



Washington State Liquor and Cannabis Board

Topic: Petition for Adoption, Amendment, or Repeal of a State Administrative Rule – Banning disposable cannabis vape devices containing lithium-ion batteries.

Date: May 22, 2024

Presented by: Denise Laflamme, Rules Coordinator

Background

On March 24, 2024, a petition for rulemaking was submitted to the Washington State Liquor and Cannabis Board (LCB) by a concerned producer/processor, who wishes to stay anonymous, requesting the Board initiate rulemaking to consider adopting rules banning single-use “disposable” cannabis¹ vape devices containing lithium ion batteries that are designed to be thrown away after use.

The Petitioner is concerned with harmful chemicals and heavy metals being released into the soil and ground water due to the large amount of vape devices that are being discarded given the lack of legal disposal methods and licensees not adhering to disposal guidelines set forth by the Department of Ecology. In the accompanying email, the petitioner provides additional detail regarding the environmental and health concerns. The petition form and accompanying email are attached.

Lithium-ion Batteries

Lithium-ion batteries are made using natural resources including cobalt, graphite, and lithium and are increasingly being used in a wide range of products, including but not limited to, electric vehicles, personal electronics, and e-cigarettes.^{1,2} These batteries store a significant amount energy in a small size, are long-lasting and rechargeable.^{3,4}

Lithium ion batteries can pose a risk of overheating and catching fire if they are damaged or defective.⁵ The Washington Department of Ecology (Ecology) regulates businesses who dispose of lithium-ion batteries and provides information on how to manage the disposal and recycling of lithium-ion batteries under their dangerous waste regulations.^{6,7} Most lithium-ion batteries are likely to meet the definition of hazardous waste, however, households are generally exempt from hazardous waste regulations.⁸ Both Ecology and the U.S. Environmental Protection Agency (EPA) recommend that individuals do not dispose of lithium-ion batteries in their household trash or curbside recycling, and suggest taking these batteries to facilities that can safely handle and recycle them.^{9,10} However, the lithium-ion batteries found in disposable cannabis and nicotine vape devices are not usually designed to be removed from the device, making it challenging to recycle them. Hazardous household waste collection facilities in Washington currently do not accept devices containing any cannabis.^{11,12}

¹ The petition form does not explicitly mention cannabis, however, it is implied based on the accompanying email that provides additional information about the Petitioner’s concerns.

Issue

Whether the Board should accept or deny the petition to initiate the rulemaking process to consider a ban of single-use “disposable” cannabis vape devices that contain lithium ion batteries.

Analysis

When making a recommendation to the Board regarding a petition for rulemaking submitted, the Director’s Office Staff considers the following factors to the extent practicable:

- Statutory authority and obligations;
- Alignment with the Board’s policy goals and priorities;
- The immediacy of the safety, environmental, or security concern(s) raised;
- Potential impact to public health outcomes;
- Level of public interest;
- Whether the problems or issues are already under consideration by the LCB in other rulemaking issues;
- Merits of the petition;
- Interagency and intragency impacts;
- Potential costs, benefits, and consequences (intended and unintended); and
- Equity impacts; and
- Feasibility/practicability

Accepting the petition initiates the rulemaking proceedings to *consider* amending rules, consistent with the Administrative Procedures Act ([Chapter 34.05 RCW](#)). The first official step in the rulemaking process is filing a CR-101, preproposal statement of inquiry, which announces that the Agency is considering rulemaking and invites the public to comment on the rulemaking subject. Comments are used to inform whether and how a rule should be modified to achieve the most favorable outcome.

Statutory Authority

Cannabis vapor products

[RCW 69.50.342](#) grants the Board broad statutory authority to establish rules related to product quality standards, and packaging and labeling requirements to promote public health and safety. This includes, but is not limited to, the authority to adopt rules related to methods of producing, processing, and packaging cannabis, useable cannabis, cannabis concentrates, and cannabis-infused products (RCW 69.50.342(1)(c) as well as the prohibition of any type of device used in conjunction with a cannabis vapor product, as well as additives and other ingredients, following a consultation with the Department of Health or other appropriate authority if it is determined the device poses a risk to public health or youth access (RCW 69.50.342(1)(m). In 2020, the authority specified in RCW 69.50.342(1)(m) was established in response to reports of hospitalizations and deaths

associated with the additive, vitamin E acetate, in nicotine and cannabis concentrates and emergency actions taken by the Washington State Board of Health to prohibit products containing this additive.

