

# Toxic export sparks debate

Firms avoid lead emissions laws by sending more dead batteries to Mexico, where rules are lax

By **TIM JOHNSON**  
McClatchy Newspapers

CIENEGA DE FLORES, Mexico — American consumers are accustomed to turning in their spent car batteries when buying new ones, pleased to take part in a successful recycling program. U.S. recyclers have some of the world's top technology for safely breaking apart batteries to smelt the lead for reuse.

But as likely as not, that old battery will be shipped to a recycling plant in Mexico, where lead emissions standards are lax, while U.S. recycling plants close or stand idle.

Mexico has a leg up for a reason: Its lead emissions standards are 10 times less stringent than U.S. standards. Mexican factories can ignore strict U.S. regulations that cap harmful lead emissions on factory floors and in the air.

The result has been an ever-increasing surge in the trade of used batteries across the border. One watchdog group estimated that in 2011, the dead batteries headed to Mexico would have filled 17,952 tractor-trailers. And the trade keeps growing, the result of a stark regulatory gap that has left Mexico at risk of becoming a "pollution haven," according to a Montreal-based commission that investigates environmental issues under the North American Free Trade Agreement, the economic accord among the U.S., Mexico and Canada.

"There's a good chance that your battery will be recycled at a plant with far inferior pollution controls than in the U.S.," said Perry Gottesfeld, executive director of San Francisco-based advocacy group Occupational Knowledge International.

Canada's standards are also lower than in the United States, but not nearly as lax as those of Mexico.

"Raising the bar is what it's all about," said Irasema Coronado, executive director of the Commission for Environmental Cooperation, the trilateral NAFTA board, adding that she hopes the three nations "are able to harmonize how they are going to deal with these batteries."

"I do reiterate that all of us who own a car in North America own this problem," she said.

Lead-acid batteries are an ever-present fact of modern life. The rechargeable batteries help drivers start cars, trucks and golf carts, and have many other uses. Tens of thousands of U.S. cellphone towers and computer server farms maintain banks of lead-acid batteries for backup power in the event of an emergency. Even submarines use the batteries.

Once their useful life ends, the spent batteries are considered hazardous waste and must be recycled. The lead inside can be recycled indefinitely.

Scientists now say that exposure to lead, even in minute quantities, can lead to cardiovascular disease, kidney damage and neurological disorders. Ten months ago, the Atlanta-based Centers for Disease Control and Prevention determined that "there is no safe level of lead."

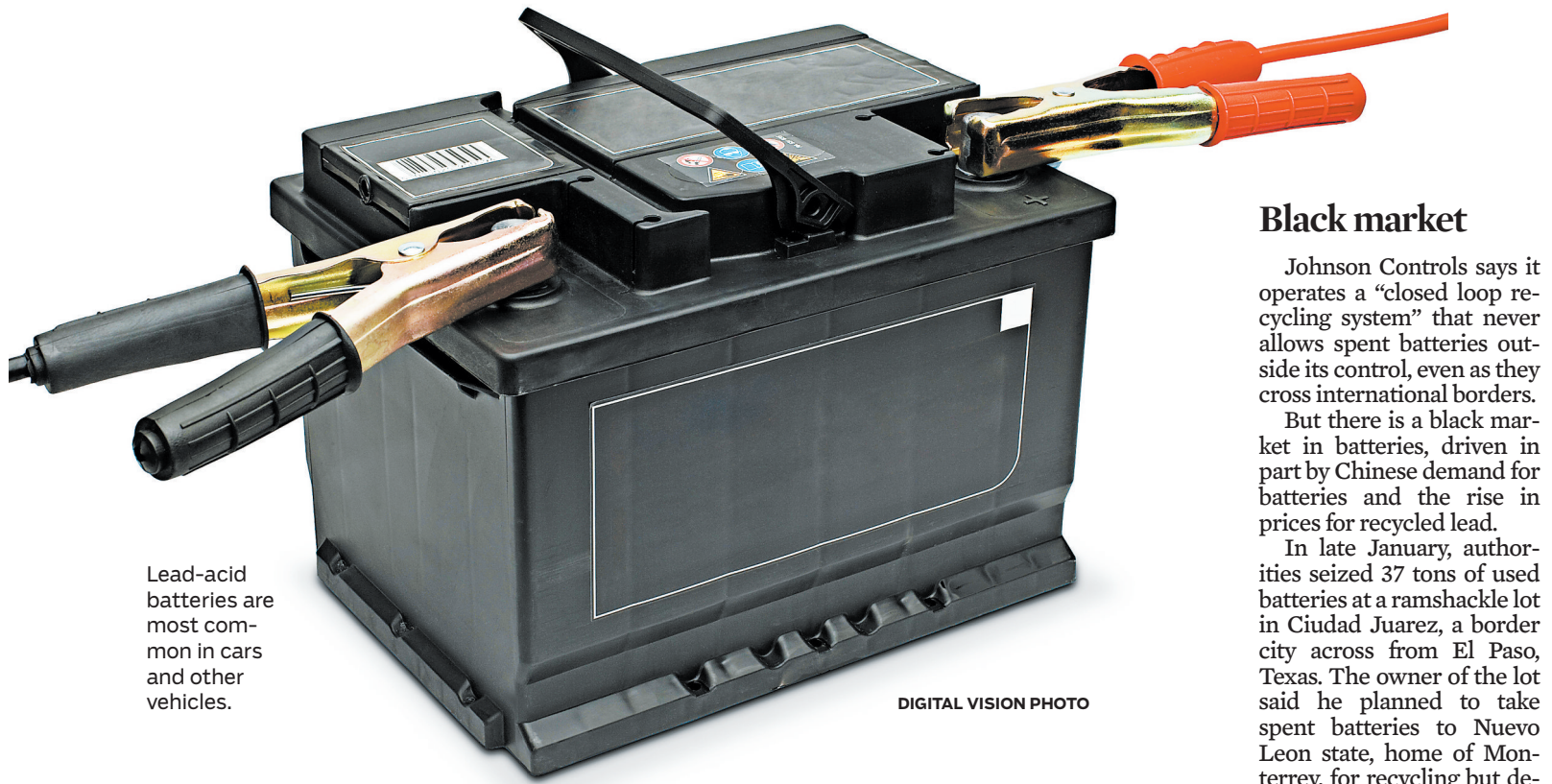
The NAFTA environmental cooperation commission issued a draft report in November citing a dramatic increase in exports of spent lead-acid batteries, or SLABs, to Mexico during the past decade.

