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BMP Dental #10

TITLE: Amalgam Separator – Operation & Maintenance

Regulatory Citation: 6 NYCRR Subpart 374-4

Applicability: Dental chair vacuum system

Purpose: Dental amalgam waste recycling according to 6NYCRR Subpart 374-4

Person or

Department Responsible: Dental Hygiene Technician
Dental Materials Instructor
Dental Hygiene Department Chair

Schedule: Scrap dental amalgam will be recycled annually

Procedures: As required by DEC regulations, an ISO 11143 certified amalgam separator is installed in the suction system for the Dental Hygiene clinic in the section where amalgam may be used. Two separators, each servicing six dental chairs, are plumbed in before the main vacuum line located in the tunnel, basement of Fitzgibbons. The units installed are SolmeteX Hg5 Amalgam Separators purchased from Benco Dental. The units were installed in August, 2008. The separators are left off except for the 1-2 days/per semester when students are learning the technique of polishing amalgam.

Operation of the Amalgam Separators:

The amalgam separators are only needed during clinics where students are polishing amalgams at the chair which is done only a few days per semester and in only part of the clinic. For the remainder of the school year, students are not handling amalgam in the clinic.

In order to extend the life of the amalgam separator, a bypass was installed so that the vacuum system operates without materials flowing through the amalgam separator when amalgam is not being handled in the clinic. Students and staff will follow BMP # 1A, amalgam traps, to capture any waste amalgam that might occur accidentally from a chipped filling.

On the days when amalgam will be handled, the Dental Hygiene Technician is responsible for notifying the Physical Plant Stationary Engineers to switch the bypass so that waste materials are filtered through the amalgam separator. The Dental Technician will notify Physical Plant again when all amalgam work is completed. If the Dental Technician is not available, the Dental Materials Instructor or the Dental Hygiene Department Chair will ensure that Physical Plant is notified of the dates the bypass should be turned off and then turned back on.

The Physical Plant Stationary Engineer will switch the bypass off before amalgam work begins in the clinic. The first time the separator is placed in service, the date will be written on the label on the separator. When the Stationary Engineer is notified by Dental Hygiene that amalgam work is completed, he will switch the bypass on and note the level of sediment in the collector. The Stationary Engineer will record the dates the bypass was turned off, on, and the level in the collection cup in the binder at the amalgam separator (see attached sample form).

Maintenance of the Amalgam Separators and Vacuum Pump filters:

The Dental Hygiene clinic will clean the vacuum lines daily when the amalgam separator is in use, following the manufacturer's instructions:

http://www.solmetex.com/newpdfs/Hg5/Hg5_op_%20manual.pdf . Line cleaners will be non-foaming, de-odorizing, sanitizing and have a pH between 6 and 10.

Physical Plant Stationary Engineers are responsible for checking the amalgam separator collection container after each time it is put into service and noting this on the form provided. When the collection container sediment level reaches the full line, or when the separators have been in service for one year, (whichever comes first), arrangements will be made to replace the collector units according to the manufacturer's instructions: http://www.solmetex.com/newpdfs/Hg5/Hg5_op_%20manual.pdf. Or, the amalgam waste in the collector can be transferred to the scrap amalgam container in the Dental Materials Lab just before that container is sent out for recycling/disposal at the end of the spring semester each year.

If performing any maintenance on the vacuum pump system or filters, the Stationary Engineers will ensure that the filters, which may contain amalgam, are placed into the scrap amalgam container in the DH Materials Lab for recycling with other scrap amalgam.

The Director of Environmental Health & Safety will be notified to oversee the replacement is done using appropriate safe practices. The Director of Environmental Health & Safety & Dental Materials Instructor will ensure the amalgam waste is sent for mercury recycling and that a written certification is obtained documenting:

- The name and address of the collection service
- The amount by weight of dental amalgam waste and elemental mercury collected
- The date it was collected
- The name and address of the facility where the waste will ultimately be recycled
- A statement that the mercury contained in the waste was destined for recycling.

The Director of Environmental Health & Safety will notify the Rensselaer County Sewer Treatment District of the date and type of separator installed, as required by DEC regulations.

Current vendor: Precision Industrial Maintenance

Record keeping: Type of amalgam separator: manufacturer's model number, unit specifications
Date the unit was placed in service
Number of chairs serviced by the separator
Description of all maintenance performed and date of completion
Amount by weight of dental amalgam sent for recycling and a certification from the recycler, as described above
Notification to the Rensselaer County Sewer Treatment District

Record Location: EHS Office, environmental files and clipboard at separators
Dental Hygiene office

Contact: Dental Hygiene Technician (629-7405 or 7481)
Dental Materials Instructor (629-7466)
Executive Manager of Physical Plant (629-7427)
Director of Environmental, Health and Safety (629-7163)

HVCC-BMP-Dental#10

AMALGAM SEPARATOR BYPASS
AND MAINTENANCE LOG

Unit Information:

Model	SolmeteX Hg5 Amalgam Separator Type 2 Maximum Flow = 1,000 ml/min
S/N	
No of chairs serviced	6
Date first placed in Service	

Date Bypass Off (in service)	Date Bypass On (not in service)	Amount of sediment in container

Other maintenance performed on unit: (date & description):