The Petitioner addresses youth access in their supplementary email and cites research related to e-cigarettes that indicates single-use vape devices, specifically those containing nicotine, appeal to youth because of attractive packaging, flavored products, and perceptions about harm.

However, despite the concerns raised by the petitioner and other agencies that were consulted, banning these devices is outside the scope of LCB's authority based on the types of issues raised about the batteries used in by these products.

Nicotine vapor products

[RCW 70.345.160](#) grants the board authority to suspend the license of a retailer or delivery sale licensee if an analyzed vapor product contains an ingredient, substance, or solution present in quantities injurious to human health or posing a significant risk to public health, as determined by the secretary of health or a local health jurisdiction. Nothing in this section permits a total ban on the sale or use of vapor products. Vapor products are defined in [RCW 70.345.010](#) as containing nicotine, and includes electronic cigarettes and similar products. Also, per statute, vapor products do not include cannabis, useable cannabis, cannabis concentrates, and cannabis-infused products.

Interagency Coordination

Rules staff consulted with Ecology and the Washington State Department of Health (DOH) in developing this response. Ecology provided information related to their regulations and activities around disposal of single-use vapes and other products containing lithium-ion batteries. Depending on the condition of the vape and other factors, the vape device could be classified as dangerous waste requiring disposal compliant with Ecology's Dangerous Waste Regulations ([chapter 173-303 WAC](#)). DOH provided information about their environmental health and youth access concerns and current activities around the disposal of vapes. Information provided by Ecology and DOH can be found attached as the appendices.

Conclusion

As expressed by DOH, Ecology and others, the production and disposal of these products raise environmental health concerns including the use of limited natural resources to produce them, the wasteful discarding of batteries designed for longer use, flammability risks, lack of accessible and safe recycling options, and complicated disposal guidelines for individuals. While the LCB has broad authority related to cannabis products, labeling and protection of public health, the environmental health concerns associated with these products are beyond LCB's scope.

LCB's authority under RCW 69.50.342 to prohibit devices used in conjunction with cannabis vapor products is related to components or ingredients that pose a risk to public

health. This authority was established in response to reports of hospitalizations and deaths associated with the additive, vitamin E acetate, in nicotine and cannabis concentrates. Subsequently, the Washington State Board of Health took emergency actions to prohibit products containing this additive. While there are environmental and public health issues related to the use of disposable vapor devices containing lithium-ion batteries, at this time, they do not necessitate immediate actions to protect public health.

Additionally, nicotine-containing vapor products and devices, including disposable or single-use devices, represents a much larger market than disposal cannabis vape devices. LCB does not have authority to prohibit the sale of these types of devices containing nicotine.

In lieu of a prohibition of these products, there may be other ways LCB can facilitate and improve recycling of these products. This could include:



- Partnering with Ecology and DOH on their efforts around use, disposal and recycling. This might include facilitating the dissemination of information from other agencies or groups to licensees, employees and consumers;
- Collecting and disseminating any product data we possess or have access to around the sale and production of these products. Currently, CCRS does not include information to identify how many of these products are produced and sold in the state; and
- Encouraging companies/licensees/retailers to offer recycling options for these products.

Recommendation

The Director's Office staff recommend that consistent with RCW 34.05.330(1)(b), the Board deny the petition for adoption, repeal or amendment of rules related to enacting a ban of single-use cannabis vape devices containing lithium-ion batteries.

Board Action

After considering the recommendation of Director's Office staff, the Board accepts/denies the petition for rulemaking received from an anonymous petition on March 24, 2024.

