CHAPTER 7

AN ORDINANCE MINIMIZING DISCHARGE OF MERCURY TO THE SANITARY SEWER

ARTICLE I. INTRODUCTION

Section 101. This ordinance shall also be known as the "Mercury Reduction Ordinance of the Las Gallinas Valley Sanitary District" and may be so cited and pleaded.

Section 102. This ordinance is adopted pursuant to provisions of Section 6400 *et. seq*. of the Health and Safety Code of the State of California.

ARTICLE II. PURPOSE AND POLICY

Section 201. Mercury is a toxic metal that bioaccumulates in several species of fish in San Francisco Bay, making them unsafe for human consumption. During 2007 the San Francisco Bay Regional Water Quality Control Board adopted the San Francisco Bay Mercury Watershed Permit to control discharge of mercury into the Bay. The Permit requires Las Gallinas Valley Sanitary District (District or LGVSD) and other publicly owned treatment works to implement mercury control strategies. Dental amalgam is the largest controllable source of mercury to the LGVSD service area. Dental amalgam is approximately 50% mercury, mixed with silver and other metals. When installing, repairing or removing amalgam fillings, dentists discharge amalgam wastes to the sanitary sewer. This Ordinance is intended to significantly reduce the quantity of mercury entering LGVSD's Water Pollution Control System.

Section 202. Chapters 1 and 2 of Title 2 of this Ordinance Code regulate the discharge of wastes into the Agency's Water Pollution Control System. Under the Health and Safety Code and LGVSD Ordinances, pre-treatment equipment can be required to prevent unlawful discharge. Moreover, inspection and record review can be mandated.

ARTICLE III. DEFINITIONS

Section 301. *Amalgam separator* - is a device that employs filtration, settlement, centrifugation, or ion exchange to remove amalgam and its metal constituents from a

dental office vacuum system before it discharges to the sanitary sewer.

Section 302. *Amalgam waste* - means and includes non-contact amalgam (amalgam scrap that has not been in contact with the patient); contact amalgam (including, but not limited to, extracted teeth containing amalgam); amalgam sludge captured by chairside traps, vacuum pump filters, screens, and other amalgam trapping devices; used amalgam capsules; and leaking or unusable amalgam capsules.

Section 303. *ISO 11143* - is the International Organization for Standardization's standard for amalgam separators.

ARTICLE IV. WASTE MANAGEMENT PRACTICES

Section 401. All owners and operators of dental facilities that remove, repair or place amalgam fillings shall comply with the following waste management practices:

(a) No person shall rinse chairside traps, vacuum screens, or amalgam separator equipment in a sink or other connection to the sanitary sewer.

(b) Owners and operators of dental facilities shall ensure that all staff members who handle amalgam waste are trained in the proper handling, management and disposal of mercury-containing material and shall document how training is being provided to staff. Training records shall be available for inspection by an authorized representative of LGVSD during normal business hours.

(c) Amalgam waste shall be stored and managed in accordance with the instructions of the recycler or hauler of such materials.

(d) Bleach and other chlorine-containing disinfectants shall not be used to disinfect the vacuum line system.

(e) The use of bulk mercury is prohibited. Only precapsulated dental amalgam is permitted.

ARTICLE V. AMALGAM SEPARATORS

Section 501. All owners and operators of dental vacuum suction systems, except as set forth in Article VI of this Ordinance, shall comply with the following:

(a) An amalgam separator device certified in accordance with ISO 11143, or

the most recent standard promulgated by ISO for amalgam separators, shall be installed for each dental vacuum suction system on or before December 31, 2010; provided, however, that all dental facilities that are newly constructed on and after the effective date of this ordinance shall include an installed ISO 11143 certified amalgam separator device. The installed device must be ISO 11143 certified as capable of removing a minimum of 95 percent of amalgam. The amalgam separator system shall be certified at flow rates comparable to the flow rate of the actual vacuum suction system operation. Neither the separator device nor the related plumbing shall include an automatic flow bypass. For facilities that require an amalgam separator that exceeds the practical capacity of ISO 11143 test methodology, a non-certified separator will be accepted, provided that smaller units from the same manufacturer and of the same technology are ISO-certified.

(b) All amalgam separators installed pursuant to 5(a) above shall be on the "Bay Area Pollution Prevention Group (BAPPG) List of Accepted Amalgam Separators," May 2009 or any more recent revision. For amalgam separators installed prior to the date of this ordinance, approval may occur by LGVSD on a case by case basis and separators must meet the standards of 5(a) above.

(c) Certification of installation shall be submitted to LGVSD within 30 days of installation of the separator. A form will be provided by LGVSD and must be completed for demonstration of certification.

(d) Amalgam separators shall be maintained in accordance with manufacturer
recommendations. Records documenting separator maintenance and disposal or recycling of amalgam waste shall be available for inspection upon request by an authorized representative of LGVSD during normal business hours.

ARTICLE VI. EXEMPTIONS

Section 601. The following types of dental practice are exempt from Article V above, provided that removal, repair or placement of amalgam fillings occurs at the facility no more than 3 days per year: (1) Orthodontics; (2) Periodontics; (3) Oral and maxillofacial surgery; (4) Radiology; (5) Oral pathology or oral medicine; (6) Endodontistry and Prosthodontistry.