



JOEL KITCHENS

STATE REPRESENTATIVE • 1ST ASSEMBLY DISTRICT

Public Testimony
Assembly Committee on Environment
Assembly Bill 987
January 30, 2024

Thank you, Chairman Oldenburg and members of the committee for holding this public hearing on Assembly Bill 987.

Our use of technology over the past couple of decades has increased at a dizzying pace and very often we have not recognized the challenges that go along with it until there is a major problem. As technology has become more present in our daily lives, so have rechargeable batteries, more specifically lithium batteries, which are used in phones, laptops, toys, power tools, etc.

While these batteries are now extremely common, most people do not understand the danger they present and they are not educated in how to properly dispose of them. Assembly Bill 987 aims to bridge that gap.

When not disposed of properly, lithium batteries are subject to crushing, condensing, and other damage, which can set off thermal runaway. Thermal runaway is a chain reaction that occurs in milliseconds and can lead to explosions or fires, igniting any flammable materials nearby. As you will hear in later testimony, we have had numerous damaging fires already in Wisconsin.

Assembly Bill 987 requires the DNR to:

- Prepare educational materials for the public on how to properly recycle rechargeable batteries and inform them about the negative effects when they are disposed of improperly.
- Provide grants to expand or create battery collection sites and/or recycling operations, for which DNR may provide more than one grant to a collection site, but no more than \$20,000 to a single collection site.
- Provide grants to solid waste facilities and materials recovery facilities to help install, upgrade, or expand fire detection and suppression systems, which DNR may provide more than one grant to a single facility, but no more than \$50,000 to a single facility.

This program will be funded through the environmental fund in an amount no greater than ten million dollars.

Rechargeable batteries bring many benefits to our daily living by powering essential and non-essential items. However, when they aren't disposed of properly they can create unexpected fires. This creates an unsafe work atmosphere for those who work in waste removal. By teaching the public how to properly discard these types of batteries, and expanding and creating collection sites we can prevent an explosive incident.

I want to thank my co-authors, Senators Tomczyk and Cowles. Thank you members for your time and I hope you consider supporting Assembly Bill 987.



ROBERT L. COWLES

Wisconsin State Senator, 2nd Senate District

STANDING COMMITTEES:

Natural Resources & Energy, Chair
Transportation & Local Government, Vice-Chair
Economic Development & Technical Colleges

Testimony on 2023 Assembly Bill 987

Senator Robert Cowles

Assembly Committee on Environment

January 30th, 2024

Thank you, Chair Oldenburg and Committee Members, for allowing me to testify on 2023 Assembly Bill 987. I'm pleased to be sitting in today for Senator Tomczyk, the lead Senate author, and delivery his testimony to the Assembly Committee on Environment. This legislation helps to address the growing threat of fires in our waste and recycling streams from lithium-ion and other rechargeable batteries.

In recent years, lithium-ion batteries have become commonplace in our lives. From household tools and devices to the newest E-bikes, rechargeable batteries surround us every day. However, despite in the increasing prevalence of these batteries many members of the public do not properly dispose of these batteries at the end of their lifespan. Improper disposal of batteries, and the resulting fires, has rocked the Wisconsin recycling industry with fires in Milwaukee, Madison, Portage, and locations in-between.

Lithium-ion fires, pose a unique risk for both first responders and businesses. Unlike a traditional fire that might be caused by a short circuit or open flame, rechargeable battery fires can be caused by a rupture of a device battery due to compaction or damage during the recycling process. A lithium-ion battery fire can be nearly impossible to extinguish, with chain reactions or ruptured cells causing fires to reignite despite appearing safe moments earlier.

These fires not only risk the viability of business operations and insurance coverage, but more importantly pose a significant hazard to the employees of these facilities and the first responders who are called to fight these fires.

In order to increase the safety of industry employees and promote public awareness, Representative Kitchens and Senator Tomczyk have lead an effort to introduce Assembly Bill 987 which takes three separate approaches to addressing this issue; public education, battery collection, and fire suppression.

First, this legislation expands the Department of Natural Resources' (DNR) educational outreach efforts, providing the agency with the ability to inform the public about inappropriately disposing rechargeable batteries and about available options to do so safely. Efforts to lower the improper disposal of rechargeable batteries will help decrease the number of these items in the waste recycling stream, decreasing the risk of fires.