<input type="checkbox"/> Accept <input type="checkbox"/> Deny	<i>Not Present</i> David Postman, Chair	<u>5.22.2024</u> Date
<input type="checkbox"/> Accept <input checked="" type="checkbox"/> Deny	 Ollie Garrett, Board Member	<u>5.22.2024</u> Date
<input type="checkbox"/> Accept <input checked="" type="checkbox"/> Deny	 Jim Vollendroff, Acting Chair	<u>5.22.2024</u> Date

Attachments:

1. Petition form
2. Email

Relevant Laws and Regulations*Laws*

[RCW 69.50.101](#) includes definitions of cannabis products and youth access.

[RCW 69.50.327](#) identifies the Board's authority to adopt rules to prohibit the use of characterizing flavors in vapor products that may pose a risk to public health or youth access.

[RCW 69.50.342](#) identifies the Board's authority to engage in rulemaking regarding standards of ingredients and quality pertaining to cannabis products. Also includes the Board's expanded authority in 2020 under [HB 2826](#) (marijuana vapor products) related to vitamin E acetate in vapor products, to prohibit any type of device used in conjunction with a cannabis vapor product and the use of any type of additive, solvent, ingredient, or compound in the production and processing of cannabis products, including cannabis vapor products, when the board determines, following consultation with the department of health or any other authority the board deems appropriate, that the device, additive, solvent, ingredient, or compound may pose a risk to public health or youth access.¹³

[RCW 69.50.345](#) identifies the Board's authority to adopt rules to license cannabis producers, processors and cannabis retailers.

[RCW 69.50.375](#) identifies the authority of the Washington State Department of Health (WADOH), in conjunction with the Board, to engage in rulemaking regarding requirements for cannabis concentrates, useable cannabis, and cannabis-infused products that include approved pesticides and pesticide testing requirements and standards of ingredients, and quality.

[RCW 70.345.010](#) Defines vapor products as containing nicotine and includes electronic cigarettes and similar products. Defines vapor products as not including cannabis, useable cannabis, cannabis concentrates, and cannabis-infused products.¹⁴

[RCW 70.345.160](#) Provides the Board's enforcement authority and includes actions that can be taken if a nicotine vapor product poses an injurious risk to public health or significant public health risk. Doesn't allow a total ban on the sale or use of vapor products.¹⁵

[Chapter 70A.555](#) Ecology Battery Stewardship Program, 2023 law ([ES2SB 5144](#), 2023). Does not cover batteries that are not intended or designed to be easily removable from the battery-containing product.

Rules

[WAC 314-55-097](#) Describes how liquid and solid wastes generated during cannabis production and processing must be managed and disposed of.

[WAC 314-55-105](#) Defines cannabis product packaging and labeling requirements.

[WAC 314-55-1055](#). Requires cannabis licensees to disclose all ingredients used in the production of cannabis concentrates for inhalation and cannabis-infused extracts for inhalation.

[WAC 314-55-1065](#) (Emergency Rule) 1/9/21. Prohibited the sale of cannabis products containing vitamin E acetate.¹⁶ Allowed Board to take disciplinary action against any licensed processor that fails to comply with prohibition. Rescinded on 4/28/21.

[WAC 314-55-550](#). Cannabis vapor products. Describes procedures the Board may use to prohibit any type of device used in conjunction with a cannabis vapor product, and any type of additive, solvent, ingredient, or compound in the production of cannabis vapor products that may pose a risk to public health or youth access.

[WAC 314-55-560](#). Evaluation of additives, solvents, ingredients or compounds used in the production of cannabis products. Describes procedures the Board may use to prohibit the use of any additive, solvent, ingredient or compound in the production of cannabis products that may pose a risk to public health or youth access.

