



Compliance Bulletin

Solid and Hazardous Waste

Marijuana and Marijuana-Related Waste Disposal

The medical and recreational marijuana industry in Colorado encompasses a wide array of businesses including grow operations, product manufacturers, dispensaries and more. Article XVIII, Section 16 of the Colorado Constitution defines a “Marijuana Establishment” as a marijuana cultivation facility, marijuana testing facility, marijuana product manufacturing facility or a retail marijuana store. All of these businesses generate wastes that must be handled appropriately to avoid endangering public health and the environment. These wastes may be regulated as solid or hazardous wastes and may include marijuana plant material, marijuana-infused products, pesticides, fertilizers, solvents, wastewater, mercury-containing lighting and other wastes. The purpose of this compliance bulletin is to provide guidance on how to handle and dispose of these wastes in accordance with the relevant state regulations. Do not rely solely on this guidance to ensure compliance with all relevant regulations as your city or county may have additional requirements.

How do I properly dispose of marijuana plant material and marijuana-infused products?

A marijuana establishment shall dispose of marijuana and marijuana-infused product waste in a secure waste receptacle in possession and control of the marijuana establishment. The plants and products must be rendered “unusable and unrecognizable.” This must be accomplished by grinding and incorporating the marijuana waste with any of the non-consumable, solid wastes listed below and the resulting mixture must be at least 50 percent non-marijuana waste. Such wastes include:

- *Paper waste, plastic waste, cardboard waste, food waste, grease or other compostable oil waste, bokashi or other compost activators and soil.* (Other wastes may be approved by the Department of Revenue’s Marijuana Enforcement Division to render the marijuana and marijuana-infused product waste unusable and unrecognizable as marijuana.)

After the waste is made unusable and unrecognizable, the rendered waste shall be:

- Disposed of at a solid waste site and disposal facility that has a certificate of designation from the local governing body;
- Deposited at a compost facility that has a certificate of designation from the Department of Public Health and Environment; or
- Composted on-site at a facility owned by the generator of the waste and operated in compliance with the Regulations Pertaining to Solid Waste Sites and Facilities (6 CCR 1007-2, Part 1) from the Colorado Department of Public Health and Environment.

Note that the waste must be unusable and unrecognizable prior to leaving the licensed premises of any marijuana establishment. Marijuana wastes are additionally subject to the following inventory tracking requirements:

- Post-harvest marijuana waste materials must be identified, weighed and tracked while on the licensed premises until disposed of in a manner as outlined above. Marijuana waste must be weighed and inventoried before leaving any marijuana establishment using a scale certified in accordance with measurement standards established in Article 14 of Title 35, C.R.S. (See Rule R 309 of the Retail Marijuana Code - Retail Marijuana Establishments: Inventory Tracking Solution.)
- A licensee is required to maintain accurate and comprehensive records regarding waste material that account for, reconcile and evidence all waste activity related to the disposal of marijuana. (See Rule R 901 - Business Records Required.)

- A licensee is required to maintain accurate and comprehensive records regarding any marijuana waste material produced through the trimming or pruning of a marijuana plant prior to harvest. Records must include weighing and documenting all wastes. (See Rule R 307 - Inventory Tracking Requirements)

How do I properly dispose of potentially hazardous marijuana-related wastes?

Hazardous waste must be disposed of in a manner consistent with federal, state and local laws, regulations, rules or other requirements. This waste category may include, but is not limited to, mercury-containing lighting, many types of pesticides or other chemicals used in the cultivation process, certain solvents or other chemicals used in the production of marijuana concentrate, and marijuana soaked in a flammable solvent for purposes of producing a marijuana concentrate. You must determine which regulations apply to the waste before you dispose of it, including making a hazardous waste determination. Consult with the Hazardous Materials and Waste Management Division's Customer Technical Assistance line at (303) 692-3320 if you are unsure of whether or not you are dealing with a hazardous waste. Hazardous wastes must be disposed of properly by a registered hazardous waste transporter shipping to a hazardous waste treatment, storage and disposal facility (TSDF).

If you generate wastes that are regulated hazardous wastes, you must notify the Colorado Department of Public Health and Environment that you are generating hazardous wastes and obtain an EPA identification number before your wastes can be accepted for disposal by a TSDF.

How do I properly dispose of other liquid wastes that are not hazardous wastes?

