

# Recycling Amalgam Waste

AND  
OTHER  
BEST  
MANAGEMENT  
PRACTICES  
FOR YOUR  
DENTAL OFFICE





# Dental amalgam waste

can be recycled to help prevent the release of mercury to the environment. Dental associations, dentists, waste managers, and regulators have worked together to develop this guide about amalgam waste recycling and handling. Following these simple suggestions will help protect the environment.

***The concern about the effects of mercury in the environment has increased over the years.*** Mercury in the environment is bioaccumulative, which means it can build up in fish and cause health problems in humans and other animals that eat fish. Many state health professionals recommend limiting fish consumption, especially for children and pregnant women.

Mercury is a naturally occurring metal, however, about half of the mercury released to the environment comes from human activity. Of that amount, 53 percent is emitted from the combustion of fuels for energy production and 34 percent is from the combustion of waste. Some mercury released into the air eventually collects in the waterways where it enters the food chain.

Although mercury in the form of dental amalgam is very stable, amalgam should never be disposed of in the garbage or infectious waste “red bag” and it should never be rinsed down the drain. The reason for this caution is that some communities incinerate municipal garbage, medical waste, and sludge from wastewater treatment plants. If amalgam waste ends up in one of these incinerated waste streams, it can volatilize at high temperatures and mercury will be released into the environment.

The good news is that amalgam waste kept separate from other waste can be recycled to reduce mercury emissions. Mercury can be recovered from amalgam wastes through a distillation process and reused in new products. After extensive review, waste regulators in the Great Lakes States recommend recycling amalgam as a best management practice for dental offices.

The following information demonstrates how to properly manage and recycle dental amalgam waste in order to prevent the release of mercury to the environment.



# Types of Amalgam Wastes



## Non-contact amalgam (scrap)

is excess mix leftover at the end of a dental procedure. Many recyclers will pay for this clean scrap.

## Contact amalgam

is amalgam that has been in contact with the patient. Examples are extracted teeth with amalgam restorations or amalgam captured by chair-side traps, filters, or screens.

## Chair-side traps

capture amalgam waste during amalgam placement or removal procedures.

*(Traps from dental units dedicated strictly to hygiene may be placed in with regular garbage.)*

## Vacuum pump filters

or traps contain amalgam sludge and water. Some recyclers will accept whole filters. Others will require special handling of this material.

## Amalgam sludge

is the mixture of liquid and solid material cleaned from vacuum pump filters or other amalgam capture devices.

## Empty amalgam capsules

are the containers leftover from preencapsulated dental amalgam.

# Steps for Recycling Amalgam

1. Use universal precautions such as gloves, masks, and protective eyewear when handling amalgam waste.
2. Contact an amalgam waste recycler about any special requirements for collecting, storing, and transporting amalgam waste.

*If you need to find a recycler, check with your city, county, or local waste authority to see if they have an amalgam waste recycling program. Or use the Amalgam Waste Recyclers directory enclosed with this guide. See page 5 for a list of suggested questions to ask your amalgam waste recycler.*

3. Store amalgam waste in a covered plastic container labeled “Amalgam for Recycling” or as directed by your recycler.

*Consider keeping different types of amalgam wastes in separate containers – talk to your recycler about any advantages.*




**B**ulk elemental mercury, also referred to as liquid or raw mercury, is no longer recommended for use by the American Dental Association (ADA).


- The ADA recommends the use of precapsulated amalgam alloy.
- Bulk elemental mercury should NEVER be poured in the garbage, red bag, or down the drain.
- Recycle all bulk elemental mercury.
- You should have a mercury spill clean up kit if you still use bulk elemental mercury.


**Hg**  
MERCURY


# Best Management Practices for Amalgam Waste


## and Other BMP's for the Dental Office


 **Never** put amalgam waste in the regular garbage.


 **Never** put amalgam waste in with infectious waste (red bag).


 **Never** rinse chair-side traps or vacuum pump filters containing amalgam over drains or sinks.

 **Never** dispose of empty amalgam capsules with infectious waste (red bag) or municipal waste that's incinerated.

 **Never** flush amalgam waste down the drain.

 **Never** pour used photographic fixer solutions down the drain, recycle them.

 **Never** throw lead x-ray foils in the garbage, recycle them.

 **Never** pour large quantities of disinfectant down the drain.



# Questions to ask your Amalgam Waste Recycler



Enclosed is a list of some amalgam waste recyclers that handle amalgam waste. Appearance on this list does not constitute an endorsement. Select a recycling facility that serves your amalgam recycling needs. Notice that not all the recycling companies accept all types of amalgam waste and services can vary widely. Contact a recycler before recovering amalgam and ask about any specific handling instructions.

We recommend asking amalgam waste recyclers the following questions:

- What kind of amalgam wastes do you accept?  
(Non-contact, contact, traps, filters or sludge, etc.)
- Do you provide packaging for storage or shipping?
- If packaging is not provided, how should the wastes be packaged?
- What wastes can be packaged together?
- Is disinfecting of amalgam waste required?
- How should the waste be shipped to your facility?
- How much does it cost?
- Can we deliver this waste to your facility ourselves?

You may also want to ask these questions:

- Do you accept bulk elemental mercury?
- Do you accept x-ray fixer solutions?
- Do you accept lead x-ray foils?
- Do you accept mercury spill clean-up materials?

# Amalgam Waste Recyclers

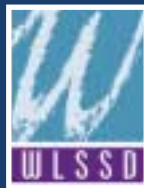
		Materials Accepted						
Company Address	Phone Number Fax Number	Non-contact Amalgam	Contact Amalgam	Chair Side Traps	Vacuum Filters/Amalgam Sludge	Bulk Mercury	X-ray Fixer	X-ray Lead Foils
<b>Amalgaway</b> 1002 West Troy Avenue • Indianapolis, IN 46225	(800) 267-1467 (317) 784-2719	✓	✓	✓	✓			
<b>D.F. Goldsmith</b> 909 Pitner Avenue • Evanston, IL 60202	(847) 869-7800 (847) 869-2531	✓				✓	✓	✓
<b>Everlights</b> 8500 West 191 Street • Mokena, IL 60448	(815) 469-0631 (815) 469-0598	✓	✓	✓	✓	✓		
<b>Midwest Recycling and Mercury Recovery Services, Inc.</b> P.O. Box 667 • Dubuque, IA 52001	(319) 582-4763 (319) 582-3072	✓	✓	✓	✓	✓	✓	✓
<b>Safety Kleen</b> 1 Brinkman Way • Elgin, IL 60123	(888) 298-8096	✓	✓	✓	✓	✓	✓	✓



## Thank You!

Recycling amalgam waste helps keep a healthy environment.

(That's why we're smiling, right?)



Clear Answers for Clean Water™

## **Western Lake Superior Sanitary District**

Developed by the Western Lake Superior Sanitary District with funding from the Great Lakes Protection Fund.  
For information about reprinting this guide for your area contact the Western Lake Superior Sanitary District.  
2626 Courtland Street • Duluth, Minnesota 55806 • 218/722-3336 • [www.wlssd.duluth.mn.us](http://www.wlssd.duluth.mn.us)