

## COMMON IMPROPER DISPOSAL METHODS

SOME DENTAL OFFICES FLUSH EXCESS AMALGAM AND CONTACT AMALGAM DOWN THE DRAIN\*. THIS PRACTICE MAY LEAD TO A FAILURE TO MEET WATER QUALITY AND/OR SLUDGE QUALITY STANDARDS AT THE TREATMENT PLANT OR COULD LEAD TO THE EVENTUAL DEPOSITION OF LOW CONCENTRATIONS MERCURY ON LAND OR IN HUMBOLDT BAY. SOME DENTAL OFFICES PLACE AMALGAM PARTICLES IN THE BIOHAZARD "RED BAG"\*. WHEN THE BIOHAZARD WASTE IS INCINERATED MERCURY IS RELEASED INTO THE AIR.

X-RAY FILM IS OFTEN THROWN AWAY AS NORMAL GARBAGE. SILVER FROM THE FILM COULD LEACH INTO THE ENVIRONMENT IF IT ENDS UP IN A LANDFILL OR, IF THE FILM IS INCINERATED, SILVER CAN BE RELEASED INTO THE AIR.

X-RAY FIXER SOLUTION AND CHROME-BASED CLEANING SOLUTIONS ARE COMMONLY POURED DOWN THE DRAIN. THIS PRACTICE MAY LEAD TO A FAILURE TO MEET WATER QUALITY OR COULD LEAD TO THE EVENTUAL DEPOSITION OF LOW CONCENTRATIONS CHROMIUM ON LAND OR IN HUMBOLDT BAY.

LEAD SHEILDS, BITEWINGS AND FOIL PACKAGING FROM X-RAYS OFTEN END UP IN THE TRASH OR IN BIOHAZARD "RED BAGS". THE LEAD MAY LEACH INTO THE GROUND AT A LANDFILL OR MAY BE RELEASED INTO THE AIR IF IT IS INCINERATED.

TO ENSURE THAT POLLUTANTS FROM YOUR DENTAL PRACTICE ARE NOT RELEASED INTO THE ENVIRONMENT USE A RELIABLE RECYCLING SERVICE TO DISPOSE OF THE WASTE PROPERLY. IF POSSIBLE, USE AN ALTERNATIVE, LESS TOXIC PRODUCT INSTEAD OF THE TRADITIONAL PRODUCT AND ALWAYS USE THE LEAST AMOUNT OF MATERIAL NEEDED TO GET THE JOB DONE.

\*PROHIBITED PER CALIFORNIA CODE OF REGULATIONS, TITLE 22

## DENTAL OFFICE

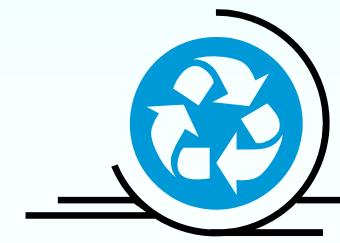
## BEST MANAGEMENT PRACTICES

A GUIDE FOR DISPOSING UNIVERSAL WASTE



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PRODUCED BY THE CITY OF ARCATA  
PRETREATMENT PROGRAM

## CITY OF ARCATA PRETREATMENT PROGRAM

THE CITY OF ARCATA PRETREATMENT PROGRAMS ARE DESIGNED TO PROTECT WATER QUALITY BY REQUIRING NON-DOMESTIC FACILITIES TO REMOVE POLLUTANTS FROM THEIR WASTE STREAM BEFORE DISCHARGING THE WASTE STREAM INTO A SEWER SYSTEM. PRETREATMENT PROGRAMS ARE DESIGNED TO:

- PREVENT POLLUTANTS FROM INTERFERING WITH THE NORMAL OPERATION OF A WASTEWATER TREATMENT PLANT
- HELP THE WASTE WATER TREATMENT PLANT MEET DISCHARGE REQUIREMENTS IMPOSED BY THE STATE REGIONAL WATER QUALITY CONTROL BOARD
- INCREASE THE OPPORTUNITY TO USE TREATED SLUDGE FOR BENEFICIAL LAND APPLICATION PURPOSES
- MINIMIZES THE AMOUNT OF POLLUTANTS BEING RELEASED INTO THE ENVIRONMENT

