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August 18, 2014

Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24th Floor  
Sacramento, CA 95814

**Sent Via Electronic Mail:** [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

Dear Ms. Townsend:

Subject: Comment Letter – Draft Drinking Water Systems General Permit and Resolution

The American Water Works Association (AWWA) represents the professional drinking water community, both those that directly operate water utilities, and those that provide the products and services they need to do so. The California-Nevada Section of AWWA has almost 5000 members in California alone, involved in virtually every aspect of providing safe and reliable water to the public. We have a large and diverse membership, and as a result, we have members who support and welcome the idea of a Statewide NPDES Permit but we also have a large percentage that instead support localized agreements and Regional Water Quality Control Board permits. A survey of our members indicated three common areas of concern regarding the proposed Statewide NPDES permit (Draft Permit). First, there are portions of the permit that our members find confusing, making it difficult to determine the requirements and associated impacts on their systems. Second, they are concerned with their ability to comply with the permit while still providing safe and reliable drinking water to the public. Finally, they are concerned with the cost of compliance, particularly the cost to prepare the Notice of Intent and to conduct the required monitoring.

As you know, drinking water systems treat groundwater and surface water in various ways to make it safe for human consumption and to meet regulatory requirements. Drinking water systems are regulated through the federal Safe Drinking Water Act, the California Health and Safety Code and system permits granted by the Division of Drinking Water. The discharge of water is an essential part of the maintenance and compliance activities required to operate a public water system. These discharges may be planned but they may also result from automated

or unforeseen events. These discharges can go to stormwater drainage systems, other conveyances or may be direct to Waters of the US. Drinking water systems and water purveyors have a vested interest in minimizing discharges and consider ourselves partners with the State Water Resources Control Board (SWRCB), in the protection of California's water resources. We appreciate this opportunity to share with you the common concerns expressed by members of the drinking water community and look forward to working with the SWRCB in finalizing a permit that will achieve the desired goals and environmental benefits.

### 1) Permit Clarity

**3.1** 1a) One common concern shared by our membership is that the permit is difficult to understand. We recognize and appreciate the dedication of SWRCB staff to understand our industry and their responsiveness to comments but even after multiple stakeholder workshops several areas of confusion remain.

Recommendation: Given the complexity of the issues presented below, we encourage the SWRCB to allow sufficient time for stakeholders to review and give an additional comment period after the next draft is issued. This will ensure that the permit is protective of the water quality without limiting water purveyors' ability to provide safe and reliable drinking water throughout California.

**3.2** 1b) The permit proposes new definitions of terms commonly used by our industry, creating confusion regarding the scope of coverage. In particular, the definitions proposed for treated, potable water and for raw water in the draft permit include a reference to primary and secondary MCLs and effectively eliminate coverage of a large portion of drinking water discharges. The effluent limits and monitoring requirements are tied to these definitions, making it difficult to understand what limits apply to which types of discharges. The monitoring program is designed to provide flexibility but as a result it is complex and open to a variety of interpretations.

Recommendation: In the attached document, we have provided recommended language that our members drafted which we hope will clarify some of the permit requirements. In particular, we propose revised definitions and clarifications to the monitoring requirements. The revisions to the monitoring requirements focus on discharges that have the potential to impact the environment if Best Management Practices (BMPs) are not implemented.

**3.3** 1c) In Attachment A of the permit, Minimum Level (ML) and Reporting Level (RL) are defined for compliance purposes but on page 8 of the permit and in stakeholder meetings, references to the Method Detection Limit (MDL) were made and it was unclear how compliance would be determined.

**Recommendation:** We recommend using the following language on page 20, Section IX.B to clarify how compliance will be determined. "The ML used to determine compliance with the total chlorine residual effluent limitations is 0.10 mg/L. A discharge monitoring result with a total residual chlorine concentration greater than or equal to 0.10 mg/L shall be deemed out of compliance with a chlorine effluent limitation."

