

Report From Agency

REPORT TO LEGISLATURE

NR 229, Wis. Adm. Code

Board Order No. WY-14-19
Clearinghouse Rule No. 21-063

Basis and Purpose of the Proposed Rule

The proposed rule requires dental offices to control the discharge of mercury and other metals in dental amalgam to publicly owned treatment works (POTWs) based on the best available technology or best available demonstrated control technology. Specifically, the requirements are based on the use of amalgam separators and best management practices recommended by the American Dental Association (ADA). The best management practices (BMPs) are:

- prohibiting the discharge of waste (or “scrap”) amalgam; and
- prohibiting of the use of line cleaners that are oxidizing or acidic and that have a pH higher than 8 or lower than 6.

Amalgam separators are a practical, affordable, and readily available technology for capturing mercury and other metals before they are discharged into sewers that drain to POTWs. The mercury collected by these separators can be recycled. This rule also includes a provision to significantly reduce and streamline the oversight and reporting requirements in pretreatment regulations that would otherwise apply as a result of this rulemaking. The rule requires dental offices to meet a performance standard that includes BMPs and the use of an amalgam separator(s) compliant with the American National Standards Institute (ANSI)/ADA Specification 108 for Amalgam Separators (2009) with Technical Addendum (2011), (ANSI/ADA, 2009; ANSI/ADA, 2011). ISO, a voluntary standard setting organization, established a standard for measuring amalgam separator efficiency by evaluating the retention of amalgam solids using specified test procedures in a laboratory setting [2008 International Organization for Standardization (ISO) 11143 standard (ISO, 2008)] which is identical to the ANSI/ADA standard with the Technical Addendum. In order to meet the ISO standard, a separator must achieve 95% removal or greater of total solids. The standard also includes requirements for instructions on the use, operation, and maintenance of amalgam separators (see proposed s. NR 229.03 (a) (1) 4., Wis. Adm. Code).

The rule also includes a provision such that the performance standard can be met with the use of an amalgam removing technology other than an amalgam separator (equivalent device). This provision was included to incorporate future technologies that achieve comparable removals of pollutants from dental discharges as amalgam separators, but that may not fall under the amalgam separator classification.

Because the rule does not include a numerical limit, the performance standards also specify certain operation and maintenance requirements for the amalgam separator(s) or comparable device to ensure they are operated optimally. In addition to installing one or more amalgam separators compliant with the American National Standards Institute (ANSI)/ADA Specification 108 for Amalgam Separators (2009) with Technical Addendum (2011) standard (or its equivalent) and implementing the required BMPs, the pretreatment standards specify certain operating and maintenance requirements for the amalgam separator. These requirements include:

- documented amalgam separator inspection as specified by the manufacturer's user manual to ensure the separator is performing properly and to confirm that all amalgam process wastewater is flowing through the amalgam retaining portion of the separator;
- replacement of the amalgam retaining unit of the device in accordance with the manufacturer's schedule or when the amalgam retaining unit has reached the maximum level, whichever comes first; repair/replacement as needed; and
- recycling/disposal of amalgam waste.

Reporting requirements include a One-time Compliance Report.

The rule allows dental offices to continue to operate amalgam separators installed prior to publication of this rule for the equipment lifetime or ten years (whichever comes first), as long as the dental discharger complies with the other rule requirements including the specified BMPs, operation and maintenance, reporting, and recordkeeping requirements.

Once the separator needs to be replaced or the ten-year period has ended, whichever comes first, dental offices will need to replace the amalgam separator with one that meets the requirements of the final rule.

Dental offices that do not place amalgam, and do not remove dental amalgam except in limited emergency or unplanned, unanticipated circumstances are exempt from any further requirements as long as they certify such in their One-time Compliance Report.

In addition, the rule minimizes the administrative burden on dental offices subject to the rule, as well as the department and local regulatory authorities (Control Authorities) responsible for oversight and enforcement of the new standard.

Application of typical categorical discharger oversight and reporting requirements to all of the dental offices in the state would require a large amount of additional staff time. Because of this, the rule minimizes the administrative burden on dental offices subject to the rule, as well as the department and local regulatory authorities (Control Authorities) responsible for oversight and enforcement of the new standard.

Further, dental office discharges differ from other industries for which categorical pretreatment standards have been established. Both the volume of wastewater discharged and the quantity of pollutants in the discharge on a per facility basis are significantly less than other industries for which categorical pretreatment standards have been established.

Accordingly, this rule exempts dental offices from the oversight and reporting requirements of categorical pretreatment standards, reflecting the department's recognition that the otherwise-applicable regulatory framework for categorical dischargers would be unlikely to have a significant positive impact on overall compliance with the rule across the dental industry, while imposing a substantial burden on state and local regulating authorities.

In order to simplify implementation and compliance for the dental offices and the regulating authorities, the rule establishes that dental dischargers are not Significant Industrial Users (SIUs) or Categorical Industrial Users (CIUs) as defined in ch. NR 211, Wis. Adm. Code, and are not "industrial users subject to categorical pretreatment standards" as those terms and variations are used in the administrative code, unless designated as such by the Control Authority.

While this rule establishes pretreatment standards that require dental offices to reduce dental amalgam discharges, the rule does not require Control Authorities to implement the traditional suite of oversight requirements in ch. NR 211, Wis. Adm. Code. This significantly reduces the reporting requirements for dental dischargers that would otherwise apply by instead requiring them to demonstrate compliance with the

performance standard and BMPs through a One-Time Compliance Report to their Control Authority. This regulatory approach also eliminates the additional oversight requirements for Control Authorities that are typically associated with SIUs, such as permitting and annual inspections of individual dental offices.

It also eliminates additional reporting requirements for the Control Authorities typically associated with CIUs, such as identification of CIUs in their annual pretreatment reports. At the same time, the rule recognizes the Control Authority's discretionary authority to treat a dental discharger as an SIU and/or CIU if, in the Control Authority's judgement, it is necessary.

Summary of Public Comments

See attached Comments and DNR Responses Natural Resources Board Order WY-14-19.

Modifications Made

No modifications to the rule were made in response to comments or input at the public hearing.

Appearances at the Public Hearing

No individuals from outside the department attended the public hearing.

Changes to Rule Analysis and Fiscal Estimate

There were no changes made to the Rule Analysis and Fiscal Estimate as a result of public comments.

Response to Legislative Council Rules Clearinghouse Report

The Legislative Council Rules Clearinghouse submitted comments on form, style and placement in administrative code; and clarity, grammar, punctuation and use of plain language.

Changes to the proposed rule were made to address all recommendations by the Legislative Council Rules Clearinghouse.

Final Regulatory Flexibility Analysis

The department anticipates that the majority of entities (if not all) impacted by this rule are small businesses. As a result, the impact of this rule to small businesses will be the same as the broader impact of the rule to the business sector provided in section #14 of the Fiscal Estimate and Economic Impact Analysis, form DOA-2049.

The economic impact on dental entities, local government units, and small businesses per year is estimated at \$1.2 M. The analysis considered that 60% of the dental facilities in Wisconsin (estimated 2,061 total) did not have the technology and equipment required, and as a result would have to install the required equipment to meet the federal regulations and proposed rule, which brought the cost to an estimated at \$909,847.97 per year. An estimated 40% of the 2,061 dental entities with already installed technology would spend an estimated \$314,338.99 per year, which brings the annual total to \$1,224,186.96.

Response to Small Business Regulatory Review Board Report

The Small Business Regulatory Review Board did not prepare a report on this rule proposal.