Ohio EPA Update

SWOWEA Industrial Waste Seminar January 26, 2017



40 CFR 441 Dental Amalgam Standard

- On December 15, 2016, the final rule was promulgated.
- The rule becomes effective 30 days after publication.
- New sources must comply upon discharge.
- Existing sources will have three (3) years from the effective date to come into compliance.



- There are only pretreatment standards in this rule.
- There are no standards for a direct discharge.
- Applies to dental offices, including large institutions such as dental schools and clinics where dentistry is practiced that discharge to a POTW.



Does <u>not</u> apply to mobile units or offices where the practice of dentistry consists only of the following dental specialties: oral pathology, oral and maxillofacial radiology, oral and maxillofacial surgery, orthodontics, periodontics or prosthodontics.



- The concern is with the removal of old amalgam fillings from cavities or placing a new filling, mercury enters the wastewater of the dental office.
- U.S. EPA expects this to reduce the discharge of metals to POTWs by 10.2 tons per year.

Protection Agency

 The removed restorations are the largest contributor of mercury.

The rule notes: "...dental dischargers subject to this part are not Significant Industrial Users as defined in 40 CFR 403, and are not 'Categorical Industrial Users' or 'industrial users subject to categorical pretreatment standards' as those terms and variations are used in 40 CFR 403, as a result of the applicability of this rule."



Requirements for Existing Sources:

- Install, operate and maintain one or more amalgam separators that meet the following requirements:
 - Compliant with either ANSI/ADA Specification 108 for Amalgam Separators (2009) with Technical Addendum (2011), or
 - ISO 11143 Standard (2008) or subsequent versions so long as it achieves a 95% removal efficiency

Requirements for Existing Sources (cont'd):

- Amalgam separator(s) must be sized to accommodate the maximum discharge rate of amalgam process wastewater.
- If the separator was installed before publication, it will satisfy the requirement until the existing separator is replaced or 10 years after the rule publication, whichever is sooner.
- Must be inspected, operated and maintained in accordance with manufacturer's manual.

Requirements for Existing Sources (cont'd):

- If the separator is not operating properly, it must be repaired or replaced as soon as possible, but no later than 10 business days.
- Amalgam retaining units must be replaced in accordance with the manufacturer's schedule or when the amalgam retaining unit has reached the maximum level it can perform at the specified efficiency.

Requirements for Existing Sources (cont'd):

- The amalgam removal device must meet the following requirements:
 - Removal efficiency of at least 95%
 - Removal efficiency must be demonstrated using the average performance of three standards
 - Device is sized to accommodate the maximum discharge rate of the amalgam process wastewater
 - It must be accompanied by a manufacturer's manual
 - It must be inspected



Requirements for Existing Sources (cont'd):

- The amalgam removal device must meet the following requirements (cont'd):
 - If it is not functioning properly, it must be repaired/replaced ASAP but no later than 10 business days
 - The amalgam retaining unit must be replaced as specified in the manual or when it is at its maximum filling level
 - Demonstration of the device must be documented in a One-Time Compliance Report

Requirements for Existing Sources (cont'd):

- Implementation of Best Management Practices (BMPs):
 - Waste amalgam including, but limited to, dental amalgam from chair-side traps, screens, vacuum pump filters, dental tools, cuspidors or collection devices must not be discharged to the POTW
 - Dental unit water lines, chair-side traps, and vacuum lines that discharge amalgam process wastewater to a POTW must not be cleaned with oxidizing or acidic cleaners

Requirements for New Sources:

 These are the same as existing sources, but must be in place prior to discharging.



Reporting and Recordkeeping Requirements

- One-Time Compliance Report Deadlines:
 - Existing Sources are due three (3) years after the effective date of the rule or 90 days after transfer of ownership
 - New Sources must submit the report no later than 90 days following the introduction of wastewater into the POTW



Reporting and Recordkeeping Requirements

- One-Time Compliance Report:
 - The report must be signed and certified by a responsible official
 - The contents of the report for users who do <u>not</u> use amalgam include:
 - Facility name, physical address, mailing address, contact information, name of operator(s) and owner(s); and a certification statement that the dental discharger does not place dental amalgam and does not remove amalgam except under limited circumstances.

