ENVIRONMENTAL PROTECTION

ENVIRONMENTAL REGULATION

DIVISION OF WATER QUALITY

WATERSHED PERMITTING ELEMENT

Water Pollution Control

Requirements for Indirect Users – Dental Facilities

Adopted New Rule: N.J.A.C. 7:14A-21.12

Adopted Amendment: N.J.A.C. 7:14A-1.2

Proposed: September 5, 2006 at 38 N.J.R. 3393(a)

Adopted: August 20, 2007 by Lisa P. Jackson, Commissioner, Department of Environmental Protection

Filed: August 30, 2007 as R.2007 d.304, **with substantive and technical changes** not requiring additional public notice and comment (see N.J.A.C. 1:30-6.3).

Authority: N.J.S.A. 13:1D-9; 13:1E-1 et seq.; 58:10A-1 et seq.; 58:11-49 through 58; and 58:11-64 et seq.

DEP Docket Number: 11-06-08/563

Effective Date: October 1, 2007

Expiration Date: December 5, 2007

The New Jersey Department of Environmental Protection (Department) is adopting a new rule at N.J.A.C. 7:14A-21.12, Requirements for Indirect Users – Dental Facilities, and amendments at N.J.A.C. 7:14A-1.2. N.J.A.C. 7:14A-21.12 establishes the conditions for all dental facilities that handle mercury amalgam. The rule prescribes implementation of the Best Management Practices for the handling, collection and recycling of mercury containing wastes.

The rule also requires all dental facilities that handle mercury amalgam to install and operate amalgam separators.

Summary of Hearing Officer's Recommendation and Agency Response:

The Department held a public hearing on October 11, 2006 at the Department's Public Hearing Room, 401 East State Street, Trenton, New Jersey, at which one person commented. James Murphy, Supervising Environmental Engineer in the Department's Bureau of Pretreatment and Residuals, Division of Water Quality, served as the Hearing Officer. After reviewing the comments received by the Department, the Hearing Officer recommended that the proposed new rule and amendment be adopted with the changes described below in the Summary of Public Comments and Agency Responses. The Department accepts the Hearing Officer's recommendations.

A record of the public hearing is available for inspection in accordance with applicable law by contacting:

Department of Environmental Protection

Office of Legal Affairs

Attn: Docket No. 11-06-08/563

401 East state Street

P.O. Box 402

Trenton, NJ 08625-0402.

This adoption document can also be viewed or downloaded from the Department's website at www.nj.gov/dep.

Summary of Public Comments and Agency Responses:

The following people submitted comments on the proposal:

1. Peter L. DeSciscio, State Board of Dentistry
2. Al Dube, Solmetex
3. Michael Jeffers, Rebec LLC
4. Dr. Stephen J. Markus, NJ Dentist
5. Arthur Meisel, New Jersey Dental Association
6. Michael L. Pisauro, Frascella & Pisauro
7. Arnold H. Rosenheck, University of Medicine and Dentistry of New Jersey
8. Barbara Sachau, Citizen
9. Michael Wynne, P.E., Hanover Sewerage Authority

A summary of the comments received and the Department's responses follow. The number(s) in parentheses after each comment corresponds to the commenter(s) listed above.

General comments

1. COMMENT: The commenter supports all measures to reduce exposure to mercury. (8)

2. COMMENT: As a practicing dentist who has had a separator installed and follows a best management practice (BMP), the commenter applauds the Department's decision to mandate mercury separators and BMPs in dental practices. (4)

3. COMMENT: As a delegated local agency, the commenter generally supports the proposal. The proposal includes a thorough analysis performed by the NJDEP regarding

removal technologies, cost to dental facilities, and effectiveness of similar programs in other States. This analysis clearly supports the need for the proposed regulations. (9)

4. COMMENT: Publicly owned treatment works (POTWs) will be subject to more stringent discharge limitations for mercury and will be required to use more sensitive means of analysis to test mercury in the POTW effluent. This will require that the POTWs place more restrictions on the dischargers of mercury to their systems. It is important that the Department move forward with the rule to limit the discharge of mercury into POTWs. (9)

