

HAZARDOUS WASTE DISPOSAL & MANAGEMENT FOR VETERINARY CLINICS



Veterinary clinics and hospitals have similar hazardous waste streams as their human counterparts and are subject to the same waste regulations as other businesses. Disposal options and discharge limits vary depending on

location and whether the clinic is on a sewer or septic system.

Skagit County follows the Washington State Department of Ecology (WSDOE), Dangerous Waste Regulations, Chapter 173-303 WAC. Each sewer district within the county may have more stringent requirements for releases to the sanitary sewer. Check with your local public utilities department or municipal codes for sewer and hazardous waste discharge limits.

BASIC REGULATORY REQUIREMENTS

- Know what your waste is
- Handle & store your waste safely
- Dispose or recycle your waste properly
- Document that you are doing this

Hazardous Waste Resources

Hazardous Waste Directory

The Waste Directory tells what to do with each type of hazardous waste and lists vendors that will handle each. The directory was created by King County but many vendors listed will serve Skagit County.

See:

www.govlink.org/hazwaste/business/wastedirectory

Industrial Materials Exchange (IMEX)

IMEX is a web service that lists surplus or unwanted materials from a business in the "Available" section and also has a section on "Wanted" materials. See:

www.govlink.org/hazwaste/business/imex

Washington State Department of Ecology's Toxics Reduction Home Page

www.ecy.wa.gov/programs/hwtr

Local hazardous waste disposal option

Skagit County allows Small Quantity Generators (SQG) of Hazardous Waste to dispose of their waste at the Household Hazardous Waste Collection Center at 14104 Ovenell Road. Please contact the Hazardous Waste Specialist at (360)424-9532 to schedule a time for disposal or use the standard collection time for SQG businesses on the third Wednesday of each month, from 8:30 a.m. to 3:30 p.m.

Material Safety Data Sheets (MSDS)

MSDS provide health and safety data, list active ingredients, precautions and warnings. Disposal methods listed on MSDS usually refer to state and local disposal codes. MSDS can be obtained from the manufacturer and should be available to employees for all chemicals stored on site.

Radiology Waste

Developer solutions

Used developer can be disposed of in the sewer but it is not allowed in the septic systems. In general, no waste created during regular business activities can go to septic. Specifically, developer can not go to septic because it contains hydroquinone which will kill the septic flora necessary to obtain complete breakdown of solids.

Fixer solutions

Fixers contain very high amounts of silver and cannot be disposed of in septic or sewer systems.

Options for disposal of radiology fixer are:

- Transport to a photo shop that will take waste fixer for silver recovery. Do not mix fixer with developer. Always get a receipt!
- Hire a waste management company to collect and dispose of used fixer.
- Return to the company that sold the photo-processing chemicals.
- Buy or lease a silver recovery system. WSDOE's best management practice recommends two chemical recovery cartridges (CRC) used in a series and plumbed to the sewer. This is not an option for on-site septic systems.

If your clinic is on a septic system, all used fixer and developer must be collected and disposed of properly by a waste management company or the Skagit County Household Hazardous Waste Collection Center. Never mix spent fixer and developer together, the disposal costs would be greater and silver recovery would be less efficient.

Dental radiology film packaging

Standard dental radiographic films have lead foil packaging. Do not dispose of lead foils in the garbage--they must be disposed of as hazardous waste or recycled. Digital dental films have plastic or vinyl packaging and can be discarded in the garbage.

Sharps

Sharps must be disposed of through a biohazard management company or as approved by the Health Department according to Skagit County Code 12.16.350, biomedical wastes. See a list of vendors including biomedical waste management at <http://apps.ecy.wa.gov/hwsd/>

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Sterilizers

- Autoclaves - steam sterilizers produce no hazardous waste.
- Gas sterilizer - Ethylene oxide (ETO) is very toxic. ETO sterilizers should be installed by the manufacturer and only trained staff should use them. ETO sterilizers are used in specialty and referral practices and in emergency clinics; they are not commonly used in general practice.
- Cold Trays – commonly use 2% Chlorhexidine diluted per label direction; once used it can be disposed of down the sink. Glutaraldehyde is also commonly used and when dilution is less than 4% it can be disposed of down the sink.

Pharmaceuticals

The presence of pharmaceuticals in the environment is a worldwide concern. Recent studies identified pharmaceutical contaminants in the waterways of thirty US states, including Washington.



Current wastewater treatment technology does not remove all pharmaceuticals. Using the sewer or a landfill to dispose of pharmaceutical waste contributes to the contamination of groundwater, surface water, and drinking water.

Pharmaceuticals can designate as hazardous waste and expired or unused pharmaceuticals should not be disposed of in sewer or septic systems. Use a reverse distributor for disposal, donate your almost-expired drugs or return them to the distributor.

For more information on managing pharmaceutical waste, see the Washington State Department of Ecology's Interim Enforcement Policy FAQ at: <http://www.ecy.wa.gov/pubs/0704024.pdf>

Mercury-containing Products

All products containing mercury are hazardous waste and must be disposed or recycled by a hazardous waste management company or the Skagit County Household Hazardous Waste Collection Center. Products that contain mercury include mercury thermometers, fluorescent tubes, computer monitors, televisions, and building thermostats. Mercury spill kits should be kept on site if you use mercury thermometers.

Cytology Stains

Most cytology stains are hazardous due to flammability and toxicity. Material Safety Data Sheets (MSDS) should be kept easily accessible and reviewed by staff. Stains must be labeled and stored properly. Used

stains must be disposed of by a hazardous waste management company. Do not dispose of waste stains down the sink for either sewer or septic systems.

Tissue Fixatives

The discharge limit for formalin into the sewer system is 0.1% and no discharge is permitted into septic systems. Biopsy containers supplied by diagnostic labs generally contain 10% formalin. Options for disposal of formalin or formaldehyde include:

- Dispose of as hazardous waste.
- Deactivate with a commercially available chemical treatment such as Neutralex, D-Formalizer or ChemGon. Depending on the product used, it can then be disposed of into the garbage or sewer.
- Many manufacturers will actually take back formalin as long as it is the product they provided you. They can not take back other manufacturers product as that will contaminate their recycling process.
- Return used formalin and fixative sample vials to the diagnostic laboratory your clinic uses. Some laboratories will deactivate the waste formalin on site. Call your lab if they provide this service.

Disinfectants and Cleaners

Read the MSDS for the product and follow dilution instructions on the product label. Use spray bottles to eliminate waste solutions. Check the label on solutions for proper disposal or call your waste water treatment plant. Full strength disinfectants and cleaners can harm septic systems and should not be disposed down the drain.

Electronic Waste and Fluorescent Bulbs

Computer equipment, batteries, and fluorescent tubes are not allowed in the garbage -- **they must be recycled**. Waste electronics may be accepted by special collection at your city solid waste division or can be taken to collection centers at The Goodwill or Skagit River Steel. Fluorescent bulbs may be collected by special collection through city solid waste or can be accepted at the Skagit County Household Hazardous Waste Collection Center. Do not place these items in your regular garbage!

For additional local assistance with chemical and/or biological waste issues please contact:

- **Your local sewer department**
- **Skagit County Public Health Department at 360-336-9380**
- **Skagit County Small Quantity Generator Program at 360-424-9532**