

Management of Pharmaceutical Wastage

1. Purpose: To provide guidance on the disposal of U.S. Drug Enforcement Administration (DEA)-controlled substances wastage generated at military healthcare facilities.

2. Background: The U.S. Army Public Health Center (APHC) has received a number of inquiries regarding the proper and legal disposal of DEA controlled substances in a clinical setting stemming from confusion, uncertainty, and/or unfamiliarity with this process. There are two categories of DEA pharmaceuticals requiring disposal: inventory (stock) and pharmaceutical wastage. Inventory that is out of date, damaged, or otherwise unusable or unwanted <u>must</u> be transferred to a DEA-authorized registrant, usually the Reverse Distributor. Pharmaceutical wastage is defined as amounts remaining after having been <u>dispensed</u> to a patient. This paper only addresses disposal of pharmaceutical wastage.

3. Disposal: Controlled substance wastage includes dispensed pills, patches, tablets, and IV solutions. In the past, staff 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 waters, these practices are no longer recommended and are prohibited in some states.

The DEA advocates that pharmaceutical wastage be disposed via a method that precludes diversion, which means ensuring that it cannot be used by anyone other than the patient. Additionally, the Joint Commission requires proper management of controlled substances, to include wastage, in the Medication Management Standards.

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

Most product instructions indicate that these used containers can be discarded into general trash. However, 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 (landfilled). Additionally, Defense Logistics Agency Disposition Services still considers this waste stream to be a controlled substance and, therefore, is not authorized to accept it for disposal.

There are several companies that sell these products; however, currently only one company (RxDestroyer^M) has been identified that offers a mail-back disposal program for these used containers, which keeps them out of the general trash and landfills.

4. Mail-Back Program: RxDestroyer partners with Rx Waste Systems to offer a nationwide mail-back program for pharmaceutical wastage. Prepaid mail-back boxes can hold up to 55 lbs of RxDestroyer bottles. Smaller boxes are also available. Prior to shipment, the RxDestroyer bottles must be solidified with a hardener. The hardener is included when you purchase the RXDestroyer bottles. The shipment is sent to a licensed incinerator and can be tracked via email. Certificates of Destruction can be downloaded and printed for your records.

Prior to purchasing any of these products, consult with your installation Department of Public Works environmental office to determine whether the used containers can be placed in general trash. If that is permissible then you will not need to purchase the mail- back boxes.

The following chart lists the companies and the services they provide.

Company	Website	Description of Product	Mail Back Program
RxDestroyer	https://www.rxdestroyer.com	RxDestroyer All Purpose Liquid	Yes – disposal thru
		16oz–30 gal container sizes	Rx Waste Systems
Deterra®	https://deterrastsyem.com	Deterra pouch	No
		2 oz–2.5 gal	
Stryker	https://www.stryker.com/content/stry	Hold approx. 1.7 liters of solid	No
Cactus [®] Smart	ker/us/en/surgical/products/cactus-	waste or 3.0 liters of liquid waste	
Sink®	controlled-substance-waste-		
	management-system/cactus.html		

U.S. Army Public Health Center, Environmental Health Sciences Division Aberdeen Proving Ground, MD 21010-5403 Commercial (410) 436-3651/DSN 584-3651 usarmy.apg.medcom-phc.mbx.hmwp@mail.mil Approved for public release; distribution unlimited.

Use of trademarked name(s) does not imply endorsement by the U.S. Army but is intended only to assist in identification of a specific product.