5. COMMENT: For more than 150 years, dental amalgam has been proven to be a safe and effective restorative material. However, the New Jersey Dental School (NJDS) recognizes that dental facilities release dental amalgam into the wastewater. Dental amalgam, when incinerated, may cause a release of methylated mercury into the environment. For that reason alone, the commenter commends the Department's proposal to require dental facilities to institute the use of best management practices and install amalgam separators to reduce amalgam waste. (7)

RESPONSE TO COMMENTS 1 THROUGH 5: The Department acknowledges the commenters' support for the adopted rule.

6. COMMENT: The proposal indicates that the average cost of compliance for a dental facility would be less than $2,000 for an amalgam separator, and less than $1,000 per year in operating costs. These costs are not excessive, particularly in light of the ability of the rule to reduce more than 90 percent of the mercury received by a POTW. For comparison purposes, a

typical food handling facility spends between $5,000 and $10,000 to install a grease trap, and could spend several thousand dollars per year in maintenance costs. (9)

RESPONSE: The Department acknowledges the commenter's economic assessment, and is aware of the costs incurred by food handling facilities relative to their efforts to achieve compliance with local requirements.

7. COMMENT: The proposal included information on the use of reverse osmosis at POTWs to remove mercury from wastewater. Based on the Department's analysis on the use of the reverse osmosis treatment, the use of this technology could cost $150.00 per year per household or per equivalent dwelling unit. This would represent a 35 percent increase in cost. Even after these expenditures, the POTW would still have to deal with sludge disposal issues and the disposal of brine created by the reverse osmosis process. It is more appropriate for the handful of dental facilities in the service area to comply with the adopted rule, rather than for the POTW to implement measures and pass the cost on to the households that are connected to the POTW. (9)

RESPONSE: A POTW upgrade to reverse osmosis treatment could result in an economic impact on each household or equivalent dwelling unit. As noted in the Department's proposal, treating dental amalgam at its source is much more cost effective than providing additional treatment at the POTW.

8. COMMENT: The Department should consider shortening the time period for compliance. The one year time period to implement BMPs and two year time period to install separators could have been shorter. (9)

9. COMMENT: A 12 month wait period for installation of amalgam separators is a sufficient amount of time. Manufactures of amalgam separators have systems available to meet the needs of the dental community. In addition, the American Dental Association Journal has published two articles in the last five years on amalgam separators, with information including from whom amalgam separators may be purchased. There is ample information for dentists to purchase an amalgam separator today. Where other States have instituted amalgam separator requirements, most of the system purchases and installations were within six months of the implementation date. Prolonging the required time period will allow the dentists to continue to discharge mercury for an additional year more than necessary. (2)

RESPONSE TO COMMENTS 8 AND 9: The one year period for dental facilities to implement the BMPs will allow the dental facilities to train their staff for proper handling of mercury containing wastes and procure services of a licensed hauler and recycler to effectively implement the BMPs.

Some dental facilities will require time to obtain the services of a manufacturer, equipment dealer, or engineer to evaluate their operation and design and size the amalgam separator to suit their needs. The Department believes that two years to design, install and operate an amalgam separator is not excessive.

10. COMMENT: In some circumstances, a facility may need additional time to comply with the rule. For example, the New Jersey Dental School (NJDS) operates in two buildings, and has more than 300 dental operatories. The combined number of operatories makes its operation by far the largest in the State. Although the NJDS agrees there exists an important need for amalgam separators, its case may require a special engineering solution.

