

From: Kimbrough, David
To: [commentletters](#)
Cc: [Dion, Mitch](#)
Subject: Comment Letter – Proposed
Date: Friday, September 7, 2018 11:50:03 AM



Ms. Townsend,

The Water & Power Department of the City of Pasadena (“PWP”) would like to thank the State Board for this opportunity to comment on the proposed revision to the Amendment to the Recycled Water Policy regarding perfluorooctane sulfonate (“PFOS”) and perfluorooctanoic acid (“PFOA”). PWP is supportive of the goals of the Recycled Water Policy and believe that the proposed Amendment has many positive elements. PWP would like to provide comments on proposed changes involving PFOS and PFOA but these comments would be applicable to other of the Chemicals of Emerging Concern (“CEC”) listed as well.

- 1) No approved method is cited. Under the recent UCMR III, EPA Method 537 Rev 1.1 was the approved method. However, Attachment A does not specify this or some other method as acceptable for compliance monitoring. This would imply that a Recycled Water Proponent (“RWP”) any laboratory can use any method? Historically, California has taken the opposite approach. The State Board has for many decades specified which methods are acceptable. The logic is that the data users, the RWPs, State Board staff, and others, need to have confidence in the quality of the laboratory results. Allowing the use of any method, including those which have not been peer-reviewed, lowers the confidence level. Results produced by un-reviewed method my not have adequate accuracy or precision. If two different laboratories are using two different methods, data user need to be confident that they are really looking at comparable results, i.e. a true “apples to apples” comparison. The results may also end up in court and data produced by an unaccredited laboratory using an unapproved method may not be admissible under either the Frye Test or the Daubert Test.

The State Board should identify specific laboratory methods that have been peer reviewed and require the use of these methods.

- 2) Currently, the Revised Amendment does not require that RWPs use laboratories accredited by the Environmental Laboratory Accreditation Program (“ELAP”). In all other regulatory regimes, the State Board requires the use of ELAP accredited laboratories for data to be used for regulatory compliance. Under the Revised Amendment, basically, each RWP sets up their own accreditation program (which is called a Quality Assurance Project Plan (“QAPP”).
 - a. Few RWPs have the technical or managerial expertise to organize and manage its own accreditation program. Likewise, there are few Board offices or staff with the needed skills or resources.
 - b. The Revised Amendment does not provide any standards for what constitutes an acceptable laboratory accreditation program for each RWP. There are just a couple of sentences which provide only a few very vague and poorly defined elements of

what could possibly be a laboratory accreditation program. Without clear and well defined standards, it would impossible for RWPs to develop a meaningful accreditation program or for Board staff to assess a RWPs accreditation program.

- c. The Revised Amendment cites TNI 2016 Volume 1, Module 2 – 7 requirements. These however do not actually establish any laboratory requirements. These standards for documenting laboratory procedures. As such, they provide no guidance for what laboratories would actually do in the case analyzing recycled water for PFOA or PFOS, or indeed any of the CECs identified in the Revised Amendment.
- d. ELAP is now offering accreditation for EPA Method 537.

It might make more sense to simply require the RWP's use laboratories reporting PFOAs and PFOSs for compliance with the Recycled Water Policy use EPA Method 537 and be accredited by ELAP.

- 3) There is a term "*Reporting Limit*" that is used. This is problematic as it is not defined either in the Revised Amendment or elsewhere.
 - a. There are different reporting limits that are defined for different applications. The Clean Water Act uses the Method Detection Limit and the Minimum Level for NPDES monitoring and compliance determination.
 - b. The Safe Drinking Water Act uses the Minimum Reporting Level ("MRL"), the Lowest Concentration MRL ("LCMRL"), and Detection Levels ("DL") depending on the situation.
 - c. The Division of Drinking Water has historically used the Detection Level for Reporting ("DLR"). Each of these terms is defined differently both legally and operationally.
 - d. The Revised Amendment could be referring to any of these, some other definition, or it may be inventing an entirely new legally significant term. It is very unclear.

To be consistent with past practice and to make it compliance more straight-forward for both RWPs and State Board staff, it would be more useful to use the term DLR.

- 4) There is a Reporting Limit of 0.002 mg/L (2 ng/L) for both PFOA and PFOS.
 - a. However the term reporting limit is defined, this number does not appear to be realistic. In EPA Method 537 at the very front (Section 1.2) it says: "*The Minimum Reporting Level (MRL) is the lowest analyte concentration that meets Data Quality Objectives (DQOs) that are developed based on the intended use of this method. The single laboratory lowest concentration MRL (LCMRL) is the lowest true concentration*

for which the future recovery is predicted to fall, with high confidence (99%), between 50 and 150% recovery. Single laboratory LCMRLs for analytes in this method range from 2.9-14 ng/L, and are listed in Table 5. The procedure used to determine the LCMRL is described elsewhere.” The only peer-reviewed method says that 2.9 ng/L is at the very lowest of the possible range of MRLs.

- b. In section 1.3 of the same method, it says: *“Laboratories using this method will not be required to determine the LCMRL for this method, but will need to demonstrate that their laboratory MRL for this method meets the requirements described in Section 9.2.5.”*
- e. In EPA 537 in section 9.2.5 the Minimum Reporting Limit is not defined numerically. It states: *“The MRL may be established by a laboratory for their specific purpose or may be set by a regulatory agency.”*
- e. However the MRL that the laboratory uses is established, it needs to be confirmed by preparing a Laboratory Fortified Blank at the MRL and recovery must be +/-50% of the spiked value.

To be consistent with past practice and other regulatory applications, the Revised Amendment should identify an approved method and then determine the DLR for that method in recycled water.

- 5) On page A-1 of the Revised Amendment it says: *“This section is to ensure laboratories conducting CEC monitoring generate data of known, consistent, and documented quality and to verify that the laboratory can meet the required reporting limits.”*
 - a. The phrase *“meet the required reporting limit”* is not defined anywhere.
 - b. Since the reporting limit is “required”, are there penalties for to the Recycled Water Proponent (RWP) if they or their laboratory fail to meet this requirement? If not, in what sense are they required?
 - c. If EPA Method 537 is the only approved method, and if the Reporting Limit were defined as the MRL, then each laboratory would need to prepare a LFB at the 2 ng/L and recover it at +/-50%. Laboratory Reagent Blanks would need to be less than 1/3rd of the MRL. These would need to be performed with each analytical batch.

The most logical approach would be for the Revised Amendment to identify EPA Method 537 as the approved method, require all RWPs use a laboratory accredited by ELAP for this method and PFOA and PFOS, and require those laboratories to comply with the MRL requirements in the method, but set the DLR in the Revised Amendment, and set the MRL requirements in the EPA Method 537 as equal to the DLR.

PWP would like to thank you for your attention in this matter.

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