

### **Plumbing requirements for installing dental amalgam separators**

The division has received many questions from local building departments regarding the permit, license, and enforcement issues relating to a state law (Senate Bill 704, 2007) that took effect January 1, 2008. The law requires dentists who work with materials containing mercury to install a separator to remove these wastes from the building drainage system.

Although the law has some specific plumbing requirements with regard to the installation of the amalgam separator, it is not part of the building code, and enforcement of these new requirements is regulated by the Oregon Board of Dentistry. In some cases, installation of a mercury separator may not constitute “plumbing,” such as when the separator is a part of a new dental chair system. However, because the separator may also be installed as part of the medical gas or drainage system, plumbing permits and licensing may be required.

Before connection to the building drainage system, amalgam separators may be installed in the drainage connection of cuspidors and dental vacuum piping. Dental vacuum systems are Level 3 under the provisions of the NFPA 99C standard for medical gas and vacuum systems. The NFPA standard addresses the separators as optional in illustrations A.5.5.6.3(a) & (b), and in Annex A. The separators may be installed *before* vacuum receiver tanks or *after* the tank at the drain connection. The manufacturer’s installation instructions should also be followed.

Pipes, fixtures, and other apparatus for medical gas, anesthetic waste gas, and vacuum systems are defined as “plumbing” under ORS 447.010(6)(f) and dental vacuum is specifically defined in OAR 918-690-0420(11). Installations of these devices are to be made in compliance with the 2008 Oregon Plumbing Specialty Code, Chapter 13 and the NFPA 99C-2002 Edition.

All new dental facilities constructed after January 1, 2008 are required to install amalgam separators. The plumbing permit for dental gases and vacuum piping will cover this installation. Installation of amalgam separators for existing dental facilities are considered an alteration and will require a plumbing permit and inspection for the alteration of the existing plumbing system. If the separator is installed in the medical gas piping, the installer will need to have both a journeyman plumber license and a medical gas installer certification. On the other hand, if the separator is installed only in the building drainage system, a journeyman plumber license is required. If you have questions regarding dental amalgam separators and the applicable plumbing requirements, please contact Terry Swisher, Chief Plumbing Inspector, at 503-373-7488 or [terry.l.swisher@state.or.us](mailto:terry.l.swisher@state.or.us).