

**ORDINANCE NO. 4110A**

**AN ORDINANCE AMENDING THE CITY OF MUSKOGEE CODE OF ORDINANCES AMENDING CHAPTER 82 UTILITIES, ARTICLE V, INDUSTRIAL PRETREATMENT, BY ADDING SECTION 82-352, DENTAL AMALGAM DISCHARGE REGULATION, PROVIDING FOR REPEALER, SEVERABILITY, AND DECLARING AN EMERGENCY.**

**ORDINANCE**

**WHEREAS,** The Environmental Protection Agency has determined that Dental amalgam-defined here as an alloy of elemental mercury and other metal(s) that is used in the practice of dentistry can be a contributor to excess mercury in Publicly owned treatment works and the environment.

**WHEREAS,** The Environmental Protection Agency published a rule under the Code of Federal Regulation Chapter 40 Part 441 on June 14, 2017. This rule requires the City of Muskogee to implement procedures to prevent the discharge of mercury-laden wastewater to the Pollution Control facility and environment from local dentist offices.

**WHEREAS,** the city of Muskogee finds it necessary to protect the health, safety and welfare of the citizens of the City of Muskogee by requiring local dentist offices comply with all requirements of the published rule, and local requirements, which are included in the ordinance below.

**NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MUSKOGEE, OKLAHOMA, AS FOLLOWS:**

**SECTION 1.** Adding section 82-352 of the Muskogee City Code of Ordinances to read as follows:

**Sec. 82-352. – Dental Amalgam Discharge Regulation**

**A. Objectives: applicability;**

(a) Except as provided in paragraphs (c), (d), and (e) of this section, this ordinance applies to dental dischargers.

(b) Unless otherwise designated by the Control Authority, dental dischargers subject to this ordinance are not Significant Industrial Users as defined in 40 CFR part 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 part 403, as a result of applicability of this ordinance.

(c) This ordinance 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.

(d) This ordinance does not apply to wastewater discharges from a mobile unit operated by a dental discharger. Wastewater discharges to the sanitary sewer from mobile units is prohibited

(e) This ordinance does not apply to dental dischargers that do not discharge any amalgam process wastewater to the PCF, 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.

(f) 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 and Part E are exempt from requirements in Part C, and D, and non-applicable portions of part E of this ordinance. City of Muskogee personnel will complete an initial inspection of dental facilities that claim this exemption and require information on how waste amalgam, if collected, is disposed of properly in accordance with 40CFR 261.5 (g)(3).

## **B. General definitions.**

(a) *Amalgam process wastewater* means any wastewater generated and discharged by a dental discharger through the practice of dentistry that may contain dental amalgam.

(b) *Amalgam separator* means a collection device designed to capture and remove dental amalgam from the amalgam process wastewater of a dental facility.

(c) *Control Authority* is defined in 40 CFR 403.3(f). The City of Muskogee is the control Authority for Dental dischargers practicing within the City.

(d) *Dental amalgam* means an alloy of elemental mercury and other metal(s) that is used in the practice of dentistry.

(e) *Dental Discharger* means 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 discharge wastewater to a publicly owned treatment works (POTW).

(f) *Duly Authorized Representative* is defined in 40 CFR 403.12(l)(3)

(g) *Existing Sources* means a dental discharger that is not a new source.

(h) *Mobile unit* means a specialized mobile self-contained van, trailer, or equipment used in providing dentistry services at multiple locations.

(i) *New Sources* means a dental discharger whose first discharge to a POTW occurs after July 14, 2017.

(j) *Pollution control facility (PCF)* means a treatment works, as defined by section 212 of the Act (33 USC 1292), which is owned by the city. This definition includes any devices or systems used in the collection, storage, treatment, recycling, and reclamation of sewage or industrial wastes of a liquid nature and any conveyances, which convey wastewater to a treatment plant. Also known as *Publicly owned treatment works* or *POTW*.

### **C. Pretreatment standards for existing sources (PSES).**

No later than July 14, 2020, any existing source subject to this ordinance must achieve the following pretreatment standards:

(a) Removal of dental amalgam solids from all amalgam process wastewater by one of the following methods:

(1) Installation, operation, and maintenance of one or more amalgam separators that meet the following requirements:

(i) Compliant with either 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 International Organization for Standardization (ISO) 11143 Standard (2008) or subsequent versions so long as that version requires amalgam separators to achieve at least a 95% removal efficiency. Compliance must be assessed by an accredited testing laboratory under ANSI's accreditation program for product certification or a testing laboratory that is a signatory to the International Laboratory Accreditation Cooperation's Mutual Recognition Arrangement. The testing laboratory's scope of accreditation must include ANSI/ADA 108-2009 or ISO 11143.

