

Date of Hearing: April 8, 2025

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Damon Connolly, Chair

AB 762 (Irwin) – As Amended March 28, 2025

SUBJECT: Disposable, battery-embedded vapor inhalation device: prohibition

SUMMARY: Prohibits, on and after January 1, 2026, a person from selling, distributing, or offering for sale a new or refurbished disposable, battery-embedded vapor inhalation device in this state. Specifically, **this bill:**

- 1) Defines "disposable, battery-embedded vapor inhalation device" as a vaporization device that is not designed or intended to be reused, and includes any vaporization device that meets either, or both, of the following requirements:
 - a) The vaporization device is not refillable. A vaporization device is not considered refillable unless it is designed to include any of the following:
 - i) A single-use container that is separately available and can be replaced;
 - ii) A container that can be refilled; and,
 - iii) A coil that is not intended to be replaced by an individual user in the normal course of use, including any coil that is contained in a single-use cartridge or pod that is not separately available and cannot be replaced.
 - b) The vaporization device is not rechargeable. A vaporization device is not considered rechargeable if it is designed to contain a battery that cannot be recharged.
- 2) Provides that a "disposable, battery-embedded vapor inhalation device" does not include a device, as defined in Section 321(h) of Title 21 of the United States Code, if either of the following applies:
 - a) It is a class I device as defined in subsection (a) of Section 360(c) of Title 21 of the United States Code, and either of the following applies:
 - (i) It is a device described in Section 414.202 of Title 42 of the Code of Federal Regulations.
 - (ii) Either of the following applies:
 - (I) The device is predominantly used in a health care setting by a provider; or,
 - (II) The device is predominantly prescribed by a health care provider.
 - b) It is a class II or class III device as defined in subsection (a) of Section 360c of Title 21 of the United States Code.
- 3) Prohibits, on and after January 1, 2026, a person from selling, distributing, or offering for sale a new or refurbished disposable, battery-embedded vapor inhalation device in this state.

- 4) Authorizes a city, county, city and county, or the state to enforce this bill and impose civil liability on a person or entity in violation of this bill in the amount of \$500 for the first violation, \$1,000 for the second violation, and \$2,000 for the third and any subsequent violations.
- 5) Authorizes the California Department of Tax and Fee Administration to revoke or suspend a license to engage in the sale of cigarettes or tobacco products, pursuant to the provisions applicable to the revocation or suspension of a license set forth in the Cigarette and Tobacco Products Licensing Act of 2003, for any licensed person who is in violation of this bill for a disposable, battery-embedded vapor inhalation device containing a tobacco product.
- 6) Authorizes the Department of Cannabis Control to revoke or suspend a license issued by the department, pursuant to the Medicinal and Adult-Use Cannabis Regulation and Safety Act, for any licensed person who is in violation of this bill for a disposable, battery-embedded vapor inhalation device containing a cannabis product.

EXISTING LAW

- 1) Enacts the Rechargeable Battery Recycling Act of 2006, which requires every retailer to have a system in place, on or before July 1, 2006, for the acceptance and collection of used rechargeable batteries for reuse, recycling, or proper disposal. (Public Resources Code (PRC) § 42451-42456)
- 2) Enacts the Electronic Waste Recycling Act of 2003 (EWRA), which established a program for consumers to return, recycle, and ensure the safe and environmentally sound disposal of video display devices, such as televisions and computer monitors that are hazardous wastes when discarded. (PRC § 42460, et seq.)
- 3) Adds battery-embedded products to the EWRA. (PRC § 42463)
- 4) Creates the Hazardous Waste Control Law (HWCL) and provides DTSC with responsibility for overseeing the management of hazardous waste in California. (Health and Safety Code § 25100, et seq.)
- 5) Creates the Responsible Battery Recycling Act (Act) of 2022, which requires producers of covered batteries, as defined, to establish a stewardship program for the collection and recycling of covered batteries. (PRC § 42420)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "Single-use vapes pose a significant threat to California's environment as well as to our public health. These devices contain highly flammable lithium-ion batteries that cannot be removed, and are designed to be thrown away after just a week or two of use. Without a standardized way to recycle single-use vapes, they are sent to material recovery facilities and landfills, where they can ignite dangerous and costly fires. Not only is this dangerous, it is unsafe for workers and costly to local governments to clean up. Long after these devices have been used and discarded, both the battery and the residual nicotine liquid can continue to pose a toxic threat to our marine and terrestrial environments."

