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# Dental Wastes Recycling and Disposal Part II

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## Preventing Pollution by Putting Dental Wastes in Their Proper Place

*A curriculum for use in Kansas dental schools*

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Putting Dental Wastes in Their  
Proper Place, Fall 2001

# Dental Wastes Recycling and Disposal Part II

- Part I focused on mercury.
- Part II focuses on other wastes:
  - silver-rich wastes
  - medical service wastes
  - lead foils, shields, and aprons
  - regulated cleaners
  - disinfectants

# What Do You Think?



- What x-ray-process chemicals should not go down the drain?
- List dental wastes that need special handling?
- List substitute materials or technologies that prevent the generation of these wastes.

# Silver-Rich Wastes

- What are they?
  - waste x-ray fixer
  - old x-rays

*Developer does not contain silver unless mixed with the fixer.*

- What about silver alternatives?
  - digital technologies
  - silver-less films

# The Silver Problem

- Why be concerned?
  - Silver is a non-renewable resource.
  - Silver can be harmful to aquatic life.
  - Wastewater plants can't remove it.
  - Reclaimed silver can be a source of income.
  - Waste fixer is usually classified as a hazardous waste.



# Options for Handling Silver Wastes

- Waste fixer
  - On-site management, purchase recovery unit



- Off-site management, contractor hauls off

# Silver Waste Handling (continued)

- Old x-rays should be sent to a licensed recycler.
- Specific record-keeping requirements in some communities.



# Communities that Regulate Silver Dischargers

- As of 2001, the cities of Wichita and Kansas City, Kan., regulate silver-rich dental wastewaters. Registration, silver recovery, and annual monitoring is required.
- Other regions around Kansas encourage dental waste BMPs.
- Nationally, many regions do regulate silver discharges.

# Medical Service Wastes

- Many different names
  - “red” bag waste
  - biohazard
  - infectious waste
- Official name in Kansas, medical service waste
- Technical guidance document, handout #4
- Definition

# Medical Service Waste Disposal Options

- Treated or sterilized medical waste can be sent to the permitted sanitary landfill.
- Untreated medical waste needs to be “red bagged,” labeled, and sent to the landfill with special authorization. Call 785-296-1600.
- Dispose through a medical waste disposal company; check the Yellow Pages.
- Incinerate at a permitted medical service waste incinerator.

# Other Dental Waste Streams

- Dental Waste Disposal Checklist, handout #3
- Lead foils and shields
- Chromium and regulated cleaners
- Common disinfectants and chemiclave chemicals

# Lead Foils, Shields, and Aprons

- Lead is harmful to human health and the environment.
- Foils, shields, and aprons
  - Collect.
  - Label, "lead foils for recycling".
  - Send to a licensed reclaimer or recycler.

# Chrome and Regulated Cleaners

- Some cleaners, especially old cleaners, may contain regulated chemicals
  - chrome cleaners
  - formaldehyde or acetone solutions
- These cleaners may need to be disposed of as hazardous wastes.
- Call the SBEAP with questions at 800-578-8898.

# Common Disinfectants

- Common disinfectants and chemoclave chemicals
  - Check with your wastewater treatment plant.
  - Most can be safely disposed of down the drain.
- Rural clinics on septic systems; should NOT dispose of any dental wastes through their system, instead, call the SBEAP for help.

# Dental Waste Regulations Summarized

- Medical service wastes are regulated throughout Kansas.
- Mercury and silver wastewaters are regulated in select communities.
- Utilize BMPs for all waste streams; keep mercury and silver wastes out of drains, trash, and “red” bags.
- Label your wastes.
- Keep records for at least three years.

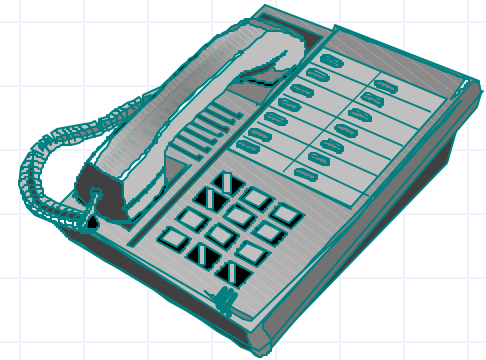
# Where To Go for Help

- **K-State's SBEAP**

- Free small business assistance
- Phone or on-site consultations
- Confidential and non-regulatory
- **800-578-8898 or 316-722-7721 ext 254, [www.sbeap.org](http://www.sbeap.org)**

- **Local Pretreatment Program**, in Wichita 316-303-8775, in Kansas City 913-371-4240

- **Local or American Dental Association** at [www.ada.org](http://www.ada.org)



# A Time for Review



- Most problematic dental waste?
- Silver-rich wastes?
- Define medical service waste.
- Other dental wastes?
- Confidential, non-regulatory assistance contact?