COLORADO WATER QUALITY CONTROL COMMISSION
STATE OF COLORADO

REBUTTAL STATEMENT OF THE COLORADO WASTEWATER UTILITY COUNCIL

IN THE MATTER OF THE ADOPTION OF REVISIONS TO THE BASIC STANDARDS AND METHODOLOGIES FOR SURFACE WATER, REGULATION #31, (5 CCR 1002-31)

The Colorado Wastewater Utility Council (hereinafter "Council") submits this Rebuttal Statement in the above-captioned rulemaking hearing.

In this Rebuttal Statement the Council is addressing several issues that were raised in the parties' Responsive Prehearing Statements and is providing additional information to support our proposal to extend the delayed effective date for nonylphenol. The Council's positions on these issues are set forth below.

I. NONYLPHENOL

A. Council Comments on the Responsive Prehearing Statement of the Water Quality Control Division (Division):

In its Responsive Prehearing Statement, the Division indicated that the Council "has not presented a compelling reason for the [Water Quality Control] Commission to further delay a water quality standard based upon national aquatic life criteria where the pollutant in question has been shown to occur in domestic wastewater effluents in Colorado in toxic amounts."

The Council respectfully disagrees that the evidence presented heretofore is not "compelling" with respect to implementation issues for publicly owned treatment works.

In this Rebuttal Statement Council is presenting additional information at this time related to Practical Quantitation Limits (PQLs) and development of pretreatment program local limits.

1. Practical Quantitation Limits

In 2008, the Commission made changes in Regulation #61 (Discharge Permit System Regulations) dealing with PQLs. At that time the term was defined:

> 61.2(78) "PRACTICAL QUANTITATION LIMIT" (PQL) means the minimum concentration of an analyte (substance) that can be measured with a high degree of confidence that the analyte is present at or above that concentration.

PQLs were removed from Regulation #61 and included in a separate Division "Practical Quantitation Guidance Document," shown as Exhibit 13. The purposes for developing the Guidance Document were to facilitate updating of existing PQLs and to include PQLs for newly regulated parameters (to avoid the need for including PQLs in Regulation #61 itself).

As indicated in the 2008 Regulation #61 Statement of Basis and Purpose, "[t]he *Division has been directed to use PQLs in permits in lieu of method detection limits (MDLs)*, based on previous revisions to Regulation Nos. 31 and 61" (emphasis added).[1]

As the Council provided in its Proponent's Prehearing Statement, at the present time there is *no* PQL for nonylphenol. Accordingly, it would be contrary to Commission direction for a Division permit writer to use a nonylphenol method detection limit in place of a nonylphenol PQL in any permit. This seems to the Council to be a compelling argument in support of its proposal for extending the delayed effective date.

The Council appreciates that there is no current impetus for development of a nonylphenol PQL. In fact, no commercial laboratories – including those used to develop other PQLs included in the PQL Guidance document – are performing analyses for nonylphenol. These laboratories were surveyed by the Council and their responses are summarized in Exhibit 14.

The Council therefore recommends that during the extension of the delayed effective date the Commission direct the Division to develop a nonylphenol PQL through its established workgroup process. This would provide the needed impetus for commercial laboratories to develop a nonylphenol PQL that would be appropriate for both permitting and assessment purposes.

2. Development of Local Limits

The Division stated in its Responsive Prehearing Statement that "…the toxic nature of nonylphenol and nonylphenol ethoxylates requires a regulatory approach that includes progress towards development of pretreatment local limits for the service areas of each POTW with an EPA approved pretreatment program."

However, this is neither a simple nor straightforward process. In accordance with EPA's Local Limit Development Guidance, shown as Exhibit 15, each pretreatment program must develop, implement, and enforce *technically-based* local limits. This relies on *accurate* analytical data that can quantify the concentrations of the pollutant of concern in the influent, effluent, and biosolids. Each publicly owned treatment works then uses these data to determine removal

[1] The Division's PQL Guidance Document defines Method Detection Limit as "the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure set forth at appendix B of *40 CFR Part 136"* (emphasis added). Practical Quantitation Limit is defined as "the minimum concentration of an analyte (substance) that can be measured with a high degree of confidence that the analyte is present at or above that concentration." According to the PQL Guidance Document, a PQL is determined by multiplying the pooled MDL (from a minimum of three commercial laboratories) by a factor of 10.

efficiencies and the maximum allowable headworks loadings the facility can receive without causing pass through or interference.

In the case of nonylphenol, the pollutant of concern is actually *numerous* pollutants of concern that are not easily analyzed for, as described in our Proponent's Prehearing Statement. It is unrealistic to expect facilities to accurately quantify all nonylphenol precursors that could contribute to loadings, determine removal efficiencies, and then try and "piece" this disparate information into an acceptable local limit for something other than nonylphenol.

