## DENTAL AMALGAM PROGRAM GENERAL PERMIT

# ISSUANCE DATE: May 21, 2020 EXPIRATION DATE: May 20, 2030

# AUTHORIZATION TO DISCHARGE UNDER THE METROPOLITAN CODE OF LAWS TITLE 15.60

In compliance with the provision of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et. seq.; the "Act"), and with the provisions of Metropolitan Code of Laws Chapter 15.60:

This general permit allows approved facilities to discharge wastewater used in their dental practices to the Metro Nashville Department of Water & Sewerage Services' Collection System, in accordance with monitoring requirements, maintenance requirements, effluent limitations, and other conditions set forth in the General Dental Amalgam Permit found at ECO.nashville.gov, Section 4.

This permit shall not be reassigned, transferred, or sold to a new owner, new user, or for different premises, without, at a minimum, prior notification to the Department of Water & Sewerage Services and a provision of a copy of the existing control mechanism to the new owner or operator.\*

\*Approved Notification Methods: written notification subject DAP to email: <u>ECO@nashville.gov</u>; mail to: Metro Water Services, 1360 County Hospital Road, Nashville, TN 37218; or fax: 615-862-4581.

A violation of this permit constitutes a violation of Metropolitan Code of Laws Chapter 15.60 and shall subject the permittee to the applicable enforcement proceeding(s).

Department of Water/Sewerage Services



### PART I - WASTEWATER DISCHARGE LIMITS

A. All customers of Metro Water Services are subject to the regulations of the city's Sewer Use Ordinance (Metropolitan Code Chapter 15.60) and Operational Division Policy No. 2008-01 Pollutant discharge limits are listed below for your convenience

### B. <u>Relevant Wastewater Pollutant Discharge Concentration Limits</u>

| Parameter | 24-hour composite Daily<br>Limit (mg/L) | Instantaneous Grab Limit<br>(mg/L) |
|-----------|---|------------------------------------|
| Copper    | 5.0                                     | 10.0                               |
| Mercury   | 0.0055                                  | 0.0110                             |
| Silver    | 0.065                                   | 0.13                               |
| Zinc      | 5.0                                     | 10.0                               |

Table 1: Based on Operational Division Policy No. 2008-01 (Local Limits) found at ECO.nashville.gov, 1.f.

#### C. Relevant Prohibited Discharges

- 1. Wastewater containing any element or compound which is not adequately removed by the treatment works which is known to be an environmental hazard;
- 2. Wastewater causing conditions at or near Metro's treatment works which violate any statute, rule or regulation of any public agency of this state or the United States
- 3. Pollutants which cause corrosive structural damage to the POTW, but in no case discharges with a pH lower than 5.0 or higher than 10.0;
- 4. Solid or viscous pollutants in amounts which cause obstruction to the flow of the sewers, or other interference with the operation of or which cause injury to the POTW, including waxy or other materials which tend to coat and clog a sewer line or other appurtenances thereto;
- 5. Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat such quantities that the temperature of the influent at the treatment works exceeds 40 degrees Centigrade (104 degrees Fahrenheit). Unless a higher temperature is allowed in the User's wastewater discharge permit, no User shall discharge into any sewer line or other appurtenance of the POTW wastewater with a temperature exceeding 65.5 degrees Centigrade (150 degrees Fahrenheit);
- 6. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
- 7. Any trucked or hauled pollutants except at discharge points designated by the POTW;
- 8. Noxious or malodorous liquids, gases, solids, or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance or a hazard to life, or to prevent entry into the sewers for maintenance or repair;
- 9. Wastewater containing any radioactive wastes or isotopes except in compliance with applicable State or Federal regulations;
- 10. Sludges, screenings, or other residues from the pretreatment of industrial wastes;
- 11. Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail toxicity test;

- 12. Detergents, surface-active agents, or other substances which that might cause excessive foaming in the POTW;
- 13. Unused or out-dated pharmaceuticals;

## PART II – COMPLIANCE WITH DENTAL AMALGAM PROGRAM POLICY

The validity of this permit is conditional upon the permitee's compliance with Operational Dental Amalgam Program (DAP) Policy which is reproduced below for your reference:

A. Scope & Purpose: To prevent the discharge of toxic metals used in dental amalgams (e.g. mercury, silver) into the publically owned treatment works (POTW). The Metro Water Services (MWS) DAP Policy was originally adopted July 14, 2017 to comply with federal rule EPA-HQ-OW-2014-0693 #2017-12338 and 40 CFR441.