Currently, amalgam separators are not being utilized in any of its facilities, but it welcomes the opportunity to comply with the rule. The NJDS is currently evaluating its needs vis a vis amalgam separators and current infrastructural capabilities and limitations. It may accomplish installation in a timely manner as prescribed in the rule. However, it is possible that the NJDS would require from the Department an extension of the deadline to achieve compliance due to the uniqueness and size of its facilities. Nevertheless, the NJDS believes the rule is an important step in balancing the need for good oral health with the need to preserve the environment. (7)

RESPONSE : If a facility is not able to install the amalgam separator or otherwise comply within the timeframes specified, a dental facility can opt out of the exemption allowed under N.J.A.C. 7:14A-21.12(b) and obtain an individual New Jersey Pollutant Discharge Elimination System Significant Indirect User (NJPDES SIU) permit from the Department or delegated local agency. The NJPDES permit may include a compliance schedule and alternate treatment technology if necessary to address the specific conditions or uniqueness of the dental facility.

11. COMMENT: The background information identifies POTW sludge as a point of mercury concentration. Although dental amalgam does concentrate in biosolids generated at POTWs, it can also settle out in grit chambers of wastewater treatment plants that provide this type of treatment. Studies have indicated that from nine percent to 48 percent of amalgam will drop out in these grit chambers at POTWs. It would be helpful to identify this process and how amalgam that is removed with this grit is further handled or disposed. Implementation of this regulation will reduce not only the mercury in biosolids but also POTW grit mercury levels. (3)

RESPONSE: Grit generated by POTWs is handled as a solid waste and sent to a landfill. The Department does not have information to verify or quantify the amount of amalgam captured in the grit chamber. However, the Department's intent in adopting the rule is to reduce the amount of mercury entering the environment. Implementation of BMPs and installation and operation of amalgam separators will reduce the amount of mercury discharged from dental facilities to the sanitary sewers. As such, decreasing the amount of mercury in the discharge means a lesser amount of mercury reaching the POTW; therefore, there will be less mercury in the biosolids and less mercury in the grit.

12. COMMENT: Recycling of mercury is usually a top priority on the waste management hierarchy, but it should not always be the case. Sequestering methods should be allowed in addition to recycling to remove this toxin from further use. (3)

RESPONSE: Recycling of the captured mercury is the preferred management method, and currently there are markets for the recycled material. If, as the rule is implemented,

the Department determines that sequestration would also be appropriate, the Department will consider adding the method.

13. COMMENT: In its proposal, the Department makes the assumption that dentists currently properly manage their pump filters and chairside traps and remove up to 2013 pounds of mercury from discharge to the sewer. If this were the case then the requirement to follow BMPs would not be a requirement of this regulation. The implementation of BMPs as well as use of amalgam separators will not just reduce the load of mercury to the sewer by 540 pounds, but may be as high as 2553 pounds. Most amalgam separators are designed to operate on the vacuum side of the pump equipment. In this application removal efficiency of the pump filter is reduced to zero as the amalgam separator will capture all of the solids usually captured in the pump filter. In this case amalgam separators will capture approximately 1500 pounds of mercury per year with the remainder trapped by the chairside traps. (3)

RESPONSE: The Department's intention in adopting the rule is to reduce the amount of mercury entering the environment. The Department at present does not have information on what percent of the dentists are properly managing dental mercury collected in the chairside traps and vacuum filters. However, by requiring that dental facilities implement BMPs that require proper management of amalgam waste and the installation and operation of amalgam separators, the Department estimates that approximately 2553 pounds of dental mercury will be captured and recycled.

14. COMMENT: In calculating the cost of this program it is unclear if the cost savings of installing an amalgam separator were factored in. Most amalgam separators are placed on the vacuum side of the vacuum pump and not the discharge side. Therefore, the amalgam separator will remove most of the solids that were previously caught in the pump filter. This lower solids load to the pump filter on wet ring vacuum pumps will not require changing as frequently as before installation of amalgam separators. These pump filters are usually recommended to be changed on a weekly basis at a cost of about $4.00 each. If using an amalgam separator reduces the frequency of pump filter changes from weekly to monthly, the dental office will actually see a cost savings of about $144.00 annually. In addition to direct cost savings there would be a labor savings from fewer staff hours required to maintain these pump filters weekly. (3)