History of legislation and rulemaking around vitamin E acetate additive related to nicotine and cannabis vape products:

- The Washington State Board of Health (SBOH) voted in [October 2019](#) to adopt an emergency rule prohibiting the sale of nicotine and cannabis vapor products containing vitamin E acetate.
- [HB2826](#) (chapter 133, Laws of 2020) concerning marijuana vapor products amended RCW 69.50.101 and RCW 69.50.342 and created RCW 69.50.327. Legislation took effect on March 25, 2020.
- In May 2020, SBOH initiated permanent rulemaking to prohibit vitamin E acetate in nicotine and cannabis vapor products. Under new section, [WAC 246-80-021](#), no person including those licensed under chapter 69.50 or 70.345 RCW may sell, offer for sale or possess with intent to sell, or offer for sale vapor products containing vitamin E acetate. (effective 11/15/2020).
- In May, 2020, LCB filed emergency rules establishing new sections WAC 314-55-1065 and WAC 314-55-1055, prohibiting Vitamin E Acetate in marijuana vapor products and requiring disclosure of ingredients, respectively. WAC 314-55-1065 was rescinded on 4/28/21 [WSR 21-10-041](#).^{17 18}
- LCB implementation of HB2826 ([WSR 21-05-075 filed 2/17/21](#)) amending WAC 314-55-010 and adding new sections WAC 314-55-550 and WAC 314-55-1055. (effective March 20, 2021)

Appendices – Interagency Coordination – Information Provided by Washington State Departments of Ecology and Health

I. Department of Ecology – Ecology provided information about their regulations and activities around disposal of single-use vapes and other products containing lithium-ion batteries. This information includes the following:

- Single use vapes, both nicotine and THC products, are an ongoing regulatory challenge. Depending on the condition of the vape and other factors, the vape device could be classified as dangerous waste requiring disposal compliant with the Dangerous Waste Regulations (chapter 173-303 WAC, DW Regs). The DW Regs apply when a material becomes a waste. Ecology only regulates what happens when the product is determined to be a waste by the user (generator).
- Ecology does not have authority to limit/ban the use of lithium-ion batteries in products.
- Households may dispose of vapes in their own household waste/garbage. However, we discourage such disposal due to the fire risk that the integrated battery (or any Li-ion battery) presents when mixed with other waste and handled with heavy machinery. For example, a garbage truck fire because the battery was compressed/damaged after the waste was picked up or at transfer station crushers.
- There are also situations where vapes are no longer considered household waste under the DW Regs. For example at schools where vapes are confiscated. The school becomes the generator of the waste vape and the vape no longer qualifies as household waste. Such situations, and expired product (now most likely a waste) from businesses have some regulatory hurdles because of additional non-Ecology requirements for transportation and disposal (e.g. from US DOT or DEA).
- Disposal in-state poses a challenge for THC vapes. The dangerous waste permitted treatment, storage, and disposal (TSD) facilities in Washington, a likely end-point for used vapes, hold federal permits and are not permitted to receive THC waste.
- The Ecology Solid Waste Management Program is currently working on a [battery product stewardship program](#) rule development for waste batteries. This program will initially focus on small format batteries like those found in vapes, but they must be loose batteries or battery packs, not contained in a device.
- Ecology’s Spills program is also coordinating Ecology’s portion of the work related to [SB 5812](#), which directs State Patrol to study EV fires.

II. Department of Health – DOH provided the following information about their concerns and current activities around the use of disposable vapes:

Environmental Public Health works to improve the health of people in Washington state by preventing and reducing exposure to health hazards in the environment and supporting healthy places where people live, work, and play. We support actions that reduce people’s exposures to toxic chemicals that are used in batteries, including exposures to workers who manufacture batteries and people who live near landfills where they are disposed of. While it is good to increase the proper disposal and recycling of batteries to decrease

some environmental exposures, the complicated nature of the regulation of different vape products makes it difficult to help people dispose of these products in the safest way.

The Youth Cannabis and Commercial Tobacco Prevention Program (YCCTPP) at the Department of Health focuses on individuals 12-20 and preventing initiation of cannabis and commercial tobacco products. We also focus our efforts on influential adults as they can impact the choices youth make. While the environmental impact of the products and the lithium-ion batteries are out of our program's specific scope of work, it is a point of concern for our youth who are environmentally conscious.

Disposable vapor products are commonly used by youth due to their inconspicuous design, number of flavors, and low cost (CDC, 2024). In Washington state, of 10th grade students who report using vapor products, 75% report using products with nicotine and 54% report using products with THC.