#### B. **Definitions:**

- 1. <u>Amalgam:</u> A metallic alloy of mercury and other metal(s), such as silver, tin, copper, or zinc.
- 2. <u>Amalgam Separator Technology (AST)</u>: Any in-line system for separating and retaining waste amalgam suspended in wastewater prior its exit from the DO and entering the MWS sewer system.
- 3. <u>American Dental Association (ADA</u>): Professional organization for dental practice.
- 4. <u>Best Management Practice (BMP)</u>: Industry standard methods or techniques that are regarded as superior to other means for the mitigation of water pollution.
- 5. <u>Blackwater</u>: Wastewater containing human waste from sanitary fixtures such as toilets and urinals.
- 6. <u>Capture device</u>: A replaceable capsule fitted for AST that holds the separator's solid amalgam waste and is removed and sent for proper disposal/recycling when its capacity is reached.
- 7. <u>Dental Office (DO)</u>: Any establishment, business, or facility practicing the installation or removal of dental amalgam. Other dental facilities that do not install or remove amalgam (e.g. maxillofacial surgeons, periodontists, orthodontists) are not included in this definition.
- 8. <u>Graywater</u>: Refers to all other wastewater other than black water as defined in this section.
- 9. <u>Metro Water Services (MWS)</u>: The Department of the Metropolitan Government of Nashville and Davidson County, Tennessee responsible for all matters regarding drinking water and wastewater within its jurisdiction, or its designee. Its jurisdiction may include independent municipalities without Davidson County that utilize its POTW. Its jurisdiction does not include facilities within Davidson County that do not utilize its POTW.
- 10. <u>Notice of Violation (NOV)</u>: A document addressed to the DO that a practice, action, or wastewater discharge is noncompliant with regulations or policies codified in the SUO. A NOV informs the user that an action is required of the user within a

specified timeframe designated by MWS risk escalating enforcement action against the DO.

- 11. <u>POTW (Publicly Owned Treatment Works)</u>: A POTW is a wastewater treatment facility and its entire infrastructure that is owned by a state or municipality.
- 12. <u>Series:</u> (Amalgam separators installed in series): AST devices that are installed one after another in a row and are connected by plumbing pipe.
- 13. <u>Sewer Use Ordinance (SUO)</u>: Chapters 15.04 and 15.60 of the *Code of Ordinances of the Metropolitan Government of Nashville and Davidson County, Tennessee.*
- 14. <u>Toxic Metals</u>: Including "Heavy Metals," are individual metals and metal compounds that negatively affect people's health, or may build up in biological systems and become a significant health hazard.
- 15. <u>Vaccuum:</u> A negative pressure waste removal system commonly used in dental practices.

## C. Operation Requirements:

- 1. *Applicability* 
  - i. All existing DOs are required to have AST installed, maintained and operating properly in order to receive a DAP permit.
  - ii. Any dental practice that does not fit the definition of a DO (see 2.g) must also apply for a DAP permit and prove exemption.
- 2. *Wastestream* AST is required to receive any graywater that may receive amalgam waste. This includes fixtures such as chair-side traps and vacuum lines. No DO will allow amalgam wastewater to bypass the AST for any reason.
- 3. *Record keeping* All DOs will be required to maintain records of cleaning, maintenance, and personnel training of AST or its capture device. Maintenance records include, at a minimum, the date of cleaning/maintenance, company or person conducting the cleaning/maintenance, and documents regarding the proper disposal of its capture device.
- 4. *Records availability* AST maintenance records will be available on the DO premises so they can be provided to Metro Water Services or their designee, and/or the Metro Health Department. The DO shall maintain these records for three (3) years.
- 5. Training
  - i. At least two members of the DO staff should be trained in the operation and maintenance of the AST.
  - ii. All staff members handling amalgam waste must be trained in its disposal.
  - iii. All training documents must be included in the AST records to be checked against maintenance logs.
- 6. *Solids* All DOs are required to dispose of AST waste solids into an approved capture device where it must remain until received at a certified disposal site.
- 7. *Certification* All DOs are required to have AST inspected and certified. Certification can only be performed by a MWS-approved inspector. If the AST