Regulation of batteries: State law, the HWCL, prohibits the disposal of batteries in the trash or household recycling collection bins intended to receive other non-hazardous waste and/or recyclable materials. Many types of batteries, regardless of size, exhibit hazardous characteristics and are considered hazardous waste when they are discarded. These include single use alkaline and lithium batteries and rechargeable lithium metal, nickel cadmium, and nickel metal hydride batteries of various sizes (AAA, AA, C, D, button cell, 9-Volt, and small sealed lead-acid batteries).

Many batteries are sold within products, such as lithium-ion batteries, which are widely used in portable electronics like laptops, smart phones, digital cameras, game consoles, and cordless power tools. Single use vape devices usually contain a lithium-ion battery, making them hazardous waste at the end of life of the product.

If batteries end up in the trash or a recycling bin, owners/operators of solid waste transfer stations, municipal landfills, and recycling centers who discover batteries in the waste or recyclable materials are required to remove and manage the batteries separately. The facility that removes the batteries from the municipal solid waste stream or recyclable materials becomes the generator of the hazardous waste batteries and must comply with hazardous waste management regulations. Facilities that do not properly manage hazardous waste may be subject to regulatory enforcement and may be liable for monetary penalties.

Depending on the type of battery and applicable management requirements, batteries must be sent to a facility permitted to accept hazardous waste batteries, universal wastes, or spent lead acid batteries. Only facilities that have a DTSC permit or other type of authorization to treat, store, or dispose of hazardous wastes may accept hazardous waste batteries. Persons that do not have a DTSC permit may accept and store universal waste batteries and spent lead acid batteries if they operate according to the regulations specifically tailored for those types of batteries.

Lithium-ion batteries: Lithium-ion batteries, which are widely used in portable electronics like laptops, smart phones, digital cameras, game consoles, and cordless power tools, are also widely used as vehicle batteries in zero emission vehicles.

Fire risks: Because lithium-ion batteries contain hazardous and corrosive materials, they also pose a fire risk if not stored or disposed of properly. Therefore, any program to manage used lithium-ion batteries needs to account for this possible fire risk.

The Responsible Battery Recycling Act of 2022: AB 2240 (Irwin, Chapter 351, Statutes of 2022) created the Responsible Battery Recycling Act of 2022, which requires producers of covered batteries to establish a stewardship program for the collection and recycling of covered batteries in California. Covered batteries include:

- A loose battery that is sold separately from a product;
- A battery that is designed to be easily removed from a product by the user using only common household tools; and,
- A battery that is packed with, but not installed in, the product that the battery is intended to power.

Electronic Waste Recycling Act (EWRA): SB 20 (Sher, Chapter 526, Statutes of 2003) enacted the EWRA to ensure the safe management of electronic waste (e-waste). E-waste is a hazardous waste. Disposing of e-waste in landfills may harm both human health and the environment. It is hazardous because it may contain materials such as lead and mercury. E-waste is any unwanted electronic device. In 2022, EWRA was amended to include battery-embedded products.

Covered Battery-Embedded Products: In 2022, SB 1215 (Newman, Chapter 370, Statutes of 2022) expanded the scope of the EWRA to include covered battery-embedded products (CBEP). "Covered battery-embedded product" means a product that contains a battery that is not designed to be easily removed by the user with common household tools. CBEPs do not include certain medical devices; existing covered electronic devices (video display devices); certain energy storage systems; or, electronic nicotine delivery systems (e.g., e-cigarettes, vape pens).

Environmental impacts of disposable vapes: In the 2023 report, "Vape waste: The environmental harms of disposable vapes," the United States Public Interest Research Group Education Fund states:

"One product stands apart as being particularly harmful to our environment and public health—disposable vapes. Vapes, also known as e-cigarettes, are handheld battery powered electronic devices with heated metal coils that vaporize a liquid containing nicotine or cannabis products, known as e-liquid. Nicotine is the famously addictive stimulant found in tobacco that gives smokers a dopamine hit, and makes quitting difficult. Much has been made of the public health harms of disposable vapes, but this report aims to understand their effects as hazardous electronic waste.

