



## MEMORANDUM

Date: March 7, 2017

To: Health Care Facilities in Colorado

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Subject: Prohibition on disposal of waste pharmaceuticals down the drain or into solid waste trash.

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### **Question:**

Are healthcare facilities allowed to dispose of pharmaceutical waste down the drain or directly into the regular trash?

### **Answer:**

No. Pharmaceutical waste may not be dumped down the drain or into the solid waste trash. This applies to both hazardous waste (as defined by the Resource Conservation and Recovery Act, or "RCRA") and non-hazardous waste pharmaceuticals, and includes both over-the-counter and prescribed medications. See Relevant Statutes at the end of this memorandum.

### **Discussion:**

For Solid Waste Pharmaceuticals: Section 13 of the Colorado Solid Waste regulations (6 CCR 1007-2) applies to any facility in Colorado that generates solid waste, including healthcare facilities. Several methods that had historically been utilized for the disposal of pharmaceuticals within the healthcare industry - such as the use of kitty litter, vinegar, or other mixing agents and then disposed either down the drain or into the regular trash - are now no longer allowed in Colorado. These regulations do not apply to household generated waste. Be advised that in Colorado, long term care and many assisted living facilities are considered healthcare facilities and not households. Therefore, the household exemption does not apply. For more clarification on assisted living facilities, go to: <https://www.colorado.gov/pacific/cdphe/medical-and-pharmaceutical-waste-guidance> and select the PDF entitled "RCRA Apply at Assisted Living".

In addition, the use of products that claims to be safe for disposal after mixing with waste pharmaceuticals have not been approved in Colorado and do not replace the approved methods of waste disposal as outlined in the Solid Waste or Hazardous Waste Regulations. For more information go to: <https://www.colorado.gov/pacific/cdphe/medical-and-pharmaceutical-waste-guidance> and select “Interpretation Activated Carbon” PDF.

For Hazardous Waste Pharmaceuticals: The Colorado Hazardous Waste Regulations apply to any facility in Colorado that generates hazardous waste, including healthcare facilities. In most cases RCRA hazardous waste cannot be disposed down the drain. In very limited and special cases, there are exceptions but they require approval either from the Department, the local publically owned treatment works facility (POTW), or both.

**Question:**

What options are available for the disposal of non hazardous (non RCRA) pharmaceutical waste in Colorado?

**Answer:**

Colorado’s solid waste regulations at 6 CCR 1007-2, Part 1, section 13.9 - Standards for Medical Waste Disposal states under 13.9.3 (Trace Chemotherapy Waste and Waste Pharmaceuticals - part B), that waste pharmaceuticals that are not hazardous wastes and that do not contain controlled substances may be:

- 1) Sent to a reverse distributor that collects unused, expired and recalled pharmaceuticals for proper disposal or returned to the manufacturer for credit.
- 2) Sent to a mail-back service for proper disposal.
- 3) Treated to encapsulate or stabilize the waste at an approved medical waste treatment facility prior to disposal in a solid waste disposal site or facility. All activities involved in the disposal of treated pharmaceuticals shall be conducted in a manner that minimizes the potential to release the waste or damage the containers holding the waste.
- 4) Incinerated at an approved solid or hazardous waste incinerator.

**OR**

- 5) Must be disposed of in an approved solid waste disposal site or facility that has an approved Engineering Design and Operations Plan that specifically allows this waste.

**Discussion:**

Colorado’s solid waste regulations provide five options for the proper disposal of non-hazardous pharmaceutical waste, none of which include disposal down the drain or disposal in an unapproved landfill as options. Please be aware that the disposal of pharmaceutical waste into the sharps or biohazard containers are not allowed. In addition, the use of products that claim to be safe for disposal

after mixing have not been approved in Colorado and do not replace the approved methods of waste disposal as outlined in the regulations.

**Question:**

What options are available for the disposal of hazardous (RCRA) pharmaceutical waste in Colorado?

**Answer:**

The answer to this depends on the facility's generator category which is based upon the amount of hazardous waste generated in a calendar month. However, all generators in Colorado must ensure that their hazardous waste is disposed in a facility that has a permit or interim status for the treatment, storage or disposal of hazardous wastes. Please see <https://www.colorado.gov/pacific/cdphe/medical-and-pharmaceutical-waste-guidance> and select the document entitled "Drugs Need Proper Disposal".

**Relevant Statutes**

A statutory requirement is a requirement written into a law passed by a legislative body, while regulatory requirements are those requirements made by a government agency in accordance with the law. When addressing the question above regarding the options facilities have for the proper disposal of non-hazardous pharmaceutical waste, Colorado's solid waste regulations were explained. Below are the relevant statutes upon which the regulations were developed.

**Solid Waste:**

Since all waste begins as a solid waste (defined as "any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, air pollution control facility, or other discarded material; including solid, liquid, semisolid, or contained gaseous material resulting from industrial operations, commercial operations or community activities" (30-20-101, C.R.S.)), please refer to the following solid waste statutes:

- a. Section 30-20-102-2, C.R.S. – *“Except as otherwise specified in this section, solid wastes disposal by any person is prohibited except on or at a solid wastes disposal site and facility for which a certificate of designation has been obtained as provided in section 30-20-105.”* Publicly owned treatment works (POTW) do not have certificates of designation, and disposal down the drain is disposal to a POTW. Therefore, disposal down the drain is not allowed.
- b. Section 30-20-110(1)(g), C.R.S. - *“All facilities shall have a waste characterization plan approved by the department that is consistent with the certificate of designation for the facility. The plan shall outline screening methodologies and waste handling procedures and shall include a hazardous waste exclusion plan”.* This statute states that landfills must screen what they are receiving to ensure the facility is receiving only those wastes they are permitted to receive. Most landfills in Colorado are not approved to dispose of non-hazardous or hazardous pharmaceutical waste. There are seven landfills in Colorado that are permitted to accept non-hazardous pharmaceutical waste, however, the permits for those landfills include screening and management requirements that will not allow for a pharmaceutical waste generator to simply dispose of their pharmaceutical waste directly into their regular dumpster for shipment and disposal at a landfill. Any facility in Colorado interested in disposing of their non-hazardous

pharmaceutical waste to one of the approved landfills in Colorado would need to contact their landfill operator servicing their waste to determine whether the landfill is permitted to accept the waste and obtain the procedures required to dispose of non-hazardous pharmaceutical waste at that specific landfill.

#### Hazardous Waste:

Hazardous waste, a subset of solid waste, which is generated by a business in Colorado (which includes most healthcare facilities such as hospitals, long term care, some assisted living facilities, ambulatory services, etc.) cannot dispose of their hazardous waste in a landfill not permitted to accept said waste or down the drain per the following statute:

- a. Sections 25-15-308(1) (a) and (b), C.R.S. which state that “*no person shall dispose of any hazardous waste off-site at any facility that does not have state or federal interim status, a federal permit, or a permit granted by the department pursuant to section 25-15-303; and (b) dispose of on-site, treat, or store any hazardous waste without having therefore either state or federal interim status, a federal permit, or a permit granted by the department pursuant to section 25-15-303*”.