Attachment A-11

Factors to Support a Maximum Benefit Finding

The State Water Resources Control Board's Antidegradation Policy (Resolution No. 68-16) set~~s~~ forth the specific conditions that must be met and the demonstrations that must be made before the Central Valley Water Board can allow a discharge (or discharges) to lower existing ~~water~~ high quality water:

"1) Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change ***will be consistent with maximum benefit to the people of the State****, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.*

2) Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality ***consistent with maximum benefit to the people of the State*** *will be maintained"* (emphasis added).[1]

To support implementation of the SNMP, the following concepts, with examples[2] of potential application, are intended to provide guidance regarding making a finding that a proposed project meets the test that its approval and implementation would be "consistent with the maximum benefit to the people of the state" test, as stated in the State's Antidegradation Policy:

1) Allowing lower~~ing~~ water quality will result in more effective protection of actual beneficial uses than would occur by imposing more stringent waste discharge requirements (WDRs) or prohibiting the discharge.

   Example: The discharge is coupled with a project to provide wellhead treatment or alternative drinking water supplies in an area where the Municipal and Domestic Supply (MUN) beneficial use is already severely impaired for the pollutant at issue.

2) Allowing receiving water quality to degrade, in relation to the historical baseline condition, would actually improve current water quality or would significantly reduce the rate at which receiving water quality is already degrading (or is expected to degrade).

   Example: Creating barriers to groundwater migration or diluting contaminants in the vadose zone.

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[1] State Water Board. Statement of Policy with Respect to Maintaining High Quality of Waters in California. Resolution No. 68-16 (October 28, 1968).

[2] The incorporated examples are intended to illustrate some, but not all, possible approaches to making a M~~m~~aximum B~~b~~enefit demonstration

3) Lowering water quality at one location will result in higher water quality in the same or another location ~~such that there is~~to create a net improvement in water quality and beneficial use protection in the receiving water, watershed, region, or state as a whole.

Example: A groundwater clean-up project removes trichloroethylene (TCE), but the air stripping process increases the concentration of total dissolved solids.

4) Lowering water quality would facilitate increased use of recycled water (particularly by displacing demand for potable water) and thereby increase the overall water supply in the watershed, region, or state.

Example: Using recycled water for landscape or agricultural irrigation that may locally increase salt loading, but frees up potable water for higher uses (drinking, cooking, and bathing).

5) Lowering water quality would facilitate increased recharge and storage to groundwater basins, ~~and~~ particularly where the California Department of Water Resources has determined the underlying aquifer is in a significant overdraft condition.

Example: Putting slightly lower quality water increases the quantity and reduces subsidence problems.

~~5)~~6) Allowing lower water quality is necessary to protect infrastructure or industries deemed vital to national security, public safety, public health, or the environment.

Example: Discharges from groundwater dewatering systems installed to prevent flooding in road or railroad underpasses.

~~6)~~7) Lowering water quality would produce significantly less adverse environmental impact than imposing more stringent effluent limitations or discharge prohibitions.

Example: Additional extraordinary treatment such as reverse osmosis results in significant cross-media waste streams (e.g., brine production~~s~~, greenhouse gases, air emissions, etc.) or requires significant energy consumption without any corresponding reduction in risk to public health or the environment.

~~7)~~8) Lowering water quality is necessary to accommodate important social and economic growth in the region particularly where more stringent WDRs or prohibiting the discharge would result in widespread and substantial adverse socioeconomic impacts in the area.

Example: Forcing stringent and expensive treatment on a small business may force them to close the business, losing jobs and adversely affecting the local economy.