- 3.4** 1d) The permit contains confusing and potentially conflicting language regarding discharges into water bodies that have Total Maximum Daily Loads (TMDLs) identified. The language as drafted could be interpreted that individual permits must be obtained for all discharges into these water bodies. As the number of TMDLs increase each year, the number of discharges covered by this permit will continually decrease, undermining the SWRCB's stated goals of consistency and efficiency.

**Recommendation:** The Permit should state that "A discharger's compliance with the Permit satisfy the TMDL requirements in the Basin Plans for all Regional Water Quality Control Boards (RWQCBs) because the high quality, intermittent and short-term nature of these low-threat discharges from CWS authorized under this Permit are not contributors to the impairment of the TMDL-related water bodies."

## 2) Ability to Comply

- 3.5** 2a) Many of our members find it will be difficult or impossible to comply with the permit conditions and continue to operate their drinking water systems. In particular, some will not be able to comply with the Numeric Effluent Limit (NEL) for turbidity. Many utilities operate systems that are either supplied in part or entirely by groundwater supplies. These wells are unlikely to meet an NEL of 10 NTU after startup or following maintenance activities such as rehabilitation.

**Recommendation:** We propose using a narrative effluent limitation for turbidity that is protective of the beneficial uses of receiving waters.

- 3.6** 2b) Some utilities rely exclusively on local groundwater supplies that do not meet secondary MCL standards. They must utilize a variety of operational strategies to meet the secondary MCL including blending with other sources of supply. These utilities would not be able to operate under this permit and would either need to obtain individual permits from the RWQCBs or increase their reliance on alternative sources of supply, such as imported surface water from other parts of the state.

**Recommendation:** In the attached document, we revised the scope of coverage to include these types of discharges.

3.7 2c) The BMPs as proposed in Attachment C are written as prescriptive minimum requirements. This is inconsistent with the BMP iterative approach and the necessity to adapt BMPs to field conditions. For example, Attachment C requires that “All treated drinking water shall be dechlorinated.” It has already been acknowledged by SWRCB staff that natural attenuation of some chlorinated discharges may be the most effective method of reducing toxicity without the addition of additional chemical additives. For example, the July 03 Draft Permit prescribes the use of multibaffled sediment tanks and 5 micron bag filters as a means to treat turbidity to less than 10 NTU. This technology is not an accepted BMP and is typically not feasible on many well sites due to space and flow constraints. It should also be noted that the efficacy of multibaffled sediment tanks without the use of coagulants has not been demonstrated. This prescriptive BMP would almost certainly place limitations on the ability of some water agencies to operate some of their wells.

Recommendation: Remove prescriptive language that specifies which BMPs be implemented and include an acknowledgement that BMPs must be implemented and adapted to a variety of field conditions.

3.8 2d) The Draft Permit dated July 03, 2014 specifies BMPs for removing salts and minerals. There are no known BMPs that can remove salts and minerals from discharges by the utilities.

Recommendation: Modify the BMP Measures specified in Attachment C, page C-1, of the July 03, 2014 Draft Permit to remove references to salt and minerals.

3.9 2e) The July 03, 2014 Draft Permit specifies that dischargers implement BMPs to assure that their discharges comply with the Division of Drinking Water MCLs. There are no known BMPs published by professional organizations that treat discharges to ensure compliance with drinking water MCLs. Water agencies do not serve water to their customers that does not meet MCL requirements, without adhering to the public notification process required in Title 22.

Recommendation: Remove references in the Permit to the implementation of BMPs to assure that the water discharges comply with drinking water MCLs. To document the nature of the water discharged by water agencies, we suggest that the permittees under the Statewide General

3.10 NPDES Order submit with the required annual report a copy of their Consumer Confidence Report as evidence of compliance with Primary and Secondary MCLs. The Consumer Confidence Report, published on an annual basis, identifies any compliance exceptions with Primary and Secondary MCLs. Please note that the cost of monitoring for all regulated contaminants (contaminants with an MCL) is about \$1,600 per sample.

### 3) Cost

3.11 3a) Our members are concerned about the cost of compliance. Given that large areas of the State are arid, it may be difficult to delineate between erosional features and dry creek beds to determine which discharges would be classified as direct discharges to a Water of the US. As a result, some utilities will need to hire outside consultants to complete the Notice of Intent. As currently proposed, it will be necessary to delineate all Waters of the US within their service area, regardless if a discharge may occur.