Reporting and Recordkeeping Requirements

- One-Time Compliance Report (cont'd):
 - The contents of the report for those using amalgam include:
 - Facility name, physical address, mailing address and contact information
 - Name(s) of the operator(s) and owner(s)
 - A description of the dental facility including the total number of chairs, the total number of chairs at which dental amalgam may be present resulting in wastewater, and a description of the existing amalgam separator(s) or equivalent device including make, model and year of installation

Reporting and Recordkeeping Requirements

- One-Time Compliance Report (cont'd):
 - The contents of the report for those using amalgam include:
 - Certification the amalgam separator(s) or equivalent device is designed, operated and maintained to meet requirements in § 441.30 or § 441.40
 - Certification the dental discharger is implementing BMPs specified in § 441.30(b) or § 441.40(b) and will continue to do so
 - The name of the third-party service provider maintaining the separator or a brief description of the practices to ensure proper operation & maintenance in accordance with § 441.30 or § 441.40

Reporting and Recordkeeping Requirements

- Transfer of Ownership Notification:
 - If the dental discharge transfers ownership, the new owner must submit a new One-Time Compliance
 Report no later than 90 days after the transfer
- Retention Period:
 - As long as a dental discharger is subject to the rule is in operation or until ownership is transferred, they must maintain the One-Time Compliance report and make it available for inspection in either physical or electronic form

Reporting and Recordkeeping Requirements

- Dental dischargers must maintain and make available for inspection in either electronic or physical form for a minimum of three (3) years:
 - Documentation of the date, person(s) conducting the inspection, and results of each inspection of the amalgam separator(s) or equivalent devices, and a summary of follow-up actions, if needed
 - Documentation of amalgam retaining container or equivalent container replacement (including the date if applicable)

Reporting and Recordkeeping Requirements

- Dental dischargers must maintain and make available for inspection in either electronic or physical form for a minimum of three (3) years:
 - Documentation of all dates collected amalgam is picked up or shipped for proper disposal in accordance with 40 CFR 261.5(g)(3), and the name of the permitted or licensed TSD receiving the amalgam retaining containers
 - Documentation of any repair or replacement of an amalgam separator including the date, person making the repair or replacement and a description of the repair or replacement (including make and model)
 - Maintain or make available the manufacturer's manual in either physical or electronic form for the current device

40 CFR 63

- National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works
- Proposed rule in Federal Register (Vol. 81, No. 248) on December 27, 2016
- U.S. EPA is looking for comments (due February 27, 2017)
- May want to consider adding a question to inspection checklist: Is the POTW used as the air pollution control device? Is the user subject to a MACT?
- Stay tuned!



Industrial Storm Water Permit

- Ohio EPA is the process of renewing this permit.
- Public hearing was held on January 9, 2017.
- Comment period ended January 16, 2017.
- Additional information is available at:

<u>epa.ohio.gov/dsw/permits/GP_IndustrialStorm</u> <u>Water.aspx</u>



Nutrient Mass Balance Study

- Ohio EPA just completed a state-wide nutrient study.
- The study was looking at nitrogen and phosphorus throughout the state.
- Maumee, Portage, Sandusky, Cuyahoga, Great Miami, Scioto and Muskingum watersheds were included in this study.
- The study was prompted by the need to identify the most environmentally beneficial and costeffective mechanisms for nutrient reduction.

Nutrient Mass Balance Study

- The nutrient mass balance will serve as a baseline and will aid in tracking progress to goals established by the 2012 Great Lakes Water Quality Agreement and the Gulf of Mexico Hypoxia Task Force 2008 Action Plan.
- Ohio EPA is required by Ohio law [ORC 6111.03] to complete this nutrient accounting on a two-year basis.



Nutrient Mass Balance Study

A copy of the report is available at:

epa.ohio.gov/dsw/wqs/NutrientReduction.aspx
#146065085-nutrient-mass-balance



SWDO Pretreatment Staff

- New pretreatment staff in southwest Ohio.
- Bob Ostendorf will be handling the northern portion of the district.
- Sarah Harvey will be handling the southern portion of the district.
- Contact information:
 - Bob Ostendorf: (937) 285-6107
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Questions?

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