## POLLUTANTS IN THE WASTE STREAM

POLLUTANTS ENTER THE WASTE STREAM WHEN THEY ARE DISPOSED OF DOWN THE DRAIN. DENTAL WASTES, MANY OF WHICH ARE HEAVY METALS, CAN NOT BE TREATED AT THE WASTEWATER TREATMENT PLANT. IF HIGH LEVELS OF THESE POLLUTANTS ARE DETECTED IN TREATMENT PLANT SLUDGE OR EFFLUENT IT MAY FAIL TO MEET FEDERAL AND STATE REQUIREMENTS. FAILING TO MEET WATER QUALITY AND SLUDGE QUALITY REQUIREMENTS WOULD IMPAIR THE CITY'S ABILITY TO REUSE SLUDGE IN COMPOSTING MATERIALS, COULD LEAD TO HEFTY FINES IMPOSED BY REGULATORY AGENCIES AND COULD LEAD TO THE RELEASE OF HEAVY METALS INTO HUMBOLDT BAY.

## UNIVERSAL WASTE IN DENTAL OFFICES

DENTAL PRACTICES ROUTINELY USE PRODUCTS THAT CONTAIN MERCURY, SILVER, LEAD AND CHROMIUM. PRODUCTS CONTAINING THESE SUBSTANCES MAY BE CONSIDERED UNIVERSAL WASTES AND REQUIRE SPECIAL DISPOSAL METHODS. THE FOLLOWING TABLE SHOWS THE SOURCES OF THESE SUBSTANCES IN DENTAL OFFICES.

SUBSTANCE	SOURCE
CHROMIUM	X-RAY SYSTEM CLEANERS
LEAD	LEAD SHIELDS, BITEWINGS & FOIL PACKAGING ON X-RAY FILM
MERCURY	AMALGAM
SILVER	X-RAY FILM & FIXER SOLUTION

## BEST MANAGEMENT PRACTICES

BEST MANAGEMENT PRACTICES (BMPs) ARE MINIMUM STANDARDS IMPLEMENTED TO MITIGATE ADVERSE ENVIRONMENTAL EFFECTS ON WATER QUALITY DUE TO DISCHARGE OF POLLUTANTS INTO THE CITY'S SEWER SYSTEM.

BASED ON AMERICAN DENTAL ASSOCIATION GUIDELINES THE CITY OF ARCATA RECOMMENDS USING THE FOLLOWING BMPs FOR DISPOSAL OF POLLUTANTS FROM YOUR DENTAL PRACTICE:

- REDUCE THE AMOUNT OF AMALGAM WASTED BY USING PRECAPSULATED AMALGAM. HAVE SEVERAL SIZES AVAILABLE AND USE THE SIZE

THAT WILL MAKE ENOUGH AMALGAM FOR THE RESTORATION WITH THE LEAST AMOUNT LEFT OVER.

- USE & MAINTAIN A CHAIRSIDE TRAP TO CATCH AMALGAM PIECES
- USE & MAINTAIN A VACUUM PUMP FILTER TO CATCH AMALGAM PIECES
- RECYCLE SCRAP AND CONTACT AMALGAM; INCLUDING PIECES CAUGHT IN CHAIRSIDE TRAPS OR ON FILTERS, AND EXTRACTED TEETH CONTAINING AMALGAM
- RECYCLE X-RAY FIXER SOLUTION
- RECYCLE LEAD SHIELDS, BITEWINGS AND FOIL PACKAGING FROM X-RAYS
- USE A CHROME-FREE CLEANING SOLUTION FOR THE X-RAY SYSTEM
- STORE AMALGAM WASTE IN AN AIR TIGHT CONTAINER FOR RECYCLING.
- KEEP A MERCURY SPILL KIT ON SITE.

## RESOURCES

VISIT THE AMERICAN DENTAL ASSOCIATION WEBSITE FOR MORE INFORMATION ON AMALGAM WASTE, IMPLEMENTING BEST MANAGEMENT PRACTICES, AND RECYCLING AMALGAM AND OTHER DENTAL WASTES AT:

<http://ada.org/prof/resources/topics/>

VISIT THE CALIFORNIA DENTAL ASSOCIATION FOR ARTICLES ON AMALGAM AND DENTAL WASTEWATER AT:

[http://www.cda.org/library/cda\\_member/pubs/journal/jour0704/index.html](http://www.cda.org/library/cda_member/pubs/journal/jour0704/index.html)