

JULY 2021 | NEWSLETTER 03

# The Recycling Times



HADCO Group's Recycling Division Monthly E-Newsletter



## How are lead-acid batteries recycled?

A 2018 report done by 'Allied Market Research' stated that the global lead-acid battery industry was valued at USD 39.7 billion and is projected to reach USD 59.7 billion by 2026. \*

Typically found in cars, trucks, boats, and tractors, lead-acid batteries are considered an industry standard in most commercial, industrial and heavy machinery. But did you know these batteries are also some of the most recycled products in the world?

The journey of how the acid, lead and plastic components are recycled is a fascinating example of how a 'closed-loop' business model can be sustainable and profitable.

On the following pages, we briefly describe how the plastic, lead and acid components of these batteries are recycled after collection from Caribbean Battery Recycling.

\*Data source on appendix on page 4.

**"YOUR COMPANY WILL  
CONTRIBUTE TO THE  
GLOBAL BATTERY  
RECYCLING  
INITIATIVE  
BY USING OUR FREE  
BATTERY COLLECTION  
SERVICE."**

Kevin Whiteman -  
Managing Director,  
HADCO Group -  
Recycling Division.

**Learn more about  
the recycling  
process below**



# The lead-acid battery recycling process



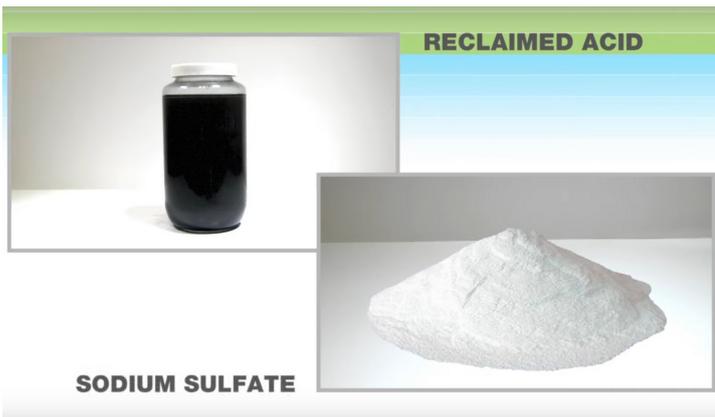
When we collect your used lead-acid batteries, they are carefully sorted and stored at our San Juan facility.

Then they are transported to international smelters located in the US, Europe and Asia .



At these international smelters, the batteries are crushed and the acid is drained, collected and undergoes a neutralization process.

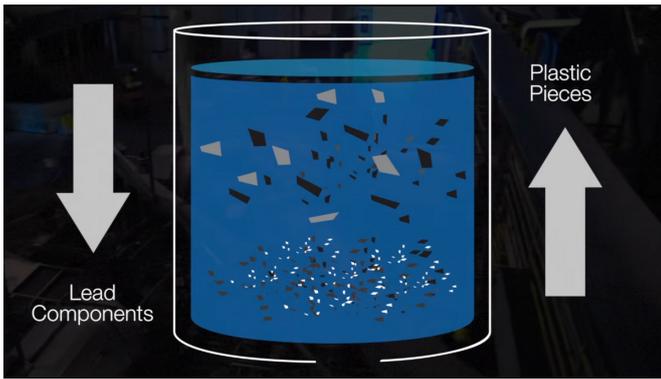
This is known as 'reclaiming' the acid.



Through this process the acid turns into a dehydrated compound known as 'sodium sulfate' and is repurposed for various other uses - most notably household powdered laundry detergents.

\*Screenshots taken from Battery Council International's "Lead Battery Recycling Process" video. See link on appendix page 4.

**Explanation continues below**



The plastic and lead remains, and is left to sit in a tank of water. Naturally the plastic will float to the top and the lead sinks to the bottom.

Now that the plastic and lead are separated, they are collected and taken to their own individual recycling processes.



The scrap lead material is taken to a furnace and alloyed into ingot bars.

These ingots are then re-used in the creation of not only new lead-acid batteries, but other lead based electronics.



The plastic is reclaimed by a cleaning and melting process that transforms the crushed pieces into finer pellets.

These plastic pellets are repurposed and molded into new plastic casings for the lead-acid batteries.



With all the lead, plastic and acid components recycled, they re-start their journey and are found in many of the consumer products we use today!

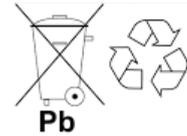
\*Screenshots taken from Battery Council International's "Lead Battery Recycling Process" video. See link on appendix page 4.

## Get Involved!

Organisations and individuals interested in responsibly disposing of their used lead-acid batteries can contact us at:

Caribbean Battery Recycling: (868) 638-0242  
or visit [www.CaribbeanBatteryRecyclingTT.com](http://www.CaribbeanBatteryRecyclingTT.com)  
#2 El Socorro Ext, LP #52 Patraj Trace, San Juan,

Contact us to schedule a collection!



**"ENSURE YOUR  
BATTERY IS  
LEAD-ACID  
BY LOOKING  
FOR THE  
FOLLOWING  
SYMBOL  
AT THE BACK"**

Nicholas De Freitas -  
General Manager,  
HADCO Group -  
Recycling Division.

## Appendix

"Lead-acid Battery Market Outlook" via Allied Market Research  
<https://www.alliedmarketresearch.com/lead-acid-battery-market-A05962>

Battery Council International's "Lead Battery Recycling Process Video"  
<https://www.youtube.com/watch?v=eO-X8Gw2nXY>

Battery Council International Website  
<https://batteryCouncil.org/>

Join the 1500 and counting businesses that are changing the way Trinidad and Tobago recycles!

See you next month for another update from HADCO Group's Recycling Division.

