



DENTAL AMALGAM RULE

Introduction

On August 8, 2019, at the Region VI Pretreatment Association (RVIPA) workshop, the Texas Commission on Environmental Quality (TCEQ) Pretreatment team presented their interpretation of and audit expectations for implementing the Effluent Guidelines and Standards for Dental Office Point Source Category (Rule). The WEAT Pretreatment Knowledge Committee (Committee) believes that TCEQ's expectations for Control Authorities (CAs) far exceed the responsibilities for CAs that are described in the preamble to and the Rule that was published in the Federal Register on June 14, 2017.

This document presents a summary of background information about the development of the Rule, and the published preamble and Rule. Comments presented by Environmental Protection Agency (EPA) representatives about CAs' responsibilities for implementing the Rule are also, provided.

The background information, published preamble and Rule, as well as EPA representatives clearly describe the CAs' required responsibilities for this Rule as limited to receiving, reviewing, and retaining the One-Time Compliance Reports (OTCR). Responsibilities beyond these activities are discretionary for the CA's and should not be prescribed by TCEQ without valid justification and stakeholder input.

Rule Development Background

In October 2014, EPA proposed a Rule to establish Effluent Limitations Guidelines (ELGs) and Standards for the Dental Category to reduce mercury discharges to publicly owned treatment works (POTWs). The proposed Rule included new requirements for both dental dischargers and CAs. It created a new designation for dental dischargers, Dental Industrial User (DIU), and required the removal of 99% of total mercury from amalgam discharges. The DIU classification was intended to minimize the administrative and regulatory burdens of adding over 100,000 facilities to the National Pretreatment Program through, "the option of complying with monitoring and reporting requirements in Title 40 Code of Federal Regulations (40 CFR) Part 441.60, which are tailored for dental dischargers, in lieu of the otherwise applicable monitoring and reporting requirements in 40 CFR Part 403."¹

Although the discharge monitoring requirement, to which a significant industrial user (SIU) would typically be subject, was reduced, the CA would be responsible for annual review of compliance and quarterly assessment for significant non-compliance (SNC) criteria for each DIU. How the annual review was to be conducted and what was to be reviewed were not specified in the Rule, but inspection was required any time a DIU was determined to be out of compliance. EPA estimated that inspections would be required for 1 percent of DIUs, but as TCEQ pointed out in "Comments on Proposed Dental Office Effluent Limitations Guidelines," states that already have dental amalgam programs in place estimate the number of offices that would require inspection under the new Rule would be closer to 20 percent. Due to the new industrial classification, changes to 40 CFR Part 403 were also proposed.² The proposed changes to Part 403 defined DIU and specified the steps a POTW must take if a DIU was found to be out of compliance with the Rule. If a POTW determined a DIU was not in compliance, then, "the POTW must



immediately begin enforcement in accordance with its enforcement response plan.”¹ Furthermore, noncompliance that continued for more than 90 days triggered a dental facility to be classified as an SIU.

For these reasons, EPA received 210 comments to the proposed Rule. Many of the comments echoed TCEQ’s opinion that EPA greatly underestimated the costs to CAs to implement the new Rule. Furthermore, as noted by many comments, National Association of Clean Water Agencies (NACWA) and TCEQ included, EPA used the 1982 “50 POTW study” to determine the mercury loading in water bodies annually from POTWs. More recent data acquired by NACWA showed a much higher POTW treatment performance/removal efficiency, but EPA failed to either use the NACWA data or to collect its own data prior to calculating the cost effectiveness value of the Rule. NACWA’s data also demonstrated that POTWs are consistently meeting effluent and biosolids limitations, and many POTWs do not have issues with interference, pass through, or limitations on sludge disposal due to mercury. Finally, there was no obvious mechanism for returning a dental discharger classified as an SIU back to a DIU which could create a long-term resource burden for many CAs.

