LOCAL LAW INTRO NO. 316 - 2023

TO: HONORABLE BOARD OF LEGISLATORS COUNTY OF WESTCHESTER

Your Committee is in receipt of "A LOCAL LAW amending the Laws of Westchester County by adding a new Chapter 542 concerning the regulation of Lithium Ion Batteries."

Your Committee is informed that lithium ion batteries power a vast and growing range of products, devices, and equipment, from laptops and smartphones to micro-mobility devices (e-bikes and e-scooters), electric vehicles, lawn mowers, power tools, and energy storage systems. As the use and prevalence of lithium ion batteries continues to grow, so does the public safety risk for residents and first responders who are called upon to mitigate the associated fire incidents and increased hazards of same.

Your Committee is further informed that lithium ion battery fires can be exceptionally difficult to control. These fires can result in a chemical reaction known as "thermal runaway" which occurs when heat builds up faster than it can be dissipated. This causes a very rapidly expanding fire, as well as the release of toxic gases, and a possible explosion. These blazes generally require copious amounts of water to extinguish. Even when lithium ion battery fires appear to be out, the batteries can reignite days later due to the energy that remains trapped inside the damaged battery cells.

Your Committee is advised that according to the Fire Department of the City of New York (FDNY) the number of lithium ion battery related fires more than doubled from 2021 to 2022. Specifically, in 2021 there were 104 related fires, resulting in 79 injuries and 4 deaths. In 2022, there were 216 related fires, resulting in 150 injuries and 6 fatalities. By mid-March of 2023, there were already 33 related fires, with 43 injuries and 3 deaths.

Your Committee is further advised that according to the market research firm, Allied Market Research, the global micro-mobility market is expected to grow from about \$40 billion today to \$215 billion by 2030, with much of that growth attributed to the boom in the sale and use of batterypowered electric devices. By 2023, roughly 40 million e-bikes are expected to be in use worldwide. Underwriters Laboratories (UL) states that "An incredible transformation of personal electrified transportation technology has taken place around the globe and shows no sign of slowing. More and more, light electric vehicles and personal transportation devices are populating worldwide markets."

Your Committee notes that the proposed legislation would require that only regulated and graded lithium ion batteries be sold by retail establishments located in Westchester County. The proposed legislation would also require every retail establishment located in the County of Westchester and engaged in the retail business of selling E-bikes and electric mobility devices to post a notice in the place where such devices are displayed or delivered to the purchaser of same at the entrance of the establishment and in at least one additional area where sales occur conspicuously stating, in no smaller than 24-point type in bold print the following warning:

WARNING

Lithium Ion Batteries are a Fire Risk: If improperly charged, reassembled, stored or disposed of there is a risk of fire or explosion

- Only use the batteries, chargers and cords designed for the device
- <u>Never charge a device on a bed, couch, or upholstered furniture, in direct</u> <u>sunlight or in an exit pathway (doorway, hallway, etc.);</u>
- <u>Stop using the battery if you notice too much heat, smoke, an odor, sounds</u> or change in shape

The Department of Emergency Services will also be required to engage in an ongoing educational and informational campaign in an effort to mitigate the risks associated with the use, storage and charging of electric mobility devises, E-bikes and lithium-ion batteries in general. The Department may also utilize its fire inspectors, along with local fire chiefs, to conduct site visits throughout the County in an effort to educate the public, increase awareness of the potential dangers associated with the use of lithium ion batteries, and to insure compliance with the various provisions of the law. Finally, the Law also provides that the Director of Weights and Measures – Consumer Protection shall have the authority to enforce the provisions of the proposed local law in accordance with various procedures contained in the Consumer Protection Code.

Your Committee further notes that a multifaceted fire safety and prevention program is most effective regarding the safe use, charging, storage, and disposal of lithium ion batteries. The proposed Local Law is designed to inform the public about the potential dangers of lithium ion batteries, as well as to help ensure the safe handling and use of such batteries and related devices. By requiring retail establishments to inform purchasers of the risks associated with E-bikes and electric mobility devices, buyers will be able to make educated decisions about owning and storing E-bikes or electric mobility devices and is a meaningful step toward promoting public safety and preventing fire hazards. Moreover, point of sale messaging has been a proven method of influencing a consumer's behavior in industries such as the tobacco industry, where warning labels have influenced the consumer to make smarter, safer and healthier choices.