15. COMMENT: Three companies comprise approximately 95 percent of the sales of amalgam separators in the United States. The average cost of these systems is approximately $850.00. The average cost of operating these systems is approximately $530.00 per year (Dube, Important Issues Surrounding Mercury Reduction: Do Amalgam Separators Work? International Mercury Summit 2006 Poster). These estimates are current and place the cost of the systems at approximately $2.9 million for purchase and approximately $1.8 million a year in operational costs. In addition, because amalgam separators are placed in front of the vacuum pump filters, and remove the material more efficiently than vacuum pump filters, any cost associated with the recycling of the vacuum pump filters would be a savings. The average cost of purchasing and maintaining vacuum pump filters according to manufactures specifications is approximately $745.00 per year. The economic costs of using a separator are less than only following the BMPs. (2)

RESPONSE TO COMMENTS 14 AND 15: The additional savings that result from less frequent pump filter changes are an additional indirect benefit from the adopted rule and will lessen the economic impact on the regulated community.

16. COMMENT: The Department estimates the annual operating costs for a separator in the range of $700.00 to $1000. One manufacturer's suggested retail price for this service is only $445.00 annually to replace and recycle or dispose of the collected material. Therefore, the estimated costs in the proposal may be higher than actual annual maintenance costs for most systems. (3)

RESPONSE: The Department's estimates were based on a review of costs provided by various separator manufacturers. Generally, the estimated costs for maintenance of the separator, including change-out of the cartridge and recycling of the captured material, ranged from $350.00 to $500.00 per event, with change-out required every six months to every 12 months. Assuming the highest cost, meaning change-out twice per year, these costs were estimated at $700.00 to $1,000 per year. There would be less of an economic impact on a regulated dental facility if the operating costs were lower than the Department's estimate.

17. COMMENT: From a policy perspective, the rule is equitable as it places the obligation to remove the pollution on the generator of the pollution, not a third party. It is further economical, as the cost to remove mercury from the source (dental facilities) is several times lower than the cost to remove the mercury at POTWs. Also, as noted in the proposal, the cost of implementing the rule, when compared to the health costs that can be avoided by the removal of

mercury from the environment, favor implementation of the rule. While the commenter supports the rule, the commenter would encourage the Department as well as the dental industry to limit the use of mercury in the first place. (6)

18. COMMENT: The use of mercury containing amalgam should be restricted to those situations where other materials are inappropriate or ineffective in treating the cavity. (6)

RESPONSE TO COMMENTS 17 AND 18: The Department acknowledges the commenter's support for the rule. The first step in the Department's "Pollution Prevention" strategy has been to encourage the use of alternate (less toxic) raw materials when appropriate. As such, and as noted under N.J.A.C. 7:14A-21.12(d)1, the BMPs specify that a dental facility should use mercury free material when appropriate. The rule does not prescribe dental procedures, including the use, effectiveness, or appropriateness of mercury amalgam as a restorative material. A dentist must use his or her formal training in making such determinations in consultation with the patient.

19. COMMENT: The Department should add prosthodontists to the list of specialties to which the requirements of N.J.A.C. 7:14A-21.12 do not apply. Significantly, prosthodontists are exempt from the amalgam separator installation requirement contained in a regulation adopted by the New York State Department of Environmental Conservation, effective May 12, 2006. (5)

RESPONSE: Adopted N.J.A.C. 7:14A-21.12(a) establishes BMPs and regulatory requirements for owners of dental facilities that generate amalgam waste. The list of specialty dentists exempt from regulation does not include prosthodontists. A prosthodontist is a specialist

who may replace missing teeth and restore natural teeth. These procedures may generate amalgam waste. Therefore, these specialists are not explicitly exempted from the regulation.

