NACWA
A Clear Commitment to America's Waters

August 9, 2010

Water Docket
Environmental Protection Agency, Mail Code 2822T
1200 Pennsylvania Avenue, NW.
Washington, DC 20460
Via Electronic Mail: ow-docket@epa.gov

Attention: Docket ID No. EPA-HQ-OW-2009-1019

Dear Sir or Madam:

The National Association of Clean Water Agencies (NACWA) appreciates the opportunity to review the proposed amendments to the Clean Water Act (CWA) regulations governing the use of sufficiently sensitive test methods for permit applications and reporting under the National Pollutant Discharge Elimination System (NPDES) (75 Fed. Reg. 35712; June 23, 2010). As NPDES permit holders, NACWA's members will be directly impacted by the proposed changes. The Association has been actively engaged in the national dialogue on analytical method issues over the past decade and was an active participant in the Federal Advisory Committee on Detection and Quantitation (FACDQ) from 2005 to 2007. While NACWA understands and agrees that CWA reporting should provide data of sufficient precision and accuracy to make sound permitting and compliance determinations, NACWA has concerns with the current proposal.

NACWA's overarching concern is that EPA's proposed action seems premature given the Agency's ongoing assessment of the FACDQ's recommendations regarding the need for a new and consistent definition of minimum level. In addition, the proposed rule appears to require the use of methods that have not been approved by EPA through the 40 CFR Part 136 process and that may not have undergone validation or any other scientific review. Given the uncertainty associated with such methods and the fact that the public is not provided an opportunity to comment on the reliability and use of those methods, NACWA believes such an approach contravenes basic principles of valid science.

NACWA at 40
A WATERSHED MOMENT
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NACWA offers the following specific comments for EPA's consideration:

Issues with the Use of the Minimum Level as Proposed

- It seems inappropriate to use the minimum level (ML) as a regulatory decision point given the current ML definition (3.18 x method detection level (MDL)) and MLs used in 40 CFR Part 136 methods are recognized to be flawed by all stakeholders including the states and EPA. The FACDQ has made recommendations to EPA on how to address the ML definition but EPA has yet to address those recommendations in a rulemaking. EPA states that it is critical that it make permitting decisions based on sound science, but the use of the current ML definition has failed that standard.

- The proposed rule falls short of providing a sound, consistent approach because it offers three different options for defining the ML:

    a. 3.18 x MDL,
    b. Whatever is published for a method, or
    c. The lowest acceptable calibration point.

    Mercury method 1631E confuses the issue more by taking 3.18 x MDL and then "*rounding to the number nearest to (1, 2, or 5) x 10^n, where n is an integer.*" The level of confusion regarding the ML to be used in the proposed rule is further complicated by the fact that labs can have different MLs than the respective methods. As stated above, this rule should not be finalized until a new, single definition of ML is promulgated based on the work of the FACDQ.

- EPA states that the ML should be less than the applicable water quality criteria. However, when following EPA's guidance in the *Technical Support Document for Water Quality-based Toxics Control*, the decision point for the reasonable potential process is the wasteload allocation (WLA) rather than the criteria. The language needs to be adjusted accordingly.

- The ML is used by labs as an internal gauge of performance. However, independent reviews of performance (discharge monitoring report (DMR) quality assurance (QA) studies, for example) generally do not monitor the actual performance of labs at concentrations approximating the ML. It is important that if the ML were to be used by EPA as suggested, stakeholders using laboratories to meet NPDES requirements must have some assurance that these labs can actually meet the required quality objectives at or near the concentration of the ML. This will require a significant shift in how third parties (permittees, EPA, states) evaluate laboratories and this shift must occur before further weight is placed on the ML.

- The notice states that published methods "give only an upper, not a lower, bound on the lab's MDL and minimum level." This is not universally true because the ML of the published method may not be based on a representative sample of lab performance. For example, some MLs are based on the performance of research and federal labs but do not include the performance of industrial or municipal labs. This is one reason why it is important to test all methods intended for regulatory use in labs representing all stakeholders that will use those methods.

