
The Good DEED Program

Dedicated to Environmental
Excellence in Dentistry

Gold Tier

May 31, 2010

Ohio Dental Association

OHIO DENTAL ASSOCIATION
Informing - Representing - Serving



With support from the Office of Compliance
Assistance and Pollution Prevention



Helping Ohioans comply with environmental
regulations and reduce waste at the source.

DEDICATED TO ENVIRONMENTAL EXCELLENCE IN DENTISTRY PROGRAM

The Good DEED (Dedicated to Environmental Excellence in Dentistry) program is an easy to participate and voluntary program to recognize the efforts of dental offices to operate in an environmentally responsible manner. The Good DEED program uses a tiered approach for recognizing dental offices that use simple and innovative solutions to minimize the environmental impact of their practices on Ohio's environment. Participants receive certificates from the Ohio Dental Association (ODA) designating the tier for which they qualify. Everything you need for participation is on-line or can be mailed to you at your request..

The Good DEED program includes:

- Comprehensive on-line checklists to identify American Dental Association best management practices (BMPs), environmental regulations that apply to dental offices, and best management practices to help your business be more sustainable and preserve and protect natural resources;
- A Gold Tier of recognition for those following the American Dental Association's BMPs and meeting environmental regulations; and
- A Gold and Green tier, a second tier of recognition, for dental offices pursuing more environmentally sustainable activities. In addition to the certificate from ODA and Ohio EPA, Gold and Green tier participants are listed on the Good Deed Achievements Web page.

Please help promote environmental stewardship in the dental profession and be recognized as an environmentally responsible dentist.

Contact the Ohio Dental Association or the Ohio EPA to participate in the program. Dental offices that are pursuing sustainable practices can be recognized for their outstanding efforts by completing the online registration.

Ohio Dental Association

Good DEED Program

1370 Dublin Road, Columbus, Ohio 43215

614-486-2700

www.oda.org

Dedicated to Environmental Excellence in Dentistry

Gold Tier – ADA BMPs and Ohio Regulations

Dental offices that meet Ohio environmental regulations and that follow the American Dental Association's (ADA) list of Best Management Practices (BMPs) relating to amalgam may receive recognition from the Ohio Dental Association and the Ohio EPA for being environmentally responsible dentists. In October 2007, the American Dental Association included the use of amalgam separators as a best management practice for dentists. In some cases these BMPs are also environmental regulations.

All businesses in Ohio are also legally responsible for meeting Ohio laws. Legal requirements applicable for dentists are included in the list below and marked with a diamond (◆) in the regulation (Reg) column of the table.

To receive Recognition as an Environmentally Responsible Dentist you need to mark yes or not applicable to each management practice in the following two sets of criteria:

- **ADA Best management practices for amalgam management**
- **Environmental regulations**

The list of ADA BMPs and the most common environmental regulations applicable to dental offices are listed below.

ADA Best Management Practices

Managing waste dental amalgam properly is important for dental offices to do. Dental amalgam is a mixture of elemental mercury (43 to 54 percent) and an alloy powder (57 to 46 percent) composed of silver, tin, copper, and sometimes smaller amounts of zinc, palladium, or indium. Amalgam waste must be either recycled or managed as a hazardous waste, due to its mercury and silver content.

Amalgam separators remove dental amalgam from wastewater before it is discharged to the local Publicly Owned Treatment Works (POTW). Separators are rated at different efficiencies, typically between 95 percent to more than 99 percent. The higher the efficiency the greater amount of mercury is removed from the waste water stream.

There are many designs and manufacturers of dental separators. Dental offices should investigate which separators best suit the needs, numbers of chairs, and vacuum systems of the dental office. Ohio EPA encourages dentists to choose separators at the highest efficiency rating the dental practice deems appropriate to keep the most mercury out of the environment.