20. COMMENT: There may be instances where it is impossible or not feasible to install an amalgam separator. Upon adoption, the Department should add a provision that would allow the Department the discretion to give an exemption from the amalgam separator requirement for extreme hardship. (5)

RESPONSE: Based on the experience of other states and jurisdictions that have required the installation of separators, the Department is not aware of any case where a separator could not be installed due to the physical or structural layout of a building housing a dental facility. Based on information provided by manufacturers and vendors, the amalgam separators can be sized to serve as few as one chair, or can be engineered to serve several hundred chairs. In addition, the Department, based on the economic impact analysis, does not believe there would be any financial hardship incurred as a result of complying with this rule.

21. COMMENT: It should be noted that governments in the European Union also are among the growing number of state and local governments in the United States, as well as local and provincial governments in Canada, that require dental facilities to use amalgam separators. (2)

RESPONSE: The Department acknowledges that governments in the European Union also require dental facilities to use amalgam separators.

Definitions at N.J.A.C. 7:14A-1.2

22. COMMENT: The definition of the term "amalgam separator" states that it is a device that is installed downstream of the chair-side trap and any vacuum filter. In reality, most of these amalgam separators are placed upstream of the vacuum filter and downstream of the last chair. What is important is that an amalgam separator comes after the last operatory that places or removes amalgam and before discharge to the sewer. (3)

RESPONSE: The Department agrees that the phrase “installed downstream of the chair-side trap and any vacuum filter” inappropriately limits the definition of “amalgam separator” at N.J.A.C. 7:14A-1.2 and is, therefore, modifying the definition accordingly on adoption. The definition, as modified, appropriately describes the device to remove amalgam and its metal constituents from dental facility wastewater, without limiting the device to a particular location.

23. COMMENT: The term "ISO 11143" is a specific, dated standard that is modified from time to time by an international committee. An amalgam separator meeting the ISO criteria would be certified as ISO 11143:1999, the standard currently in place It should be clear that an amalgam separator certified as meeting the ISO 11143:1999 standard remains in compliance even if a revised standard has been adopted by the international committee.It might be best to refer to ISO 11143 as the ISO 11143:1999 version and modify these regulations as changes are made to the ISO 11143 standard if truly necessary. (3)

RESPONSE: The Department does not expect a dental facility to replace a separator every time ISO revises the standard. The Department considered the existing ISO 11143 standard when developing this rule. This standard requires a minimum 95 percent removal. In determining the economic impact of the rule, the Department utilized the costs of the amalgam separators meeting the existing ISO 11143 standard. The Department did not intend for the rule to require a future, possibly more expensive technology to be mandated without the necessary cost/benefit analysis being completed. Therefore, on adoption, the Department is modifying the definition of "ISO 11143" to allow a dental facility to install a separator that meets the ISO 11143:1999 or later criteriaUse of separators certified to the 1999 standard, which is the standard now in effect, or to a later standard if one is issued, is anticipated to achieve the Department's estimated level of mercury reduction from dental facilities.

Comments on N.J.A.C. 7:14A-21.12(b)

24. COMMENT: The cost of using composite materials in a restoration, rather than amalgam, is often twice as high. Clearly, there is a significant economic windfall to dental practitioners when using composite materials. It is possible that an unscrupulous dentist will suggest that there are adverse health effects due to the continued presence of amalgam material, to induce patients to remove existing, stable amalgam restorations and replace them with composite material. Such activity results in an increased amounts of mercury into the waste stream.

As proposed, N.J.A.C. 7:14A-21.12(d)1 could add fuel to that practice, because some dentists may use the statement, along with citations from questionable scientific sources, for their

own economic benefit. This will likely result in potentially serious, albeit unintended, consequences to both patients (in both economic and health terms) and to the environment. (1)

RESPONSE: Adopted N.J.A.C. 7:14A-21.12(d)1 does not recommend removal of existing stable amalgam restorations, nor does it prescribe dental procedures, including the use, effectiveness, or appropriateness of mercury amalgam as a restorative material. The BMP does specify that a dental facility use mercury free material when appropriate. A dentist must use his or her formal training in making such determinations in consultation with the patient. The Department has worked in consultation with the New Jersey Dental Association to develop posters, to be placed in each dental facility, suggesting that consumers should talk to the dental professional about alternatives to mercury amalgam.