It is important to note that although EPA alludes to unpublished EPA methods for the determination of longer chain ethoxylates, these methods are *semi-quantitative*, and therefore are useful only for tracking purposes.

In addition, local limit development must also account for "background" and domestic sources that cannot be controlled. Although the Metro District has conducted limited sampling of domestic-only influent sources, these results were inconclusive due to numerous quality control failures. It is unclear at this time whether or not domestic sources may be a major contributor of nonylphenol and ethoxylates, and therefore outside the realm of a publicly owned treatment work's pretreatment authority.

B. Council Comments on the Responsive Prehearing Statement of the U.S. Environmental Protections Agency, Region 8 (EPA):

Many of EPA's comments presented in its Responsive Prehearing Statement echo the concerns stated by the Division, discussed above.

However, the Council would like to elaborate on two issues, set forth below.

1. Validated and Published Analytical Methods

In its Responsive Prehearing Statement, EPA indicates that "EPA's Office of Water is writing a notice of proposed rulemaking that would add several new CWA [Clean Water Act] methods to Part 136 including both of the ASTM nonylphenol methods." The Council is pleased to learn of this development, as it underscores our statements that an EPA-approved method is a necessary "piece" of the overall nonylphenol "puzzle" for permitting and assessment purposes. Until the time that any methods become final and an appropriate PQL has been developed and included in the Division's Practical Quantitation Guidance Document, the Council does not agree with EPA that Division permit writers have the discretion and authority to specify methods in permits that are not cited in 40 CFR Part 136 – especially when no PQLs have been develop and approved by the Division. As noted above, *to do so would contravene both the Commission's stated direction with respect to the use of PQLs and the Division's own PQL Guidance Document.*

2. Pollution Prevention and Source Control Issues

In addition to the Division's comments on pretreatment program implementation, discussed above, EPA indicates that source controls efforts are "…important, because nonylphenol

ethoxylates will ultimately degrade to nonylphenol and (if not removed by the treatment process) continue to pose risks to downstream aquatic life."

As explained in our Proponent's Prehearing Statement, there is widespread scientific and technical uncertainty regarding the ability of any current wastewater treatment technology to remove nonylphenol or any of its precursors. When compounded with analytical issues, detailed previously, Council members are left with few options through EPA approved pretreatment programs.

The only possible approach would be to have a "zero standard" for nonylphenol and ethoxylates. This would prohibit regulated industries from discharging any of these compounds to the sewer system.

However, there are several complicating issues associated with this seemingly "easy" solution. For example:

- Nonylphenol and nonylphenol ethoxylates are not always identified on Material Safety Data Sheets for industrial uses, e.g., they are often included under the general listing of "proprietary" ingredients. As such, neither the industry nor the publicly owned treatment works can know if a product contains these compounds.

- This "bottom up" approach – regulating each potential industry or commercial facility – one by one could take many, many years to even implement, never mind monitoring for compliance. It is so piecemeal that compliance would be difficult to ensure.

In the Council's opinion, a much more effective way to eliminate nonylphenol and its precursors from streams is for EPA to take a leadership role, rather than "pushing" the responsibility onto publicly owned treatment works.

An excellent example of how EPA stepped up to the plate in recent years concerns Diazinon. In 2004, through negotiations with producers, EPA established a nationwide stop-sale date of December 31, 2004 for retail sales of this compound (*see* Exhibit 16).

The Council continues to believe that this "top down" approach would be far less costly and much more effective than having pretreatment staff take this challenge on one *potential* user at a time.

C. Council Comments on the Combined Responsive Prehearing Statement of the Western Colorado Water Network et al. (WCWN):

The Council notes that many of the concerns expressed by WCWN have been addressed above. However, there are a few issues that the Council would like to respond to here:

1. Nonylphenol Ban

The Council agrees with WCWN that banning nonylphenol, an approach used in Europe, makes sense. We indicated in our Proponent's Prehearing Statement that a nationwide ban of nonylphenol and ethoxylates would be an appropriate control strategy.

2. Metro District Monitoring Results

WCWN states in its Responsive Prehearing Statement that "[t]he Denver Metro District [sic] would not be presenting this information if they had any doubts concerning either accuracy or replicability of analysis."

This statement is completely without merit. The Metro District undertook efforts to develop a method internally to get an *estimate* of nonylphenol concentrations in its influent and effluent. Because of significant quality assurance problems associated with these efforts, the Metro District has concerns about *both* the accuracy and replicability of results presented for this hearing.

3. Boulder Data

The City of Boulder was one of the publicly owned treatment works directed by the Commission to investigate nonylphenol-related issues (the others are the Metro District, Littleton/Englewood, and Colorado Springs Utilities). The data and information presented in the WCWN Responsive Prehearing Statement has not been shared with the City of Boulder, so the accuracy and applicability of those data and information are in serious question.