"Passes" the certification requirement, then no further action is required. If the AST "Fails" the certification requirement, then a corrective action response is required from the DO owner or authorized representative to MWS.

\*Approved Notification Methods: verbal notification call 615-862-4591; and/or written notification subject DAP Certification Inspection request: <u>ECO@nashville.gov</u>; mail to: Metro Water Services, 1360 County Hospital Road, Nashville, TN 37218; or fax: 615-862-4581.

- 8. *Certification Failure* If AST fails certification, the DO is required to submit a detailed "Corrective Action Response" to MWS within 30 days. The "Corrective Action Response" must include the reason for the failed certification, what corrective action will be taken to address the failure, and the date the corrective action will be completed.
- 9. *Cleaning* AST must be cleaned as per manufacturer's specifications. If a representative from MWS inspects the AST and determines that this condition has not been met, the DO may receive a Notice Of Violation (NOV.) Capture devices must be sealed from leaks during transport to their approved disposal facility.
- 10. *Prohibition of Certain Cleansers* Use of oxidizing cleaning agents in the wastewater lines leading to AST is not permitted. Examples of such agents are bleach, chlorine, iodine, peroxide, or any other detergents with pH <6 or >8. This includes the rinse waste from using such agents on non-wastewater lines.
- 11. *Prohibition of Flushes* Flushing amalgam waste from chair-side traps, screens, vacuum pump filters, dental tools, or collection devices into any drain is not permitted.
- 12. *BMPs* DO must remain aware of and comply with other BMPs endorsed by the ADA with regard to amalgam waste control.

#### **D.** Installation Requirements

- 1. New Dental Offices, Upgrading of Existing Dental Offices, or Change of Ownership of Existing Dental Offices
  - i. Any new DO, upgrading of an existing DO or change of ownership of existing DO will be required to install and maintain AST.
  - ii. DOs in one of these categories must submit a DAP plan to MWS for approval.
  - iii. The DAP plan includes identification of all plumbing fixtures and drains, plans for the AST and its location, and waste management plan.
  - iv. Metro Water Services will review the DAP plan and approve or make changes as necessary to aid in the prevention of amalgam discharge.

- 2. *Graywater only* New construction of DOs shall have separate sanitary (restroom) and amalgam waste lines. The amalgam waste lines shall be plumbed to AST. No blackwater shall be plumbed to the AST.
- 3. *Approved AST* MWS accepts any AST that is tested by ISO 11143 to be 98% efficient.
- 4. Installation
  - i. AST must be installed according to its manufacturer's specifications.
  - ii. AST must be permanently accessible for cleaning, maintenance, repair and inspection.
  - iii. AST should be installed as close to discharge point as practical.
  - iv. AST must be installed so that its manufacturer, model number, limits, date of manufacture, capture device, flow restrictor (if included), inlet, and outlet are visible.
- 5. *Sizing* DOs must install AST of sufficient capacity to receive the maximum amount of potential flow, based upon its manufacturer's specifications for retention time. If lack of space makes it impossible to install AST of sufficient size, AST installed in series may be acceptable.
- 6. *Inspection* All new DOs and DOs that have upgraded their facilities must contact MWS for final inspection and approval of the AST. This approval serves as its first annual certification. Failure of the DO to contact MWS in this regard may result in escalation of enforcement action.