"According to our estimates, between 2004 and 2011, the U.S. exports of SLABs to Mexico increased by anywhere from 449 percent to 525 percent," Coronado said.



TIM JOHNSON/MCT PHOTO

This Johnson Controls recycling plant and a second, also in northern Mexico, take in three-fourths of the spent batteries sent across the border.



DIGITAL VISION PHOTO

Lead-acid batteries are most common in cars and other vehicles.

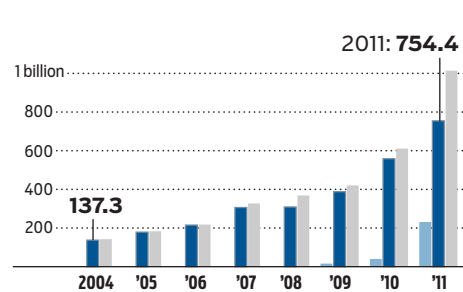
## Shipping lead batteries to Mexico

More spent lead-acid batteries, or SLABs, that Americans recycle are being sent to Mexican recycling plants. There, lead can be extracted for resale more cheaply than in the U.S. because of low labor costs and lower safety standards. But the lead emissions from the plants have been endangering the health of workers and local residents.

### SHIFT IN SLAB SHIPMENTS

Exports of spent batteries began rising after the Environmental Protection Agency toughened lead pollution standards in 2008, making domestic recycling more costly.

Exports, in millions of pounds



SOURCES: SLAB Watchdog, The New York Times

## Double standard?

It's not just environmentalists worried about the issue. U.S. smelters and recycling firms that don't have operations in Mexico also are demanding that the environmental bar be raised for companies in Mexico and, to a lesser extent, Canada.

In late December, Dallas-based RSR Corp. urged that the three nations take "robust and immediate action to halt battery exports."

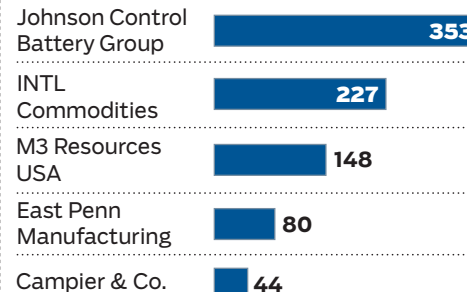
"Allowing the tsunami of lead-acid batteries to continue to be exported to Mexican facilities sentences those working in or living near these facilities to a lifetime of increased lead burden in their bodies," RSR Chief Executive Robert Finn said in a Dec. 21



### TOP U.S. SHIPPERS

The EPA does not restrict companies to where they export SLABs, and it only began requiring companies to report exports in 2010. Only about 30 percent complied, and many other batteries that cross the border illegally also go unrecorded.