4. Nonylphenol Degradation Products

WCWN alleges in its Responsive Prehearing Statement that "[n]onlyphenols degrade into substances more estrogenic than the original compound." The Council believes that although nonylphenol exthoxylates (nonylphenol precurors) are less estrogenic than nonylphenol itself, any degradation compounds from nonylphenol are not more estrogenic than nonylphenol itself. That is the reason EPA issued water quality criteria solely for nonylphenol.

D. Council Alternative Proposal – Revised Statement of Basis and Purpose

In light of EPA's stated intention to publish a 40 CFR Part 136 method for nonylphenol, the Council believes that this is an important development and could help speed up the process of eventual PQL development and subsequent assessment and permitting activities.

As such, the Council would like to propose an alternative proposal that would not change our regulatory proposal, but would include an option for an accelerated schedule (removal of the delayed effective date prior to January 1, 2017) so long as the following milestones are achieved:

- An approved method(s) for nonylphenol is published for inclusion in 40 CFR Part 136 (final rule);

- PQLs for nonylphenol and nonylphenol ethoxylates are developed for inclusion in the Practical Quantitation Guidance Document; and

- A minimum of three commercial laboratories are able to analyze for nonylphenol and nonylphenol ethoxylates (based upon the requirement for a site-specific PQL, according to the Practical Quantitation Guidance Document).

The Council's revised proposed Statement of Basis and Purpose is as follows:

BASIS AND PURPOSE – June 7, 2010 Rulemaking Hearing -- REVISED

Nonylphenol: Updated information on nonylphenol analytical method development and source control activities was provided to the Commission by the Metro Wastewater Reclamation District, the City of Boulder, the Littleton/Englewood Wastewater Treatment Plant, and Colorado Springs Utilities. Based on that evidence, the Commission determined that an extension of the current delayed effective date until January 1, 2017 (following the next scheduled Basic Standards rulemaking hearing) was appropriate. However, because of evidence submitted by EPA Region 8 that nonylphenol analytical methods would be proposed for inclusion in 40 CFR Part 136 in 2010, the Commission agreed with all parties that the delayed effective date for nonylphenol could be considered for removal from the Basic Standards for Organic Chemicals in Section 31.11 prior to January 1, 2017 once all of the following requirements are met: (1) EPA publishes a final rule for a nonylphenol analytical method(s) in 40 CFR Part 136; (2) appropriate Practical Quantitation Limitations for nonylphenol and nonylphenol ethoxylates are developed and published in the Division's Practical Quantitation Limitations Guidance Document; and (3) at least three (3) commercial laboratories within the State of Colorado are able to routinely analyze for nonylphenol and nonylphenol precursors using approved analytical method(s) and associated PQL(s). In the meantime, EPA and the Division agreed to work with interested stakeholders in developing additional information on controllability evaluation issues and possible source control strategies, or if sources are deemed uncontrollable, to proceed with appropriate statewide or EPA Region 8 product bans.

II. TABLE I – TEMPERATURE FOOTNOTE (5)(c)(iv), (SHOULDER SEASON EXCURSION)

As indicated in our Responsive Prehearing Statement, the Council supports the Water Quality Control Division's (Division) proposal to add a winter shoulder-season excursion for cold water streams but suggested that this excursion also should be applicable to warm water streams. To that end, the Council appreciates the data and evidence submitted by the City of Boulder on this important issue.

As Boulder noted, "[j]ust as in cold water streams, in-stream temperatures in warm water streams do not abruptly change with the seasons, but gradually increase or decrease." More importantly, the Council agrees with Boulder that "[t]he abrupt transition between summer and winter temperature standards also complicates the assessment of temperature standards," especially with respect to weekly average temperatures during the transition periods. As such, the Council supports Boulder's proposed changes to Table I, Footnote 5(c)(iv) and the associated Statement of Basis and Purpose language.

III. E. COLI AVERAGING PERIOD

The Council would like to take this rebuttal opportunity to support the Division's proposal for the addition of a two-month averaging period to the *E. coli* standards (Footnote 7 to Table I of the Basic Standards).

IV. EXHIBITS

Exhibit 13: Practical Quantitation Guidance Document

Exhibit 14: Commercial Laboratories for PQL Development – Availability of Nonylphenol Analyses

Exhibit 15: EPA's Local Limit Development Guidance

Exhibit 16: U.S. Environmental Protection Agency Diazinon "stop-sale" Information

Respectfully submitted this 12th day of May, 2010.

By _____

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CERTIFICATE OF SERVICE

I hereby certify that a true and exact copy of this Responsive Prehearing Statement of the Metro Wastewater Reclamation District in the matter of the rulemaking hearing for Revisions to Regulation #31 was emailed to all parties included in the email list dated April 1, 2010 on this 12th day of May, 2010 and that an original and thirteen copies were provided to the Water Quality Control Commission. Hardcopies were provided to EPA Region 8.

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