Recommendation: Move the requirement of identification of the receiving water to the annual report.

3.12 3b) There are many utilities that operate with part time staff and the requirement to monitor all direct discharges would not be feasible without hiring additional staff or full time employees. Many direct discharges are automated and do not vary significantly over time.

Recommendations: Allow for representative monitoring on direct discharges. In the attached document, we have provided suggested language to allow for this type of monitoring. In

3.13 addition, provide an exemption from direct discharge monitoring for systems with less than 3000 connections. These small systems would still need to apply for the permit and provide an annual report certifying the implementation of BMPs thus ensuring beneficial uses of receiving waters are protected. We also encourage the SWRCB to consider a phased approach to implementation based on system size to provide the immediate regulatory coverage to those purveyors that need it and allow time for technical assistance and outreach to be provided to smaller systems.

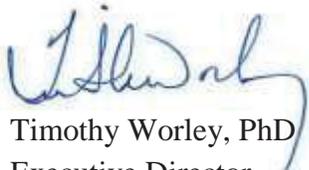
3.14 3c) Monitoring discharges for pH is not practical. Accurate pH readings require frequent instrument calibrations and are typically performed either in an accredited laboratory by laboratory personnel, or in the field by State certified water treatment and/or distribution operators. Workers charged with repairing and maintaining a water agency's infrastructure may not possess the required training or certifications to perform the analysis without further training and certification. Furthermore, there is no field BMP that either raises or lowers the pH of discharges. If the SWRCB expects dischargers to manage pH in the field, this would require introducing acidic or alkaline chemicals to the discharge in the field. Water purveyors cannot feasibly and safely alter the pH of the discharge in the field and are in fact mandated by the Division of Drinking Water to maintain a certain pH level in the distribution system.

Recommendation: Since water purveyors that serve water outside the 6.5 to 8.5 range, do so with regulatory oversight and approval by the State Water Resources Control Board, Division of Drinking Water, we recommend that the pH monitoring required for this permit use existing

regulatory monitoring or be integrated in the representative monitoring described in the July 03, 2014 Draft Permit.

CA-NV AWWA appreciates the SWRCB's continued collaboration on such an important issue and looks forward to working with SWRCB staff in finalizing a practical permit that is also protective of our State's water quality. If you have any questions regarding the content of this letter, please contact me via email: [tworley@ca-nv-awwa.org](mailto:tworley@ca-nv-awwa.org) or phone: (909) 291-2102.

Sincerely,



Timothy Worley, PhD  
Executive Director

### Changes to Page 5, 6 & 7

All water purveyors in California who discharge raw or potable water as described in Section I.B. below pursuant to the activities specified within this Order must submit an application package in accordance with section II.A.1. or a Notice of Non-Applicability in accordance with section II.A.2. of this Order by December 1, 2014. Water purveyors described in items 1 through 4 above that are not requesting coverage under this Order must submit a Notice of Non-Applicability form (see Attachment B-2) to the State Water Board in accordance with Section II.B.2. of this Order.

#### **A. Facilities Authorized To Discharge Under This Order**

**3.15** This Order authorizes discharges from community drinking water systems (as defined in Table 1) that do not adversely affect or impact beneficial uses of receiving waters. Authorized discharges to waters of the U.S. pursuant to this Order are those from drinking water facilities including, but not limited to, municipal supply wells, transmission systems, water treatment facilities, treated drinking water distribution systems, and storage facilities.

#### **B. Discharge Definitions**

**3.16** This Order covers planned, automated and emergency discharges. Planned discharges are defined as discharges resulting from a water purveyor's essential operations and activities undertaken to comply with the federal Safe Drinking Water Act, the California Health and Safety Code associated regulations and permits in order to provide reliable and safe drinking water. Planned discharges include regularly scheduled, and non-regularly scheduled activities that must take place to comply with mandated regulations and that the water purveyor knows in advance will result in a discharge. Emergency discharges are defined as discharges that occur due to system leakage, system failures or other emergencies.