Preamble and Final Rule

The final Rule was published on June 14, 2017. It was obvious that EPA incorporated many of the comments to the proposed Rule by making drastic changes prior to issuing the final Rule. References to creating the new classification, DIU, were removed as were the changes to 40 CFR Part 403. All language regarding specific or required enforcement was removed as well. The preamble states, “...Control Authorities have discretion under the final Rule to determine the appropriate manner of oversight, compliance assistance, and enforcement.”³ It was made clear in the final Rule that dental dischargers are not SIUs or CIUs³ which eliminated requirements for permitting and annual inspections unless the CA chooses to do so. The EPA summarized, for this final rulemaking, that the CAs must receive the OTCRs from dental dischargers and retain that notification according to the standard records retention protocol contained in 40 CFR §403.12(o).^{3, 5}

As such it came as a surprise to the CAs, when at the RVIPA 2019 workshop, the TCEQ Pretreatment team presented their interpretation of the implementation of the Effluent Guidelines and Standards for Dental Office Point Source Category. During this presentation, CAs were informed that TCEQ expects CAs to submit a dental certification form as a non-substantial modification and “Enforce against dental dischargers that are determined to be out of compliance with 40 CFR Part 441”⁶. In addition to the enforcement requirement, imposed by TCEQ and not the EPA, TCEQ further stated that “during a pretreatment audit or pretreatment compliance inspection (PCI), the TCEQ would expect to see the following: a determination of whether or not the dental facility has to complete an Industrial User Survey for the Master Industrial User (IU) Inventory; Master IU Inventory to include a list of dentists (and addresses) that have been identified; OTCRs submitted by dental dischargers, and; documentation of enforcements actions taken, if needed, and quarterly evaluation of dental dischargers to determine if in SNC.”⁶

The interpretation that the TCEQ Pretreatment Team has presented to CAs is in contradiction with what the EPA has clearly stated, both in regulation, and during multiple public presentations on the



interpretation of this Rule. Specifically, the opening paragraph in the preamble of the Federal Register publication states that the rule includes provisions to significantly reduce and streamline the oversight and reporting requirements in EPA's General Pretreatment Regulations that would otherwise apply as a result of this rulemaking.³ The Rule does not include a reference to or requirement for a certification form. Both EPA and TCEQ have published example forms on the internet for reference for both CAs and dental dischargers. These forms can be helpful to dentists in that they insure all the required information is submitted, but as no one form or format is required, dentists should have the flexibility to submit their OTCR in a format that is most convenient for them. Therefore, submitting a specific form as a non-substantial modification to a CAs program could increase the time necessary to implement the Rule. For instance, if a dentist finds the EPA form on the internet and submits that to meet the Rule requirements, then that should be sufficient, regardless of whether it is the form the CA is employing, as the EPA form has all required elements of the Rule.

The current definition limits the applicability of SNC on IUs to only three of the SNC criteria, 40 CFR §403.8(f)(2)(viii)(C), (D), and (H). This does not include late reporting, which is criteria (F). As the CAs responsibility is to receive, review, and retain the OTCR, it is unclear what SNC evaluation TCEQ would request to see during an audit or PCI. Additionally, SNC publication would require listing the dental discharger in pretreatment annual reports and the Rule is specifically designed to prevent treating dental dischargers as SIUs/CIUs and to leave enforcement options up to the CAs that regulate the dental dischargers. The preamble on this Rule making states that dental dischargers subject to this Rule must comply with an OTCR requirement specified in the final Rule in lieu of otherwise applicable reporting requirements in 40 CFR Part 403^{3, 4}. Submission of reports as specified in this Rule satisfies the reporting requirements in 40 CFR Parts 403 and 441⁶. That was expanded upon at the 2018 NACWA Pretreatment & Pollution Prevention conference, EPA representatives presented that CAs must only receive, review and retain the OTCRs, reaffirming the final rule preamble that states "[the] only incremental requirement associated with this rule is for the Control Authority to receive, review, and retain a One-time Compliance Report from dentists subject to this rule^{7, 3}

