



August 18, 2014



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

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

Dear Ms. Townsend:

California Water Service Company (Cal Water) is an investor-owned water utility that serves over 472,000 customers through 28 Customer and Operations Centers throughout the state.

Cal Water appreciates the opportunity to submit these comments for your consideration on the State Water Resources Control Board’s (SWRCB) Statewide National Pollutant Discharge Elimination System (NPDES) Permit for Drinking Water System Discharges to Surface Waters (Tentative Order). Cal Water is appreciative and supportive of your efforts to develop a practical permit that is protective of the environment.

A major area of concern that I wish to bring to your attention is the draft resolution approving the exception to the State Implementation Plan (SIP). The draft resolution states “Water Purveyors are required to comply with MCLs established by the California Department of Public Health, therefore discharges of drinking and potable water systems comply with MCLs when appropriately managed.” The draft resolution does not address untreated groundwater water discharges, which may exceed a MCL in many cases. The discharge of untreated groundwater is necessary to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code. The stated objective of the SIP Exception “is to address requirements placed on discharges due to mandated activities that conflict with statutory requirements of the federal Safe Drinking Water Act and the California Health and Safety Code.” However, the draft resolution does not resolve this conflict in the case of untreated groundwater discharges.

With nearly 600 wells in California, groundwater is a major source of drinking water served by Cal Water. Currently there are approximately 176 wells with impacted water quality or roughly a third of our groundwater supply. The draft permit as written has the potential to severely limit our ability to meet our water supply obligations due costly well replacements or treatment system installations. As you may be aware, the issue of aging water infrastructure is well known and projected permit compliance costs would divert desperately needed funds from critical infrastructure projects. In our estimation, both public interest as well as benefit to the environment would be best served by supporting critical infrastructure projects.

Please find our comments as attached in the following table. If you have any questions regarding this issue, please contact me at (408) 367-8324.

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Dale Gonzales, P.E.
Director, Environmental Health & Safety
California Water Service Company

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5-6	I. B.1 I. B.2. I. B.3	Delete the defined terms "treated drinking water", "potable water" and "raw water". Limit the discharge definitions to "Planned" and "Unplanned" discharges.	The terms "treated drinking water", "potable water" and "raw water" are ambiguous because some discharges fit into more than one category. For example, groundwater that is treated can be categorized as either "treated drinking water" or "potable water". Also, there is no apparent purpose for classifying water in this manner, except to exclude those discharges essential to protecting human health & safety. Water that may have a parameter above the MCL may be precisely why it must be discharged in the first place, yet the three water definitions as written, appear to preclude this function that is vital to complying with the Safe Drinking Water Act and Title 22 of the California Code of Regulations and the California HSC. There are also discharges that don't fall under the "treated drinking water", "potable water" and "raw water" definitions. For example, tank maintenance may include cleaning and disinfecting prior to returning the tank to service.
6	I. C.	Change "This Order authorizes planned and emergency discharges of raw, potable or treated drinking 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" to "This Order authorizes planned and unplanned water discharges associated with development, operation, maintenance, and rehabilitation of community drinking water systems, as defined above, due to activities mandated by law."	Categorizing discharges as planned and unplanned is a more useful way of referring to discharges and provides clarity.
6	I. C.1.	Replace "Planned Discharges" with "Discharge Types"	By categorizing planned discharges into types of discharges, it simplifies the concept. The bottom line is that all discharges are managed through BMP

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			implementation to minimize potential impact to the environment.
6	I. C.1.a.	Delete "Treated Drinking Water"	Ditto above comment
6	I. C.1.a.i.	Delete "(discharges of treated drinking water only)"	Water treatment plants generally do not discharge drinking water so a permit to discharge treated drinking water is more or less a moot point. Discharges from treatment plants that would require permit coverage are associated with operations and maintenance (e.g., filter backwash, system flushing). By prohibiting the O&M type discharges, utilities would have to resort to another permit. There is also some confusion in the SF Bay community regarding the existing Order No. R2-2009-0033-NPDES General Discharge Requirements for Discharges from Surface Water Treatment Facilities for Potable Supply. I believe that Region 2 WQCB is planning <u>not</u> to re-issue this order, with the intention that treatment plant discharges will now be covered under the State General permit. This will be a problem as stated above. It makes good sense to consolidate surface water treatment discharges into the State General Permit; however, there will be limited value if "Treated Drinking Water" is the only allowable discharge type.
6	I. C.1.b.	Delete "Potable or Raw Water"	Ditto above comment
7	I. C.2.	Change "Emergency" to "Unplanned".	Not all unplanned discharges are considered an emergency. For example, a small leak that does not threaten public safety might not be considered an emergency; however, it is an unplanned event that should be covered under the permit if the discharge reaches an MS4 or surface water.
8	I. B.1.c.iii.	"The location and general un-detailed alignment of the receiving surface water(s)"	A set of topographic maps showing the general location of receiving waters can be provided, but maps showing receiving waters overlain with water facilities does not exist for most utilities.
8	I. B.1.c.iv.	Delete "location of representative monitoring sites, with reference to parameters to be monitored at each site"	A map showing general water facilities, let alone monitoring sites for a single water system is not feasible. Cal Water owns 28 water systems in California. To show just the facilities on a map would require 20 to over 500 plat sheets for each system. That's on the order of a couple thousand plat sheets for all of Cal Water's California operations.

