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2005 Target for Amalgam Waste Management

As the 2005 deadline for the Canada-wide Standard on Mercury for Dental Amalgam Waste (CWS) approaches, Environment Canada, the Canadian Dental Association and the province of Saskatchewan urge dentists to voluntarily meet the target. The CWS calls for the installation of ISO 11143 certified amalgam separators and other best management practices to reduce releases of mercury from dentistry in Canada by 95% by 2005, from a baseline of 2000.

Managing amalgam waste is an ongoing concern at dental practices across Canada. Most dentists recognize the need to collect their amalgam waste, but may require further guidance about proper disposal of the collected materials.

To help clarify and highlight current dental amalgam waste protocols, Environment Canada has published a new section on its website (www.ec.gc.ca/mercury). The site includes the specific requirements for dental amalgam waste management in every jurisdiction in Canada and offers links to pertinent provincial and territorial documentation, regulations and bylaws.

Background on the Canada-wide Standard

The Canadian Council of Ministers of the Environment (CCME) endorsed the Canada-wide Standard (CWS) on Mercury for Dental Amalgam Waste in 2001 to address mercury releases from dental facilities in a nationally consistent manner. The Canadian Dental Association and Environment Canada signed a Memorandum of Understanding (MOU) committing to actions for the voluntary implementation of the CWS.

Representatives from EC met with CDA in January 2005, to review both parties' role in encouraging the dental profession to voluntarily adhere to the CWS. As a result of this meeting, a random survey of dental offices is planned for 2005 to determine current compliance levels with the CWS.

"CDA encourages its members to install certified amalgam separators in their dental practices," says Dr. Benoit Soucy, CDA's director of membership and professional services. "Separators are an effective tool to prevent mercury release into the environment. Furthermore, if Canadian dentists voluntarily install separators and follow best management practices, it will help prove that Canadian dentistry understands the issue and can effectively regulate itself."

Requirements and Resources in Saskatchewan

The Saskatchewan government promotes the appropriate management of Dental Amalgam Waste so mercury does not enter the environment. Appropriate management may include landfilling in an approved, confined, engineered landfill with leachate collection systems, recycling to either produce reusable materials such as mercury, silver or copper, or for stabilization/immobilization in a form that may be retired permanently. Saskatchewan intends to achieve a 95 per cent reduction in mercury releases from dental amalgam waste discharges to the environment, by 2005, from the base year of 2000, through "Best Management Practices".

In Saskatchewan, mercury is considered as a toxic substance as per CEPA (1999). This substance is managed under *The Dangerous Goods Transportation Act* (1985, amended 2003), *The Environmental Management and Protection Act* (2002) and *The Hazardous Substances and Waste Dangerous Goods Regulations* (1989).

Implementation

Since the MOU was signed, studies have examined how Canadian dentistry has fared in achieving the goals of the CWS. A national survey reported on the EC website estimated that in 2003, 27% of dentists in Canada used ISO 11143 certified (or equivalent) separators. This resulted in 1,046 kg of mercury entering waste water in 2003. This figure could have been reduced to only 16 kg if all Canadian dental practices had installed separators that meet ISO specifications. Recent indicators show that the 2003 compliance levels will increase as more Canadian dentists voluntarily adhere with the CWS.

When the MOU was signed in 2002, EC likened Canadian dentistry's approach to amalgam waste issues to the preventative approach dentists have taken towards their patients' oral health. CDA agrees with this assessment. "A voluntary; preventative approach is in the best interest of dentistry and the environment,"

What is the Canada-Wide Standard (CWS) on Mercury for Dental Amalgam Waste?

The objective of the CWS is a 95% national reduction in mercury releases from dental amalgam waste discharges to the environment, by 2005, from a base year of 2000.

What is the Memorandum of Understanding (MOU) between the Canadian Dental Association and Environment Canada?

The objective of the MOU is to achieve the voluntary implementation of the CWS.

Should the objectives of the CWS not be met voluntarily, the federal Minister of the Environment may review options under his authority, including the use of Canadian Environmental Protection Act 1999, and take appropriate measures to promote attainment of the CWS.

Dr. Soucy emphasizes. "The information presented on the Environment Canada Web site makes following the CWS a relatively painless process." Dr. Soucy adds that as long as dentists continue to adhere to the CWS, they can avoid the administrative burden that would accompany regulation and/or dentistry losing its exemption from the reporting requirement of the Canadian Environment Protection Act.

CDA recognizes dental amalgam as a safe restorative material, but acknowledges that dental amalgam waste needs to be recovered to prevent the release of mercury into the environment. Mercury can convert in lakes and waterways to methyl mercury; a toxic form which accumulates in fish, and in turn in wildlife and humans.

Environment Canada's dental amalgam waste Web site can be found at: www.ec.gc.ca/MERCURY/DA/EN/da-i.cfm?SELECT=DA . Here, full-text versions of the Memorandum of Understanding, Canada-wide Standards on dental amalgam waste and the Best Management Practices can be viewed.