Your Committee is advised that the proposed Local Law does not meet the definition of an action under New York State Environmental Quality Review Act and its implementing regulations 6 NYCRR Part 617. Please refer to the memorandum from the Department of Planning dated January 12, 2023, which is on file with the Clerk of the Board of Legislators. Your Committee concurs with this conclusion.

Your Committee, after careful consideration, recommends the adoption of this Local Law.

Dated: <u>September 19</u>, 2023 White Plains, New York Organia Om Mary Poar Margaret a. Cypo Margaret A. Cypo

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Legislation

Public Safety

COMMITTEE ON

Dated: September 19, 2023 White Plains, New York

The following members attended the meeting remotely and approved this item out of Committee with an affirmative vote. Their electronic signature was authorized and is below.

Colin O. AMAZ Syma D. Bronchon

Colin J. Ant

COMMITTEES ON

Legislation

Public Safety

FISCAL IMPACT STATEMENT

SUBJECT:	Regulation of Lithium Ion Batteries X NO FISCAL IMPACT PROJECTED
OPERATING BUDGET IMPACT To Be Completed by Submitting Department and Reviewed by Budget	
	SECTION A - FUND
GENERAL FUND	AIRPORT FUND SPECIAL DISTRICTS FUND
	SECTION B - EXPENSES AND REVENUES
Total Current Year Expense	
Total Current Year Re	venue <u>\$</u>
Source of Funds (chec	k one): Current Appropriations Transfer of Existing Appropriations
Additional Appro	priations Other (explain)
Identify Accounts:	N/A
Potential Related Ope	erating Budget Expenses: Annual Amount N/A
Describe:	A local law amending the Laws of Westchester County by adding a new
Chapter 542 cond	cerning the regulation of Lithium Ion Batteries.
Potential Related Ope	erating Budget Revenues: Annual Amount N/A
Describe:	
Anticipated Savings to County and/or Impact on Department Operations:	
Current Year:	N/A
Next Four Years:	N/A
Prepared by:	Patricia Haggerty
Title:	Sr. Budget Analyst Reviewed By:
Department:	Budget Budget Director
Date:	July 17, 2023 Date: 7 18 2?

LOCAL LAW INTRO. NO. 316 - 2023

A LOCAL LAW amending the Laws of Westchester County by adding a new Chapter 542 concerning the regulation of Lithium Ion Batteries.

BE IT ENACTED by the County Board of the County of Westchester as follows:

Section 1. The Laws of Westchester County are hereby amended to include a new Chapter 542 to read as follows:

CHAPTER 542 REGULATION OF LITHIUM ION BATTERIES

Sec. 542.11 Purpose.
Sec. 542.21. Definitions.
Sec. 542.31. Sale, Lease, Rental and Storage of E-Bikes and Electric Mobility Devices.
Sec. 542.41. Sale of Second Use Lithium-Ion Batteries.
Sec. 542.51. Posting of Signs.
Sec. 542.61. Public Education and Outreach.
Sec. 542.71. Promulgation of Rules and Regulations.
Sec 542.81. Enforcement, Violations and Penalties.
Sec. 542.91. No Private Right of Action.
Sec. 542.101. Severability.

Sec. 542.11. Purpose.

The purpose of this Chapter is to help prevent unnecessary fires and fire-related tragedies caused by the use and/or misuse of E-bikes and electric mobility devices which utilize lithium-ion batteries by prohibiting the sale, lease or rental of same unless it utilizes a properly graded, factoryinstalled battery. Damaged or unstable batteries and improper charging, storage or disposal can cause the batteries to overheat, leading to an explosive, aggressive fire that spreads rapidly, can reignite and is challenging to extinguish. As such, educating the public of the potential hazards associated with the use and storage of powered mobility devices as well as the safety measures which could mitigate those risks through the use of appropriate and required signage will allow consumers to make smarter and safer buying choices.