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8	I. B.1.c.vi.	"Identification of the portion of the community water system that discharges within a 300-foot conveyance distance from the receiving water(s) and/or within a 300-foot radius of the receiving water(s)."	Ditto above comment. Placing this information on a site schematic is problematic given the number of plat sheets required. Propose a tabular summary identifying well and tank discharges. It's not possible to identify receiving water distances in the NOI for planned and unplanned discharges of the distribution system (e.g., line flushing/main breaks). Also, it's not practical to identify distance to receiving water on a site schematic for hydrant discharges due to the sheer number of hydrants. Propose to identify distance to receiving water prior to discharge as a matter of procedure.
9	I. B.2.b.	"The water purveyor is under an established local agreement with a municipal separate sewer storm system (MS4) permittee that is acknowledged by the corresponding Regional Water Board in writing and submitted with the Notice of Non-Applicability."	If RWQCB acknowledgement of the local agreement is to be required, what is the criteria for issuing said acknowledgement? Can the RWQCB decline to provide written acknowledgement of a local agreement? If the MS4 owner/operator authorizes third party discharges to their MS4, does the MS4 owner/operator assume liability for those discharges? Can there be language added to the permit that would insulate the MS4 owner/operator from the liability associated with third party dischargers under the proposed general permit (i.e. Safe Harbor)?
15	V.A.	Delete "for all discharges to comply with DPH's MCLs"	The BMPs available to the Dischargers are not intended to treat or control the discharges such that they meet DPH's MCLs. The BMPs are a tool utilized to minimize adverse environmental impacts to the Maximum Extent Practicable (MEP).
16	V. C.	Delete "potable" from "Final Effluent Limitation for all planned discharges of potable water directly to a surface water or via a storm drain. Add "inland surface waters, enclosed bays and estuaries"	If the turbidity was measured above 5 NTUs, the source water is above the secondary MCL for turbidity of 5 NTUs and would not be considered potable water. This paragraph should pertain to all planned discharges associated with operating and maintaining CWSs. Also, was it intended not to have a turbidity limit for treated and raw water? Since V.E. addresses turbidity for discharges to ocean water, this paragraph should pertain to discharges to inland surface waters, enclosed bays and estuaries.
16	V. C. 1.	"The Turbidity measure in Nephelometric Units (NTUs) in the discharge of potable water shall not exceed 10 NTUs as a daily average or per turbidity water quality objectives"	Basin Plans generally apply turbidity limits to receiving water as the comparison between upstream and downstream samples from the outfall. This is a marked departure from the typical Basin Plan. The point of compliance is at the receiving water, whereas here, the point of compliance is at the end of pipe prior to entering storm water conveyance or surface water. The rationale

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			<p>behind the 10 NTU limit is not clear. Precedent would appear to be established for turbidity per Order No. 2009-0009-DWQ, NPDES permit for storm water discharges associated with construction activity. There are 2 fundamental differences when contrasting the proposed permit with the General Construction permit. One, the NAL is not an effluent limit, and two, the NAL is significantly higher (250 NTU compared to 10 NTU). Storm water runoff associated with construction discharges to surface water as do discharges associated with CWSs. If the 250 NTU NAL General Construction permit is protective of beneficial uses, then why is there such a significant gap between the two permits?</p>
E-3	II.A. & B.&C.	Clarify if monitoring applies to planned and/or unplanned discharges.	It's should be mentioned as to whether this section applies to just planned discharges or if unplanned discharges are included. If unplanned discharge monitoring is not required, it should be explicitly stated.
E-3	II.A.2)	Delete "direct or"	This is redundant since all direct discharges require monitoring per II.A.1).
E-3	II.B.	Change "The Discharger shall monitor all other non-direct discharges (traveling via a storm drain or other conveyance system), based on representative monitoring" to "The Discharger shall monitor all other-non-direct discharges <325,850 gallons (traveling via a storm drain or other conveyance system), based on representative monitoring"	Adding "<325,850 gallons" makes it clear exactly what is meant by "other non-direct discharges".
E-3	II.B.1.	This requirement can become complicated for purveyors that rely on groundwater. Some distribution systems are fed by more than one aquifer zone, with some wells screened across multiple zones. Does the term "same general source" apply to a distinct aquifer? If a distribution system is fed by groundwater wells treating by numerous contaminants such as	For the ease of establishing representative monitoring for more complex systems, recommend a single sample location representing the entire distribution system. For well discharges, recommend monitoring for all discharges that enter MS4.