Top recorded shipments, in millions of pounds, 2010



MCT

letter to the Commission for Environmental Cooperation.

Even as recycling has become the norm, the U.S. has seen major consolidation in lead smelting and refining. In a little more than four decades, the number of smelters in the U.S. has fallen to 14 from 154. At the top of the heap is Johnson Controls, a diversified industrial conglomerate based in Milwaukee that is the world's largest supplier of automotive batteries.

Johnson Controls has two huge recycling plants in Mexico, one in Cienega de Flores, about 10 miles north of Monterrey, an industrial hub, and a newer facility in Garcia, on the city's western outskirts. The two plants receive nearly three-fourths of the spent batteries sent to

Mexico for recycling.

U.S. watchdog groups say the Johnson Controls plant in Cienega de Flores emitted nearly 7 tons of lead into the air in 2010, 33 times the level of emissions expected for a much cleaner plant the company opened in September in Florence, S.C.

Mexican activists say they are concerned about what they say is a double standard, but they haven't been able to gather data from the company.

"When we asked for information about emissions and lead blood levels, they never responded to us," said Marisa Jacott, head of Fronteras Comunes, a nonprofit group that monitors toxic waste in Mexico.

Jacott said Mexican factory workers are often too poor to organize or com-

plain when workers or their children fall ill from substances like lead dust.

"There are few who have the resources to pay for tests of lead levels in their children," she said, adding that at health clinics, "sometimes they just diagnose the kids with attention deficit disorder or they blame the mothers for the kids being dull."

Lead particles can escape from recycling plants in exhaust gases, dust emissions and water discharges. Workers can take lead particles home on their clothing or their cars.

The director of global communications for Johnson Controls, Rebecca Fitzgerald, said blood-lead levels of all employees at the company's Cienega de Flores plant "have been below the U.S. blood-lead standard of 40 micrograms per deciliter for more than three years."

She added in an email that as of January, the factory "has had an average of 93 percent employees with a blood-lead level below 20 micrograms per deciliter, representing world-class blood levels."

Citing a "highly competitive environment with this business," Fitzgerald said the company could not share more precise data about emissions from the plant.

Johnson Controls has previously run into problems with excessive emissions. A year ago, Chinese authorities shut the company's Shanghai battery manufacturing plant after reports that 49 children in the area had elevated blood-lead levels.

Gottesfeld, the occupational safety activist, disputed that Johnson Controls had reached adequate safety levels at the plant in Cienega de Flores.

"There is no occupational physician alive who would say that this is an adequate standard or world class," he said.

## Black market

Johnson Controls says it operates a "closed loop recycling system" that never allows spent batteries outside its control, even as they cross international borders.

But there is a black market in batteries, driven in part by Chinese demand for batteries and the rise in prices for recycled lead.

In late January, authorities seized 37 tons of used batteries at a ramshackle lot in Ciudad Juarez, a border city across from El Paso, Texas. The owner of the lot said he planned to take spent batteries to Nuevo Leon state, home of Monterrey, for recycling but declined to say if the batteries had come from the U.S.

The huge gap between U.S. and Mexico on lead emissions dates to 2008, when science advisers told the Environmental Protection Agency to tighten standards for airborne lead particles. The change cut the allowable standards of lead concentrations to one-tenth of the previous standard, which hadn't been altered in three decades.

"It's certainly increased costs," said Bruce Cole, executive vice president of Exide Technologies, a battery recycler based in Milton, Ga., that once operated six recycling factories in the U.S. The firm closed a plant in Frisco, Texas, in November and idled a plant in Reading, Pa., at the end of March.

To meet the tougher standards, Cole said, "we've had to make very significant investments in all facilities. They include environmental control systems, facility enclosures (and) putting buildings under negative pressure so that emissions can't get out."

The report by the Commission on Environmental Cooperation was sent to federal governments in Canada, Mexico and the U.S. in February, Coronado said, and the three are expected to vote this month on its findings.

Even if the three nations harmonize rules, Mexico has a long way to go to ensure compliance. The commission's report said Mexican regulators fail to measure stack emissions at smelters, collect adequate air quality data or enforce a requirement that recyclers report lead emissions.

The panorama, the panel said, "is an alarming portrait of a virtually nonexistent regulatory regime" in Mexico.

Jacott, the Mexican toxic waste activist, still holds out for a simple dream.

"We just want the environmental and health rules to be the same here as in the United States," she said.