## OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY



## Disposal Requirements and Options For Hazardous Dental Wastes

There are a number of wastes typically generated by a dental office which, if improperly handled, may pose a risk to people and the environment.

Examples include **mercury and silver residues from amalgam, lead** found in lead-foil packets and lead shields, **silver** found in X-ray fixer solutions, **chromium** used in many X-ray cleaners, and chemical **wastes**, such as formaldehyde, acetones, and ketones.

Any business must evaluate the wastes it generates and determine if the wastes are classified as regulated hazardous waste.

**Dental amalgam containing mercury and/or silver that has not been used** and is sent for reclamation is classified as a commercial chemical product and is not regulated hazardous waste.

**Dental amalgam containing mercury and/or silver that has been used and is not recycled** requires a hazardous waste determination. To determine if a particular solid waste is a hazardous waste, a generator may use knowledge of process, or perform a Toxicity Characteristic Leaching Procedure (TCLP) analysis.

If mercury is present in greater than or equal to 5 ppm concentration based on knowledge or TCLP analysis, the waste is hazardous for mercury and carries EPA waste code D009.

A generator may use supporting documentation such as safety data sheets or other supporting documentation in a knowledge of process determination.

A waste (including hazardous mercury waste) is not regulated as hazardous waste if it is properly recycled.

**Wastewaters:** In addition to the solid residues, a dental office will typically generate wastewaters that are regulated by the municipality that owns and operates the sewage system. With the approval and guidance from the city certain wastes may be diluted and safely disposed down the drain.

**Disposal requirements/options:** If any of these wastes are disposed in a manner that is not recycling/recovery, a hazardous determination must be performed by obtaining a TCLP analysis on the waste or using knowledge of process. If the analysis indicates the waste is hazardous, it must be disposed by an approved hazardous waste disposal service. Often the same company can analyze the waste and dispose of it.



For more information about management of dental wastes, please contact the DEQ Hazardous Waste Section at (405) 702-5100.

Regulated medical wastes are covered under a different set of rules. Untreated sharps or other medical wastes generated at medical/research facilities are examples of regulated medical wastes. For more information regarding management of regulated medical wastes contact the DEQ Solid Waste Section at (405) 702-5100.

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