Disposal Requirements & 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 human health and the environment.

These are:

- 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
- chemical wastes, such as formaldehyde, acetones, and ketones

- Any business must evaluate the solid wastes they generate and determine if the wastes are hazardous or not.
- 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 exempt from the definition of solid (and therefore hazardous) waste.
- Dental amalgam containing mercury and/or silver that has been used, is classified as a spent material and is considered a solid waste and 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 of TCLP analysis, the waste is hazardous for mercury and carries EPA waste code D009.
- A generator may use supporting documentation such as MSDS sheets or other supporting documentation in a knowledge of process determination.

- A waste (including hazardous mercury waste) is exempt from regulation as a solid/hazardous waste, if it is properly recycled.

Wastewaters: In addition to the solid residues that may be generated, a dental office will typically generate wastewaters that may be regulated by federal, state, or municipal agencies. Typically, a city will have a Publicly Owned Treatment Works (POTW) that regulates the discharge of hazardous wastes and materials to a sewage system. Certain of these wastes may be diluted and safely disposed down the drain; however, prior to any such discharge an office must contact the POTW for approval and guidance.

Disposal requirements/options:

- If any wastes, including the hazardous wastes listed above, are properly packaged and sent to an appropriate recycling facility, they are excluded from many regulatory requirements.
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 perform both services)
- Biomedical wastes are regulated under a different set of rules. An example is the requirement for red-bag storage/disposal for sharps. For more information, contact the Solid Waste Division of the DEQ at (405) 702-5100.

Disposal/recycling companies:
Businesses that may accept various types of potentially hazardous dental office wastes are:

Mercury and other hazardous wastes
Amalgaway Disposal Service
(800) 267-1467

DRNA Waste Management
(800) 360-1001 (customer service, extension #13)

Environmental Management Inc.
Telephone: (405) 282-8510

Maguire & Strickland Refining, Inc.,
Pre-paid services for lead foil, film, amalgam
(800) 486-2858

Safety Kleen Systems Inc.
Telephone: (405) 745-2025

X-ray service and/or silver recovery
N.T.&H. Enterprises, Inc.
(316) 835-2088

Radiographic Equipment Services
(405) 789-5855

Eastman Kodak
(800) 933-8031

For more information about disposal of dental office wastes and regulated wastes in general, see the fact sheets and other documents and guidance on the DEQ website: www.deq.state.ok.us/LPD, or call (405) 702-5100.