Restricting access to products is an evidence-based practice however, its effectiveness depends on the approach and whether it's comprehensive (Tobacco Control Network, 2022). Previous policy implementation efforts have indicated that when one type of product is removed from the market, youth transition to another product that is available. An example is in 2020 when fruit flavored Juul pods were removed from the market and youth transitioned to using Juul flavors available and other disposable products with fruit flavors (MMWR, 2023). We would anticipate a similar response if this approach were to be implemented in Washington state.

An additional consideration for this petition is accessibility for disposal, especially for current products already circulating the market. While it is good to increase the proper disposal and recycling of batteries to decrease some environmental exposures, the complicated nature of the regulation of different vape products makes it difficult to help people dispose of these products in the safest way. As youth are more often using disposable products, the burden of disposal falls onto schools or other facilities that confiscate them from youth. Products are not clearly marked as what substance is present in the vapor product, especially if a youth obtained the product secondhand from a social source. The two substances most commonly used in vapor products (Nicotine and Cannabis) have conflicting disposal guidelines, without any overlap, making disposal difficult for facilities who do not commonly handle hazardous or illicit substances.

The Department of Health's Youth Cannabis and Commercial Tobacco Prevention Program (YCCTPP) is currently working to address proper vapor product disposal through:

- Partnership with Department of Ecology to host educational webinars on disposal of these products for schools and other prevention professionals.
- Exploring the opportunity improve and streamline disposal efforts in partnership with Department of Ecology for vapor products (cannabis and commercial tobacco).
- Translating complicated guidance for product disposal, especially for "one time use" or disposable products.

- Partner with the Statewide Commercial Tobacco Coalition, Washington Breathes, to develop a fact sheet to educate schools and other facilities on disposal recommendations.
- Working with the CDC, FDA, and EPA to continue to improve national disposal guidance, to in turn support statewide efforts.
- Meeting with other states that have legalized cannabis to learn from each other on current disposal efforts.
- Educating youth (ages 12-20) and influential adults on the environmental impact of disposable vapor products (cannabis and commercial tobacco).

DOH References:

- https://www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html
- Askhys.net
- <https://tobaccocontrolnetwork.org/wp-content/uploads/2022/05/2022-TCN-Policy-Recommendations-Guide-FINAL.pdf>
- <https://www.cdc.gov/mmwr/volumes/72/wr/mm7225a1.htm>

Additional resources:

1. H.T. Reid et al., 2023. Up in smoke: considerations for lithium-ion batteries in disposable e-cigarettes. *Joule* 7, 2749-2759. Open Access available at: <https://www.cell.com/action/showPdf?pii=S2542-4351%2823%2900482-8>
2. Public Health Law Center, 2/11/21. [What a waste! Legally disposing of e-cigarettes and nicotine products.](#)
3. Cannabis Business Times, 2024. [The vexing issue of vape recycling.](#)
4. PennEnvironment Research & Policy Center, July 2023. [Vape Waste. The environmental harms of disposable vapes.](#)

¹ U.S. EPA, 2023. [Lithium-ion battery recycling.](#)

² Vermont DEC, 2020. Environmental Fact Sheet: [Lithium Batteries. Safe Management of Household Lithium Batteries.](#)

³ U.S. EPA. [Used Lithium-Ion Batteries. General Information.](#)

⁴ U.S. EPA Region 7. [Know the Facts: Lithium-ion batteries.](#)

⁵ Washington State Dept. of Ecology. [Lithium-ion battery safety and management.](#)

⁶ Washington State Dept. of Ecology. [Guidance & technical assistance - Batteries.](#)

⁷ Washington State Dept. of Ecology, Interoffice memorandum. [Lithium-ion battery management under Chapter 173-303 WAC. Dangerous Waste Regulations.](#)

⁸ U.S. EPA, 2024. [Used Lithium-Ion Batteries: Information for Businesses.](#)

⁹ Washington State Dept. of Ecology. [Batteries.](#)

¹⁰ U.S. EPA, 2023. [Lithium-ion battery recycling frequently asked questions.](#)

