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October 7, 2013

Water Docket

U.S. Environmental Protection Agency

1200 Pennsylvania Avenue, NW

Washington, DC 20460

Via email: [OW-Docket@epa.gov](mailto:OW-Docket@epa.gov)

**Re: Docket ID No. EPA-HQ-OW-2010-0824, Preliminary 2012 Effluent Guidelines Program Plan and 2011 Annual Effluent Guidelines Review Report**

- The National Association of Clean Water Agencies (NACWA) appreciates the opportunity to comment on the Preliminary 2012 Effluent Guidelines Program Plan ("Preliminary Plan"). NACWA represents the interests of nearly 300 public clean water agencies nationwide. NACWA members operate highly successful pretreatment programs and are actively involved in efforts to reduce the quantities of pollutants that are discharged into the sewer system.

NACWA's comments below are related to the dental amalgam rule that is listed in the Preliminary Plan with a "TBD" schedule for both the proposed and final rule. In the Final 2010 Effluent Guidelines Program Plan (published on October 26, 2011), EPA announced a schedule of October 2011 for the proposed rule and October 2012 for the final rule. EPA has communicated to NACWA and to other stakeholders that the proposed rule has already been drafted, but that the rule has raised some concerns during informal interagency review with the White House's Office of Management and Budget (OMB). EPA continues to state that it plans to propose the rule despite the concerns raised by OMB, but so far there have been no signs that EPA is moving forward.

Because of the uncertainty created by EPA surrounding this rule – stating publicly that it plans to propose the rule, but making no noticeable progress – development of local amalgam separator programs has stalled. Publicly owned treatment works (POTWs) do not want to put a program in place that would need to be changed to comply with a federal rule. POTWs with existing, successful voluntary or mandatory dental amalgam separator programs are also concerned about needing to change their programs if a federal rule is finalized. Other POTWs are concerned about potential unnecessary costs to comply with a federal rule if they do not have problems with mercury discharges. NACWA therefore asks EPA to either drop this rule from consideration, or to formally submit the proposed rule to OMB for review.

### Previous Communications between NACWA and EPA

After EPA announced in 2010 that it would propose a dental amalgam rule, NACWA provided the Agency with input on pretreatment standards for dental amalgam on several occasions. NACWA's concerns about the implementation of a national pretreatment standard – which would affect the more than 100,000 dental offices in the U.S. and nearly all POTWs with a pretreatment program – are summarized in the Association's comment letter (dated November 23, 2011) about the Final 2010 Effluent Guidelines Program Plan. The primary concern was the burden that an amalgam separator rule would place on the POTW pretreatment programs that would be responsible for ensuring compliance at all dental facilities. NACWA also recommended that existing local amalgam separator programs be "grandfathered" into any new rule, so that POTWs with successful mandatory dental amalgam separator programs or other similar BMP programs could continue their existing programs.

At the NACWA National Pretreatment & Pollution Prevention Workshops in 2012 and 2013, NACWA and its public agency members reiterated to EPA Office of Science & Technology staff that many POTWs do not need a dental amalgam separator program to control mercury, and that local programs that are already in place are working well. NACWA has asked for an opportunity to review a copy of the draft proposal, but EPA has not granted this request, despite the fact that a private consultant has reportedly seen a draft.

From the information that NACWA has received from EPA about the contents of the draft rule, the Association still has concerns about its potential impacts on POTWs. These concerns were communicated by NACWA and its members during the 2013 NACWA Pretreatment & Pollution Prevention Workshop. NACWA understands that a new Dental Industrial User (DIU) category would be established, which would create less of a burden on POTWs than if every dental office was considered a Significant Industrial User (SIU). However, NACWA also understands that if a dental office does not comply with requirements, it would become a SIU. In some states, such as Oregon and North Carolina, POTWs must have a pretreatment program if they have any SIUs in their service area. Therefore, small POTWs in these states would need to establish an entire pretreatment program if even one dentist in their service area became a SIU through noncompliance. Even if all dental offices fully complied with requirements and remained DIUs, some state pretreatment programs could still force small POTWs that do not currently have pretreatment programs to regulate DIUs.

As NACWA members also expressed to EPA during the 2013 Pretreatment Workshop, POTWs with existing pretreatment programs are still concerned about the costs associated with establishing a dental amalgam separator program, even with the new DIU category. POTWs that already have amalgam separator programs in place are concerned that they will need to change the programs to meet the requirements of a federal rule, which may damage the relationships that they have established with the dental community.