Second this legislation expands available avenues for battery collection and disposal. The bill does so by creating grant program administered by the DNR to municipalities, businesses, or non-profits for the purpose of collecting and transporting rechargeable batteries to recycling facilities which take these types of batteries. In expanding the number of available collection sites, we can lower the barrier to proper disposal that might otherwise result in the public throwing these devices into garbage or recycling bins. These grant are capped to a total of no more than \$20,000 to a single collection site.

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Third, this legislation creates a fire suppression grant of up to \$50,000 for solid waste and recycling facilities. This money can be used by facilities to install new, or upgrade existing, fire suppression systems. Grants under this section must be for facilities that face an increased risk of fire due to the presence of rechargeable batteries.

As more and more rechargeable batteries make it into the waste recycling stream, it is important that we work to address the potential dangers that improper disposal poses. Assembly Bill 987 is a first step to ensure that those risks are mitigated and ample, safe, disposal opportunities are available for all Wisconsinites.



CORY TOMCZYK

STATE SENATOR • 29TH SENATE DISTRICT

Testimony – Assembly Bill 987
Assembly Committee on Environment
Tuesday, January 30, 2024

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In order to increase the safety of industry employees and promote public awareness, myself and Representative Kitchens have introduced AB 987 which takes three separate approaches to addressing this issue; public education, battery collection, and fire suppression.

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Assembly Committee on Environment

2023 Assembly Bill 987

Education about rechargeable batteries and providing grants for collecting and recycling rechargeable batteries

January 30, 2024

Good afternoon, Chair Oldenburg and members of the Committee. My name is Kate Strom Hiorns, and I am the Recycling and Solid Waste Section Manager for the Wisconsin Department of Natural Resources. With me today is Sarah Murray, the department's E-Cycle Wisconsin Program Coordinator, to assist with questions. Thank you for the opportunity to testify, for informational purposes, on Assembly Bill 987, related to education about rechargeable batteries and providing grants.

Many batteries, especially powerful lithium-ion batteries found in many electronics, can cause fires when not disposed of properly. These batteries hold a considerable charge even when they no longer provide enough energy to power a device, and when damaged they can spark or heat up and cause a fire. The department has created webpages, issued press releases and used social media to remind the public of the dangers of throwing rechargeable batteries, electronics and other materials that could cause a fire in trash or recycling bins – but more needs to be done.

The bill requires the department to prepare educational materials to inform the public about the dangers of rechargeable batteries in the waste and recycling streams and about existing options for properly recycling rechargeable batteries. Proper recycling includes dropping off batteries at local collection sites and bringing electronics to registered E-Cycle Wisconsin collectors. The bill provides greater flexibility and clarifies authority for the department to use the recycling appropriation for these and other intended purposes. This would allow us to scale up our outreach efforts and make them more effective.

The bill also requires the department to develop and administer two grant programs, one for creating or expanding rechargeable battery recycling and recovery programs, and the other for grants to solid waste facilities and materials recovery facilities for the purpose of installing, upgrading, or expanding fire detection and suppression systems. The department could request up to \$10 million from the Joint Committee on Finance in the current and future biennia to fund the education and grant programs.

The department supports conducting these efforts to help prevent fires from damaging equipment, putting workers at risk and destroying essential facilities. The bill requires the department to provide grants to responsible units, municipalities, businesses, tribal governments, and non-profit organizations which equates to thousands of potential applicants. This would require grant program design, outreach, technical assistance, reporting, and compliance monitoring for possibly hundreds of individual grant applications each year, which would be very difficult to implement with existing staff resources. To ensure successful implementation of this bill, the department would need to request funding to cover staffing and administrative costs from the Joint Committee on Finance, as part of the request for grant funding.

We truly appreciate the willingness of the bill authors to share early drafts of the bill and allow us to provide feedback. On behalf of the Department of Natural Resources, we would like to thank you for your time today. We would be happy to answer any questions you may have.

January 30, 2024

Chairman Oldenburg and Honorable Members of the Assembly Committee on Environment;

The Wisconsin Chapter of the National Solid Waste & Recycling Association submits the following testimony urging your support of AB 987 and I appreciate the opportunity to speak with you today on this major issue facing our industry.

