

PROHIBIT VITAMIN E ACETATE AND CERTAIN OTHER INGREDIENTS IN MARIJUANA AND VAPING PRODUCTS

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House Bill 4249 (H-1) as reported from committee
House Bill 4250 (H-1) as reported from committee
Sponsor: Rep. Abdullah Hammoud

Analysis available at
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House Bill 4251 (H-4) as reported from committee
Sponsor: Rep. Joseph N. Bellino, Jr.

1st Committee: Regulatory Reform
2nd Committee: Rules and Competitiveness
Complete to 6-2-21

BRIEF SUMMARY: House Bills 4249, 4250, and 4251 would respectively amend the Medical Marihuana Facilities Licensing Act, amend the Michigan Regulation and Taxation of Marihuana Act, and create a new act, to prohibit the sale of marijuana products, vapor products, or liquid nicotine products that contain vitamin E acetate or other prohibited ingredients and to establish a criminal fine for a violation. HB 4250 would also lower, from 21 to 18 years of age, the minimum age for employees or volunteers of a (recreational) marijuana establishment.

FISCAL IMPACT: The bills would have an indeterminate fiscal impact on state and local units of government. (See **Fiscal Information**, below, for a detailed discussion.)

THE APPARENT PROBLEM:

Vitamin E acetate was linked by the federal Centers for Disease Control and Prevention (CDC) to an outbreak of vaping-related illnesses in over 2,600 people across the country in late 2019.¹ As of January 23, 2020, the Michigan Department of Health and Human Services had identified 69 confirmed or probable cases of severe lung disease associated with vaping in Michigan, including three deaths. Though not an approved additive, vitamin E acetate is used by some to dilute vaping products. It has been most commonly used in vaping products that contain THC (tetrahydrocannabinol, the active chemical in marijuana), where it increases the volume of the THC concentrate extracted from marijuana, but has also been found in some liquid nicotine products. While vitamin E acetate can usually be safely ingested or applied topically, as when used in such products as nutritional supplements or skin creams, it can be dangerous when heated and inhaled into the lungs. In November 2019, emergency rules issued by the Marijuana Regulatory Agency banned the use of vitamin E acetate in marijuana vaping products in Michigan, and tens of thousands of products containing vitamin E acetate were recalled or pulled from shelves in stores and dispensaries.² Legislation has been offered to prohibit selling certain products intended to be inhaled that contain vitamin E acetate and any substances used as diluents (diluting agents) that have not been approved by the Federal Drug Administration (FDA).

¹ https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html

² <https://www.michigan.gov/lara/0,4601,7-154-11472-513083--,00.html>

THE CONTENT OF THE BILLS:

House Bill 4249 would amend the Medical Marijuana Facilities Licensing Act, which regulates medical marijuana, to prohibit a licensed marijuana processor from processing marijuana intended for inhalation, or a marijuana-infused product intended for inhalation, that contains or has been combined with vitamin E acetate. Similarly, a licensed provisioning center could not sell marijuana intended for inhalation, or a marijuana-infused product intended for inhalation, that contains or has been combined with any of the following:

- Vitamin E acetate.
- Any other ingredient, unless either of the following applies:
 - The ingredient is a botanically derived terpene that is chemically identical to a terpene derived from the plant *Cannabis sativa* L. (Generally speaking, a terpene is a compound found in many plants that can be used to add a flavor or scent to a product; for instance, citrus. Terpenes can also be chemically synthesized.)
 - Both of the following conditions are met:
 - The ingredient is approved by the FDA for inhalation.
 - The concentration of the ingredient in the marijuana or marijuana-infused product does not exceed the maximum concentration approved by the FDA.

A processor or provisioning center that violated the prohibition would be guilty of a misdemeanor punishable by a fine of up to \$10,000.

MCL 333.27502 et seq.

