

**CAMPAIGN FOR A SAFE AND HEALTHY CONNECTICUT • CLEAN WATER ACTION • CLEAN WISCONSIN • CONNECTICUT RIVER VALLEY COUNCIL CONSUMERS FOR DENTAL CHOICE • EARTHJUSTICE • HEALTH CARE WITHOUT HARM • HUDSON RIVER SLOOP CLEARWATER • IPEN • MERCURY POLICY PROJECT • MITCHELL ENVIRONMENTAL HEALTH ASSOCIATES NATURAL RESOURCES COUNCIL OF MAINE • NATURAL RESOURCES DEFENSE COUNCIL • NEW YORK PUBLIC INTEREST RESEARCH GROUP • PA COALITION FOR MERCURY-FREE DENTISTRY SAFEMINDS • SIERRA CLUB • TEDX, THE ENDOCRINE DISRUPTION EXCHANGE • THE ADIRONDACK COUNCIL UPSTREAM • WOMEN'S VOICES FOR THE EARTH ZERO MERCURY WORKING GROUP**

March 6, 2014

**Via First Class Mail and Electronic Mail**

Administrator Gina McCarthy  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

Dear Administrator McCarthy:

We urge you to propose a rule to establish effluent guidelines for dental discharges of mercury soon and finalize it by a date certain.

On September 27, 2010, the Environmental Protection Agency announced its intention to propose and finalize an effluent guideline rule to control dental mercury discharges by 2012. However, to date, EPA has not proposed any rule.

Elemental mercury enters the environment through wastewater system discharges to rivers and lakes of dental amalgam waste flushed into dentists' chair-side drains. Once released, certain microorganisms can change this elemental mercury into methylmercury, a highly toxic form that can damage brain development and nervous systems. Fish and shellfish are the main sources of methylmercury exposure to humans.

Dentists are the largest source of mercury in U.S. wastewater effluent. A study conducted by the Association of Metropolitan Sewerage Agencies in 2002 found that dental uses were "by far" the greatest contributors of mercury load to municipal wastewater, on average contributing 40%,

over 3 times the next contributor.<sup>1</sup> A second study funded by the American Dental Association estimated that dental offices discharge approximately 6.5 tons of mercury per year to sewage treatment systems in the United States, which represents 50-53 percent of influent loading.<sup>2</sup>

At least eleven states, including Massachusetts, Connecticut, Maine, New Hampshire, Washington, Vermont, New York, Rhode Island, New Jersey, Oregon, and Michigan, mandate pollution control requirements to reduce mercury discharges from dental clinics through the use of amalgam separators and best management practices (BMPs). Data collected indicate that in these locations, up to 50 percent less mercury enters the municipal wastewater treatment plants. In fact, the combination of using amalgam separators and following BMPs can eliminate 95-99 percent of dental mercury releases to wastewater. The ADA recommends that dentists implement such practices.

Setting a pretreatment requirement for dental offices can be a cost effective method of keeping mercury out of our environment. Amalgam separators are widely available, relatively straightforward to install, operate without electricity or chemical addition, have low installation and maintenance costs, and facilitate easy recycling of amalgam content.

EPA should follow the lead of the above-mentioned states and establish national effluent guidelines for dental discharges of mercury that require installation of amalgam separators and implementation of BMPs. This will ensure that all covered dental facilities implement a minimum level of low cost and effective treatment to reduce environmental release of mercury with a level playing field. In addition, as the states with existing programs have found, the amalgam separator rule can be designed to avoid any unnecessary regulatory burdens on states and publicly owned wastewater treatment plants, thereby minimizing costs.

Notably, the United States Government recently took the necessary legal steps to become a party to the Minamata Convention on Mercury. Part II of Annex A to the Convention (par. ix) covers precisely the mercury release reduction activities contemplated in the EPA rulemaking. EPA should demonstrate global leadership in this area, rather than send the wrong signal to the global community that such measures are unwarranted

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<sup>1</sup> Association of Metropolitan Sewerage Agencies (now the National Association of Clean Water Agencies), Mercury Source Control & Pollution Prevention Program Evaluation: Final Report. March 2002 (Amended July 2002.)

<sup>2</sup> Vandeven, J. and McGinnis S.L. An Assessment of Mercury in the Form of Amalgam in Dental Wastewater in the United States, *Water, Air and Soil Pollution*, 2005, 164,349-366.

Thank you for your consideration of our concerns about the dental amalgam effluent guideline. We look forward to hearing from you soon.

Sincerely,

Campaign for a Safe and Healthy Connecticut

Clean Water Action

Clean Wisconsin

Consumers For Dental Choice

Connecticut River Watershed Council

Earthjustice

Health Care Without Harm

Hudson River Sloop Clearwater

IPEN

Mitchell Environmental Health Associates

Mercury Policy Project

Natural Resources Council of Maine

Natural Resources Defense Council

New York Public Interest Research Group (NYPIRG)

Safeminds

Sierra Club

TEDX, The Endocrine Disruption Exchange

The Adirondack Council

PA Coalition for Mercury-Free Dentistry

Upstream

Women's Voices for the Earth

Zero Mercury Working Group