¹¹ King county hazardous waste management program, 2022. [E-cigarettes, vape cartridges, and cigarettes – disposal for households.](#)

¹² Clark County Public Health. [Household hazardous waste, residential collection services.](#)

¹³ The legislature passed agency-requested [HB 2826](#) in 2020 (chapter 133, Laws of 2020) amending [RCW 69.50.342](#), and providing LCB authority to adopt rules regarding:

(m) The prohibition of any type of device used in conjunction with a cannabis vapor product and the prohibition of the use of any type of additive, solvent, ingredient, or compound in the production and processing of cannabis products, including cannabis vapor products, when the board determines, following consultation with the

department of health or any other authority the board deems appropriate, that the device, additive, solvent, ingredient, or compound may pose a risk to public health or youth access; and

(n) Requirements for processors to submit under oath to the department of health a complete list of all constituent substances and the amount and sources thereof in each cannabis vapor product, including all additives, thickening agents, preservatives, compounds, and any other substance used in the production and processing of each cannabis vapor product.

¹⁴ (18) "Vapor product" means any noncombustible product that may contain nicotine and that employs a heating element, power source, electronic circuit, or other electronic, chemical, or mechanical means, regardless of shape or size, that can be used to produce vapor or aerosol from a solution or other substance.

(a) "Vapor product" includes any electronic cigarette, electronic cigar, electronic cigarillo, electronic pipe, or similar product or device and any vapor cartridge or other container that may contain nicotine in a solution or other form that is intended to be used with or in an electronic cigarette, electronic cigar, electronic cigarillo, electronic pipe, or similar product or device.

(b) "Vapor product" does not include any product that meets the definition of cannabis, useable cannabis, cannabis concentrates, cannabis-infused products, cigarette, or tobacco products.

(c) For purposes of this subsection (18), "cannabis," "useable cannabis," "cannabis concentrates," and "cannabis-infused products" have the same meaning as provided in RCW 69.50.101. [2022 c 16 § 135; 2021 c 65 § 69. Prior: 2019 c 445 § 210; 2019 c 15 § 4; 2016 sp.s. c 38 § 4.]

¹⁵ (6) Upon a determination by the secretary of health or a local health jurisdiction that a vapor product may be injurious to human health or poses a significant risk to public health:

(a) The board, in consultation with the department of health and local county health jurisdictions, may cause a vapor product substance or solution sample, purchased or obtained from any vapor product retailer, distributor, or delivery sale licensee, to be analyzed by an analyst appointed or designated by the board;

(b) If the analyzed vapor product contains an ingredient, substance, or solution present in quantities injurious to human health or posing a significant risk to public health, as determined by the secretary of health or a local health jurisdiction, the board may suspend the license of the retailer or delivery sale licensee unless the retailer or delivery sale licensee agrees to remove the product from sales; and

(c) If upon a finding from the secretary of health or local health jurisdiction that the vapor product poses an injurious risk to public health or significant public health risk, the retailer or delivery sale licensee does not remove the product from sale, the secretary of health or local health officer may file for an injunction in superior court prohibiting the sale or distribution of that specific vapor product substance or solution.

(7) Nothing in subsection (6) of this section permits a total ban on the sale or use of vapor products. [2023 c 398 § 7; 2016 sp.s. c 38 § 24.]

¹⁶ WAC 314-55-1065(2) provides that:

No person, including, but not limited to, a person licensed under chapter 69.50 RCW may sell, offer for sale, or possess with intent to sell, or offer for sale, vapor products containing vitamin E acetate. The foregoing prohibition applies to the sale, offer for sale, or possession with intent to sell, or offer for sale vapor products containing vitamin E acetate at any location or by any means in this state including, but not limited to, by means of a telephonic or other method of voice transmission, the mail or any other delivery service, or the internet or other online service.

¹⁷ LCB [CR103E Memorandum](#). Emergency rule establishing new section – WAC 314-55-1065- Prohibition – Vitamin E Acetate.

¹⁸ LCB [CR103E Memorandum](#). Emergency rule regarding new section WAC 314-55-1055 – Ingredient Disclosure.