

STATE SENATOR • 29TH SENATE DISTRICT

### Testimony – Senate Bill 906

Senate Committee on Natural Resources and Energy Wednesday, January 24, 2024

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.

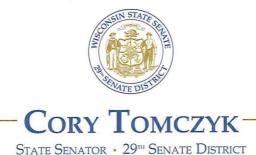
Lithium-ion fires, pose a unique risk for both first responders and businesses. Unlike a traditional fire that might be caused by a short circuit or open flame, rechargeable battery fires can be caused by a rupture of a device battery due to compaction or damage during the recycling process. A lithium-ion 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, myself and Representative Kitchens have introduced SB 906 which takes three separate approaches to addressing this issue; public education, battery collection, and fire suppression.

First, this legislation expands the DNR's 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. 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.



Third, this legislation creates a fire suppression grant of up to \$50,000 for 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. SB 906 is a first step to ensure that those risks are mitigated and ample, safe, disposal opportunities are available for all Wisconsinites.



STATE REPRESENTATIVE • 1st Assembly District

# Public Testimony Committee on Natural Resources and Energy Senate Bill 906 January 24, 2023

Thank you, Chairman Cowles and members of the committee for holding this public hearing on Senate Bill 906.

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. Senate Bill 906 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 that can lead to explosion or fires, igniting any flammable materials nearby. As you will hear in later testimony, we have had numerous damaging fires already in Wisconsin.

## Senate Bill 906 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 Senate Bill 906.

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Tony Evers, Governor Adam N. Payne, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



# Senate Committee on Natural Resources and Energy

2023 Senate Bill 906
Education about rechargeable batteries and providing grants for collecting and recycling rechargeable batteries

January 24, 2024

Good morning Chair Cowles 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 Senate Bill 906 (SB 906), 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 24, 2024

# Chairman Cowles and Honorable Members of the Senate Committee on Natural Resources and Energy;

The Wisconsin Chapter of the National Solid Waste & Recycling Association submits the following testimony urging your support of SB 906. We thank Senator Tomczyk for his authorship of this legislation and Chairman Cowles for his support as #2 on the bill.

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 4 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 10 -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. SB 906 will help increase the number of local collection sites offered by Responsible Units and provide funding to help assure they may properly dispose of the batteries collected.

There is a significant lack of public education on the potential dangers caused by improper disposal of these batteries. Unknowing consumers are increasingly disposing of these batteries directly into their household garbage or recycling bins. A concerted and coordinated effort is needed between our industry, public officials, and state agencies to better educate the public on these dangers and highlight best practices for proper disposal. SB 906 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 as 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.

SB 906 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 or recycling bin; assisting local responsible units of government with the costs involved in providing/expanding more collection sites; and helping members of our industry assure that our facilities, but most importantly, our employees, are better protected from fires that erupt when these batteries are improperly disposed of.

On behalf of the Wisconsin Chapter of the National Solid Waste & Recycling Association, I respectfully ask your support of SB 906.

Thank you,

David Pellitteri

Chairman-National Waste & Recycling Association-WI Chapter

### Kranner, Benjamin

From:

cheryl\_nenn@milwaukeeriverkeeper.org

Sent:

Wednesday, January 24, 2024 11:49 AM

To:

Miller, Evan

Cc:

'Leah Holloway'

Subject:

Support for SB906 at Senate Committee of Natural Resources and Energy

Evan-

Can you forward this to the Committee please?

Esteemed Members of the Natural Resources and Energy Committee:

We were unable to attend the public hearing today in Madison. On behalf of Milwaukee Riverkeeper, we'd like to express our support for SB906, which relates to providing education about rechargeable batteries and providing grants for collecting and recycling rechargeable batteries. Milwaukee Riverkeeper hosts a coalition called Plastic Free MKE, which is pushing to reduce single use plastics, which are a threat to our waterways and natural spaces, a threat to our own health, and a significant burden to our waste management and recycling systems.

In Milwaukee, we've had several fires at our recycling facility in the last year, and we think this is largely due to residents throwing lithium batteries into their recycling and these batteries igniting. These fires have shut down our recycling facility, and the City of Milwaukee is currently contracting this work out to 3 private firms while planning for construction of a new facility. One of these private firms recently also had a damaging fire in Elm Grove. Late last year, I witnessed a fire of a garbage truck in Mequon that ignited in front of me. Our hazardous waste drop-off facilities do not currently accept these batteries. Our coalition is working with the City on providing educational information for the residents, but its difficult to tell people not to dispose of these batteries (in their phones and other electronics) when there is nowhere for residents to take them for safe disposal and/or recycling. Providing funding for education and a collection/recycling program would help solve this issue or at least minimize the risks to our community and environment.

Thank you for your consideration,

Cheryl Nenn

### Cheryl Nenn (she/her)

Riverkeeper

Milwaukee Riverkeeper

main: 414.287.0207 direct: 414.378.3043

find me at: 600 E. Greenfield Ave. | Milwaukee, WI 53204

Follow us:











So, it's going to snow! Help keep Milwaukee's rivers safe (& our drinking water), by applying road salt appropriately. Learn more about Road Salt & our waterways



Leaders in Resource Renewal

A non-profit association that provides statewide proactive leadership on waste reduction and recycling through education, advocacy, collaboration, programs and services.

Date January 24, 2024

Dear Chair Sen. Cowles, Sen Tomczyk, Rep. Kitchens, and Members of the Committee,

On behalf of the Associated Recyclers of Wisconsin (AROW) Board of Directors, we want to express our support for Senate Bill 906 regarding "education about rechargeable batteries and providing grants for collecting and recycling rechargeable batteries."

We appreciate the work that has been done on this bill to address a critical issue in recycling – Batteries.

Our heroes downstream, the recyclers, waste haulers, and waste managers, know, firsthand, the increasing concern and issues related to batteries in our society today, especially powerful lithium-ion batteries found in many electronics. 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. Workers in our industry are concerned and are relieved to see this legislation to help address these issues.

We support the bill allowing the Wisconsin Department of Natural Resources (WDNR) to seek up to \$10 million from the Joint Committee on Finance in the current and future biennia to fund the education and grant programs. This increase could have a remarkable impact on statewide battery recycling and education.

One item of note that was not included in the current bill is funding for implementation and the ability to request funds for staffing needed to administer this grant program. Running a grant program will need additional staffing, especially a program with upwards of \$10 million in grants. To ensure successful implementation of this bill, we urge you to add language giving the WDNR the ability to request appropriate funding from the Joint Committee on Finance to cover staffing and administrative costs necessary for administrating this very important grant program. Without this additional support, the implementation of this important work and subsequently the availability of the necessary funds could be diminished for a program that is needed to keep our workers and the public safe.

We commend you for your work on this bill and feel it will keep recycling strong in Wisconsin and our workers safe on the job. Thank you.

#### About the Associated Recyclers of Wisconsin (AROW)

Founded in 1990, AROW is a 501(c)(3) association representing Wisconsin's recycling, waste reduction and sustainability professionals with members from local government, businesses and non-profit groups. The organization provides leadership through education, advocacy, and collaboration and promotes effective, efficient and sustainable material recovery initiatives. For details on AROW, its positions and programs visit <a href="https://www.associatedrecyclersofwisconsin.org">www.associatedrecyclersofwisconsin.org</a>