Sec. 542.21. Definitions.

- A. <u>"Commissioner" shall mean the Commissioner of the Westchester County</u> Department of Emergency Services;
- B. "County" shall mean the County of Westchester;
- C. <u>"Department" shall mean the Westchester County Department of Emergency</u> Services;
- D. "Director" shall mean the Director of the Westchester County Office of Weights and Measures-Consumer Protection;
- E. <u>"Office" shall mean the Westchester County Office of Weights and Measures-</u> <u>Consumer Protection;</u>
- F. "Code" shall mean the County of Westchester Consumer Protection Code;
- G. <u>"Consumer" shall have the definition set forth in Section 542.11 of the County</u> <u>Consumer Protection Code;</u>
- H. <u>"Person" shall include without limitation any individual, firm, association, joint</u> <u>venture, co-partnership, group or corporation or any other legal entity or</u> <u>combination of entities whatsoever;</u>
- I. <u>"Retail Store" shall have the same meaning as set forth in Section 863.11 (13) of the</u> <u>County Consumer Protection Code;</u>
- J. <u>"Lithium-Ion Battery" shall include, but not be limited to, a storage battery in which</u> an electrical current is generated by lithium ions embedded in a carbon graphite or nickel metal-oxide substrate placed in a high viscosity carbonate mixture or gelled polymer electrolyte;
- K. <u>"Second-use Lithium-Ion Battery" shall mean a lithium-ion battery that has been assembled or reconditioned using cells removed from used batteries;</u>
- L. <u>"E-Bike" shall mean a bicycle with electric assist as such term is defined by Section</u> one hundred two-c of the New York State Vehicle and Traffic Law;
- M. "Electric Mobility Device" shall mean an electric scooter, as such term is defined by Section one hundred fourteen-e of the New York State Vehicle and Traffic Law, or any other device used for personal mobility that is powered by a lithium-ion or other storage battery. The term "Electric Mobility Device" shall not include e-bikes, powered wheelchairs, or other mobility devices designed for use by persons with

disabilities, or any vehicle that is capable of being registered with the New York State Department of Motor Vehicles.

Sec. 542.31. Sale, Lease and Rental of E-Bikes, Electric Mobility Devices and Storage Batteries for Said Devices.

A. <u>No person shall distribute, sell, lease, rent or offer for sale, lease or rent an E-bike</u> or electric mobility device unless:

1. The electrical system for said E-bike or electric mobility device has been certified by an accredited testing laboratory for compliance with one of the following standards:

- a. <u>The Underwriters Laboratories (UL) Standards 1642, 2054,</u> 2580 and 2849, 2271, 2272; or
- b. <u>The International Electrotechnical Commission (IEC)</u> <u>Standards 62133, 60086-4, 61960 and 62281; or</u>
- c. <u>The American National Standards Institute (ANSI)</u> <u>Standard C18; or</u>
- d. <u>The Society of Automotive & Aerospace Engineering</u> (SAE) Standards J2464 and J2929.

2. The Certification required in Subsection (1) above or the logo, watermark, or name of such accredited testing laboratory is displayed as follows:

- a. <u>On packaging or documentation provided at the time of sale of</u> such E-bike or electric mobility device; or
- b. Directly on such E-bike or electric mobility device.
- B. <u>No E-bike, electric mobility device or storage battery shall be required to display</u> the certification or the logo, wordmark or name of such accredited testing laboratory as specified in Subsection (2) above if such E-bike, mobility device or storage battery:

1. Is being sold or leased used or second-hand by an individual; and

2. Does not include original packaging, or original printed materials or documentation.

C. <u>No person shall sell, lease, rent, distribute or otherwise transfer ownership of any</u> <u>E-bike or electric mobility device with anything other than the manufacturer's</u> <u>recommended lithium-ion battery and charger.</u>

Sec. 542.41. Sale of Second Use or Reconditioned Lithium-Ion Batteries

A. <u>No person, shall assemble or recondition a lithium-ion battery using cells removed</u> from used batteries; B. No person shall sell or offer for sale a second use lithium ion battery intended for use in a bicycle with electric assist as defined in section one hundred two-c of the New York State Vehicle and Traffic Law, an electric scooter as defined in section one hundred fourteen-e of the New York State Vehicle and Traffic Law or any other type of electric mobility device.