- The proposed rule specifically refers to "the method ML." There are very few methods with an ML. Therefore, the proposed language does not address the vast majority of 40 CFR Part 136 methods. A footnote in the proposed rule states that the ML can also be "the lowest calibration point in a method." Methods in 40 CFR Part 136 do not define the lowest calibration point to be used. This is decided by the respective laboratory. It would be more appropriate to refer to "the lowest calibration point used by a laboratory" in this instance.

- The proposed rule equates "ML," "quantitation level (QL)" and "reporting limit (RL)," however these terms are not synonymous in all cases. For example, the QL and/or the RL for a lab may be one value equal to or less than the method ML, but they are not necessarily equivalent with the ML. Using the ML definition of 3.18 x MDL, it would be nearly impossible for a lab to use 3.18 x MDL as the lowest calibration standard. This is particularly true for methods that measure dozens of analytes. It is much more practical for labs to adopt MLs that are similar in concentration across analytes and that are less than the respective WLAs than to calculate a MDL for each analyte, multiply each of those MDLs by 3.18, and then create dozens of dilutions equaling that product for dozens of analytes. Therefore, the QL/RL may be 5 ppb for numerous analytes in EPA method 625 but the MDL x 3.18 for each analyte does not equal 5 ppb.

Use of Most Appropriate Method, Not Most Sensitive

- The driver for this proposed change is to provide data of sufficient precision and accuracy, but EPA has not defined the data quality objectives for precision and accuracy to be applied to NPDES-related data. Therefore, no one including EPA can establish whether the ML meets this proposed need. EPA goes on to say that it should not use imprecise analytical methods in permits, but EPA has not defined what this means. EPA states it needs to make permitting decisions based on accurate data, but EPA has not defined the level of accuracy required for use of the data.

- The notice defends the need for the use of sufficiently sensitive methods, and explains this need in terms of accuracy and precision. Based on EPA's own guidance regarding data quality indicators (DQIs) EPA should recognize that sensitivity is different than accuracy and precision. Although NACWA agrees that accurate and precise data should be used to meet NPDES requirements the desire to have more sensitivity will likely conflict with the need for accuracy and precision. Simply stated, values reported at lower concentrations do not inherently have greater accuracy or precision than higher concentrations. Quite the contrary, one often compromises accuracy and precision as sensitivity increases. The need for greater sensitivity should not compromise the need for accuracy and precision.

- In many cases such as PCBs, pesticides, and other organics, GC/MS MDLs are not sufficiently sensitive to detect the level of the water quality standard. In the case of most organics, there is an approved gas chromatography (GC) method which provides a lower detection limit than the approved GC/MS method. In the case of many organic parameters, the ML rule could trigger a requirement to change from GC/MS to GC methods. This would be undesirable. GC/MS provides a much greater degree of confidence in the correct identification of the regulated parameter. Although use of dual columns in

GC methods reduces uncertainty in the identification, GC/MS methods provide much greater confidence in the correct identification of organic parameters. The value of more sensitive quantitation is lost if one is not certain what is being quantified. There are numerous cases in which a GC method might be considered the most sensitive method and its use required by the proposed rule. NACWA believes that the sufficiently sensitive method rule should recognize the superiority of GC/MS methods to GC methods and provide an exception to the sufficiently sensitive methods rule for the case of less sensitive GC/MS methods.

Implementation of the Proposed Requirements

- The "Scope and Rationale of the Proposed Rule" states that where insufficient sensitivity among 40 CFR Part 136 methods is concluded, the permitting agency would have the authority to require a non-promulgated method in an NPDES permit based on the proposed language of the rule. This preamble text is problematic because it conflicts with the language of the actual proposed regulation where "an NPDES applicant may use any suitable sufficiently sensitive method." The latter language indicates that selection of the method is made by the permittee rather than the permitting authority. NACWA believes that the decision should be made by the permittee.

- States only have a maximum of 2 years to implement this rule once finalized. It is not clear how this rule will impact NPDES permits which will not be renewed for up to 5 years after the rule has been adopted. EPA should clarify how this rule change impacts reporting under current NPDES permits.

- EPA states that it will provide regular updates on water quality criteria to ensure that the states use sufficiently sensitive methods. This is irrelevant for states that have adopted their own water quality criteria. Once state criteria are EPA-approved, only the state criteria can be used. Later-developed EPA criteria do not replace the properly adopted state criteria. Rather, the states are under an obligation to update their criteria periodically, but pending the states' updates the adopted state criteria still control for NPDES purposes. The language should be removed because it suggests the opposite.