An anonymous survey conducted by the Committee received responses from 21 CAs in Texas which represents approximately 28% of the programs in Texas. In just those 21 jurisdictions alone, CAs estimate a total of 6,562 dental facilities. Using EPA's estimate of 10 minutes per facility for review¹, this represents 1,094 hours of CA resource time. The survey results also showed that none of the 21 respondents experiences pass through or interference or has limited sludge disposal options due to mercury. The Committee agrees with TCEQ that EPA should have gathered more recent data to calculate removal efficiencies at POTWS, especially as the analytical methods are much more sensitive now as compared to 1982. In the Draft 2018 Integrated Report - Potential Sources of Impairment and Concerns found on TCEQ's website, there are 24 segments identified with possible concerns for mercury, and not one of them implicates a municipal point source as the pollutant source. The vast majority are attributed to atmospheric deposition. It is the position of the Committee that enforcement of the Dental Amalgam program should follow the initial evaluation as set forth by the EPA contained within the final Rule and that the dental program should follow; receive, review, and retain unless a CA determines that increased oversight is necessary. By requiring enforcement at a level analogous to SIU enforcement, TCEQ would



place an enormous burden on CAs with little to no benefit. As POTWs are currently not experiencing pass through or interference, essentially CAs would be required to take enforcement on paper work violations that do not have any environmental impact.

Conclusion

It is the Committee's position that the information provided by the TCEQ Pretreatment Team, is that the TCEQ is placing an undue burden on CAs by misinterpreting the Rule as set forth by the EPA. In fact, TCEQ even stated in the public comment to the Rule making that "the TCEQ believes that the EPA significantly underestimated the cost and the resource burden to implement the proposed rule."² The EPA ELG Fact Sheet, EPA 820-F-16-014, clearly states that the dental facilities are to submit an OTCR and/or maintain an amalgam separator (if applicable), must not discharge scrap amalgam or use a certain kinds of cleaners for compliance.⁸ In December 2016, the EPA released a fact sheet on the new Rule clarifying that the Rule minimizes dental office reporting requirements and the administrative burden to federal, state, and local regulatory authorities responsible for oversight of the new requirements.⁵ EPA FAQs for CAs, EPA 800-F-18-002, reiterates that the CA has discretion to determine the appropriate oversight, compliance assistance and enforcement.⁵ Combined these documents substantiate the minimum oversight to receive, review, and retain the OTCR. By requiring CAs to perform the actions identified at the 2019 RVIPA Workshop by TCEQ, TCEQ will definitely place additional responsibilities on CAs at significant expense in time, money, and resources, contradicting the information presented by EPA regarding the rule.

As such, the Committee believes the implementation of the Dental Amalgam program should be left to the minimum as set forth by the EPA contained within the Rule, and the determination to increase oversight of dental dischargers should be left to the individual CAs. As stated by EPA, "the rule is designed to be self-implementing and it is the dentists' responsibility to know and comply with the rule."⁴ Further clarification was provided of this at the RVIPA workshop in August 2018 when the EPA summarized the Rule that the only incremental change for CAs is that they must receive the OTCRs from dental dischargers and retain that notification.⁴

¹ Effluent Limitations Guidelines and Standards for the Dental Category, 79 Fed. Reg. 79 63258-63286. (October 22, 2014).

² Texas Commission on Environmental Quality Comments on Proposed Dental Office Effluent Limitations Guidelines, EPA-HQ-OW-2014-0693-0372. (January 27, 2015).

³ Effluent Limitations Guidelines and Standards for the Dental Category, Fed. Rd. 82 27154-27178. (June 14, 2017).

⁴ Pickrel, Jan. (August, 2018). Dental Amalgam Rule Overview 40 CFR 441

⁵ Frequently Asked Questions for Control Authorities on the Dental Rule (40 CFR Part 441), EPA 800-F-18-002. (May, 2018).

⁶ Crespo, Erika. (August, 2019). Texas State Breakout Session

⁷ Pimpare, Jay. (May, 2018). Dental Amalgam Implementation Efforts in EPA Region I (New England)

⁸ Fact Sheet: Effluent Limitations Guidelines and Standards for Dental Offices, EPA 820-F-16-014. (December, 2016).



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