House Bill 4250 would amend the Michigan Regulation and Taxation of Marijuana Act, which regulates recreational marijuana, to prohibit a marijuana establishment from allowing a person who is younger than 18 years of age to volunteer or work for the marijuana establishment. Currently, a marijuana establishment may not allow a person younger than 21 years of age to work or volunteer in the establishment. (Under the act, a person must be at least 21 years of age to purchase marijuana from a provisioning center or possess marijuana.)

The bill would also prohibit a marijuana processor from processing, and a marijuana retailer from selling, marijuana intended for inhalation or a marijuana-infused product intended for inhalation if the marijuana or marijuana-infused product contains or has been combined with any of the following:

- Vitamin E acetate.
- Any other ingredient, unless either of the following applies:
 - The ingredient is a botanically derived terpene that is chemically identical to a terpene derived from the plant *Cannabis sativa* L.
 - Both of the following conditions are met:
 - The ingredient is approved by the FDA for inhalation.
 - The concentration of the ingredient in the marijuana or marijuana-infused product does not exceed the maximum concentration approved by the FDA.

A violation involving a prohibited ingredient would be a misdemeanor punishable by a fine of up to \$10,000.

MCL 333.27953 et seq.

House Bill 4251 would create a new act to prohibit the sale of a *vapor product* that contains or has been combined with any of the following:

- Vitamin E acetate.
- Any other ingredient that the FDA has prohibited for inhalation at the concentration present in the *liquid nicotine*.

Vapor product would mean a noncombustible product 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 from *liquid nicotine*, and the use or inhalation of which simulates smoking. The term would include an electronic cigarette, electronic cigar, electronic cigarillo, electronic pipe, or similar product or device and a vapor cartridge or other container of liquid 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. The term would not include a product regulated as a drug or device by the FDA.

Liquid nicotine would mean a liquid containing nicotine in any concentration that is sold, marketed, or intended for use in a vapor product.

A violation would be a misdemeanor punishable by a fine of up to \$10,000.

The bill is tie-barred to House Bill 4878, which means that it cannot take effect unless HB 4878 is also enacted. House Bill 4878 would amend the Youth Tobacco Act to change the definition of “minor” for its purposes to mean an individual under the age of 21. The act now defines “minor” as an individual under 18. In general terms, the Youth Tobacco Act prohibits selling or providing tobacco products, vapor products, or alternative nicotine products to minors and also prohibits minors from purchasing, possessing, or publicly using those products. The bill would also add synthetic nicotine products to the products addressed by that act.

BACKGROUND INFORMATION:

The bills are reintroductions of HBs 5159, 5160, and 5161 of the 2019-20 legislative session. Those bills, which pertained only to prohibiting products containing vitamin E acetate, were passed by the House of Representatives.

FISCAL INFORMATION:

House Bill 4249 would have an indeterminate fiscal impact on the state and on local units of government. Under the bill, a processor that processes or a provisioning center that sells marijuana or a marijuana-infused product intended for inhalation that contains or has been combined with vitamin E acetate, or other ingredients specified in the bill, would be guilty of a misdemeanor punishable by a fine of up to \$10,000. Under section 602 of the Medical Marijuana Facilities Licensing Act, all revenue from fines imposed under the act is required to be deposited into the Medical Marijuana Excise Fund. Because there is no practical way to determine the number of violations that will occur under provisions of the bill, an estimate of the amount of additional revenue the state would collect cannot be made. The fiscal impact to local units would depend on how provisions of the bill affected court caseloads and the related administrative costs.

House Bill 4250 would have an indeterminate fiscal impact on the state and on local units of government. Under the bill, a marijuana processor or marijuana retailer that processes or sells marijuana or a marijuana-infused product intended for inhalation that contains or has been combined with vitamin E acetate, or other ingredients specified in the bill, would be guilty of a misdemeanor punishable by a fine of up to \$10,000. Under section 7 of the Michigan Regulation and Taxation of Marihuana Act, all revenue from fines imposed under the act is required to be deposited into the general fund. Because there is no practical way to determine the number of violations that will occur under provisions of the bill, an estimate of the amount of additional revenue the state would collect cannot be made. The fiscal impact to local units would depend on how provisions of the bill affected court caseloads and the related administrative costs.