### Existing Local Dental Amalgam Separator Programs are Successful

Many states and local governments have already established successful dental amalgam separator programs based on an established water quality need. Some examples of successful programs are as follows:

- The Narragansett Bay Commission (NBC) in Providence, Rhode Island, established a dental amalgam separator program in 2005 for the 90 dental facilities, representing 145 dentists, in its service area. NBC gave dentists the option of either installing a dental amalgam separator or sampling, and all of the facilities have chosen to install a separator. The dental facilities are required to submit annual

certification that they are complying with best management practices (BMPs). NBC inspects each dental facility every other years, and these inspections are announced due to the nature of the dental business.

NBC has seen drastic loading reductions since implementation of this program. Influent mercury has been reduced by 57% (from 13.3 lbs in 2005 to 5.7 lbs in 2012) at the Field's Point treatment facility and by 53% (from 5.6 lbs in 2005 to 2.6 lbs in 2012) at the Bucklin Point treatment facility.

- The Northeast Ohio Regional Sewer District (NEORSDD) in Cleveland, Ohio, has been addressing mercury issues since the mid-1990s and has developed and implemented an ongoing Pollutant Minimization Program (PMP). Early on in the program, a numeric local limit to achieve the 1.3 ppt water quality criterion in NEORSDD effluent was determined to be infeasible, and a narrative local limit was adopted instead. This limit requires significant dischargers of mercury into the sewer system, including dental offices, to implement BMPs to minimize the amount of mercury discharged. In 2010, NEORSDD received Great Lakes Restoration Initiative funding to reduce the amount of mercury emitted from its treatment plants. This funding was used to install amalgam separators in approximately 415 of the dental facilities in the NEORSDD service area in an effort to reduce the amount of mercury in the NEORSDD biosolids that are ultimately incinerated.

Due to NEORSDD's overall mercury reduction efforts, including amalgam separators at dental facilities, average annual influent mercury has decreased dramatically from 2005 to 2012 at its three treatment facilities: from 103 to 37 ng/L at the Westerly treatment plant, from 182 to 62 ng/L at the Southerly treatment plant, and from 150 to 36 ng/L at the Easterly treatment plant.

- Central Contra Costa Sanitary District (CCCSD) in Martinez, California, is part of the San Francisco Bay Area regional watershed permit for its municipal wastewater dischargers to meet the Total Maximum Daily Load (TMDL) for mercury adopted by the San Francisco Bay Regional Water Quality Control Board in 2006 and approved by EPA in 2008. The watershed permit requires that POTWs implement dental amalgam programs and that the programs meet specified performance criteria. CCCSD implemented its program in 2007 and as a result has seen a 74% reduction in its influent mercury, a 67% reduction in effluent mercury, and 77% reduction in its biosolids mercury.

The other Bay Area POTWs in the watershed permit have also seen reductions in their influent, effluent, and biosolids mercury levels. Each agency was allowed the flexibility to design its own programs, and the dental amalgam separator programs are part of larger mercury reduction strategies employed by the POTWs.

- The Western Lake Superior Sanitary District (WLSSD) in Duluth, Minnesota, has had a very successful mercury source reduction program in place since the 1990s to meet the low mercury limits imposed by the Great Lakes Water Quality Initiative. WLSSD's source control program includes dental amalgam separators and other industrial and residential control efforts. WLSSD's dental amalgam separator program is voluntary, but all of its 60 dental offices, representing 100 dentists, have dental amalgam separators. This success was achieved through cooperation with the local dental society, and a 2003 local supplemental environmental improvement grant awarded to WLSSD and the Northeast District

Dental Society allowed the purchase of dental amalgam separators for all of the dental facilities. Total mercury emissions from WLSSD facilities have dropped from 208.7 lbs in 1990 to 83 lbs in 2012.

Despite the lack of a federal rule, these POTWs have achieved nearly universal amalgam separator compliance with the dental offices in their service areas and mercury released into the environment has significantly decreased.

