

FS No. 37-087-0122

Controlled Substances Disposal at Veterinary Treatment Facilities

- 1. Purpose:** To provide guidance on the disposal of U.S. Drug Enforcement Administration (DEA) controlled substances (CS) generated at military Veterinary Treatment Facilities (VTFs).
- 2. Background:** The U.S. Army Public Health Center (APHC), Waste Management Division has received inquiries regarding the proper and legal disposal of DEA CS in a veterinary treatment setting. Proper disposal is necessary to prevent CS from being illegally used or abused by people, and to prevent CS from entering the environment and affecting water, soil, and wildlife. A list of DEA CS can be found at <https://www.deadiversion.usdoj.gov/schedules/>. There are two categories of DEA pharmaceuticals requiring disposal: inventory (stock) and pharmaceutical wastage.
- 3. CS Inventory Disposal:** in 2014, the DEA promulgated the *DEA Rule on the Disposal of Controlled Substances*. In this Rule, the DEA defines CS inventory as CS that are part of stock and that have not been dispensed or administered. Under this Rule, unwanted or expired CS that are in the VTF's inventory must be rendered non-retrievable. The DEA Rule defines non-retrievable as "a condition or state that the CS shall be rendered following a process that permanently alters the CS physical or chemical condition or state through irreversible means and thereby renders the CS unavailable and unusable for all practical purposes." The DEA does not specify a method for meeting the non-retrievable requirement, but rather that the result meets the requirement. Disposal options include the following:
 - **Return to Reverse Distributor (RD) using the Medical Treatment Facility (MTF) RD Contract.** Because VTFs generally have minimal amounts of expired CS, some MTFs have agreed to allow the VTF to use the MTF's RD contract. A disposal cost will be deducted from the MTF's RD credits. This is the easiest option for the VTF, but it will require agreement and coordination from the MTF.
 - **Return to a DEA Registered Commercial Company.** Currently, APHC's Waste Management Division is aware of only one pay-as-you-go company (Sharps Compliance, Inc.™) that accepts CS expired/unused inventory for destruction/disposal. With the Sharps Compliance Inc. *TakeAway Medication Recovery – DEA Reverse Distribution for Registrants System*, VTFs must first submit their DEA Registration number and a DEA CS for Destruction Form that lists the names and amounts of the expired/unused inventory items to be returned. The company will then send the appropriate materials to package drug returns, which includes a prepaid return box and documentation to track the shipment. After the items are incinerated, a certificate of destruction is available online. Additional information including pricing and ordering can be found on the company website: www.sharpsinc.com.
- 4. CS Wastage Disposal:** Pharmaceutical wastage is defined as any leftover amounts after the pharmaceutical has been dispensed and administered to a patient, which includes dispensed pills that have been spit out, used patches, and remaining amounts in IV solutions. In the case of multi-dose vials, only the unused drug remaining in the syringe is considered pharmaceutical wastage. The drug remaining in the multi-dose vial must be managed as stock/inventory when disposed.

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Previously, staff often disposed of these unwanted substances by wasting them onto a gauze or flushing them into the sanitary sewer. With increased scrutiny on pharmaceuticals in drinking water, these practices are no longer recommended and are prohibited in some states. The DEA advocates that pharmaceutical wastage be disposed via a method that prevents diversion to an unauthorized user, meaning that it cannot be used by anyone other than the patient for whom it was prescribed.

Commercial companies have developed products that can be used to prevent diversion. These products are containers that are pre-loaded with a binding agent, typically activated charcoal, and/or an expectorant such as ipecac. The pharmaceutical wastage is discarded into the container, which generates a slurry/sludge. This resulting mixture meets the intent of preventing diversion.

Most product instructions indicate that the filled containers can be discarded into general trash. However, state or local county regulations may prohibit pharmaceuticals from being landfilled. While the resulting mixture prevents diversion, it is still considered a pharmaceutical and, therefore, may be prohibited from being discarded into the trash destined for landfilling. Additionally, based on a 2019 e-mail with the Defense Logistics Agency Disposition Services, they consider this waste stream to be a controlled substance and, therefore, is not authorized to accept it for disposal.

Several companies sell these products; however, the APHC Waste Management Division is currently only aware of one company (RxDestroyer™) that offers a container mail-back disposal program. This is suitable for VTFs that are prohibited from putting the waste into the general trash and subsequently landfilled.

5. Mail-Back Program: RxDestroyer partners with Rx Waste Systems to offer a nationwide mail-back program for CS wastage. Prepaid mail-back boxes can hold up to 55 lb. of RxDestroyer bottles. Smaller boxes are also available. When the container holds mostly liquids and injectables, the mixture must be solidified with a hardener prior to shipment. The hardener is included with the purchase of RXDestroyer bottles. The shipment is sent to a licensed incinerator and can be tracked via email. Certificates of Destruction should be downloaded, printed, and maintained with the clinic records.

Prior to purchasing any of these products, consult with the local installation Department of Public Works environmental office to determine whether the used containers can be placed in general trash as indicated in product instructions. If permissible, there is no need to purchase the mail-back boxes.

The following chart lists the companies and the services they provide regarding pharmaceutical wastage.

Company	Website	Description of Product	Mail Back Program
RxDestroyer	https://www.rxdestroyer.com	RxDestroyer All Purpose Liquid 16oz–30 gal container sizes	Yes – disposal through Rx Waste Systems
Deterra®	https://deterrasystem.com	Deterra pouch 2 oz–2.5 gal	No
NarcX	https://www.narcx.com	NarcX+ 6oz-55 gal container sizes	No mail back program, but the waste containers can be picked up by a 3 rd party contractor on a case-by-case basis.
Stryker Cactus® Smart Sink®	https://www.stryker.com/us/en/surgical-technologies/products/cactus-controlled-substance-waste-management-system.html	Hold approx. 1.7 liters of solid waste or 3.0 liters of liquid waste	No