It doesn't make any sense to manufacture electronics with rechargeable batteries, ship them across the world, and throw them out within a few days. Disposable vapes are single-use products powered by the same rechargeable lithium-ion batteries used in electric cars and iPhones. However, unlike traditional vapes, they're designed to be thrown out after use. That's because while some can be recharged with a USB cable, once they run out of the included e-liquid they can't be refilled.

After the Food and Drug Administration's (FDA) February 2020 crackdown on flavored nicotine e-liquid cartridges for reusable vapes, sales of disposable brands increased 196.2% by March 2023, according to the CDC Foundation. The FDA's decision prohibited the sale of flavored pre-filled nicotine vape cartridges exemplified by popular brand JUUL, but didn't mention disposable vapes. This sin of omission created a gray market and by March [2023] sales of disposable products increased to 11.9 million units a month and have overtaken cartridges market share at 53% of vape sales. At this rate, we throw out 4.5 disposable vapes per second.

Electronic waste produced from disposable vapes includes both the circuit boards and lithium ion batteries that power the device. These boards contain some of the heavy metals mentioned above, which can leach into the groundwater. Due to the nicotine e-liquid used in these products, vape waste can't be recycled with other plastics because the substance is defined by the [US] EPA as an acute hazardous waste."

This bill: AB 762 prohibits, on and after January 1, 2026, a person from selling, distributing, or offering for sale a new or refurbished disposable, battery-embedded vapor inhalation device in this state.

Arguments in support: According to Californians Against Waste, California Product Stewardship Council, California Public Interest Research Group, and Rethink Waste: "We are proud to co-sponsor AB 762, which seeks to ban the sale of single-use disposable vaporizer products in California. This critical legislation addresses the alarming environmental, safety, and public health risks posed by these hazardous products, protecting our communities, waste infrastructure, and natural ecosystems from their destructive impact.

Single-use vapes contain embedded lithium-ion batteries, making them not only an unsustainable source of electronic waste but also a significant fire hazard. When improperly discarded—as is often the case—these devices ignite fires in garbage cans, collection trucks, and material recovery facilities (MRFs). These lithium-ion battery fires can reach temperatures of up to 1200°C—equivalent to a welding torch—causing rapid and uncontrollable blazes. The U.K. has already linked disposable vape waste to a staggering 77% increase in waste facility fires over the last year alone. California waste and recycling operators are facing a similar crisis, with escalating fire risks and increased costs in managing this hazardous waste.

Disposable vapes are rapidly becoming a dominant form of electronic litter, contaminating highways, parks, and beaches. The Marine Conservation Society reports that these products are now routinely found along coastlines, where they pose an immediate threat to marine life. Unlike cigarette butts, which take up to ten years to degrade, single-use vapes introduce long-lasting toxic pollutants into ecosystems, including residual nicotine, lead, and mercury, which can leach into soil and waterways.

California has long been a leader in environmental protection and consumer safety, and this bill aligns with global momentum to eliminate single-use disposable vapes."

Arguments in opposition: According to the California Grocers Association: "Flavored tobacco products have been banned in California for nearly half a decade, however, based on one study, 98% of California consumers still use flavored disposable nicotine vapes today. Flavored disposable nicotine vapes are generally manufactured in China and though banned by the federal government, they continue to make up roughly two-thirds of the US market and more in some states. China's illicit vape market is worth nearly \$28 billion. Each time there is a restriction on access to a product that millions of adult customers want and use, an unintentional demand for contraband product is created and in this instance it has been filled by this non-domestic product. With such a large illicit market, customers are driven away from legal and regulated retailers and move to those that sell these products that are banned under state and federal law and likely do not conform to other standards (age verification, etc.). Of greatest concern beyond illegality, is that these illicit markets are too often selling unsafe counterfeit products that bypass authorization by the Food and Drug Administration, increasing further criminal activity and retail theft.

While we appreciate that AB 762 is well-intentioned, it represents the third subsequent ban in nearly as many years on products that are widely used in California yet already banned by state and federal law. We believe that this bill is premature and rather, the State's priority should be on the enforcement of existing law."

Double-referral: Should this bill pass the Assembly Environmental Safety and Toxic Materials Committee it will be re-referred to the Assembly Business and Professions Committee.