(ii) The amalgam separator(s) must be sized to accommodate the maximum discharge rate of amalgam process wastewater.

(iii) A dental discharger subject to this ordinance that operates an amalgam separator that was installed at a dental facility prior to June 14, 2017, satisfies the requirements of paragraphs (a) (1)(i) and (ii) of this section until the existing separator is replaced as described in paragraph (a)(1)(v) of this section or until June 14, 2027, whichever is sooner.

(iv) The amalgam separator(s) must be inspected in accordance with the manufacturer's operating manual to ensure proper operation and maintenance of

the separator(s) and to confirm that all amalgam process wastewater is flowing through the amalgam retaining portion of the amalgam separator(s).

(v) In the event that an amalgam separator is not functioning properly, the amalgam separator must be repaired consistent with manufacturer instructions or replaced with a unit that meets the requirements of paragraphs (a)(i) and (ii) of this section as soon as possible, but no later than 10 business days after the malfunction is discovered by the dental discharger, or an agent or representative of the dental discharger. The dental discharger is responsible for notifying the City of Muskogee pretreatment division upon replacement of an amalgam separator. The City of Muskogee shall require the replacement of a malfunctioning amalgam separator if discovered during inspection of a dental facility.

(vi) The amalgam retaining units must be replaced in accordance with the manufacturer's schedule as specified in the manufacturer's operating manual or when the amalgam retaining unit has reached the maximum level, as specified by the manufacturer in the operating manual, at which the amalgam separator can perform to the specified efficiency, whichever comes first.

(2) Installation, operation, and maintenance of one or more amalgam removal device(s) other than an amalgam separator. The amalgam removal device must meet the following requirements:

(i) 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.

(ii) 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  $\mu\text{m}$  sieve but which do not pass through a 500  $\mu\text{m}$  sieve, 10 percent by mass of particles that pass through a 500  $\mu\text{m}$  sieve but which do not pass through a 100  $\mu\text{m}$  sieve, and 30 percent by mass of particles that pass through a 100  $\mu\text{m}$  sieve. Each of these three specified particle size distributions must contain a representative distribution of particle sizes.

(iii) The device(s) must be sized to accommodate the maximum discharge rate of amalgam process wastewater.

(iv) The device(s) must be accompanied by the manufacturer's manual providing instructions for use including the frequency for inspection and collecting

container replacement such that the unit is replaced once it has reached the maximum filling level at which the device can perform to the specified efficiency.

(v) The device(s) must be inspected in accordance with the manufacturer's operation manual to ensure proper operation and maintenance; including confirmation, that amalgam process wastewater is flowing through the amalgam separating portion of the device(s).

(vi) In the event that a device is not functioning properly, it must be repaired consistent with manufacturer instructions or replaced with a unit that meets the requirements of paragraphs (a) (2) (i) through (iii) of this section as soon as possible, but no later than 10 business days after the malfunction is discovered by the dental discharger, or an agent or representative of the dental discharger. The dental discharger must notify the city of Muskogee pretreatment division when a replacement unit is installed.

(vii) The amalgam retaining unit(s) of the device(s) must be replaced as specified in the manufacturer's operating manual, or when the collecting container has reached the maximum filling level, as specified by the manufacturer in the operating manual, at which the amalgam separator can perform to the specified efficiency, whichever comes first.

(viii) The demonstration of the device(s) under paragraphs (a) (2) (i) through (iii) of this section must be documented in the One-Time Compliance Report.

(b) Implementation of the following best management practices (BMPs):

(1) Waste amalgam including, but not limited to, dental amalgam from chair-side traps, screens, vacuum pump filters, dental tools, cuspidors, or collection devices, must not be discharged to the PCF.

(2) Dental unit water lines, chair-side traps, and vacuum lines that discharge amalgam process wastewater to the PCF must not be cleaned with oxidizing or acidic cleaners, including but not limited to bleach, chlorine, iodine and peroxide that have a pH lower than 6 or greater than 8.