25. COMMENT: N.J.A.C. 7:14A-21.12(b)2 states that the amalgam separator shall conform to the ISO 11143 protocol. The ISO 11143 is a testing standard and conforming to it is an ambiguous statement. All amalgam separators should be tested and certified as meeting the ISO 11143:1999 or revised standard. Testing labs should be reputable and accredited to conduct the ISO 11143 testing protocol. Certification should be by a certified body properly accredited to conduct such certification. If this is not clearly spelled out in regulation just about anyone can certify just about anything. (3)

RESPONSE: Adopted N.J.A.C. 7:14A-21.12(b)3 requires the owner of the dental facility to certify that he or she has installed an amalgam separator that, when tested in accordance with the ISO 11143 protocol, met the minimum 95 percent removal efficiency. The

current ISO 11143 standard has been in place for about eight years. Numerous manufacturers, as well as private and public organizations, have proceeded through such testing with private companies and have reported results exceeding the 95 percent removal rate when the equipment was tested in accordance with the ISO protocol. The manufactures will provide documentation to that effect to a dental facility. At this time, the Department is accepting these results on merit, and is not contemplating the establishment of a certification body governing ISO product testing.

Comments on Best Management Practices at N.J.A.C. 7:14A-21.12(d)

26. COMMENT: The American Dental Association (ADA) document contains a number of recommendations for best management practices that are targeted at reducing the amount of mercury that enters the environment, including the collection and recycling of amalgam waste. N.J.A.C. 7:14A-21.12(d)1 goes beyond the ADA guidelines in making the statement that "Best Management Practices require a dental facility to, at a minimum: 1. *Use mercury free material when appropriate*." (emphasis added) No such statement is contained in the ADA BMP document. The inclusion of this statement will result in the establishment by regulation of practice guidelines that are inconsistent with the nationally recognized and established norms and practices endorsed by the ADA. Therefore, the Board respectfully requests that this portion of proposed N.J.A.C. 7:14A-21.12(d)1 not be adopted. (1)

27. COMMENT: N.J.A.C. 7:14A-21.12(d)1 would "require a dental facility to, at a minimum [u]se mercury-free material when appropriate." When dentists examine patients and

prepare treatment plans, they are required by the New Jersey State Board of Dentistry to record in their patient records, among other information, clinically acceptable treatment alternatives and costs relative to the treatment that is recommended and/or rendered.

Composite restorations are typically far more costly than amalgam restorations and are rarely covered by dental insurance when placed in posterior teeth. Therefore, when treatment alternatives are discussed, patients frequently choose amalgam because it is the least costly alternative. Most importantly, the Department should make absolutely clear the sole reason it is requiring covered dental facilities to use mercury free material, when appropriate, is to reduce the volume of amalgam discharged to publicly operated wastewater treatment plants and not because it is unsafe for dental use. In addition, the Department should clarify that it is appropriate for a dentist to use amalgam unless the patient requests a composite. (5)

RESPONSE TO COMMENTS 26 AND 27: N.J.A.C. 7:14A-21.12(d)1 is not part of the ADA BMP; however, it is consistent with the Department's pollution prevention strategy to reduce the amount of toxins entering the environment. The first step in the Department's pollution prevention strategy has been the use of alternate (less toxic) raw materials when appropriate.

The rule does not prescribe dental procedures, including the use, effectiveness, or appropriateness of mercury amalgam as a restorative material. A dentist, in consultation with the patient, must use his or her formal training in determining which restorative material to use.

See also the Response to Comment 24.

