PROTECTING THE ENVIRONMENT FROM DENTAL WASTE





Thurston County Solid and Hazardous Waste



DENTAL AMALGAM

Common dental amalgam is composed of mercury, silver, tin, copper, and zinc. These heavy metals have the potential to adversely impact water quality, human health, and the environment. In 2017, the US EPA issued the Effluent Limitations Guidelines and Standards for the Dental Category (aka the Dental Amalgam Rule).¹ The goal of this rule is to prevent mercury, specifically from dental amalgam, from entering the wastewater system. This rule requires dental offices to operate and maintain an amalgam separator according to manufacture guidelines. As well as maintain maintenance and disposal records. Dental offices are also required to submit a one-time report to Department of Ecology and follow applicable best management practices.









SEPARATORS AND TRAPS

Chair-side Traps

Chair-side traps do not fulfill the requirements for amalgam separation. Chair-side traps use a filter to capture coarse solids; however, a significant portion of amalgam still pass through the filter. Consider using pre-capsulated amalgam which greatly eliminates the potential for spillage and impact to the environment.

Amalgam Separator

Maintaining the amalgam separator according to the manufacture instructions will ensure that you are capturing all amalgam properly. Line cleaners must maintain a pH between 6-8 to keep mercury in its solid form. If the pH is outside these parameters, then mercury can dissolve and flush into wastewater. No amalgam should enter a septic system even with an amalgam separator. Don't use bleach or chlorine-containing cleaners to flush wastewater lines.

Other Waste Considerations

If your office is developing x-rays using silver fixer, please refer to the handout "Disposal options for used x-ray and photographic fixer".

Sterilizing agents and disinfectants can contain chemical agents that are considered hazardous in concentrated form. Chemicals that contain properties of ignitability, corrosivity, reactivity, and toxicity must be handled safely, stored properly, and sent off to an approved facility for disposal.

Contaminated sharps, and other materials potentially contaminated with blood, body fluids, and other potentially infectious body fluids must be managed through a biohazardous waste vendor. Chair-side trap material or amalgam should not be disposed of as biohazardous waste due to incineration. Light bulbs and batteries should be collected and taken to the Thurston County HazoHouse.

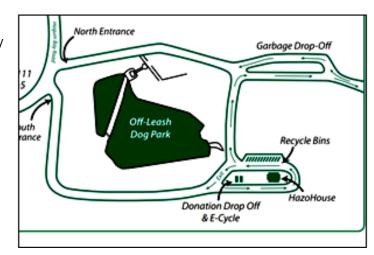
TRAINING

Periodically train employees on proper waste management, sharps safety, chemical handling, spill prevention, personal protective equipment, and blood borne pathogens. Ecology has a Dental Waste Shop Guide² that you may want to refer to.

DISPOSAL

Small businesses that generate less than 220 pounds of hazardous waste per month can dispose of it at the Waste and Recovery Center, HazoHouse. If more than 220 pounds of hazardous waste is generated per month then a licensed vendor must be hired for disposal.

Business can drop by HazoHouse with wastes between 8 a.m. – 4:45 p.m. everyday. The facility is located at the 2420 Hogum Bay Rd NE Lacey, WA. Businesses are asked to call in advance to set up disposal appointments prior to arriving 360-867-2912. There is a fee for this service. More disposal information can be found at the Thurston County webpage under Household Hazardous Waste.³



ADDITIONAL INFORMATION

For more information, including how to set up a free on-site technical assistance visit:

- Contact Thurston County Hazardous Waste Hotline at 360-867-2664 / TDD 360-867-2603
- **► Email** PHSSPollutionPrevention@co.thurston.wa.us
- Visit our website at <u>www.thurstoncountywa.gov</u>

In partnership with:





¹ Dental Office Category Rule EPA 40 CFR Part 441. https://www.epa.gov/eg/dental-effluent-guidelines

² Ecology Dental Waste Shop Guide. https://apps.ecology.wa.gov/publications/documents/0604007.pdf

³ Thurston County HazoHouse information. https://www.thurstoncountywa.gov/departments/public-works/solid-waste/garbage-recycling/household-hazardous-waste