



Proposed Regulatory Approach to Authorize Long-term Averaging in NPDES Permits

- 1) Federal regulations require that, where wasteload allocation has been established, effluent limits for discharges governed by that wasteload allocation must be consistent with the assumptions and requirements of that approved wasteload allocation. [40 CFR 122.44(d)(vii)(B)]
- 2) In the Santa Ana region, where existing water quality was better than necessary to protect beneficial uses, water quality objectives for TDS were established to preserve this higher water quality consistent with the State Board's Antidegradation Policy (Res. 68-16).
- 3) The antidegradation-based objectives were set equal to the baseline water quality for TDS in each groundwater management zone. The baseline water quality was computed as the 20-year volume-weighted average TDS concentration for the period from 1954 thru 1973 to account for spatial and temporal variability (per APU 90-004).
- 4) Attainment of the applicable water quality objectives is periodically reassessed using the volume-weighted average TDS concentration in each groundwater management zone for the most recent 20-years of water quality monitoring data.
- 5) A wasteload allocation has been established to protect water quality and prevent degradation in groundwater basins underlying the Santa Ana River and its major tributaries, including: San Timoteo Creek, City Creek, Temescal Creek, Mill-Cucamonga Creek and Chino Creek.
- 6) Compliance was evaluated and confirmed for a wide range of probable and possible discharge scenarios by comparing the 10-year volume-weighted average TDS concentration of streambed recharges, during the critical low-flow receiving water condition, to the applicable TDS objective for each groundwater management zone. (driest 10-year period in the 67-year meteorological record).
- 7) Add the following text immediately following Table 5-5 in the Basin Plan:

"To assure consistency with the assumptions and requirements of the approved wasteload allocation, effluent limits for the POTWs identified in Table 5-5 must be based on the values specified in the same table and expressed as 120-month volume-weighted running averages for both concentration and mass."



Proposed Approach to Clarify Intended Application of Effluent Limits for Mineral Increments

2. Mineral Increments

The fundamental philosophy of TDS management plans in Santa Ana Region Basin Plans to date has been to allow a reasonable use of the water, to treat the wastewater generated appropriately, and to allow it to flow downstream (or to lower groundwater basins) for reuse. "Reasonable use" is defined in terms of appropriate mineral increments that can be applied to water supply quality in setting discharge limitations.

The Department of Water Resources has recommended values for the maximum use incremental additions of specific ions that should be allowed through use, based on detailed study of water supplies and wastewater quality in the Region [Ref. 8]. Their recommendations are as follows:

Sodium	70 mg/L
Sulfate	40 mg/L
Chloride	65 mg/L
TDS	250 mg/L
Total Hardness	30 mg/L

These mineral increments were incorporated into the 1983 Basin Plan. They will be incorporated into waste discharge requirements when appropriate and necessary.

Add the following text at the end of the existing Basin Plan language:

"In general, such requirements are appropriate for discharges to surface or ground waters where no water quality objective has been established. However, for POTW discharges to surface or ground waters where a numeric water quality objective for salinity has been established in the Basin Plan, and especially when a water quality-based effluent limitation has been imposed in accordance with an approved Waste Load Allocation for salinity, additional waste discharge requirements for mineral increments are generally not necessary."