#### **C. Authorized Discharges**

**3.15** This Order authorizes planned and emergency discharges of raw and potable water from community drinking water systems, as defined above, due to activities mandated by law regarding the development, operation, maintenance, and rehabilitation of drinking water systems. Authorized discharges may include, but are not limited to, the following:

##### **1. Planned Discharges:**

- i. Water Treatment Plant (discharges of treated drinking water only).
- ii. Distribution System Storage Tank or Reservoir releases.
- iii. Distribution System Dewatering, Flushing, and Pressure Testing.
- iv. Fire Flow / Fire Hydrant Testing.
- v. Meter Testing.
- vi. Groundwater Supply Well Flushing.
- vii. Transmission and raw water system installation, cleaning, testing and maintenance.
- viii. Groundwater Well Development, Installation, Rehabilitation, and Testing.
- ix. Groundwater Monitoring for purpose of Supply Well Development, Installation, Rehabilitation and Testing.

## 2. Automated Discharges

- i. Automated Water Quality Analyzers.
- ii. Pressure Relief Valves.
- iii. Automated Groundwater Well Startup

## 3. Emergency Discharges

- a. Raw and Potable Water:
  - i. Emergency Drinking Water System Failures and Repairs including Transmission and Distribution System Failures and Repairs.
  - ii. Trench Dewatering due to an emergency failure.
  - iii. Catastrophic Events.
  - iv. Other emergency events, conducted to comply with mandates of the Federal Drinking Water Act and California Health and Safety Code that result in discharges

## II. PERMIT COVERAGE AND APPLICATION REQUIREMENTS

### A. Permit Coverage

3.17

This order provides regulatory coverage to water purveyors with existing and potential discharges from a community drinking water system that do not adversely affect beneficial uses of the receiving water. Permit coverage may include discharges from work conducted by contractors or other agencies on behalf of the water purveyor.

Discharges not covered by this order:

- 1) Water transferred from one Water of the US to another Water of the US without subjecting the transferred water to intervening industrial, municipal, or commercial use.
- 2) Discharges of raw water from transmission system pipelines and tunnels
- 3) Covered under a separate NPDES permit for discharges that the Regional Water Quality Control Board Executive Officer determines additional permit requirements are necessary to address Total Maximum Daily Loads (TMDL) with Waste Load Allocations (WLA) because the requirements of this Order are not consistent with the TMDL, or
- 4) From other entities or individuals such as fire departments, construction and insurance companies that test potable water systems, street cleaners, or other users of a municipal storm water system that discharge to waters of the U.S.

Add to Definitions in Attachment A

**1. Potable Water**

**3.18** Water that is safe for human consumption.

**2. Raw Water**

**3.19** For the purposes of this Order, raw water is defined as untreated or partially treated surface or groundwater dedicated for drinking water supply but is not suitable for human consumption.

**Changes to Page 8**

**Site Information.** A site map schematic showing the following items:

- i. The boundaries of the water purveyor's service area(s),
- ii. The location and general un-detailed layout of the community water system(s) facilities,

- Instead, move requirements to identify monitoring locations and receiving water to annual Self-Monitoring Reports (page E-7) Section VII. REPORTING REQUIREMENTS B2.

Changes to Page 15-16

B. Final Effluent Limitations:

Table 1: Final Effluent Limitations

3.20

DISCHARGE TYPE	Total Chlorine Residual (mg/L)	Turbidity (NTU)
Super-chlorinated	0.019 <sup>1</sup>	---
Planned discharges directly into inland surface waters, enclosed bays and estuaries, or that discharges within 300 feet or less of the receiving water:	0.019 <sup>1</sup>	---
Planned discharges of groundwater directly to a surface water or via a storm drain:	10 (as a daily average)	---
Planned discharges directly into ocean waters, or into a storm drain that discharges within 300 feet or less to ocean waters:	0.008 <sup>1</sup>	225

1: The ML used to determine compliance with the total chlorine residual effluent limitations is 0.10 mg/L. A discharge monitoring result with a total residual chlorine concentration greater than or equal to 0.10 mg/L shall be deemed out of compliance with a chlorine effluent limitation.

