and recycling of scrap batteries.

All scrap batteries coming through our warehouses in British Columbia comply with the Green Standard. The Load Safe<sup>TM</sup> packaging materials include a stronger gauge shrink wrap, thicker bags that are used to contain batteries that may be cracked or leaking, and labels on each pallet so we can track their route from the distributor to the smelter. As our employees pick-up scrap batteries and cores on their regular routes, they inspect each battery.

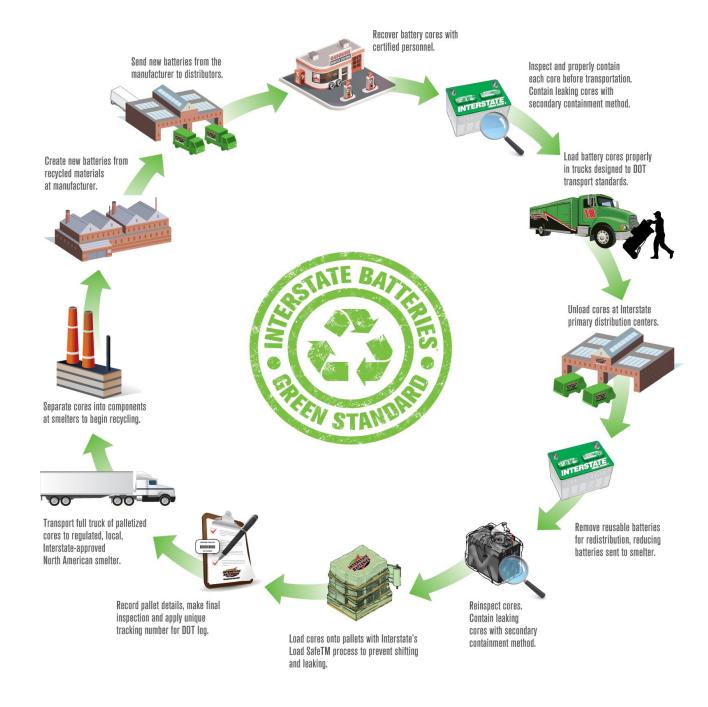
Those cores are returned to our warehouses where they are consolidated with other cores and packaged according to the Green Standard training.

Interstate's Green Standard process provides the following:

- > Training certification and annual audits for all employees who collect, transport or handle battery cores.
- ➤ Individual battery inspection for leaking cores with on-site packaging and clean-up before they are transported to the smelter.
- > State-of-the-art packaging methods and materials to ensure safe transport to an approved smelter.
- > ID tracking to trace the shipment back to its origin and ensure accountability.

Scrap batteries managed to our Industry-leading Green Standard levels become part of one of the largest closed loop recycling processes in North America.

### THE CLOSED-LOOP SCRAP BATTERY RECYCLING PROCESS



#### NEW AND USED BATTERIES SOLD AND RECOVERED

(Non-financial Information Requirement: BC Reg 449/2004, section 8 (2) (e) – the total amount of the producer's product sold and collected, and, if applicable, the producer's recovery rate.

During 2013, our three distributorships in BC sold about 4.485 million pounds (US) of new batteries yet they recycled more than 6.664 million pounds (US) of scrap lead acid batteries throughout the province of British Columbia. While there are different types of lead-acid batteries that are recycled through Interstate, the numbers provided are based on the majority of batteries we recover being automotive-sized batteries weighing an average of 38.3 lbs. each. This leads to a scrap battery recovery rate in British Columbia for 2013 of approximately 149%.

Included within the 6.664 million pounds we recycled were approximately 329,000 lbs of scrap lead-acid batteries purchased from Canadian Battery Association and recycled as part of our program.

In 2013, our three battery distributorships in BC produced more than 240,945 lbs. of Econo batteries (Approx. 6,291 auto batteries) that were recovered and set aside for resale as opposed to going to a smelter.

TRANSPORTATION



The same network that distributes new batteries also safely collects and returns used batteries for recycling.



At the recycling facility, used batteries are broken apart and separated into components to begin the recycling process



#### **PLASTIC**

Plastic pellets recycled from battery cases and covers are used to manufacture new cases and covers.



Plastic pellets



### **NEW COVERS AND CASES**

New battery covers and cases are manufactured using recycled plastic pellets.

New cases and covers





#### LEAD

Lead ingots recycled from battery grids, other battery parts (e.g., posts and terminals) and lead oxide are used to manufacture lead for new grids, parts, and lead oxide.

Melt grids





Lead ingots





#### **NEW GRIDS AND LEAD OXIDE**

New battery grids are manufactured from recycled lead. Recovered lead oxide is also used in new battery manufacturing.

New grids









#### **ELECTROLYTE: OPTION 1**

Sodium sulfate crystals separated from used electrolyte (dilute sulfuric acid) are recycled and sold for use in textiles, glass and detergent manufacturing.





Sodium sulfate crystals









#### **ELECTROLYTE: OPTION 2**

At some recyclers, used electrolyte is reclaimed and reused in manufacturing new batteries. At others, it is neutralized and managed according to federal and state water permits.





Electrolyte is neutralized and sent to a water treatment plant. Electrolyte is chemically treated and reused.