

### 3.5.3 Health Care: Veterinary Clinics

#### Tip Sheet #1

**WASTE ORIGIN:** Medications, Cleaning Agents, Diagnostic Operations

**WASTE TYPES:** Discarded medications, broken thermometers, old batteries, spent cleaners, silver (X-ray fixer and film), lead foil, and chromium (developer system cleaners)

#### WASTE REDUCTION AND RECYCLING METHODS:

- ! **Reduce or eliminate** use of medications containing mercury:
  - ! Use *alternatives* to dips, wound treatments or vaccines that contain mercury;
  - ! Take *precautions* not to allow mercury containing products into drains leading to the sewer;
- ! Use **mercury-free equipment** whenever possible:
  - ! Use *digital or electronic sensors* and temperature strips instead of mercury thermometers;
  - ! Have *mercury spill kits available* in all areas where mercury containing products are used, and have all persons in that area trained in the use of those kits;
  - ! **Phase out mercury-containing batteries** in equipment and set up in house battery recycling program;
  - ! Use *rechargeable batteries* when possible;
- ! **Review** chemical use and storage practices:
  - ! **Hazardous materials and products** containing silver, cadmium, chromium, copper, cyanide, lead, mercury, nickel, selenium and zinc, for example, should not be discarded to the sanitary sewer — all such materials should be properly labeled and stored with secondary containment;
  - ! **Eliminate** floor waxes and strippers containing zinc;
  - ! **Eliminate** toilet cleaning and disinfection products containing tri-butyl tin;
  - ! **Eliminate** carpet and upholstery cleaners containing tri-butyl tin;
- ! **Review** X-ray fixer, developer and film management practices to eliminate hazardous materials disposal:
  - ! X-ray fixer and developer should not be mixed, but should have separate containers and treatment methods — sell or give away spent fixer and developer to a recycling service, usually after 5 to 10 gallons of fixer have been accumulated;
  - ! Use *silver recovery unit* for the developing system;
  - ! **Used X-ray film** should be placed a in labeled container. Silver recovery companies often take the film also.
- ! **Cleaners** for the developer system that contain chromium can be handled in different ways:
  - ! Use cleaners that **do not contain chromium**.
  - ! **Find a cleaning service** that will clean the developing unit at the clinic and properly dispose of the chromium containing cleaner.
  - ! Collect and store in a closed plastic container labeled as hazardous waste and contact a recycling service when enough used cleaner has accumulated.

**Sources:**

Fact Sheet: *Waste Reduction in the Veterinary Clinic*, Solid and Hazardous Waste Education Center, University of Wisconsin-Extension, 1996.

*Guide to Pollution Prevention: Selected Hospital Waste Streams*, U.S. EPA, Center for Environmental Research Information, June 1990, EPA/625/7-90/009.