Whereas, dentists are the third largest users of mercury in the country. Dental vacuum systems are equipped with screens and filters that are primarily designed to protect the pumps and vacuum equipment. Studies have shown that approximately 20% of the residual mercury amalgam particulates remain in the wastewater discharged to the sanitary sewer.

Whereas, mercury can build up in the solids and biomass in low-lying plumbing areas. The solids and biomass can slough off at any time discharging a "slug" of mercury to the sanitary sewer.

Whereas, East Bay Municipal Utility District (EBMUD) attributed about 33% of its incoming mercury mass loading to dental facilities.

Whereas, EBMUD has expressed interest in applying for funding from the State Water Pollution Cleanup and Abatement Account (CAA) to conduct a dental mercury cleanup and abatement project as described in its September 5, 2002 proposal.

Whereas, EBMUD proposes to remove residual mercury amalgam from the plumbing lines, install amalgam separator at selected dental facilities, and monitoring for its cost-effectiveness. EBMUD is seeking up to $100,000 in CAA funds to remove residual mercury from the plumbing lines and will match with in-kind service up to $123,445 to install amalgam separator and conduct necessary monitoring.

Whereas, Section 13442 of the California Water Code states that upon application by a public agency with authority to clean up waste or abate the effects thereof, the State Board may order moneys to be paid from the CAA to the agency to assist it in cleaning up the waste or abating its effect on waters of the State;

Whereas, California Regional Water Quality Control Board, San Francisco Bay Region (Regional Board) staff is developing a Total Maximum Daily Loading (TMDL) project, which will lead towards an overall reduction of mercury mass loading in the watershed. The draft mercury TMDL report, issued in June 2000, stated that POTWs are a measurable percent of the total load. Past studies have found that dental facilities are the most significant mercury source to POTWs.
Whereas, funding from the CAA would enable EBMUD to determine the most cost effective approach to clean up and abate mercury-contaminated wastewater from dental practices throughout EBMUD’s service area. The project will have direct benefits for the EBMUD dental mercury program and other POTW dental programs throughout the region and potentially throughout the nation, and result in a measurable reduction of mercury discharged to the State’s receiving waters.

Whereas, the Regional Board is responsible for providing protection of present and future beneficial uses of San Francisco Bay and developing prevention and control strategies for toxic pollutants that will prevent creation of new toxic hot spots or the perpetuation of existing ones within the bays and estuaries of the State. Section 303(d) of the Federal Clean Water Act lists Central San Francisco Bay as an impaired water body because of the presence of twelve toxic pollutants. Mercury, one of the twelve, is listed because of its fish tissue level exceedence.

THEREFORE BE IT RESOLVED, that the Regional Board, hereby supports EBMUD’s forthcoming Resolution requesting up to $100,000 from the CAA for a dental mercury cleanup and abatement project.

I, Loretta K. Barsamian, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on October 16, 2002.

Loretta K. Barsamian
Executive Officer