(c) All material is available for inspection at EPA's Water Docket, EPA West, 1301 Constitution Avenue NW., Room 3334, Washington, DC 20004, Telephone: 202-566-2426, and is available from the sources listed below.

(1) The following standards are available from the American Dental Association (ADA), 211 East Chicago Ave., Chicago IL 60611-2678, Telephone 312-440-2500, *and* <http://www.ada.org>.

(i) ANSI/ADA Specification No. 108:2009, American National Standard/American Dental Association Specification No. 108 Amalgam Separators. February 2009.

(ii) ANSI/ADA Specification No. 108:2009 Addendum, American National Standard/American Dental Association Specification No. 108 Amalgam Separators, Addendum. November 2011.

(2) The following standards are available from the American National Standards Institute (ANSI), 25 West 43rd Street, 4th Floor, New York, NY 10036, Telephone 212-642-4900, <http://webstore.ansi.org>.

(i) International Standard ISO 11143:2008, Dentistry—Amalgam Separators. Second edition, July 1, 2008.

**D. Pretreatment standards for new sources (PSNS).**

As of July 14, 2017, any new source subject to this ordinance must comply with the requirements of §441.30(a) and (b) and the reporting and recordkeeping requirements of §441.50.

**E. Reporting and recordkeeping requirements.**

(a) Dental Dischargers subject to this part must comply with the following reporting requirements in lieu of the otherwise applicable requirements in 40 CFR 403.12(b), (d), (e), and (g).

(1) *One-Time Compliance Report deadlines.* For existing sources, a One-Time Compliance Report must be submitted to the Control Authority no later than October 12, 2020, or 90 days after a transfer of ownership. For new sources, a One-Time Compliance Report must be submitted to the Control Authority no later than 90 days following the introduction of wastewater into the PCF.

(2) *Signature and certification.* The One-Time Compliance Report must be signed and certified by a responsible corporate officer, a general partner or proprietor if the dental discharger is a partnership or sole proprietorship, or a duly authorized representative in accordance with the requirements of 40 CFR 403.12(l).

(3) *Contents.* (i) The One-Time Compliance Report for dental dischargers subject to this ordinance that do not place or remove dental amalgam as described at §441.10(f) must include the: facility name, physical address, mailing address, contact information, name of the operator(s) and owner(s); and a certification statement that the dental discharger does not place dental amalgam and does not remove amalgam except in limited circumstances.

(ii) The One-Time Compliance Report for dental dischargers subject to the standards of this part must include:

(A) The facility name, physical address, mailing address, and contact information.

(B) Name(s) of the operator(s) and owner(s).

(C) A description of the operation at the dental facility including: The total number of chairs, the total number of chairs at which dental amalgam may be present in the resulting wastewater, and a description of any existing amalgam separator(s) or equivalent device(s) currently operated to include, at a minimum, the make, model, year of installation.

(D) Certification that the amalgam separator(s) or equivalent device is designed and will be operated and maintained to meet the requirements specified in §441.30 or §441.40.

(E) Certification that the dental discharger is implementing BMPs specified in §441.30(b) or §441.40(b) and will continue to do so.

(F) The name of the third-party service provider that maintains the amalgam separator(s) or equivalent device(s) operated at the dental office, if applicable. Otherwise, a brief description of the practices employed by the facility to ensure proper operation and maintenance in accordance with §441.30 or §441.40.

(4) *Transfer of ownership notification.* If a dental discharger transfers ownership of the facility, the new owner must submit a new One-Time Compliance Report to the Control Authority no later than 90 days after the transfer.

(5) *Retention period.* As long as a Dental Discharger subject to this part is in operation, or until ownership is transferred, the Dental Discharger or an agent or representative of the dental discharger must maintain the One-Time Compliance Report required at paragraph (a) of this section and make it available for inspection in either physical or electronic form.

(b) Dental Dischargers or an agent or representative of the dental discharger must maintain and make available for inspection in either physical or electronic form, for a minimum of three years:

(1) Documentation of the date, person(s) conducting the inspection, and results of each Inspection of the amalgam separator(s) or equivalent device(s), and a summary of follow-up actions, if needed.

(2) Documentation of amalgam retaining container or equivalent container replacement (including the date, as applicable).

(3) Documentation of all dates that collected dental 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 treatment, storage or disposal facility receiving the amalgam retaining containers.

