

**California Regional Water Quality Control Board
San Francisco Bay Region**

RESPONSE TO WRITTEN COMMENTS

**On the Issuance of Region-wide Waste Discharge Requirements
for Discharge or Reuse of Extracted Brackish Groundwater, Reverse Osmosis Concentrate
Resulting from Treated Brackish Groundwater, and Extracted Groundwater from Structural
Dewatering Requiring Treatment (Groundwater General Permit)**

A tentative order to reissue the Groundwater General Permit was circulated for public comment from May 9, 2012, to June 12, 2012. The following organizations submitted comments:

Alameda County Water District (ACWD) – June 7, 2012
Dublin San Ramon Services District (DSRSD) - June 11, 2012
Alameda County Flood Control and Water Conservation District, Zone 7
(Zone 7) – June 12, 2012

The response to each comment begins with quotes or paraphrases from the party’s comments shown in *italics*, followed by staff’s response. In some cases, similar comments were combined. Interested persons should refer to the original letters to ascertain the full substance and context of each comment. As needed, text changes are shown using underline for added text and strikethrough for deleted text. Non-substantive editorial changes were also made to the tentative order in response to other comments received that are not described below for brevity.

Alameda County Water District (ACWD) – June 7, 2012, Comments

1) ACWD Comment 1

The Tentative Order makes reference to “Aquifer Protection” wells. ACWD requests that “Aquifer Protection” Wells be deleted and replaced with Aquifer Reclamation Program (ARP) Wells.

Response to ACWD Comment 1

We agree and replaced “Aquifer Protection” with “aquifer reclamation program”.

2) ACWD Comment 2

The Tentative Order makes reference to “Salinity Barrier Well”. ACWD no longer uses the term Salinity Barrier Wells. ACWD requests that “Salinity Barrier Wells” be deleted and replaced with Aquifer Reclamation Program (ARP) Wells.

Response to ACWD Comment 2

We agree and replaced “Salinity Barrier” with “aquifer reclamation program”.

3) ACWD Comment 3

On Page 13 Section V. Receiving Water Limitations 2.g. of the Tentative Order, “Nutrients” is a new addition. The new tentative order references “biostimulatory substances...” ACWD discharges do not contain biostimulatory substances (i.e. nutrients) and, in fact, aid in the improvement of downstream water quality. Thus, this limitation should not apply to ACWD’s discharges from E-14 or ARP Wells.

Response to ACWD Comment 3

Noted. This receiving water limitation is based on Basin Plan Objective 3.3.3. We have found no reasonable potential for discharges covered under this tentative order to contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses. For this reason, the tentative order has no effluent limitations or monitoring requirements related to this receiving water limitation.

4) ACWD Comment 4

Page 16 Table 2 Trigger Pollutants: The Trigger for Cyanide (CN) is 1.0 µg/L. In a 2009 email correspondence with a member of the SFRWQCB ACWD was told that the CN trigger was 2.9 µg/L. ACWD requests that the Trigger in the Tentative Order be adjusted accordingly.

Response to ACWD Comment 4

We agree and have changed Table 2 for Cyanide to read “2.9” instead of “1”. The “1 ug/L” trigger was based on the California Toxics Rule but “2.9 ug/L” is based on the recently adopted Basin Plan marine site specific objective.

5) ACWD Comment 5

In May 2012, ACWD sent the SFRWQCB a letter requesting modification of RLs. ACWD requests that the SFRWQCB review the letter and consider ACWD’s request for modification of RLs and amend the Tentative Order accordingly...

Excerpt from ACWD May 4, 2012, letter:

Reporting Limits (RLs) for specific metals (Beryllium, Total Chromium, Copper, Lead, and Zinc) stipulated in Tables E.3 and E.4 of the current permit exceed the low-level detection capability of the prime contract laboratory engaged by ACWD, necessitating out-sourcing to a sub-contract research laboratory. From past experience, the results obtained in this manner have been inconsistent due to quality assurance/quality control challenges (related to salinity in the sample matrix- based on subsequent discussions with ACWD on July 16, 2012). This concern, combined with the additional turnaround time and cost involved, prompts ACWD to request modification of current RLs, and associated specification of applicable analytical methods...The proposed modifications to the RLs and approved methods will provide a minimum savings to ACWD of \$1650/year while retaining the ability to detect low level concentrations approaching (or exceeding) applicable threshold limits.

