

## **Sewer Use Ordinance Mandating Amalgam Separators and Best Management Practices**

*[The text presented below is excerpted from the city of Palo Alto ordinance. Ordinance language for the cities of Mountain View and Los Altos is identical.]*

16.09.112 Requirements for dental facilities that remove or place amalgam fillings.

(a) Definitions. For the purposes of this section the following words and phrases shall be as defined herein.

- (1) "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 sewer.
- (2) "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.
- (3) "ISO 11143" is the International Organization for Standardization's standard for amalgam separators.

(b) All owners and operators of dental facilities that remove or place amalgam fillings shall comply with the following waste management practices:

- (1) No person shall rinse chairside traps, vacuum screens, or amalgam separators equipment in a sink or other connection to the sanitary sewer.
- (2) 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 fixer-containing solutions, and shall maintain training records that shall be available for inspection by the superintendent or designee during normal business hours.
- (3) Amalgam waste shall be stored and managed in accordance with the instructions of the recycler or hauler of such materials.
- (4) Bleach and other chlorine-containing disinfectants shall not be used to disinfect the vacuum line system.
- (5) The use of bulk mercury is prohibited. Only precapsulated dental amalgam is permitted.

(c) All owners and operators of dental vacuum suction systems, except as set forth in subsections (d) and (e) of this section, shall comply with the following:

- (1) An ISO 11143 certified amalgam separator device shall be installed for each dental vacuum suction system on or before March 31, 2005; 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. Alternative materials and methods may be proposed to the superintendent for approval, pursuant to 16.09.165.

(2) Proof of certification and installation records shall be submitted to the superintendent within 30 days of installation.

(3) Amalgam separators shall be maintained in accordance with manufacturer recommendations. Installation, certification, and maintenance records shall be available for immediate inspection upon request therefor by the superintendent or designee during normal business hours.

(d) Facilities with vacuum suction systems that meet all of the following conditions may apply to the superintendent for an exemption to the requirements of subsection (c) of this section:

(1) The systems was installed before October 1, 2003.

(2) The system is a dry vacuum pump system with an air-water separator.

(3) The sedimentation tank is non-bottom draining, with the drain above the anticipated maximum level of accumulated sludge.

(4) Evidence of regular pump outs (a minimum of once a year, or more often if either directed by the manufacturer or necessary to keep solids from exiting through the drain) is maintained and open to inspection by the superintendent during normal business hours.

(5) The system has no direct discharge pipe to the sewer on the bottom of the sedimentation tank.

An owner or operator whose facility meets conditions (1) through (5) may apply for this exemption by written letter to the superintendent. The superintendent or designee will review the system and, if the exemption is approved, shall provide a written letter of exemption.

An exemption obtained pursuant to this subsection (d) shall expire upon installation of a new vacuum system. Upon expiration of the exemption, the facility shall comply with subsection (c) of this section before commencing further operation.

(e) The following types of dental practice are exempt from this section 16.09.112, provided that removal 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.