House Bill 4251 would have an indeterminate fiscal impact on local units of government. Under the bill, an individual that sells a vapor product that contains or has been combined with vitamin E acetate or other ingredients that the FDA has prohibited at the concentration present in the liquid nicotine would be guilty of a misdemeanor punishable by a fine of up to \$10,000. The bill does not specify where the fine revenue would be deposited, so it is assumed the fine revenue would increase funding for public and county law libraries, which are the constitutionally designated recipients of penal fine revenues. Because there is no practical way to determine the number of violations that will occur under provisions of the bill, an estimate of the amount of additional revenue the libraries would collect cannot be made. The fiscal impact to local units would depend on how provisions of the bill affected court caseloads and the related administrative costs.

ARGUMENTS:

For:

Nationally, thousands have suffered lung injuries and at least 60 people have died from vaping-related incidents. At least three deaths were in Michigan. Two of the vaping-related cases, one in Michigan that involved a high school student, resulted in double-lung transplants. Although no single substance has been identified as causing the injuries, half of the samples tested by the FDA contained THC, the active ingredient in marijuana, and half of those were found to contain vitamin E acetate. This provides clear evidence that the addition of vitamin E acetate to vaping products, whether containing nicotine alone or containing marijuana, poses a serious public health risk.

The bills would address the issue by prohibiting sales of vaping products containing vitamin E acetate and unapproved additives and would apply the ban, and resulting criminal fine, to both nicotine-only products and to marijuana or marijuana-infused products that are intended to be inhaled. The bills would not ban certain flavors, just additives that may pose a risk to the health and safety of those using vapor products. Certain natural compounds could be used if approved by the FDA. (Currently, in an effort to curb e-cigarette use by minors, the FDA bans flavors other than menthol and tobacco from e-cigarettes and vaping products but does allow vape shops to sell flavors in tank-based systems whereby consumers may mix their own flavors.)

If enacted, the prohibition would protect the public, as labels on products do not necessarily identify additives such as vitamin E acetate and not all consumers may be aware of the dangers of inhaling substances used as additives. Under the bills, anyone selling marijuana or nicotine

in inhalable products containing vitamin E acetate or other substances not approved by the FDA, whether in licensed facilities or on the street, could be prosecuted.

Response:

House Bill 4250, as reported from committee, would lower the age of employees or volunteers in a recreational marijuana facility from 21 to 18. Since the law legalizing recreational marijuana prohibits those younger than 21 from buying or possessing marijuana, and early use of marijuana may have long-term cognitive impacts on the developing brain of adolescents, some may feel it prudent to retain the requirement that only those legally of age to purchase and possess recreational marijuana should be allowed to be employed by, or to volunteer at, recreational marijuana establishments.³

For:

A similar package of bills last session pertained only to prohibiting products containing vitamin E acetate and did not address other substances. Some argued then that those bills did not go far enough, as other substances that are or may prove to be harmful when inhaled are already being used as diluents (that is, fillers or cutting agents) or flavoring agents. For example, the FDA found that 24% of the products that contained THC also contained another diluent such as medium chain triglycerides. Some of the affected patients had used products containing polyethylene glycol as a diluent. Therefore, in addition to vitamin E acetate, it would be reasonable to ban any additive as a diluent or flavoring agent that has not been approved by the FDA as safe to use in that manner, as the committee-reported versions of these bills would do.

POSITIONS:

The following entities indicated support for the bills:

- Michigan Cannabis Industry Association (5-6-21)
- RevSix Data Systems (3-16-21)
- Great Lakes Cannabis Chamber of Commerce (5-6-21)

A representative of Wild Bill's Tobacco testified in support of House Bill 4251. (5-13-21)

Legislative Analyst: Susan Stutzky
Fiscal Analyst: Robin Risko

■ This analysis was prepared by nonpartisan House Fiscal Agency staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.

³ <https://www.drugabuse.gov/publications/research-reports/marijuana/what-are-marijuanas-long-term-effects-brain>