

Office of Waste Management

April 12, 2016

## Pharmaceutical Waste Management For Healthcare Providers March 29, 2016

This information is intended to summarize regulatory requirements for pharmaceutical wastes in Rhode Island:

Once pharmaceuticals are no longer needed, they fall into the following categories:

- Controlled substances: whether they are product or waste, these
  must be managed or destroyed under the guidelines of the United
  Stated Drug Enforcement Administration. More information is
  available <a href="here">here</a> from the RI Department of Health.
- <u>Radioactive Wastes:</u> Any radioactive substances must be managed in accordance with the RI Department of Health's Radiation Control Program. More information can be found here.
- <u>Hazardous Waste Pharmaceuticals</u>: This small subset comprises about 5% of Pharmaceutical Waste.
- Regulated Medical Waste: Normally pharmaceutical waste is not considered regulated medical waste as the treatment process is very different. Regulated Medical Waste is comprised of contaminated or potentially contaminated items produced in care and diagnosis of patients. Unused needles that have been removed from their packaging are also considered Regulated Medical Waste.
- Solid waste Pharmaceuticals: If they do not fall into any category above, then pharmaceuticals are solid waste. They can be disposed of with trash. Due to concerns about identifying the material, some medical waste transporters have the right to refuse to accept pharmaceuticals of any kind in medical waste containers.
- Pharmaceutical Disposal in Wastewater: Unless specifically authorized in writing by your sewer authority, none of the above categories of pharmaceutical waste can be disposed of by flushing down the drain.

## **Hazardous Waste Pharmaceuticals**

- ▶ Rhode Island's Rules are based on EPA Rules but include some additional wastes the USEPA does not consider hazardous. DEM has compiled a workbook to help hazardous waste generators understand basic terminology and concepts.
- ► Pharmaceuticals that are hazardous under the federal (RCRA) program include the following:
  - Characteristic Hazardous Waste:
    - ▶ Waste that exhibit a characteristic waste (i.e. ignitable or reactive). This is frequently the case for drugs that are in alcohol based solution.
    - ► Waste that contain certain chemicals that when tested, leach out above certain limits (TCLP) (i.e. chromium, selenium, etc.)
  - Listed Hazardous Waste
    - ▶ Waste with constituents specifically listed such as nicotine or warfarin.
  - More information on federal hazardous waste determinations can be found at: <a href="https://www.epa.gov/hwgenerators/management-pharmaceutical-hazardous-waste">https://www.epa.gov/hwgenerators/management-pharmaceutical-hazardous-waste</a>
- ▶ Rhode Island also considers the following as hazardous wastes:
  - Extremely hazardous wastes contain:
    - ► Carcinogens at or above 0.1%
    - ► Teratogens at or above 0.1% by weight
    - ▶ Suspected carcinogens at or above 1% by weight
    - ► Cytotoxic or antineoplastic chemotherapy agents
    - Mercury Containing Waste- any items that contain added mercury

Other important concepts about hazardous waste generation:

- ► In RI a person who generates ANY hazardous waste, regardless of quantity is a Hazardous Waste Generator
- ► Waste generated by homeowners in private homes is exempt. Information for homeowners about drug disposal can be found at: http://www.dem.ri.gov/programs/benviron/waste/drugdisp.htm
- ► All generators must register and receive a generator number from RIDEM (this is separate from medical waste generator registration). There is no fee for hazardous waste generator number and they do not expire.
- ► If >2,200 lb in a month, then you are a Large Quantity Generator subject to more reporting requirements.

## **Regulated Medical Waste**

- ► This special category of waste includes
  - Cultures and Stocks
  - Pathological Waste (incl. Anatomical Waste)
  - Human blood and body fluids
  - Sharps (used and unused)
  - Animal waste from research on pathogens
  - Isolation Wastes
- ► Regulated Medical Waste Transporters are permitted by RIDEM
- ▶ Yearly renewal of registration with a fee is mandated by state law.

Additional questions regarding pharmaceutical or medical waste can be directed to:

Mark M. Dennen, CPG RIDEM/Office of Waste Management 235 Promenade St. Providence, RI 02908 tel. 401.222.2797 ext. 7112 fax 401.222.3812

e-mail: mark.dennen@dem.ri.gov