#### Dental Amalgam Separator Programs are Not Necessary for all POTWs

Some POTWs do not experience elevated mercury levels in their influent and have not needed to implement dental amalgam separator programs. While the EPA 2008 Health Services Industry Detailed Study for Dental Amalgam estimated costs of a national amalgam separator requirement for dental facilities, it did not estimate the cost for POTWs. Although NACWA has not seen the draft rule and does not know all of the details of EPA's proposal, the cost to POTWs to set up and maintain a mandatory amalgam separator program for all of the dentists in their service areas will be substantial:

- The City of Greensboro, North Carolina, has over 250 dentists, most of which are located in the service area of its 16 mgd treatment plant. This facility has only violated its 12 ppt mercury discharge limit five times out of 364 samples since 2005, with no violations since 2009. These violations occurred when total suspended solids were high or the POTW recorded high influent flows following heavy precipitation events. The average mercury concentrations in the biosolids were 0.36 mg/kg in 2007 and have steadily decreased to 0.18 mg/kg in 2011, two orders of magnitude below the 40 CFR Part 503.13 Table 3 "high quality" biosolids mercury limit of 17 mg/kg. The removal rate for mercury at this facility is 98.2%.

The City of Greensboro estimates that it would need to hire at least one full-time employee, at approximately \$50,000 per year, to implement a mandatory dental amalgam separator program. The total effluent mercury per year at Greensboro is 0.475 lbs. If half of this mercury is removed by an amalgam separator program, the cost to the City is over \$200,000 per pound of mercury each year. This does not include the cost to the dentists.

- The Los Angeles County Sanitation Districts (LACSD) has 11 wastewater treatment plants. Three of these plants currently have effluent limits or performance goals for mercury, and those limits and goals are consistently met. LACSD's largest facility, the Joint Water Pollution Control Plant (JWPCP), is one of the largest wastewater treatment plants in the world, processing approximately 280 mgd. From 2007 to 2011, effluent samples at JWPCP were below the detection concentration of  $4 \times 10^{-5}$  mg/L for mercury, and currently JWPCP discharges only 0.007 lbs of mercury per day. The biosolids from JWPCP had an average mercury concentration of 1.2 mg/kg, an order of magnitude below the 40 CFR Part 503.13 Table 3 "high quality" biosolids mercury limit of 17 mg/kg. Influent mercury loadings to JWPCP have steadily decreased from 4-5 lbs/day in the late 1970s to approximately 0.5 lbs/day now.

LACSD estimates that it has 2,000-5,000 dental offices in its service area. Assuming 3,500 facilities, LACSD estimates total initial costs of \$1.4 million to establish a mandatory amalgam separator program and \$4.4-6.0 million in annual costs, if each dental office is considered a SIU. Even if a special

DIU category is created, costs for this number of dentists will be significant, with little environmental benefit.

For these and other POTWs without elevated influent mercury levels, the costs associated with establishing and maintaining a dental amalgam separator program will not be justified by the environmental benefits. These utilities should be able to prioritize their resources to address their most pressing environmental concerns.

#### POTWs Waiting to Implement Amalgam Separator Programs Due to Uncertainty

NACWA has been told by several of its utility members that they have delayed establishing a local dental amalgam separator program due to the uncertainty about whether or not EPA will propose and finalize a federal rule. The Denver Metro Wastewater Reclamation District is an example of a utility that has held off with developing a program due to this uncertainty. However, the District has finally begun the process of developing a program due to a change in water quality standards and a lower mercury limit in the utility's next discharge permit. Like other utilities with existing programs, the District is worried that if the federal rule is eventually published, their program will need to be changed, with additional costs and resources for both the utility and the dentists.

#### Conclusion

NACWA asks EPA to take action on the draft dental amalgam separator rule, either dropping it from consideration in the final 2012 Effluent Guidelines Plan or formally submitting it to OMB. NACWA recommends that EPA drop the rule from consideration and allow POTWs, states, and regions to develop their own programs as needed. Successful programs across the country have shown that when dental amalgam separator programs are needed, they can be implemented successfully by POTWs. Many communities have found that a collaborative approach with dentists is successful, while others have found that a regulatory approach is necessary. Local regulators are best suited to determining the most effective methods for controlling mercury discharges in their communities, whether through dental amalgam separators alone or with a more holistic approach. If EPA drops the rule from consideration, POTWs that have been waiting for certainty with the federal rule can develop their own programs once they know that these local programs will not need to be changed. Other POTWs may not need to reduce mercury influent to protect the environment and would achieve greater environmental benefits by using their resources on other issues.

Thank you for your consideration of these comments. NACWA can provide more information about utility experiences, both with dental amalgam separator programs, upon request. Please contact me at 202-533-1836 or [cfinley@nacwa.org](mailto:cfinley@nacwa.org) if you have any questions.

Sincerely,



Cynthia A. Finley, Ph.D.  
Director, Regulatory Affairs