Sec. 542.51. Posting of Signs.

A. Every Retail Store located in the County which engages in the sale, lease or rental of E-bikes and/or electric mobility devices shall not sell, deliver, lease or rent any such device to another person unless a notice is posted in the establishment where such E-bikes and/or electric mobility devices are displayed or delivered to the purchaser of same at the entrance of the establishment and in at least one additional area where sales occur conspicuously stating, in no smaller than 24-point type in bold print the following warning:

<u>WARNING</u>

Lithium Ion Batteries are a Fire Risk:

If improperly charged, reassembled, stored or disposed of there is a risk of fire or explosion.

- Only use the batteries, chargers and cords designed for the device;
- <u>Never charge a device on a bed, couch, or upholstered furniture, in direct</u> sunlight or in an exit pathway (doorway, hallway, etc.);
- Stop using the battery if you notice too much heat, smoke, an odor, sounds or change in shape.
- B. The Department shall produce and make available to any Retail Store located in the County which engages in the sale, lease or rental of E-bikes and/or electric mobility devices, signs conforming to the requirements of this section.
- C. Failure to post said sign shall be a violation of this Chapter.

Sec. 542.61. Public Education and Outreach.

- A. The Department shall develop an informational campaign to educate the public about the fire and safety risks posed by lithium ion batteries and the safety measures that can mitigate such risks. Such campaign shall address both commercial and personal use of said devices.
- B. <u>The informational campaign required by Subdivision (A) above may include, but</u> may not be limited to: the preparation and creation of handouts, video and social media content, public service announcements and presentation at public forums;

- C. The Department may coordinate its efforts in achieving the campaign outlined in Subsections (A) and (B) above with any and all County Departments, public agencies, not-for-profit organizations, regulatory agencies, municipalities and local fire districts and departments.
- D. <u>The Department may also utilize its fire inspectors, along with local fire chiefs, to</u> conduct site visits throughout the County in an effort to educate the public and increase awareness of the potential dangers associated with the use of lithium ion batteries, and to insure compliance with the various provisions herein.

Sec. 542.71. Promulgation of Rules and Regulations.

The Commissioner is authorized to promulgate such rules and regulations as may become necessary to effectuate the provisions of this local law.

Sec 542.81. Enforcement, Violations and Penalties.

The County Department of Weights and Measures – Consumer Protection shall have jurisdiction to enforce the provisions of this Chapter. The prosecution and punishment of violations hereunder shall be in accordance with the provisions of Chapter 182 and Chapter 277, Article VIII, of the Laws of Westchester County, as such provisions now exist or as they may hereafter be amended, or pursuant to any successor laws to these provisions.

Sec. 542.91. No Private Right of Action.

This local law does not create a private right of action against any Retail Store in the County.

Sec. 542.10. Severability.

If any clause, sentence, paragraph, subdivision, section, or part of this local law or the application thereof to any person, individual, corporation, firm, partnership, entity, or circumstance shall be adjudged by any court of competent jurisdiction to be invalid or unconstitutional, such order or judgment shall not affect, impair or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section or part of this local law, or in its application to the person, individual, corporation, firm, partnership, entity, or circumstance directly involved in the controversy in which such order or judgment shall be rendered.

§2. This local law shall take effect 60 days after final adoption.

STATE OF NEW YORK)) ss. COUNTY OF WESTCHESTER)

I HEREBY CERTIFY that I have compared the foregoing Local Law, Local Law Intro No. 316 - 2023, with the original on file in my office, and that the same is a correct transcript therefrom, and of the whole, of the said original Local Law, which was duly adopted by the County Board of Legislators, of the County of Westchester on October 16, 2023, and approved by the County Executive on October 17, 2023.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Corporate Seal of said County Board of Legislators on this 18th day of October, 2023.

Malika Vanderberg

The Clerk of the Westchester County Board of Legislators

County of Westchester, New York