Non-hazardous liquid waste may be transported to a wastewater treatment plant by a licensed wastewater hauler, or via sanitary sewer pipes, so long as the treatment plant knows about the waste and deems it acceptable. Alternatively, liquid waste may be solidified by mixing with soil or other absorbent material in order to be sent to a landfill. Contact the receiving landfill to confirm the resulting mixture can meet its waste acceptance criteria prior to disposal at the landfill. Depending on the type and quantity of wastewater generated, other options may be available. Call our Customer Technical Assistance line at (303) 692-3320 for further options.

How do I properly dispose of lighting wastes?

Most lighting used for growing marijuana contains mercury. Although this waste is a regulated hazardous waste when disposed, it is allowed to be managed as a universal waste with an alternate set of management standards. If you decide to manage your lighting wastes as universal wastes, you should identify a recycler that is permitted to accept these wastes for processing or disposal. Specific guidance for mercury-containing lighting is available on our website. Please find the appropriate link on page three of this bulletin.

I do not have a marijuana-related business but I grow marijuana in my home for personal use. What do I do with marijuana-related waste from my home?

"Household hazardous waste" is a special category of waste that includes, but is not limited to, the pesticides, herbicides, fertilizers, solvents, mercury-containing lights and other materials related to marijuana cultivation. These types of wastes, as long as they are coming from a home in quantities commonly generated by households, are excluded from regulation as hazardous waste. This kind of household hazardous waste may be disposed of at household hazardous waste collection facilities or during household hazardous waste collection events. Contact your county health department for the options available in your area. For disposal of marijuana plant material and marijuana-infused products, please follow the guidance above to render it unusable and unrecognizable and then dispose of it in your household trash or at your nearest landfill. Check with your nearest landfill and/or waste hauler to be sure they can take such material. If they cannot, the waste will need to be taken to a location that can accept it or it may be composted at the residence. Other options may be available in your area. Please contact your county health department to determine if other options are available.

If you are generating quantities of household hazardous waste that exceed the quantities commonly generated by a household and appear to be associated with commercial activities conducted in the home, then this is no longer household hazardous waste and needs to be disposed of in accordance with

the guidance above regarding hazardous waste. Selling marijuana and/or marijuana-infused products is a commercial activity and any marijuana-related waste generated from that activity is not subject to the household hazardous waste exclusion.

Check with your local jurisdiction to determine how many plants may be grown per person or per household. If the marijuana-related waste being generated from the home is clearly in excess of the needs for the allowable number of plants, then the home may be generating hazardous waste that does not qualify for the household hazardous waste exclusion.

Prior to beginning any marijuana-related operations, consider the following:

- Is there a plan in place for how to deal with solid and hazardous wastes generated during operations?
- What quantities of waste will be generated and what are the various waste streams?
- If the operation is generating hazardous waste, have you determined the appropriate generator category and what rules may apply?
 - Conditionally exempt small quantity generator (CESQG)
 - Small quantity generator (SQG)
 - Large quantity generator (LQG)
- Is there a storage plan for the waste addressing storage methods, locations and length of time the waste may be stored?
- What readily-available material could be used to render marijuana plant material and marijuana-infused products unusable and unrecognizable?
- Where will the waste be sent and how will it be transported?
- Will any composting of marijuana-related waste occur on-site?
- What licensing and permitting requirements will apply to this operation?

For more information on marijuana and marijuana-related waste disposal, please see the links below:

- Solid Waste Regulations: www.colorado.gov/pacific/cdphe/solid-waste-regulations
- Generator Handbook - Guide to Generator Requirements of the Colorado Hazardous Waste Regulations:
www.colorado.gov/pacific/sites/default/files/HM_hw-generator-handbook.pdf
- Hazardous Waste Management and Guidance:
www.colorado.gov/pacific/cdphe/hwguidance
- Household Hazardous Waste:
www.colorado.gov/pacific/sites/default/files/HM_household-hw-exclusion.pdf
- Marijuana Enforcement by the Colorado Department of Revenue:
www.colorado.gov/pacific/enforcement/marijuanaenforcement
- Mercury-Containing Lighting:
www.colorado.gov/pacific/cdphe/mercury
- Universal Wastes (includes pesticides, aerosols, batteries, mercury-containing lighting, etc.):
www.colorado.gov/pacific/sites/default/files/HM_hw-universal-waste-rule_0.pdf

The information in this bulletin comes from the Colorado Department of Revenue Marijuana Enforcement Division's Retail Marijuana Code, 1 CCR 212-2, and the Colorado Department of Public Health and Environment's Solid Waste Regulations, 6 CCR 1007-2.

If you have additional questions, please contact us at:

Colorado Department of Public Health and Environment
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