

Subpart 374-4: Standards For The Management Of Elemental Mercury and Dental Amalgam Wastes Dental Facilities

(Statutory authority: Environmental Conservation Law Section 27-0926)

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374-4.1 General Requirements

(a) Purpose

This Subpart establishes requirements for dental facilities concerning the use and possession of elemental mercury and for the proper management of dental amalgam waste and elemental mercury waste through recycling.

(b) Applicability

This Subpart shall apply to any dental facility where dental amalgam is applied, altered, maintained, removed or disposed; where dental amalgam waste is generated; or where elemental mercury has been used or is possessed by dentists licensed or otherwise authorized to practice dentistry under Article 133 of the New York State Education Law.

(c) Definitions

(1) "Amalgam separator" means a type of dental equipment designed to remove dental amalgam particles from the wastewater of a dental facility and meeting the standards specified in subdivision 374-4.2(a) of this Subpart.

(2) "Dental amalgam" means an alloy which contains mercury and other metals used in the practice of dentistry.

(3) "Dental facility" means any institution, clinic, office or other location where the practice of dentistry is performed.

(4) "Dental amalgam waste" means waste from a dental facility containing:

(i) Dental amalgam that has been in contact with the patient including, but not limited to: extracted teeth with dental amalgam restorations, carving scrap collected at chair-side, dental amalgam captured by chair-side traps, vacuum pump filters, amalgam separators or other dental amalgam capture devices;

(ii) Dental amalgam that has not been in contact with the patient including, but not limited to: excess dental amalgam mix and the used pre-encapsulated dental amalgam capsules remaining at the end of a dental procedure; and

(iii) Dental amalgam that may have accumulated in the plumbing system of a dental facility.

(5) "Elemental mercury" means a heavy, silvery-white metal that is liquid at room temperature and is represented by the chemical symbol "Hg" with an atomic number of 80 and an atomic mass of 200.59.

(6) "Large dental facility" means an institution which houses fifty (50) or more dental chairs.

(7) "Practice of dentistry" means the practice of dentistry as defined in Section 6601 of the New York State Education Law.

374-4.2 Requirements for the Management of Elemental Mercury and Dental Amalgam Waste at Dental Facilities

(a) Amalgam Separators

(1) All dental facility waters likely to come into contact with dental amalgam waste must be treated prior to discharge by an amalgam separator which is certified to ISO 11143 Standards (Dental equipment - Amalgam separators) as incorporated by reference in subdivision 370.1(e) of this Title. The amalgam separator must achieve a minimum of 99 percent removal efficiency of dental amalgam, by weight, in accordance with ISO 11143 test procedures.

(2) Amalgam separators in service at dental facilities prior to the effective date of this Subpart, must be certified, but only need to achieve a minimum 95 percent removal efficiency of dental amalgam, by weight, in accordance with ISO 11143 test procedures.

(3) For large dental facilities, the amalgam separator must meet or exceed the applicable ISO 11143 Standards set forth in paragraph (1) or (2) above, but is not required to be ISO certified. If such a separator is not ISO certified, then the minimum removal efficiency

certification must be made by a person or firm licensed to practice professional engineering in the State of New York.

(4) All amalgam separators must be properly sized for the volume and flow of the dental facility amalgam wastewater in accordance with the manufacturer's specifications and recommendations. The maximum allowable flow rate through the amalgam separator at the dental facility may not exceed the maximum flow rate capacity that the separator was tested at and passed in meeting the ISO standards.

(5) The amalgam separator must be installed, operated, and maintained in accordance with the manufacturer's specifications and recommendations. Amalgam separators must also be installed in accordance with any applicable state and local building code requirements.

(6) The amalgam separator must be placed in service in accordance with the requirements of this Subpart as follows:

(i) for dental facilities that begin operations after the effective date of this Subpart, the amalgam separator must be placed in service prior to beginning operation; or

(ii) for dental facilities operating on the effective date of this Subpart, the amalgam separator must be placed in service no later than two years after the effective date of this Subpart.

