

Waste Management Guidance Document for Dental Clinics at Rutgers University

Background

Rutgers University has dental clinics located throughout New Jersey. These clinics generate different types of waste which includes:

- Hazardous waste and Expired Non-DEA Medications / Dental Anesthesia
- Universal Waste and Light Ballasts

In addition to generating these types of waste, many clinics have photographic silver recovery equipment and all clinics have an amalgam collection system. This guidance document will discuss the proper management of these dental clinic waste types as well as the proper routine maintenance which is required for photographic silver recovery equipment and amalgam collection systems.

Hazardous Waste

Rutgers University dental clinics generate small quantities of hazardous waste. The most common types of hazardous wastes generated include:

- Lead Foil
- Extracted Teeth in Ethanol
- Contact and Non Contact Amalgam (including side chair suction traps when amalgam is present)
- Adhesives
- Dental Anesthesia (including novocaine, lidocaine, carbocaine, etc.)
- Photographic Fixers
- Used X-ray Film

Proper management of these wastes is required to ensure compliance with the Resource Conservation and Recovery Act (RCRA), a federal law enacted in 1976 to protect health and the environment.

If you have questions concerning the proper classification of your waste please contact REHS at (848) 445-2550 or email at hazwaste@rutgers.edu.



Hazardous Waste - Proper Container Management

Each waste type must be collected in the appropriate waste container.

Lead Foil - 5-gallon screw top pail with a poly liner

Contact/Non Contact Amalgam (including solidified amalgam from side chair suction traps if amalgam is present) - 5-gallon screw top pail with a poly liner

Expired Miscellaneous Medications and Dental Materials (including adhesives, bonding materials, anesthesia) - 5-gallon screw top pail

Extracted Teeth in Alcohol - An appropriately sized container with a tight fitting lid

Photographic Fixer - An appropriately sized container with a tight fitting lid

Each of these waste types should be stored separately in their own container. Wastes combined in a single container must be chemically compatible. Incompatible materials must be collected in separate containers. The attached “Dental Clinic Miscellaneous Waste Inventory Sheet” must be used for each container of combined wastes.

The following waste containers and supplies are available from REHS:

- 5-Gallon screw top plastic pail with poly liner
- 1-Gallon screw top plastic jar
- Grey Secondary containment bins

Hazardous Waste- Proper Storage

Hazardous waste must be stored in a Satellite Accumulation Area (SAA). Satellite Accumulation Areas (SAAs) must be designated for every clinic where hazardous wastes are generated. Each SAA must be located near the point of generation, secured and under the generator's control. Incompatible waste streams must be separated with physical barriers (e.g., secondary containment).

All containers in the SAA must be properly labeled, in good condition, and tightly closed/sealed (when you are not actively adding waste). Any small spills or leaks in the SAA should be cleaned up immediately.

Hazardous Waste-Labeling

All hazardous waste containers must have a black and white Rutgers Hazardous Waste label filled out and attached to them from the moment the first drop of waste is added. The hazardous waste label must be filled out completely with the full chemical name (no abbreviations or formulas) and concentrations of every component (totaling 100%) as well as the clinic's contact information.



HAZARDOUS WASTE
(For Satellite Accumulation Areas)
Rutgers, The State University of New Jersey

Chemical Contents: (% vol. or % weight) circle one

Ethanol	75	%
Water	25	%
		%
		%
		%

Are heavy metals present? Yes No (If yes, add to chemical contents section)
SAA Manager: Dr. Ralph Kremen Telephone: 848 445-2950
Campus: Bush Bldg: Nelson Biology Room: D222

Have Accumulation Limits Been Exceeded? YES NO (Circle One)

(55-gallon Hazardous Waste and/or 1-Gal Acutely Hazardous Waste)

If yes, please indicate date excess accumulation began: _____

IN CASE OF EXCESS ACCUMULATION, CONTACT REHS IMMEDIATELY: 848/445-2950

Irritant Corrosive Toxic Flammable Oxidizing Compressed Gas Radioactive



Hazardous Waste Pickups

Hazardous waste pick-up requests must be made in a timely manner to prevent stockpiling of waste. All hazardous waste pick-up requests must be submitted online at <http://halflife.rutgers.edu/forms/hazwaste.php>

Please plan accordingly and make your request allowing 5 business days for pick-ups from on-campus clinics and 10 business days for off-campus clinics.

