Waste Disposal Tips for Vape Shops

Introduction:

Improper handling of vaping devices may pose health and environmental hazards to retail workers and the public. Additionally, some components of these devices are regulated as hazardous waste. This document is intended to give general guidance to vape shops on how to navigate the hazards and regulations pertaining to vaping waste.

Part 1: Hazards of Vape Waste:

Vape devices have two main concerns to be aware of: the battery and the vaping liquid.

Liquid:

The juice used for vaping may contain nicotine. Nicotine was once used as a pesticide and herbicide and if ingested, absorbed into the skin, or inhaled at a high dose, can cause sickness, skin irritation, or even death.

Nicotine is particularly absorbent through the skin, and in concentrated doses, such as those found in vaping liquids, it can be highly toxic. It is advisable to wear gloves when handling nicotine waste. If your skin is exposed to nicotine, wash the affected area immediately. If you become dizzy, sick to your stomach, or have an irregular heartbeat after exposure, go to the emergency room.

Battery:

Most vaping devices contain a lithium battery. When improperly handled, lithium batteries are known to start fires. For more information about lithium battery safety, go to larimer.org/solidwaste/batteries.

To help mitigate the risk of fire, either bag each battery separately or tape both terminals (ends) before storing. This will help prevent electrical shorts or sparking that may occur if the terminals come into contact with each other. Use clear tape on batteries so that recyclers can read anything printed on battery labels.

Part 2: Summary of Regulations:

As a business generator of nicotine-containing waste and batteries, you are prohibited from putting these items in the trash. You must properly dispose of or recycle them following State regulations, found in <u>6 CCR 1007-3</u>.

Nicotine-Containing Waste

Nicotine-containing liquid and their containers are acute hazardous wastes. Businesses disposing of nicotine waste are considered hazardous waste generators and must follow hazardous waste regulations. For a summary of the regulations that pertain to nicotine-containing waste, see the Colorado Department of Health and Environment's (CPHE) <u>guidance</u> on this topic. It is recommended that you read the guidance before continuing.

Depending on your shop's circumstance, Very Small Quantity Generator (VSQG) status may be easily obtained if you ensure there is never more than 2.2 lbs. of nicotine-containing waste on-site. The benefits of being a VSQG include exemption from paying fees and tracking waste with a hazardous waste manifest, reduced reporting requirements, and less stringent accumulation time limits, among others.

While Larimer County Hazardous Waste has a permitted VSQG waste collection program, they do not accept acute hazardous waste from VSQGs. For proper disposal of acute hazardous waste, vape shops should coordinate with a company that can ship your waste to a **permitted** treatment, storage, or disposal facility. They will help you determine how to package waste for shipment. See "<u>Hazardous Waste Disposal Companies</u>" for a list of some resources. Others may be found through an internet search.

Batteries

Most lithium batteries, if handled properly, are "Universal Waste," and do not count toward your hazardous waste generator category (for a summary of generator categories, see "Vaping Liquids, E-cigarettes and Nicotine Wastes Guidance"). The regulations for universal waste are less stringent than those for hazardous waste but are designed to ensure safety and encourage recycling.

Most vape shops will likely fall into the Small Quantity Handler of Universal Waste category. As long as you ensure your batteries are delivered to a proper recycling facility, like Larimer County Hazardous Waste's BHWD program, most other regulatory requirements are waived. More information can be found in the CDPHE Battery Compliance Bulletin.

Contact Information:

Larimer County Hazardous Waste Facility: (970)-498-5773 Larimer County Health Department: 970-498-6700

Colorado Department of Public Health and Environment: (303) 692-3320

Poison Control: (800) 222-1222