

10/26/17

ATTACHMENT A: ALTERNATIVE BASIN PLAN LANGUAGE

As requested by Regional Board staff, the CUWA member agencies Contra Costa Water District and Zone 7 Water Agency and the Sacramento River Source Water Protection Program have prepared an “alternative” to the proposed modifications to the Basin Plans to support SNMP implementation, as presented in Section 4.0 of the Guidance to Implement Secondary MCLs (Attachment A-9 of the SNMP). We have presented the alternative with our top priorities related to SMCLs. There are still other implementation details that we believe would be better described in Regional Board Policies or Guidance, rather than as specific text in the Basin Plan. This includes the need to ensure that these drinking water constituents are evaluated periodically by Regional Board staff, perhaps more specifically as part of the CWA Section 305(b) evaluation, to confirm the sufficiency of data collection, conduct a review of available data, and prepare an assessment of the long-term trends of these constituents in key surface water bodies used for MUN in the Central Valley. In addition, we would suggest that a guidance document be developed to provide Regional Board staff in the future with a consistent process for application of the SMCLs in permits under the process described in the Implementation chapter.

The alternative Basin Plan Language is as follows:

The Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin

Text below is from the Basin Plan. Additions to the existing text are indicated by underline and deletions of existing text are indicated by strikethrough.

Chapter III – Water Quality Objectives

Water Quality Objectives for Inland Surface Waters - Chemical Constituents (page III-3.00):

“At a minimum, surface water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Tables 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) ~~and 64449-B (Secondary Maximum Contaminant Levels-Ranges)~~ of Section 64449. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain lead in excess of 0.015 mg/l. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. To protect all beneficial uses the Regional Water Board may apply limits more stringent than MCLs.”

In addition, for surface waters designated MUN the concentration of chemical constituents shall not exceed the “Maximum Recommended” level specified in 22 CCR Table 64449-B, unless otherwise authorized by the Regional Water Board in accordance with the provisions of 22 CCR Section 64449 et seq. Constituent concentrations ranging to the “Contaminant Upper” level in Table 64449-B are acceptable only if it is neither reasonable nor feasible to provide more suitable waters, such as an Extended Dry Period defined in Chapter IV of this water quality control plan; in addition, constituents

ranging to the “Short Term” level in Table 64449-B may be authorized on a temporary basis pending construction of treatment facilities or development of acceptable new water sources. In cases where the surface water natural background concentration of a particular chemical constituent exceeds the “Maximum Recommended” level specified in Table 64449-B, the surface water shall not exceed that natural background concentration due to controllable anthropogenic sources, unless the Regional Board authorizes it consistent with State Antidegradation Policy”. This incorporation-by reference is prospective, including future changes to the incorporated provisions as the changes take effect.

Water Quality Objectives for Ground Waters – Chemical Constituents (page III-10.00):

“At a minimum, ground waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Tables 64449-A (Secondary Maximum Contaminant Levels- Consumer Acceptance Limits) and ~~64449-B (Secondary Maximum Contaminant Levels Ranges)~~ of Section 64449. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain lead in excess of 0.015 mg/l. To protect all beneficial uses, the Regional Water Board may apply limits more stringent than MCLs.”

In addition, for ground waters designated MUN, concentration of chemical constituents shall not exceed “Maximum Recommended” level specified in 22 CCR Table 64449-B unless otherwise authorized by the Regional Water Board in accordance with the provisions of 22 CCR Section 64449 et seq. Constituent concentrations ranging to the “Contaminant Upper” level in Table 64449-B are acceptable only if it is neither reasonable nor feasible to provide more suitable waters, such as an Extended Dry Period defined in Chapter IV of this water quality control plan; in addition, constituents ranging to the “Short Term” level in Table 64449-B may be authorized on a temporary basis pending construction of treatment facilities or development of acceptable new water sources. In cases where the natural background concentration of a particular chemical constituent exceeds the “Maximum Recommended” level specified in Table 64449-B, the ground water shall not exceed that natural background concentration due to controllable anthropogenic sources, unless the Regional Board authorizes it consistent with State Antidegradation Policy. This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect.

Chapter IV – Implementation (Added to this section)

For the chemical constituents identified in 22 CCR §64449 (Table B) the water quality objectives shall be set as described in Chapter III-3.0 of this water quality control plan. Lower concentrations of these chemical constituents are desirable for promoting greater consumer confidence and acceptance of water supplied by community water systems.