(4) Documentation of any repair or replacement of an amalgam separator or equivalent device, including the date, person(s) making the repair or replacement, and a description of the repair or replacement (including make and model).

(5) Dischargers or an agent or representative of the dental discharger must maintain and make available for inspection in either physical or electronic form the manufacturers operating manual for the current device.

(6) Dental dischargers subject to all requirements of this ordinance will submit amalgam separator maintenance, service and disposal records listed above to the City of Muskogee annually every May 30 using forms provided by the City.

#### **F. Inspection**

- (a) The Public works director or his representative shall complete an initial inspection of all dental facilities that are required to submit a one-time compliance form. Dental Dischargers that do not place dental amalgam, and do not remove amalgam except in limited emergency or unplanned, unanticipated circumstances, will be inspected to verify accuracy of one-time compliance form and also required to provide information on how waste amalgam, if collected, is disposed of properly in accordance with 40CFR 261.5 (g)(3).
- (b) The city shall have the right to enter the facilities of a dental discharger to ascertain whether the purpose of this article is being met and whether the dental facility is complying with all the requirements thereof. Dental dischargers shall allow the Public Works Director or his representative's ready access to all parts of the premises for the purpose of inspection, sampling, records examination and copying, and the performance of any additional duties.
- (c) Where a Dental Discharger has security measures in force that require proper identification and clearance before entry into its premises, the Dental Discharger shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, personnel from the city, state and EPA will be permitted to enter without delay, for the purposes of performing their specific responsibilities.

#### **G. Enforcement Remedies**

- (a) Dental Dischargers in violation of this article will be subject to the Administrative or Judicial Enforcement remedies listed in Article V Division 10 Division 11 and Division 12 of this ordinance.

**SECTION 2. SEVERABILITY.** Should any section, subsection, sentence, provision, clause or phrase hereof be held invalid, void or unconstitutional for any reason, such holding shall not render invalid, void or unconstitutional any other section, subsection, sentence, provision, clause or phrase of this ordinance, and the same are deemed severable for this purpose.



**SECTION 3. REPEALER.** All ordinances or parts of ordinances in direct conflict herewith are repealed to the extent of conflict only.

**SECTION 4. EMERGENCY.** This ordinance being designated to protect the public health, safety, and welfare of the inhabitants of the City of Muskogee, Oklahoma, and its passage being immediately necessary, an emergency is hereby declared to exist and by reason whereof this ordinance shall take effect immediately upon its passage, approval and publication as provided by law.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MUSKOGEE, OKLAHOMA, THIS 9<sup>th</sup> DAY OF November, 2020.

CITY OF MUSKOGEE

Clarence Coleman  
MAYOR

ATTEST:



Tammy L. Tracy  
TAMMY L. TRACY, CITY CLERK  
(seal)

Approved as to form and legality this 10<sup>th</sup> day of NOV, 2020.

Roy Tucker  
ROY TUCKER, CITY ATTORNEY



City of Muskogee  
Industrial Pretreatment  
5000 E. Hancock, Muskogee Ok, 74403  
(918)684-6239, (918)684-6240 Fax (918)684-6394

**Effluent Limitations Guidelines and Standards for the Dental Office Category  
ONE-TIME COMPLIANCE REPORT FOR DENTAL DISCHARGERS  
40 CFR 441.50**

**Instructions:**

The following contains the minimum information dental facilities must submit in a one-time compliance report as required by the Effluent Limitations Guidelines and Standards for the Dental Office Category ("Dental Amalgam Rule"). Please submit this one-time compliance report to The City of Muskogee Industrial Pretreatment office at the address listed above. See the applicability section of 40 CFR part 441 to determine if your facility is subject to this federal regulation.

**General Information**

Name of Dental Facility :			
Physical Address of Dental Facility			
City:		State:	Zip:
Mailing Address			
City:		State:	Zip:
Facility Contact			
Phone:		Email:	
Names of Owner(s):			
Names of Operator(s) if different from Owner(s):			

**Applicability: Please Select One of the Following**

<input type="checkbox"/>	This facility is a dental discharger subject to this rule (40 CFR Part 441) and it places or removes dental amalgam. <i>Complete sections A, B, C, D, and E</i>
<input type="checkbox"/>	This facility is a dental discharger subject to this rule and (1) it does not place dental amalgam, and (2) it does not remove amalgam except in limited emergency or unplanned, unanticipated circumstances. <i>Complete section E only</i>
<b>(Also, select if applicable) Transfer of Ownership (§ 441.50(a)(4))</b>	
<input type="checkbox"/>	This facility is a dental discharger subject to this rule (40 CFR Part 441), and it has previously submitted a one-time compliance report. This facility is submitting a new One Time Compliance Report because of a transfer of ownership as required by § 441.50(a)(4).

