

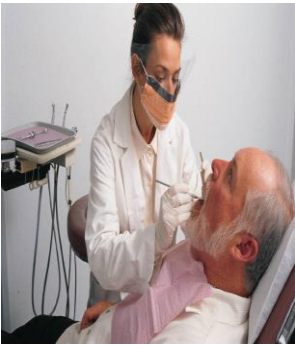


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ADMIN	627-2620	WASTE	627-2640
LEGAL	627-2602	WETLANDS	627-2630
WATER	627-2670	ERM	627-2650
AIR	627-2660	LAB	272-5157

## **DENTAL & MEDICAL HAZARDOUS WASTES AND HOW TO HANDLE THEM PROPERLY**



### **I. WHAT IS HAZARDOUS WASTE?**

The federal hazardous waste regulations found in the Resource Conservation and Recovery Act (RCRA) and carried out by the Florida Department of Environmental Protection under Chapter 62-730, Florida Administrative Code, define a waste as hazardous if:

1. It exhibits one of these four characteristics:
  - a. Ignitable: flashpoint < 140 degrees F.
  - b. Corrosive: pH is <2 or >12.5
  - c. Reactive: explosive, extremely unstable, reacts violently with water
  - d. Toxic: if sampled using "TCLP", fails for one or more of 43 toxic contaminants (i.e. silver, lead, chromium, benzene, etc.)
2. It is a listed hazardous waste per RCRA (40 CFR Part 261.30)

If your business generates hazardous waste, regardless of the amount, you must become familiar with what RCRA requires you to do. Depending on the amount of hazardous waste you generate each month, there are different requirements you must follow. Of course, the more you generate the more comprehensive the requirements are. In addition, there are many local and state requirements which protect the environment from improper handling and disposal of waste materials which can cause a threat to living things and the air, surface water and ground water.

## **II. WHAT HAZARDOUS WASTES DO DENTAL OR MEDICAL OFFICES NORMALLY GENERATE?**

### 1. Dentists:

- a. Photographic processing wastewater (regardless of whether silver is recovered or not). This is generated from the developing process for x-ray machines. This wastewater may be characteristic for corrosivity (only if the developer and fixer are not mixed) and toxic for silver, lead, and possibly other metals depending on the particular chemical fixing and developing products an office uses.
- b. Silver which is recovered from the photo processing machine is also toxic.
- c. Used amalgam: this waste can be toxic for silver, and possibly other metals depending on the products used.

### 2. Physicians:

- a. same as above
- b. same as above
- c. If the office has an on-site laboratory and/or pharmacy, various wastes, such as outdated pharmaceuticals, various chemicals used for analysis, etc. (list may be provided by EPC staff)

## **III. IF I GENERATE THESE WASTES, HOW DO I PROPERLY RECYCLE OR DISPOSE OF THEM?**

\*\* One of the most important things to know is that disposal of any of these materials onto the ground, into a septic tank, or with the normal garbage is prohibited. See below for the proper methods:

### 1. Photo processing wastewater- there are several options for this type of waste:

- a. Remove the silver with a silver recovery unit. This should remove enough silver to make the wastewater a non-hazardous industrial wastewater which can be discharged to a sanitary sewer system (not septic tank), with the approval of your county or city utility.
- b. In the case where a silver recovery unit is not used, the wastewater must be disposed as a hazardous waste using a licensed hazardous waste transporter. Alternatively, you can use a photographic waste recycler, provided they give you documentation proving they are legitimately recycling the silver and properly disposing of the resultant wastewater. Also, be aware that these recyclers can only transport your waste without being a licensed hazardous waste transporter if your business generates less than 25 gallons of hazardous waste in any one calendar month.

2. Silver recovered from a silver recovery unit- preferably, this should be recycled for its value as a precious metal. If it is not, it must be disposed of as a hazardous waste using a licensed hazardous waste transporter.

3. Amalgam- preferably, this should be recycled with your other silver from #2 above. If it is not, it must be disposed of using a licensed hazardous waste transporter.

4. Laboratory or pharmaceutical wastes- if these wastes cannot be legitimately used on-site or returned to the manufacturer for recycling, these wastes must be disposed of using a licensed hazardous waste transporter. Possibly, selected wastes may be discharged to the sanitary sewer, with the utility's approval.

#### **IV. WHO CAN I CALL TO GET MORE INFORMATION?**

You are encouraged to contact the SQG Program of the Environmental Protection Commission at (813) 627-2600 for information regarding hazardous waste generation, storage and disposal. We can provide you with lists of hazardous waste transporters, silver recyclers, and other related factsheets which may assist you in complying with environmental regulations. In addition, the Hazardous Waste Program of the Florida Department of Environmental Protection can be contacted at (813) 632-7600 for information. Also, please check with your utility: City of Tampa at 247-3451, Hillsborough County at 274-6800, City of Plant City at 757-9289, or City of Temple Terrace at 989-7170.

#### **V. WHY IS IT IMPORTANT TO COMPLY WITH THESE REGULATIONS AND WHAT WILL HAPPEN IF I DO NOT?**

First, it is important to Florida's most precious resource- ground water. Ninety-five percent of Florida's drinking water comes from ground water. In some areas, ground water is less than five feet under the surface. That means that contaminants, which are dumped onto the ground or into a septic tank, can quickly contaminate the soil and ground water underneath. Second, public health and safety is jeopardized when wastes are improperly disposed.

Your business could also be subject to administrative, possibly criminal, enforcement actions from various local and State environmental or law enforcement agencies. This can include costly cleanup activities and payment of fines and the agencies' costs associated with performing the investigation. Penalties can be as high as \$25,000 per day, per violation of hazardous waste regulations.

Again, you are encouraged to find out now what your business needs to do to be in compliance with environmental regulations, and to avoid future problems. Eventually, your business will receive an inspection from either the EPC or FDEP and it is in your best interest to be in compliance prior to such an inspection. Please contact EPC for any information you may need to assist you in this process.

**\*\*NOTE:** All of the information provided in this fact sheet is based on EPC's understanding of the intent and application of the regulations, in addition to technical data on dental and medical wastes which EPC has been able to gather to date. This fact sheet is not meant to be comprehensive, in any way, regarding inclusion of all possible regulations or interpretations of them.

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Updated 3/2008 by J. Lopez