## Recycling of Dental Amalgam

### What are you doing with your dental amalgam waste?

The mercury from one amalgam tooth filling in enough to pollute 30,000 litres of water beyond a safe level of drinking.





Did you know Amalgam waste causes severe damage and contamination when it enters our waterways and the environment.



Since amalgam has been long recognised as beneficial in restoring and maintaining the dental health of patients, it has been understandably difficult to convey a message of serious environmental concern for mercury. However, world wide studies by health and environment experts have shown that mercury causes severe damage when it enters the environment. This brochure explains the mercury contamination problem, particularly dental amalgam waste, and offers a high-tech solution to the dental community for the management and disposal of amalgam waste.

### **Mercury Contamination**

Dental amalgam is about 50% mercury by weight - other components include silver, zinc, copper and tin. Mercury is ranked third in the U.S. Government list of hazardous substances. The World Health Orginisation has identified mercury as the number one environmental poison and it is also the Environmental Protection Authority's (E.P.A.) number one toxin of interest. Mercury is on the U.K. 'red list' of dangerous substances which represent the greatest threat to the aquatic environment. Dental amalgam fillings are a major source of mercury entering our waterways. Even a small amount discharged through the sewer system can be detected. For example only 1 gram can contaminate 1,000,000,000 (one billion) litres of wastewater to a concentration above the acceptable level. Studies show the average dentist discharges approximately 1 gram of mercury each working day through wastewater. This is a serious problem that needs to be urgently addressed and resolved. Australia is one of the last countries yet to embrace the use of separation technology to stop mercury from entering our sewerage and waterways.

Due to its high toxicity and tougher regulations governing its disposal, landfill and incineration are no longer acceptable means by which to safely dispose of mercury bearing waste.

### **Case Study**

In two Danish townships, Ringe and Trehoeje, mercury levels up to 7 times the acceptable limit were found. Interestingly both of these townships had no heavy industry. The local authorities suspected dental amalgam as the source of the mercury and demanded fitting of amalgam separators for all dental surgeries. As expected, the mercury content in the sludge reduced to acceptable levels within 12 months, confirming that dental amalgam was in fact the source of the pollutant.





## Amalgam Separator ECOAS04 provides a total solution to all your Amalgam waste problems.

The **ECOAS04** is a reliable, unique ecological technology with no moving parts, no electronics, no motors, no power and no maintenance. It's a system based on retention, enhanced sedimentation and electrochemical reaction with a separation efficiency of 99.5%. We install, change over, process and recycle, then treat the waste and recover the metals before cleaning the unit for reuse. Amalgam waste is processed in Melbourne, Australia - the only state-of-the-art E.P.A approved and licensed facility in Australasia.

## **Benefits**

- Dental staff not required to handle, maintain or clean the unit.
- Does not affect the suction pressure.
- Fits all wet and dry suction systems.
- Decades of successful marketing around the world warrants this well proven, safe and efficient system.
- Up to three dental chairs can be catered for with one ECOAS04 unit.
- All waste handled and processed in Australia in EPA approved licensed facilities.
- Closed loop process with all distilled Mercury being sold to the dental industry for remanufacturing into capsules.

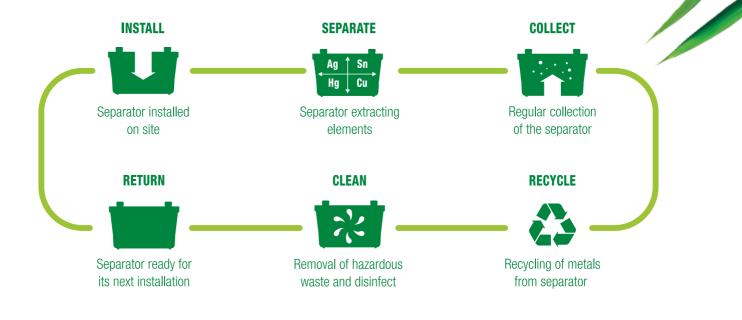
ECOAS04 has superior separation at 99.5%

The ECOAS04





## Integration of ECOAS04 in a central suction system



The best amalgam separator in Australasia

### **Specifications**

Weight (empty):	7kg
Tube In / Out:	25mm
Water Flow:	6 litres per min
Efficiency:	99.5%





# Responsible recycling is only a phone call away.

- Easy payment plan
- No capital outlay
- Lease arrangement, monthly terms

## Services offered to the dental industry

### Installation

Installation of dental separation equipment.



### Recycling

Collection and recycling of amalgam waste.



### Collection

Collection of coarse amalgam, lead tabs, capsules, fixer, developer and x-ray films.

## Responsible recycling is just a phone call away call Ecocycle today 1300 32 62 92

VIC I NSW I QLD I WA I SA I TAS I NT I ACT I NZ

## Keep our environment safe for future generations

Join us by supporting recycling.



## call 1300 32 62 92

## **Find Your Nearest Location**

#### VICTORIA (Head Office)

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### **NEW SOUTH WALES**

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### SOUTH AUSTRALIA

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Ecocycle 1204 Lytton Road Hemmant QLD 4174 P: (07) 3260 1796

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#### **NEW ZEALAND**

Ecocycle Auckland, Wellington, Christchurch, Dunedin P: 0800 732 922

#### WESTERN AUSTRALIA

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