Related legislation:

- 1) AB 2240 (Irwin, Chapter 351, Statutes of 2022). Creates the Responsible Battery Recycling Act of 2022, which requires producers of covered batteries, as defined, to establish a stewardship program for the collection and recycling of covered batteries.
- 2) SB 1215 (Newman, Chapter 370, Statutes of 2022). Expands the EWRA to include battery embedded products.
- 3) SB 289 (Newman, 2021). Would have enacted the Battery and Battery-Embedded Product Recycling and Fire Risk Reduction Act of 2021, which would have required the producers of batteries and battery-embedded products to establish a stewardship program for those products, with full implementation on or before June 30, 2025. This bill was held on the suspense file in the Senate Appropriations Committee.
- 4) AB 1509 (Mullin, 2019). Would have established, within CalRecycle, the Lithium-Ion Battery Recycling Program, which would have required manufacturers of lithium-ion batteries to provide convenient collection, transportation, and disposal of lithium-ion batteries. This bill was held in the Senate Environmental Quality Committee.
- 5) AB 2832 (Dahle, Chapter 822, Statutes of 2018). Requires the Secretary for the California Environmental Protection Agency to convene a research group to review and advise the Legislature on policies pertaining to the recovery and recycling of lithium-ion vehicle batteries sold with motor vehicles in the state.
- 6) AB 1125 (Pavley, Chapter 572, Statutes of 2005). Enacts the Rechargeable Battery Recycling Act of 2006, and requires retailers of rechargeable batteries, by July 1, 2006, to establish a system for accepting rechargeable batteries for reuse, recycling, or proper disposal.
- 7) SB 20 (Sher, Chapter 526, Statutes of 2003). Enacts the EWRA to provide for the convenient recycling of covered electronic devices in California.

REGISTERED SUPPORT / OPPOSITION:

Support

350 Sacramento
7th Generation Advisors
A Voice for Choice Advocacy
ACR Solar International Corp.
Action on Smoking and Health
Active San Gabriel Valley
Algalita Marine Research and Education

Alliance of Nurses for Healthy Environments
American Academy of Pediatrics, California
Azul
Ban SUP
Breast Cancer Prevention Partners
Breathe California of The Bay Area, Golden Gate and Central Coast
California Nurses for Environmental Health and Justice
California Product Stewardship Council
California State Association of Counties
Californians Against Waste
California Public Interest Research Group
Catholic Charities of The Diocese of Stockton
Chico Bag
City of Thousand Oaks
Clean Earth 4 Kids
Clean Water Action
Community Environmental Council
County of Yolo
Courage California
Defend Our Health
Ecology Center
Endangered Habitats League
Environmental Action Committee of West Marin
Facts: Families Advocating for Chemical & Toxics Safety
Friends Committee on Legislation of California
Heal the Bay
Ivan's Recycling
League of California Cities
Little Kamper
Los Angeles County Sanitation Districts
Los Angeles Waterkeeper
Marin Sanitary Service
Napa Recycling and Waste Services
National Stewardship Action Council
Natural Resources Defense Council (NRDC)
Northern California Recycling Association
Oakland Recycles
Ocean Preservation Society
Physicians for Social Responsibility - Los Angeles
Plastic Free Future
Plastic Pollution Coalition
Product Stewardship Institute
Recology

Recology Waste Zero
Regen Monterey
Republic Services
Rethink Disposable
Rethinkwaste
Rural County Representatives of California
Rural County Representatives of California
Salinas Valley Solid Waste Authority
San Diego Pediatricians for Clean Air
Santa Barbara County Resource Recovery & Waste Management Authority
Santa Barbara County Resource Recovery & Waste Management Division
Save Our Shores
Save the Albatross Coalition
Save the Bay
Sierra Club California
Simply Recycle
SoCal 350 Climate Action
South Bayside Waste Management Authority
Swana California Chapters Legislative Task Force
The 5 Gyres Institute
The Last Plastic Straw
The Surfrider Foundation
Torus Consulting
TRI-CED Community Recycling
Turn Climate Crisis Awareness & Action
Upstream
Wilmington Recyclers
Wm (waste Management)
Zero Waste Marin Joint Powers Authority
Zero Waste San Diego
Zero Waste Sonoma

Opposition

American Petroleum and Convenience Store Association
BizFed Central Valley
Cal Asian Chamber of Commerce
California Business Roundtable
California Cannabis Industry Association
California Cannabis Operators Association
California Chamber of Commerce
California Fuels and Convenience Alliance
California Grocers Association

Huntington Beach Police Officers' Association
Peace Officers Research Association of California
Westminster Police Officers Association

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