Amalgam Separator Policy for Dental Practices Fact Sheet

Environmental requirements related to dental clinics and offices discharging waste to public sewers are governed by local, state, and federal regulation. Currently, 12 states and 18 localities have mandatory programs to reduce dental mercury discharge. In Minnesota, regulations governing amalgam waste varies based on where a providers’ practice is located, and which unit of government has control over water treatment in that area. Regulations in Minnesota range from a state-wide voluntary mercury amalgam separator program to an enforced mandatory amalgam separator usage in the metropolitan counties. Additionally, federal Environmental Protection Agency (EPA) regulations will change how Minnesota providers manage dental waste altogether.

State-wide Voluntary Mercury Amalgam Separator Program

In 2007, the MDA and the Minnesota Pollution Control Agency (MPCA) signed an agreement to encourage dental practices statewide to install mercury amalgam separators in certain practices and use ADA best practices in an effort to reduce the release of mercury into Minnesota’s wastewater. The MDA established a goal of 100% practice compliance by December 31, 2008 for providers to install and maintain amalgam separators (from a list of approved separator models) and follow American Dental Association Best Management Practices for Amalgam Waste in clinical practices. The Minnesota Pollution Control Agency manages the statewide voluntary mercury amalgam separator program and with the MDA Environment and Safety Committee, developed its own process for separator approval to create a list of approved separators for installation in Minnesota. More information and access to the MPCA’s list of approved separators can be accessed on the MPCA’s website.

Metropolitan Council Environmental Services Rules

While the Minnesota Pollution Control Agency manages the statewide voluntary amalgam separator program, the Metropolitan Council has authority over the local public sewers and wastewater treatment plants in the seven-county metropolitan area (Anoka, Carver, Dakota, Hennepin, Ramsey, Washington counties) and has instituted its own amalgam separator regulations. In 2013, the Metropolitan Council Environmental Services (MCES) added dental waste discharge rules (Rule 307.01 and 307.02) to require dental clinics in the seven-county metropolitan area that place, repair, or remove amalgam to operate and maintain an amalgam separator from the MPCA approved list. If a dental practice currently has a separator not listed on the MPCA list of approved separators, the practice must meet the Metropolitan Disposal System Limitations on Discharges standard for mercury, which is 0.002 milligrams per liter. While the MCES has the ability to assess fines for noncompliance, no fines have been assessed on any dental practice and affected dental practices not in compliance will be given reasonable time (no less than 90 days) to install a separator.

It is important to note that specialty practices that do not place or remove amalgam, and that primarily conduct procedures related to orthodontia, periodontia, endodontia, and oral and maxillofacial surgery, radiology or pathology, may be exempt from MCES Waste Discharge Rules Sec. 307.02.

Environmental Protection Agency Rules
Environmental Protection Agency Regulations

On June 14, 2017, the Environmental Protection Agency (EPA) promulgated a final rule (40 CFR Part 441) under the Clean Water Act to reduce discharges of mercury into publicly owned treatment works (POTWs). The approved rule will require affected dental clinics including large institutions such as dental schools and clinics; permanent or temporary offices; home offices; and clinics operated by federal, state or local governments to use amalgam separators and two ADA best management practices. All existing dental practices subject to this rule must comply with the standards by July 14, 2020. After July 14, 2020, all new affected dental practices must immediately comply. To comply, affected dental practices must install an amalgam separator that meets the International Organization for Standardization (ISO) Standard for Dental Amalgam Separators, ISO 11143. The ISO standards create a benchmark for amalgam separator efficiency and certain design requirements. Much like the MCES rule, the EPA’s rule does not apply to specialty dental practices where the practice of dentistry consists exclusively of one or more dental specialties: oral pathology, oral and maxillofacial radiology, oral and maxillofacial surgery, orthodontics, periodontics, or prosthodontics. The final rule also does not apply to wastewater discharge from mobile units.

Conclusion

In conclusion, regulations governing dental amalgam waste in Minnesota that mandate the use of an amalgam separator currently only apply to the seven-county metropolitan area under the MCES rules. Outside the seven-county metropolitan area, practices are encouraged to participate in the MPCA voluntary amalgam separator program, but they are not required to do so. However, federal rules promulgated by the EPA that go into effect on July 14, 2020, will require all dental practices in Minnesota that place or remove amalgam to install and maintain an approved amalgam separator and use two ADA best management practices for amalgam waste.