



## Amalgam Waste Best Management Practices

Regulatory agencies are reaching out to the dental community to encourage the reduction of amalgam and mercury in the waste stream. Communities in the San Francisco Bay area, Sacramento and Los Angeles County have seen educational outreach programs and, in some cases, regulatory programs. Amalgam waste is easily captured and can be recycled. Recycling is the preferred method of managing this waste. CDA encourages members to follow these best management practices for amalgam waste.

- Do not rinse amalgam-containing traps, filters or containers in the sink.\*
- Do not place amalgam, elemental mercury, broken or unusable amalgam capsules, extracted teeth with amalgam or amalgam-containing traps and filters with medical "red-bag" waste or regular solid waste.\*
- Recycle, or manage as hazardous waste, amalgam, elemental mercury, broken or unusable amalgam capsules, extracted teeth with amalgam, amalgam-containing waste from traps and filters. Empty dental amalgam capsules containing no visible materials may be disposed of as a non-hazardous waste, except as required by local regulations.\*
- Collect and store dry dental amalgam waste in a designated, airtight container. Amalgam, which is designated for recycling, should be labeled "Scrap Dental Amalgam" with the name, address and phone number of your office and the date on which you first started collecting material in the container. In the past, dental amalgam scrap may have been kept under photographic fixer, water or other liquid. If you should encounter amalgam stored in this manner, do not under any circumstances decant the liquid down the drain and discontinue this practice in the future.\*
- Keep a log of your generation and disposal of scrap amalgam; inspectors may ask to see this to verify that your office is managing it correctly. A generation and disposal log is a record of what you placed in the amalgam container, when it was placed in the container and when the container was picked up by or sent to a recycler or hazardous waste hauler.
- Check with your amalgam recycler for any additional requirements. Some recyclers do not accept contact amalgam (amalgam that has been in the patient's mouth); others may require disinfecting the amalgam waste. All recyclers have very specific packaging requirements.
- Separate excess contact dental amalgam from gauze that is retrieved during placement and place in an appropriate container.
- Use chair-side traps to capture dental amalgam.
- Change or clean chair-side traps frequently. Flush the vacuum system before changing the chair-side trap.
- Change vacuum pump filters and screens at least monthly or as directed by the manufacturer.
- Check the P-trap under your sink for the presence of any amalgam-containing waste.
- Eliminate all use of bulk elemental mercury and use only precapsulated dental amalgam for amalgam restorations.
- Limit the amount of amalgam triturated to the closest amount necessary for the restoration, i.e. do not mix two spills when one spill would suffice. Keep a variety of amalgam capsule sizes on hand to ensure almost all triturated amalgam is used.
- Train staff members who handle or may handle mercury-containing material in its proper use and disposal.
- Install an amalgam separator compliant with ISO 11143.
- Do not use bleach to clean discharge systems as this may mobilize legacy mercury and amalgam in the system.

\*Mandatory per California Code of Regulations Title 22  
Publicly Owned Treatment Works (POTWs) may choose to make some BMPs mandatory

## Information Resources

ADA Professional Product Review, Summer 2012, Amalgam Separators, (requires ADA member log-in)  
<http://editiondigital.net/publication/?i=121004>

Amalgam and Dental Wastewater, Richard T. Kao DDS, editor, California Dental Association Journal, July 2004, Volume 32 No. 7 [http://www.cda.org/Portals/0/journal/journal\\_072004.pdf](http://www.cda.org/Portals/0/journal/journal_072004.pdf)

California Dental Association Issue Summary, *Dental Amalgam: Public Health and the Environment*, July 2016,  
[http://www.cda.org/Portals/0/pdfs/policy\\_statements/issue\\_amalgam.pdf](http://www.cda.org/Portals/0/pdfs/policy_statements/issue_amalgam.pdf)

Directory of Amalgam Recyclers – compiled by the ADA  
[http://www.ada.org/~media/ADA/Member%20Center/Files/Recyclers\\_Direct\\_4\\_02\\_12.ashx](http://www.ada.org/~media/ADA/Member%20Center/Files/Recyclers_Direct_4_02_12.ashx)

Health Services Industry Detailed Study – Dental Amalgam, U.S. Environmental Protection Agency, August 2008, EPA-821-R-08-014 <https://www.epa.gov/sites/production/files/2015-06/documents/dental-amalgam-study-2008.pdf>

Vandeven J and McGinnis S, "An assessment of mercury in the form of amalgam in dental wastewater in the United States," *Water, Air and Soil Pollution*, 2005 June;164(1-4):349-66.  
[http://www.ada.org/en/~media/ADA/Member%20Center/Files/topics\\_amalgamwaste\\_springer](http://www.ada.org/en/~media/ADA/Member%20Center/Files/topics_amalgamwaste_springer)

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## EPA rule requiring amalgam separators takes effect July 14



Following a six-month delay, the Environmental Protection Agency on June 14 published a final rule under the Clean Water Act to control the discharge of mercury and other metals entering the waste stream from dental practices. The rule regulates dental practices that place or remove amalgam.

The EPA finalized the rule last December with the rule expected to take effect in January but, as CDA reported in February, a Trump administration order froze all proposed and pending federal regulations to allow for executive review.

The effective date of the rule is July 14, 2017 — 30 days after its publication in the Federal Register. The compliance date for most dentists will likely be July 2020, three years after the effective date.

Under the rule, a dental facility that places or removes amalgam will be subject to two best management practices: 1) collect and recycle scrap amalgam; 2) clean the chairside traps with non-bleach or non-chlorine cleanser so as not to release mercury.

The rule also includes an amalgam separator requirement, stating that a dental facility must install an amalgam separator that is compliant with either the American National Standards Institute American National Standard/American Dental Association Specification 108 for Amalgam Separators (2009) with Technical Addendum (2011) or the International Organization for Standardization 11143 Standard (2008) or subsequent versions so long as that version requires amalgam separators to achieve at least a 95 percent removal efficiency.

The rule is not intended to apply to dental practices such as orthodontic and periodontal practices except in limited emergency circumstances.

Dental practices that already have amalgam separators will be required to replace the equipment within 10 years of the rule's effective date with equipment meeting the new standard.

Additionally, there are reporting requirements. All dental facilities must submit to the local authority a compliance report and have maintenance and inspection records available for inspection.

CDA and the ADA advocated to the EPA for revisions to the proposed rule, published in 2014, with CDA calling for withdrawal of the rule to allow sanitation agencies, states and regions to "develop their own guidelines to use when developing and enforcing dental

amalgam programs which will allow for the appropriate response based on each local jurisdiction's needs."

CDA Practice Support offers an [Amalgam Separator Requirements Q&A](#) and other resources to assist dental practices with compliance dates, California-specific required BMPs, penalties for noncompliance and more.

### **Member-exclusive offer on amalgam separator**

CDA has worked with PureLife Dental to help make complying with the new mandate easier and more affordable. With the confidence of CDA's Endorsed Programs, PureLife's ECO II amalgam separator is available to members for only \$99 per unit with a discounted one-year replacement cartridge and disposal service agreement.

For amalgam-related resources, or to take advantage of the PureLife offer, [visit cda.org/amalgam](http://cda.org/amalgam).