BMP Description	Reg	Yes (√) Or N/A
DENTAL AMALGAM USE		
You have discontinued the use of bulk elemental mercury.		
You have sent any bulk elemental mercury in the office to a recycling facility. Note: Check with your recycler to determine whether they will accept bulk mercury.		
You use the proper size pre-encapsulated amalgam and stock a variety of capsule sizes to minimize waste.		
You use chair-side traps and vacuum pump filters to collect amalgam.		
You properly manage mercury amalgam from chair-side traps, vacuum screens and amalgam separators, either through recycling or disposal as a hazardous waste	◆	
You DO NOT put any mercury-containing wastes in your regular trash, in infectious waste containers (red bags), in sharps containers, or down the drain or toilet. Examples include: amalgam capsules, amalgam waste and extracted teeth containing amalgam.	◆	
You DO NOT rinse reusable traps or other devices containing dental amalgam over drains or sinks.		
You store amalgam waste in a covered plastic container labeled “ Non-Contact Amalgam Waste for Recycling ” and “ Contact Amalgam Waste for Recycling, ” or as directed by your recycler Note: You should include the date when you first placed amalgam into the container on the container’s label. Your recycler may have some requirements, so ask about containers and what may be placed in them.		
Send mercury-containing materials to a recycler, including: Non-contact amalgam <ul style="list-style-type: none"> • disposable amalgam capsules • non-contact amalgam (scrap amalgam) Contact Amalgam <ul style="list-style-type: none"> • salvage (contact) amalgam pieces from restorations • teeth containing amalgam • contents of reusable chair-side amalgam traps • disposable chair-side traps • vacuum pump filters • sludge from plumbing clean-outs Note: Ask your recycler whether contact amalgam contents or extracted teeth with amalgam restorations require additional preparation or separate storage prior to recycling.		
AMALGAM SEPARATOR		
You use an amalgam separator that complies with ISO 11143 and is at least 95% efficient. Check with your supplier to determine if your separator qualifies.		
You follow the manufacturer’s recommendations for operation, filter replacement and cleaning, and maintenance of your separator(s).		
You use non-bleach, non-chlorine–containing line cleaners, to minimize amalgam dissolution to flush wastewater lines.		
AMALGAM IN PLUMBING		
You properly manage any sludge generated when you clean your pipes or replace plumbing. Handle the sludge as you would handle contact amalgam.	◆	

ENVIRONMENTAL REGULATIONS

Dental offices, like all businesses in Ohio, are responsible for complying to Ohio's environmental regulations. This section has a series of checklists for different waste types that apply to dentists. Dental offices must comply with these waste management regulations:

Infectious Waste Management

Dental offices are responsible for properly managing any infectious wastes generated. The definition of infectious wastes and categories of generators are available at <http://www.epa.state.oh.us/dsiwm/pages/iwpro.html>. The most common wastes that a dental office may need to manage as infectious waste are blood and blood products, teeth that have blood on them, and sharps.

The amount of infectious waste generated in a month determines the requirements that must be followed. Most dentists generate less than 50 pounds of infectious waste and are Small Infectious Waste Generators, the checklist is appropriate for Small Infectious Waste Generators. Dentists that generate more than 50 pounds of infectious waste in any calendar month at one location have more stringent regulatory requirements found at http://www.epa.state.oh.us/portals/34/document/guidance/gd_078.pdf.

It is also a good idea to contact the Public Utilities Commission of Ohio (PUCO) and your trash hauler to determine whether it has specific requirements regarding the content of the wastes that they will haul.

Hazardous Waste Management

Most dental offices generate less than 220 pounds of hazardous waste per month, and are defined as conditionally exempt small quantity generators (CESQG) of hazardous waste. CESQGs must follow two main requirements.

- CESQGs are required to evaluate any waste they generate to determine whether it is a hazardous waste.
- CESQGs ensure delivery to an Ohio EPA permitted off-site hazardous waste storage, treatment, or disposal facility.

If a dental office generates more than 220 pounds of hazardous waste in any calendar month, there are more stringent requirements. See *Ohio EPA's Hazardous Waste Generator Handbook* (http://www.epa.state.oh.us/dhwm/pdf/gen_handbook.pdf) for more information.

Wastewater

It is important to know where the sinks and drains at your dental office discharge. If you are discharging to your local wastewater treatment plant (called a publicly owned treatment works, or POTW), it is recommended that you contact them to ensure they can accept your wastewater and to see what local requirements they may have for your discharge. POTWs are designed to handle sanitary (restroom) wastes. POTWs are not designed to manage wastewaters

containing chemicals, metals or other contaminants. POTWs have limits on the level of contaminants that can be discharged by businesses and many have specific limits on mercury discharges. Mercury discharged down the drain can pose a problem to POTWs. Also many POTWs DO NOT want chemicals put down the drain because they can kill helpful bacteria at the wastewater plant or cause other hazards, such as an explosion or fire hazard.

If your dental office is not connected to a sewer system and has its own on-site sewage system, there are different considerations. An on-site sewage system usually consists of a buried septic tank or aeration tank and a drain field (also called a leach field or leach bed). On-site treatment systems are designed to handle sewage and wastewater from restrooms and sinks. Discharging chemicals, cleaning solvents or mercury into an on-site system can kill the important bacteria that help the system break down wastes and function properly. These chemicals can travel through the septic tank into the drain field, making their way directly into underground sources of drinking water. Because of this, Ohio EPA has strict regulations against the use of on-site treatment systems for the disposal of process-related wastes from a business.

INFECTIOUS WASTE GENERATOR REGULATIONS	Reg	Yes (✓) Or N/A
SMALL INFECTIOUS WASTE GENERATOR - Generates less than 50 pounds of infectious waste in any calendar month at one location.		
You keep a written log which shows the amount (weight) of infectious waste generated each month. Note: You are not required to send this information to Ohio EPA, but must keep it on file at the business.	◆	
You put discarded needles, syringes, scalpel blades and other sharps in a commercially manufactured sharps container.	◆	
Your sharps container(s) are in good condition, labeled, puncture and leak resistant with a tight-fitting cover. It also needs to be rigid and strong enough to withstand handling during transport (for example, it will not collapse or break open).	◆	
Your sharps containers are labeled with the word “sharps” and the international bio hazard symbol.	◆	
Check with the PUCO on the requirements for the proper transportation of your regulated medical waste/infectious waste.		

