

George Latimer County Executive

Office of the County Executive

July 19, 2023

Westchester County Board of Legislators County of Westchester 800 Michaelian Office Building 148 Martine Avenue White Plains, New York 10601

Dear Honorable Members of the Board of Legislators:

I respectfully request that your Honorable Board adopt the attached Local Law which would amend the Laws of Westchester County by adding a new Chapter 542 concerning the regulation of Lithium Ion Batteries. 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.

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. 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.

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 battery-powered 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."

The proposed legislation would require that only regulated and graded lithium ion batteries be sold by retail establishments located in Westchester County and require every retail establishment located in Westchester County engaged in the retail business of selling E-bikes and electric mobility devices to post a

Website: westchestergov.com

notice warning of the dangers of Lithium Ion Batteries. The notice shall be posted in such retail establishment in the area where such devices are displayed or delivered to the purchaser and in at least one additional area where sales occur conspicuously stating, in no smaller than 24-point type and 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
- Never charge a device on a bed, couch or upholstered furniture, in direct 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

The Department of Emergency Services will also be required by the proposed legislation 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 Law would also permit the Department to 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.

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 lithium ion batteries, buyers will be able to make educated decisions about owning and storing devices containing such batteries 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.

In light of the aforementioned, I respectfully urge that your Honorable Board adopt the attached Local Law amending the Laws of Westchester County by adding a new Chapter 542 concerning the regulation of Lithium Ion Batteries.

George Latimer

County Executive

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Sincerely

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 battery-powered 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
- Never charge a device on a bed, couch, or upholstered furniture, in direct 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

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 |
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| this conclusion. | | |
| Your Committee, aft | er careful consideration, recommends | the adoption of this Local Law. |
| Dated: White Plains, New York | , 2023 | |

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 Revenue \$ - | _ | | |
| Source of Funds (check one): Current Appropriations | Transfer of Existing Appropriations | | |
| Additional Appropriations Other (explain) | | | |
| Identify Accounts: N/A | | | |
| 200 | | | |
| Potential Related Operating Budget Expenses: Annual Amount N/A | | | |
| Describe: A local law amending the Laws of Westchester County by adding a new | | | |
| Chapter 542 concerning the regulation of Lithium Ion Batteries. | | | |
| | | | |
| Potential Related Operating Budget Revenues: Annual Amount N/A | | | |
| Describe: | | | |
| | | | |
| | | | |
| Anticipated Savings to County and/or Impact on Department Operations: | | | |
| Current Year: N/A | | | |
| 2000024-00-000000 | | | |
| Next Four Years: N/A | | | |
| | 8 | | |
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| | | | |
| Prepared by: Patricia Haggerty | | | |
| Title: Sr. Budget Analyst | Reviewed By: | | |
| Department: Budget | Budget Director | | |
| Date: July 17, 2023 | Date: 1823 | | |

RESOLUTION NO.____- 2023

| RESOLVED, that this Board hold a public hearing pursuant to Section 209.141(4) of the | | | |
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| Laws of Westchester County on Local Law Intro. No 2023, entitled "A LOCAL | | | |
| LAW amending the Laws of Westchester County by adding a new Chapter 542 concerning the | | | |
| regulation of Lithium Ion Batteries." The public hearing will be held at .m. on the day of | | | |
| , 2023 in the Chambers of the Board of Legislators, 8th Floor, Michaelian Office Building, | | | |
| White Plains, New York. The Clerk of the Board shall cause notice of the time and date of such | | | |
| hearing to be published at least once in one or more newspapers published in the County of | | | |
| Westchester and selected by the Clerk of the Board for that purpose in the manner and time | | | |
| required by law. | | | |