To implement the salinity SMCLs in the Chemical Constituents section of the surface water and groundwater quality objectives (Table 64449-B), the Regional Water Board shall consider, if requested and applied for by a permittee, site-specific factors as appropriate when developing WDRs, including:

- The existing processes to reduce, to the maximum extent practicable, the discharge of the pollutant through pretreatment, source control, and/or pollution prevention;
- List of possible methods for removing or reducing the concentrations and loadings of the pollutants from the discharge, including an assessment of technical effectiveness and costs of these methods;
- The availability of assimilative capacity in the receiving water and compliance with the antidegradation policies;
- Naturally occurring background concentrations;
- Background concentrations due to prior anthropogenic activities where it is not feasible or practicable to remediate the effect of these past discharges;
- The net effect of discharges that affect receiving water quality;
- The potential impact on downstream water quality and beneficial uses (MUN-designated surface water and groundwater) for current and future use;
- Economic factors including the practicality and feasibility of achieving compliance with the SMCLs (including consideration of cost for achieving compliance, the availability of alternative water supplies for drinking water, ability to pay, and cost of noncompliance);
- Consideration of other regional salinity management requirements, including the ability to meet existing downstream salinity-related water quality objectives in the SRSJR and TLB Basin Plans and Bay Delta Plan and policies, recommendations or regulations resulting from implementation of the CV-SALTS Salinity Management Strategy (see SNMP Attachment A-3);
- Potential for the permitted discharge to affect the concentration of constituents identified in 22 CCR Table 64449-B in downstream and downgradient MUN waterbodies and groundwater basins to ensure a safe drinking water supply for current and future MUN users;
- Need for additional monitoring to track the net effect of permitted discharges on downstream or downgradient MUN water bodies and to determine the need for additional management requirements to protect the MUN supply;
- The State Water Board's Recycled Water Policy and the Central Valley SNMP's goals to increase the use of recycled water, increase stormwater use, and increase water conservation as mechanisms to increase drought protection;
- The long-term cumulative impact of all discharges to the same receiving water;
- Modeling and any changes in contaminant concentrations due to fate and transport factors;
- Consultation with the Division of Drinking Water to assess impacts to downstream or down-gradient community water systems, including:
 - o Economic factors including the practicality and feasibility of achieving compliance with the salinity SMCLs (including consideration of cost for achieving compliance, the availability of alternative water supplies for drinking water, ability to pay, and cost of noncompliance);
 - o The ability of drinking water treatment processes to remove contaminants and the potential effect on drinking water treatment costs for downstream and down-gradient community water systems; and
 - o Drinking water regulatory and human health information from US EPA, the Division of Drinking Water, and OEHHA.

Under no circumstance will an effluent limit be set that is higher than the current level of the constituent in the effluent or discharge. All WDRs with site-specific SMCL effluent limits shall be reviewed as part of the 305(b) evaluation.

Compliance with any chemical constituent in Tables 64449-A of 64449-B shall be determined from the annual average of sample results from non-filtered water samples at each compliance point.

Chapter V – Monitoring and Surveillance (Added to this section)

Monitoring and assessment programs are essential to evaluate the existing conditions and changes in both surface and ground water quality caused by discharges. Where it is reasonable and feasible to do so, WDRs should consider development of a monitoring program and/or assessment of existing programs. Considering limited resources in certain areas of the Basin, a monitoring program is not a strict requirement by this water quality control program, but it is desirable and should be implemented as available resources allow.

NOTES:

The following is information on site-specific factors that we propose not to be included in the Basin Plan Amendments. We have removed several items for the following reasons:

“The presence or absence of other minerals (e.g., anion-cation balance) that may mitigate or aggravate aesthetic acceptability;” – This would be a very detailed analysis that assumes constant presence and ratio of minerals in the source water. This is not consistent for surface waters in the Central Valley as they change seasonally and are impacted by annual hydrology and releases/discharges to the receiving waters. WDRs are typically effective for 5 years or longer. Over such a period, there could be high uncertainties on the minerals presence in the ambient environment. Counting on the ambient conditions to mitigate the discharge impacts is not reasonable.

“The application of appropriate averaging periods to evaluate compliance with WDR monitoring requirements;” – This could be conflicting with the last paragraph above which clearly states that compliance will be based on an annual average. It would be inconsistent to allow different periods of analysis and evaluation than the compliance.

“Other environmental considerations.” – This is too general for evaluation at this point. If there are other factors that are desired to be included, those should be specified and available for review as part of the Basin Plan Amendment public process.

“Evaluation of downstream or down-gradient community water system(s) in consultation with the Division of Drinking Water and the downstream or down-gradient community water system(s) to determine if a waiver under 22 CCR §64449.2 has been obtained or if the provisions of §64449.4 are being met;” – Both of these sections only apply to constituents in Table 64449-A and since we recommend their removal these are not applicable. If non-salinity SMCLs are kept in, this would be a sub-bullet under consultation with DDW.