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E-Cigarette, Vaping, and Nicotine Wastes Fact Sheet

There are numerous electronic cigarette (e-cigarette) and vaping stores throughout Hillsborough County, and many other types of businesses, such as convenience stores, often sell e-cigarettes and vaping accessories, too. This fact sheet identifies the wastes that are potentially produced when e-cigarettes and nicotine are discarded or otherwise disposed of. This fact sheet outlines regulatory requirements for the safe management and disposal of typical hazardous wastes associated with e-cigarettes and other vaping devices. This fact sheet is not intended to be a complete reference to all applicable regulations and may not include all hazardous materials associated with e-cigarettes. It is also assumed that the majority of e-cigarette retailers and /or vaping stores are categorized as very small quantity generators of hazardous waste (VSQGs).

Note that the business owner is responsible for determining the quantity of hazardous waste generated each month, managing the hazardous waste while it is at the store, and ensuring its proper disposal. Contact the Small Quantity Generator (SQG) Program at (813) 627-2600 for personalized compliance assistance if you believe your business generates more than 220-lb of hazardous waste, or more than 2.2-lb of acute hazardous waste, in a single calendar month.

Acute hazardous waste, also referred to as "P-listed waste," is any discarded or off-specification product that the USEPA has found to be fatal in low doses or otherwise capable of causing serious irreversible or incapacitating illness. One common example of a P-listed waste is waste nicotine. P-listed waste is considered so toxic that even the empty containers are hazardous waste. Due to the acutely toxic nature of these wastes, the threshold for full regulation as a large quantity generator of hazardous waste is very low compared to regular hazardous waste:

2.2-lb/month of acute hazardous waste vs. 220-lb/month of regular hazardous waste

E-Liquids

Nicotine-containing liquid for vaping, commonly referred to as e-juice, is categorized as a P-listed, acute hazardous waste when disposed and has the waste code P075. This includes any e-juice that is spilled, expired, discontinued, damaged, unwanted, unsellable, or unusable for any reason. Any amount of nicotine-containing material, at any concentration, is subject to regulation as an acute hazardous waste when it is discarded.

Expired, discontinued, or otherwise unsellable e-liquids may be given away to customers or employees if they are still safe for use. In many cases, they can be returned to the manufacturer or the distributor. They may NOT be discarded into the dumpster, poured on the ground, or poured down any drain. VSQGs should store waste e-liquids in a closed container that is labeled "hazardous waste" or "waste nicotine." No more than 2.2-lb of nicotine containing waste may be accumulated on site at any time.

E-Cigarette / Vaping Devices

Many electronic nicotine delivery systems, commonly referred to as "e-cigs" or "vape pens," must also be managed as hazardous waste when they are discarded. This is because of nicotine residues remaining in the nicotine cartridge or device itself, as well as lead or silver solder, or device components, such as heating coils and batteries. Unless your business performs repairs on these devices and is prepared to manage the associated wastes appropriately, you should not accept any defective or broken devices or components from customers unless your distributor takes them back for evaluation. Customers should not dispose of their broken devices inside your store.

Heating Coils

The heating elements or "coils" in electronic nicotine delivery devices often contain hazardous metals such as chromium and silver and cannot be disposed of in the regular trash. Likewise, solder containing lead or silver cannot be discarded in the regular trash, either. Any components or materials containing these metals must either be recycled or managed as hazardous waste.

Batteries

Many rechargeable batteries in electronic nicotine delivery devices contain hazardous metals such as silver and cadmium and cannot be disposed of in the regular trash. These batteries can either be recycled or managed as hazardous waste.

Spill Debris

In the event of a spill of a nicotine-containing product, such as e-juice, any material used to address the spill must also be managed as hazardous waste. This includes any rags, towels, absorbents, gloves, or mop water. Any material that comes in contact with any nicotine must be managed as hazardous waste when disposed of, and this can be costly. To prevent spills, do not allow customers to open containers of e-liquid in your store for any reason, even after purchase. Do not accumulate more than 220-lb of clean up materials from nicotine spills on site at any time.

Spent/Used Fluorescent Lamps / Universal Waste Lamps

Fluorescent lamps contain mercury and can be hazardous waste if not recycled. Additionally, Florida prohibits the incineration of any fluorescent lamp. Since most solid waste in Hillsborough County goes to an incinerator for disposal, discarding waste lamps in the regular trash is not an option.

Store waste fluorescent lamps in containers that will protect them from breakage, and keep the containers closed unless you need to add or remove a lamp. Waste lamps may be stored in their original box as long as all openings are covered/sealed. Label the container "universal waste lamps," "waste lamps" or "used lamps." When the box is full, make recycling arrangements.

If you have questions about this fact sheet, or about waste management in general, please contact the EPC at (813) 627-2600 and ask to speak with someone from the SQG Program.