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		nitrate, iron, manganese, PCE, MTBE, or chrome VI are being treated, how does one establish representative sampling locations?	
E-3	II.B.2.	Neither the frequency nor the sample requirements is indicated.	Identify sampling frequency and analytical requirements.
E-3	Table E-1	Not clear what discharges this table applies to. Is it only for discharges identified in II.A. 1) &2)?	Identify what discharges Table E-1 applies to.
E-3	Table E-2	Not clear what discharges this table applies to. The term "Representative Monitoring" in the column heading is confusing and misleading. I'm assuming that the "1/Event" applies to II.A. 1) &2) discharges and "1/Year" applies to II.B. discharges?	Provide clarity to what type of discharge the Minimum Sampling Frequency applies to.
E-3	Table E-2	Per Footnote 3 "If feasible for Discharger to monitor turbidity downstream of management practices." Is this referring to receiving water or post-BMP prior to entering storm water conveyance?	Clarify.
E-3	Table E-2	Per Footnote 4 - "Event is not defined in Section II.	Define "Event"
E-3	Table E-2	Per Footnote 4 "Each discharge event that requires monitoring shall be monitored once per year." This statement seems to	Clarify.

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		contradict "1/Event" monitoring frequency.	
E-4	IV.	"The receiving water shall be monitored for all direct discharges that are out of compliance with this Order." This statement is too general.	Recommend specific criteria that would trigger receiving water monitoring (i.e., chlorine residual >0.1 mg/L post-BMP). Also, if there is a significant unplanned discharge event, receiving water should be monitored.
F-3	II.A.		Ditto original comment on discharge definitions.
F-13	B.	" allowing water purveyors an exception to comply with priority pollutant criteria for the priority pollutants that have an applicable CTR criterion more stringent than its corresponding MCL." Section 5.3 of the SIP simply grants exception from meeting priority pollutants criteria/objectives regarding drinking water conducted to fulfill statutory requirements under the Safe Drinking Water Act or California HSC. There is no reference to MCLs in Section 5.3 of the SIP.	<p>For Cal Water, this is may be the most significant issue regarding the draft permit, because the impact would be significant. Cal Water owns/operates nearly 600 water supply wells in California. Of those, approximately 176 of these wells have water quality issues.</p> <p>This requirement would make a large number of discharges that are necessary in the normal course of business significantly more expensive, or entirely infeasible. There are wells that are treated that need to be discharged to prior to returning to service after maintenance or disinfection. The water can't be run through the treatment facilities because it could ruin, or lessen the life of the treatment unit.</p> <p>Cal Water has 51 standby wells. Standby wells may be used in emergency situations, such as a fire, or severe drought. These wells maybe over primary or secondary MCLs, but are still considered suitable for human consumption in the short term. Standby wells need to be flushed to allow the collection of a representative sample prior to putting the water to the distribution system or to collect samples to maintain well status. The frequency for discharging to maintain well status can range from annual to once every 9 years, depending on the parameter required for analysis. If these wells can't be discharged, they will have to be moved to inactive status, and then destroyed. The replacement cost for a new well is about \$1.5 million per well.</p> <p>Cal Water has about 125 wells with treatment across the state. The majority of these would not be allowed to discharge as the permit is currently written because there are parameters that are either above or approaching an MCL.</p>

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			<p>Occasionally some wells can be discharged to land or sanitary sewer, but discharge to MS4 or surface water is usually the only alternative. Water can be contained in some cases, to be discharged in a controlled manner from a tank or battery of tanks to land or sanitary sewer. However, the discharge rate is generally too great for either of those alternatives to be viable. Sanitary sewer is not always available nearby and may be restrained by available capacity. It is very costly to bring temporary tanks on site for discharge. For a representative well sampling, a typical well will run for 2 hours prior to sampling. For a 1,000 gpm well, that would mean storage of 120,000 gallons of water prior to discharge or about six Baker tanks. Most well sites do not have a large enough footprint to accommodate adequate onsite storage capacity. The cost to contain the water for a single discharge event is about \$20K.</p> <p>Costs to install a treatment system just to treat periodic discharges would vary depending primarily on what parameter requires treatment. Parameters such as nitrate or VOC treatment would cost over \$700K, while treatment for CrVI would cost about \$2.2 million.</p>