Universal Waste

There are four types of Universal Waste which include the following:

- Rechargeable Batteries
- Lamps/Bulbs
- Mercury Containing Equipment

- Consumer Electronics

The typical universal wastes generated in clinics are **Batteries, Lamps/Bulbs, and Consumer Electronics**. In addition, PCB and non-PCB light ballasts are generated as well. Each one of these waste streams must be properly managed to comply with regulations and protect the environment. Batteries and Lamps/Bulbs must be labeled with a black and white Rutgers Universal Waste label. Consumer Electronics will be labeled by Material Services after removal for storage. Light Ballasts must be labeled with a black and white Rutgers Spent Ballast label. Universal waste cannot be stored for more than one year from the time of generation. The following describes the proper management for each type of Universal Waste and Light Ballasts.



Batteries – All rechargeable batteries must be collected, labeled with the Rutgers Universal Waste Label and routed through **REHS** for proper disposal. Rechargeable batteries include lead acid, lithium ion, lithium metal, nickel-cadmium, and nickel metal hydride.

Please tape the terminals to prevent batteries from short circuiting. All rechargeable battery pick-up requests must be submitted online at <http://halflife.rutgers.edu/forms/hazwaste.php> (Note: Alkaline batteries are disposed of in the regular trash)

Lamps/Bulbs – Fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps are to be collected and disposed of as Universal Waste. Typically in most clinical settings, lamps/bulbs are managed (labeled and stored) by **Housekeeping or Facilities Maintenance** and properly disposed of through the University approved vendor. Clinics without Facilities Maintenance agreements must dispose of bulbs directly through the University Approved Vendor. (Note: Incandescent bulbs are disposed of in the regular trash).

Consumer Electronics – All items containing a circuit board (i.e. computers, TV's, DVD Players, etc.) are considered consumer electronics and must be routed through **the Rutgers Material Services Department** for proper disposal through the University approved vendor. Request for pick-up are made by submitting a completed surplus form to Material Services, which can be found at <http://www.material.rutgers.edu/surpluspickup.shtml>

Light Ballasts- Light ballasts are divided into two categories, PCB and Non-PCB (i.e. mineral oil). Light ballast disposal is dependent on the presence of polychlorinated biphenyls (PCB) in the ballast potting material. In 1979, the Toxic Substance Control Act prohibited the manufacturing of light ballasts containing PCBs.

Ballasts manufactured after 1979 should have a “Non-PCB” label affixed to the outside of the ballast. Any ballast manufactured prior to 1980 (1979 or earlier) must be classified as PCB regardless of labels. If the ballast is not dated on the backside of the ballast to indicate it was manufactured after 1979 or labeled as non-PCB on the front, it must be considered PCB as well.

Ballasts must be collected in appropriate containers and labeled with the Spent Ballast label. These labels are available from REHS. In addition, PCB ballasts must have the PCB label affixed to the storage container as well. Light ballasts are typically disposed of through Facilities Maintenance. Clinics without Facilities Maintenance agreements must dispose of ballasts directly through the University Approved Vendor.

Routine Maintenance

Dental clinics that have photographic silver recovery equipment and amalgam collections systems must have them properly serviced on an appropriate frequency.

Photographic silver recovery equipment at dental clinics must be serviced at an appropriate frequency based on through-put, which is typically every 12 to 18 months. Documentation of maintenance and service activities is required using the maintenance log (see attached). Additional information about photographic silver recovery equipment can be found in the University Darkroom Waste Management Policy at http://rehs.rutgers.edu/pdf_files/drkrm.pdf.

Amalgam collection systems must be registered with the NJDEP and serviced annually (every 12 months). The NJDEP requires an annual certification to be completed on each amalgam collection system. Additional information about the NJDEP Dental Amalgam Program can be found at <http://www.nj.gov/dep/dwq/dap.htm>.