Rechargeable batteries, especially lithium-ion batteries, have become increasingly popular in everyday consumer products because of their light weight, small size, and high energy density. While a convenient energy source, there are significant hazards associated with rechargeable batteries. From collection to receipt and processing at a solid waste or materials recovery facility, rechargeable batteries experience the physical abuse of loading, compacting, unloading, sorting, baling, stacking, crushing, and densification. This abuse can damage the battery, often leading to thermal runaway. Even "dead" batteries can experience thermal runaway. Thermal runaway is a chain reaction of the battery chemicals that produces more heat resulting in more reaction, creating even more heat. This can occur incredibly fast, within milliseconds. As a result, the batteries can explode and start fires, igniting both the battery and any flammable materials nearby. Solid waste and materials recovery facilities contain an abundance of flammable material, such as paper and plastics. Between the potential damage to these lithium batteries and the presence of paper and plastic, lithium battery fires at solid waste and material recovery facilities can be severe and present long-lasting implications for essential public services.

My family's company, Pellitteri Waste Systems, operates both a solid waste transfer station and a material recovery (recycling) facility right here in Dane County. In 2023 we averaged a thermal event and/or fire every other week, with summer seeing at least one fire a week. One example involved a truckload of recyclables that had just been dumped inside our recycling facility for sorting. Our employee pushed the load into a pile and was working on another task. In less than four minutes the pile erupted into flames. Surrounded by paper and plastics it only took seconds for the fire to grow to the size of a large bonfire. Our employee utilized the ten -yard grapple bucket on the loader he was operating to take a big scoop of the burning material and relocated it outside, drastically reducing the size of the fire and allowing other employees to safely contain it. We were blessed that the thermal event occurred in an easily accessible location, and if not for the quick thinking of our loader operator I hate to think what serious injury, or worse, could have happened to our other employees in the facility. Not to mention his quick actions likely prevented the destruction of millions of dollars in sorting equipment and technologies contained in our recycling facility. But this is not the end of the story.... After containing the fire inside our facility, we proceeded outside to contain it. We doused the pile with water and were able to locate the burning battery. After separating it from the recyclables surrounding it, we could not get it to stop burning! It continued to have thermal events for hours. Once the battery finally ceased burning it was determined to be a rechargeable battery contained inside of a remote-control truck made for children.

As this story affirms, lithium-ion batteries are not recyclable products like paper, aluminum and other basic household products and should never be placed into residential or commercial trash or recycling streams. Rather, they should be taken to household hazardous waste collection points or other collection sites. However, there are not nearly enough of these collection sites in the state. AB 987 will help increase the number of collection sites in Wisconsin and provide funding to help assure proper disposal.

There is a significant lack of public education on the potential dangers created by throwing rechargeable batteries into the trash or recycling bin. A concerted and coordinated effort of all stakeholders is needed to better educate the public on these dangers and inform them of proper disposal options. AB 987 will help increase public awareness on proper disposal of rechargeable batteries.

Finally, to help alleviate the real and ever-present risks posed to our workers' safety and damage to our facilities, it is imperative that modernized fire detection and suppression systems be installed. Both public and private waste & recycling facilities are not designed or equipped to handle this type of risk. The expense involved in installing fire prevention/suppression measures for our members is not one that can be absorbed as a cost of business because our contracts with local municipalities often involve setting costs for service on a multi-year basis. Utilizing surplus funds from the Environmental Fund to help subsidize the costs for installation of these important safeguards is good for public facilities, good for our members, keeps costs down for the taxpayer, and reduces the potential of interruption to waste and recycling pick-up services.

AB 987 is a vital first step in beginning the process of educating the public on the dangers involved in disposal of rechargeable batteries into the garbage can and recycling bins; providing more collection sites; and assuring our facilities, but most importantly, our employees, are better protected from fires that erupt when these batteries end up in the waste & recycling streams.

On behalf of the Wisconsin Chapter of the National Solid Waste & Recycling Association, I respectfully ask your support of AB 987.

Thank you,

David Pellitteri

Chairman-National Waste & Recycling Association-WI Chapter