Response to ACWD Comment 5

We disagree with ACWD's request to raise the RLs for Beryllium, Total Chromium, Copper, Lead and Zinc. ACWD should work with its contract laboratory to address the quality assurance/quality control challenges related to salinity in the sample matrix prior to requesting a modification of the RLs. Per Note 1 of Table E-3 of the tentative order, the Discharger shall appropriately select the analytical procedures that will compensate for salinity in the sample matrix. Additionally, the Discharger shall analyze for constituents with RLs not exceeding the minimum levels (MLs) in Appendix 4 of the State Implementation Policy or SIP and as specified in the tentative order. Based on our communication with another laboratory (Caltest Analytical Laboratory) and the State Water Board's QA/QC Officer, the MLs in Appendix 4 of the SIP for the metals in question can be achieved if the appropriate analytical procedure and technology are utilized. For this reason, at this time, we are not making the proposed modifications to the RLs as requested. However, to clarify expectations related to MLs, we revised the Monitoring and Reporting Program Section I.B and Note 1 of Table E-2, E-3, E-4, and E-5.

The addition to the Monitoring and Reporting Program Section I. B is shown below:

The Discharger shall report with each sample result the Reporting Level (RL) from the Minimum Levels (MLs) listed in Appendix 4 of the State Implementation Policy or SIP (http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/sip2005.pdf). When there is more than one ML value for a given substance, the Discharger may select any one of the analytical methods cited in SIP Appendix 4 for compliance determination, or any other method described in 40 CFR part 136 or approved by the USEPA (such as the 1600 series) if authorized by the Regional Water Board's Executive Officer. However, the ML must be below the trigger level and water quality objective. If no ML value is below the trigger level and water quality objective, then the method must achieve an ML no greater than the lowest ML value indicated in SIP Appendix 4. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

The revision to Note 1 of Table E-2, E-3, E-4, and E-5 is shown below.

Note 1: The Discharger shall appropriately select analytical procedures that will compensate for salinity in the sample matrix. Inorganic compounds samples shall be analyzed for total (unfiltered) constituents with the reporting levels not exceeding the following: 0.002 µg/L for Mercury and ~~0.25 µg/L for Cadmium and Silver~~; 1.0 µg/L for Cyanide. For all other inorganic compounds, the minimum levels shall not exceed the following if Inductively Coupled Plasma Mass Spectrometry (ICP-MS) analytical technique is utilized: 0.25 µg/L for Cadmium and Silver, 1.0 µg/L for Nickel, Thallium and Zinc; 2.0 µg/L for Arsenic and Selenium; and 0.5 µg/L for Antimony, Beryllium; Total Chromium, Copper, and Lead (SIP Appendix 4 Minimum Levels (<http://www.waterboards.ca.gov/iswp/docs/final.pdf> http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/sip2005.pdf)). If the Discharger exceeds the trigger for mercury of 0.025, the Discharger shall sample and analyze the additional samples using ultra-clean techniques as described in USEPA methods 1669 and 1631 to eliminate the possibility of artifactual contamination of the sample.

6) ACWD Comment 6

Page F-6 reference is made to ACWD's discharges having total dissolved solids (TDS) levels below 4,400 mg/L. Historical data collected over the span of the current Order indicates that TDS levels from ACWD discharges is 5,000 mg/L and below.

Response to ACWD Comment 6

Noted. We replaced the "4,400 mg/L" with "5,000 mg/L".

Dublin San Ramon Services District (DSRSD) - June 11, 2012
Alameda County Flood Control and Water Conservation District, Zone 7
(Zone 7) – June 12, 2012

7) DSRSD and Zone 7 Comment 1

DSRSD and Zone 7 request that the sentence "RO Concentrate discharges that are permitted under industrial pretreatment requirements to a permitted publicly-owned treatment works (POTW) are not required to obtain coverage under this Order" be retained from the existing general permit, and placed in Finding II.E.2 on page 4 of the Tentative Order as follows:

RO concentrate from aquifer protection well discharges to estuarine environments (typically long term). Pumped groundwater may be treated by RO so that less saline groundwater may be returned to the drinking water supply, and the RO concentrate discharged as waste. RO concentrate discharges to sanitary sewer systems are not required to seek coverage under this Order. In addition, RO Concentrate discharges that are permitted under industrial pretreatment requirements to a permitted publicly-owned treatment works (POTW) are not required to obtain coverage under this Order.

Zone 7 further commented that retaining such language allows a more streamlined approach to achieve the same results and avoid double-permitting of those indirect/industrial dischargers already satisfying the pretreatment requirements.

Response to DSRSD and Zone 7 Comment 1

We agree and added the underlined words to the last sentence of Finding II.E.2 as follows:

"RO concentrate from aquifer protection well discharges to estuarine environments (typically long term). Pumped groundwater may be treated by RO so that less saline groundwater may be returned to the drinking water supply, and the RO concentrate discharged as waste. RO concentrate discharges to sanitary sewer systems, or that are regulated under a sanitary agency's pretreatment program, are not required to seek coverage under this Order."