28. COMMENT: Bleach is not the only problem for vacuum line cleaners. Vacuum line cleaners should not have oxidizing chemicals like bleach. Other oxidizing chemicals include percarbonates, hydrogen peroxide, nitrates, and perborates. If these instructions only mention bleach then the dental office will miss the other chemicals that can dissolve mercury. (3)

RESPONSE: N.J.A.C. 7:14A-21.12(d)5 requires that a dental facility operate and maintain its amalgam separator in accordance with the manufacturer's specifications. There are a number of oxidizing chemicals that may dissolve mercury. Generally, a vacuum pump is downstream of the separator, so all material used to clean or disinfect the vacuum system is pulled or goes through the separator. As such, amalgam separator manufacturers generally prescribe a cleaner that would be safe for use with all vacuum equipment and be specifically formulated for amalgam separator maintenance. These cleaners are pH neutral, contain no bleach or other chemicals that can dissolve amalgam particles that would result in less efficient operation of the separator due to decreased removal efficiency.

29. COMMENT: N.J.A.C. 7:14A-21.12(d)9 and 10 of the BMP refer to disposable traps or sludge from reusable traps but do not mention pump filters. Both of these items should refer to pump filters as well as traps. (3)

RESPONSE: The Department's intent was for all amalgam waste containing mercury to be recycled, as specified under N.J.A.C. 7:14A-21.12(d)16. On adoption, the Department is clarifying that the vacuum pump filter and material captured by that filter are not to be disposed of with garbage or with sharps, but must be recycled as amalgam waste.

Summary of Agency-Initiated Changes:

The Department is modifying N.J.A.C. 7:14A-21.12(d)6 and 7 on adoption to remove the word “amalgam” from the phrases "chair-side amalgam traps." In practice, these traps are referred to as chair-side traps and not specifically chair-side amalgam traps.

Federal Standards Statement

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. (P.L. 1995, c.65), require State agencies that adopt, readopt or amend State regulations that exceed any Federal standards or requirements to include in the rulemaking document a Federal standards analysis. The Federal General Pretreatment Regulations at 40 CFR Part 403 include the requirements for indirect users and the role of the control authority to regulate such users. Subchapter 21 incorporates the requirements from 40 CFR Part 403 relevant to indirect user control mechanisms for implementing the pretreatment program in the State. Adopted N.J.A.C. 7:14A-21.12 establishes specific requirements for dental facilities that generate amalgam waste through placement or removal of amalgam fillings and discharge to the sanitary sewer. The adopted rule sets forth specific requirements for dental amalgam waste collection and management. The adopted rule does not have any Federal counterpart. Accordingly, the rule is not more stringent than the Federal rules, and a Federal standards analysis is not required.

Full text of the adoption follows (additions to proposal indicated in boldface with asterisks *__thus__*; deletions from proposal indicated in brackets with asterisks *[thus]*):

7:14A-1.2 Definitions

...

"Amalgam separator" is a device to remove amalgam and its metal constituents from dental facility wastewater*[, installed downstream of the chair-side trap and any vacuum filter]*.

...

"ISO 11143" is the International Organization for Standardization's standard for amalgam separators *[as supplemented or amended, and incorporated herein]* ***and specifically means ISO 11143:1999 or later***. The standard is available from the ISO at http://www.iso.org.

...

7:14A-21.12 Requirements for Dental Facilities

(a) – (c) (No change.)

(d) Best Management Practices require a dental facility to, at a minimum:

1. – 5. (No change.)

6. Install chair-side *[amalgam]* traps in both the vacuum system and cuspidor of each operatory where restoration work is done;

7. Change and clean chair-side *[amalgam]* traps frequently;

8. (No change.)

9. Not throw or place the disposable trap*__,__* *[or]* sludge from reusable trap ***, or vacuum pump filter or contents**** with regular garbage;

10. Not throw or place the disposable trap*,* *[or] *sludge from reusable trap **, or vacuum pump filter or contents*** into sharps containers or biohazard bag;

11. – 18. (No change.)

(e). (No change.)

Based on consultation with staff, I hereby certify that the above statements, including the Federal Standards Statement, addressing the requirements of Executive Order 27 (1994) and N.J.S.A. 52:14B-23, permit the public to understand accurately and plainly the purposes and expected consequences of this adoption. I hereby authorize this adoption.

Date:_____

_____
Lisa P. Jackson, Commissioner
Department of Environmental Protection