## E. Rights and Responsibilities

- 1. *Responsibility* All matters pertaining to compliance with the DAP permit are the responsibility of the DO owner.
- 2. *Compliance* Any violation of the policy as stated herein may be considered by MWS to be noncompliance, and a NOV may be issued to the responsible DO.
- 3. Right of Entry
  - i. MWS shall have the right to enter the premises of any DO to determine whether the DO is complying with the requirements of this policy and/or the SUO.
  - ii. DOs shall allow MWS, upon presentation of proper credentials, full access to all parts of the premises for the purpose of inspection, monitoring, and/or records examination.
  - iii. Unreasonable delays in allowing MWS personnel access to the DO premises shall be a violation of this policy and the SUO.
- 4. *Monitoring* MWS may require that the DO install monitoring or additional pretreatment equipment deemed necessary for compliance with this policy and/or SUO.
- 5. *High Concentration Levels* In the event that MWS monitors discharge from the DO into the POTW and determines through laboratory analysis that its metal concentrations exceed violable limits, further enforcement action may be warranted.

- 6. *Fee Option* MWS may charge inspection, monitoring, assessment, impact, and permit fees to the DOs to get reimbursement for DAP costs.
- 7. *Enforcement Action* When DOs fail to respond to a NOV, enforcement action may be warranted. Such action includes, but is not limited to, compliance orders, penalty assessments, and termination of DAP permit. Please refer to DO-ERG for more information.
- 8. No Grandfathering
  - i. Existing DOs will be phased into compliance through their DAP permit and a Compliance Schedule.
  - ii. The Compliance Schedule will be an Agreed Schedule, with all DOs coming into compliance with this policy by July 14, 2020.
  - iii. Existing DOs with AST already installed may keep it in place if:
    - 1. it meets ISO 11143 testing at  $\geq$ 95% removal efficiency
    - 2. it has not operated for >10 years from its installation date
    - 3. all other conditions of the DAP policy are met
- 9. *Change of Ownership or change of Address:* Any existing permittee that undergoes a change in ownership shall comply with all conditions of this general permit, including the installation and certification of an approved high efficiency amalgam separator, within 90 days of the change of ownership, where required.

\*See Part II.c.7 of this permit for approved notification requirement

## PART III – ACCIDENTAL DISCHARGE BEYOND LIMITS

A. In the event that the permittee expects discharge to exceed the limitations of this permit (aka a slug discharge) they are required to inform Metro Water Services as soon as possible within 24 hours of the event and describe all factors that resulted in such discharge. Failing to do so is a violation of this permit and the Sewer Use Ordinance. Fees or surcharges may apply.

\*Approved Notification Methods: verbal notification call 615-862-4591; and/or written notification subject DAP Accidental Discharge to email: <u>ECO@nashville.gov</u>; mail to: Metro Water Services, 1360 County Hospital Road, Nashville, TN 37218; or fax: 615-862-4581.

#### PART IV – VIOLATIONS AND PENALTIES

- A. Any person including, but not limited to industrial/commercial users, who does any of the following acts or omissions shall be subject to a civil penalty of up to ten thousand (\$10,000) per day for each day during which the act or omission continues or occurs, in accordance to T.C.A. 69-3-125:
- 1. Violates an effluent standard or limitation imposed by a pretreatment program;

- 2. Violate the terms and conditions of a permit issued pursuant to a pretreatment program;
- 3. Fails to complete a filing requirement of a pretreatment program;
- 4. Fails to allow or perform an entry, inspection, monitoring or reporting requirement of a pretreatment program;
- 5. Fails to pay user or cost recovery charges imposed by a pretreatment program; or
- 6. Violates a final determination or order of the local hearing authority or local administrative officer.
- B. The Metro Water Services' Dental Office Enforcement Response Guide will be used to enforce compliance orders or assess penalties for violations to this permit. This guide can be found on the website: **ECO.nashville.gov**, **Section 1**.