



One-Time Compliance Report for Dental Dischargers: Instructions & Definitions

Introduction

The purpose of this one-time compliance report is to implement Title 40 of the Code of Federal Regulations Part 441, which aims to set uniform national standards to reduce the discharge of mercury-containing dental amalgam to publicly owned treatment works (POTWs). The rule requires:

1. Installation, operation, and maintenance of an ISO 11143 or ANSI / ADA 108-2009 compliant amalgam separator or equivalent device.
2. Implementation of Best Management Practices (BMPs) for amalgam waste.
3. Submittal of the One-Time Compliance Report.
4. Retention of documentation of BMP implementation for three years and the one-time compliance report as long as the dental office is in operation.
5. Resubmittal of the One-Time Compliance Report if there is a change of ownership within 90 days of the transfer of ownership.

Applicability of New Rule

- This rule does not apply to dental dischargers that exclusively practice one or more of the following dental specialties: oral pathology, oral and maxillofacial radiology, oral and maxillofacial surgery, orthodontics, periodontics, or prosthodontics.
- This rule does not apply to wastewater discharges from a mobile unit operated by a dental discharger.
- This rule does not apply to dental dischargers that do not discharge any amalgam process wastewater to a POTW (Public Owned Treatment Works), such as dental dischargers that collect all dental amalgam process wastewater for transfer to a Centralized Waste Treatment facility as defined in 40 CFR Part 437.
- Dental dischargers that do not place dental amalgam, and do not remove amalgam except in limited emergency or unplanned, unanticipated circumstances, and that certify such to the Control Authority as required in § 441.50 are exempt from any further requirements of this rule.

Dental offices are required to identify any applicable exemptions on the One-Time Compliance Report Form.

General Definitions

1. Amalgam Process Wastewater:

Any wastewater generated and discharged by a dental discharger through the practice of dentistry that may contain dental amalgam.

2. Amalgam Separator:

A collection device designed to capture and remove dental amalgam from the amalgam process wastewater of a dental facility.

3. Authorized Representative (defined at 40 CFR 403.12):

- (a) A responsible corporate officer if the dental office is a corporation.
- (b) A general partner or proprietor if the dental office is a partnership or sole proprietorship or;

(c) A duly authorized representative of the responsible corporate officer, or general partner or proprietor if:

- (i) The authorization is made in writing by the individual described in paragraph (a) or (b);
- (ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well, or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and
- (iii) The written authorization is submitted to the City of Houston.

4. Average Removal Efficiency of Equivalent Device that is not an amalgam separator per 40 CFR 441.30(a)(2)(i)-(iii):

The amalgam removal device must meet the following requirements:

- (a) Removal efficiency of at least 95 percent of the mass of solids from all amalgam process wastewater. The removal efficiency must be calculated in grams recorded to three decimal places, on a dry weight basis. The removal efficiency must be demonstrated at the maximum water flow rate through the device as established by the device manufacturer's instructions for use.
- (b) The removal efficiency must be determined using the average performance of three samples. The removal efficiency must be demonstrated using a test sample of dental amalgam that meets the following particle size distribution specifications: 60 percent by mass of particles that pass through a 3150 µm sieve but which do not pass through a 500 µm sieve, 10 percent by mass of particles that pass through a 500 µm sieve but which do not pass through a 100 µm sieve, and 30 percent by mass of particles that pass through a 100 µm sieve. Each of these three specified particle size distributions must contain a representative distribution of particle sizes.
- (c) The device(s) must be sized to accommodate the maximum discharge rate of amalgam process wastewater.

5. Control Authority:

The City of Houston.

6. Dental Amalgam:

An alloy of elemental mercury and other metal(s) that is used in the practice of dentistry.

7. Dental Discharger:

A facility where the practice of dentistry is performed, including, but not limited to, institutions, permanent or temporary offices, clinics, home offices, and facilities owned and operated by Federal, state or local governments, that discharges wastewater to a POTW.

8. Equivalent Device:

Amalgam removing technology other than an amalgam separator.

9. Existing Sources:

A dental discharger that is not a new source. All dental facilities that commenced discharge to a POTW before July 14, 2017, are existing sources. These dental dischargers must achieve compliance with the rule by July 14, 2020, and submit the One-Time Compliance Report by October 12, 2020.

10. ISO 11143 or ANSI / ADA 108-2009 Compliant Amalgam Separator:

International Organization for Standardization (ISO) 11143 Standard (2008) or the American National Standards Institute (ANSI) American National Standard/ American Dental Association (ADA) Specification 108 for Amalgam Separators (2009) with Technical Addendum (2011) or the or subsequent versions so long as that version requires amalgam separators to achieve at least a 95% removal efficiency.

11. New Sources:

A dental discharger whose first discharge to a POTW occurred on or after July 14, 2017. These dental facilities must comply immediately and submit the One-Time Compliance Report within 90 days of commencement of discharge.