Changes to Page E-3 to E-4

**II. MONITORING LOCATIONS AND SAMPLING**

**3.21** In its annual report, the Discharger shall (1) identify the sample location on a site map and (2) list the appropriate receiving water body.

**A. Monitoring Every Planned Discharge**

The Discharger shall monitor every planned discharge that is greater than 325,850 gallons/day.

**B. Representative Annual Monitoring for Planned Discharges**

The Discharger shall monitor all other planned discharges between 20,000 and 325,850 gallons/day based on representative monitoring, as specified below.

**3.22** 1. The Discharger shall identify representative monitoring locations in its water supply system that represent the quality of the discharge after BMPs have been implemented and prior to the discharge entering the receiving water, or other conveyance system.

The representative monitoring locations shall include one from each of the types of discharges below, as long as similar BMPs are implemented:

- i. One from each Surface Water Treatment Plant
- ii. One from each type of Groundwater Treatment Plant
- iii. One from a Distribution System Storage Tank or Reservoir
- iv. One from the Distribution System Flushing
- v. Meter Testing.
- vi. Groundwater Well Development and Installation
- vii. Groundwater Well Rehabilitation

If no discharge occurs in one of these categories in the reporting year, no monitoring is required.

**3.23** 2. The Discharger shall monitor all labeled representative monitoring locations on its site plan, in accordance with all discharge monitoring and reporting requirements in this Monitoring and Reporting Program. In its annual report, the Discharger shall (1) identify the portions of its system in which the representative monitoring results represent, and (2) include any changes in its representative monitoring locations, as applicable. For discharges within a 300 foot conveyance distance from a receiving water body and/or within 300 foot radius of a receiving water body, the annual report shall include a site map of the receiving water(s), and shall identify whether such receiving water(s) is a water of the U.S.

### III. DISCHARGE CONSTITUENT MONITORING REQUIREMENTS

#### A. Discharge Constituent Monitoring Requirements

The Discharger shall monitor discharges meeting the requirements in Section II above for the constituents or parameters listed in Tables E-2 and E-3. The name of the receiving water for each sampled event must be reported with the annual report.

**Table E-2. Discharge Monitoring for Planned Discharges from groundwater**

Parameter	Units	Sample Type	Minimum Sampling Frequency per Representative Monitoring Location <sup>3</sup>	Required Analytical Test Method
Chlorine, Total Residual	mg/L	Grab	1/Event or 1/Year	1,2
Flow	Gallons/min	Estimate	1/Event or 1/Year	1
pH	Standard Units	Grab	1/Event or 1/Year	1
Turbidity	NTU	Grab	1/Event or 1/Year	1,3

<sup>1</sup> A handheld field meter shall be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. The Discharger shall maintain a calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program.

<sup>2</sup> The ML used to determine compliance with the total chlorine residual effluent limitations is 0.10 mg/L. A discharge monitoring result with a total residual chlorine concentration greater than or equal to 0.10 mg/L shall be deemed out of compliance with a chlorine effluent limitation.

<sup>3</sup> If feasible for Discharger to monitor turbidity downstream of management practices.

**Table E-3. All other planned discharges**

Parameter	Units	Sample Type	Minimum Sampling Frequency per Representative Monitoring Location <sup>3</sup>	Required Analytical Test Method
Chlorine, Total Residual	mg/L	Grab	1/Event or 1/Year	1,2
Flow	Gallons/min	Estimate	1/Event or 1/Year	1
pH	Standard Units	Grab	1/Event or 1/Year	1

<sup>1</sup> A handheld field meter shall be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. The Discharger shall maintain a calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program.

<sup>2</sup> The ML used to determine compliance with the total chlorine residual effluent limitations is 0.10 mg/L. A discharge monitoring result with a total residual chlorine concentration greater than or equal to 0.10 mg/L shall be deemed out of compliance with a chlorine effluent limitation.

<sup>3</sup> If feasible for Discharger to monitor turbidity downstream of management practices.