(7) Dental facilities where dental amalgam is not placed or removed, including facilities where the specialties of orthodontics, periodontics, prosthodontics and oral and maxillofacial surgery are exclusively performed, are exempt from the requirements to install an amalgam separator.

(b) Dental Amalgam Waste Storage

(1) All dental amalgam wastes must be collected and stored in air-tight, leak-proof and structurally sound containers.

(2) The containers holding the dental amalgam waste must have a label that includes, at a minimum, the type of the dental amalgam waste contained therein and the date waste was initially placed in the container.

(3) The containers holding the dental amalgam waste must be tightly closed except when adding or removing dental amalgam waste.

(4) Length of storage of dental amalgam waste within the dental facility must not exceed one year from the date waste was initially placed in the container.

(c) Recycling of Dental Amalgam Waste and Elemental Mercury

(1) All dental amalgam waste and elemental mercury generated by the dental facility must be sent for mercury recycling.

(2) Written or electronic certification from the collection service or recycler must be obtained by the dental facility, documenting:

(i) the name and address of the collection service;

(ii) the amount, by weight, of dental amalgam waste and elemental mercury collected and the date it was collected; and

(iii) the name and address of the facility where the dental amalgam waste and elemental mercury will ultimately be recycled, and certification that the mercury contained in the waste was destined for recycling.

(d) Record Keeping & Inspection

(1) Records must be maintained at the dental facility documenting:

(i) the type of amalgam separator(s) installed, manufacturer's model number, unit specifications, date the unit was placed in service and number of chair units serviced by the separator;

(ii) a description of all maintenance performed on the amalgam separator(s) and the date of completion of such maintenance;

(iii) the amount, by weight, of dental amalgam waste sent for recycling of mercury, on an annual basis; and

(iv) copies of the correspondence required by paragraph 374-4.2(c)(2) of this section.

(2) The records required under subparagraph 374-4.2(d)(1)(i) of this subdivision must be maintained as long as the amalgam separator is in use at the dental facility. The records required under subparagraphs 374-4.2(d)(1)(ii through iv) of this subdivision must be maintained for a minimum of three years.

(3) Written notification when an amalgam separator is installed must be provided to the sewage treatment works or sewer authority that the wastewater discharge is tributary to, if applicable. Such notification must be submitted no later than 30 days following the applicable deadline specified under paragraph 374-4.2(a)(6) of this section and must contain the dental facility name; facility location including street address and municipal subdivision, i.e. city, town, or village; telephone number; and the information specified in subparagraph 374-4.2(d)(1)(i) of this subdivision.

(4) The records specified in paragraph 374-4.2(d)(1) of this subdivision, the amalgam separator(s) and any related equipment must be readily available for inspection by the department, or its authorized representative, upon written or verbal request.

(e) Prohibitions

(1) The use or possession of elemental mercury in the practice of dentistry is prohibited in a dental facility unless such elemental mercury is contained in appropriate pre-encapsulated capsules specifically designed for the mixing of dental amalgam.

(2) Elemental mercury must not be rinsed down the drain, disposed with municipal solid waste or disposed as regulated medical waste as defined in Section 1389-aa of Public Health Law and Section 27-1501 of Environmental Conservation Law.

(3) Chair-side traps, screens, vacuum pump filters or other amalgam collection devices containing dental amalgam must not be rinsed over drains or sinks that are not equipped with an amalgam separator as required under subdivision 374-4.2(a) of this section.

(4) Dental amalgam waste must not be managed as a regulated medical waste as defined in Section 1389-aa of Public Health Law and Section 27-1501 of Environmental Conservation Law and must not be disposed of in containers destined for treatment or disposal as regulated medical waste.

(5) Dental amalgam waste and collection equipment must not be disinfected by any method that utilizes heat.

(6) Dental amalgam waste must not be disposed of as municipal solid waste.