HAZARDOUS WASTE GENERATOR REGULATIONS	Reg	Yes (✓) Or N/A
HAZARDOUS WASTE - CESQG		
You have evaluated all the wastes you generate to determine whether they are hazardous wastes. Examples of potential hazardous wastes include: <ul style="list-style-type: none"> • Dental amalgam • Used fixer and cleaners for x-ray developer • Lead foils, shields, aprons • Used chemical sterilants • Fluorescent bulbs and batteries • Old electronic equipment, including computers • Mercury-containing thermostats • Pesticides 	◆	
You DO NOT put hazardous waste in with infectious waste or in the regular trash.	◆	
You DO NOT put liquids in your solid waste dumpster, even if non-hazardous, as landfills are not permitted to accept liquid wastes.	◆	
You send your hazardous waste to a permitted hazardous waste treatment, storage or disposal (TSD) facility, OR Send the hazardous waste to an appropriate recycler, if the material is recyclable.	◆	

WASTEWATER DISCHARGER REGULATIONS	Reg	Yes (✓) Or N/A
WASTEWATER DISCHARGED TO A POTW		
If you are discharging to a local wastewater treatment plant (POTW), you should contact the local POTW to check on any local ordinances or permission requirements.		
You DO NOT dispose of any chemicals down the drain, such as photo and x-ray chemicals, sterilants or disinfectants, unless you have been given permission to do this from the POTW, or the activity is covered under your discharge permit with them. Note: If a dental office is not authorized to dispose of chemicals, including photo and x-ray chemicals, sterilants or disinfectants down the drain, the dental facility must evaluate and properly dispose of the chemicals. If the chemicals are hazardous wastes, the dental facility must send the chemicals to a recycler or permitted hazardous waste disposal facility. See Hazardous Waste Section of this checklist.	◆	
You DO NOT rinse amalgam from cleaning chair-side traps, vacuum screens or an amalgam separator down the drain.		
WASTEWATER DISCHARGES TO AN ON-SITE SEPTIC SYSTEM		
If you have an on-site sewage treatment or disposal system such as a septic tank/leach field, filtration system or mound system, you have a permit-to-install (PTI) from Ohio EPA's Division of Surface Water.	◆	
You ensure that only sanitary water (from restrooms and hand wash only sinks) is discharged to your onsite system.	◆	

<p>You DO NOT discharge chemicals such as photo and x-ray chemicals, sterilants or disinfectants into your on-site system.</p> <p>Note: If wastewater containing amalgam or chemicals is going into a facility's on-site system, the dental facility must discontinue this practice and find another way to manage its wastewater, such as installing a holding tank. A holding tank requires a permit-to-install (PTI) from Ohio EPA's Division of Surface Water. If you have chemicals or amalgam in your wastewater, your tank may also be regulated as a hazardous waste tank by Ohio EPA's Division of Hazardous Waste Management.</p>	◆	
<p>You DO NOT discharge wastewater containing amalgam from cleaning chair-side traps, vacuum screens or an amalgam separator down the drain to an on-site system.</p>	◆	
<p>If you have installed a holding tank for collecting wastewater, you evaluate the wastewater and have it shipped by a waste hauler to a commercial wastewater treatment facility or, if hazardous waste, a hazardous waste disposal facility.</p>	◆	

Marking yes or not applicable to all the ADA BMPs and environmental regulations above enables you to be recognized for the Gold tier of the Good DEED program.

Dental offices that have completed the Gold tier and are pursuing more environmentally friendly and sustainable practices may receive recognition in the *Gold and Green Tier*.

To apply for Recognition for Environmentally Responsible and Sustainable Dentistry – Gold Tier:

1. Complete the checklist and mail it to the Good DEED Administrator; or
2. Send an e-mail to the Good DEED Administrator with your contact information, the model and brand of amalgam separator that you have used, the maintenance schedule for the separator, and a statement that you have met all environmental regulations on the checklist. The Good DEED Administrator will follow up with you for additional information if necessary.

Contact information should include:

Name of dental facility:

Names of dentists at the facility and their specialties:

Street address:

Mailing address:

City and ZIP Code:

_____, OH _____

Phone number:

Web address:

E-mail address:

Number of chairs at the dental practice: _____

Send application to “Good DEED Administrator” at ODA or mail application to:

Good DEED Administrator
Ohio Dental Association
1370 Dublin Rd
Columbus, OH 43215-1098

If you have any questions call the Ohio Dental Association at 614-486-2700 or Bill Narotski, OCAPP, at 800-329-7518.