**Section A**

**Description of Facility**

Total number of chairs:		
Total number of chairs at which amalgam may be present in the resulting wastewater (i.e., chairs where amalgam may be placed or removed):		
YES <input type="checkbox"/>	NO <input type="checkbox"/>	The facility discharged amalgam process wastewater prior to July 14th, 2017 under any ownership.

**Section B**

**Description of Amalgam Separator or Equivalent Device**

<input type="checkbox"/>	The dental facility has installed one or more ISO 11143 (or ANSI/ADA 108-2009) compliant amalgam separators (or equivalent devices) that captures all amalgam containing waste at the following number of chairs at which amalgam placement or removal may occur:	<i>Chairs:</i>
<input type="checkbox"/>	The dental facility installed prior to June 14, 2017 one or more existing amalgam separators that do not meet the requirements of § 441.30(a)(1)(i) and (ii) at the following number of chairs at which amalgam placement or removal may occur: I understand that such separators must be replaced with one or more amalgam separators (or equivalent devices) that meet the requirements of § 441.30(a)(1) or § 441.30(a)(2), after their useful life has ended, and no later than June 14, 2027, whichever is sooner.	<i>Chairs:</i>
	<b>Make</b>	<b>Model</b>
		<b>Year of installation</b>
<input type="checkbox"/>	My facility operates an equivalent device.	

Make	Model	Year of installation	Average removal efficiency of equivalent device, as determined per § 441.30(a)(2)- iii.

**Section C**

**Design, Operation and Maintenance of Amalgam Separator/Equivalent Device**

<input type="checkbox"/>	YES	I certify that the amalgam separator (or equivalent device) is designed and will be operated and maintained to meet the requirements in § 441.30 or § 441.40.
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A third-party service provider is under contract with this facility to ensure proper operation and maintenance in accordance with § 441.30 or § 441.40.

<input type="checkbox"/>	YES	Name of third-party service provider (e.g. Company Name) that maintains the amalgam separator or equivalent device (if applicable):	
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<input type="checkbox"/>	NO	If none, provide a description of the practices employed by the facility to ensure proper operation and maintenance in accordance with § 441.30 or § 441.40.
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*Describe Amalgam Disposal Practices:*

*Name, Address, Phone of Disposal Company:*

**Section D**

**Best Management Practices (BMP) Certifications**

<input type="checkbox"/>	<p>The above named dental discharger is implementing the following BMPs as specified in § 441.30(b) or § 441.40 and will continue to do so.</p> <ul style="list-style-type: none"> <li>• Waste amalgam including, but not limited to, dental amalgam from chair-side traps, screens, vacuum pump filters, dental tools, cuspidors, or collection devices, must not be discharged to a publicly owned treatment works (e.g., municipal sewage system).</li> <li>• Dental unit water lines, chair-side traps, and vacuum lines that discharge amalgam process wastewater to a publicly owned treatment works (e.g., municipal sewage system) must not be</li> </ul>
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cleaned with oxidizing or acidic cleaners, including but not limited to bleach, chlorine, iodine and peroxide that have a pH lower than 6 or greater than 8 (i.e. cleaners that may increase the dissolution of mercury).

**Section E  
Certification Statement**

Per § 441.50(a)(2), the One-Time Compliance Report must be signed and certified by a responsible corporate officer, a general partner or proprietor if the dental facility is a partnership or sole proprietorship, or a duly authorized representative in accordance with the requirements of § 403.12(l).

*"I am a responsible corporate officer, a general partner or proprietor (if the facility is a partnership or sole proprietorship), or a duly authorized representative in accordance with the requirements of § 403.12(l) of the above named dental facility, and certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

Authorized Representative Name (print name):			
Phone:		Email:	
Authorized Representative Signature		Date	

**Retention Period; per § 441.50(a)(5)**

As long as a Dental facility subject to this part is in operation, or until ownership is transferred, the Dental facility or an agent or representative of the dental facility must maintain this One Time Compliance Report and make it available for inspection in either physical or electronic form.