- Upon promulgation of this rule, laboratories/permittees should be given sufficient time to change methodologies. The time period to do this should not start until the rule is incorporated by each regulatory authority and should be at least 18 months in length to allow for review and selection of labs or purchase of equipment and training.

- EPA requires that data be collected within 4.5 years prior to the NPDES permit renewal application and cover different periods of the year to address discharge quality variability. If the rule is finalized in December of 2010 and a permit renewal is due in 2012, sampling/analyses by the permittee have already begun and may not meet the requirement of the CWA modification. EPA and States should grandfather permit renewal data up to and including a date well after the rule is finalized to allow use of data already generated, to avoid loss of resources, and to avoid situations where permittees may be found in noncompliance because the data they provide does not complete the permit application.

Also, if non-detectable data or data below the ML is collected during the term of a permit, but the most sensitive method is not used, must that data be excluded from consideration for NPDES re-permitting if the water quality standard is below the ML of the method used? NACWA believes it is appropriate to allow the permit writer to use all the data collected during the term of the permit in addition to the data required to meet the minimum data requirements for the permit application, and requests that EPA clarify in the rule or preamble that this approach is allowed.

- The notice is not clear whether the new requirements are intended to apply to indirect discharges to POTWs. The description in Table I-1, *Entities Potentially Regulated by this Rule*, does not refer to indirect dischargers, but the preamble refers to subchapter N which includes pretreatment standards for direct and indirect discharge standards. The rule or preamble should be clear as to whether the rule applies to the pretreatment program monitoring conducted for compliance with Part 403. Because of the challenges associated with industrial discharge matrices, NACWA believes that the option to require the achievement of MLs below regulatory limits should be left to the discretion of the POTW. Industrial permittees may not be able to meet these requirements because matrix effects often require dilution of samples which increases the ML. Some of these samples may even damage components of the more sensitive instruments due to their high concentrations.

- Monitoring is sometimes required in an NPDES permit for parameters for which numeric water quality based effluent limits (WQBELs) are not specified in the permit. A condition may be included in the permit which states that the permittee may not cause a violation of instream standards. For some utilities, there are dozens of compounds for which quarterly monitoring is required and which have state water quality standards but for which no numeric WQBELs are included in the permit. In such a case, do the new requirements apply or do they apply only to those parameters which have specific numerical effluent limits and for which monitoring results are required to be reported on the DMR? NACWA believes that the ML requirement should only apply to parameters with explicit numerical limits which are reported on the DMR.

- Not all approved methods are available commercially. NACWA recommends that the rule provide an exception for sensitive methods which are not commercially available to prevent creating an obligation for regulated entities to fund laboratories to provide those analytical services.

- Instructions for DMR reporting address the reporting of data below the MDL. The rule is silent on the communication of ML information on the DMR or NPDES application. NACWA requests that EPA clarify in the preamble to the final rule that there is no ML reporting obligation on the DMR or NPDES application.

- For multi-parameter approved methods which utilize similar technology with similar MDL/MLs (e.g. 624, 1624, 6210B 18th), is an analyte-by-analyte comparison necessary to determine the appropriate method? This would be a significant administrative difficulty and cost increase if POTWs would have to divide one analysis into two or three because parameters have slightly different MLs.

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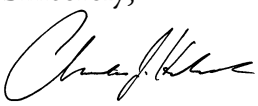
The proposed rule is problematic for many reasons and should not be finalized without first completely addressing the ML issues raised by EPA's Federal Advisory Committee on Detection and Quantitation and addressing the issues raised above. As it did with mercury, NACWA believes EPA can directly address any particular concerns it has over the use of appropriate methods without making regulatory changes. Making substantial revisions to the NPDES permitting regulations when there are significant outstanding questions, such as those raised through the FACDQ process, is not appropriate. NACWA believes the process to complete this rulemaking should be suspended until EPA's evaluation of the FACDQ's recommendations can be finished and the necessary regulatory changes can be made to implement those recommendations.

Again, NACWA appreciates the opportunity to comment on the proposed changes. Please contact me at *chornback@nacwa.org* or 202/833-9106 if you would like to discuss these comments.

Sincerely,



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